

Improvement Of Warehouse Management In A Muslim Fashion Company In Bandung City

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ABSTRACT

At this time Muslim fashion or what is more often called modest fashion, has begun to appear and become a trend. The target or market for Muslim fashion (modest fashion) has reached various circles, both Muslim and non-Muslim. One of the largest Muslim fashion companies in Indonesia is Elcorps. The elcorps group is a company that was founded in 2012. The elcorps group itself divides its business units into 4 industrial divisions, including the fashion industry, food industry, cosmetic industry, and tour and travel. One of the industries that is the biggest contributor to the company's revenue is the fashion industry. The brands in the fashion industry include Elzatta, Dauky, Zatta Men. In this Muslim fashion business activity, one of the important points is in the warehouse. But in this case, some problems come from the warehouse, including storage and product layout problems, to fulfilling orders for consumers. In this study using descriptive analysis research with qualitative methods, by collecting data using observation, interviews and documentation. Furthermore, the results of this study indicate that improvements must be made to warehouse management, one of which is storage management. The purpose of this study is to analyze and find out which activities or parts of warehouse management need to be improved. The advice recommended by the author is to make a stock control schedule or stock taking every 3 months on products that are in warehouse. improve the storage layout (storage) and improve the layout of the warehouse management.



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1. INTRODUCTION

1.1 Background

The Global Halal Industry has sectors that are growing rapidly, this can be seen from the expenditure of the Muslim community on the halal sector of \$2.2 trillion in 2019 (Global Islamic Economy Report 2019/2020). The halal industrial sectors are halal food and beverages (halal food), Muslim fashion (modest fashion), halal media and information (halal media & reaction), halal tourism (Muslim friendly travel), halal cosmetics (halal cosmetics), halal pharmaceuticals. (halal pharmaceuticals) and Islamic finance (Islamic finance).

At this time Muslim fashion or what is more often called modest fashion, has begun to appear and become a trend. The target or market for Muslim fashion (modest fashion) has reached various groups, both Muslims and non-Muslims. Throughout 2019 to 2022, various countries in the world held Muslim fashion shows. Among them are the Muslim fashion exhibition (moderate fashion) involving 53 designers, labels and retailers in the city of San Francisco, a fashion show in Turkey, 2 modest fashion exhibitions at the Dusseldorf Gallery and the Premier Moscow Collection. In addition, several large companies have issued Muslim

fashion product lines, such as the Uniqlo company, which issued the Hana Tajima hijab series, which is a favorite, especially in the Asian marketing area. In addition, the company Nike launched the Hijab Pro. One of the largest Muslim fashion companies in Indonesia is Elcorps. The elcorps group is a company that was founded in 2012, while the focus taken by this company is to provide and fulfill the lifestyle and needs of Muslims. The elcorps group itself divides its business units into 4 industrial sections, including the fashion industry, food industry, cosmetic industry, and tour and travel. One of the industries that is the biggest contributor to the company's revenue is the fashion industry. The brands in the fashion industry include Elzatta, Dauky, Zatta Men. as for the focus taken by this company is to provide and meet the lifestyle and needs of Muslims. The elcorps group itself divides its business units into 4 industrial sections, including the fashion industry, food industry, cosmetic industry, and tour and travel. One of the industries that is the biggest contributor to the company's revenue is the fashion industry. The brands in the fashion industry include Elzatta, Dauky, Zatta Men. as for the focus taken by this company is to provide and meet the lifestyle and needs of Muslims. The elcorps group itself divides its business units into 4 industrial sections, including the fashion industry, food industry, cosmetic industry, and tour and travel. One of the industries that is the biggest contributor to the company's revenue is the fashion industry. The brands in the fashion industry include Elzatta, Dauky, Zatta Men.

The Elcorps company which was founded in 2012 made various developments to increase sales and also expand distribution channels. It is strived to increase customer satisfaction and loyalty. In 2019, the Elcorps company has become one of the companies in the Muslim fashion industry that is included in the omni channel retailing category.

