Centre for Transportation and Logistics

INDIAN INSTITUTE of MANAGEMENT AHMEDABAD

विद्याविनियोगाद्विकास:

NEWSLETTER

January - March 2025

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CTL Thought Article

The Unseen Factors Behind E-commerce Returns: Strategies for Prevention

With more than 27 million e-commerce websites on the internet, the rise in online shopping has revolutionized consumer behavior, offering unparalleled convenience through doorstep deliveries (Mustapic, 2024). India's online seller community has expanded significantly, registering an annual growth rate of 35%. Notably, almost 40% of the new sellers are emerging from tier-2 cities and beyond, reflecting the increasing digital penetration in smaller towns. E-retail now reaches 99% of the country's PIN codes, demonstrating how accessible and widespread the e-commerce landscape has become across India (Sheth et al., 2022). Additionally, global parcel deliveries approached 103 billion in 2019, with projections indicating a potential increase to 262 billion by 2026, showcasing substantial industry growth (Skurpel & Wodnicka, 2023). Moreover, e-commerce giants such as Amazon, Flipkart, and Myntra have significantly increased their revenue through promotional events like the Great Indian Festival, Big Billion Day Sale, and End of Season Sale, respectively. While this model and their promotional events have proven highly lucrative for online retailers, it has imposed substantial financial and logistical burdens in managing product returns and exchanges. For instance, in 2023, Amazon witnessed a 12% expansion in revenue compared to the previous year, largely attributed to successful promotional campaigns. However, alongside the increase in sales, the company faced a substantial increase in return-related expenses amounting to $1.4 billion. This figure marks an escalation from the $1.3 billion recorded in 2022 and the $1.0 billion in 2021 (Amazon, 2023).

Research indicates that the expanding global e-commerce market is contributing to a sharp rise in product returns, with return values projected to surpass $1 trillion annually (Reagan, 2019). Additionally, the average e-commerce return rate climbs by 25-40% during the festive times (Bhattacharjee, 2022). Sellers on e-commerce platforms are facing significant financial setbacks due to high return rates, which hover around 30% and can surge to 40% during major sales events such as Flipkart's Big Billion Day and Amazon's Great Indian Festival (Rajkumar & Pandey, 2023).

It, therefore, becomes essential to address the mounting financial and logistical burden associated with handling returns, encompassing repackaging costs, re-handling costs, strain on last-mile delivery personnel, increased urban congestion due to delivery vehicles, and potential losses from damaged or unsaleable items that are often overlooked. Studies indicate that handling returns can be more expensive than initial deliveries (Metzker, 2024), further elucidating that return-related costs account for 4.4% of total revenue, contributing to a significant economic impact on e-commerce businesses (Comstock, 2021; Martínez-López et al., 2023). This is primarily because, unlike outbound logistics, which can be planned using sales forecasts, the volume of returns is comparatively less predictable. This uncertainty complicates resource allocation, often leading to inefficiencies and increased operational costs.

Contextually, a few significant contributing factors for the increased returns that yet go unnoticed are:

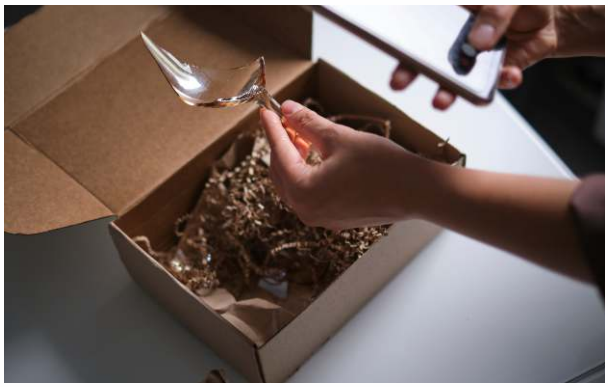
1) Bubble purchases

One of the key drivers behind the recent surge in return parcels is the practice of "bubble purchases." When customers deliberately add unnecessary items to their shopping carts to meet the minimum order value (MOV) required for free delivery, it gives rise to bubble purchases. Once customers receive the order, they return the unwanted items using the free return policy. Nearly 30% of consumers engage in this behaviour, leading to a rise in returns of items, further burdening the logistics process (Osborn, 2023). It has been found that 43% of millennials and 46% of Gen Z engage in such purchases, with the fashion industry alone facing 66% of bubble purchases by consumers (Yadav, 2024). These figures escalate when several e-commerce platforms frequently offer lucrative deals and

discounts to boost sales while implementing policies like free delivery for orders exceeding a certain cart value. Moreover, since 75% of consumers prefer free shipping compared to fast shipping (Stanley, 2024), about 49% of the retailers online offer free shipping in an attempt to avoid losing their customer base (Davison, 2024). This is corroborated by studies indicating that 41% of adults worldwide cite high delivery costs as a key reason for abandoning their online shopping carts (Beyrouthy, 2024).

