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Centre for Open and Lifelong Learning

FEEDBACK TUTORIAL LETTER

1ST SEMESTER 2023

ASSIGNMENT 1

INFORMATION TECHNOLOGY IN LOGISTICS

ITL611S

ASSIGNMENT ONE FEEDBACK LETTER

INFORMATION TECHNOLOGY IN LOGISTICS ITL 611S

Feedback on students' performance

Question 1

The students showed a good understanding of Michael Porter's competitive strategies that shape the structure of competition in an industry. They lacked the knowledge on how Information Technology could be applied to help the given strategies. They found it difficult to answer the part of the question which required them to present to ABC Freight management on how Information Technology could help the given strategies: Cost Leadership Strategy, Differentiation Strategy, Innovation Strategy, Growth Strategy and Alliance Strategy. The students just explained the strategies as they got them from different sources.

The majority of the students did not reference their work and this led to some students having very high similarity ratios.

Question 2

The students had an understanding of e-commerce and the different types of e-commerce but some found it difficult to apply the competitive advantage of e-commerce to logistics business processes. The majority could not give examples.

As was in question one the majority of the students did not reference their work and this led to some students having very high similarity ratios.

Question 3

This question was not fairly answered by most students. Most students simply duplicated the module but could not turn their answers to satisfy the requirements of the question. Most students could not identify examples of IoT uses in the Logistics Industry.

As was in questions one and two the majority of the students did not reference their work and this led to some students having very high similarity ratios.

Below are sample answers to the assignment 1

MARKING GUIDE

QUESTION 1

(5 marks for showing clearly how IT could be used in each of the five strategies listed.
Total marks 25)

1. Cost leadership strategy

The cost leadership strategy is a **business model that focuses on reducing the cost of production and offering the lowest priced products to outperform competitors and gain market share**. IT can help ABC Freight develop this strategy by:

- **Developing advanced technology:** Cost leaders can invest in the development of new technology that will increase efficiency and lower operating costs, enabling them to increase production and lower prices.
- Automating routine tasks and reducing the need for manual labour, thus reducing costs. **Low costs enable low prices.** Cost leaders focus their attention on increasing the efficiency of production processes to lower production costs. Low costs allow them to lower prices while still making a profit.
- Implementing a robust Enterprise Resource Planning (ERP) system to track inventory, streamline supply chain, and reduce operational costs. ERP **automates demand planning, creating demand upon receiving orders**. When an order is received, the software implements scheduling. Team members are able to see real-time information about how resources are being used in production and can better plan production jobs and product delivery.
- Utilizing data analytics to identify areas for cost savings and optimize logistics operations. **It can be used to track shipments and predict delays**. For instance, if a shipment is delayed, the logistics company can use data analytics to determine the cause and take steps to avoid it in the future. Data analytics can also be used to improve customer service
- Implementing a Transportation Management System (TMS) to optimize routes and reduce transportation costs. **Reduced costs for the business and the end customer.** Simplification of supply chain processes across geographies, modes, and carriers.

Automation of business operations for faster and more accurate billing and documentation. Improvement in visibility and security, especially in transit.

2. Differentiation Strategy

A differentiation strategy is **an approach businesses develop by providing customers with something unique, different and distinct from items their competitors may offer in the marketplace**. The main objective of implementing a differentiation strategy is to increase competitive advantage. Information system **provides valuable data of both your product and that of the competitor's**. Comparison between these two data can help pin point the gap. The gap and the customer demand and expectation from the product can help companies differentiate their product over the other.

3. Innovation Strategy

An innovation strategy is **a common innovation mission and a detailed plan that aims to create new value, for which customers are willing to pay**. It includes a set of policies or behaviors geared toward achieving future organizational growth. An effective innovation strategy can:

- **Clarify priorities and goals.** An innovation strategy outlines the goals of the organization's innovation activities and helps focus efforts on reaching those goals.
- **Foster alignment.** With a plan in place, diverse groups within an organization will all be working toward common goals rather than pursuing their own individual priorities.
- **Keep a business from resting on its laurels.** Even businesses that start out as innovators must continue to innovate in a strategic way, as copycats and innovative competitors are likely to take market share over time.
- **Help a business achieve long-term success.** Without ongoing innovation, a company is unlikely to gain (or maintain) competitive advantage or keep customers engaged over the long term.

