

The Requirement of a Logistical Organization

Definition: The requirement of a logistical organisation (متطلبات التنظيم اللوجستي) refers to the essential components, structures, and systems that are needed to effectively manage the flow of goods, services, and information within a supply chain. A logistical organisation is critical in coordinating the transportation, storage, and distribution of products, ensuring that they reach their intended destinations on time, in the right quantities, and in the proper condition to the right place. It encompasses various activities, such as inventory management, warehousing, procurement, and customer service. The ultimate goal is to meet customer demand efficiently while minimizing costs, reducing waste, and maintaining high service levels.

In a logistical organisation, several key functions must be aligned to ensure the smooth operation of the supply chain. These include transportation management (which involves the selection and management of transportation methods), warehousing (storing goods under appropriate conditions), and inventory management (monitoring stock levels to prevent shortages or overstocking). Additionally, logistical organisations often rely on advanced technologies, such as automated systems, data analytics, and real-time tracking, to improve decision-making and enhance operational efficiency.

As global supply chains become more complex and interconnected, the requirement for a logistical organisation has expanded beyond just coordinating the movement of goods. It now includes the integration of various business functions, the optimization of resources, the management of risks, and the use of sustainable practices. The increasing demands for faster delivery, cost reduction, and customer satisfaction mean that logistical organisations must be flexible, adaptive, and able to respond quickly to changing market conditions.

In summary, the requirement of a logistical organisation is multifaceted, involving the integration of several critical components to ensure that goods and services are delivered efficiently, cost-effectively, and sustainably. The success of a logistical organisation directly impacts a company's competitiveness, customer satisfaction, and overall profitability.

A logistical organisation is an essential part of modern businesses, ensuring the smooth movement of goods and services through complex global supply chains. Its primary function is to efficiently coordinate and manage the flow of materials, information, and resources between suppliers and customers. The importance of logistics has grown with the expansion of international trade and the increased complexity of supply chains (Christopher, 2016). In this context, logistics not only involves the transportation of goods but also covers areas such as inventory management, procurement, warehousing, and information systems. The ability to align supply and demand efficiently and cost-effectively is a key component of successful logistics.

The Core Functions of Logistical Organizations

Logistics organisations are responsible for various core activities that ensure the smooth operation of the supply chain. These activities include inventory management (إدارة المخزون), where companies monitor stock levels and plan restocking to avoid shortages or overstocking; warehousing (التخزين), which involves storing goods in suitable

conditions; and transportation management (إدارة النقل), which oversees the movement of goods from suppliers to consumers. Efficient procurement (الشراء) processes are also crucial in logistics, as they help organisations source the raw materials or finished goods they need.

Effective logistical management ensures the timely delivery of products to customers. In an increasingly competitive business environment, customers expect fast delivery and accurate order fulfilment. This makes logistics a critical function in customer satisfaction, as delays or mistakes in delivery can result in significant losses for companies (Melnik et al., 2014). Furthermore, companies with efficient logistical operations can reduce their costs, which gives them a competitive edge.

The Role of Technology in Logistics

Technology plays an indispensable role in modern logistical organisations. The integration of advanced tools such as Artificial Intelligence (AI) (الذكاء الاصطناعي), the Internet of Things (IoT) (إنترنت الأشياء), and blockchain (البلوك تشين) has revolutionized the way logistics functions. These technologies help organisations to automate processes, improve accuracy, and enable real-time tracking of goods. For instance, AI is used to forecast demand and optimise delivery routes, while IoT devices allow companies to monitor the conditions of their products in transit (e.g., temperature-sensitive goods) (Christopher, 2016). Blockchain enhances transparency and security in transactions, making it easier to track the movement of goods and verify their authenticity.

The application of these technologies reduces human error, improves supply chain visibility, and allows companies to respond more quickly to unexpected disruptions. For example, if a delivery truck faces a delay due to traffic or an accident, real-time data can be used to reroute the shipment, thereby reducing the impact of the disruption. Melnik et al. (2014) point out that the use of these technologies enables logistical organisations to respond with agility to dynamic market conditions and customer demands.

Challenges Faced by Logistical Organizations

Despite the advantages that technological innovations bring to logistics, logistical organisations face several challenges that can hinder their operations. One of the most significant challenges is the complexity of global supply chains (تعقيد سلاسل الإمداد العالمية). With multiple stakeholders involved, including suppliers, manufacturers, distributors, and retailers, any disruption in one part of the supply chain can cause delays and increase costs for the entire network. The global nature of supply chains also introduces uncertainties such as geopolitical issues, fluctuating exchange rates, and the risk of natural disasters.

