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IMPACT OF E-BUSINESS ON SUPPLY CHAIN DURING COVID-19 PANDEMIC (IN CONTEXT OF FOOD INDUSTRY, GROCERY)

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Abstract : The purpose of this paper is to look at Impact of E-business on Supply Chain during Covid-19 pandemic in Context of Grocery & Food Industry. The COVID-19 pandemic and therefore the lockdown and social distancing mandates have disrupted the buyer habits of shopping. Consumers are learning to improvise and learn new habits. Consumers cannot attend the shop , therefore the store involves home. While consumers return to old habits, it's likely that they're going to be modified by new regulations and procedures within the way consumers shop and buy products and services. New habits also will emerge by technology advances, changing demographics and innovative ways consumers have learned to deal with blurring the work, leisure, and education boundaries.

IndexTerms **- E-business, Supply Chain, Covid-19, Consumer, Shopping.**

I. INTRODUCTION

The COVID-19 pandemic and therefore the lockdown and social distancing mandates have disrupted the buyer shopping behavior. Consumers are learning to improvise and learn new habits. Consumers cannot attend the shop; therefore, the store involves home. While consumers return to old habits, it's likely that they're going to be modified by new regulations and procedures within the way consumers shop and buy products and services.

On the evening of 24 March 2020, the govt of India Prime Minister ordered a nationwide lockdown for 21 days, limiting movement of the whole 1.38 billion population of India as a precaution against the COVID-19 pandemic in India. It was ordered after a 14-hour voluntary public curfew on 22 March, followed by enforcement of a series of regulations within the country's COVID-19 affected regions. On 14th April, Prime Minister Narendra Modi extended the nationwide lockdown until 3 May, with conditional relaxations after 20th April for the regions where the spread had been contained or was minimal. On 1 May, the govt of India extended the nationwide lockdown further by fortnight until 17 May. The govt divided all the districts into three zones supported the spread of the virus—green, red and orange—with relaxations applied accordingly. On 17th May, the lockdown was further extended till 31st May by the National Disaster Management Authority.

On 30th May, it was announced that lockdown restrictions were to be lifted from then onwards, while the continued lockdown would be further extended till 30th June for less than the containment zones. Services would be resumed in a phased manner starting from 8th June. This was termed as "Unlock 1.0". Modi later clarified that the lockdown introduced in the country was over since the 'unlock' had already begun.

The second phase of unlock, Unlock 2.0, was announced for the period of 31 days, i.e., from 1st July to 31st July, with more ease in restrictions. Unlock 3.0 was announced for August. Similarly, Unlock 4.0 was announced for September and Unlock 5.0 for the month of October. In the same way, Unlock 6.0 was announced for the month of November, Unlock 7.0 was announced for the month of December.

The purpose of this paper is to look at Impact of E-business on Supply Chain during Covid-19 pandemic in Context of Grocery & Food Industry. The COVID-19 pandemic and therefore the lockdown and social distancing mandates have disrupted the buyer habits of shopping. Consumers are learning to improvise and learn new habits.

II. OBJECTIVES

1. Comparative study of the buying pattern and preference of essentials during complete lockdown and unlock phases of COVID-19 pandemic.
2. Study the changes within the supply chain of food industry driven by the boom of e-business during lockdown.

III. RESEARCH METHODOLOGY

The present research is exploratory in nature. The information is collected through various secondary sources. Secondary data for the study were collected through newspapers, research papers, articles, etc., supporting the buying pattern and preference of essentials during complete lockdown and unlock phases of COVID-19 pandemic and therefore the study about the changes within the supply chain of food industry driven by the boom of e-business during lockdown.

IV. REVIEW OF LITERATURE AND DISCUSSION

Dr. Ganesh Pandit Pathak & Dr. Satish Warpade(2020) observed that after the announcement of the primary phase of unlocking in Maharashtra, everyone was panic and moved towards shopping for essential goods. The data they collected was collected from the western part of Maharashtra and therefore the majority of the samples are from Pune and Satara District. After the analysis, it's found that some consumers have changed their preference while selecting retailers for shopping of essential goods. It was interesting to see in their research that before lockdown, 60.47% people preferred unorganised retailer, 37.79% preferred organised retailer and 1.74% only preferred online channel for the purchase of Grocery. While after lockdown the respective percentages changed to 73.26%, 22.67%, and 3.49%. Similarly, a detailed list for pre and post lockdown percentages for different food products like vegetable, products, milk and milk-related products, bakery items, packaged food and beverages, bakery items, was presented by them. A comparison between unorganized, organized, and online retailers, it was observed that customers prefer an unorganized and online platform than organized. Easy availability, security, less rush, and following all rules are the major reasons behind the preferring particular channel.

