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The Chartered Institute of Logistics and Transport

Centre of Excellence:
Transportation, Logistics & Supply Chain Management

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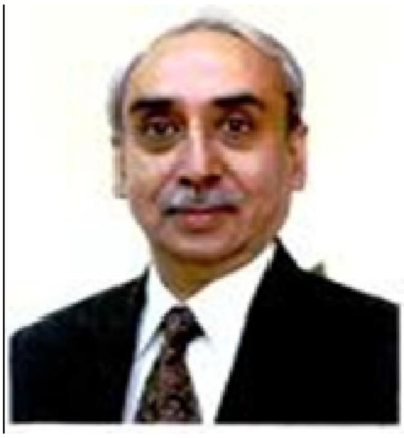
Message from the National Chairman



I am pleased to inform you all that the current issue in your hand, have been brought out by the Center of Excellence - Transportation, Logistics & Supply Chain Management, GD Goenka University. This Center, which is the joint initiation of CILT as well as the School of Management, GD Goenka University, Gurgaon (India) have been the front runner in the recent past in organizing series of programmes and events like MDPs, International Conferences, Workshops etc. for junior to senior level executives in the areas of logistics and supply chain management.

I am delighted to mention here that the current issue of this e-magazine contain lot of valuable information related to the latest trends and practices by the world class supply chain professionals. It also brought out Indian Governments various initiatives through budgetary proposals to cater the emerging and challenging needs for infrastructure development for the growth of the country.

I congratulate faculty members of Centre of Excellence and editorial board for carrying out research in supply chain domain and putting all contemporary facts together in the form of e-magazine. I hope that readers will find this issue interesting and enlightening.

Warm Wishes

Shanti Narain

Message from the National Vice Chairman

In today's competitive scenario, visibility is one of the biggest problems for goods in transit. Of all the supply chain management trends, supply chain visibility remains at the top of the list as a key area for executives and supply chain managers. Interestingly, as the supply chain gets more technologically robust, supply chain visibility is more and more a requirement by both providers of services and those running supply chains. Transparent supply chain management and effective supply chain visibility is a critical tool in a company's continued growth and successful brand image. Connected supply chains provide additional opportunity link supply chains and receive more data. Further, the application of the Internet of Things (IoT) along with cloud-based GPS will make it possible to keep track of individual items and their conditions. IoT makes use of RFID chips that "talk" to each other. Chips attached to individual items will transmit data such as identification, location, temperature, pressure, and humidity.

It is indeed a matter of pleasure that we have come up with the 2nd issue of e-magazine which covers the latest development in the area of transportation, logistics and supply chain management. This magazine has international and national news section coupled with the article and cases on contemporary issues. We hope that the reader will enjoy while reading it. I congratulate our editors and members to bring out innovative and latest information for our readers.

Prof.(Dr.) Pradeep Kumar Goel

Professor & Dean, School of Management

GD Goenka University, Gurgaon

National News

March 2016

Union Budget 2016-17 and Logistics Sector

Union Budget 2016-17 Highlights for Transport and Logistics Sector

Union budget approved the following outlays for different ministries falling under the category of public infrastructure:

Road Transport and Highways: Rs.1.03 trillion

Railway Ministry: Rs.1.03 trillion

Shipping Ministry: Rs.4,183 crore

1. India has a road network of 48.7 lakh km; the national highways constitute only two per cent of this network but carry 40 per cent of the traffic. In this connection, budgetary announcement of Rs 55, 000 crore and upgrading 50,000 km of State highways into National highways is welcome for the logistics sector. The companies believe that better roads will lead to a reduction in operational costs, which will have a positive impact on net earnings. More focus on highways will ensure faster movement of goods across the country thus lowering cost of operations significantly. Improved fuel efficiency and reduced maintenance cost for trucking companies would reduce prices for long distance transportation

2. The announcement of deferred customs duty payment for large importers would help them plan their logistics efficiently, potentially increasing the number of shipments and facilitating trade.

3. It will bring about better connectivity from the hinterland to ports and encourage manufacturing growth in landlocked States.

4. In a bid to discourage imports of goods, the union budget announced imposition of 14% service tax on services provided by domestic shipping companies transporting goods from outside India. The service tax on services provided by shipping companies by way of transportation of goods by a vessel from outside India up to the customs station in India will be 14% with effect from 1 June, 2016. Meanwhile, shipping companies engaged in export assignments will be allowed the input tax credit, a move to encourage export of goods, one of the crucial parts of '**Make in India**' initiative kick-started by the government.

According to the industry experts, the move pertaining to input tax credit is was line with industry expectations as it will improve competitiveness of Indian flag companies as against the foreign flag vessels.

5. Keeping the heavy balance sheets and drying toplines of domestic shipbuilding companies in mind along with the future prospects for them to attract orders mainly from the navy and defence division, the budget has exempted the shipbuilding company from excise duty on capital goods and spares thereof, raw materials, parts, material handling equipment and consumable for repairs of ocean-going vessels. This move is going to make shipbuilding more competitive and shipping companies will be encouraged to place orders or repairs with domestic repair units.

Rail Budget and Logistics Sector

The rail budget for 2016-17 presented by Mr. Suresh Prabhu, the government has earmarked Rs.1.2 trillion for capital investment in the next fiscal year and focused on enhancing revenue and cutting costs. His budget focused upon three strategies for 2016-17: **Nav Arjan** (New Revenue), **Nav Manak** (New Norms) and **Nav Sanrachna** (New Structures). For revenue enhancement there is a lot of strategic direction provided. It is looking to generate revenues through new products, new terminals and new solutions rather than core commodities as they have been historically doing. So there is a clear intent on revenue enhancement. The challenge will be execution.

The three new freight corridors were quite unexpected. It is going to be a major expense for the government. Typically a freight corridor costs around Rs.80,000-90,000 crore. These new freight corridors will cover about 50,000 odd kilometers, and the estimated investment would be around Rs.3 lakh crore. Industry experts applauded the government's attempt to move towards the engineering, procurement and construction (EPC) model for rail projects.

The EPC model assigns the responsibility for investigation, design and construction of a project to contractors for a lump-sum price awarded through competitive bidding.

The move toward the EPC model will bring in transparency, where investors will be able to see where their money is going and what's the progress of projects. For the larger projects worth more than Rs.1,000 crore, government's commitment towards adopting global practices will attract big multinational companies. The railway budget focused more on consolidation than expansion.

The budget has focused on key issues plaguing the railways which are customer experience, increasing efficiency, network decongestion, improving safety, improving stations, increasing revenues and increasing availability. It also gave a push to projects that will lay the foundation of next generation railways, which is primarily high-speed railway, popularly referred to as bullet trains. Overall a mature rail budget that balances much-needed investments with the revenue and funding constraints. It is very clear the government is looking at railway sector to kick-start the economy.

Sagarmala Project

The **Sagarmala** project holds significance in the wake of maritime logistics being an important component of the Indian economy accounting for 90 per cent of EXIM trade by volume and 72 per cent of EXIM trade by value. The government has sought comments from various stakeholders on the national perspective plan of Sagarmala under which it has identified about 150 projects. Of the 150 projects, 40 are related to ports modernisation while 10 are community development projects and estimated to will mobilize more than Rs 4 lakh crore investment and create one crore new jobs, including 40 lakh direct jobs, in the next 10 years.

The Centre's Sagarmala programme aims to promote port-led development in the country by harnessing India's 7,500-km long coastline, 14,500-km of potentially navigable waterways and strategic location on key international maritime trade routes. The draft report submitted to Ministry of Road Transport and Highways, Nitin Gadkari in February 2016, had mentioned that to meet the future growth in cargo volumes, 50 projects have been identified to increase the port capacity from 1,400 million tonne per annum (MTPA) to 2,500 MTPA by 2025, at an investment of Rs 1 lakh crore. These projects include capacity augmentation at existing ports and development of 5-6 new ports, including a trans-shipment hub. In addition, 104 initiatives have been identified to improve major port efficiency. The report mentioned that to enhance the port connectivity to the country's production and consumption centres, 65 projects have been proposed at an investment of more than Rs 2 lakh crore. This includes 10,000 km of last mile port-connectivity infrastructure, 12 new freight expressways, heavy haul rail corridor to transport coal, new pipelines for transporting crude and petroleum products, development of prioritized inland waterways and new multi-modal logistics hubs.

