# A Study on 'Impact of E- Commerce Growth on Decathlon Logistics'

Vyshak N. Nair, Vishnu Ashok

**Guide:** Prof. Hasmukh Panchal

MBA LSCM,

Parul Institute of Engineering and Technology,

Parul University,

Limda, Waghodia,

Vadodara, Gujarat- 391760

## Abstract

The exponential growth of e-commerce has ushered in a transformative era for the global logistics industry. This comprehensive study analyzes the far-reaching impact of e-commerce expansion on logistics operations, supply chain management, consumer behavior, and technological advancements. The research delves into the critical role of last-mile delivery, exploring how logistics providers have adapted to meet the burgeoning demand for rapid and reliable parcel shipments. Innovations like autonomous vehicles, drone deliveries, and smart lockers are examined to understand their potential in enhancing efficiency and customer satisfaction. Furthermore, the study investigates the profound changes in warehousing and inventory management strategies spurred by the rise of online retail. The proliferation of strategically located fulfillment centers and adoption of cutting-edge technologies, such as robotics and AI, are explored for their impact on streamlining operations and reducing order fulfillment times. The impact of e-commerce growth on supply chain management practices is also explored.

## Introduction

The rapid growth of e-commerce has had a profound impact on the global logistics industry. With the rise in online shopping, the demand for efficient and streamlined shipping and delivery services has increased significantly. This growth has prompted logistics companies to adapt their operations and invest in innovative technologies to meet the changing consumer demands and expectations. E-commerce has led to a surge in parcel shipments, which has required logistics providers to optimize their last-mile delivery processes to ensure faster and more reliable deliveries. Additionally, the need for seamless international shipping solutions has grown as consumers expect products from around the world to be delivered quickly and affordably. The growth of e-commerce has also given rise to new business models such as dropshipping and direct-to-consumer fulfillment centers, which further challenge traditional logistics practices and require agile supply chain solutions.

## LITERATURE REIVIEW

The exponential growth of e-commerce has significantly impacted various sectors, including retail and logistics. This literature review aims to explore the specific implications of e-commerce growth on Decathlon's logistics operations.

1.According to Statista, global e-commerce sales are projected to reach $6.54 trillion by 2022, highlighting the substantial growth trajectory (Statista, 2021). Decathlon, as a leading sports retailer, has experienced this surge in online sales, necessitating adaptations in its logistics strategies.

2. Research by Tsay and Agrawal (2018) emphasizes the importance of integrating inventory management systems across channels to enhance efficiency and customer satisfaction. Decathlon's logistics must synchronize inventory levels between its online and offline channels to fulfill orders promptly while minimizing stockouts and overstocks.

Ivanov et al. (2018) emphasizes the adoption of advanced technologies such as warehouse automation and robotics to improve efficiency and reduce operational costs. Decathlon could leverage automated picking systems and autonomous mobile robots to enhance warehouse productivity and cope with the surge in e-commerce orders.

6. Zhu and Sarkis (2020) underscores the importance of integrating sustainability practices into logistics operations to mitigate carbon emissions and environmental degradation. Decathlon could explore eco-friendly packaging solutions, optimize transportation routes to minimize fuel consumption, and invest in renewable energy sources to align its logistics operations with sustainability objectives.

## OBJECTIVE

1. To assess the technological advancements and innovations adopted by the logistics industry in response to e-commerce growth, including the integration of automation, robotics, artificial intelligence, and data analytics in logistics operations.
2. To investigate the changes in supply chain models and strategies employed by logistics companies to optimize their processes and meet the dynamic demands of e-commerce, with a focus on direct-to-consumer fulfillment centers, dropshipping, and other emerging trends.

## RESEARCH METHODOLOGY

### RESEARCH DESIGN

This study will primarily employ a mixed methods research design. Quantitaive data will be collected through surveys and data analysis,while qualitative data will be gathered through interviews and content analysis.

