



= E-COMMERCE LOGISTICS:=

Unveiling Data Driven Shopping Patterns



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Message from ISB

Our nation's e-commerce landscape is climbing a remarkable ascension. I want to take a moment to reflect upon the role of the Indian School of Business and the ISB Institute of Data Sciences (IIDS) in observing the slopes and troughs of this fascinating industry. As a data institute, we have deep research expertise across the retail ecosystem – right from the placing of an order online to its final delivery at the customer's doorstep, we observe, analyze, and unravel the complexities of manufacturing, production, supply chain management, logistics, marketing strategies, advertising techniques, and the art of optimizing operations.

Online shopping creates an ocean of data available with the e-commerce platforms or their logistics partners. Our vision is to analyze and comb through this information from time to time so we can harness knowledge into actionable intelligence to guide business leaders, strategy experts, and entrepreneurs alike. We want to deliver data-driven insights that empower decision-makers to navigate the eversplashing waters of e-commerce confidently and precisely.

Based on data from Ecom Express analysis by IIDS, we are launching this report at the cusp of a seminal initiative. The trends cited here are the confluence of a unique insights-based analysis of the e-commerce trends in India. This report holds vast value for businesses, governments, citizens, and our society and economy. Data-led insights reveal industry trends that have the power to shape policies that drive toward economic growth and lead to a better life for millions of Indians.

E-commerce is growing at an exponential rate. There is a specific surge in demand from smaller cities in India. Couple this with the widespread penetration of the internet across our geography and inject this ecosystem with the utter convenience of digital payments. No wonder the stage for unprecedented success in this sector has been set.

I hope you will find this report and its insights helpful, and it will kindle some exciting discussions. Together, we embark on a mission to shape the future of e-commerce in India and beyond.

Manish Gangwar, Associate Professor
Executive Director – ISB Institute of Data Science



Messages from Ecom Express

At Ecom Express, we are building technology-enabled logistics solutions for an expanding community of online sellers, reaching through 95%+ of India's population. In an era marked by increased digital adoption and a growing appetite for online shopping, we firmly believe that logistics extends far beyond mere product delivery for marketplaces, sellers and D2C brands. Our central mission revolves around empowering our customers with products and insights that help them capture maximum potential from a trusted logistics partner in transacting with Indian consumers across cash on delivery, higher fulfilment and conversions to prepaid channels.

I hope you find the insights in this report useful to understand how India orders and consumes e-commerce orders.

Ashish Sikka Chief Strategy Officer - Ecom Express



Traditionally, the logistics industry has been perceived as operationally intensive, with limited room for actionable insights. Logistics companies were often regarded as mere vendors tasked with delivering products. However, Ecom Express set out to change this narrative. We demonstrated our role as true partners to our sellers and customers, united by a shared objective: to foster their growth.

Our commitment extends beyond utilizing our robust technological infrastructure for our own operations. We firmly believe in sharing these capabilities with our valued seller partners, empowering them to manage and scale their businesses effectively. Within the pages of this report, we aim to showcase some of the insights we gather and collaboratively share with our partners, equipping our sellers with a comprehensive understanding of the diverse landscape of Indian customers.

In my view, unlocking the true potential and achieving exponential growth necessitates targeted, data-driven actions. This report represents our dedication to that vision.

Dipanjan Banerjee Chief Business Officer - Ecom Express



ISB Institute of Data Science Indian School of Business and Ecom Express
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Jointly Published by

ISB Institute of Data Science and Ecom Express

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Executive Summary

E-retail seems to be the definite future of shopping in India. Indians are set out to spend \$140-160 billion on online purchases by 2025. Soon, we'll leave behind the US and become the second biggest online shopper in the World.

This is due to many factors. India is a nation of young people. We're more than inclined to wear and carry all that is endorsed by celebrities and social media influencers. While we may have the spending potential, most of us live in urban hubs sprawled over a vast geography where branded stores may not physically exist. So, we reach out to the ones we carry in our pockets - online shopping sites.

This report is the confluence of two unique potentials: data sets that are collected by an e-commerce logistics partner and the deep research capability that lies with research organizations. Both these factors have led to a unique collaboration between Ecom Express and ISB Institute of Data Sciences. Hence, we present to you a data-based deep view of the Indian e-commerce sector such as has never been explored before.

In this study, we have cultivated data and found insights on various aspects of the online shopping pattern of Indians – what we buy, how much of it we buy, and how we like to pay for it. Primarily, you will see how metros, larger cities, and growth hotspots across India shop for different product categories and the payment trends that are prevalent across these areas.

Though online platforms started with books and technology, fashion and makeup are now the forerunners of online shopping. Over 70% of items bought online are clothes, fashion accessories, skin care and makeup products. Another big chunk – 10 % – is taken by electronics. Technology has invaded the modern world. Internet penetration and cheap data rates has guaranteed the sale of gadgets like smart watches, headphones, and of course, mobile phones.

Home, Kitchen & Office products, too, are popularly bought online contributing to over 8 % of the total online sales. Cookware, Kitchen Accessories and Storage, Lighting, and Decor products are hugely bought. Other popular verticals include groceries, health & fitness products, baby products & toys, and books & stationery items.

In terms of volume of orders, metropolitan cities like Delhi, Bengaluru, Mumbai are the biggest shoppers. These are followed by larger cities, usually state capitals, like Lucknow, Jaipur, Srinagar and so on. Interestingly, the growth hotspots dotted across India – cities like Kohlapur, Jammu, Azamgarh, etc. bring in the largest volume of online orders across the country when compared with their population. This trend makes sense because a lot of popular brands don't have a physical presence in these cities and online shopping really breaks this barrier by delivering products across the country.

You might think that digitally literate metro residents might be using online payment methods to prepay (Pre-Paid Delivery known as "PPD" when they shop online but cash on delivery ("COD") remains as the overarching trend across most product verticals. This means that more Indians prefer to pay for their shopping once it reaches their doorstep as compared to prepaying for it at the time that they order it.

Overall, COD is four times higher compared to PPD which might be an indication that Indians are more comfortable with cash or it could simply be a matter of trust. When compared across cities, small towns of India show the thickest contrast - COD is chosen seven times more than PPD. Zoom out to metro cities, the trend goes thinner with shoppers choosing COD only 1.5 times more than prepaying for orders.

Even when compared across products, the COD-PPD ratio varies drastically. E.g., shoppers opt COD for mobile phones two times as much as PPD while for health supplements, COD-PPD option is almost equal. PPD is two times more for gift cards while COD is quite higher for certain items like appliances – grooming appliances (7 times more COD), fitness equipment (17 times more COD), perishables (6 times more COD), bars and coins (8 times more COD).



