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# THE IMPACT OF MOBILITY SOLUTIONS ON LOGISTICS AND SUPPLY CHAIN MANAGEMENT

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# **ABSTRACT**

The rise of mobility solutions, such as autonomous vehicles, drones, and wearable technology, has transformed logistics and supply chain management. These solutions have enabled businesses to improve efficiency, reduce costs, and enhance customer satisfaction. Autonomous vehicles, for instance, have increased the speed and accuracy of deliveries, while drones have facilitated last-mile delivery in remote areas. Wearable technology has improved worker safety and productivity by providing real-time data on their physical condition and location.

However, these mobility solutions also pose challenges for logistics and supply chain management. For instance, the integration of these solutions with existing systems and infrastructure requires significant investment in technology and infrastructure. Additionally, there are concerns about cybersecurity and data privacy.

Despite these challenges, the adoption of mobility solutions is likely to increase in the coming years, driven by advances in technology and changing consumer demands. Logistics and supply chain managers must adapt to these changes to remain competitive and meet the needs of their customers. This paper examines the impact of mobility solutions on logistics and supply chain management, exploring their benefits and challenges, and discusses the strategies businesses can adopt to leverage these solutions effectively.

**Keywords:** Alibaba, Flipkart, India Mart, Warehousing, Logistics ,Customer satisfaction ,Supply chain management ,Autonomous vehicles ,Technology adoption.

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# **CHAPTER 1**

# 1: INTRODUCTION

The COVID-19 crisis was a tipping point of historic proportions for digital adoption. The world saw many years' worth of digital transformation in just a few months. The resulting acceleration in the use of technology, digitization and the rise of remote work has brought about the fourth industrial revolution. The study explores the impacts of mobility solutions on Logistics and Supply Chain Management. It brings out the strategically designed mobile applications that integrate fleet management solutions. Tarun Nagar, defines Mobility Solutions as the usage of mobile devices like smart phones, tablets by employees for various business purposes. He mentions that it is essential in business because it provides employees to work at any time and from anywhere using various devices and applications. The study reveals the vital role played by mobile devices to reduce the overall complexities that are involved in the management of the company data on various mobile devices. The study also brings out various objectives of mobility solution in logistics and supply management, which include limiting congestion during travel periods, route optimization, and location tracking. The study unveils how mobility solutions have improved communication between customers and suppliers and how it helps in tracking location and delivery timeline, keeping an eye on the package, accessing data, and how everyone stays connected via various ways such as email, social media platforms, and mobile applications, throughout the whole process. The study also brings out how strategically designed applications assist in staying up to date and keeping up with globalization.

Fig.No.1



Source: Outsource2india

# 1.1: About the Industry

According to Abby Jenkins, Logistics focuses on the movement and storage of items in the supply chain. Supply chain management covers all of the coordination between partners that have a role in this network, including sourcing, manufacturing, transporting, storing and selling. The ultimate goal of Supply chain management is to find processes that ensure a smooth, efficient flow of goods that give customers an excellent experience and drive the business forward. Supply chain management sets the strategy and directs daily logistical activities that happen in factories, warehouses, local shipping centers and other facilities. Logistics is an aspect of the supply chain that stores or delivers finished goods or services to the customer, whether that's a manufacturer, distributor or consumer. The goal of logistics is to get goods and services to the customer on time and at a competitive price. Logistics and supply chain management focuses on the flow of goods from the point of origin to the endpoint. Its disciplines require careful coordination of supplies, labor and facilities to make sure items can move through the supply chain as required. Logistics is a key component of supply chain management, but just one piece of the equation. Logistics and supply chain management focus on goods, services or information. They also have the ultimate aim of supporting the company's success and distinguishing it from competitors. Also to note is Logistics and supply chain

management revolve around the same flow of goods and services, from the supplier, to the manufacturer, to the wholesaler and finally to the retailer or consumer.