SmartShift to Connect Cargo Owners, Transporters

Mahindra and Mahindra Ltd, part of the $16.9 billion Mahindra Group announced an online platform to connect cargo owners and transporters. It's one of several start-ups that the company plans to launch as it seeks to tap the burgeoning e-commerce space. The venture, named **SmartShift,** will be a technology-enabled load-exchange platform, the company said at a press conference in Mumbai. Cargo owners, both businesses and individuals, can access the **SmartShift** service through a mobile app available on the Android operating system, the website or a dedicated call center. They can then connect with transporters in a manner that will save cost and time. **SmartShift** is a digitally enabled, value-added service that will benefit both cargo owners and transporters. The service was launched in Mumbai and would be extended to 26 towns and cities over time.

SmartShift will operate as a separate business (Orizonte Business Solution Ltd) and that the Mahindra Group will invest in the company as a venture capital investor. The goods transport industry in India is a fragmented market. A platform or marketplace that connects load owners and transporters can bring significant efficiencies. The expert says it in the right step to begin with. But more than value addition, the biggest risk in this aggregation is taking the responsibility of cargo transportation. According to a McKinsey and Co. study, inefficiencies in logistics infrastructure cost the Indian economy an extra $45 billion, about 4.3% of gross domestic product (GDP), every year. Freight traffic will multiply 2.5 times by 2020 from the 2010 levels, further straining India's infrastructure, the study had said.

According to Kausalya Srinivasan, chief executive, **SmartShift**, need to bring in traceability and timeliness in the transport goods sector is a lot more as compared to the passenger segment. Companies such as Ola and Uber are experiencing a boom in demand for their cab services in a country where the transport infrastructure is still creaky and safe public and private commuting options are few. Like cab aggregator firms do not own the vehicles their customers use. **SmartShift** will also be an asset-light, marketplace model. The company's core target group will be small and medium enterprises. To be sure, the cargo aggregator market though still in a nascent stage, is not an unexplored one. It's gaining traction slowly but steadily and has been drawing investor attention.

Source: www.mahindra.com

On 8 October, Mumbai-based logistics company Vonken Technologies Pvt. Ltd, that operates as Quifers, raised Rs.2 crore in a round led by the Indian Angel Network (IAN) with the participation of Smile Group, an Internet group focused on consumer Internet and the media.

Quifers aggregates light commercial vehicles to provide its services to consumers and enterprises. Currently, 200 vehicles are listed with the company, and 40-50 vehicles are added each week. It charges 15% commission on the total transaction. Quifers aims to touch Rs.1 crore in revenues, fulfil 500 orders a day and list around 500 vehicles by December.

Another firm Porter raised $5.5 million from Sequoia and others, Shippr raised $500,000 in seed funding, while Trucksfirst raised Rs.62 crore from SAIF Partners and Singapore Post. Other start-ups in the space include names like Moovo and Karrier.

For the Mahindra Group, the SmartShift venture is part of a broader move towards digital commerce and the digital services ecosystem. “This is just one of the start-up ideas we have internally,” Shah said. Mahindra will provide seed funding for all the start-ups in the initial stage up to Series A, he added.

Last month, the Mahindra Group said it would launch an e-commerce venture called M2ALL.com, which would offer the entire range of Mahindra products and services. It would be operated through a separate wholly-owned subsidiary called e-Marketplace Pvt. Ltd.

Flipkart to push logistics cart in next growth drive

Flipkart's new CEO Binny Bansal is seeking to rev up the company's growth through the business he knows best, its logistics unit Ekart. Flipkart is preparing to build out Ekart into an independent business catering to other companies as well, and has started talks with investors to raise capital separately for the logistics unit at a valuation yet to be determined, according to four people familiar with the developments. The company also recently injected Rs 666 crore (nearly $100 million) into Ekart, regulatory filings show.

One of the people mentioned above said Flipkart had started discussions with investors including Russian billionaire Yuri Milner's DST Global. DST, a stakeholder in Flipkart, is scouting for logistics companies to invest in and has held talks with third-party logistics providers including Delivery. An immediate priority for the marketplace is to get its thousands of sellers to use Ekart's warehouses, which, in addition to generating revenues from logistics-handling, would ensure smoother in-house deliveries. Last year, Flipkart significantly expanded its warehousing space. Flipkart is also building an end to-end distribution network that will cater also to brick-and-mortar consumer goods, electronics and apparel firms, according to the people mentioned earlier, all of whom declined to be identified.

It is in discussions with companies including Hindustan Unilever, Procter & Gamble and Adidas to handle logistics for them, a move these people said would translate into better utilization of Ekart's capacity in lean periods. Investors have poured more than $3 billion into Flipkart and own at least 80% of the company, which is now registered in Singapore. But fundraising has not been easy as global headwinds coupled with hyper competition in India have forced investors to step back. Ekart currently handles around 3.25-lakh deliveries a day, according to industry sources. Around 75% of Flipkart's deliveries are handled by the unit. Ekart has outlined plans to spend $500 million to build 50-100 delivery centers over the next five years, half of these in small towns and cities. Growing the logistics business has become the new buzz at Flipkart. The challenge will be to enlist outside clients, experts said, as large ecommerce companies have their own logistics units or work with other third-party companies. Which is why Flipkart is looking to work with apparel, electronics and consumer goods companies for distribution. Experts tracking the logistics industry said there is precedent of conglomerates like TVS Group and Mahindra Group building specialized logistics units for their auto businesses. TVS Logistics and Mahindra Logistics have become independent companies, raising capital from private equity investors KKR and Kedaara Capital, respectively.

[Source: Economic Times]

International News

March 2016

Industry executives weigh in on e-commerce and how it is changing logistics operations

For anyone not sold on the ongoing impacts of e-commerce on logistics and supply chain operations, comments by some influential industry executives at the recent National Shippers Strategic Transportation Council (NASSTRAC) Conference and Transportation Expo definitely would help change that train of thought.

At a CEO panel on the conference's opening day, the case was clearly made for the role e-commerce has had on day-to-day logistics. Henry Maier, President and CEO of FedEx Ground noted that e-commerce can now be viewed as a revolutionary shift in our society, akin to how airplanes were decades ago. And he explained how in the United States alone, in 2015, e-commerce will top $300 billion in sales and is fast outpacing brick and mortar store rollouts, which, from 2012-2014, increased by more than 100 percent, whereas during that same period the number of "Web," or e-commerce-type stores shot up by 1,354 percent.

So, what is behind that massive upswing?

Maier said that much of it is being driven by things like changes in consumer behavior and expectations, with the cost of online shipping being the number one factor in whether a shipper makes a purchase or not. Surprisingly, the cost of shipping outranks product reviews on those same sites, where customers shop. Of course free shipping does not mean customers are willing to wait any longer for the product and you can ask our customers–nobody is expecting their online order to come slower nor are they expecting it to cost more. According to him, E-commerce in his industry is driven by what we call a revolutionary change, one where consignees, or receivers of goods, have more control than shipper.

While e-commerce is making a major foothold in the supply chain and logistics sectors, Maier was clear that there is a ways to go, stating that it currently represents less than one-tenth of total U.S. retail sales. It is known that free shipping is not free so how sustainable is it in its current form? Maybe a better model is needed to reflect its true costs and maybe free shipping is only an option when residential delivery is made to a commercial location like a grocery store or a FedEx office location. Regardless of how shopping, shipping, and consumer expectations change, one thing is clear in the transport industry and parcel segment in that the company are going to have to address further issues going forward.

UPS Freight President Jack Holmes said another way to view the changing role of e-commerce on logistics is to consider how things used to be on the parcel side and how things have changed from a seasonal perspective by the growing impact of e-commerce-driven reverse logistics processes.

During the holiday rush, Holmes noted that in the past UPS's business used to run up to Christmas and then turn "soft" for the following six weeks. But, now, those six weeks are one of the most challenging periods of the year.

The other part is a focus on the omnichannel side. There has just been a sea change in that you have taken these hundreds of store fronts and put them in play like they are their own DC, and it has allowed not huge virtual companies, but brick and mortar companies to be more competitive than they ever have. That story is still being written, and they are trying to figure out better ways to reduce costs by utilizing that model and they are getting a lot better at it.

This last peak season was a big improvement and opened customers eyes after a year in which customers might have had a different opinion."

