Overview of Logistics 4.0 Era

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ABOUT VIETNAM LOGISTICS ASSOCIATION (VLA)

Connecting Logistics Professionals

**Vision**

*Connecting and cooperating with local and foreign freight forwarders, logistics services providers in order to create the leading industry of Vietnam*

**Mission**

*To enhance the professionalism, to promote the modern logistics, to integrate the national logistics with the region and globally in order to efficiently contribute into the development of enterprises in the industry as well as the country’s economics development in Vietnam*
ABOUT VIETNAM LOGISTICS ASSOCIATION (VLA)

○ Established in 18 November 1993, formerly Vietnam Freight Forwarders Association (VIFFAS)
○ Renamed Vietnam Logistics Business Association (VLA) on 4 January 2013 to reflect new industry trend
○ National Association Member of FIATA: active member, participating in various working groups
○ 370+ members (80 are members of FIATA)

Our services
○ Freight Forwarding
○ Transport (sea, air, land, inland waterway)
○ Integrated Logistics (3PL)
○ Warehousing, Ports, Stevedoring, Distribution
○ Customs Brokerage
○ Delivery Services
○ Others Logistics Related Services

Website: www.vla.com.vn
Number of Logistics companies about 3000 according to VLA research and estimate

VLA has 372 members as of 30-Jun-18, among them:
- 316 ordinary members
- 56 associated members (36 FDIs)
- by 2020: 500 members

Services provided by the Members:
- Freight Forwarding: 53.34%
- Warehousing, ports, stevedoring, distribution: 15.48%
- Transport (trucking, sea, inland waterway, air): 37.50%
- Customs Agents: 14.08%
- Delivery services: 06.55%
- Integrated logistics, 3PL: 26.64%
- Other related logistics: 12.41%

Transport & Logistics:
- Land, Rail Transport: 49xx
- Waterborne Transport: 50xx
- Air Transport: 51xx
- Warehousing & Auxiliary: 52xx
- Post & Express: 53xx
EVOLUTION OF VIETNAM LOGISTICS INDUSTRY
CHALLENGES

Legal frameworks
Infrastructure, connectivity
Logistics Service Providers Capability and Quality of Service
Logistics market
Human Resources
VIETNAM LOGISTICS CURRENT STATUS & DEVELOPMENT

**Current Status**
- Growth Rate: 15-16% per annum
- LPI: 64th /160 and ranks 4th in ASEAN (2016 World Bank)
- High Logistics Cost: 20.8% of GDP (WB report 2014)
- Contribute to: 3% of GDP (2014)
- Low Outsourcing rates: 35-40%

**National Logistics Action Plan up to 2025**
- Growth Rate: 15-20% per annum up to 2025
- Logistics Performance Index (LPI): top 50th
- Reduce High Logistics Cost: 16-20% of GDP
- Contribute to: 8-10% of GDP (2025)
- Higher Outsourcing rates: 50-60%
ACTIONS TAKEN BY THE GOVERNMENT

• National Logistics Action Plan by Decree 200 (14-Feb-2017)
• Decree 163 (30-Dec-2017) on provision of logistics services
• National Conference on Logistics 16-Apr-2018
• Resolution 19 (15-May-2018) on “ONGOING IMPLEMENTATION OF MAJOR DUTIES AND MEASURES TO IMPROVE BUSINESS ENVIRONMENT AND ENHANCE NATIONAL COMPETITIVENESS IN 2018 AND SUBSEQUENT YEARS “
• [NEW] Directive on promoting measures to reduce logistics costs, effectively connect the transport infrastructure system (18-Jul-2018):
  “Domestic logistics enterprises need to enhance the application of modern science and technology in line with the tendency of forming the logistics services industry in the industrial revolution of 4.0 to improve competitiveness, service quality ..”
WHAT IS INDUSTRY 4.0?

A state in which manufacturing systems and the objects they create are not simply connected, drawing physical information into the digital realm, but also communicate, analyze, and use that information to drive further intelligent action back in the physical world to execute a physical-to-digital-to-physical transition.
THE NINE PILLARS OF TECHNOLOGICAL ADVANCEMENT

EXHIBIT 1 | Nine Technologies Are Transforming Industrial Production

Industry 4.0
- Autonomous robots
- Simulation
- Horizontal and vertical system integration
- The Industrial Internet of Things
- Cybersecurity
- Additive manufacturing
- Augmented reality
- Big data and analytics
- The cloud

Integrated communication along the entire value chain reduces work-in-progress inventory

Greater automation will displace some of the least-skilled labor but will require higher-skilled labor for monitoring and managing the factory of the future.

Machine-to-machine and machine-to-human interaction enables customization and small batches

Source: BCG.
THE LOGISTICS REVOLUTION

1. First Industrial Revolution
   Introduction of mechanization, water power, steam power.

2. Second Industrial Revolution
   Use of electrical energy. Mass production, assembly lines.

3. Third Industrial Revolution
   Use of electronic, computer and automation systems.

4. Fourth Industrial Revolution
   Cyber Physical Systems.
LOGISTICS 4.0 DEFINITION

- Full digitalization
- Network collaboration
- Service innovations
- Synchro-modal transport
- Sustainable transport
- Big Data
- Artificial Intelligence
- Autonomous driving
- Automation of supply chain
- Green Logistics
WHAT DEFINES LOGISTICS 4.0

Robots & automation

IoT integrated devices
WHAT DEFINES LOGISTICS 4.0

AI/ Big Data

Virtual reality (VR) & augmented reality (AR)
HOW WILL VIETNAM LOGISTICS INDUSTRY NEED TO EVOLVE TO MEET THE DEMANDS OF INDUSTRY/LOGISTICS 4.0?

Knowledge of technology

Knowledge across supply chain

Change management skill
VLA Roadmap to Digitalization

VLA eFBL Project: participate in FIATA project of digitalization of the FBL

VLA eDO Project: working on Electronic Delivery Order project based on blockchain
Creating of Awareness: Healthcheck & Productivity Improvement Opportunity