Overall Trends

Indians are the World's third-largest online shoppers. We top the world in buying the highest number of digital items online. Data suggests that this trend will continue in the near future as online shopping is increasingly becoming the go-to mode of shopping across all age groups. With internet penetration and rising urbanization, more and more Indians are taking to online shopping each year. 125 million Indians shop online and we will add 80 million more shoppers by 2025. Further, the pandemic has also pushed customers not only get comfortable with shopping over digital platforms but has also shown them the convenience and safety of shopping from home.

All these factors underline the fact that online shopping is the definite future of shopping.

Shopping trends are direct indicators of a nation's economy. Non-essential items like fashion, cosmetics, and gadgets make up the bulk of online shopping today. This indicates a confident shift towards the growing disposable income and ability to spend on leisure items. Buying behaviour, i.e., what we shop for, how frequently we do it, and how we pay for it, not only drives the goods and services sector to constantly innovate and strategise to match ever-changing consumer needs but also injects much needed capital into the system that keeps oiling the economic machinery.

Consumers, businesses, media giants, and governments are keen to know the key trends in shopping behaviours. This is because shopping trends drive digital ad spending and ad structures, social media consumption, and digital spending pattern. This report is the first of its kind data backed analysis analysing shopping trends from a B2C delivery perspective.

Here, we take an overview of the buying pattern of online shoppers across basic verticals of the most popular product sections for a period of six months ranging from January 2023 to June 2023. Then, we travel through India – from metropolitan cities to state capitals and exploring urban hubs as well as small towns – to unpeel the layers of the online shopper of India, what they love to buy and how they pay for it.

KEY CATEGORIES

Trends 10% BEAUTY, COSMETICS A TOILETRIES FASHION & ACCESSORIES OVERALLY TRENDS 10% BEAUTY, COSMETICS A TOILETRIES Syd HEALTH, SPORTS & FITNESS

Though online platforms started with books and technology, fashion and makeup are now the forerunners for online shopping. Over 70% of items bought online are clothes, fashion accessories, skin care and makeup products.

Another big chunk - 10 % - is taken by electronics. Technology has invaded the modern world. Internet penetration and cheap data rates has guaranteed the sale of gadgets like smart watches, headphones, and of course, mobile phones.

Home, Kitchen & Office products, too, are popularly bought online contributing to over 8 % of the total online sales.



Overall Trends





India at a Glance

Out of all Indian cities, it is metropolitan residents from Delhi, Bengaluru, Mumbai etc. who shop the most online. Then come the state capitals like Lucknow, Jaipur, Srinagar and so on. This is because these cities are densely populated and have great internet at their disposal which drives the large volumes of online orders.

Having said that, the smaller urban hubs of India – otherwise known as Tier II cities – bring in the largest volume of online orders. This could be because of the growing urbanization in India where people from small towns move to the nearest urban centre in search of better opportunities. Another reason could be lesser variety of products being stocked at local stores. In the age of social media, everyone wants to follow global trends and keep up with the latest lifestyle, be it fashion, décor, or diet. Consumers are able to easily fulfill these needs through online shopping.

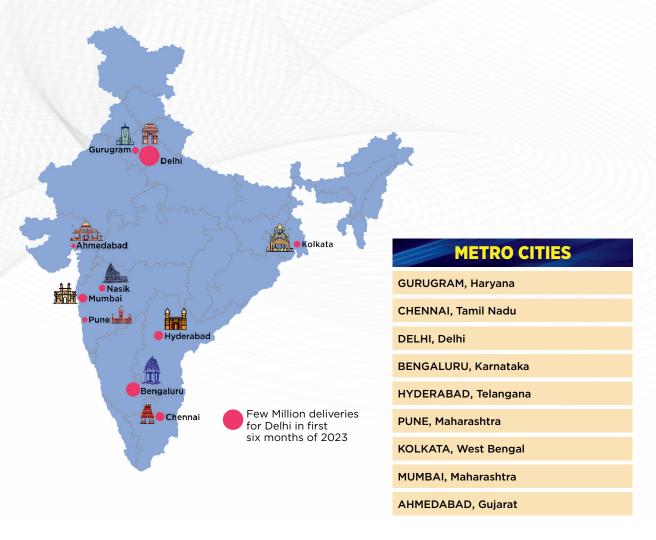
The number of shopping orders tell the story of which Indian cities shop the most but there's another element that underlines the trajectory of online shopping industry. This is the rate at which a city shops online after factoring in its population. Some cities may have lesser number of people but those people are shopping online at very high rates and therefore, these cities and towns are the backbone of online shopping in India.

Zooming out and looking at the trends holistically, it makes sense that smaller towns display such sharp online shopping trends. Social media and internet penetration has given exposure to every India about the latest trends in products, gadgets, and lifestyle.

But often, these products do not physically reach the markets of the smaller cities and towns spread across the map. Online shopping has truly removed this barrier. Now, a person sitting in the tiniest town of India has access to the latest appliance or apparel style by tapping on a screen.

Metros

The metropolitan cities of India shop the most online. Delhi, being the second most populated city in the world, outranks all other Indian metro cities by a far margin when it shops online. Bengaluru, the second biggest online shopper of India shops only a little over half of what Delhi shops. Interestingly, Mumbai, being one of the most populated cities in India shops three times lesser than the national capital. Once suburbs but now cities in themselves, Gurugram and Faridabad also figure as high ranking online shoppers.

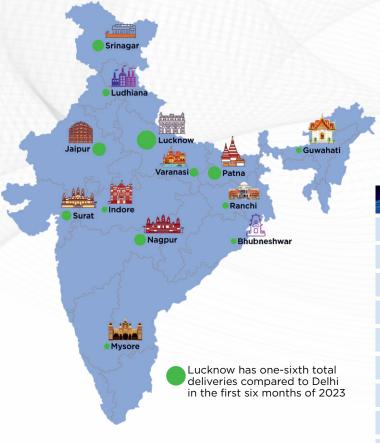


When we analyse the online shopping data across all cities, two separate patterns emerge. Certain cities come on top while comparing the sheer bulk of their shopping cart. But a completely different set of cities surface when we sort the shopping capacity of these cities keeping in mind their respective populations.

In the images above, the map represents metro cities that shop the most online across India. The list, however, tells the story of those cities that shop the highest in proportion to their population. We see here that Delhi shops the most when seen simply from the lens of volume of orders placed but when juxtaposed against the size of population, neighbour Gurgaon emerges as the champion online shopper.

Larger Cities

Lucknow, the capital of Uttar Pradesh - the most populated state in India - is the biggest online shopper out of all state capitals. Pink city, Jaipur, is a close second with almost the same volume of orders in its shopping cart. Patna and Srinagar are other capitals that have taken vigorously to online shopping. We notice a lot of industry rich cities like Surat, Ludhiana, and Mysore in the top cities that shop online. This trend can be indicative of the overall economic prosperity and disposable income available to residents.