Addressing how e-commerce has impacted truckload operations, Derek Leathers, president and chief operating officer of Werner Enterprises, pointed out that e-commerce has considerably shortened truckload length of hauls, as shippers build regional DC's to be closer to customers for next-day or two-day delivery. Length of haul has gone down a great deal, and one of the unintended consequences of that has been miles-per-truck across the industry are down quite a bit, "From 2007 to today total trucks and capacity [for publicly traded fleets] are down between 12-15 percent and miles are down nearly 25 percent, and that is a direct effect of shorter length of haul, because you cannot deliver the same number of miles-per-day when you are stopping and starting that often.

In the past, Leathers said truckload length of haul would not be uncommon to average 700-800 miles, and now it is closer 500 or high 400s, which he explained is essentially taking capacity out which is the right thing to do as regional DCs are needed and serve as a model that gets product to people quicker. But he cautioned this does create an unintended consequence in the form of less efficiency on the assets at a time when asset values are up 40 percent in terms of cost per truck over that same period.

[Source: Jeff Berman, Logistics Management]

Last-mile logistics looks to change going forward as omnichannel supply chain matures

The wave that heavy e-commerce activity currently rides is not close to crashing anytime all that soon. And with that comes a heightened focus on the logistics-related aspects of e-commerce, specifically on the last-mile side of things.

Much has been made of innovations or a new way of doing things within the last-mile in order to get online orders to consumers as quickly as possible i.e. the new normal. The options for making this happen are plentiful and include many familiar names and themes, including drones, robots, and rapidly-changing distribution networks, as well as Uber, which recently rolled out a partnership with Carnegie Mellon University for the Uber Advanced Technologies Center to research autonomous vehicles.

That concept is considered valid by some industry stakeholders, whom say on-demand carriers could deliver packages to consumers as a low-cost option relative to other modes or options, coupled with increased efficiencies and supply chain productivity gains.

To be fair, that is a pretty huge leap to suggest something like that is actually on the cusp of happening. One reason for that is that is that in North America omnichannel logistics and last-mile delivery has not been adopted, progressed, or evolved as quickly as it has in other regions, according to Fab Brasca, vice president, industry strategy, for JDA.

Brasca said it is possible that in North America there could be an evolution in that the pace of omni-channel adoption is growing, with shippers looking to potentially bypass standard existing providers in exchange for better flexibility and timeliness. In North America, many retailers have a dot com division, which might be supported by one or two distribution centers handling e-fulfillment. In those cases, Brasca said it makes sense to turn to a standard provider for last-mile delivery, as the origin points are static. But with distribution points anywhere in the network, including DCs, direct from suppliers, or stores, Brasca said retailers are continuing to figure out they need to be closer to customers. And in order to do so they need to be closer to their existing infrastructure to allow a greater degree of flexibility for where they ship from and fulfillment, he explained.

When a company is closer to the consumer, there is less of a requirement to go through the static or rigid networks a FedEx or UPS might have, and there is a greater ability to take advantage of these existing local city logistics functions like couriers, which have been around forever and typically relegated to specific industries. With e-commerce, there is the ability for couriers to expand their horizons based on flexibility in their network and what makes the most sense for their customer and for the retailer from a profitability standpoint. So, where does something like using Uber for last-mile deliveries fit into all of this? It is still very early in the game in that regard in terms of retailers using it in that way, noted Jean-Francois Gagne, chief product officer for JDA. It depends on where a retailer is regarding its sophistication on the omni-channel curve. As for where it might go, there are reasonable alternatives, and it paints an attractive picture when you think about responsiveness and time to customer. The theme is about getting goods to customers with the promise of delivering it as fast as possible. There has not yet been enough emphasis yet on the profitability of doing that, but it is inevitable that is going to happen, as core fundamental financial metrics will take hold in the marketplace.

In regards to Uber and its potential impact on last-mile logistics, Brasca said one thing it has done is lower the barrier to entry for new drivers and vehicles to enter the market and leveraging an infrastructure that was already deployed through mobile phones and GPS systems.

At the same time, it could expand available capacity and lower prices when demand is low and increase rates when demand rises while establishing a market dynamic with lower annual operating costs, too. “All across the board, you see people using infrastructure now in place while trying to lower barrier to entry and adding capacity and help to solve or lower the costs of the last mile,” said Gagne. “There are some forces now at play in the market and some technology now available, and it is a matter of time before it becomes possible. It is a reality now that [shippers] need to be thinking about, as well as plan how they can leverage it.

[Source: Jeff Berman, Logistics Management]

UPS survey examines logistics-related aspects and consumer traits related to e-commerce

As the pull of shopping online via mobile devices becomes ever more prevalent, recent research from transportation and logistics bellwether UPS shows that as more consumers shop online, they also bring with them specific preferences and guidelines, too. The survey, entitled “UPS Pulse of the High-Tech Online Shopper,” is based on feedback from more than 2,000 consumers.

Some of its most telling findings, as they specifically relate to supply chain and logistics, focus on deliveries, returns, and free shipping, each with very telling observations. For delivery options, the survey found that high-tech purchasers are bigger users of alternative delivery options, with 37 percent preferring shipping to an alternative location other than home (compared to 30 percent of non-high tech shoppers). The primary reasons customers prefer alternative delivery is to avoid missed deliveries, having to stay home to receive their packages and greater convenience for them and 56 percent preferred shipping to an alternative location with extended hours and lower fees. Another interesting finding on that front was how high-tech purchasers use ship-to-store more often, with 52 percent saying they have shipped to store for pick-up, with 45 percent of that 52 percent noting they plan to employ this practice more frequently.

The survey's data regarding free shipping continues to paint a picture of free shipping being something that high-tech shoppers are seemingly viewing as vital to a degree. Free shipping continues to be important to online shoppers and they are willing to wait longer for their packages to receive it. Free shipping was rated as the most important option while checking out online by 75 percent of respondents. A whopping 93 percent of high tech shoppers have taken action to qualify for free shipping on online orders. Those actions include adding items they plan to keep to their order (51 percent), choosing a slower transit time (48 percent) and shipping to store (39 percent). A third of high tech shoppers will wait three to five days and an additional half (48.7 percent) are willing to wait six to 10 days for free shipping.

But the UPS data also points out the high-tech purchasers are willing to pay for shipping to get products they want or faster delivery.

As an example, nearly 60 percent (59 percent) indicated they wanted a product and free shipping was not offered, and 35 percent said they needed a product delivered faster than the free shipping service offered. Returning online orders in the form of a smooth returns process received a high priority by the survey's respondents.

High tech respondents reported multiple issues with returning online purchases. There were two that offer insights into why they are shipping items back instead of returning to a store. First, 30 percent reported that it was inconvenient to return to a store. Second, 25 percent reported that the retailer did not accept store returns for online purchases. When asked about the best return practices, 37 percent of survey respondents cited the ability to return to a store, and 27 percent listed the convenience/proximity of the store location indicating that the retailer return policy and the store location are both important to consumers.

[Source: Jeff Berman, Logistics Managment]

Healthcare Supply Chain Management Market worth $13,814.0 Million by 2019

The report **"Healthcare Supply Chain Management Market by Product (Inventory Management, Strategic Sourcing, Warehouse Management, Order Management, Supplier Management, RFID, & Barcode), by Delivery Mode (On Premise, Cloud) & By End User - Global Forecast to 2019",** analyzes and studies the major market drivers, restraints, and opportunities, in North America, Europe, Asia, and Rest of the World (RoW).

This report studies the global healthcare supply chain management market over the forecast period of 2014 to 2019. This market was valued at $9,276.5 million in 2014 and is poised to grow at a CAGR of 8.3% from 2014 to 2019, to reach $13,814.0 million by 2019.

The market is segmented on the basis of component, delivery mode, end user, and region. By component, the market is divided into software and hardware. Based on delivery mode, the market is categorized into web-based, on-premise, and cloud-based. The market by end user is categorized into manufactures, distributors, and providers. Based on region, the market is divided into North America, Europe, Asia, and the Rest of the World (Pacific, the Middle East & Africa, and Latin America).

The major factors driving the growth of the this market are the need to curb the increasing healthcare costs, implement better inventory management practices in hospitals to improve the quality of patient care, and compliance with regulatory requirements.