# 1.2: Growth of Industry

Dr. Jean-Paul Rodrigue mentions that the evolution of supply chain management has been characterized by increasing integration of separate tasks, a trend underlined in the 1960s as a key area for future productivity improvements since the system was highly fragmented. Although logistics tasks have remained relatively similar, they initially consolidated into two distinct functions related to materials management and physical distribution during the 1970s and 1980s. This process moved further in the 1990s as globalization incited functional integration and the emergence of logistics in a true sense. All the elements of the supply chain became part of a single management perspective. Lately, the growing level of automation of logistics and supply chains has been a dominant element of the evolution of both physical distribution and materials management. This digitalization is particularly notable within distribution centers that have experienced a remarkable push towards automation such as storage, materials handling, and packaging. Automation may possibly in time lead to automated delivery vehicles.

#### 1.3: Logistics and Supply Chain Management Companies

#### **1.3.1: FLIPKART**

Fig.No.2



Source: insideiim.com

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Flipkart is an Indian e-commerce company, headquartered in Bangalore, and incorporated in Singapore as a private limited company. The company initially focused on online book sales before expanding into other product categories such as consumer electronics, fashion, home essentials, groceries, and lifestyle products. The service competes primarily with Amazon's Indian subsidiary and domestic rival. Snapdeal Halzack, Sarah (9 May 2018) claim that, As of March 2017, Flipkart held a 39.5% market share of India's e-commerce industry. According to Sharma, Nishant (23 March 2018), Flipkart has a dominant position in the apparel segment, bolstered by its acquisition of Myntra, and was described as being "neck and neck" with Amazon in the sale of electronics and mobile phones. Tandon, Suneera also points out that, Flipkart owns PhonePe, a mobile payments service based on the UPI. Flipkart was founded in October 2007 by Sachin Bansal and Binny Bansal, alumni of the IIT, Delhi and former Amazon employees Joseph Tejaswi, Mini (2 May 2013). Flipkart allows payment methods such as cash on delivery, credit or debit card transactions, net banking, egift voucher and card swipe on delivery. The Economic Times. 9 September 2014 claims that Flipkart operates several house brands, including Citron. Home appliances and Digiflip electronics and accessories. In 2017, Flipkart launched additional house brands, including Billion smartphones. Smartbuy (electronics accessories, effectively replacing Digiflip, and MarQ. The company structure of Flipkart is divided into three broad categories. First is Product and

Technology which is the core team of the company, second is Business Development which is related to sales and third is Operations which deals with the supply chain management of the company.

# 1.3.2: ALIBABA GROUP

Fig.No.3



Source: bingo.com

Alibaba Group Holding Limited, also known as Alibaba, is a Chinese multinational technology company specializing in e-commerce, retail, Internet, and technology. Founded on 28 June 1999[1] in Hangzhou, Zhejiang, the company provides consumer-to-consumer (C2C), business-to-consumer (B2C), and business-to-business (B2B) sales services via web portals, as well as electronic payment services, shopping search engines, and cloud computing services. It owns and operates a diverse portfolio of companies around the world in numerous business sectors. Alibaba is one of the world's largest retailers and e-commerce companies. McClay, Rebecca (25 July 2017) claims that, In 2020, it was also rated as the fifth-largest artificial intelligence company, It also set the record on the 2018 edition of China's Singles' Day, the world's biggest online and offline shopping day.

# 1.3.3: <u>INDIA MART</u>

Fig.No.4



Source: bingo.com

According to IndiaMART.com, IndiaMART is India's largest online B2B marketplace, connecting buyers with suppliers. IndiaMart has over 82.7 mn registered buyers and 5.55 million supplier storefronts across 54 industries in India as of FY19. However, its competitors are far behind. Some of its competitors are TradeIndia.com, Alibaba India and ExportersIndia.com. To strengthen its resource, IndiaMART made focused investment in expansion of channel sales partners and hired ~ 1,000 new employees across product, sales and service teams. Ekart (flipkart). The report also mentioned that IndiaMART leverages its proprietary behavioral data-driven algorithmic matchmaking to connect businesses with relevant buyers. It made regular investments in Artificial Intelligence (AI), Machine Learning (ML) and Data Analytics across various parts of the user journey to drive better experience. Along with strengthening its technologies, IndiaMART also launched an exclusive service for Indian exporters 'IndiaMART Verified Export Services', which enables 50,000 export-oriented sellers on IndiaMART's platform to expand their business across the globe. The company has invested more than \$100mn in companies offering commerce and business enablement solutions in the areas of accounting, logistics, supply chain, vertical commerce, financing, and other softwares.

