

RMIT University
OMGT2221- Introduction to Logistics and Supply Chain Management

Assignment 3 (Individual): 40% weight

Assessment type: Individual

CASE ANALYSIS REPORT

Important note: This ‘case study analysis report’ (individual) is your final assessment of the course. You will receive the final results from RMIT, NOT from the course coordinator.

Details

This assessment task will be based on the Case Study – “KP Corporation supply chain”. Each student will work on the supplied case and will answer specific questions and submit the report.

The case analysis report provides an opportunity for you to demonstrate what you have learned during the semester in the course. It requires you to analyse the problems and the likely causes of these problems. To support your answer, you may refer to lecture notes (insert references of Lecture Note - Week no.) and other authenticated sources. A bibliography of all articles and sources of information referenced in the report is mandatory. Please use the RMIT Business (AGPS) Harvard referencing style (<https://www.dlsweb.rmit.edu.au/bus/public/referencing/index.html>).

This assignment must be delivered in a report format containing:

- Title page
- Table of contents
- Introduction
- Case analysis (addressing questions) and discussion
- Recommendation
- Conclusion
- Reference list
- Appendices (if any)

Marking criteria

The report will be evaluated based on the following outline:

1. Introduction (brief) **(3 marks)**
In this section, provide a brief of the case, the purpose of the report, key terms/issues to discuss and the report structure.

2. Case analysis (addressing questions) and discussion **(25 marks)**
In this section, identify issues relevant to the questions and discuss the issues/situations using relevant knowledge area (covered in this course) and references.

3. Recommendation **(5 marks)**
In this section, provide your recommendations with justifications for various issues you discussed in the previous (case analysis and discussion) section.

4. Conclusion **(3 marks)**
 In this section, summarise the major issues you have identified and conclude by reporting the lessons learnt from this report.

5. Clarity of writing and overall presentation **(4 marks)**
 Overall presentation (easy to follow/clarity of language, coverage and completeness, page numbers, table of contents), use of references and citations, and conciseness.

Note:

Word limit: 2000±10% words (excluding references, title page, table of contents)

Assignment submission due date: 7 April 2021, 11:59 pm (Singapore Time).

Report submission: Submit an individual report via Canvas.

KP Corporation Supply Chain

KP Corporation is a Europe-based integrated apparel, footwear, and accessories manufacturer and retailer. The company started its operation in Spain in 1985 and since then has evolved into a rapidly growing multi-dimensional conglomerate. The company currently operates and sells its products via online and retail stores in 24 European countries. KP Corporation considers itself as end-to-end apparel, footwear, and accessories solution provider, starting from sourcing the materials and going all the way to providing services to its' customers. It employs over 450 Management staff and over 15,000 workers. With a vertically integrated setup, the incorporation of advanced technology, and a proficient management team, KP Corporation is emerging strongly as one of the highly regarded organisations in Europe.

Like other companies in the apparel, footwear, and accessories industry, KP Corporation is dealing with products that are characterised by short product life cycles, volatile and unpredictable demand, high in product variety, long and inflexible supply processes, and a complex supply chain. In KP Corporation supply chain, demand uncertainty, lack of historical data and seasonal trends usually coexist. The company experiences variations in demand for the products that it produces. For example, some of the products, such as Jackets and winter boots, are in high demand during the winter season, while basic t-shirts, sneakers, and loafers are in high demand during summer. Over the last 10 years, the company also has noticed a significant increase in demand for some products. One of the main reasons for the increased demand is the escalated popularity of new styles amongst the young population group in Europe. KP Corporation has some historical data based on which different functional departments develop their plan; however, quite often the company experiences disputes among the departments. In the 2018 winter season, KP Corporation experienced a sharp spike in demand; hence, suffered a stock-out situation with their newly introduced winter boots (Product line code: KP203). The marketing and sales department could not anticipate such a demand through its market research. Consequently, the production department did not

prepare extra capacity for producing the product. Moreover, suppliers were unable to provide the raw materials/components for producing such exclusive winter boots. As a result, the company could not produce additional products on time and was unable to meet customer demand. This resulted in customer dissatisfaction and loss of profit. By the time, the company made the products available in the market, customers were preparing for the spring and the demand for winter boots dropped. Therefore, KP Corporation had to organise a huge promotional offer (half price) to sell the excess inventory. This again resulted in a loss of profit for the company.