However, despite the benefits of healthcare supply chain management solutions, barriers such as the high cost of sophisticated software, and long time to implement them which leads to unjustifiable payback periods for mid-small organisations are restraining the growth of this market.

In 2014, the North American market commanded the largest share of the global market, followed by Europe and Asia. Furthermore, North America is the fastest-growing region in this market as well. The growing trend of hospitals in the U.S. and Canada adopting supply chain solutions to better manage their inventory and the regulatory requirements in these countries aimed towards improving patient care by enforcing the need for traceability throughout the healthcare chain is the major driving factors in this region.

The major players in this global market include Oracle Corporation (U.S.), Infor (U.S.), Cerner Corporation (U.S.), McKesson Corporation (U.S.), and SAP AG Group (Germany) amongst others.

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M&M's flagship competitive intelligence and market research platform, "RT" connects over 200,000 markets and entire value chains for deeper understanding of the unmet insights along with market sizing and forecasts of niche markets. The new included chapters on Methodology and Benchmarking presented with high quality analytical infographics in our reports gives complete visibility of how the numbers have been arrived and defend the accuracy of the numbers.

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The Chartered Institute of Logistics and Transport

Articles/Cases

March 2016

Agility – Sensing and Responding

The ability to sense innovation prospects and respond to them by capturing market opportunities through assembling required assets and knowledge is agility. One of the necessary conditions for defining and executing a sound business strategy is the presence of agile business processes. One of the important determinants for a firm to succeed in turbulent environment is their capability to sense and respond to the environmental change rapidly. Sensing and responding are the two components of agility that can be enabled by IT.

There exists a significant correlation between IT infrastructure capability and strategic agility. If managers know and can express the required strategic agility, they can recognize the needed IT infrastructure service that needs to be above the industry average and hence can produce a distinctive competence. Therefore managers should be able to recognize the steps they must take so as to determine the unique combination of IT services that can create agility. They should be aware of IT investments that they make as these investments will serve the strategy for tomorrow.

Benefits of information systems for business processes can be realized when IT strategy is in alignment with business strategy. However it cannot be the principle condition for agile business processes. People skills and expertise are also very crucial for achieving agility and for operating information systems in a proper way. Low performing IS cannot be an impediment to agility; however it can be overcome by skills and expertise. Under high market pressures and turbulent environment an ideal agile organization combine high reactive and proactive abilities. IT can enhance the agility only when the existing information systems and the practices are also agile in nature.

IT not only enables agility, it also plays a crucial role in disabling agility. When the systems are architected poorly, they just consume time and money and remain unresponsive. Agility is affected by managerial and technical capabilities. Organizations should focus on relying on information technology for building process capabilities for gaining competitive advantage. IT acts as a platform for business process agility that affects process efficiency and quality outcomes. Mangers should take decisions on IT investment based on their strategic goals.
The two complementary preconditions for the agility are knowledge management and response ability. Firms' sensing capability is enhanced by knowledge reach and richness as the managers are provided with high quality information about their business through IT which helps them in anticipating emerging market opportunities and threats. Similarly, firms' responding capability is enhanced by process reach and richness as better quality of information is available in a timely and accurate manner.

The firms that have absorptive capacity for the external knowledge are well prepared to sense the emerging market opportunities. Nowadays firms are developing web-based tools that help them in sensing the information, for e.g.: Customer Relationship management is one such tool. Information about customers is brought together in CRM from different data sources. This information presents a holistic view of the customers which in turn help organization to make informed decisions about customers.
Knowledge creation requires the presence of tools that help in achieving analytical capabilities. Such tools help in sensing the data and are provided by IT applications. IT facilitates the establishment of a "knowledge creating" synergy that is developed by the interaction between web-based infrastructure and analytical ability of this tool, this in turn facilitates the sensing ability of a firm. Analytics refers to "the extensive use of data, statistical and quantitative analysis, explanatory and predictive models, and fact-based management to drive decisions and actions".
A firm can respond quickly to market opportunities when there is effective coordination internally as well as externally. A firm in which information system is integrated in a very well manner gains more value in terms of responding as compared to the firm in which information systems is poorly integrated. Integration helps in coordination among different organizational units which helps in achieving agility. IT also facilitates the establishment of a "process enhancing" synergy that is derived from the interaction between coordination efforts of a firm and the information systems integration level, this in turn facilitates the responding ability of a firm.

ASEAN Logistics: Refining Transportation Networks

Ten Southeast Asian countries launched a long-term plan to achieve regional economic integration within the next 10 years to better compete with China, Japan and South Korea. However, transportation infrastructure must be rapidly improved for this to happen. Once that is achieved, however, the market would represent $2.6 trillion and more than 622 million people. In 2015, the so-called ASEAN Economic Community (AEC) was collectively the third largest economy in Asia and the seventh largest in the world. In the same year, intra-ASEAN trade reached $608.3 billion or 24.1% of the total trade for the region. At $24.4 billion, intra-ASEAN investment accounted for 17.9% of the total foreign direct investment there. AEC leaders expect that the trade and investment that took place last year will maintain its momentum as they roll through 2016. The combined GDP of the region reached $2.57 trillion in 2015, and average GDP per capita $4,135—nearly doubling the 2010 figures.

But all of Southeast Asia—including the countries in the AEC—is also at a logistical tipping point, with modernization and economic factors driving the need for sophisticated and efficient real estate facilities to aid an increasingly complex supply chain. According to analysts for the industrial real estate firm Jones Lang LaSalle [JLL], inventories in many emerging markets are old and don't meet current investment grade standards. This could be good news and bad news for potential developers.

Furthermore, as countries continue to witness more consumption and a strong rise in e-commerce, the current trend for modernization and development of industrial inventories is set to accelerate. Real estate facilities that cater to all forms of supply chain activities, from trans-shipment to domestic distribution facilities, will have a key role to play in the industrial landscape of the future..

Maritime Outlook: The geographical profile of ASEAN means that ocean shipping lanes are vital to achieving an effective supply chain network. Moreover, the region remains an important hub for cargo flows, given its prominent location and advanced port infrastructure. The major shipping routes through the region exemplify the ASEAN nations prominent position within the global trade network. This explains their large trading volumes. The Straits of Malacca, for example, carries over one fourth of the world's trade. It's one of the most important lanes in the world and is the main shipping channel between the Indian Ocean and the Pacific. Mega-ports in Singapore and Malaysia can also handle the new generation of supersized container vessels. This also puts the region in a strong position looking forward.

The recently formed "ASEAN Single Shipping Market" lays out a strategy to create an efficient ocean shipping network to facilitate the movements of goods throughout the ASEAN community and around the world. The Single Shipping Market will aim to achieve the following:

- harmonize regulatory requirements and commercial practices;
- improve the capacity and technologies required to manage shipping and port operations;
- develop guiding principles for the pricing of port services;
- intensify infrastructure development to support the effective and efficient operation of intra-ASEAN shipping services; and
- carry out liberalization of services that support the maritime trade, including maritime cargo handling services, storage and warehouse services, and freight transport agency services.

Ports in Thailand are also good, while the port quality in Indonesia, Philippines and Vietnam falls behind considerably. Shipping analysts expect this to change, however, with the advent of more trans-shipments in the region. Mega-vessels plying the transpacific trade lanes will create a cascading effect and demand of smaller ships will drive ports toward more development initiatives.

Air cargo outlook: The ASEAN aviation industry fills a crucial role in connecting the community and has a current combined investment schedule value of $34 billion. The proposed development value is at varying stages of construction, with some already nearing completion and others at the planning stage and not due to be completed until 2020.

Vietnam is clearly the most proactive country in terms of investment in air transport, pouring close to $12 billion into seven projects. Indonesia's air cargo industry, meanwhile, is expected to benefit from the multilateral agreement on the opening of freight services between ASEAN countries—a move that promises to help increase air cargo volume by 50% this year.

According to the president of the Indonesia National Air Carriers Association (INACA), prior to ASEAN Open Skies, also known as the ASEAN Single Aviation Market (ASEAN-SAM), Indonesian cargo planes were required to stop over in countries like Singapore, as a hub, en route to a final destination.

For example, there wasn't a direct air cargo flight from Jakarta to Hanoi. However, with the liberalization, we can fly directly from Surabaya to Hanoi. This is a chance for Indonesian air cargo service providers to get into ASEAN industrial centers, both for imports and exports. Further, the country's international air cargo shipping volume stood at around 80,000 tons in 2014, just one-fifth of domestic air cargo shipping which booked 400,000 tons during the same year. While air cargo volume decreased by 5% in 2015 due to the slowing economy, INACA forecasts a substantial volume increase now that more direct flights are possible.

