

Data Analysis for DHL Logistics Facilities

LITERATURE SURVEY

Paper 1: DEVELOPMENT AND IMPLEMENTATION OF REVERSE LOGISTICS PROGRAMS

- ✓ **Publication year:** 1998
- ✓ **Author:** James R. Stock.
- ✓ **Journal Name:** The increasing importance of reverse logistics in technology
- ✓ **Summary:** A thorough literature study on the topic of this paper: Reverse Logistics was conducted for a short period. Several articles were found on the topic over the internet. After getting somewhat of a fair idea about reverse logistics, a preliminary set of questions were formulated for the survey. Most of the questions were either taken directly or inspired by the questionnaire developed by Rogers and Tibben-Lembke (1998), for their paper “Going Backwards: Reverse Logistics Trends and Practices”. And one might even say that to a great extent this thesis has been inspired by the above mentioned paper.

Paper 2: GREEN LOGISTICS BUSINESS ORGANIZATION

- ✓ **Publication year:** 2006
- ✓ **Author:** Aronsson, H. and Brodin, M.
- ✓ **Journal Name:** The environmental impact of changing logistics structure.
- ✓ **Summary:** DHL and Blue Dart Steer India's Logistics a New Direction with the Launch of Smart Truck Bangalore, India. Adapts successful innovations from the corporate unit DHL Solutions & Innovations to improve service quality, cut costs, reduce time and CO2 emissions in emerging market conditions. DHL, the world's leading logistics company, and Blue Dart, part of the DHL Group, are piloting Smart Truck technology in Bangalore, India, the first deployment of this successful

logistics innovation outside Germany. Created by DHL Solutions & Innovations (DSI), the DHL Smart Truck is an "intelligent" pick-up and delivery vehicle that combines a number of innovative technologies including a route planner. Launched in Germany in 2010, DHL Smart Truck reduced number of miles traveled by 15 per cent and length of average route by 8 per cent during its pilot stage, reducing both fuel consumption and CO2 emissions.

Paper 3: INDIAN LOGISTICS INDUSTRY AND SUPPLY CHAIN MANAGEMENT

- ✓ **Publication year:** July 2012
- ✓ **Author:** Smit Thakkar
- ✓ **Journal Name:** RC Air & Rail services and Logistics
- ✓ **Summary:** RC a Logistics Company is renowned for its domain expertise and experienced manpower in the Logistics sector. RC can best understand your Logistics and distribution requirements and can offer the most suitable Logistics model and solution to you. RC has the strong network coverage across India traversing over 3,50,000 km. everyday covering over 150 locations through more than 50 routes operating 24 hours a day 365 days a year reaching these locations through its fleet of SLR (Short Luggage Room), VP (Various Parcel Room), Air Carriers and through truck vehicle operating on. Logistics services provider RC plans to invest Rs 3-4 crore (30–40 million) in five years to expand its operations on the back of the boom in Rail activities in the country.

Paper 4: ACHIEVING THE CUSTOMIZED “RIGHTS” OF LOGISTICS BY ADOPTING NOVEL TECHNOLOGIES

- ✓ **Publication year:** 2016
- ✓ **Author:** Bonk enburg, Tom.
- ✓ **Journal Name:** A DPDHL perspective on implications and use cases for the logistics industry
- ✓ **Summary:** In this section we present a literature review on facilitating role of emerging technologies on customization of logistics services. The literature on emerging technologies that we examine within the scope of this study is fairly new. While most studies focus on a specific technology, some studies examine the impact of all novel technologies effective on logistics (e.g., DHL Logistics Trend Radar Report, 2020).

The Internet of Things (IOT) refers to a network system where the everyday objects that feature an IP address for internet connectivity can exchange and share data, and so communication occurs between these objects and other network devices and systems.

Cloud Computing (CC) is a virtualized IT resource that allows businesses to access software applications, other manipulative data services, and data storage and processing power over the Internet

Unmanned Aerial Vehicle (UAV), commonly known as Drone, could be simply defined as “an aircraft operating or designed to operate autonomously or to be piloted remotely without a pilot on board”

Self-driving (Autonomous) Vehicle is defined as a vehicle that is capable of sensing its environment and navigating without direct action of human such as steering, accelerating, or braking. 3D Printing, also known as Additive Manufacturing, is a technology used for making three dimensional solid objects up in layers from a digital file without the need for a mold

Paper 5: DISCLOSURE IN THE GLOBAL LOGISTICS INDUSTRY: THE CASE OF DHL

- ✓ **Publication year:** 13 April 2017
- ✓ **Author:** David M. Herold, Ki-Hoon Lee and Marc A. Rosen.
- ✓ **Journal Name:** The institutionalization and commensuration of carbon disclosure
- ✓ **Summary:** The aim of this paper is to examine the similarities and differences in the measurement and reporting of carbon-related information in order to capture the underlying logic that drives carbon-disclosure behaviour in the global logistics industry. We adopt an interpretative content analysis approach and examine the carbon-related information using the Carbon Disclosure Project (CDP) reports of DHL, FDX and UPS. The analysis reveals significant differences in the applied carbon-disclosure strategies, as well as in the degree of transparency between the three companies. The results also indicate that the carbon-disclosure practices of FDX are dominated by a market logic that emphasizes the economic benefits of carbon reductions, while DHL and UPS have prioritized the sustainability logic to gain a competitive advantage.