The practice of "bubble purchases" has thus led to widespread exploitation of free delivery policies, as customers take advantage by adding unnecessary items to meet the delivery threshold, only to return those items at no extra cost. This significantly increases the overall volume of returns, placing a strain on e-commerce operations.

2) Damaged/poor quality Products



Concurrently, product returns tag along with a higher incidence of products being returned in damaged or spoiled condition, either due to mishandling by the customer or damage incurred during transit back to the retailer or warehouse. If the retailer does not identify such damaged items, they risk being redistributed to other customers, which increases the likelihood of further returns. This raises the retailer's operational costs and undermines customer trust in a particular brand or an e-commerce portal. Nearly 80.2% of the products get returned because they are damaged (Wilson, 2023). Moreover, 73% of the customers do not purchase from the same company again if they receive a damaged product from them (Nelson, n.d.). The continuous cycle of damaged products being re-delivered continues, and the companies lose out on their customers. This process takes a back seat unless these products go for refurbishment or white-label sales.

3) Ordering multiple variations of a product

Another common reason for the rise in returns is the practice of ordering multiple sizes of a product, particularly clothing, to determine the correct fit or to better assess the product's appearance, which can be difficult to judge through online images. With 65% of the people returning their product because the wrong size of the product gets delivered (Yadav, 2024), almost 19% of the people order multiple variations of a product in order to decide which product they want to keep and return the rest (Osborn, 2023). Meanwhile, discrepancies between the product description and the item received also contribute to the increasing number of returns. Nearly 64% of the consumers return their products because the actual product does not match the description of the product (Appert, 2024).

4) Failed first-attempt deliveries

Almost 20% of the parcels (Frederick W.T. Lim, 2023), with more than 1 out of 10 deliveries, are not delivered on the first attempt (Loqate GBG, 2021). Several factors contribute to delivery failures, including inaccurate addresses, GPS malfunctions in remote areas, customers unavailable during the time of delivery, and goods being damaged or misplaced during transit. Additionally, data indicates that approximately 15% of unsuccessful deliveries are due to fake delivery attempts (Bajaj, 2024), where the customer anticipates the arrival of a package but is notified that delivery could not be completed because the recipient was allegedly unavailable. Moreover, 65% of businesses incur financial losses due to failed or delayed deliveries (Understanding the True Costs of Failed Deliveries, 2023), with the average cost of a failed delivery in the USA estimated at $17.20 and around £11.60 in the UK (Carrick, 2023).

In response to the rising returns, several potential strategies can be implemented to mitigate this growing issue:

1) Subscription fee

Several e-commerce platforms have adopted a subscription-based model where customers are charged an annual/monthly fee in exchange for added benefits, such as free deliveries, free return policy, cheaper deals, or one-day delivery benefits. This approach helps retain customers by providing convenience while offsetting operational costs related to returns. Companies such as Amazon and Walmart memberships utilize this model to balance customer satisfaction through seamless delivery and return services while managing the associated logistics costs effectively. For instance, the Amazon Prime membership is priced at a monthly subscription fee of INR 299 or an annual subscription at INR 1499 (Amazon, n.d.) whereas the Walmart Plus membership is priced at a monthly subscription fee of $12.95 plus tax and an annual subscription fee of $98 plus tax (Walmart, n.d.).

However, implementing a differentiated subscription fee could help companies better absorb the costs associated with product returns. By utilizing AI and ML methods, companies can identify customers with a history of higher return rates and fewer purchases and accordingly charge them a higher subscription fee than those who purchase more and return less. Similarly, an appropriate fee can be set for customers who both purchase and return frequently. However, for starters, all customers could be offered the same subscription fee, with future adjustments based on their purchasing and return patterns. This approach could allow companies to accurately segment their customers and optimize the subscription model, thus managing return-related costs more efficiently.