Logistics Hub: Despite its history of political unrest and military juntas, the nation of Thailand is emerging as a major ASEAN logistics hub that could be worth nearly $100 billion in revenue over the next few years, according to a December 2015 study released by global consultants Frost and Sullivan. Thailand's economic policy, which focuses on high-tech manufacturing and expansion of trade, combined with increased foreign capital inflows, will support accelerated growth in air services, the report said. Frost and Sullivan estimates that Thailand's logistics industry earned revenue of $71.7 billion in 2015, and the consultants believe it will reach $96.5 billion by 2019.

Frost and Sullivan's work also found that the formation of ASEAN in 1967 and the impact of various free-market agreements on key manufacturing sectors outside the region are certainly working to shape Thailand's logistics landscape. According to Jeff Tan, automotive and transportation senior consultant for Frost and Sullivan, Thailand's road transport plays a key role in connecting the landlocked countries of Indochina. Government has planned to position Thailand as the trade and service hub of the Greater Mekong sub-region and as the gateway to Asia are opening up opportunities in the logistics and transport industry.

Last year, the Hong Kong Trade Development Council (HKTDC) reported that Thailand's manufacturing sector—dominated by automotive and electrical products—represented 80% of its exports in 2015, and that exports made up half of the country's GDP. In the meantime, Thailand's exports to other ASEAN countries also grew by an average of 12% per year during the period from 2009 to 2015, HKTDC analysts say, with Myanmar, Cambodia and Laos being the fastest growing trade partners.

However, a final note of caution is being invoked by trade experts who say that global uncertainties such as stalled economies in the EU and Japan could be a threat to Thailand's exports. These uncertainties might possibly derail transportation and logistics projects. Analyst in the region also warn that delays in government spending and failure to invest optimally in logistics infrastructure could hamper freight movement, thus lowering Thailand's productivity—and have a negative impact on all of those closely aligned nations comprising ASEAN.

Source: Supply Chain Management Review

CASE STUDY
LOGISTICS SYSTEM FOR FOOD SAVORIES LTD

Food Savories Limited is engaged in the manufacturing of various types of fast food items that are ready-to-eat variety. It has been in the business for the past 12 years. It has its factory as well as the processing unit in Navi Mumbai. The raw materials required are mainly vegetables, chicken which the company procures from either the local vendors, or from various suppliers situated at Nasik, Pune and other districts. The required materials are procured with the help of hired transporters. However, the hired transporters do not care much about the preservation of the goods. Hence, about 20% of the goods are lost due to damage, deterioration, pilferage, etc. Again, the hired transporters are unreliable with regard to their availability as well as prompt delivery schedules.

The company's products are quite popular with the customers who are situated in Mumbai, Navi Mumbai, Pune, etc. However, the company stands to **lose** the market due to erratic supply schedules which do not cater **promptly** to the customers. The packaging of the products is attractive, but it **does not preserve** the product for a long time. The shelf-life is only about 5 hours, if the goods are not properly refrigerated. Loss on this account is about 10%.

The company has about 10 distribution centers. But there does not seem to be the much **coordination** between these centers. Logistical information system is **not adequate**. Due to this, the company is unable to **expand** its business. In fact, due to competition, there is fear that the company may stand to lose its existing clientele. Due to mismanagement, the company is unable to meet increase in the demands during festival seasons and holidays.

You are appointed as a **logistics consultant.** You are required to put forward your suggestions with regard to:

1. Setting-up of proper, effective logistical information system to improve coordination *[Note: Discuss about Logistics as an integrated process, ensuring proper planning]*

2. Effective forecasting system to reduce inventory carrying cost, wastages, damages, pilferages *[Note: Forecasting can be in terms of door-to-door surveys, questionnaires, telephonic interviews. For markets/stores that are close-by, think of JIT strategies]*

3. Setting-up of effective purchasing and distribution system *[Note: Quality control with regard to purchases is required. Prefer those suppliers who can supply goods in their own transport]*

4. Improved system of storage, handling and packaging *[Note: Study warehousing, material handling system and packaging. Write/discus relevant points relating to the question.]*

5. Alternative modes of transport to reduce/eliminate wastages *[Note: Study has to be made regarding capital investment in having own fleet of specialized trucks and related variable costs versus hiring specialized fleet of trucks. In case of hired trucks, agreement should be made with regard to compensation to be paid by the transport company in case goods are damaged/pilfered by them*]

6. Ways and means to tackle and counter competitors' strategies *[Note: Analysis as to why competitors are having a "cutting edge". Improvement in the company's performance vis-à-vis performance in inbound logistics, processing, packaging, storage/warehousing, marketing/sales programmes. Quality and taste of the product may be altered to suit various sections of customers. Different sizes of packets to suit customers' budget]*

Cloud Based Enterprise Resource Planning

This is the era in which Information technology has become one of the most basic needs for enterprises. An organization that ignores IT is left far behind its competitors. Traditionally, for using IT, an organization was supposed to maintain its own IT infrastructure. An IT infrastructure in an organization, which may sometimes be a huge one, requires high cost of implementation, maintenance and training etc. The High initial investment is a challenge for Small and medium Enterprises (SMEs). There is a remedy for SMEs to overcome such issues - **Cloud Computing**. Cloud computing is a buzzword today. It is changing the way of doing day to day activities in SMEs. It embraces "pay as you go" approach. "Cloud computing is a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction."

Few years back, various functional areas of an organization were stand alone. Because of standalone systems, the data was supposed to be added separately for each functional area and this was leading to the problem of data inconsistency. It was difficult to deal with multiple vendors of those standalone systems simultaneously. Also it was very challenging for the management to get an overall organizational view. At that time **Enterprise Resource Planning (ERP)** emerged as a way to deal with such issues.

"A packaged business software system that lets an organization automate and integrate the majority of its business processes, share common data and practices across the enterprise and produce and access information in a real-time environment. The ultimate goal of an ERP system is that information must only be entered once."

Nowadays various cloud providers are providing ERP on cloud. Cloud based ERP is blessed with the advantages of both - ERP and Cloud. Presently, SMEs are not required to maintain their own

IT infrastructure. They can make use of cloud based ERP and go for payment as per their use. Entire infrastructure is purchased and maintained by cloud providers.

Enterprise Resource Planning

ERP has established itself as the backbone of most of the big enterprises in the world today. ERP plays a significant role in getting SMEs to focus on business processes. These solutions have bought a change in thinking processes that has ultimately turned into the extended enterprise and better supply chain management. An ERP system integrates business processes and their corresponding information. It integrates various systems for e.g.: HR management, Inventory management, financial accounting etc. The major benefits of ERP systems are business process automation, timely access to management information and supply chain improvement via ecommerce. ERP gathers information from across all of a company's functions letting the entire enterprise to have a broader scope. One major advantage is that information that is entered once becomes available in the entire organization. This results in fewer efforts to be placed by employees and the possibility of error also gets reduced.

It's a way for an organization through which it can remain customer oriented and competitive. ERP offers easy way for carrying out decision making activities as it provides appropriate and timely information. This results in better planning and highly effective and efficient operations. This further leads to customer satisfaction. ERP systems have become a necessary thing for organizations to remain competitive in the business instead of being a strategic tool. ERP may act as competitive advantage with cautious planning, proper management of ERP projects, refined engineering of the organization and alignment of ERP with the strategy of organization even after implementation.

For implementation of ERP in an organization, there should be focus on both, the technology and business. In spite of its countless advantages, most ERP implementations require heavy customization to achieve their proclaimed advantages. Numerous problems arises while ERP implementation. Apart from being complex, ERP process takes a lot of time to be implemented. There have been many instances of failure of ERP system. ERP implementations sometimes take more time and cost than projected. This complexity poses considerable risks for an enterprise-wide project. Issues that arise during ERP implementation are not understood by management many a times. Consequently advantages of ERP are not realized.

Key issues in ERP implementation are: management feels a lot of challenges due to change in the processes, management capabilities like abilities, communication and experience are required for proper implementation, and limited training imposes issues. The innovations like ERP lose their shine because they are seen as technology solutions only.