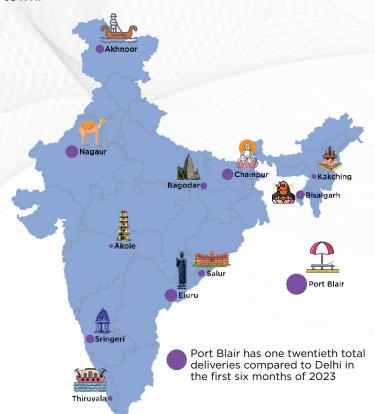
In the images above, the map represents larger cities of India that place the most online orders. The list, on the other hand, indicates cities that shop the most online in proportion to their population. We can see here that Lucknow, Jaipur, and Srinagar are big shoppers but when this trend is adjusted to the population of cities, some unlikely names like Panchkula, Mohali, and Orissa's Behrampur come across on top.

LARGER CITIES PANCHKULA, Haryana HAJIPUR, Bihar BERHAMPUR, Odisha MOHALI, Punjab DEHRADUN, Uttarakhand VELLORE, Tamil Nadu AMBALA, Haryana VIZIANAGARAM, Andhra Pradesh BILASPUR, Chhattisgarh WARDHA, Maharashtra CHANDANNAGAR, West Bengal KALOL, Gujarat HARIDWAR, Uttarakhand **CUTTACK**, Odisha SRIKAKULAM, Andhra Pradesh KALYANI, West Bengal RAI BAREILY, Uttar Pradesh

Growth Hotspots

The real India lives in small towns. Out of these, Port Blair residents have vigorously taken to online shopping. This is perhaps because Port Blair is on an island with limited goods available and as such, online shopping provides a better aisle of stuff that can always be shipped to their doorstep. Some small towns emerge as clear winners when we scan India for its top online shoppers. Among these are the city of rug weavers, Eluru located in Andhra Pradesh; Rajashtan's Nagaur – home to India's largest salt water lake; and Jharkhand's handicraft hub, Chainpur.

Akhnoor, a historical town 30 km away from Jammu, shops online at a super high rate given its tiny population of just over 1.6 lakhs. Bihar's tea grower, Thakurganj, is another such town.



Pradesh's Janpur also place large online orders. Jammu, the winter capital of the newly declared union territory of Jammu & Kashmir, love to shop online outranking many other popular cities like Jhansi, Pathankot, and Podicherry.

The map represents growth hotspots of India that place the most online orders in terms of volume of orders placed. Port Blair, Nagaur, and Eluru are the toppers. The list indicates cities that shop aggressively given the size of their population. Andhra Pradesh's Salur and Manipur's Kakching top that list.

Uttar Pradesh's Deoria is handsdown the winner amongst smaller Indian cities. Temple city, Deoria's online shopping cart is as big as that of state capitals like Chandigarh and Dehradun. Maharashtra's Kohlapur and Uttar

GROWTH HOTSPOTS

PORT BLAIR, Andaman And Nicobar

SALUR, Andhra Pradesh

KAKCHING, Manipur

NAGAUR, Rajasthan

KONDAPI, Andhra Pradesh

THOUBAL, Manipur

K V P PURAM, Andhra Pradesh

THIRUVALLA, Kerala

BHIMAVARAM, Andhra Pradesh

BISALGARH, Tripura

CHAINPUR, Jharkhand

DHARMANAGAR, Tripura

ELURU, Andhra Pradesh

BAGODAR, Jharkhand

MELAGHAR, Tripura

BISHNUPUR, Jharkhand

SIMRI BAKHTIYARPUR, Bihar

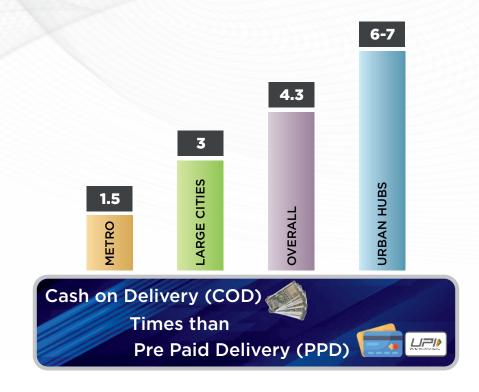
CHURACHANDPUR, Manipur



Payment Trends

You get two options to pay when you shop online. One is you pay at the time you place the order, known as Pre Paid Delivery ("PPD") and the other is you pay when you receive the product at your doorstep, known as Cash On Delivery ("COD").

If we see the trend across India, online shoppers prefer to pay cash on delivery over four times than they choose to prepay for their orders.



With the growing fintech revolution in India, there are multiple options for paying for an online purchase like UPI, credit card, net banking, Wallets, gift cards or cash on delivery. From the perspective of logistics, these options can be broadly segregated into two groups - Pre Paid Delivery ("PPD") where the payment has been made at the time of ordering the product or Cash on Delivery ("COD") where the payment has to be collected by the delivery person.

Overall Trends



The above image indicates how shoppers pay for products of various categories. While cash on delivery is very much the norm across all product categories, the rate at which shoppers prefer it differ quite a bit. At a glance, we see that for health, sports and fitness goods, customers like to opt for COD 1.4 times more than they prepay. On the other end are electronic goods for which customers like to pay COD almost 5.5 times more than they they prepay.

Category Level Detail



Fashion & Accessories

Globally, people are addicted to buying fashion online. Indians are no different. Fashion & Accessories is the most purchased vertical of all. Infact, Fashion & Clothing is five times ahead of the its rival, Beauty, Cosmetics & Toiletries. Zooming in, you will notice that the item that is most bought is top wear. This includes dresses, t-shirts, and jackets. Interestingly, the average customer buys over three times more top wear than bottom wear.



This ties in with the data from US retail giant, Walmart, where top wear sales have been eclipsing bottom wear sales ever since the pandemic. One reason could be the growing trend of working from home and employees preferring to wear neatly ironed shirts and blouses for zoom meetings while still wanting the comfort of lounge pants from the waist down.

In Fashion, western wear is the most popularly purchased item. There are many reasons for this trend. A rapidly modernizing India chooses comfortable western clothing over ethnic choices. Western clothing may also be popular because India is the youngest population in the World – its median age being 26 – and younger generations prefer stylish western clothing that gives them a global look. We also know that after the pandemic, more and more people work from home and therefore, have a chance to work in comfortable, casual clothing like t-shirts and tops.