2) Customizing pricing of returns

Additionally, an alternative approach involves implementing a customized pricing model for returns. By employing AI algorithms to identify customers with a higher propensity for returns, these platforms can implement a return fee while processing product returns. For instance, Flipkart has introduced a policy wherein customers with a high frequency of returns are informed that their future returns would be subject to a nominal processing fee of INR 50 (Gorantla, 2022). Meanwhile, Myntra has also employed a similar strategy (Myntra Charging You Money for Returning Items? This May Be the Reason, 2023). This encourages consumers to make more thoughtful purchasing decisions, ultimately reducing the financial burden on e-commerce platforms. The savings accumulated through this approach, or through the subscription-based models, can then be reinvested by the e-commerce companies into offering discounts and promotions, thereby benefiting the customer base.

(Martínez-López et al., 2023) elaborates on similar lines with the concept of return credits, which refer to the maximum number of returns that can be processed free of charge; any returns beyond this limit may attract a fee. Return credits serve as a regulatory mechanism, discouraging excessive returns by penalizing returns with a certain fee. His findings demonstrate that the strategic use of return credits can effectively reduce return volumes.

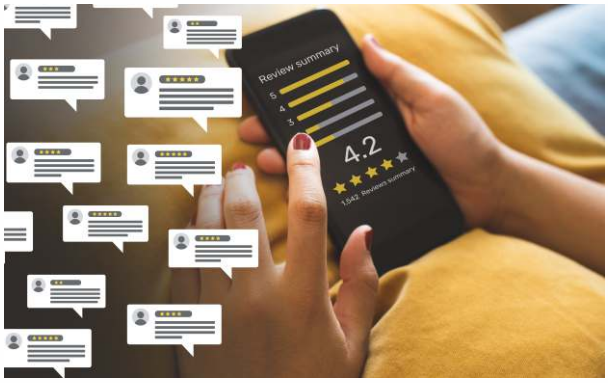
3) Encouraging store credits over cashback through platform/convenience fees

On the other hand, e-commerce platforms can significantly reduce returns by offering store credit in place of cash refunds, a strategy supported by studies such as (Martínez-López et al., 2023). Store credit helps avoid the transaction fees typically incurred during cash refunds, especially when payment processors or credit card companies are involved. Furthermore, when customers use store credit, they generally spend an additional $20 or more per order, as customers are inclined to make additional purchases when using store credits (Lazar, 2023). Moreover, store credits in place of cash refunds offer a more cost-effective approach to managing returns, as it minimizes refund-related logistical expenses.

Meanwhile, offering store credits can be complemented by platforms implementing differentiated pricing strategies, like making cash-on-delivery (COD) options more expensive than pre-payment options. An example of this approach is Flipkart's introduction of an INR 5 handling fee for COD purchases, which is waived if customers opt for pre-payment methods (Sunilkumar, 2022). Similarly, the e-commerce platform Myntra charges an INR 10 platform fee for every order and imposes an additional INR 99 fee on non-registered users making purchases under INR 1,000 (Dhanrajani, 2023). Thus, when a return occurs, the handling/platform fee is non-refundable, leading to a partial refund instead of a full one. This tends to compel consumers to make pre-payment orders, thus making store credits in cases of refunds more attractive.

While 62% of consumers prefer COD (Why Your Small Business Needs Cash on Delivery?, 2024), data shows that consumers often try to avoid additional fees when shopping online. By incentivizing pre-payment, e-commerce companies encourage customers to make more mindful purchasing decisions. Notably, COD orders have a significantly higher return rate, with 40% of COD orders being returned, compared to an average return rate of 20% for all e-commerce orders (Gupta, 2021). This discrepancy highlights the importance of discouraging COD in favor of pre-payment to reduce return rates and enhance operational efficiency. Moreover, by combining store credit policies with tiered pricing strategies for COD and pre-payment, e-commerce platforms can effectively mitigate return requests and improve customer buying behavior.

4) Focusing on brand reviews and ratings



An increase in the quantity and quality of product reviews, particularly those marked as "helpful," correlates with a reduction in product returns (Sahoo et al., 2018). This finding aligns with (Walsh & Möhring, 2017), demonstrating that informative product reviews reduce the likelihood of returns. There is nearly 20.3% lower return rate on products that have customer reviews (Yadav, 2024). However, (Maslowska et al., 2017) identify that as product ratings increase to around 4.2–4.5 stars, the probability of returns rises, as overly positive ratings may raise customer expectations to the point where they become skeptical or disappointed, increasing the chances of returns (Maslowska et al., 2017). Meanwhile, products with star ratings below a critical threshold are also likely to experience higher return rates. It thus becomes essential to have credible, helpful, good quality, and a quantity of reviews that come across as genuine to the customers. In order to have credible and sufficient reviews/ratings by customers on the products they purchase, customers can be given lucrative deals such as a 10% discount on their next purchase, a freebie, or a cashback/scratch card when they give a product review (Yadav, 2024).