Cloud Computing

Cost Effectiveness

In cloud computing model, IT services are distributed. These services can be accessed over internet or intranet. Cloud providers, rather than the organizations, have control over services and resources in this case. Total outsourcing cost is lower than the investment in setting up IT infrastructure. This results into savings for organizations. Cloud computing converts capital expenditure into operation expenditure i.e., CapEx to OpEx. In internet services, cloud computing is no less than a revolution. Small and Medium Enterprises (SMEs) should seriously think about adopting it as it helps in reducing the cost and providing high ROI.

There are three important models of cloud computing:

First is **SaaS** (software-as-a-service) - users pay for the software as per their use.

Second is **PaaS** (platform-as-a-service) - users purchase the computing processing capacity on the web. For e.g.: online data storage provision to its customers is provided by Amazon.

Third is **IaaS** (infrastructure-as a-service) - users pay for technology (firewalls and anti-viruses software) on pay per use basis.

Hence users don't buy software for separate systems as they can be accessible on cloud. Similarly, there is no need to buy powerful memory storage systems. Consequently, there is no need to maintain a separate huge IT department. The organizations that employ cloud computing do not have to buy high powered computers as web based applications run on cloud. Therefore low cost computers can also perform well.

Cloud computing is a solution for one application per server attitude which is very common in the data centers for so many years. This results into the utilization of 15 to 20% of total computing capacity. However when multiple applications are run on a single server in case of virtualization, there is a dramatic gain in utilization of server capacity. Various tenants share the resources in the cloud which helps in achieving economies of scale which in turn provides benefit in terms of lower cost.

Flexibility

Cloud Computing is an innovative way to enhance value of a business and productivity. This technology can be used by those people who have internet access as this technology is offered online. Through the cloud users can collaborate more easily as they can access the services from anywhere and at anytime. Also their data is kept safe in the infrastructure. Cloud computing lowers the total cost of ownership, increases return on investment, enhances efficiency and provides dynamic provisioning.

Cloud computing increases profits and productivity of a firm as it allows employees to work from distant location. Now employees don't wait for team members to gather for a project instead they make use of cloud over the internet to work from any place and at any time and be up to date with the colleagues. Cloud computing helps the people to collaborate and work efficiently even when they are located at remote locations. Thus it provides accessibility from any place as long as you have a computer and assess to the internet. This is a boon to those people who keep on travelling from place to place for their business work.

There are various providers of cloud computing for e.g.: Amazon, Google, IBM, Yahoo, eBay and Microsoft. Different functions are offered by all the providers in their services. Using some of the interfaces of cloud computing, a user doesn't need to change his working habits. He may get the same look and feel in each of the application. This makes cloud computing a better option than grid computing.

Cloud services can be scaled across geographical locations, hardware performance, software configurations. Cloud computing provides elasticity, i.e. it is easy to upscale or downscale the capacity in minutes. Scalability also helps in mitigating the failure risk and making the organization more adjustable. Cloud services also enhance the upgradability of the system. Upgradability refers to the ease in improving a system's functionality to the latest version.

Hence, cloud services are flexible in nature. Flexibility refers to the ability to foresee and serve the environmental change and respond to them to take benefit of opportunity and reduce threat.

Time Effectiveness
Sometimes it may take more than a few months between the decision to acquire hardware and its delivery, setup and use. Cloud computing can significantly reduce this delay. Cloud computing solutions provide both time and cost savings, and hence it is suitable for SMEs. Cloud services can be valuable to fast-moving and agile projects as the cloud infrastructure can be setup instantaneously.

Organizations that are using cloud services can run an application on a virtual server. It can also ramp up as per its necessity. In few minutes, new virtual servers can be generated and released in a matter of minutes depending on demand. Cloud Computing provides high rate of responsiveness to unpredictable demand. The shared access shortens the time for customers and suppliers to assess the market. Time to reach market is correlated directly to the time of deployment. One may argue that the organizations that implement their own IT infrastructure spend 70% of time and money in supporting it and the rest 30 % in innovating, improving and growing. However when cloud computing is used, the ratio gets reversed.

Cloud computing reduces processing time. Amazon cloud service provides parallelization which helps in reducing the processing time. For e.g.: “If one compute-intensive or data-intensive job that can be run in parallel takes 500 hours to process on one machine, with Cloud Architectures, it would be possible to spawn and launch 500 instances and process the same job in 1 hour.”.

Unique Identification Number in India

Information Systems are increasingly becoming critical for the very existence as well as growth of any organization these days. Organizations are spending huge amount in acquiring and implementing these systems. Government has also started to embrace technologies for fair distribution of rights among the citizens of the country. E-government (Electronic-government) can be understood as the intensive use of information technologies for the provision of public services, promotion of democratic values and improvement of managerial effectiveness. It takes a lot of time and resources to implement such systems. Thus it is not only important rather essential that these systems must be efficient and effective so as to provide the right returns of the investment made.

The Government of India (GoI) approved the National e-Governance Plan (NeGP) that comprised of 27 Mission Mode Projects (MMP) and 8 components in May, 2006. The MMPs has a vision to “Make all Government services accessible to the common man in his locality, through common service delivery outlets, and ensure efficiency, transparency, and reliability of such services at affordable costs to realize the basic needs of the common man”. MMPs have clearly articulated scope, well-defined milestones and timelines for implementation. Line Ministries are responsible for completion of Central, State, and Integrated MMPs.

Implementation of Unique Identification Number (UID) is one of the central MMPs. The UID project aims at providing Unique Identification Number to all the citizens of India. This project was launched keeping in mind the effective monitoring of government schemes and welfare services. Currently UID is not a mandatory requirement, but it will become compulsory in future.

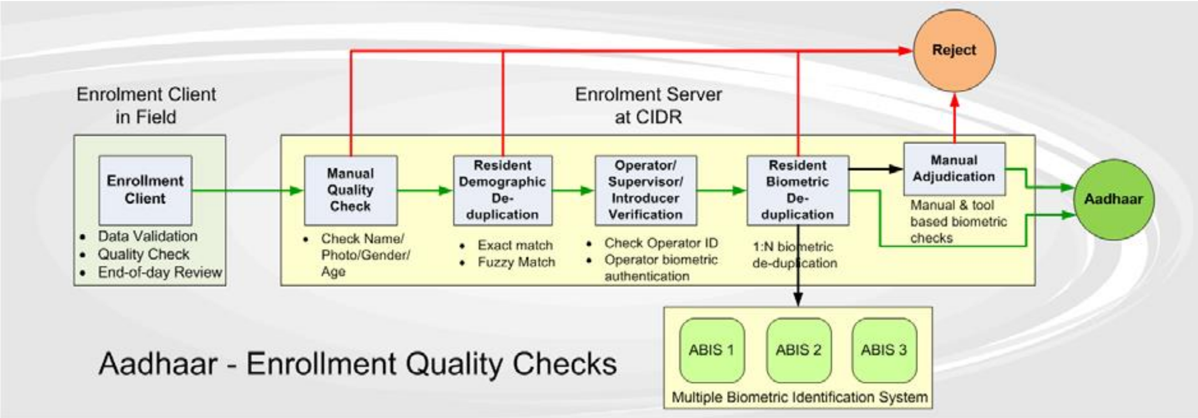
The concept of UID in India originated in 2006 when administration of Department of Information technology gave approval for the implementation of Unique ID for below poverty line families. As it would help in uniquely identifying beneficiaries of Public Distribution System (PDS), Education, National Rural Employment Guarantee Act (NREGA), Healthcare, Financial and various other services, it would be effective in identifying frauds. Hence, it would be beneficial in utilizing the funds efficiently. National Institute of Public Finance and Policy carried out a cost-benefit analysis of UID. It was found that the GoI will accumulate considerable benefits by integrating UID and other services like PDS, NREGA, LPG subsidies, healthcare, housing, education schemes. The benefits will be achieved as a result of the decline in issues related to identification and authentication issues.

Later on Empowered Group of Ministers (EGoM) recommended collating National Population Register (NPR) and UID schemes. Through NPR of all residents of the country, the GoI had decided to collect information on some specific characteristics of every individual along with his finger biometrics, photograph and iris. In 2009, Unique Identification Authority of India (UIDAI) was formed by Planning Commission of India and was provided the responsibility of implementing policies and plans for UID. UIDAI is now responsible for owning and maintaining UID database.