Consumer buying behavior was suddenly changed due to countrywide lockdown. It was becoming difficult for the shopkeeper to manage huge crowed who came to get essential goods. Consumers were in confused state of mind due to shortage of products within the market (Patil, 2020). While studying Lockdown effect on retailers (Krishna 2020) observed that, essential items still remain a key priority, the buyer behaviour was well captured in shops , which stocked abreast of these things before the lockdown was announced. On the brink of three quarters (70%) of consumers reported a preference for purchasing grocery items face to face, while around half also opted for home delivery (47%), and 17% relied on curbside pick-up (research released by Adobe). Across all product categories, younger generations and concrete residents preferred home delivery while the older generation preferred in-person shopping, with the exception of media for the latter.

Varun Jain (2020) observed that, 62% of consumers were inclined to go to stores within the primary three months post lockdown. This number goes up to 75% in tier II and tier III cities. However, 78% of consumers said their shopping expenditure will decrease while only 6% said they might increase their spending. While Abhinav Singh (2020) states that, there's the sluggish growth of the retail segment continues wherein 67 per cent of consumers showed little to no excitement in shopping post the lockdown, citing safety and hygiene concerns. Similarly, Kumar Rajagopalan (CEO of RAI) states that, most consumers demonstrating hesitation to resume shopping within the coming months, the retail sector needs the support of all stakeholders to revive sentiment. (DECCAN

CHRONICLE published article (2020) A survey administered by the Retailers Association of India) also states that, maximum consumers aren't excited in shopping post lockdown. During this situation, retailers will get to prioritize safety and hygiene measures to reassure consumers that they're going to receive a secure shopping experience. Despite a strained quarter, the world will need to make investments in implementing the required safeguards to get back consumer confidence. Regular sanitization of stores is going to be the most preferred measure and expectation of consumers to feel safe and secure while shopping. They might prefer minimal staff interaction and virtual trial rooms. Patil (2020) also states that buyers were refocused for the appliance of preventative measures.

It is expected that the majority habits will return back to normal. However, it's inevitable that some habits will die because the buyer under the lockdown condition has discovered an alternate that's more convenient, affordable, and accessible. Thanks to coronavirus, consumers may find it easier to figure reception and patronize home. In short, what was a peripheral alternative to the prevailing habit now becomes the core and therefore the existing habit becomes the peripheral.

There is a universal law of consumer behavior. When an existing habit or a necessity is given up, it always comes back as a recreation or a hobby. Examples include hunting, fishing, gardening, baking bread, and cooking. It'll be interesting to ascertain what existing habits which are given up by adopting the new ways will come as hobbies. In other words, will shopping become more an outside activity or hobby or recreation.

In most cases, existing habits of grocery shopping and delivery are going to be modified by the new guidelines and regulations like wearing masks and keeping the social distance. This is often evident in Asia where consumers wear masks before they are going for shopping or use the general public transit systems. Modified habits are more likely within the services industries especially in personal services like beauty parlours, physical therapies, and fitness places. It'll also become a reality for attending museums, parks and recreation centres, and concerts and social events, just to call a couple of.

As mentioned earlier, another major driver of consumer behavior is technology. It has transformed consumer behavior significantly. How technology transforms wants into needs has significant impact on developing new habits like online shopping, or online anything. More importantly it's equally significant impact on the family budget between the old necessities (food, shelter, and clothing) within the new necessities (phone, internet, and apps).

The Food supply chain is often divided into five stages, including agricultural production, post-harvest handling, processing, distribution/retail/service, and consumption. Two systems are getting used within the food supply chain regarding food quality and safety. The primary one is predicated on regulations and laws that use mandatory standards which are inspected by state agencies. The other is counting on voluntary standards which are defined by market laws or international associations (Bendekovic et al., 2015). Safety measures to make sure the continuity of food flow in each stage are often grouped as food employee's health issues, personal hygiene, using personal protective equipments like helmets and glove, sanitization of surfaces and dealing environments, safe handling/preparation/delivery of food, and maintenance of social distance. Protective measures within the last stages of the food supply chain are critical since more people are often potentially affected as moved towards the last stages (Rizou et al., 2020).

Unlike foot and mouth disease, bird flu, Escherichia coli (E. coli), or Listeria, the COVID-19 pandemic doesn't directly affect production, because it doesn't spread directly through livestock or agricultural products (FAO, 2020a). However, thanks to the pandemic, governments around the world have made significant restrictions within the transportation (land, water, and air transport) of products also as within the migration of labour. Reports showed that using the trucks for food distribution was declined to 60% since the restrictions in France which was 30% before the pandemic (FAO, 2020j; Bakalis et al., 2020).