However, if some brands continue to have unsatisfactory ratings and reviews, they could price their products higher and pay a premium to the e-commerce platform to offset the associated return costs. By implementing strategies such as pricing adjustments or incentivizing brands to improve their ratings, e-commerce platforms can manage the costs associated with increased returns while maintaining customer trust and satisfaction.

5) Focusing on product exchanges over product returns

In an exchange scenario, the old item can be collected when the new one is delivered, allowing both to occur in a single trip. This approach reduces the overall transit cost. On the other hand, with a return, the old product is collected separately, and if the customer orders a new product, it is delivered at a different time, doubling the transportation costs. Therefore, promoting exchanges helps companies retain revenue by minimizing logistics expenses, whereas returns often result in lost revenue or increased transit costs (Karwa, 2017). In light of this, e-commerce platforms can promote product exchanges as an alternative to returns, encouraging customers to make more thoughtful purchasing decisions. Exchanges can be made more effective by providing a longer exchange period than refunds. This ensures customers have ample time to return items while subtly increasing the chances they will choose an exchange over a refund, thereby helping businesses retain more sales (Dopson, 2023).

Another approach to attract exchanges in place of returns could be to assist customers in making informed choices. Companies should offer detailed size charts, precise product descriptions, and authentic, unbiased reviews. Furthermore, through predictive analytics, companies can analyze customer purchase and return data to identify size patterns and offer accurate size recommendations, minimizing the chances of customers ordering incorrect sizes or multiple sizes for the right fit. Such personalisation tools attract customers, indicating that customers are likely to purchase when they receive a personalised experience.

In addition, product descriptions can be enhanced using AR/VR technology to provide immersive, accurate visual representations of the products. AR/VR helps bridge the gap between online and offline shopping experiences by enabling customers to "try before they buy." Nearly 30% of GenZ and millennials want AR/VR capabilities incorporated into their shopping experience (Singhal, 2021). Many e-commerce portals like Flipkart, Nykaa, Myntra, and Lenskart have enabled this

feature to provide a more immersive experience to their customers. The 'Flipkart Camera' feature facilitates virtual demonstrations for furniture, luggage, and large appliances, allowing customers to better assess product size, fit, and aesthetics. This tool simplifies the decision-making process by enabling users to visualize items in their own spaces before making a purchase, enhancing the overall shopping experience (Flipkart Introduces Immersive eCommerce Experience with Its AR Camera, 2021).

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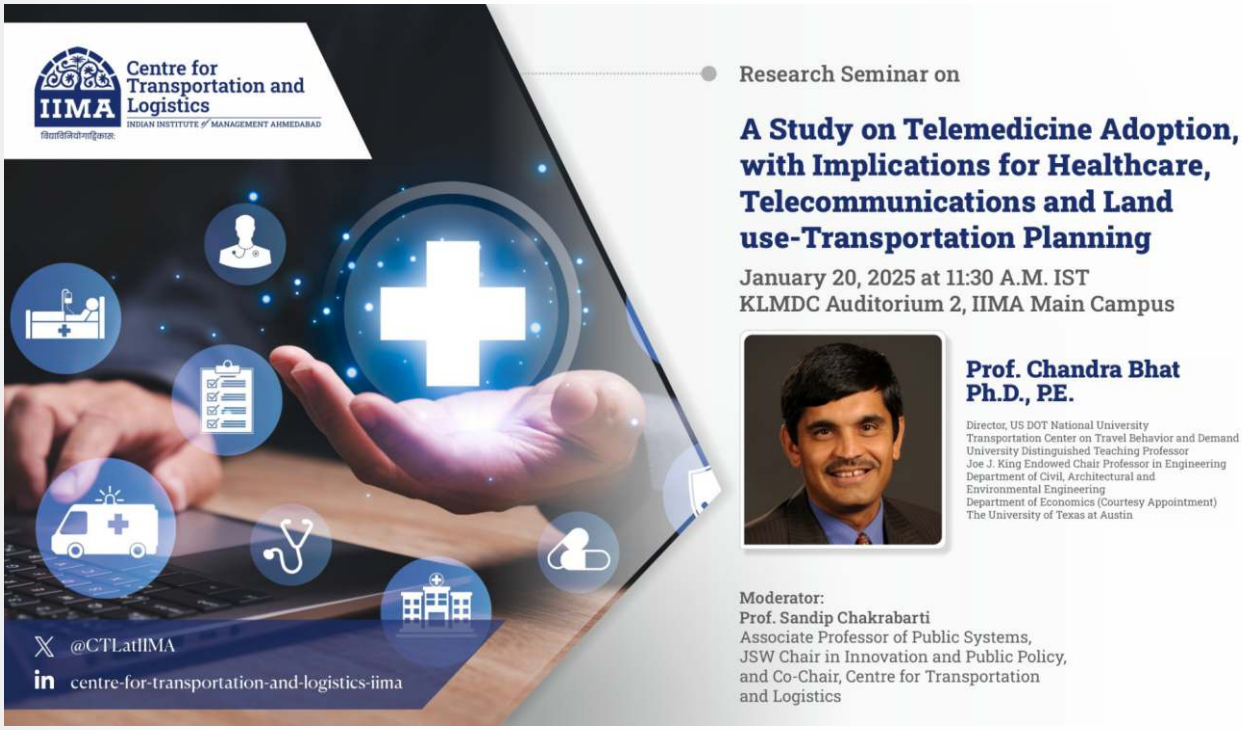
Research Seminar