Initially, the storage carried out was raw materials, semi-finished goods and finished goods. But after the production activities are handled by the vendor, it becomes a finished goods warehouse. The activities carried out are receiving, put-away and storage, picking and sorting, packing and shipping and return activities. One of the characteristics of an omnichannel warehouse is its configuration. According to Karagiannaki in Kembro (2020) said that three dimensions of aspects that affect the configuration of omnichannel warehouses are the application of RFID (radio frequency identification): structure (eg storage systems, mechanization level), workflow (eg storage assignment policies, order accumulation) and sources. power (eg space capacity, manpower). In product management activities, the challenge is in product storage management activities. One of the problems faced is that there are irregularities in storage, where products occupy the wrong location. Each product is assigned a storage and location number, but there are several factors that cause products to change locations. The following are product deviations at the wrong location:

Table 1.1 Incompatibility of products and storage locations in the warehouse

No	Month	Number of Storage Location Mismatch	Number of Products That Have Mismatched Storage Locations	Location Code
1	January	117 Location	667 Products	1PZ001-1PZ009
2	February	16 Locations	20 Products	1PZ001-1PZ009
3	March	26 Locations	56 Products	1PZ001-1PZ009
4	April	103 Location	236 Products	1PZ001-1PZ009
5	May	55 Locations	306 Products	1PZ001-1PZ009
6	June	235 Location	1394 Products	1PZ001-1PZ009
7	July	115 Location	407 Products	1PZ001-1PZ009
8	August	119 Location	936 Products	1PZ001-1PZ009
9	September	56 Locations	739 Products	1PZ001-1PZ009
Amount		839 Location	4761 Products	

Data source: Elcorps Corporation (2020)

Kembro et al (2020) say that efficient storage in omni-channel warehouses often requires “clean-up pallets” containing only one product (and size). This means that each product in the omnichannel warehouse

has its own storage per product. This has been implemented by the elcorps company, it's just that in its implementation there are still some deviations or discrepancies.

Based on the table above, it can be seen that there are several discrepancies, this is due to several factors, including the following: stock taking, human resources, locations that have not been sequentially according to category and the last one is an online sales program with one of the market places, namely Shopee Brand Day.

Based on an interview with the Head of Warehouse, Mr. Pendi, he explained that the stock taking was carried out 2 times, namely in January and July. In this stock taking activity, all warehouse employees carry out checking activities between products on the system and physically real products. The error that occurs in this activity is not placing the product in its proper location. This is due to several reasons, including the same type and color of the product so that products with different types are mixed, the type of product that causes employees to be careless, or can be said to be human error, other than that, irregular storage locations or layouts make employees difficulty knowing the location of storage.

The factor that is most often found in this product error is the human resource factor. Lack of product knowledge is often an obstacle to warehouse activities. Lack of product knowledge makes an employee make mistakes, for example taking a product of a certain type. So that the wrong product is not returned to its original storage location. In addition, employees who are not assigned to warehouse activities have access to take online sales products. So that warehouse tidiness and soup in omnichannel warehouse management are not implemented properly.

It can be seen that the largest deviation occurred in June, which amounted to 235 locations with 1394 products, this is because in May 2020 previously there had been a major program, namely *Shopee Super Brand Day*. With the location mismatch, it resulted in some losses felt by the company, especially in the omnichannel warehouse. In an omnichannel warehouse, configuration is the most important thing, but with one process, namely the relationship between products and storage locations, the obstacles faced by the company are not optimal on the side of fulfilling orders or consumer demands, be it individual consumers or store chains. Due to storage discrepancies, the packaging fulfillment time becomes inefficient (long), besides that some orders or requests cannot be completed. According to the results of an interview with the Head of Warehouse Elcorps, he said that based on these things the company suffered a loss of 5% based on reports in 2019 or last year. In Value 5%, it can reach a value of billions of rupiah. This of course will also disrupt the performance of the supply chain at elcorps companies

The following is an illustration of the decrease in effectiveness or not achieving the target for meeting demand at the warehouse:



Figure 1 Fulfillment of Dauky Brand Product Demand at Elcorps Omni Omnichannel Warehouse



Figure 2 Fulfillment of Dauky Brand Product Demand at Elcorps Omni Omnichannel Warehouse

Based on the two graphs above, it can be seen that the fulfillment of demand at Elcorps' omnichannel warehouse undergoes a fluctuating process, up and down. The highest fulfillment was in May from the two Elzatta brands with around 77,000 products and the Dauky brand with around 9000 products. This is because, by the Shopee Super Brand Day program. As for the other months decreased. One of the reasons is the mismatch of product location in storage. While other factors or reasons still have to be investigated. Based on these problems, this study aims to analyze the improvement of warehouse management in this Muslim fashion company.