After Topwear, it's Ethnic & Festive Wear that takes the biggest piece of the fashion pie. This is a vast category but other popular choices include artificial jewellery, sleepwear, and shoes. An interesting factor we noticed is that trinkets and knick-knacks i.e., artificial jewellery, are ordered two times more than shoes which is an item of daily need.

In shoes, flip flops are ordered way more than sandals and heels.

City Trends

As expected, metros order the most fashion items.

Another interesting trend emerges when we see the volume of online sales as opposed to the entire population of the city. This gives us an idea as to the rate at which a city shops online i.e. how many people in the city have taken to online shopping. Several interesting trends emerge once we go through various cities' buying rates.

Across India, the rate of buying Topwear is the most in Gurgaon being three times more as compared to other metros like Delhi, Kolkata, and Bengaluru. Out of other cities, Panjim and Mohali top the chart and buy topwear at an aggressively high rate given their population.

Among the smaller cities, Port Blair emerges as a major online purchaser by ordering more fashion products than Chandigarh, Bhopal, and Agra.



Payment Trends

As is the national trend, shoppers prefer to pay COD upon orders. In metros, people tend to opt for COD 1.6 times more when they shop for topwear. For Indian & Festive wear, COD is chosen 2.4 times than PPD, while in artificial jewellery, it's three times more. For bottomwear, shoppers opt for COD 1.4 times more than PPD.

We also see that the trend of paying for products upon COD is much sharper in Tier 4 cities as opposed to metro cities. The COD preferring shoppers go up seven times in the smaller towns of India. For Indian & ethnic wear and artificial jewellery, shoppers choose COD over 9 times more.

For shoes, shoppers opt for COD 1.8 times more in metros. When we reach small towns, the COD curve goes up to 7 times more.

The trend for paying COD for online shopping is all pervasive but the most pronounced in the fashion vertical. There are many factors that contribute to this tendency. India is still a cash driven economy. Majority of Indians still use cash in their daily lives. Shoppers in semi-urban and rural areas may not have access to digital payment methods.





Then there could be a lack of faith in entering card information / details upon online portals. It could also be that there's a general impetus that you pay for an item only when you receive it in hand.

Beauty, Cosmetics & Toiletries

With Indian consumers channeling into global trends, the beauty segment has transformed itself into a daily need. Most people have a daily beauty regime. In the wake of COVID-19, people have become more aware of their health and fitness habits. In the past couple of years, the beauty vertical has also seen a wave of preventive and natural beauty methods. Terms such as 'healthy beauty' and 'Clean Girl Look' are all across social media. It is, then, no wonder that the most shopped products are skin care and face care items across the online beauty aisle.

Makeup drives in as a close second. With growing disposable income per household, consumers are likely to choose natural, cruelty-free make up brands made from organic substances rather than discounted mass brands. Hair Care and Bath & Shower products are also popular choices.



Perhaps one factor that drives online shopping in body and hair care segments is the rise of small scale, customised and nature-driven stores that sell products solely online. These new age brands have tapped into the online shopping pulse of Indians and hence, go for aggressive social media marketing to capture more market share as people are always looking for the next big thing in beauty and self-care.

City Trends

Delhi comes out as a clear topper, not just here but in every vertical across India. One interesting trend here is that Delhi orders more than two times skin care products and make up products than film city, Mumbai. Nagpur, Guwhati and Imphal also love to shop for skin care ordering far more than Pune and Ahmedabad.

Out of state capitals, Lucknow orders the most beauty and cosmetic products. The north-eastern city of Siliguri orders more make up than other major Indian cities such as Amritsar, Meerut, and Indore. Maharashtra's Nasik outranks Indore and Dehradun when ordering makeup.

Bath and shower products are a popular choice for online shoppers. Gurugram orders more bath and shower items than ten times more populated Hyderabad.



Surat and Nagpur also heavily order bath products. North eastern cities of Imphal, Dimapur, and Siliguri also order a lot more bath products than bigger cities of Agra and Srinagar.

Payment Trends

For skincare and makeup, people prefer to pay COD three times more than prepayment. This ratio is better in metros. For makeup, metro residents prefer COD only 1.2 times more than prepayment. For skin care and oral care, they opt for PPD almost as much as they prefer COD. In other cities, this trend sharply increases to four times more COD than PPD.

One interesting trend is that many small towns of West Bengal cities like Raipur and Goghat pay for over 90% of their oral care orders before delivery.



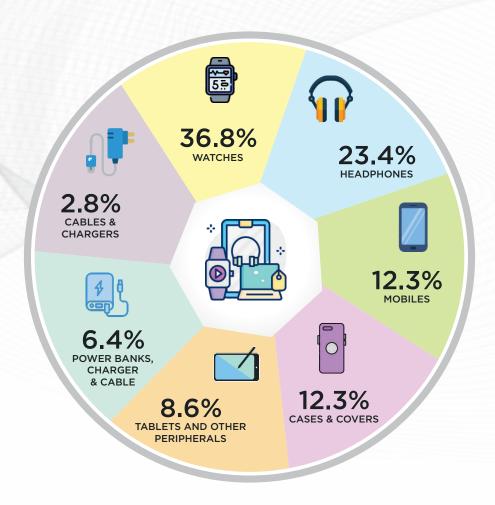


This could be because usually, consumers have brand loyalty in oral care products like toothpaste and toothbrush which are a staple in their daily routine, and thus, feel more comfortable in paying before they receive the product.

7.0

Electronic Gadgets

Over 70% Indians are happy to splurge on electronics and gadgets during festive season. And that makes Electronic Gadgets like watches, headphones, mobile phones are a popular vertical of online shopping.



The most purchased electronic gadget this year is the digital watch. Three digital watches are ordered online for every mobile phone. Even the bestseller lists across online shopping websites showing smart watches as the most sold product.



Apple sells over 15% of the world's watches which makes it bigger than all of the Swiss watch market combined. There is an acceleration in the smart watch wearing customer trend due to health and fitness reasons. The gym goer, marathon runner, and the cyclist all prefer a smart watch over the analog option because of the plethora of features like pulse, step meters, and stair climb count.



Another consequence of this trend has established analog watch makers like Titan and Fossil to launch their own smart watch models to tap into the fitness conscious consumer market.



The second most popular electronic gadget is earphones. With the modern customer always on the go and switching between various roles and operating in a world full of external sounds, earphones are a must for the modern human. Along with this, increased use of earphones during workout and to engage in work related calls is the primary reasons for the market growth of earphone demand.

The next most popular electronic gadget bought online is mobile phones. Interestingly, Indian shoppers buy as many mobile phones as mobile phone cases and covers.



City Trends

Delhi is the most gadget loving city in India.