Nandan Nilekani, the Chairmain of UIDAI has articulated that the UID will help in opening a bank account without supporting documents. In this way it will raise financial inclusion. It will also ease obtaining a telephone connection. Public distribution system will become more transparent. It will assist in eliminating corruption in NREGA. It will also help in monitoring the attendance of teachers in schools. Ultimately UID technology system will facilitate better governance.

To maintain uniqueness, the biometric information of the enrolling citizen is captured and matched against every already enrolled citizen. Capturing biometric data is the only way to uniquely identify a person. De-duplication is done to ensure that each citizen gets only one UID number. The identity proofs that rely merely on demographic fields are quite exposed to theft, corruption, forgery etc. Moreover, de-duplication will not work perfectly fine by using demographic information only. Hence, biometric data is considered to be necessary for the purpose of National Identity system.

Technical team of UIDAI analyzed the already existing programs in India that were based on biometric data. Their analysis showed that considering only fingerprints as biometric data could be a challenge in India as most of the Indian population is involved in manual labor. Hence, it was suggested that the system could be more reliable and accurate if iris could also be considered for biometric data. Ultimately it was decided that three necessary biometric modalities will be needed: 10 fingerprints, 2 irises and face. UIDAI conducted a proof of concept study in which it was found that iris data can also be captured from the blind people. Biometric data can be captured from the children between 4 to 15 years. Using iris and fingerprints provided a very high level of accuracy as compared to using any one of them. According to UIDAI, the biometric data will help in financial inclusion of the rural poor as it will help in transfer of cash easily. For e.g.: if a local shop keeper has a device for reading fingerprints, a person can easily get the money from him by providing his identity. The shop keeper can in turn get money from the bank or government agency.



During December 2011, a study was carried out by UIDAI in which the enrolment of 8.4 crore residents was used to measure the accuracy of biometric data against de-duplication. The results of the study are presented in table 1:

UIDAI Study

Issue	Result	Description
Failure to Enroll Rate	0%	Every unique resident can be enrolled and issued Aadhaar number regardless of their biometrics
Biometric Failure to Enroll Rate	0.14%	This implies that 99.86% of the population can be uniquely identified by the biometric system. The exceptions (0.14%) however are de-duplicated using demographic data and checked manually for fraud. The legitimate cases among these are issued Aadhaar number.
False Positive Identification Rate	0.057%	In practical terms, it means that at a run rate of 10 lakh enrolments a day, only about 570 cases need to be manually reviewed daily to ensure that no resident is erroneously denied an Aadhaar number. The UIDAI currently has a manual adjudication team that reviews and resolves these cases. After manual adjudication, there is a negligible number of legitimate residents who are wrongly denied an Aadhaar number
False Negative Identification Rate	0.035%	This implies that 99.965% of all duplicates submitted to the biometric de-duplication system are correctly caught by the system as duplicates. Given that currently approximately 0.5% of enrolments are duplicate submissions, only a few thousand duplicate Aadhaar would possibly be issued when the entire country of 120 crores is enrolled.

From this analysis, it was found that this system has proved to be accurate, scalable and reliable. It can properly meet the demand of entire nation by providing unique identity number to all the residents. This project will result into creation of a single database with identity information of all the residents. This will prevent the need to create a separate department wise database. People will be spared from the need to provide multiple identification proofs that are widespread across various government departments. This scheme will be very useful from the perspective of banking and financial services.

Event Highlights @Center of Excellence

March 2016

Two Days Management Development Programme on 'Logistics and Supply Chain Management' dated January 29 & 30, 2016

A two days **Management Development Programme** (MDP) on **'Logistics and Supply Chain Management'** was organized by **Center of Excellence –Supply Chain Management** (**School of Management), GD Goenka University** in collaboration with **Chartered Institute of Logistics Management** (CILT India) at its campus on **January 29 & 30, 2016**. The programme was attended by Senior Level Executives with diverse background from **Navratna Companies** and **Miniratna companies** like **Indian Railway Catering and Tourism Corporation Ltd** (IRCTC), **Central Warehousing Corporation** (CWC), **Rail India Technical and Economy Service Ltd**(RITES), **Central Railside Warehouse Company Ltd** (CRWC), **Konkan Railways** and other leading organizations like **Air India**, **Paradip Port Trust**, **Berger Paints** and **Jaipuria Institute of Management**.

Objective of the MDP

In today's business environment, an efficient and effective supply chain is a necessity for staying competitive in the market. Nevertheless, supply chain management in India is still in its early stages of deployment. Managing supply chain is a complex job as it includes and affects the entire business activities of an organization and its business partners. Understanding the dynamics and complexity of the supply chain is quite challenging and a prerequisite for any supply chain endeavor. The basic objective of this programme was to develop an appreciation for the concept of working with business partners in order to achieve an efficient and effective supply chain and increase customer value. The programme also aimed to make participant understand the drivers and challenges of achieving supply chain excellence through integration and coordination. The course also provided training on application of analytical skill for handling complex supply chain problems.

Proceedings of MDP

MDP was conducted in two days which covered eight modules (four modules on each day) with each module of duration one and half hours.

First day (29th January) covered modules on **Fundamental Concepts of Logistics & Supply Chain Management**, **Warehouse Management & Operations**, **Economics for Transportation Systems Supply Chain for E-Commerce and Modes of Transportation**

Second day (30th January) covered modules on **Shipping and Containerization**, **Transportation, Sourcing and Green Supply Chain Management**, **Optimization for Logistics Planning**, **Information Technology in Supply Chain** and**.**

Resource faculty for conducting different modules of MDP were **Prof. (Dr.) Pradeep Kumar Goel**, Dean, School of Management, **Prof.** (**Dr.) Tanuja Kaushik**, HoD, School of Management, **Dr. Gyanesh Kumar Sinha**, Asst. Professor –School of Management**, Mr. Rajneesh Kler,** Asst Professor, School of Management, **Ms.Hitesha Yadav**, Asst. Professor, School of Management and **Ms. Sumedha Chouhan**, Asst. Professor, School of Management.

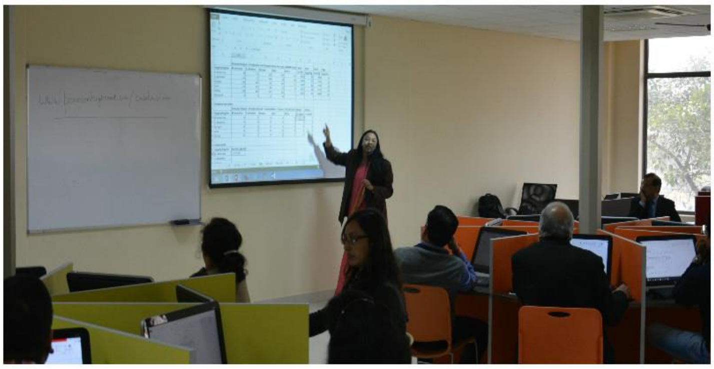
At the end of session, **Prof. (Dr.) Raj Singh, Hon'ble Vice Chancellor**, GD Goenka University, thanked all participants for attending the these two day MDP and conferred memento along with the certificate of participation to them. He congratulated Dean-School of Management and all faculty members and staff for making the programme a memorable and successful event.