4. Growth Strategies

A growth strategy allows companies to expand their business. Growth can be achieved by practices like **adding new locations, investing in customer acquisition, or expanding a product line**. Information Technology can help ABC Freight to develop growth strategies in the following ways:

- Expanding into new markets by utilizing online marketplaces and e-commerce platforms
- Implementing a robust logistics management system to manage growth and scalability.
- Developing strategic partnerships and alliances to expand reach and increase market share.

5. Alliance Strategies

Strategic alliances allow two organizations, individuals or other entities to work toward common or correlating goals. Strategic alliances **diversify revenue streams, grant access to potentially difficult-to-obtain resources, and may improve a company's public image.** Information

Technology can help ABC Freight to develop alliance strategies in the following ways:

- Implementing a robust partner management system to manage partnerships and alliances.
- Utilizing data analytics to identify potential partners and strategic alliances.

Utilizing digital collaboration tools to enhance communication and collaboration with partners and allies.

QUESTION 2

(3 marks for each of the three E-commerce explained. Total marks 9)

(3 marks for each of the three draw backs Total marks 9)

a) Three types of e-commerce and their application in logistics business processes:

- 2.1 Business-to-business (B2B) e-commerce: This type of e-commerce involves transactions between businesses. In logistics, B2B e-commerce can be used for procurement and supply chain management. For example, a logistics company can use B2B e-commerce to purchase goods and services from suppliers and manage the supply chain process.
- 2.2 Business-to-consumer (B2C) e-commerce: This type of e-commerce involves transactions between businesses and consumers. In logistics, B2C e-commerce can be used for online ordering and delivery of products to consumers. For example, a logistics company can use B2C e-commerce to offer online ordering and delivery services to customers.
- 2.3 Consumer-to-consumer (C2C) e-commerce: This type of e-commerce involves transactions between consumers. In logistics, C2C e-commerce can be used for peer-to-peer logistics and transportation services. For example, a logistics company can use C2C e-commerce to offer peer-to-peer delivery services, where individuals can sign up to transport goods for others.

b) Three drawbacks of e-commerce to a logistic organization:

- 2.1 Security risks: E-commerce platforms can be vulnerable to security breaches and hacking, which can compromise sensitive customer data and expose the company to legal and financial risks.
- 2.2 Dependence on technology: E-commerce relies heavily on technology, and any disruptions or failures can impact the company's ability to conduct business and meet customer demands.
- 2.3 Competition: E-commerce has lowered barriers to entry in the logistics industry, leading to increased competition and price pressures. This can impact the profitability and sustainability of logistics organizations.

QUESTION 3

3.1 The **Internet of Things (IoT)** is used in various ways in logistics services to help offering solutions that improve the productivity of supply chains and, therefore, the profitability of companies.

Key Use Cases Of IoT-Enabled Logistics

Wireless devices—such as **radio-frequency identification (RFID) tags, eSIM and global positioning system (GPS) sensors**—offer logistics companies the ability to track shipments' location and to monitor container temperature, relative humidity and other real-time conditions. Some logistics company uses IoT. For Example DHL. DHL has launched its DHL SmarTrucking solution that uses sensor-enabled trucks to gather fleet data like location, weather, traffic and shipment information. Predictive analytics allow for more efficient fleet scheduling and route optimization. (2 marks for identifying two examples, one mark each Total marks 2)

3.2 Success factors of IoT in Logistics Industry:

(at least two success factors should be named and explained. 1 mark for naming and 1.5 marks for explaining)

- IoT-enabled fleet management can offer real-time vehicle location, trailer or truck weight management, vehicle current status and speed. This way, businesses can **optimize routes and scheduling, help diminish idling and improve fleet performance.**
- It also improved warehouse and yard management making it easy for firms to monitor and keep track of goods whenever and wherever.

Answers can differ from student to student. Students should be able to give the benefits of IoT.

TOTAL MARKS 50

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