Delhi towers over any other Indian city when it comes to buying mobile phones online, ordering more mobile phones than Hyderabad, Bengaluru and Kolkata combined. The metros, of course, order the most watches, headphones, and mobile phones. Surat buys more smart watches than the usual toppers, Jaipur and Lucknow. Kohlapur and Azamgarh also buy more smart watches than Chandigarh and Bhopal.

After Delhi, Mumbai purchases the most headphones. Surat's name comes up again as it buys twice as many headphones as Jaipur and Lucknow.

When it comes to mobile phones, Delhiites leave behind every other city by a far margin. It orders three times more mobile phones than the other biggies - Mumbai, Bangalore, etc. Then comes Srinagar that outranks not only other capital cities like Jaipur and Lucknow but also outrank metros like Gurgaon and Pune. The heart of

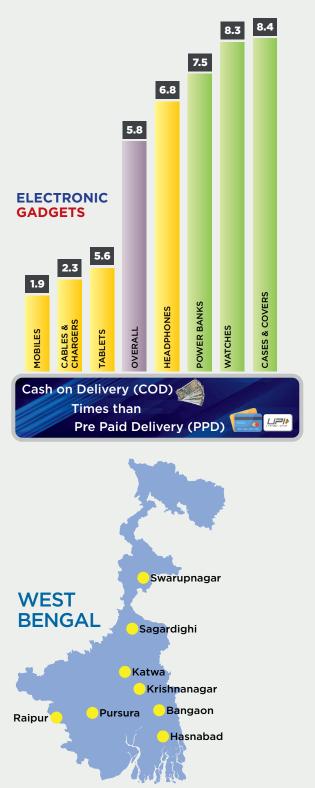
Haryana - Jind city - is a major mobile phone purchaser and shops for more mobile phones than major Indian cities like Lucknow, Surat, Patna, or Amritsar.

Across state capitals, Srinagar is the top contender state capitals cities and buys more mobile phones than major cities like Jaipur and Lucknow that are four times more populated.



Payment Trends

The overarching trend still remains paying in cash upon delivery but for mobile phones, almost half the shoppers are comfortable paying before delivery. This trend is more visible in metro cities like Delhi and Kolkata where people pre pay for mobile phones 10% more times than opting for COD.

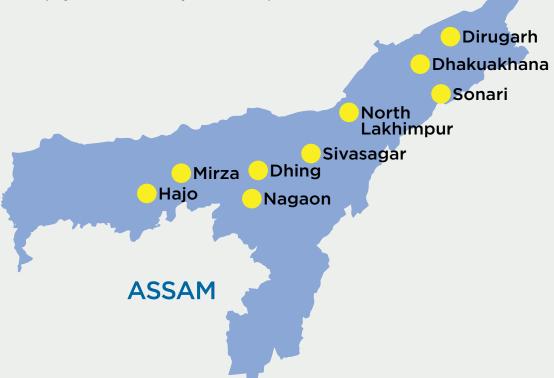




Overall, metros opt for COD 1.5 times more. However, when it comes to watches and headphones, the overall COD trend in metros is 5 times more. As much as people love prepaying for mobiles phones, very few like to prepay for Cases & Covers, i.e. COD orders are 8.5 times more than PPD orders in mobile phone covers. One reason for this could be people usually buy cases and covers from small internet stores selling generic / white label brands and therefore, are happier to pay only when they get the product in their hand. Mobile phones, on the other hand, are sold by reputed brands and carry protection mechanisms like guaranty, etc.

The mobile phone segment has shown some curious trends. Across India, when an online shopper places an order for a mobile phone, the COD-PPD ratio (i.e. (how likely a shopper is to opt for COD for their order) is two. This means that shoppers across India are two times more likely to opt for COD than to prepay for their purchase. However, a closer look at the data reveals some fantastic outliers.

Haryana small towns, Adampur, Jind, Fatehabad and a few others, show a COD-PPD ratio is 0.08 to 0.5, which means that shoppers from these places are two to twelve times more likely to prepay when they shop for mobile phones. Specifically, Adampur and Jind, show a whopping prepaid delivery percentage of 90% and 92%, respectively. To underline the contrast, in the metros of Haryana like Gurugram and Faridabad, 58% customers pay cash on delivery for mobile phones.



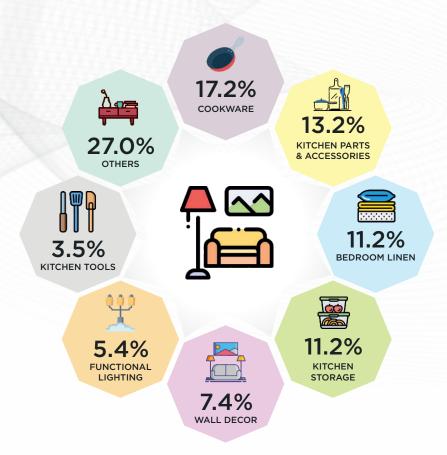
Similarly, certain small towns of West Bengal like Pursura and Swarupnagar also show a similar angle. The general COD-PPD trend in these areas varies from 0.1 to 0.3, meaning that shoppers prefer to prepay for their orders three to ten times more than they choose COD.

There have been reports of cybercrime activities from these areas and this eyebrow raising PPD trend on gadgets may just underline this facet.

On the other hand, the state of Assam offers a completely different trend. Here, the COD-PPD ratio is much higher than the national average of two. In small cities like Nazira, Sonari and Hajo, shoppers tend to opt for COD 8 to 18 times more than they choose to prepay.

Home, Kitchen & Office

Pots, pans, Kadhais, and Tawas - basically, cookware - forms a huge vertical for online shoppers. One reason for this could be the Indian government's strong emphasis on making LPG available to every household. Recent trends also suggest low to mid income houses purchasing stainless steel cookware items as they provide even cooking. Also, India's rising urbanization makes people change homes every few years and therefore, gives them an opportunity to upgrade their cookware.



Incidentally, South India buys more cookware than any other region. One only wonder if this is because of the interesting utensils like *urulis* and *idiyappam urals* that are used primarily in South Indian kitchens.

The Indian kitchen is evolving with the people of India. Consumers want modern, modular kitchens that reflect their lifestyle. COVID-19 saw a big rise in home cooking. People resorted to organizing their homes and trying new recipes to make their lock down days interesting. It's no wonder then that Kitchen Parts and Accessories are super popular items dropped into the online shopping cart. These include kitchen racks, organisers, trays etc. Alongside, Bedroom Linen and Kitchen Storage items are also quite popular with shoppers and are Wall Décor and Functional Lighting.

City Trends

As we know, metros bring in the bulk of orders for Home, Kitchen & Office Supplies. For instance, Bangalore alone shops online more than Lucknow, Jaipur, Patna, Nagpur, and Surat. In state capitals, Bhubhaneshwar orders the most cookware out of all other cities. Mysore and Guwhati also heavily order cookware items.