A Study on Telemedicine Adoption, with Implications for Healthcare, Telecommunications and Land use-Transportation Planning

The Centre for Transportation and Logistics, IIMA, hosted a research seminar on 'A Study on Telemedicine Adoption, with Implications for Healthcare, Telecommunications and Land use-Transportation Planning' by **Prof. Chandra R. Bhat**, Director, US DOT National University Transportation Center on Travel Behavior and Demand, University Distinguished Teaching Professor, Joe J. King Endowed Chair Professor in Engineering, Department of Civil, Architectural and Environmental Engineering, Department of Economics (Courtesy Appointment), The University of Texas at Austin, on January 20, 2025.

The seminar was moderated by **Prof. Sandip Chakrabarti**, Associate Professor of Public Systems, JSW Chair in Innovation and Public Policy, and Co-chairperson at CTL IIMA.



Talk Summary

Prof. Bhat began the discussion by underlining the rapid growth of virtual participation in sectors like work, shopping and dining. This growth has been particularly accelerated by COVID-19. Relaxed regulations, incentives offered by insurance companies, increase in telework and growth of platforms have emerged as major drivers of telemedicine. The study aimed to trace the evolution patterns of telemedicine adoption and investigate shifts in the effect of factors influencing telemedicine adoption before and after the pandemic. His study lies at the intersection of economics, transportation, land use and health.

The data was derived from COVID Future Panel Survey. The study employed a multivariate binary probit model to analyze adoption trends. Individual characteristics, household socio demographics, employment, personal traits, COVID perception and built environment attributes were used as exogenous variables to model telemedicine adoption. Convenience, minimized waiting period and health safety assurance emerged as significant reasons encouraging telemedicine use. On-site tests and procedures, greater convenience of on-site interaction and privacy acted as deterring

reasons in telemedicine usage. Prof. Bhat also provided a detailed analysis of how different groups get influenced by each reason identified in the study. For instance, women, households with children, and teleworkers identified comfort, privacy, and accessibility as key drivers of telemedicine adoption.

Prof. Bhat concluded the seminar with several key policy recommendations. Among them, it was suggested that policymakers should increase the telemedicine workforce, focusing on specialists in women's and children's health. Additionally, a hybrid model could be developed to enhance quality and build patient confidence. For child specialists, additional training is essential to effectively interpret non-verbal cues in virtual settings. Furthermore, for low-income neighborhoods, investing in improved internet accessibility is crucial.

To watch, visit: https://youtu.be/X317sYqe9Jo or scan

Panel Discussion

Role of Digital Technologies in Improving Trucking Operations

The Centre for Transportation and Logistics, IIMA, hosted an online panel discussion on 'Role of Digital Technologies in Improving Trucking Operations' on March 27, 2025.

The distinguished panel featured :

- **Mr. Ravi Agrawal,** Head – Marketing, Digitization and Telematics for Mahindra and Mahindra Limited [Automotive and Farm Equipment Business] – Commercial Vehicle division

- **Mr. Bharat Bhushan**, Senior General Manager, Digital Business, Commercial Vehicle at Tata Motors Limited

- **Mr. Bhagwan Bindiganavile**, Executive Vice President responsible for Strategic Planning, Brand & Communications for VE Commercial Vehicles Ltd.