KP Corporation purchases a lot of items to support company operations and has a large supplier-base for various items. The company purchases items from both the local and overseas markets. For example, it sources cotton, which is the major item for producing apparel products, from Uzbekistan and China. Other essential and main materials, such as Polyester, Rubber, EVA (Ethylene Vinyl Acetate) Foam, Leather, and Synthetic Leather come from several countries. For instance, the company sources leather from tanners and suppliers in Italy, and Vietnam, synthetic leather from Taiwan, and rubber from Germany, Indonesia, Thailand, and Malaysia. The company also sources supporting materials and supplies such as buttons, zippers, interlining, fuel for the vehicles, and paper for the employee newsletter. While the company has multiple suppliers for most of the materials, the company sources synthetic leather from a single supplier in Taiwan. Since synthetic leather is cheaper, more breathable, easier to clean and function better than real leather, KP corporation has been increasingly using this in producing many of their products. This increases the demand for synthetic leather; however, due to single sourcing and limited capacities of the supplier, KP corporation is often required to wait for the material. As a result, the procurement manager, Ms. Jennifer Dillon, is seriously looking for new suppliers to source synthetic leather. Likewise, KP corporation has a limited number of suppliers for embellishments such as high-quality print and embroidery. Given that embellishments are important for improving the design and visual appeal of the products and some of the current suppliers of embellishments are not price competitive, the company is currently looking for new suppliers.

KP Corporation has a large number of product lines. Due to the increasing demand for the KP corporation's products, the company struggles to manage inventory. Therefore, the company president, Mr. Graham Wood, has decided to analyse the company's inventory requirements utilising the ABC analysis of the existing product lines, as shown in Table 1. Accordingly, Mr. Graham Wood has asked Ms. Nina Pova, the inventory manager, to perform the ABC analysis based on the previous year's sales data, as presented in Table 1, and formulate inventory management strategies for each category.

Table 1: Annual sales data

Product line Code	Units sold	Unit price (USD)
KP101	12,000	149
KP102	1,200	19
KP103	2,400	23
KP104	9,600	144
KP201	300	29
KP202	1,200	30
KP203	15,000	89
KP204	16,000	23
KP301	400	45
KP302	350	60
KP303	6,250	15
KP304	8,000	44
KP401	200	69
KP402	250	149
KP403	4,800	9
KP404	2,800	19
KP501	10,500	34
KP502	2,000	249
KP503	1,900	199
KP504	350	24

As mentioned earlier, one of the key components that KP Corporation requires for manufacturing products is synthetic leather. The current monthly demand for synthetic leather is 300 pallets where each pallet has 100 units. KP Corporation gives orders when they need and organises a letter of credit and other financial documents. The price per unit of synthetic leather is \$20. The cost to place an order to the supplier is \$2400. The annual capital cost related to inventory carrying is 6 percent of the per-unit price of the materials (such as synthetic leather). The other inventory-related costs include:

- The annual cost of storage space is 4 percent of the per-unit material price;
- The annual inventory insurance cost is 3 percent of the per-unit material price; and
- The annual other inventory carrying costs related to weight loss, damage, and obsolescence is 2 percent of the per-unit material price.

KP Corporation doesn't want to carry a lot of stock of synthetic leather as it takes up spaces; however, they are also concerned about the frequent stock-outs they have been experiencing these days.

KP Corporation currently has a central distribution in Madrid in Spain. The centre is approximately 135,000 square meters in size and serves customers (retailers) from 24

European nations where the company operates. All the products that KP Corporation produces come to this centre first to get distributed to retailers across Europe. The centre delivers products to the retail stores at the beginning of the seasons as well as during the seasons. At the beginning of a season, when the demand is generally high for some products, KP Corporation employs more staff for ensuring fast and on-time delivery, which is critical due to the seasonal demand for those products. The company also uses various strategies for the shipments of the products. For example:

- The company directly ships to big retailers for fast delivery. As these big retailers require larger shipments such as full pallets, hence, consolidation with other shipments is not possible.
- KP Corporation consolidates the shipments for many small retailers to fully utilise the capacity and reduce costs.
- Several value-adding services are performed in the centre for selected retailers. These value-adding services include sorting, labelling and repacking.
- In France and Germany, where the demand for KP Corporation products is high, recently the company opened small satellite distribution centres. This enables KP Corporation to faster replenish some popular items in these markets.

KP Corporation achieves many benefits for using centralised warehousing and distribution such as lower inventory storage, lower carrying cost, consolidation of inbound shipments, and enhanced control to name a few. However, the company has also been experiencing many challenges in recent times. In particular, retailers are demanding smaller quantities but more frequent deliveries. Moreover, all retailers demand in-store availability of seasonal products on day one (the first day) of a new season. Currently, the company is struggling to provide such services due to its centralised distribution system. Retailers claim that when KP Corporation delivers the products well before a season, it increases carrying cost for the retailers. On the other hand, retailers lose sales when KP Corporation is unable to deliver on time at the beginning of a new season. Moreover, the majority of retailers expects advance shipping information with RFID tags on the products for enhancing visibility.