1.2 Literature Review

a. Operation management

Operations management is one of the important company functions to support all activities in the company. Operations management is concerned with the production process and other supporting activities. According to Slack and Jones (2018), "Operations management is about how organizations produce goods and services".

Furthermore, Heizer et al (2017) also say that operations management is a series of activities that create value in the form of goods and services by converting inputs into outputs.

b. Warehouse Management

Warehouse is a point or place of storage in a company, whether it is storage of raw materials, semi-finished goods, or finished goods. Warehouse has an important role in supply chain management activities in the company. The following is an explanation of warehouse management. Bartholdi in Kembro (2019) said "The warehouse is the point in the supply chain where the product is stopped, maintained, and also given operational action. The function of the warehouse is to adjust supply and demand, to consolidate various products and to reduce transportation costs and lead times to reduce costs and improve service to customers. Most warehouses have operations for receiving, storing, retrieving, sorting, packaging and shipping. Furthermore, one view of Gwynne Richards (2018) explains "In the past, warehouses were always referred to as cost centers and rarely added value. The movement of production to low-cost countries, the growth of e-commerce and the increasing demand from consumers have seen a change in pace in warehouse operations. Warehouses are now seen as an important link in today's supply chains."

C. Activities in Warehouse

The following are activities in the warehouse according to Tompskin (2017) The function of the warehouse is based on the order in which it is carried out, briefly defined as follows:

1. Receiving is the collection of activities involved in (a) the orderly receipt of all incoming materials to the warehouse, (b) ensuring that the quantity and quality of these materials are as ordered, and (c) dispensing materials to storage or to other organizational functions that require them. .
2. Inspection and Quality Control is an extension of the acceptance process and is carried out when suppliers are inconsistent in quality or purchased products are strictly regulated and must be inspected at all steps in the process. Inspections may be as simple as a visual examination or as complex as lab testing.
3. Repackaging is carried out in warehouses when products are received in bulk from suppliers and then packaged individually, in tradable quantities, or in combination with other parts to form kits or assortments. All merchandise receipts can be processed at once, or some can be stored in bulk for later processing. The latter can be done when packaging greatly increases the need for storage boxes or when a part is common to several kits or assortments. Re-labeling is carried out when a product is received without a system or human readable mark for identification purposes.
4. Sorting (putaway) is the act of placing merchandise in a warehouse. This includes material handling and placement.
5. Storage is the physical holding of merchandise while waiting for a request. The form of storage will depend on the size and quantity of items in stock and the handling characteristics of the product or its container.
6. Order picking is the process of removing goods from storage to fulfill certain requests. It represents the basic service a warehouse provides to customers and is the function on which most warehouse designs are based.
7. Postponement can be done as an optional step after the pick-up process. As in the repacking function, individual items or assortments are boxed for more convenient use. Waiting until after choosing to perform these functions has the advantage of providing more flexibility in the use of existing supplies. Individual items are available for use in any of the packaging configurations until needed. Pricing applies at the time of sale. Preparing prices at the factory or when they are received at the warehouse inevitably leads to some re-pricing activity, as price lists change while merchandise is held in stock. Selecting tickets and price stickers are sometimes combined into one document.
8. Sorting into individual orders and accumulation of picks distributed into orders must be done if the order has more than one item and accumulation is not done when the pick is made.
9. Packing and Shipping may include the following tasks:
 - Checking orders for completeness
 - Package merchandise in suitable shipping containers.