- **Mr. V G Ramakrishnan**, Founder and Managing Partner of Avanteum Advisors LLP

The panel discussion was moderated by **Prof. Debjit Roy**, Professor, Operations & Decision Sciences & Co-Chairperson, CTL.

Talk Summary

Prof. Roy began the discussion with an introduction of the esteemed panelists. He provided an overview of the heavy commercial vehicle (HCV) supply chain participants & the challenges faced by stakeholders. Building on this foundation, the panel explored how digital solutions could address these challenges & drive efficiency in the trucking industry.

Mr Bhagwan Bindiganavile emphasized the use of digital tools to maximize truck uptime. He demonstrated how digital platforms unite the aftermarket ecosystem with connected services to provide instant solutions to fleet operators (FOs). He stressed the need for developing IT-driven solutions tailored to industry stakeholders & outlined key challenges hindering the adoption of digital technology at the FO level.

Mr Ravi Agrawal discussed the shift from cowl to fully built trucks & the growing focus on customer-centric solutions like uptime & mileage guarantees. He underscored the significance of integrating DMS with IoT to address dealer challenges, highlighting how real-time vehicle diagnostics & predictive maintenance could enhance service efficiency. Additionally, the seamless flow of telematics data between OEMs & dealers ensures better decision-making, leading to improved customer satisfaction & higher operational transparency..

Mr Bharat Bhushan advocated for adopting an ecosystem-driven approach for the digital transformation of the trucking industry. He underscored that it extends beyond products to the entire supply chain, with fleet & trip management key to improving fleet operator profitability. He described AI-ML as an anchor of digitalization, with GenAI & AgenticAI becoming key pillars to provide customer-centric solutions.

Mr V G Ramakrishnan highlighted the convergence of multiple factors driving digitalization in trucking, including OEM-led initiatives, rollout of 4G, & regulatory shifts like BS VI. He stressed the need to develop interoperable systems for FOs operating trucks of different companies.

Afterwards, the discussion moved toward challenges & opportunities in adopting digital technologies across the trucking ecosystem, & covered the following points:

1. Improving demand management through AI

2. Enabling customized, personalized digital solutions for all stakeholders.

3. Suboptimal use of digital technologies at the FO level

4. Different use cases for digital tools

5. Emerging areas for research in digital transformation in the trucking industry

CTL Snippet

1. Navigating Supply Chain Disruptions

Interaction with Prof. Saurabh Ambulkar, Assistant Professor, The University of Texas at Arlington

Prof. Saurabh Ambulkar discussed supply chain disruptions, categorizing them based on the kind of triggering events and their impact. He elaborated on the consequences of such disruptions on a firm's performance, addressing financial and humanitarian implications. He explored a few strategies that could help mitigate these disruptions, including redundancy and flexibility. He asserted that building redundancy under the supply chain would involve having safety stock or multiple suppliers as options, and building flexibility would include strategies to restart operations employing existing capabilities within the system. Prof. Ambulkar continued by addressing the strategies that mitigate financial losses arising from supply chain disruptions. These include having risk management infrastructure in place to be better prepared for low-impact disruptions. However, during unanticipated disruptions, flexibility in the supply chain could assist in reconfiguring the resource base. Prof. Ambulkar concluded by discussing the emerging research areas in supply chain disruptions. Some of them include the use of blockchain and AI to predict and recover from disruptions and examining the role of decision-makers within a firm to deal with the same.

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2. Co-Creation in Supply Chain

Interaction with Prof. Abhishek Roy, Assistant Professor, Fox School of Business at Temple University

Prof. Abhishek Roy explains the concept of co-creation in supply chain: an economic strategy connecting multiple parties to jointly produce a valuable output. He underlines the need for buyers and suppliers in co-creation to improve the product/service. To measure the contribution of each party in co-creation, companies can either audit each party's contribution in a transparent manner or design incentives based on the final outcome. He explains the concept of multi-vendor co-creation and how it is different from single-vendor co-creation. The discussion then moves towards the introduction of a secondary vendor in the co-creation project, and its impact on the primary vendor. Finally, he discusses the role of co-creation in making supply chains more sustainable and resilient.

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CTL Faculty Opinion Article

1. Beyond mangoes and motorcycles: Can India Gain from the US COMPACT?

An opinion article titled '**Beyond mangoes and motorcycles: Can India Gain from the US COMPACT?**' authored by **Prof. Poornima Varma**, along with Indrajit Banerjee, was published in The Indian Express on 19 February 2025.