In developing and underdeveloped countries, temporary or seasonal employment is common, especially for planting, sorting, harvesting, processing, or transporting crops to markets. Therefore, the availability chain is significantly affected as a result of the absence of local or migrant workers thanks to sickness or travel restrictions imposed by lockdown. It also weakens not only production abilities for others, but also their own food safety, in cases where the disease directly affects their health or movement (FAO, 2020k). Especially, labour shortage thanks to COVID-19 crisis caused severe disruptions in some sectors like livestock production, horticulture, planting, harvesting, and crop processing which are relatively labour intensive (Stephens et al., 2020). However, shortage of farmworkers was a serious issue well before the COVID-19 outbreak, too (Richards and Rickard, 2020).

Due to the very fact that a lot of skilled workers within the harvest couldn't access various countries due to the border controls, a call has been made to the unemployed persons to figure within the fields in France. In Britain, 'Pick for Britain' campaign was aimed to seek out 70 000 British to figure within the field and through the harvest (Nature Plants, 2020). However, thanks to the shortage of workforce as a results of illness and physical distance to be maintained during production, the crisis undermines the power of farms and agricultural businesses to figure. These conditions retarded the delivery of food and agricultural inputs and created problems in providing continuous food supply to markets (ILO, 2020). Although many manufacturers believe their core inputs, most are more vulnerable to disruptions, as they need to obtain their requirements from domestic markets. Logistics barriers that disrupt food supply chains further weaken high-value goods, thanks to their short time period (Shahidi, 2020; FAO, 2020j, FAO, 2020k).

Kobrin (2020) observed that disruptions in global supply chains within the context of the COVID-19 pandemic have re-opened the talk on the vulnerabilities related to production in complex international production networks. To form resilience in supply chains, several authors suggest making them shorter, more domestic, and more diversified. This paper argues that before redesigning global supply chains, one must identify the concrete issues faced by firms during the crisis and thus the policies which may solve them. It highlights that the solutions that are proposed tend to be disconnected from the conclusions of the available chain literature, where reshoring doesn't cause resilience, and may further enjoy the insights of international business and global value chain scholars. Lastly, the paper discusses the policies which may build resilience at the firm and global levels and thus the narrative which may replace this one to reshape the talk on the policy implications of COVID-19 for global supply chains.

V. FINDINGS

As studied from the above literature some consumers have changed their preferences from organized retailers to unorganized and online retailers for the FMCG products. Research analyzed same leads to fruits, milk and milk-related products that customers have changed their preference and a few aren't preferred to shop for bakery items. Same thing happens with packaged food and beverages and residential utensils & useful items that majority of the customers those that preferred organized retailer and online shopping hold their decision to shop for clothes after the lockdown. Overall analysis shows that there's slightly change in customer preferences in selecting a shopping platform.

As the lockdown and social distancing disrupted the entire range of consumer behavior, it has generated several new research opportunities anchored to anchor to the world. The substantial and heterogeneous impacts propagated through global supply chains, which affect the world in ways which aren't always intuitive. It implies that an outsized a neighborhood of the matter that currently faces is that Grocery and food industry control choices without sufficient consideration of the effect of their actions on global supply chains. It implies that the considerable amount of attention needs to be given to the Grocery and Food industry that we have had the experience of such an unprecedented and unique situation. Sufficient consideration to this field leveraging the technologies is evident as of now, but the more is yet to come. Supply chains across food and grocery industry ought to being more subtle changes to cater to the changing needs and buying behavior of consumers.

VI. CONCLUSION

The lockdown and social distancing to combat the covid-19 virus has generated significant disruptions on consumer behavior. After the study, it's been observed that everybody has faced difficulties during the lockdown and therefore the customer has changed their behavior. It's been observed that for Grocery items, FMCG products and Bakery items customer has changed their preference. Earlier those that have preferred organized retailers now some customers have changed their preference and shifted towards unorganized & online retailers. After the comparison between unorganized, organized, and online retailers, it's been observed that customers prefer an unorganized and online platform than organized. Easy availability, security, less rush, and following all rules are the main reasons behind preferring the particular channel.

All consumption is time bound and site bound. With time flexibility but location rigidity, consumers have learned to improvise in creative and innovative ways. The work-life boundaries are now blurred as people work at home, study reception, and relax reception. Since the buyer is unable to travel to the shop, the shop has got to come to the buyer.

As consumers adapt to the confinement for a protracted period of your time, they're likely to adopt newer technologies which facilitate work, study and consumption in a more convenient manner. Embracing digital technology is probably going to switch existing habits.

During an epidemic, continuing the flow of the availability in agriculture and food sector, which is one among the foremost important sectors alongside health, is significant to stop the food crisis and reducing the negative impact on the worldwide economy. Although no major problems are observed within the food supply chains thus far, it remains unclear within the face of an uncertain future. As a result, each country has got to realize the severity of things and sometimes should tighten or loosen the measures consistent with the spread of the pandemic. The availability chain also should be flexible enough to reply to the challenges within the food supply chain.

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