2. METHODS

In this study using descriptive research methods with a qualitative approach. According to Denam in Mura (2018), qualitative research is a tradition that encapsulates many, and often contrasts, paradigms, approaches, methodologies, methods, audiences, procedures, strategies, practices, and rhetorical assumptions. In addition, Hollowood et al (2018): Descriptive analysis is a method used to describe characteristics objectively. Descriptive analysis produces objective, precise and repeatable data. In other words, it produces data that is equivalent to data generated from analytical instruments, but with greater variance due to inherent variation within and between individuals. Furthermore, data collectors use observation, interview and documentation techniques. The data source used is primary data. After collecting data, then the data is

analyzed while the activity in analyzing the data is displaying the data. reduce data, make conclusions and verify data.

3. RESULTS AND DISCUSSION

Elcorps is a company engaged in the Muslim life style industry, with one of the largest industries, namely Muslim fashion. There are 3 Muslim fashion brands Elzatta, Dauky and Noore. As a company that continuously improves customer satisfaction, in 2018 Elcorps created an omnichannel retail distribution system to increase customer satisfaction. Where Elcorps optimizes all distribution channels, both online distribution and offline distribution. Consumer demand is optimized from multiple channels. The composition of the products in the omnichannel warehouse of the Elcorps company is as follows:

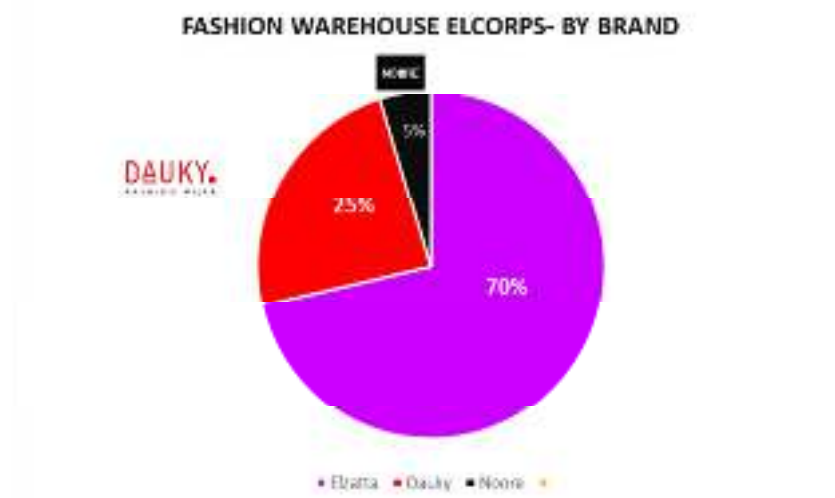


Figure 3 Product Percentage by Category Fashion Brand Elcorps

The information contains that the presentation of products in the Elcorps Warehouse with categories based on brand are as follows 70% for the Elzatta brand, 25% for the Dauky brand and 5% for the Noore brand. The fashion brand divides its products into several categories including bergo, scarf, robe, tunic, complementary and men's clothing categories. All products in the Elcops warehouse have been recorded computerized in the warehouse system, which uses Microsoft AX technology.

These changes made the company's operational activities change, this started in 2019 with the change from warehouse to warehouse *omnichannel*. In the omnichannel warehouse operations, Elcorps fashion products meet 2 channels that have different characteristics. That is an online channel where the order is very diverse, a variety of end-level consumers, with a small number. Then there are offline orders to meet business consumers, corporate stores, which have the character of scheduled orders and in large quantities. This opinion is in line with what was stated by Feber (2018), namely "omnichannel warehouses are different from ordinary warehouses, in this warehouse they combine various types of flows. Especially orders that differ significantly. Namely large and planned orders for filling physical stores with large volumes and online orders with high variability in small quantities.