The Indian EXPRESS
JOURNALISM OF COURAGE

SUB

Beyond mangoes and motorcycles: Can India Gain from the US COMPACT?

As tariff reductions could hurt India's domestic market, policymakers must ensure trade liberalisation is balanced

Feb 19, 2025 18:02 IST

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Recently, during PM Modi's visit to US, Trump had unveiled his plan to hit the whole world with "reciprocal tariffs". (Photo: X/@narendramodi)

Written by Indrajit Banerjee and Poornima Varma

To read the complete article, visit: https://indianexpress.com/article/opinion/columns/mangoes-motorcycles-india-gain-us-compact-9844598/

CTL Faculty Research

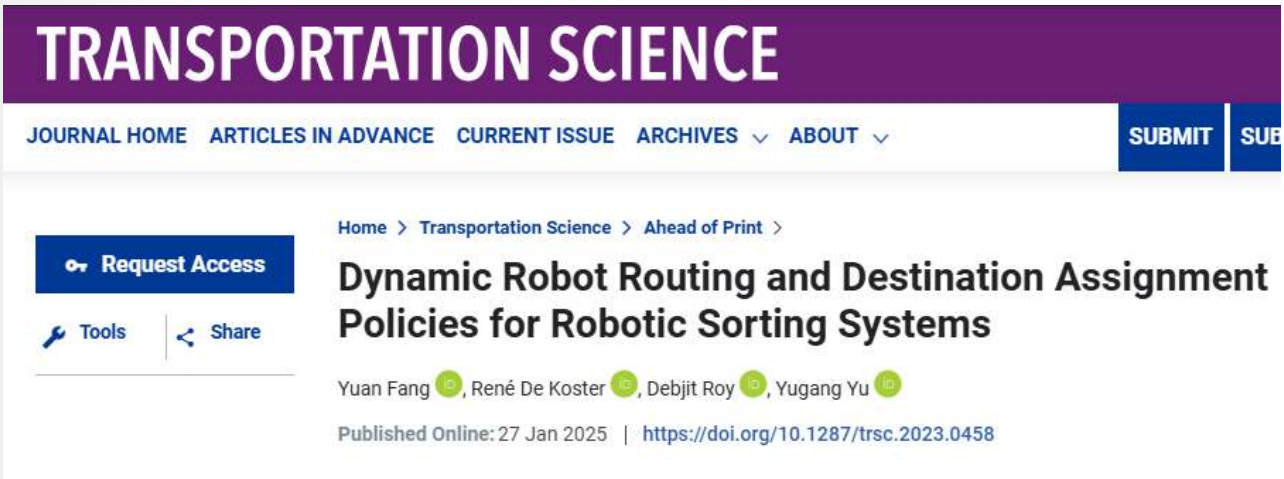
1. Dynamic Robot Routing and Destination Assignment Policies for Robotic Sorting Systems

Prof. Debjit Roy, along with Dr. Yuan Fang, Prof. René De Koster, Prof. Yugang Yu, published a research article in the Transportation Science Journal titled '**Dynamic Robot Routing and Destination Assignment Policies for Robotic Sorting Systems**'.

Abstract

Robotic sorting systems (RSSs) use mobile robots to sort items by destination. An RSS pairs high accuracy and flexible capacity sorting with the advantages of a flexible layout. This is why several express parcel and e-commerce retail companies, who face heavy demand fluctuations, have implemented these systems. To cope with fluctuating demand, temporal robot congestion, and high sorting speed requirements, workload balancing strategies such as dynamic robot routing and destination reassignment may be of benefit. We investigate the effect of a dynamic robot routing policy using a Markov decision process (MDP) model and dynamic destination assignment using a mixed integer programming (MIP) model. To obtain the MDP model parameters, we first model the system as a semiopen queuing network (SOQN) that accounts for robot movement dynamics and network congestion. Then, we construct the MIP model to find a destination reassignment scheme that minimizes the workload imbalance. With inputs from the SOQN and MIP models, the Markov decision process minimizes parcel waiting and postponement costs and helps to find a good heuristic robot routing policy to reduce congestion. We show that the heuristic dynamic routing policy is near optimal in small-scale systems and outperforms benchmark policies in large-scale realistic scenarios. Dynamic destination reassignment also has positive effects on the throughput capacity in highly loaded systems. Together, in our case company, they improve the throughput capacity by 35%. Simultaneously, the effect of dynamic routing exceeds that of dynamic destination reassignment, suggesting that managers should focus more on dynamic robot routing than dynamic destination reassignment to mitigate temporal congestion.