Moreover, managing inventory (المخزون) is another challenge. Companies must balance the need to keep inventory levels low to minimize storage costs, with the necessity of ensuring they have enough stock to meet customer demand. This balancing act becomes even more complex when dealing with seasonal fluctuations or unexpected demand spikes. Efficient demand forecasting, therefore, becomes a critical skill for logistical organisations. As highlighted by Hübner et al. (2016), organisations that can predict

demand accurately are more likely to maintain optimal inventory levels and avoid disruptions in their supply chains.

The Importance of Collaboration in Logistics

Effective communication and collaboration (التعاون) are essential within logistical organisations. Logistics often involves multiple teams working together across various functions, such as sales, procurement, and transportation. Coordination between these functions ensures that all aspects of logistics are aligned and that problems are resolved efficiently. For instance, if there is a delay in the procurement of raw materials, the production team needs to be informed promptly to adjust their plans accordingly.

The need for collaboration is particularly important in the context of supply chain resilience (مرونة سلسلة الإمداد), which refers to the ability of an organisation to recover from disruptions. Hübner et al. (2016) argue that companies with strong collaborative networks can adapt more effectively to changes in supply and demand, thus maintaining operational continuity even during times of crisis. Real-time communication tools and collaborative platforms are used to share information and adjust logistics strategies based on changing circumstances. This cross-functional cooperation helps ensure timely deliveries, reduce costs, and ultimately improve customer satisfaction.

The Role of Sustainability in Logistical Organizations

In recent years, there has been an increasing focus on the sustainability (الاستدامة) of logistical operations. Companies are under growing pressure from both consumers and governments to reduce their environmental impact. Sustainable logistics practices involve optimizing transportation routes to reduce fuel consumption, using eco-friendly packaging materials, and adopting energy-efficient warehousing technologies. According to Christopher (2016), sustainable logistics practices not only benefit the environment but also help organisations save costs in the long term. For example, by optimizing routes to reduce fuel consumption, companies can lower transportation costs while contributing to the reduction of greenhouse gas emissions.

Moreover, the rise of green logistics (اللوجستيات الخضراء) reflects the industry's response to the need for more environmentally responsible practices. Companies are increasingly investing in electric vehicles (EVs) for transportation, incorporating renewable energy sources into warehouses, and exploring alternative delivery methods such as drones. As consumers become more environmentally conscious, companies that adopt sustainable logistics practices can gain a competitive advantage and improve their brand image.

Strategic Importance of Logistics in Competitive Markets

In the increasingly competitive global marketplace, the role of logistics has evolved from being a support function to becoming a key strategic element that drives business success. Companies are no longer simply focused on reducing costs or ensuring timely deliveries; instead, they are using logistics as a strategic tool to gain competitive advantage. According to Christopher (2016), logistics is at the heart of supply chain

strategy, and businesses that manage their logistics operations effectively can achieve superior performance.

The strategic importance of logistics lies in its direct impact on customer satisfaction, which, in turn, influences market share and profitability. Companies that provide faster and more reliable delivery services often attract more customers, especially in industries such as e-commerce, where customer expectations are continually rising. Logistics also contributes to operational efficiency by streamlining processes, reducing waste, and improving resource utilization. This has been highlighted by Melnyk et al. (2014), who argue that organisations that integrate logistics into their broader business strategy are better positioned to respond to changes in customer demand and external market forces.

Moreover, businesses that invest in logistics innovations, such as automation and data analytics, can enhance their ability to anticipate market trends and customer needs. For example, predictive analytics allows companies to forecast demand patterns, while automated warehouses enable faster processing and more accurate order fulfillment. This proactive approach to logistics helps businesses stay ahead of their competitors and meet customer expectations more effectively. Therefore, the integration of logistics within the overall strategic planning of an organisation is crucial for long-term success in a competitive environment.

Logistics in Emerging Markets

As businesses expand globally, they must navigate the challenges and opportunities presented by emerging markets (الأسواق الناشئة). Emerging markets, particularly in regions such as Africa, Asia, and Latin America, offer vast growth potential, but they also present logistical challenges such as inadequate infrastructure, regulatory complexities, and geopolitical instability. Despite these challenges, companies that effectively manage their logistics operations in emerging markets can benefit from access to new customer bases, cheaper production costs, and the ability to tap into new sources of raw materials (Hübner et al., 2016).