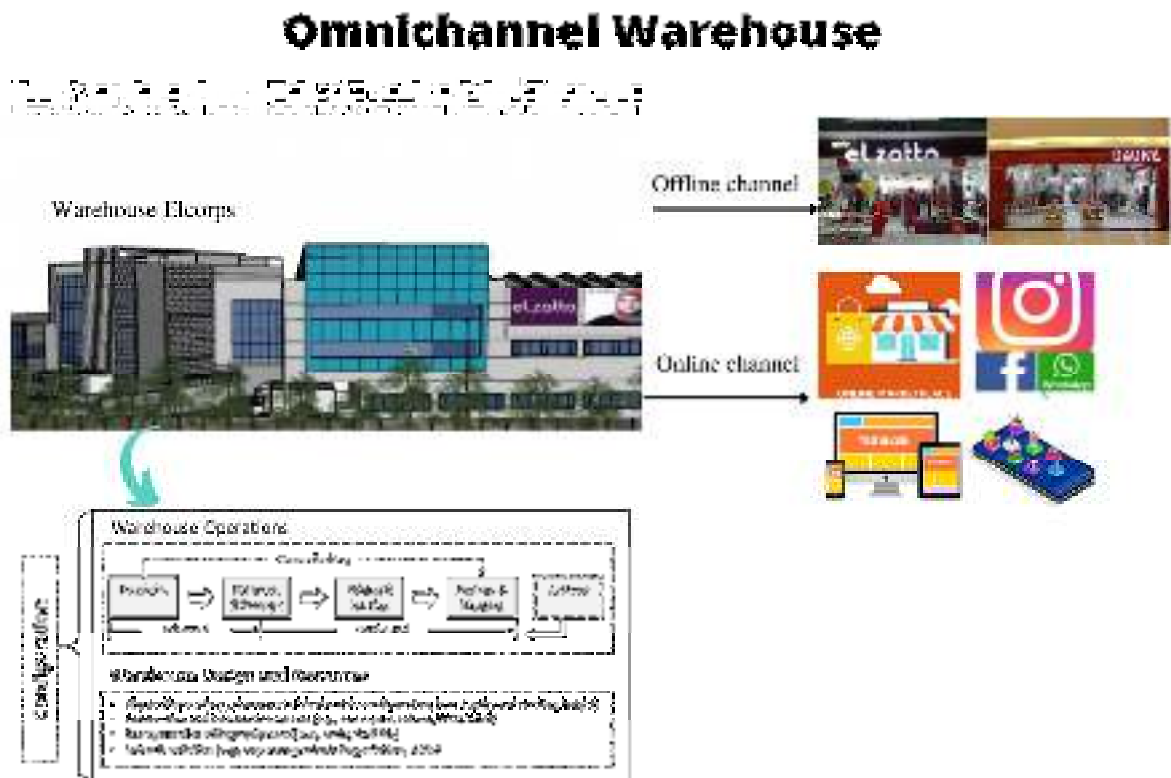


Figure 4 Overview of Elcorps Perusahaan Company Warehouse

As for the omnichannel warehouse, it consists of the integration of warehouse operations activities, resource design. Operational activities carried out include receiving or receiving products, product identification activities, activities for sorting various products to storage management, product retrieval or picking activities, product packaging and delivery activities to arranging product returns from consumers. The following is an overview of Elcorps' omnichannel warehouse as shown in Figure 4.5 as follows:

Based on the information contained in Figure 4.5, there are 5 main activities in the Elcorps warehouse, including the receiving process, the product identification process to storage, the process of retrieving products from storage for incoming orders, as well as the delivery process, and the last is arranging the return of products from customers or customers. return system. All of these activities involve manpower, equipment, space and information systems that can support the continuity of activities. The explanation of the operational stages is as follows:

1. Product Receiving (receiving): this activity is an inbound activity in an omnichannel warehouse, where in this activity the products ordered from suppliers are received by the warehouse in certain quantities and types. The product receipt schedule at Elcorps is scheduled for 5 working days, with

an average receipt of 20000 per day and consists of 3 brands, namely Elzatta, Dauky and Noore. The receiving activity involves 3 workers, while the receiving activity consists of receiving products, adjusting the number of orders and the number of products in real, checking product quality, calculating products based on brand, category, color and size.