While the KP corporation is operating in 24 European countries, the biggest market of the company is Spain. Since the inception of the company, KP Corporation had been managing its own transportation operations to deliver the products to retailers in Spain, although according to senior vice president (SVP), supply chain management, Mr. Adam Zampa, the core competency of the company is: 'maintaining cost efficiency in designing and supplying quality and innovative products'. It is also worth noting that any domestic road transportation in Spain to deliver the products overseas (for example, distribution centre to the port) is internally

managed by KP Corporation while cross-border transportations to deliver the products to other countries are outsourced. In the last 5 years, the number of KP Corporation retail stores in Spain has doubled. Currently, the company has retail stores across the country. Due to the huge expansion, the current logistics network of KP Corporation faces huge challenges to maintain consistent delivery to all the retail stores in Spain. A recent analysis shows a significant variation in transit time and service reliability. Besides, KP Corporation has decided to improve services for big retail stores by providing more frequent deliveries. This would require the company to expand its logistics network considerably. In a board meeting, the company president, Mr. Graham Wood, asked to investigate the current transportation capability and suggest the cost for the required capability. In the meeting, however, the logistics manager, Ms. Alicia Chan, recommended using a third-party logistics (3PL) provider for managing the entire domestic transportation of products (both to the retail stores and the port for overseas delivery from the central distribution centre) in Spain. The SVP, Mr. Adam Zampa, however, is against using a 3PL as the company has already developed some capabilities towards the transportation network. He said, "what will we do with the current transportation capabilities?". He also raised the issue of losing control and the need for developing capabilities to properly integrate with the 3PL firm. Listening from all, Mr. Graham Wood, advised to seriously investigate the feasibility of using a 3PL provider to manage the domestic transportation of products in Spain.

As part of the increased global concern triggered by incidents like Rana Plaza, fashion (apparel and footwear) manufacturers are under the intense scrutiny of governments and other stakeholders. KP Corporation is also facing intense pressure from various stakeholders to eradicate any child labour, providing safe working conditions for their workers, minimum wages, and source environmentally friendly chemicals and materials in production. They are also currently setting up a source for organic cotton from Indonesia. Going forward, the manager for sustainability initiatives at KP Corporation, Ms. Sneha Palit, is currently working on strategic directions the company should go for. She is using the McKinsey report (*Fashion's new must have: sustainable sourcing at scale McKinsey Apparel CPO Survey 2019* (URL:

<https://www.mckinsey.com/~media/McKinsey/Industries/Retail/Our%20Insights/Fashions%20new%20must%20have%20Sustainable%20sourcing%20at%20scale/Fashions-new-must-have-Sustainable-sourcing-at-scale-vF.pdf>) for understanding the future industry-wide sustainability disruption and wants to ensure her company remains competitive in the future market.

Questions:

1. Using the quadrant technique,
 - (a) Categorise the items that KP Corporation purchases.
 - (b) Describe the rationale for each item you have identified in each category.
2. Based on the information provided,
 - (a) Critically analyse how the distinctive distribution features of KP Corporation provide a competitive advantage or disadvantage to the company.
 - (b) Do you agree to use a 3PL for its transportation in Spain? Why or why not? If you do not agree to use a 3PL, discuss how KP Corporation can improve its transportation services. Why would you choose such an option/options rather than a 3PL?
3. Based on the information provided,
 - (a) What are the major challenges you see in the supply chain of KP corporation?
 - (b) Discuss how relationships and collaboration with supply chain partners can help the company to overcome such challenges.
4. Considering the business needs/problems of KP Corporation,
 - (a) Discuss how the company could be benefited from implementing the latest supply chain technology.
 - (b) What sort of supply chain execution software and applications could be implemented to improve the flow of products along the supply chain of the company, and how?
5. a) Using the information related to the yearly revenue of the existing product lines of KP corporation,
 - (i) Conduct an ABC analysis.
 - (ii) Discuss how KP Corporation could be benefited from classifying the inventory items as A, B, and C.
 - (b) Using the information related to the demand for synthetic leather and by applying the concept of the economic order quantity (EOQ),
 - (i) Determine how many orders should be placed each year?
 - (ii) Determine the total cost of EOQ.
6. Review the McKinsey report.
 - (a) Do you think 'social and environmental sustainability' will be the dominant supplier selection criteria in the future apparel and footwear supply chain? Justify your answer.
 - (b) What are the key areas you would suggest Ms. Sneha Palit to consider and act on for future social and environmental sustainability of KP Corporation operations?