## SOURCES OF DATA

Primary Data – Google Questionnaire

Data that are first acquired are referred to as primary data. By framing questionnaires, primary data is gathered. Both closed-ended and open-ended questions were included in the survey. Answers to open-ended questions must be provided in the respondent's own words. Google Form is the basis for the questionnaire.

Secondary Data- Literature Reviews

 Secondary data, or information that has previously been gathered and examined by another party, can help researchers save both time and money. Secondary data may be found in business records, trade journals, libraries and from old Research paper.

## DATA COLLECTION METHOD

- **Quantitative Data:** Surveys will be distributed to logistics companies, e-commerce firms, and relevant stakeholders. The data will be collected on various metrics, such as growth rates, technology adoption, and environmental practices.

## POPULATION

❖ Sampling size 100

## Sampling methodology

❖ Simple random sampling through questionnarires
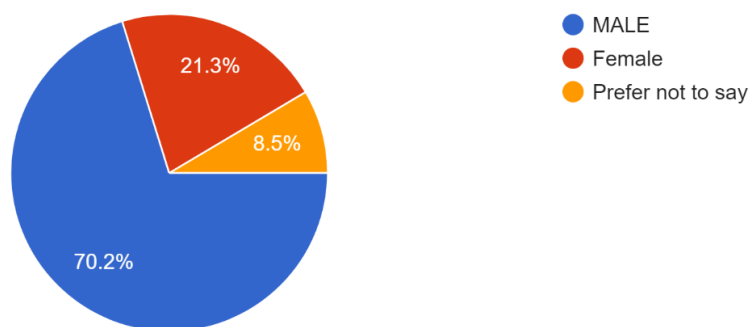
## Sampling frame

❖ List frame

## Data collection instrument
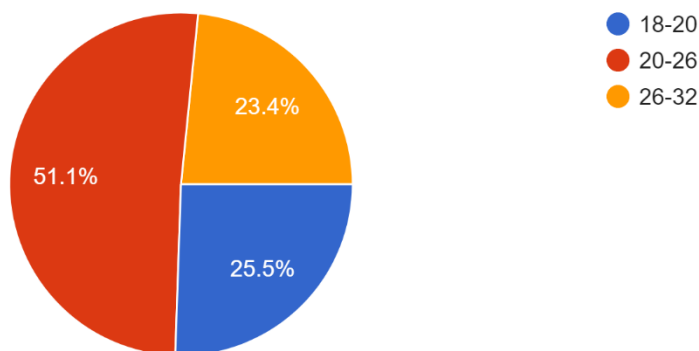
❖ Google form

## DATA ANALYSIS AND INTERPRETATION



GENDER
47 responses

- MALE
- Female
- Prefer not to say

According to above study, 70% of sample size is male and 21.3% of sample size is female and rest of the sample size is 8.5% which preferred not to say
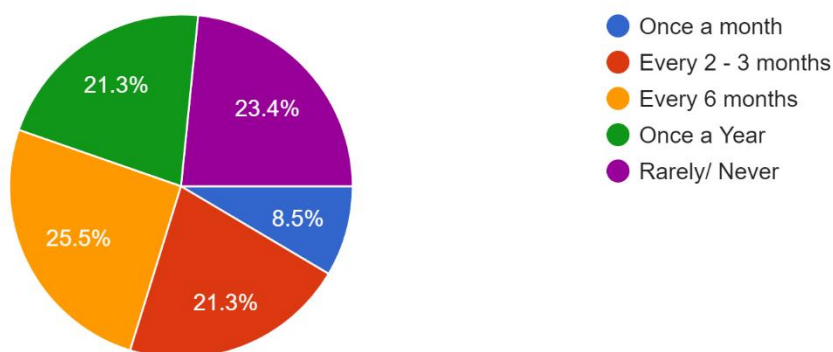
**AGE**

47 responses



According to above study 51.1% of sample size are in the age group of 20-26 , 23.4% of sample size are in the age group of 26-32 and rest of the sample size 25.5% are in the age group of 18-20.