2. Product identification (putaway): after the product acceptance process is complete, the next main activity is product identification and product placement in storage. Product identification activities consist of labeling, checking labels or SKUs, checking product placement locations. In this activity, all products have been arranged according to brand, category, name to size and color. After all procedures are carried out, the products are placed in their respective storage and locations. This activity requires high concentration, so that the product is stored in the right location in the right amount. This means that in storage, all products are allocated for all online and offline orders. The system implemented to fulfill all orders on each channel, Elcorps implements a tagging system for product storage location management. Location tagging applies to products sold in marketplaces, websites and online or internet-based channels. This is done to match the number of products posted on the online system with physical products. In the product placement there is the term tagging. Elcorps' omnichannel warehouse has implemented integrated storage management, besides that product storage is implemented as shared storage. The classification of products stored in Elcorps' omnichannel warehouse storage consists of brands, product categories such as scarves, clothes, bergo, tunics, and complementary goods, then classified according to product name and SKU, and classified according to color and size. Location tagging applies to products sold in marketplaces, websites and online or internet-based channels. This is done to match the number of products posted on the online system with physical products. In the product placement there is the term tagging. Elcorps' omnichannel warehouse has implemented integrated storage management, besides that product storage is implemented as shared storage. The classification of products stored in Elcorps' omnichannel warehouse storage consists of brands, product categories such as scarves, clothes, bergo, tunics, and complementary goods, then classified according to product name and SKU, and classified according to color and size. Location tagging applies to products sold in marketplaces, websites and online or internet-based channels. This is done to match the number of products posted on the online system with physical products. In the product placement there is the term tagging. Elcorps' omnichannel warehouse has implemented integrated storage management, besides that product storage is implemented as shared storage. The classification of products stored in Elcorps' omnichannel warehouse storage consists of brands, product categories such as scarves, clothes, bergo, tunics, and complementary goods, then classified according to product name and SKU, and classified according to color and size. This is done to match the number of products posted on the online system with physical products. In the product placement there is the term tagging. Elcorps' omnichannel warehouse has implemented integrated storage management, besides that product storage is implemented as shared storage. The classification of products stored in Elcorps' omnichannel warehouse storage consists of brands, product categories such as scarves, clothes, bergo, tunics, and complementary goods, then classified according to product name and SKU, and classified according to color and size. In addition, product storage is applied as shared storage. The classification of products stored in Elcorps' omnichannel warehouse storage consists of brands, product categories such as scarves, clothes, bergo, tunics, and complementary goods, then classified according to product name and SKU, and classified according to color and size. In addition, product storage is applied as shared storage. The classification of products stored in Elcorps' omnichannel warehouse storage consists of brands, product categories such as scarves, clothes, bergo, tunics, and

complementary goods, then classified according to product name and SKU, and classified according to color and size.

3. Picking: product picking is one of the main processes and has its own characteristics in the omnichannel warehouse. Where there are orders sourced from two different streams, namely online with various distribution sources and available platforms, and offline which is devoted to refilling stores spread throughout Indonesia.
4. Packaging and shipping (shipping): The packaging system is carried out differently at Elcorps' omnichannel warehouse, packaging for online orders is done individually with different consumers. Furthermore, offline packaging systems with large volumes are stored in boxes or sacks containing the name of the shop that ordered the product. The next process is the shipping process for orders online and offline at the Elcorps company, the same delivery is carried out at 4 pm for orders that come in from 08.00 to 14.00 WIB. This is in accordance with the principle that exists in omnichannel, which is to make deliveries on the same day with the right amount and the right address. Meanwhile, orders placed after 14.00 WIB will be delivered the next day.
5. Returns or returns: in an omnichannel warehouse, one of the characteristics is returns management, while this return consists of 2 types, namely returns from consumers who make purchases through online channels and from consumers who make purchases from offline channels.

These things are in accordance with the opinion conveyed by Kembro and Norrman (2020) which explains that the most important activity in the warehouse is the activity of *picking* (product pick-up), it is explained that integrated storage can make it easier for product pick-up and packaging and delivery to be fast. Integrated storage can cover distances and also speed up product fulfillment.”

Based on the analysis of the problems, the improvements that must be made in this Elcorps warehouse activity are storage improvements and also improvements to the receiving or receiving stage.

4. CONCLUSION

Based on the analysis that has been carried out on warehouse activities at this Muslim fashion company, this research concludes as follows:

- a. The main problem in warehouse management faced by this company is the storage management and product receiving activities. The problem he faces is that there are products that occupy the wrong storage space. One of the reasons for this is because stock taking or stock control activities are only carried out twice a year.
- b. Activities carried out in the warehouse of this Muslim fashion company include receiving activities, product sorting activities, storage activities, goods retrieval activities, packing goods activities, as well as goods delivery activities to consumers.
- c. The next thing that must be improved is the management of warehouse storage and the reception and layout of the storage space in the warehouse.