#### 1.3.4: AMAZON INDIA LIMITED

Fig.No.5



Source: bingo.com

It is an Indian Non-Government Company. The company took its first steps into the Indian market in February 2012 when it launched Junglee.com, a site which allowed customers to compare prices online but not purchase items directly. It will initially only sell books, films and TV shows but plans to offer mobile phones and cameras within weeks. Third party retailers will sell their goods through Amazon's site using a "marketplace" model, a familiar retail concept in India Sellers send their goods to Amazon's warehouse near Mumbai. When an order is placed, Amazon packs and sends the order to the customer. Amazon's Amit Agarwal, country manager in India points out that their vision is to become a trusted and meaningful sales channel for retailers of all sizes across India.

### **Product Profile**

**Sourcing:** It is the process of vetting, selecting, and managing suppliers who can provide the inputs an organization needs for day-to-day running. Sourcing is tasked with carrying out research, creating and executing strategy, defining quality and quantity metrics, and choosing suppliers that meet these criteria. Product sourcing on Alibaba is done by searching for your product based on products or suppliers. Whether you choose products or suppliers depends on what you are looking for. Suppliers give you a list of suppliers that specialize in that type of product.

Manufacturing: It is the making of goods by hand or by machine that upon completion the business sells to a customer. Items used in manufacture may be raw materials or component parts of a larger product. IndiaMART is India's largest online marketplace that assists manufacturers, suppliers & exporters to trade with each other at a common trusted platform.

**Transporting:** according to Oxford dictionary, transporting means to take or carry people or goods from one place to another by means of a vehicle, aircraft, or ship. Logistics is one of the most important facets of any successful ecommerce venture. Flipkart ships more than 100000 items a day which makes management of the logistics a cumbersome task for the company. Furthermore, the cost of the delivery is born by the company itself making logistics a financially complex issue also.

Storing: it is to supply or stock with something, as for future use. To accumulate or put away, for future use. To deposit in a storehouse, warehouse, or other place for keeping. Computers. To put or retain (data) in a memory unit. A big part of Amazon's success lies in its expert warehousing strategy, which ensures products are easily accessible from pretty much everywhere in the world. All the company's warehouses are strategically placed near big metros and population hubs, and inventory is spread amongst them to ensure supply can meet demand. There are even mini-warehouses in smaller areas to ensure orders can be sent and delivered fast, no matter what is being purchased.

Flipkart has 7 major warehouses spread across the country in Mumbai, Kolkata, Delhi, Noida, Pune, Chennai and Bangalore. They have smaller regional distribution centers at over 500 locations spread across Tier I and high volume Tier II cities

<u>Selling:</u> according to Meg Prater, Selling is any transaction in which money is exchanged for a good or service. During a sales negotiation, the seller attempts to convince or "sell" the buyer on the benefits of their offer. Digital marketing is the primary channel used by Flipkart to grow its customer base. Apart from its websites and apps, the company uses digital promotions as well as other traditional channels like print media and outdoor advertisements to grow sales.

Setting Strategy: Strategic goals focus on long-term growth or performance, while business goals are more immediate targets you must hit to achieve bigger objectives. Business goals tend to be specific and quantitative, while strategic goals have a broader and more aspirational focus. Customer Support a strategy for an e-commerce website, it is one of the most important touch-points for the business in terms of building trust, customer acquisition and maintaining customer loyalty. Flipkart's Customer Support team consists of call-center agents who handle in-bound and outbound calls and also a team that handles e-mail queries. Customer calls for either Sales Assistance, General Enquiries or Product/Shipping related enquiry

<u>Materials Handling:</u> MHI defines Material handling as the movement, protection, storage and control of materials and products throughout manufacturing, warehousing, distribution, consumption and disposal. As a

process, material handling incorporates a wide range of manual, semi-automated and automated equipment and systems that support logistics and make the supply chain work. Material collection, manufacturing, and product distribution are the discrete steps of material handling and materials are moved in individual rather than bulk units.