Specifically, for bedroom linen, Jaipur orders more than Ahmedabad. Ludhiana is also one of the top purchasers of bedroom linen. Srinagar orders more functional lighting items than Jaipur and Lucknow and even metros like Kolkata and Ahmedabad.

Having said that, smaller cities are also taking heavily to shopping online for Kitchen and Home items. Port Blair orders as much stuff as major cities like Mangalore, Jamshedpur, and Vijaywada. Srinagar is a consistent topper in online shopping and orders as much as Ahmedabad, a city that is five times more populated.

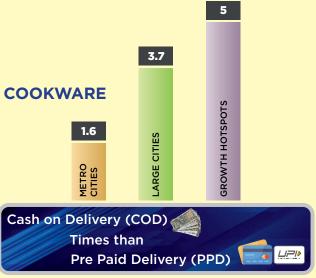


Payment Trends

The PPD curve shows a jagged up-and-down trend as we travel across smaller towns to bigger cities to even bigger metropolitans. While 41% of Gurugram residents stick to prepayment for online shopping, in emerging towns such as Tripura's Kailashahar, 44% customers pay pre-delivery.

Across India, shoppers still prefer COD 3.7 times more than prepayment when they buy cookware. Metro residents tend to opt for COD 1.6 times more than prepayment but in small towns, this tendency to go for COD increases to five times.





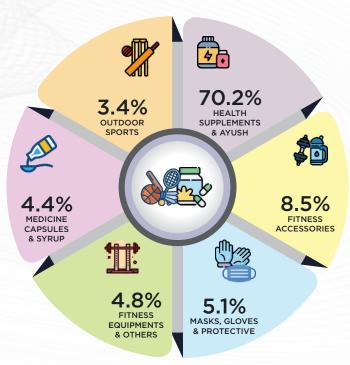
Home appliances such as microwaves, televisions, washers and dryers tend to have a better PPD percentage in small towns. This could be because these are bulky, high-ticket items and often, online shopping websites are unable to provide COD options in relatively remote areas where the cost of delivery is higher and lesser items are ordered.

Health, Sports & Fitness

Even when over 50% of Indians fall into 'High Risk' or 'borderline unhealthy' category, it is disappointing that Health, Sports and Fitness takes only a slender sliver - about 5 per cent - off the online shopping pie.

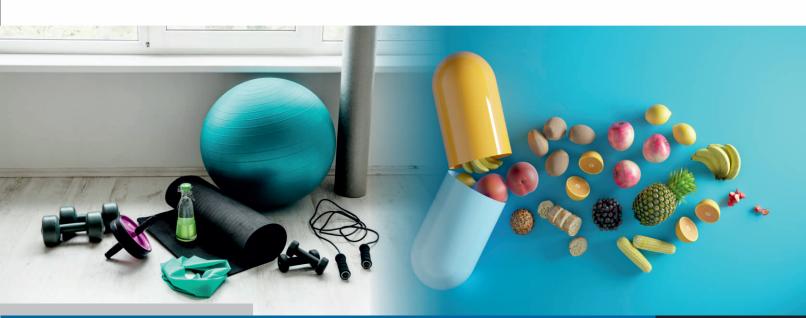
Drilling down, the first thing we notice is that people are desperate to get their hands on Health Supplements. With the current tsunami of health and fitness sweeping humans globally in the wake of COVID pandemic and a generally stress ridden lifestyle, online shoppers spend 70 percent of their money on health supplements.

With 10% Indians working out at home, Fitness Accessories like dumbbells, gym gloves and kits, resistance bands, hand grippers and so on are the second most popular category. This makes total sense. People now work for longer hours and don't have time to go to gyms. Also, a lot of workforce now work from homes. It's natural that people want to invest in compact, portable home gyms and are also turning to on-screen workouts.



Next comes - and no surprise here -

masks, gloves, and protective gear. This is followed by medicine, capsules, and syrups which are also fairly popular. And then comes outdoor sports gear like balls, rackets, roller skates, etc.



City Trends

Metros, of course, order most of their needs online and thus rank as the top-buying cities. Specifically, we notice Delhi - which is anyway the biggest shopper across each vertical - has double the population of Kolkatta but orders four times more health and fitness goods. By the way, Delhi and Kolkata both have lower health status when compared with the rest of India.



Eastern UP's Deoria shops more health and fitness products than big ticket cities like Baroda, Jodhpur, and Agra. Imphal buys more masks and gloves than cities double its size i.e., Chandigarh or Bhubaneshwar. A lot of north eastern cities like Siliguri, Itanagar, and Shillong tend to actively buy masks and protective gear.

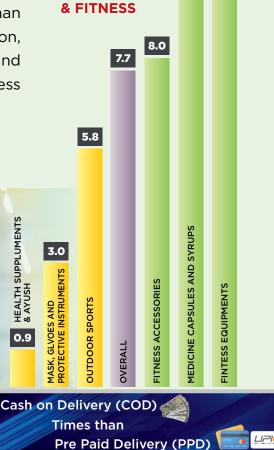


Payment Trends

Payment pre-delivery emerges as a towering trend in health supplements. More people across India prepay for their health supplements.

Metro residents opt for PPD two times more than they pay COD for health supplements. Specifically, Delhi has a 71% PPD rate while Bengaluru has a jaw-dropping 80% PPD rate. Overall, PPD rates are much higher for health supplements. This could be because health supplements are usually perishables with lesser shelf-life and people continue to buy their trusted brands again and again and therefore don't have the usual quality check qualms.

But this trend does not reflect when people buy fitness accessories and COD still comes up as the most preferred payment method. Actually, shoppers pay COD 8 times more than PPD for fitness accessories. As a comparison, Delhi pays PPD on only 22% orders and Bengaluru pays PPD only upon 13% fitness accessories.



HEALTH.

SPORTS

17.3

11.0

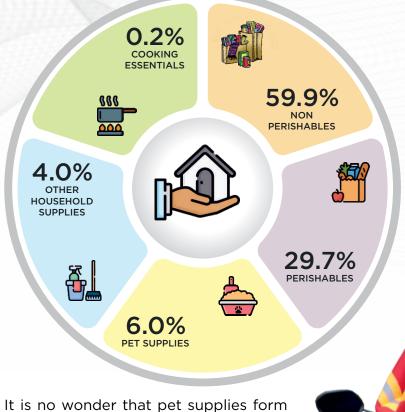


In metropolitan cities, the COD-PPD ratio improves with essentials and mostly non-returnable items like masks and protective gears. COD is chosen only 1.2 times more than PPD. However, this ratio plummets sharply as we travel into the smaller cities of India where people still prefer to pay upon delivery of products. Shoppers in the urban hubs and small towns spread across India choose COD over 4 times more than they choose to prepay for masks.