One of the key logistical challenges in emerging markets is the lack of reliable infrastructure, particularly in rural areas. Poor roads, limited access to transportation networks, and underdeveloped ports can cause significant delays in the delivery of goods. However, companies that invest in local infrastructure development or adapt their logistics strategies to these conditions can gain a competitive advantage. For instance, companies may opt for alternative transportation methods, such as using small trucks or motorcycles for last-mile delivery, to navigate difficult terrain. Additionally, logistics hubs (مراكز اللوجستيات) can be established in strategic locations to streamline operations and improve the efficiency of the supply chain in these regions.

The ability to adapt logistics operations to the unique conditions of emerging markets requires a deep understanding of local conditions, including cultural, economic, and political factors. Logistics managers must be familiar with local regulations, trade policies, and potential risks in order to develop effective strategies. Collaborative partnerships with local suppliers, distributors, and transportation providers can also be instrumental in overcoming these logistical challenges. As Hübner et al. (2016) point out, companies that succeed in navigating the complexities of emerging markets can

achieve substantial returns on investment and gain a strong foothold in fast-growing economies.

The Future of Logistical Organizations

The future of logistical organisations is closely tied to technological innovation, environmental sustainability, and the evolving demands of customers. As global supply chains become more interconnected and complex, logistical organisations will need to embrace digital transformation and advanced technologies to stay competitive. The use of big data (البيانات الكبيرة), robotics (الروبوتات), and autonomous vehicles (مركبات ذاتية) will become increasingly common in logistical operations, transforming how goods are transported and delivered.

Big data analytics will allow companies to gain deeper insights into customer behaviour, predict demand more accurately, and optimise their supply chains. Robotics will play a critical role in automating warehousing and inventory management, reducing human error and increasing efficiency. Autonomous vehicles, such as drones and self-driving trucks, are expected to revolutionize last-mile delivery, reducing costs and delivery times. These technological advancements are likely to redefine the logistical landscape, making supply chains faster, more efficient, and more responsive to customer needs.

Sustainability will continue to be a significant factor shaping the future of logistics. As climate change and environmental concerns become more pressing, logistical organisations will need to adopt greener practices, such as transitioning to electric delivery vehicles, using renewable energy sources in warehouses, and optimizing transportation routes to reduce carbon emissions. According to Christopher (2016), companies that prioritize sustainability in their logistics operations will not only help protect the environment but also meet the growing demand for eco-friendly practices from consumers and regulatory bodies.

Furthermore, e-commerce (التجارة الإلكترونية) will continue to drive innovation in logistics. With the rise of online shopping, the demand for fast and reliable delivery services has increased exponentially. As a result, logistical organisations will need to implement more flexible and agile systems to handle the growing volume of orders. The rise of e-commerce is also contributing to the growth of third-party logistics (3PL) providers (مقدمو الخدمات اللوجستية الطرف الثالث), who specialize in managing logistics on behalf of businesses. These providers help companies reduce costs and improve efficiency by leveraging their expertise and resources.

Conclusion

The requirement of a logistical organisation is indispensable in today's interconnected and fast-paced global economy. Logistics is no longer just a function within a business; it is a strategic asset that can determine a company's success or failure. The core functions of logistics, including inventory management, transportation, and warehousing, must be integrated into a seamless and flexible system that can respond to both challenges and opportunities in the market. Technology, collaboration, and sustainability are key pillars that support effective logistics operations, while emerging markets offer both opportunities and complexities that must be navigated with care. As

the future of logistics continues to evolve, businesses must remain adaptive, innovative, and customer-focused to stay competitive and meet the demands of the modern market.

References

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Text exploration :

"تنسيق النقل": "coordinating the transportation"

This refers to the process of organizing and managing the movement of goods and materials from one location to another. It involves planning, scheduling, and overseeing transportation methods (such as trucks, ships, planes, etc.) to ensure that products are delivered efficiently, on time, and at the lowest possible cost.

