



INTERNATIONAL
ACADEMY for
QUALITY



iLTT
LOGISTICS
INTERNATIONAL ACADEMY FOR QUALITY

QiLTT – Quality in Logistics

(2nd Meeting - Online, June 15th, 2022)

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Conclusions from the last QiLTT held at April 28th:

- MoM;
- GM in May 19th, 2022 in Anaheim, CA USA;
- Web page;
- Election of the co-chair;
- Newsletter (invitation to all members).

1. Co-Chair election

IAQ – QiLTT Members:

1. Ayed T. Alamri – Saudi Arabia
2. Juhani Anttila – Finland
3. Grace D. Brannan – USA
4. Catherine Y. P. Chan – Hong Kong China
5. Elizabeth A. Cudney – USA
6. Pál Molnar – Hungary
7. Hesameddin Aref Kashfi – Iran
8. Pedro M. Saraiva – Portugal
9. Miroslav Drljača – Croatia
10. Hu-Chen Liu – China
11. Benson Tendler – Austria
12. Patricia C. La Londe – USA
13. Luca Urciuoli – Sweden

3. Definition

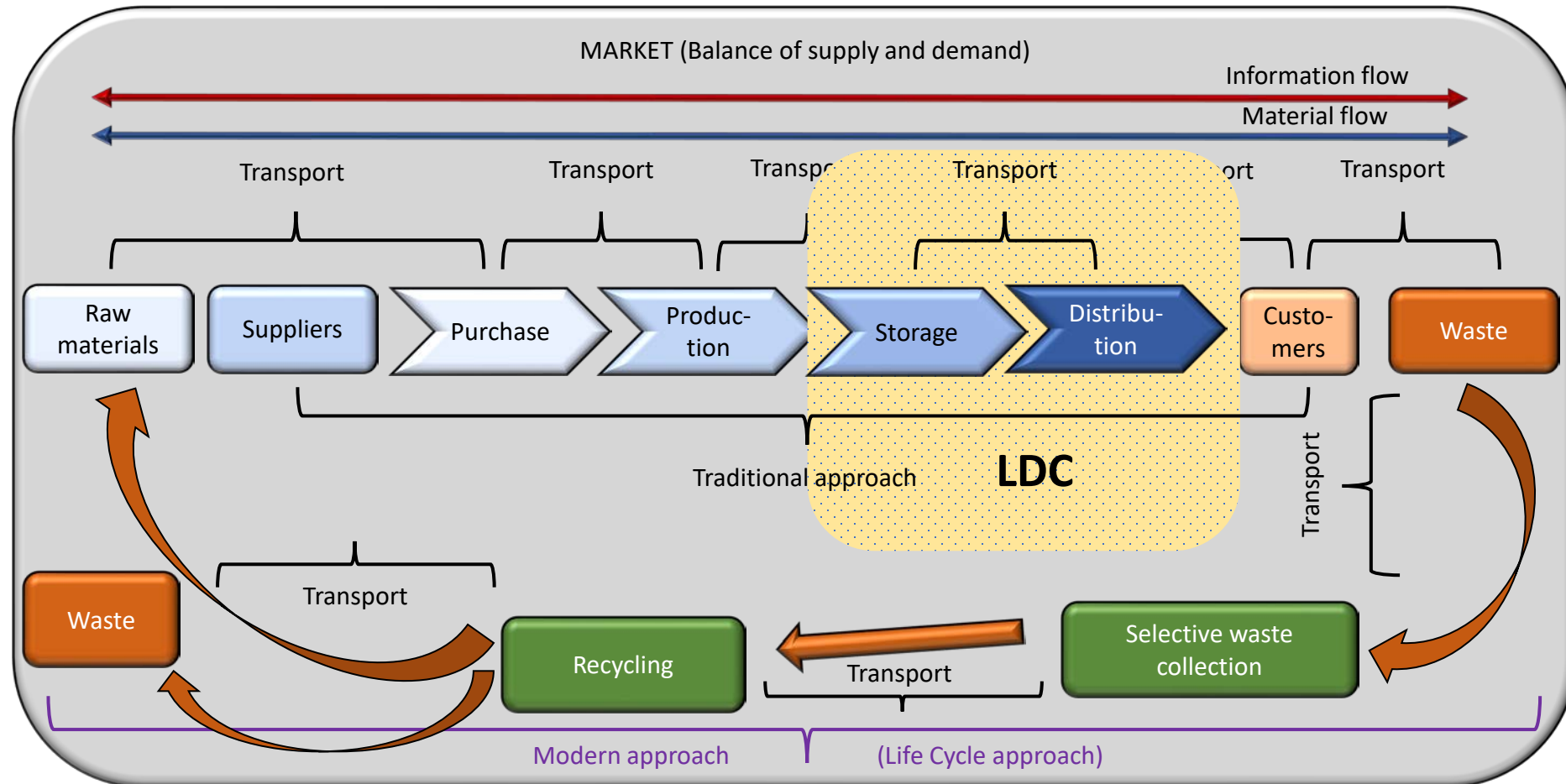
LOGISTICS is an activity that deals with mastering space and time at the lowest cost.