Groceries

Kirana stores continue to dominate the grocery segment, yet the trend of ordering groceries online is catching up fast. Specifically, in the past three years, the pandemic has made shoppers comfortable with ordering groceries online. Internet penetration and ease of ordering from the comfort of home while saving fuel, time, and a trip to the grocery store are all factors that add to the sharp rise of the trend of getting your groceries online.

Sixty percent of grocery orders contain non-perishables like grains, dried pulses and beans, nuts and dried fruits, sauces and jams are products that are ordered the most. Infact, shoppers order twice the amount of non-perishables than fresh produce which tends to have a shorter shelf life. With newer e-commerce portals penetrating the market promising quick deliveries, perishables are also taking a larger share of the online grocery cart.



It is no wonder that pet supplies form another popular category. The online market is brimming with new-age hip pet stores that provide pet food and other lifestyle items for shoppers' furry friends.

An interesting fact that comes to light is the pet industry becoming one of the fastest growing industries in India. (CAGR = 16%)

City Trends

Jammu orders more grocery online than way more populated industry and tourist hubs like Agra and Jalandhar. For example, Jammu, having half the population as Chandigarh, still orders as much perishables as does the City Beautiful.

As a key trend, Port Blair shops the most non-perishable grocery items amongst its counterparts and leaves far behind, bigger cities many times its size, such as Darjeeling, Bhatinda, and Shillong. One reason for this could be that the residents of Port Blair prefer to shop online rather than local markets that carry lesser variety of products and also have uncompetitive pricing.

Looking at pet supplies, the most interesting trends emerge from rather lesser known towns of India. Known as the rice-bowl of Karnataka, Koppal, orders the most pet supplies in India. In fact, Koppal orders way more pet supplies online than combined order of most of the metropolitan cities of India – Delhi, Bengaluru, Chennai, Hyderabad, and Mumbai.

A hundred kilometres away, Siruguppa and Sindhanur are the next biggest buyers of online pet supplies. Within the same state, Kushtagi and Hospete also rank very high in this category. Overall, the smaller towns of Karnataka take the cake in ordering pet supplies.





Payment Trends

As in line with other categories, cash on delivery seems to be the trend when ordering perishables and non-perishable items. Zooming in, the COD-PPD gap is much more wider in perishables as these items don't last long and usually, the customers might want to look at the produce before paying.

In metros, more than half the non-perishables are prepaid while only one-third of perishables are prepaid. In other large cities, COD is preferred 1.5 times more while for perishables, this rate goes up to 5 times more PPD orders. In small towns, COD still rules the roost. For non-perishables, COD orders are three times more but for perishables, COD takes up 8 times more orders than prepayment.

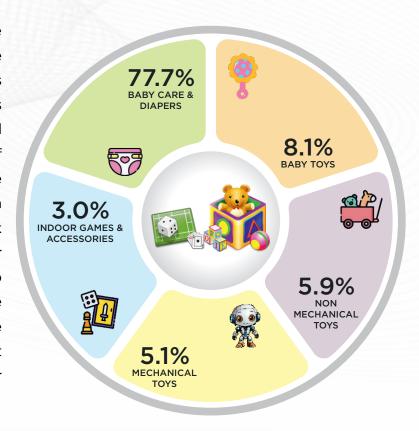


For pet supplies, PPD is the general norm. Strangely, metro residents opt COD twice as they choose PPD. In a sharp contrast, more residents from large cities prepay for their pet supplies than paying COD. In small urban hubs, the PPD trend goes even higher. Customers prepay for their pet supplies almost three times more than they chose COD.

Games, Toys & Baby Products

The modern household is forever on a time crunch and households with babies are the most time crunched for time. That is why baby care and diapers are the most bought items online across this vertical, clocking at almost 80 per cent of the total orders. Price sensitive shoppers love comparing discount rates at the click of a button at the comfort of home and this could be one reason why diapers are such a hit online order. Also, convenience seeking parents know their preferred brand of diapers and baby care products and over time, these products become a staple orders.

It's also seen that online retailers give massive discounts on baby diapers and nappies because diapers come in bulky packaging and therefore take up a lot of space at storefronts. Online retailers incur no such expense as they simply stock these items up at their warehouses and then ship them directly to the customer. Parents these days want the best, most interactive toys for their children.





City Trends

As expected, metros order the biggest volume of diapers and baby care products. Delhi towers over other metros and orders over twice the volume of Hyderabad, Chennai, or Mumbai. Out of all state capitals, Srinagar orders the most diapers, baby care products, and baby toys than pink city Jaipur that houses twice as much people.

Thane based Mumbra surfaces as a top buyer of diapers & baby care products leaving behind major Tier II cities like Kohlapur and Jabalpur.

Payment Trends

COD is the common trend across all sub-categories in this section. People are happier paying for the product once it's delivered at their doorstep. Only one-third of the diaper ordering customer pays for it pre delivery. This trend gets much louder when people order any kind of toys. Dehradun, Varanasi, and Mysore are also major buyers of diapers.

Close to forty percent metropolitan residents pay for diapers at the time of placing their order. This curve goes lower and lower as we move to other



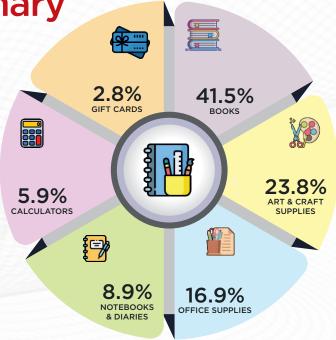
cities cities where COD is still the go-to method. Big cities opt for COD 3 times more than PPD. Other urban hubs choose COD 4 times more and in small towns, COD is chosen 6 times more. Mumbra, by the way, pays COD for 75 percent of its orders.

Again, COD is preferred 6 to 7 times more than PPD when people order baby toys, and mechanical and non-mechanical toys.

Books & Stationary

The World Culture Survey has shown that Indians spend more time reading than any other country in the World. Despite this encouraging number, Books & Stationery remain as one of the least popular verticals shopped online.

Forty-one percent of all orders contain books making it the most popular item ordered in this vertical. Other popular categories are Art & Crafts Supplies, Office Supplies, Notebooks and Diaries, and Calculators. Region wise, it is



the west (Gujarat, Madhya Pradesh and Maharashtra) that orders the maximum volume.

City Trends

Metro cities like Delhi, Bengaluru, and Mumbai have been featured as the most well-read cities as per national surveys in the recent past. And this reflects in the orders - Delhi alone shops for more books than Pune, Kolkatta, and Hyderabad put together.