،تنسيق النقل هو عملية تنظيم وإدارة حركة السلع والمواد من مكان إلى آخر. يشمل ذلك التخطيط، الجدولة الزمنية والإشراف على طرق النقل المختلفة (مثل الشاحنات، السفن، الطائرات، وما إلى ذلك (لضمان أن يتم تسليم المنتجات بكفاءة، وفي الوقت المحدد، وبأقل تكلفة ممكنة.

تعد هذه العملية جزءًا أساسيًا من العمليات اللوجستية في أي منظمة، حيث تساهم في تحسين فعالية سلسلة الإمداد وزيادة رضا العملاء من خلال ضمان تسليم المنتجات بسرعة وبدقة. كما تتطلب التنسيق الفعال بين مختلف الأطراف المعنية مثل شركات النقل، الموردين، والمستودعات لضمان أن تتم حركة البضائع بدون تأخير أو مشاكل.

Scheduling vs. Planning in Logistics and Supply Chain Management

In logistics and supply chain management, both scheduling (الجدولة) and planning (التخطيط) are crucial for ensuring the smooth flow of goods and services. However, these two functions serve different purposes and are often used together to achieve operational efficiency. Understanding the difference between scheduling and planning is essential for anyone working in logistics, especially in today's complex global supply chains.

What is Planning in Logistics?

Planning refers to the process of defining the overall strategy for how goods will move through the supply chain. It involves determining the resources, processes, and actions required to achieve long-term goals. Planning focuses on creating a framework for operations, deciding what needs to be done, when, and how. In logistics, this could include determining inventory levels, choosing transportation methods, and setting up warehouse locations.

For example, a company might plan its supply chain for the next year by forecasting the demand for its products, ensuring that they have enough stock to meet this demand, and deciding the best routes for transportation. The goal of planning is to minimize costs, reduce risks, and ensure that resources are allocated efficiently.

Real-world Example of Planning:

A global retail company like Amazon uses extensive planning to forecast the demand for various products during peak seasons, such as holidays. They plan how much inventory to have at their warehouses in different regions and decide which transportation methods will be used to deliver the goods. This planning ensures that Amazon can meet customer demand on time without overstocking products, which could lead to unnecessary storage costs (Christopher, 2016).

What is Scheduling in Logistics?

On the other hand, scheduling is the process of deciding the exact timing of tasks within the logistics and supply chain process. It focuses on the day-to-day operations (العمليات اليومية) and specifies when certain activities will occur, such as when a delivery truck should leave the warehouse, or when a shipment should arrive at its destination. Scheduling is more specific than planning, as it involves setting exact dates and times to ensure that resources are used efficiently at every step of the supply chain.

For example, if a company plans to deliver 1000 products in one week, scheduling determines the specific time slots (الأوقات المحددة) for each delivery, ensuring that each delivery arrives on time and in the right order. In logistics, scheduling also involves coordinating with transportation providers to ensure that vehicles are available at the correct time and that drivers follow the planned routes.

Real-world Example of Scheduling:

Consider DHL, a logistics company that delivers parcels globally. DHL uses scheduling to determine the exact time that each parcel will be picked up and delivered. For instance, if a customer orders a product online and selects a two-day delivery option, DHL schedules the exact pick-up time from the warehouse and then schedules the delivery time to the customer's address (Hübner, Jörke, & Kuhn, 2016).

Key Differences Between Planning and Scheduling

Although planning and scheduling are closely related, they serve different functions in logistics and supply chain management:

1. Scope:

- Planning is broader and focuses on long-term strategies. It involves setting goals, making decisions about transportation modes, inventory levels, and other elements that shape the entire supply chain (Christopher, 2016).
 - Scheduling, in contrast, is more specific and concerned with the daily (اليومي) or weekly (الأسبوعي) execution of these plans. It deals with the precise timing of actions that need to happen.
2. Time Frame:
- Planning usually looks at a longer time frame, often weeks, months, or even years. It deals with anticipating future needs and preparing for them (Melnyk, Narasimhan, & DeCampos, 2014).
 - Scheduling is concerned with short-term time frames, such as the next few hours, days, or weeks. It translates the plans into specific actions that happen in real time.
3. Flexibility:
- Planning involves creating a framework that is flexible and can adapt to changes, such as changes in customer demand or unexpected disruptions in the supply chain.
 - Scheduling tends to be more rigid once it is set. However, it can still change if unforeseen issues arise, such as traffic delays or sudden supply shortages (Hübner et al., 2016).