PARTICIPANT LIST

Sr. No.	Name of Participant	Designation	Affiliation
1	Ms. Anjaly Negi	Sr.Asstt.Manager-ICD	Central Warehousing Corporation
2	Shri S. Vinaya Kumar	Asstt. Traffic Manager	Konkan Railway Corporation Ltd
3	Shri A K Sahoo	DTM, Traffic Department	Paradip Port Trust
4	Shri Ashok Advani	Adjunct Professor	Jaipuria Institute of Management
5	Shri Amit Kumar Mohanty	Warehouse Incharge	Berger Paints India Ltd
6	Shri K K Kak	AGM (Cargo)	Air India

7	Mr.Pankaj Tiwari	Manager-Commercial (Distribution and Marketing)	Air India
8	Ms. Kavita Gupta	AGM (T & E)	RITES Ltd
9	Shr. R N Das	Manager (T & E)	RITES Ltd
10	Shri Rakesh Chhabda	AM (T & E)	RITES Ltd
11	Shri Pushpender Singh Chauhan	Executive (L/O/M)	CRWC
12	Shri Rohit Goel	AGM(IT)	IRCTC
13	Ms. Payal Mathur	Manager (T)	IRCTC
14	Mr. S S Rathi	Sr.Manager (T & E)	RITES Ltd








3RD INTERNATIONAL CONFERENCE- ICON 2016

School of Management, GD Goenka University, Gurgaon organized its 3rd International Conference- ICON 2016 on February 4 and 5, 2016 at the University premises. The theme for this year's ICON was **"Flattening of the Globe: Propelled by E-Commerce and Supply Chain"**. The two day conference included an inaugural session and a plenary session which had industry and academic stalwarts sharing their views on the theme. 8 concurrent sessions were held with students, academicians and industry leaders presenting papers. Over 100 papers were received, out of which a selected 62 got presented and published. All the selected papers were published in the book of proceedings which was released by Prof. (Dr.) Raj Singh, Hon'ble VC GDGU, Prof. (Dr.) Pradeep Kumar Goel, Dean, School of Management, GDGU, Prof. Paul Lalvani, Dean- Empower School of Health, Ms. Laura Paletta Crespo, Chief of Consular Section, Embassy of Brazil, New Delhi and Dr. Moutusy Maity, Professor- IIM Lucknow and conference convener Prof. (Dr.) Tanuja Kaushik. The plenary session was themed "Is the Globe Really Flattening? - Supply Chain, Innovation and Changing World Trade". It was chaired by Dr. Prem Vashishtha, Visiting Senior Fellow at NCAER with panelists Mr. B V L Narayana, Director- Passenger Systems CRIS, Mr. Prem Nath Panday, a freelance consultant and Mr Anuj Alphonson, Chief Operating Officer at Safeducate Learning. Mr. Shanti Narain, National Chairman CILT and Dr. S. Venkat, Professor, IIM Lucknow were the chief guests at the valedictory ceremony. In addition, the concurrent sessions were chaired by renowned experts from both the industry and academia.

CILT: Office Bearers

Mr, Shanti Narain	***National Chairman***
Dr. Pradeep Kumar Goel	***Vice Chairman***
Mr. Rajeev Bhardwaj	*Vice Chairman*
Mrs. Veni Mathur	*Vice Chairman*
Mr. Amit Shankardhar	*Secretary General*
Mr. Vinod Asthana	*Treasurer*
Mr. Ramesh Krishnan	*Member*
Mr. Sumant Jha	*Member*
Mr. Vikas Shekhar	*Member*
Mr. Sanjay Priye	*Member*
Mr. Vershal Sudeora	*Member*
Mr. C.V. Kumar	*Member*
Mr. Suresh Bansal	*Member*
Mr. Prem Prakash	*Member*
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Mr. Kwaja (Kochi)	*Vice Chairman*
Mr. Sameer Shah (Gujarat)	*Vice Chairman*
WILAT FORUM HEAD	
Mrs. Ragini Yeshuri	*Head of WILAT*

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IRCON International Limited, New Delhi
Central Organisation for Railway Electrification, Allahabad
Integral Coach Factory, Chennai
Central Warehousing Corporation, New Delhi
RDSO, Lucknow
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School of Logistics Management & Technology, Kochi

CONCOR, New Delhi
Tata Steel Limited, Jamshedpur
Tata Motors Limited, Mumbai
RITES Limited, Gurgaon
Nestle India Limited, New Delhi
IDFC Limited, Mumbai
SIEMENS Limited, Mumbai
Delhi Metro Rail Corporation Limited, New Delhi
Inland Waterways Authority of India, Noida
Indian Port Association, New Delhi
Reliance Logistics Private Limited, Mumbai
Chakiat Agencies Private Limited
Essar Steel Limited
Hazira Port Private Limited, Ahemdabad
Yak Institute of Management Private Limited, Mumbai
Federation of Indian Mineral Industries, NewDelhi
APL Logistics India Private Limited
Axis Bank Limited, Mumbai
Innovative B2B Logistics Solutions Limited

CILT India New Members

Life Fellow Members

Mr. Susanta Kumar Mukhopadhyay	*Chief Executive Officer*
Mr. Ajit Kumar Mishra	

Life members

Mr. Girjaprasad J.Kantharia	*AMA Professional Retd.*
Mr. Sanju Ariyangattil	*Director , Triplede Technologies Pvt. Ltd.*
Mr. Lily Pandeya	*Director Railway Board*
Mr. Ambika jain	*FA ,CAP/C/G Northen Railway*
Nazhat Kittur	*Management Trainee*
Mr. Rajesh Nigam	*Dy. General Manager (S & D)*

Annual Chartered Members

Mr. Aniket Nanda	*Chemicals Procurement officer Haldia Petrochemicals*
Mr. Chandrasekar Ranganathan	*Director Cognizant Technology Solution Pvt. Ltd*

Annual Fellow Members

Mr. Shishir Tewari	*AGM Logistics Carrier Media India Pvt.Ltd.*
Mr. Anindyo Mukhopadhyay	*Chief of Strategy & Marketing Prolific HR Consultants (I) Ltd.*
Mr. Atsungla Longkumer	*General Manager*
Mr. Shiv Kumar	*Principal Consultant Tech Mahindra Ltd*
Mr. Jaipal S Bhandari	*General Manager Lords Travel Pvt Ltd*
Mr. Abhinav Anand	*Sr.Op & SCM Evolution India*
Mr. Anuj Alphonson	*Chief Operating Officer Safeducate Learning*
Mr. Dinakar S	*Student*

Affiliate Members

Amit Sharma	*Manager in Metalworld recycling ltd.*
Narasimhamurthy Arasapura Suryanarayana	*Senior consultant Ernst & Young*
Abhilash Bandikolla	*Channel Management dtdc*
Naresh P	*Channel management executive*
Shijas Hassan T	*MT DTDC*
Bipin Louis	*Management Trainee Dtdc*
Gopikrishna Pagadala	*Management Trainee*
Tuhin Sengupta	*Sr. Engineer (L&T ECC)*
Naveen SGK	*Management Trainee Dtdc*
Vijaykumar Maddela	*Management Trainee*
Aaqib Mushtaq	*Executive Trainee Dtdc Express LTD*
Saravanakumar	*Channel Management Executive*
Chandrasekhar Devangala	*Management Trainee Chandrasekhar*
Hemanth R	*Project Engineer Wipro Technologies*
Mohd Adil Faruqi	*Assistant Manager Jindal Steel And Power Ltd*
Muhammed Razeen PP	

CILT India - Vision

To be the first choice professional body for Supply Chain, Logistics and Transport industry and professionals nationally and be a premier knowledge sharing platform in the field of supply chain, logistics and transport management.

The Chartered Institute of Logistics and Transport (CILT) is the international professional body for all sectors of the Logistics and transport industry. Founded in the United Kingdom in 1919 and granted a Royal Charter in 1926, it was established to promote knowledge of the science and art of logistics and transport and to provide a source of authoritative views for communication to government, industry and the community. CILT is currently operating in 31 countries globally and has over 30,000 logisticians as it members. CILT India, the India chapter of CILT, was formed in 1993 and has more than 1000 practicing professionals and a large number of corporate organizations as its members. CILT India is fully involved in spreading awareness about Logistics and Transportation industry in India and also organizing training programmes for students and Management Development Programmes for practicing professionals, apart from Research and Studies on Logistics and Supply Chain Management.

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CILT INDIA

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Center of Excellence at G D Goenka University

Vision:* School of Management, GD Goenka University aims to *be a premier institute known for holistic development of future managers, leaders and entrepreneurs.

SCHOOL OF MANAGEMENT

Center of Excellence at School of Management, G D Goenka Univesity is an initiative jointly undertaken by the G D Goenka University and CILT.

We at Center of Excellence believe that a lot can and shall be done on our part to create, disseminate and proliferate the knowledge and learnings in above mentioned field. We are undertaking some endeavours in these broad areas, which are as follows:

- Carry out extensive, path breaking and relevant research in the area of supply chain management, logistics and transport.
- Develop and propagate latest technologies and models in the area of supply chain and transportation.
- Undertake executive trainings, bespoke trainings, and short courses in this area.
- Jointly conduct seminars and conferences for the convergence and reflection on new ideas and findings.
- Get connected to best Supply Chain Management professionals across the globe.
- An access to global research and knowledge in U.K. knowledge centre.

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