5. SUGGESTIONS

The suggestions recommended by the author are as follows:

- a. Make a stock control schedule or stock taking every 3 months on products in warehouse.
- b. Improve the storage layout (storage) and improve the layout of the warehouse management.
- c. Evaluate and calculate warehouse performance at least once a year in order to find out the problems in the warehouse and get solutions to these problems.

BIBLIOGRAPHY

Baruffaldi, G., Accorsi, R., Manzini, R., & Ferrari, E. (2020). Warehousing process performance improvement: a tailored framework for 3PL. *Business Process Management Journal*, 26(6), 1619–1641. <https://doi.org/10.1108/BPMJ-03-2019-0120>

- Beske, P. (2012). International Journal of Physical Distribution & Logistics Management Management Article Title Page. *International Journal of Physical Distribution & Logistics Management*, 42(4), 5.
- Binos, T., Adamopoulos, A., & Bruno, V. (2020). Decision Support Research in Warehousing and Distribution: A Systematic Literature Review. *International Journal of Information Technology and Decision Making*, 19(3), 653–693. <https://doi.org/10.1142/S0219622020300013>
- Braglia, M., Marrazzini, L., Padellini, L., & Rinaldi, R. (2020). Managerial and Industry 4.0 solutions for fashion supply chains. *Journal of Fashion Marketing and Management*. <https://doi.org/10.1108/JFMM-12-2019-0285>
- Cai, YJ, & Lo, CKY (2020). Omni-channel management in the new retailing era: A systematic review and future research agenda. *International Journal of Production Economics*, 229(May 2019), 107729. <https://doi.org/10.1016/j.ijpe.2020.107729>
- Ding, S., & Kaminsky, PM (2020). Centralized and decentralized warehouse logistics collaboration. *Manufacturing and Service Operations Management*, 22(4), 812–831. <https://doi.org/10.1287/msom.2019.0774>
- He, R., Li, H., Zhang, B., & Chen, M. (2020). The multi-level warehouse layout problem with uncertain information: uncertainty theory method. *International Journal of General Systems*, 49(5), 497–520. <https://doi.org/10.1080/03081079.2020.1778681>
- Jemelka, M., & Chramcov, B. (2019). The Use of Recursive ABC Method for Warehouse Management. In *Advances in Intelligent Systems and Computing* (Vol. 984). Springer International Publishing. https://doi.org/10.1007/978-3-030-19807-7_22
- Kembro, JH, & Norrman, A. (2019). Warehouse configuration in omni-channel retailing: a multiple case study. *International Journal of Physical Distribution and Logistics Management*, 50(5), 509–533. <https://doi.org/10.1108/IJPDLM-01-2019-0034>
- Kembro, JH, Norrman, A., & Eriksson, E. (2018). Adapting warehouse operations and design to omni-channel logistics: A literature review and research agenda. *International Journal of Physical Distribution and Logistics Management*, 48(9), 890–912. <https://doi.org/10.1108/IJPDLM-01-2017-0052>
- Luo, H., Yang, X., & Kong, XTR (2019). A synchronized production-warehouse management solution for reengineering the online-offline integrated order fulfillment. *Transportation Research Part E: Logistics and Transportation Review*, 122(December 2018), 211–230. <https://doi.org/10.1016/j.tre.2018.12.010>
- Richards, G. (2011). *Warehouse Management: A Complete Guide to Improving Efficiency and Minimizing Costs in the Modern Warehouse* (Google eBook). 344. <http://books.google.com/books?id=fe0O6Q16mzEC&pgis=1>
- Torabizadeh, M., Yusof, NM, Ma'aram, A., & Shaharoun, AM (2020). Identifying sustainable warehouse management system indicators and proposing new weighting methods. *Journal of Cleaner Production*, 248(xxxx), 119190. <https://doi.org/10.1016/j.jclepro.2019.119190>