Example to Show Both Planning and Scheduling Together

Imagine a furniture company that plans to launch a new line of products. The company needs to plan the production schedule, decide how many units to manufacture, where to store them, and how to distribute them to customers. This is the planning stage.

Once the plan is in place, the scheduling comes into play. The company will then schedule the transport for each item — when the trucks will leave the warehouse, when they will arrive at the retail stores, and when the products will be delivered to customers' homes. Scheduling helps the company ensure that the delivery process runs smoothly.

Why Are Both Important?

Both planning and scheduling are essential in logistics and supply chain management because they ensure that operations run efficiently and that the right products are delivered to the right places at the right time. Without proper planning, there could be too many or too few products, inefficient transportation methods, and poorly managed inventory. Without proper scheduling, even the best plans can fail if the timing is wrong (Melnyk et al., 2014).

Real-world Example of Both:

Apple, the tech giant, plans the production and distribution of its products months in advance, making sure that it has enough stock in warehouses around the world to meet global demand. However, they also use precise scheduling to ensure that each store receives the correct number of products at the right time, especially when new products are launched. This combination of strategic planning and precise scheduling is what

helps Apple maintain its reputation for timely product launches and deliveries (Christopher, 2016).

Conclusion

To sum up, while planning focuses on the long-term and broader strategies in logistics, scheduling is about the short-term, operational aspects of executing those plans. Both are crucial for the success of logistics and supply chain management, as they ensure that resources are used efficiently, that customers receive their orders on time, and that companies can handle the complexities of modern supply chains. Proper planning and scheduling together enable companies to deliver products accurately, on time, and in the most cost-effective way possible.

Work-in-Progress Inventory (WIP) : refers to goods or materials that are in the process of being manufactured or assembled but are not yet completed. WIP includes all items that are partway through the production process, from raw materials that have started undergoing transformation to semi-finished goods waiting for the next production steps.

In logistics and SCM, managing WIP is crucial for ensuring smooth operations and minimizing inefficiencies, as excessive WIP can lead to increased lead times, storage costs, and resource underutilization, while too little WIP might result in production stoppages.

Translations:

- Arabic: مخزون العمل الجاري (WIP) أو السلع التي تشير إلى التوريد سلسلة إدارة اللوجستيات وإدارة سلسلة التوريد يشير إلى السلع أو (WIP) مخزون العمل الجاري بعد المواد التي تكون في طور التصنيع أو التجميع ولكنها لم تكتمل بعد.
- French: Inventaire en cours de production (WIP) dans la logistique et la gestion de la chaîne d'approvisionnement fait référence aux biens ou matériaux en cours de fabrication ou d'assemblage mais non encore terminés.
- Spanish: Inventario en proceso (WIP) en logística y gestión de la cadena de suministro se refiere a los productos o materiales que están en el proceso de fabricación o ensamblaje, pero que aún no están terminados.
- Italian: Inventario in corso (WIP) nella logistica e nella gestione della supply chain si riferisce a beni o materiali che sono in fase di produzione o assemblaggio, ma non sono ancora completati.

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Text exploration:

source verb

BrE /sɔ:s/ ; NAmE /sɔ:rs/

- VERB FORMS

Verb Forms

present simple I / you / we / they source BrE /sɔ:s/ ; NAmE /sɔ:rs/

he / she / it sources BrE /'sɔ:sɪz/ ; NAmE /'sɔ:rsɪz/

past simple sourced BrE /sɔ:st/ ; NAmE /sɔ:rst/

past participle sourced BrE /sɔ:st/ ; NAmE /sɔ:rst/

-ing form sourcing BrE /'sɔ:slŋ/ ; NAmE /'sɔ:rsɪŋ/

[often passive] source something (from...) (business) to get something from a particular place We source all the meat sold in our stores from British farms.

out·source verb

BrE /'aʊtsɔ:s/ ; NAmE /'aʊtsɔ:rs/

+ VERB FORMS

[transitive, intransitive] outsource (something) (business) to arrange for somebody outside a company to do work or provide goods for that company We outsource all our computing work.

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Oxford Advanced Learner's Dictionary 9th edition © Oxford University Press, 2015

out·sourc·ing noun

BrE /'aʊtsɔ:slŋ/ ; NAmE /'aʊtsɔ:rsɪŋ/

[uncountable] outsourcing (of something) (to somebody) (business)

the process of arranging for somebody outside a company to do work or provide goods for that company the outsourcing of IT work to private contractors

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