SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore – 641 107
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DEPARTMENT OF MANAGEMENT STUDIES

SUBJECT NAME & CODE : 23BAT348 - AIR CARGO MANAGEMENT

YEAR/ SEMESTER : II MBA / III SEMSTER

UNIT 1 : INTRODUCTION TO AIR CARGO MANAGEMENT

Topic : Introduction to Cargo History

Introduction to Cargo History

Ancient Trade Routes (Pre-500 CE)

Imagine a silk merchant in ancient China in 200 BCE, loading silk onto camels to travel the Silk Road.

His cargo would take months to reach Europe, traveling across deserts, mountains, and rivers, relying on animal power and the networks of small trading posts

Key Developments

- Human Porters and Animals
- Development of Ancient Trade Routes
- Waterways

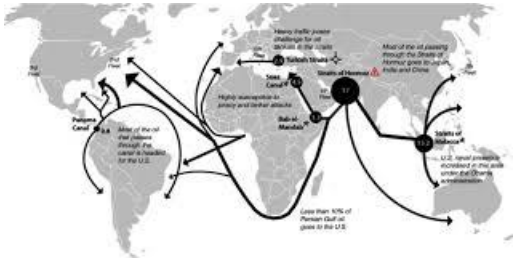
Challenges

- Slow transportation speeds due to reliance on human and animal power.
- Vulnerability to theft, natural disasters, and breakdowns.
- Limited by the terrain; deserts, mountains, and seas posed significant challenges.

Introduction to Cargo History

Medieval Period (500–1500 CE)

A Venetian trader in the 1200s might load a ship with spices from India. The ship would navigate through the Indian Ocean, around the Arabian Peninsula, and up the Mediterranean Sea to reach Europe.



Key Developments

- Maritime Expansion
- New Trade Hubs
- The Role of Guilds and Trade Networks

Challenges

- Weather and piracy remained significant risks.
- Limited navigation technology often led to lost cargo or shipwrecks.
- Long voyages meant goods like food and spices could spoil en route.

The Age of Exploration (1500–1800 CE): Global Expansion

A Spanish galleon in the 1600s carries silver from the Americas to Spain. Along the way, it passes through the Caribbean and the Atlantic Ocean, bringing back exotic goods like tobacco, sugar, and precious metals.

Key Developments

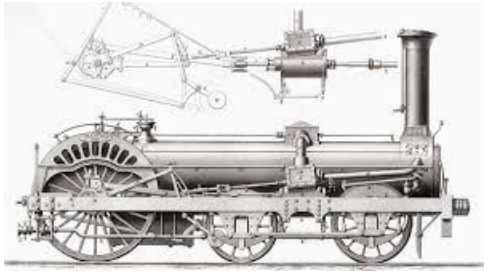
- Global Maritime Trade
- Colonial Empires
- Navigation Advances

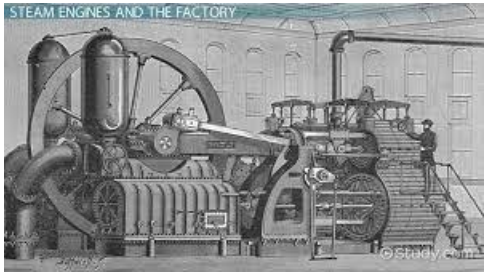
Challenges

- Long travel times and unpredictable weather.
- European colonial powers engaged in wars over control of trade routes, leading to dangerous seas.
- The exploitation of indigenous peoples and slaves for resource extraction and labor became a dark part of the global trade network.

Industrial Revolution (1800–1900): Mechanization and Railways

In 1850, a British textile mill owner exports finished cotton to the United States using a steam-powered ship. The cargo reaches the port in New York, and from there, it's loaded onto a train that travels across the country to new markets in the Midwest.





Key Developments

- Steam Power
- The Rise of Railways
- Mass Production and Specialization

Challenges

- Infrastructure development was costly and slow.
- Steam engines required coal, creating logistical challenges in fueling.
- Early railway networks were not always well-integrated, requiring multiple transfers for goods.

Introduction to Cargo History

20th Century: Globalization and Containerization

A Japanese electronics manufacturer ships televisions to the United States in the 1960s. The goods are packed into standardized shipping containers, loaded onto a container ship, and moved efficiently between ports using cranes. Upon arrival in the U.S., the containers are moved onto trucks and railways for quick distribution.

Key Developments

- Containerization
- Air Cargo
- Globalization
- Supply Chain Integration

Challenges

- The global supply chain became more complex, and disruptions like strikes or wars could impact entire industries.
- Environmental concerns around air and sea pollution began to arise.
- Developing countries faced barriers in participating in the global economy.

Introduction to Cargo History

Modern Logistics (21st Century): Automation and Sustainability

In 2024, an e-commerce company in China ships consumer electronics to customers in Europe. An automated warehouse uses robots to pack orders, which are then sent by drones to a nearby fulfillment center. From there, electric trucks deliver the goods to a high-speed train, which transports them to a European distribution center, where they're delivered by autonomous vehicles.

Key Developments

- Automation and Robotics
- Big Data and AI
- Sustainability
- Just-in-Time and Lean Logistics

Challenges

- The complexity of global supply chains makes them vulnerable to disruptions (e.g., pandemics, political instability).
- Environmental concerns and the need for greener logistics are pushing companies to innovate, but solutions can be costly.
- Cybersecurity risks with increased reliance on technology.

RECAP

QUESTIONS???

THANK YOU