**Packaging:** According to Soroka, Packaging is the science, art and technology of enclosing or protecting products for distribution, storage, sale, and use. Packaging also refers to the process of designing, evaluating, and producing packages. Flipkart, Amazon, Alibaba and IndiaMart all use various packages depending with the product, size and weight. They all use Branded packaging material for their sellers and it is a convenient way to procure superior quality packaging material at competitive prices.

#### **Products:**

	Campingcompass	
Campingglove		
	Campingstove	
	Cricketcover	
	Campingbag	
	Campingcover	
	Campingkit	
	Board Game	CR
	Mosquito Net	130
	Bag	
	Water Bottle	
	Pencil Box	
Toys and Baby care	Bath Tub	
	Umbrella	

	Campinglight
	Cricketgrip
	Cricketnet
	Cricketpad
	Crickethelmet
	Cricketguard
	Cricketbag
	Campinghikinglock
	Crickettape
	Carromboard
Sports fitness	Cricketbail
	Campingcompass
	Campingglove
	Campingstove
	Cricketcover
	Conoral Coolor
	General Cooler
	Ice Cream Maker

	General Cooler
	Ice Cream Maker
	General Cooler
	Swimsuit (Girl/Boy)
Kids	Raincoat (Girl/Boy)
	Sunglass
Mens Accessories	Backpack
Mens Clothing	Mensswimsuit
	Mensraincoat
	Soap
	Sunscreen
	Talc

Personal Care	Sweat Pad
	Cricketkit
	Swimmingkit
	Swimmingcap

	Soap Case
	Goggle
Fan Regulator	
	Bottle
	Lunch Box
	Emergency Light
	Hand juicer
	Electric Insect Killer
	Can Cooler
	Torch
	Lunch Box
	Ice Cube Tray
	Ice Bucket
	Mosquito Coil
	Mosquito Vaporise Refill
Household	Mosquito Vaporiser

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Category	Vericals
	Air Freshener
Auto Accessories	Car Interior Fan
	Fan
Electric Appliances	Air Cooler
	Syrup
	Drinks Juice
	Antiseptic
FMCG	Concentrate
	Aerated Drink
Home Furnishing	Bath Towel
Large Appliances	Air Conditioner New
	Umbrella
	Hanger
	Goggle
	Solar Light Set

# **CHAPTER 2**

# LITERATURE REVIEW

According to Logmore Blog 2 April 2019, Supply chain management forms the backbone of most economies and successful multinational companies today. From humble beginnings to global standards. He also mentions that supply chain started with slaves who were moved from Africa to the Caribbean to grow the sugarcane, which came from India, and it ended in distilleries in the US. Logistics became very important during World War II, as military organizations needed efficient supply chains at home and in Europe. At home, supply chains were necessary to manufacture military hardware and supplies, while abroad, it was essential to get supplies and support to troops as quickly as possible says blumeglobal.com 10 April 2019.

The term "supply chain management" was first coined by Keith Oliver in 1982. Aziz Muysinaliyev, Sherzod Aktamov mentions that Supply chain Management has assumed a significant role in firm's performance and has attracted serious research attention over the last few years.

Ganeshan and Harrison has defined Supply chain management as a network of facilities and distribution options that performs the functions of procurement of materials, transformation of these materials into intermediate and finished products, and the distribution of these finished products to customers.

Lee & Corey states that Supply chain management consists of the integration activities taking place among a network of facilities that procure raw material, transform them into intermediate goods and then final products, & deliver products to customers through a distribution system. Companies are striving towards more effective business models in order to meet customers' needs better in lieu of competitions.