In modern conditions, **LOGISTICS** is most often used to denote a business function and a scientific discipline that deals with the coordination of all movements of materials, products and goods in physical, informational and organizational terms.

As **LOGISTICS** is one of the fundamental occupations of the future, the fact that the EU has declared the development of logistics one of the most promising sectors proves it.

LOGISTICS = Material management + Distribution
Supply Chain = Suppliers + **LOGISTICS** + Customers

Fig. 1. Supply Chain display



Source: Own research.

LOGISTICS is a very broad area and has a complex structure:

- supply chains,
- procurement (purchase),
- production,
- storage,
- distribution,
- retail,
- traffic and transport,
- reverse logistics,
- waste management,
- cost management,
- organization,
- information management,
- circular economy,
- Human resources management,
- quality management,
- safety management,
- risk management, etc.

2. Actual global logistics situation – Case study:

2.1. Pandemic

Fig. 1. Pandemic



Source: Covid pandemic photo – Bing images

Restrictions on the movement of people and goods have significantly undermined the stability of supply chains at the global level, due to:

- closure or significant reduction of seaport traffic, especially in China but also elsewhere;
- lack of workers in all logistics processes, due to illness or isolation;
- closing state borders and significantly restricting the movement of people and goods;
- application of stricter procedures in trafficking in human beings and goods.

Fig. 2. Chinese port of Yantian



Source: [covid pandemic photo, blockade of chinese ports - Bing images](#)

The consequences of these circumstances and changes in context have manifested themselves on a global scale as:

- reduction of production;
- shortages of certain products;
- conversion of production in favour of necessary means and medical equipment needed in the fight against the pandemic;
- shortages of shipping containers left in blocked ports;
- shortages of ship capacity;
- growth of maritime and other freight rates;
- price growth, ie inflation;
- disturbing the balance between supply and demand at the global level.

2. Actual global logistics situation – Case study:

2.2. Blockade of the Suez Canal

- In March 2021, the container ship of the Japanese company Shoeni Kisen, Ever Given, 400 meters long, 59 meters wide and with a draft of 14.5 meters, blocked the Suez Canal.
- At one moment, more than 300 ships were waiting to enter the canal. They had the choice to travel around Africa, which is about 9,000 km longer.
- The Suez Canal is 193 km long and connects the Mediterranean and the Red Sea, and is also the shortest waterway between Asia and Europe.
- More than 18,000 ships pass through the Suez Canal every year. In the six days of the blockade the damage to the world economy amounted to between 6 - 10 billion US\$.
- It is also estimated that car parts suppliers in Europe have suffered the most damage. Namely, they managed the supply chain by applying the JiT - Just in Time concept of quality, which in these circumstances could not be met.

Fig. 3. Ever Given in Suez Chanal



Source: ever given blockade of suez, photo - Bing images

Due to these circumstances and changes in the context, the following consequences have manifested themselves at the global level:

- extension of the journey from Asia to Europe and vice versa, up to 10 days,
- stagnation in shipping, hundreds of ships waiting to pass through the canal,
- increase the travel time of goods,
- delay of raw materials and spare parts for the production of finished products,
- non-fulfillment of contractual obligations towards customers related to delivery,
- non-quality costs due to (poor) quality for many participants in supply chains,
- creating a sense of insafe,
- price growth, ie inflation,
- disturbing the balance between supply and demand at the global level.

2. Actual global logistics situation – Case study:

2.3. War in Ukraine

This circumstance further disrupted the development of global supply chains, and the disruption manifested itself through:

- creating a sense of insafe which is not good for the economy;
- interruption of certain supply chains, namely strategic goods such as cereals;
- change of the current usual directions of supply chains;
- shortages of strategic goods such as food, oil, gas, etc.;
- large migrations of people and social problems;
- increasing the costs of taking care of refugees in many countries and appropriate logistics;
- increase in input costs in production processes (increase in energy prices, etc.);
- price growth, ie inflation;

Fig. 4. Map of Ukraine



Source: Karta Ukrajine - Bing images

- finding new directions for supply chains;
- leaving the concept of the only (dominant) supplier, ie customer;
- changes in existing and creation of new political and economic alliances;
- new bloc division of the world;
- new geopolitical division of the world;
- reallocation of financial resources for the purpose of strengthening the defence sector;
- redefining the understanding of sovereignty;
- violation of international rules and principles;
- disturbing the balance between supply and demand at the global level.

3. Conclusion

These three circumstances have had a major impact recently on the context in which supply chains take place:

- have a common denominator;
- have some common consequences for the global economy;
- affect a number of global processes when it comes to logistics and supply chains;
- affect some quality concepts;
- these are global problems that require global solutions.

How quality can help?

We will talk about these impacts and the role of quality in stabilizing logistics and supply chains at the global level at the next meeting.

Thank you for kind attention!
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