A few cities emerge as unlikely stars in this vertical. For example, Patna, which carries only one-third of the population of Ahmedabad, orders the same amount of books and stationery. In fact, Patna even outranks metros like Bengaluru, Chennai, and Hyderabad in buying notebooks and diaries.

Interestingly, Kathua, a small city in Jammu orders more books than major cities like Dehradun, Guwhati, and Mysore. Similarly, the Manchester of South India - Coimbatore, purchases more calculators than state capitals like Lucknow, Kolkata, and Jaipur. Coimbatore is a major industrial hub as well as software producer and this could be the reason for the calculator rains here.

Payment Trends

COD trends are changing for books in metros. Lesser people are choosing COD for books and the COD and PPD orders are actually very close to each other. As we move to smaller cities, the tendency to order COD does rise and shoots to 2.2 times more than PPD orders. But this COD trend way less as compared to many other categories, say, fashion and kitchen essentials. This could be because books are standardized items and do not particularly need a touch and feel experience as other products do.





However, there are some outliers in T4 cities like Kailasahar and Teliamura (Tripura) showing an 80% PPD trend for books. As we've said before, this could be because COD options are yet to be provided for remote locations.

Others

There are a lot of miscellaneous products that form popular online orders. Some of these are perfumes, deodorants, insect repellants, etc. But two products outshine every other item in this vertical – gold bars and pressurized cylinders.

The online popularity of gold bars & coins is unparalleled. More people order gold bars than non-perishable grocery items. Now, Indian households love investing in gold. While most people hold gold as jewellery, gold bars and coins are a popular way to bump up your savings as gold rates go up each year. Gold bars and coins come in the highest purity, shapes, and sizes. Most online gold stores offer a return policy and provide the most secure logistics partner which make buying gold online a hassle-free and safe experience for shoppers.

The other prevalent item is pressurized cylinders. Infact, more people order pressurized cylinders than books in India. High pressure cylinders can be used in a variety of ways, for cleaning needs at home or for analytical needs in laboratories. These include small fire extinguishers, lighters, etc. Oxygen cylinders, too, have become a popular item in this vertical especially in the wake of COVID and people may be stocking oxygen cylinders at home in anticipation of a future need.



City Trends

After Delhi, Hyderabad buys the maximum gold bars and coins in India. Orange city, Nagpur also ranks pretty high and buys almost as much as Gurugram. Infact, Nagpur outshines the three major cities of Lucknow, Jaipur and Srinagar. Kohlapore and Indore also come up cities that love purchasing gold bars and coins. Andhra Pradesh's chilli capital, Guntur, buys more gold bars than other bigger cities like Patna, Indore, or Chandigarh.

North east emerges as a prominent region in this vertical. After the metros, Guwhati buys the most pressurized cylinders, more than Ludhiana and Baroda having double the population of Guwhati, and even eight times more populated Surat. In other cities, Siliguri, Imphal, and Dimapur are the highest purchasers of pressurized cylinders.



Payment Trends

COD remains the norm for gold bars and coins. Metros opt for COD 3 times more than prepayment. Hyderabad, the top online gold bar shopper, choose COD 5 times more than PPD. In other cities, the COD curve rises up to 6 times more than prepayment. Across urban hubs and small town of India, shoppers opt for COD 9-10 times more than they

prepay for their orders.

More people tend to pay COD when they order pressurized cylinders online. But this trend is turned on its head in the metros where more prepaid orders are placed for these items. Delhiites prepay on over 54% of their orders. Bengaluru prepays on 57% orders and Mumbai prepays for over 67% of their orders.



8.0



In other cities, the trend slips back to COD being the preferred method. Still, the difference isn't much as COD is opted 1.3 times more than PPD. In smaller urban areas, the COD trend grows sharper – 2.8 times more than PPD. For small towns, it sinks even lower – 4.9 times more COD orders.

Directions for Future Research

As we dig through data, we comprehend better the Indian shoppers online journey. While our analysis provides relevant insights on various aspects of e-commerce, a lot of this information is a fertile ground for more in-depth research which is going to help the industry, academia, and most of all the citizens of India to understand the economy better.

To open the discussion, we list some of broad research areas below.

- The report finds that large cities purchase large volumes of orders due to their dense population. But, when we examine the volume of online order for cities keeping in mind their total population, we often noticed that a set of separate cities emerge as the top online shoppers. These are cities with a large urban, educated, and digital-savvy population. What could be other factors that impact the higher adoption of online deliveries in these cities? Are these socio-economic factors related to the fewer choices in physical stores, which would need further research?
- Metros opt for COD 1.5 times more than PPD as opposed to the smaller urban hubs where this figure is 6-7 times more. Why do we see such a stark difference in the payment trend between larger metros and smaller emerging urban hubs? In this time of mobility and migration, can this be attributed to the population residing in those areas? Are there any other socio-economic factors that contribute to this trend? This needs a deeper research which will help the retail industry – store fronts as well as online portals – to get a deeper understanding the Indian shopper.
- One of the biggest segments of online shopping are cosmetics, a product that a shopper may ideally like to try a sample of at the store front before purchasing. Even so, cosmetics are one of the most purchased items online. Aggregator websites like Nykaa and Purplle and dedicated online shops that sell a particular brand of cosmetics are immensely popular in the online shopping sector. It would be interesting to research the dynamics of this shift to buying cosmetics online and the trend of shoppers opting for products that are only available online.
- A few outlying trends that the data reveals are downright curious. Haryana's small cities like Jind and Adampur, and West Bengal's small towns like Pursura and Sagardighi, show an alarming rate of PPD on mobile phones. Could this be a sign of nefarious activities? Perhaps another layer to be uncovered for deeper research.



Ecom Express Limited stands as a pioneering force in the logistics industry, offering technologically advanced solutions tailored for India's dynamic retail and e-commerce sector. Founded in 2012 by industry veterans T. A. Krishnan, Manju Dhawan, K. Satyanarayana, and the late Sanjeev Saxena, our company amalgamates decades of profound experience in the Indian logistics and distribution landscape.

We harness cutting-edge technology and automation to provide end-to-end logistics and supply chain solutions. Our network, encompassing 150 gateways, hubs, processing centres, and fulfilment centres is bolstered by a vast network of 3,000+ delivery centres, and allows us to serve customers in 28 states, 8 union territories, 2,700 cities across more than 27,000 pin codes in the Indian subcontinent. We boast a proud legacy of serving over 1 lakh online sellers, facilitating the delivery of nearly 1.6 billion shipments to over 95% of Indian households.

We offer a gamut of shipping services, such as first-mile pickup and processing, network management, last-mile delivery, efficient reverse logistics and returns handling.

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