Success depends on building the process that can design, make and deliver innovative, high-quality theories concerning supply chain management are presented to formulate an understanding of the framework that firms in supply chain are able to learn to leverage their internal resources to build up the value chain (Caridi, et al., 2010).

Low-cost products and services that consumer's demand (Pettit, Fiksel, & Croxton, 2010). The contingency theory brings out the need for managers to recognize the consequences of a changing environment and to use firm resources to respond effectively. In other words, the contingency theory stresses the concept of facing challenges due to the changing environment, such as dynamic customer requirement, technological innovation and changing external environment through effective utilization of firm resources (Fawcett, Ellram, & Ogden, 2007; Kayakutlu & Buyukozkan, 2010;

Stonebraker Afifi, 2004). Industrial organisation theory claims that decision making in business firms is driven by market forces (Fawcett, et al., 2007; Ketchen & Hult, 2007). The mentioned market forces is determined by the power of the five forces that include suppliers, buyers, existing rivals, potential rivals, and providers of substitute products, in which managers are able to comprehend the environment where their firms are operating, thereby leveraging their competitiveness in the market the resource-based theory of the firm emphasizes on the management of internal resources to establish a hard to imitate advantages (Barratt & Oke, 2007; Fawcett, et al., 2007)

In the original times the scheduling was done to improve asset utilization and reduce manufacturing costs. However Chirstopher Martin unveils that with the advent of IT strong linkage is established between supply chain partners and customers. As such scheduling is done to serve the customer at the right time. Before the era of the use of mobility solutions, logistics was more manual, exhaustive and there was no visibility of the movement of goods. David Simchi Levi, Philip Kamisky and Edith Simchi Levi, due, explain the that introduction of mobile devices and technologies like RFID and GPS complete visibility in movement of goods is assured resulting into efficient logistic and warehouse management.

Stridelysolutions.com brings out hoe mobility solutions have impacted the logistics and supply chain industries. Ecommerce is on the increase and with it, there lies the need to create an organization that can influence the Omni channel business and craft ways to deploy demands in real-time. Using industrial tables or software such as CAY, organizations can capture, establish and analyze data.

According to Stridelysolutions.com, the present-day business depend on data. With more data being produced each day by billions of users, enterprises strive to put the data to use and improve their business operations. While manually operated supply chain restricts the availability and accessibility of data, the use of a mobile app to do the same, gives leaders the ease to use the data and convert it into meaningful information. Data can then be analyzed, studied and modelled to drive significant insights that further promote data-driven decisions.

A modified supply chain management structure is designed in a way that vehicles have IoT devices that can track the location and also alert the retailer. The devices are connected with mobile apps that keep track of the location of the vehicle in real-time. One does not need to call the driver as they will be knowing about their exact location. It is important to note that with mobile applications for logistics and supply chain, everyone involved in the process remains connected and on the same page from the beginning to the end. For businesses that run through the day, the vehicles are constantly moving. Such movement may affect the system, obstructing the entire line of the delivery. With mobility solutions managers insert sensors within the vehicle that are expert in tracking the load fed, the temperature, battery performance and if any problem arises, it sends an alert to the concerned person, informing them about the issue. This also allows solving the problem before it damages the system.

#### **Problem Statement**

With the growing competition and peer pressure from the manufacturing industry, the supply chain and logistics sector need to pick up the speed. The COVID-19 pandemic caused chaos across every local, national and global supply chain, from product shortages to facility closures and beyond. It is time for the mobile app development companies to see the spurge of growth. With almost every industry going digital, the mobile app development sector is going to experience a sudden boom. Mobility solutions in supply chain industry will be a great boom for everybody involved. It will not only reduce the time spent on communication by half but will also cut down the costs associated with transportation. This makes it the right time to invest in a quality supply chain management system to help grow your business.

#### **Objectives of the Study**

- To assess the ways in which mobility solutions shaped the industry of logistics and supply chain.
- To assess how mobility solutions made a difference in logistics and supply chain.
- To assess how the COVID-19 influenced the use and improvement of mobility solutions.
- To assess Challenges brought by mobility solutions.