To read the complete article, visit: https://doi.org/10.1287/trsc.2023.0458



2. How Can Foreign Commercial Vehicle Manufacturers Succeed in India?

A magazine article titled '**How Can Foreign Commercial Vehicle Manufacturers Succeed in India?**' authored by **Prof. Debjit Roy**, along with CTL Research Associate **Mr. Shubham Siwach**, was published in the Singapore Management University's (SMU) magazine, Asian Management Insights (Volume 12, Issue 1), on 28 March 2025.

Abstract

The Indian automotive industry plays a significant role in the Indian economy, comprising half of manufacturing GDP and more than 7% of the total GDP. Continuing with the 1991 economic reforms, India opened its automobile market for foreign players with the Auto Policy of 2002 that allowed 100% automatic FDI for automotive manufacturing. This resulted in an influx of many foreign firms in both, passenger and commercial vehicle (CV) segments. Numerous foreign players entered the Indian market between 2002 - 2015, starting with German automaker MAN Motors in 2003. The Indian CV market grew at a compounded annual growth rate of 12.7% between 2000 - 2010. However, the next decade (2011 - 2020) witnessed a slowdown wherein the industry grew at a CAGR of just 3%. Most of the foreign players exited the market by 2020, giving India the moniker of the 'graveyard' of global automotive players.

In this article, we explore the reasons behind the exit of foreign original equipment manufacturers and the persistent challenges hindering their success. We derive insights from numerous field visits, interactions with fleet operators and top executives from original equipment manufacturers and a primary survey on truck buying behavior. Three most critical challenges emerge: the duopolistic grip of existing market leaders, low margins and difficulty in expanding service network. The top two players in the Indian M&HCV market have occupied almost 80% of the dominant share. Their market dominance allows them to provide deep discounts, prompting new firms to match the low prices by reducing their margins despite facing the constraints of higher costs and limited scale. Data suggests that profit margins for CV makers are among the lowest in India. The pressure on the profit margins of new firms is exacerbated by the demands of an expansive service network by the Indian fleet operators.

We present a seven-step market entry strategy for foreign entrants to achieve success in the Indian CV segment after gathering insights from top OEM executives, including foreign OEMs who have achieved success in the Indian CV market. Development of India-centric truck variants is a prerequisite for any foreign OEM to find a foothold in the Indian market. Significant investments in design, development, manufacturing and testing facilities are required. A careful study of the Indian market can help foreign OEMs identify the unserved segments (like heavy duty mining and construction) for market expansion. However, the size of the Indian market is still not comparable to the American or European markets and hence, demand stability remains a concern. An export-centric business model is critical to achieve scale and associated cost benefits. To reduce the uncertainties of the market demand on the company's profitability, new entrants must focus on gathering accurate demand signals through the use of technology. Localization is an important strategy for foreign OEMs to control sourcing costs, build a reliable supplier base and gradually introduce modularity in their Indian manufacturing plants. Additionally, new players need to leverage technology to offset any loss in sales due to a small service network. However, such solutions need to be affordable and should not divert them from establishing an expansive service network. Finally, a display of a long-term commitment to the Indian market is essential to build customer trust and generate market demand.

To read the complete article, visit: https://cmp.smu.edu.sg/ami/issues/volume-12-issue-1/insights/how-can-foreign-commercial-vehicle-manufacturers-succeed

CTL Faculty Engagements

Prof. Poornima Varma has been appointed as a member of the Programme Committee for the International Agricultural Trade Research Consortium (IATRC), an international association of agricultural trade researchers and policy practitioners.

Prof. Debjit Roy delivered a talk on "Data Strategies for AI Adoption" at the Statistics conclave organized by St. Xavier's College, Ahmedabad. He explained how technology, data, and AI together can solve several pressing problems in the supply chain. He demonstrated the use cases from production, distribution, and transportation.

Prof. Sundaravalli Narayanaswami delivered insightful sessions on 'Public Private Partnerships (PPP)' at the ITEC course held at Gati Shakti Vishwavidyalaya.

Prof. Debjit Roy presented a keynote address at the International Conference on Advances in Theory, Research & Practices in Management (GLSU-ATRPM 2025), organized by the Faculty of Management, GLS University, Ahmedabad, on March 15, 2025. In his address, he shared his insights on the future of Industry 5.0, critical industry challenges and emerging opportunities.

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