Paper 6: DHL e-COMMERCES IN VIETNAM'S BUSTLING E-COMMERCE MARKET

- ✓ **Publication year:** 26 July 2017
- ✓ **Author:** Calbeto. J, Abareshi. A, Sriratanaviriyakul, N. Nkhoma, M. Pittayachawan, S. Ulhaq, I. Wandt.
- ✓ **Journal Name:** Last Mile Delivery as a competitive logistics service
- ✓ **Summary:** Through the case of DHL's Ecommerce Vietnam, LMD has demonstrated a very important role in the supply chain network. Not only stopping at improving the overall efficiency and responsiveness, the

activities are able to represent DHL's key competitive advantages. In general, Parcel Metro Service is the key competitive advantage of DHL Ecommerce while good compensation policies for insurance package can be considered as short-term competitive advantage. As such, insurance package may potentially become a critical aspect for the company to develop strategic plans in order to make it become a unique sustainable strength soon. Additionally, Tracking System, Next-day Cash Remittance and Service Point are features that define the foundation of any e-commerce service providers nowadays in Vietnam. In this case, DHL Ecommerce has well- established a foundation that is as good as their competitors. Open Box service does not generate good returns for the company, however, DHL's LMD practices will level down without this feature.

**Paper 7:SPECULATING ENVIRONMENTAL SUSTAINABILITY
STRATEGY FOR LOGISTICS SERVICE PROVIDERSBASED ON DHL
EXPERIENCES**

- ✓ **Publication year:** 2019
- ✓ **Author:** Tran, D. T., Wong, W. K., Moslehpour, M., & Xuan, Q. L. H.
- ✓ **Journal Name:** Management Information and Decision Sciences
- ✓ **Summary:** According to the United Nations General Assembly (1987), there is none of the universally-official agreed term on sustainability due to the complexity and various approaches to achieve the outcomes. However, the original concept of sustainability was generated from the views of sustainable development in the World Commission on Environment and Development Summit in 1992 in Rio describing “the development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Albert, 2019). In the business context, Hoppmannetal. (2018) suggested the

sustainability goal requires an increase in profit once the initial investments are made. Any business operation considers environmental, social and economic aspects, then should link to their sustainable activities. Khoshnava et al. (2018) suggested that sustainability concept can be categorized and illustrated as the three pillars “social, economic and environmental” to fully evaluate sustainable dimensions in the commercial world. Janker et al. (2019) addresses the social sustainability more focuses on the process of creating healthy and liveable communities which could improve the well-being of people who are living in those places. This dimension of sustainability supports the present and the future generations to maintain healthy living and working societies. From a business perspective, social sustainability refers to the comprehension about the impacts of corporations on people community which might affect their daily-life routine, community engagement and future well-being (Hale et al., 2019). On the other hand, Läßle & Thorne (2019) clarified that businesses seek for economic sustainability through the economic system, which implies the current level of productions fulfils the consumptions without compromising future needs.

Paper 8: AERIAL VEHICLES (UAVs) TECHNOLOGIES FOR EFFECTIVE TRANSPORT AND LOGISTICS DELIVERY

- ✓ **Publication year:** 2019
- ✓ **Author:** Godwin, O
- ✓ **Journal Name:** Value of Nigeria's Logistics Industry
- ✓ **Summary:** The logistics and chains supply industry has come of age as there exist some local and foreign private business entities that are operating in the logistics industry which include: DHL, Red Star Express

(also known as FedEx), United Parcel Service (UPS), NiPOST (Nigerian Post Office) amongst others (Ogunbowale, 2018). Though the Nigerian Postal Service (NPS) is the agency that regulates the activities of stakeholders in country, and it operates a courier delivery service, the Nigerian Post Office (NiPOST) which competes with other courier operators in private industry. In the first instance, there is the need for Nigeria to engage in and implement the various free-trade and bilateral with various states across the globe which include: the ECOWAS and African Growth and opportunity Act (AGOA) programmes that are much expected to improve trade significantly (Mazur, et al., 2016).