# **Hypothesis**

According to Nitin Lahoti in Blog Posted December 16, 2019 a strategically designed mobile application will integrate fleet management solutions that will allow streamlining the entire logistics process, including real-time tracking of goods. Mobile development helps operators to detect movement of the fleet and provides information about their location. The supply chain management apps will provide more support to your business in numerous ways. With features like navigating customers through GPS, finding the best route to a destination become easier via real-time traffic analysis.

# **CHAPTER 3**

# 3.1: Role of Mobility Solutions in the Logistics Industry

The logistics industry canters on mobility. Each and every day, the industry gets a massive movement of people and packages from one place to another. A well-organized logistics structure focuses on a competent administration of packages. For industries on a continuous move, mobility solutions through applications and devices come across as a predictable choice as it has the future to play a pivotal role in ensuring detailed data collection with constant and real-time information flow. In addition, the shift towards a mobility structure marks a complete logistics and fleet administration systems to be faster and reliable.

Fig.No.6



Source: Vestbee

With mobility making advances into the logistics industry, the traditional landscape of manual processes are getting replaced with automation impacting standardized processes and workflows. Mobility can work wonders in every facet of the logistics industry such as cargo, freight transportation, logistics services and freight documentation.

Automating key processes such as sales and customer service functions, addressing capacity planning and archaic logistical workflows can go a long way in improving greater level of visibility, enabling quick decision making, better margins and higher productivity. Mobility is becoming the face of customer experience and engagement, transforming the traditional landscape of the transportation and logistics industry.

Fig.No.7



Source: Wavebreakmedia

Mobility solutions help show and process critical data at the source and its distribution in real time thereby helping employees take informed decisions on the go. Businesses that have incorporated mobility solutions have found it to be a great help in increasing their productivity and profitability. It allows greater visibility of the field staff making workforce performance management a lot easier with such solutions. Providing workforce with mobile or customized devices, maintaining real time information flow and giving them constant access to data, can boost employee productivity, reduce manual efforts and help them better manage time. Mobility solutions also boost environmental impact by reducing paper usage. The business impact of switching to paperless operations typically manifests itself in terms of efficiency improvements and increased environmental responsibility.

# 3.2: Fleet Management

The introduction of mobility solutions in fleet management is set to transform it and provide convenience in business by altering the whole processes of dispatch and scheduling, driver and vehicle tracking, driver productivity, fleet maintenance, load management, pick-up and delivery. With the application of logistics software and vehicles connected to a GPS, tracking the fleet and managing them has become tremendously possible. Applications offer solutions such as intelligent geographic routing, optimizing the routes, examining vehicle performance, fuel monitoring, accident reporting, liability and vehicle maintenance cost, load management, driver efficiency and much more.

Fig.No.8



Source: GW media

Mobility solutions help to manage and to monitor all logistical elements, including arrival times and departure times of transport orders, verification of capacity utilization of hubs are examples of what mobility solutions can achieve for logistics providers. Any deviations in the logistic chain can be visualized through the control tower, enabling each party involved to react swiftly. Mobility solution do not only help to focus on problems, but also offers an opportunity to evaluate and correct the planning of future routes

The mobility solutions also provide opportunity to process data to receive insights that will set the alarm before any damage has been done and achieve better results more efficiently, thus giving companies the opportunity to take preventive measures and improve business performance and operations aiding tighter control over issues. Mobility solutions can be an important factor in transforming operations and other additional systems that are critical to confirm improved visibility for better decision making and better performance for logistics providers.

# **CHAPTER 4**

# 4.1: Impact of Mobility on Supply Chain Management

Mobile devices like smartphones, tablets, wearable printers and other hand-held computers and devices support continuous connectivity in today's digitally connected world of business and consumers. They allow workers to be agile and productive accomplishing various tasks independent of work location. The main influencing factors are accurate data collection, commercial availability, location independent work and multi-purpose devices.

Mobility devices enable accurate data collection agnostics of place and the time of the transaction. Accurate data collection is fundamental to business intelligence, which helps in growth opportunities for a business. Mobility devices have eliminated paper-based manual transactions, leading to time saving and cost reduction. Through mobile devices accurate data can be captured and real-time information is available to all the partners in the supply chain to make quick decisions.



Source: QAD blog

There is an growing demand for the commercial availability of enhanced mobility solutions that can work even in harsh environmental conditions, for example extreme hot and cold weather, water resistance. The demand for robustness and reliability with increased battery life is expected to grow to meet the demand for continuous connection irrespective of external environmental factors. Mobile devices have made the demand of continuous connection a reality. Mobility devices enable work from anywhere at any time, making work

location and time independent. Mobility devices and internet access have been revolutionary in today's connected world.

# 4.2: Future for mobile applications development

It is time for the mobility solution developers that they tap into the small and micro businesses at a global level by offering customized mobile solutions in the form of mobile software development for supply chain and logistics purposes. Just as developers integrate the solutions to mobile fleet management for the taxi app development, a similar thing works of course on a wider coverage geographically. They could either build on the available system of the legacy of all the small companies or begin developing mobility solutions at scale. A completely mobile supply solution would require the training of the key personnel from the bottom to the top level.

And since it involves technology on the mobile, businesses could well spread mobility usability awareness among their team players and roll out an implementation strategy that is phase-dependent. This enables in avoiding disruptions within the current mechanism, paving a road for a smoother transition from a conventional supply model to adapt plus gradually adopting all solutions in mobile for their daily logistics function.

# 4.3: Future of mobility solutions on logistics and supply chain

Mobility solutions in supply chain and logistics is transforming the industry with the latest innovations. From UAVs for online fulfillment to autonomous mobile robots in cargo yards and warehouses, logistics and supply chain industry is enduring a significant transformation. According to experts, the industry will lean more on to artificial intelligence and machine learning to make the process self-orchestrated and completely autonomous. A fleet of delivery trucks using an algorithm could increase the efficiency in warehouses and cargo yards.

Fig.No.10



Source: Microsoft new

# **CHAPTER 5**

# RESEARCH METHODOLOGY

# Research Design:

This approach aims to understand and interpret the impacts of mobile devices in supply chain and logistics. When researchers use this approach they want to understand deep or inner understanding of the challenges and opportunities brought by mobility solutions. Mostly used on supply and logistics companies around the world. This study will be focusing of Ekart Logistics, Amazon India, India Mart and Alibaba Group. This is done by naturalistic methods of study, analyzing conversations and interactions that researchers have with subjects.

# **Sources of Data:**

The researcher will use a combination of quantitative and qualitative methods to gather data for this research

#### **Data Collection Methods:**

The researcher will use internet sources, surveys, and case studies to collect data.

# **Population:**

In this research, the researcher will use different group of online app users like students in Gujarat to conduct the research.

#### **Sampling Method:**

The researcher is going to use Quota sampling, sometimes considered a type of purposive sampling, and is also common. In quota sampling, the researcher decides while designing the study how many people with which characteristics to include as participants. Characteristics might include age and place of residence.

## **Sampling Frame:**

Snowball

# **CHAPTER 6**

# **CONCLUSION**

Flipkart's marketing strategy is a very solid and robust one - of course it also doesn't hurt that brands like Flipkart have deep pockets and can make their marketing efforts come to life. The best thing about Flipkart is that they're great with transmitting coherent messages across platforms. As a marketer here are my main takeaways from Flipkart:

- Influencer marketing and star power are huge in India Flipkart understands this and is not shy about using this channel in order to garner traffic and views.
- Flipkart is also largely focused on visual ads be it video, creatives or even reality tv. As a fashion brand this is great and shows that they understand their product as well as their audience.
- Multichannel ads are great. While Flipkart drives the performance of their ads online with performance marketing, they're also heavy on offline ads and TV spots which shows a great understanding of the audience.
- Experimenting is always great and Flipkart is not shy about this being one of the early adopters of gamification and VR.

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