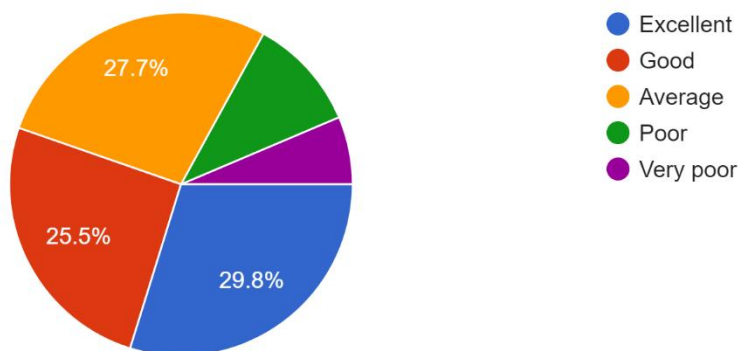How often do u purchase product on Decathlon

47 responses



According to the above study 25.5% people purchase products every 6 months on decathlon and 23.4% of sample size purchase products rarely and rest of the sample size 8.5% once a month .

How would you rate the availability of products at your local Decathlon store?
47 responses



According to the above study 29.8% of sample size would like to rated Excellent for the availability of products to the local decathlon and 27.7% of sample size like to rated average and 25.5% rated good .

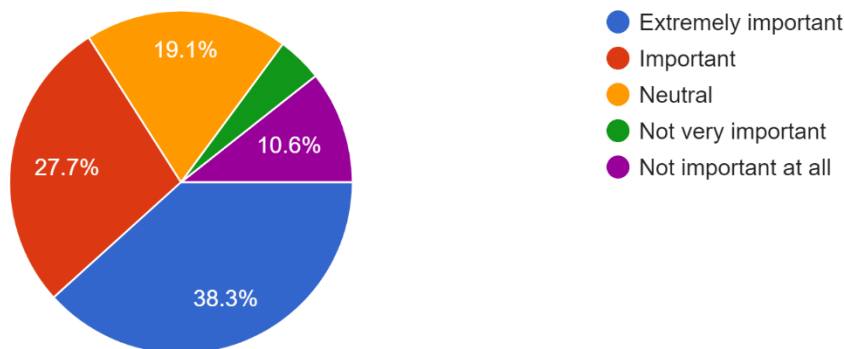How satisfied are you with the variety of products offered by Decathlon?
47 responses
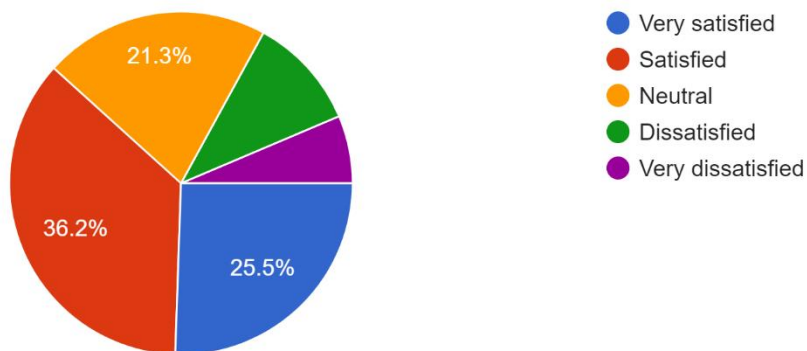


According to above study 36.2% of sample size are satisfied with the variety of products offered by decathlon and 25.5% of sample size are very satisfied and 21.3% are neutral.

How important is the speed of delivery when purchasing products online from Decathlon ?
47 responses



According to the above study 38.3% of sample size rated extremely important for the speed of delivery when purchasing products online from decathlon and 27.7% rated important ,however 10.6% of sample size rated not important at all for the speed of delivery when purchasing online from decathlon.

Have you ever experienced issues with the delivery of Decathlon products ?
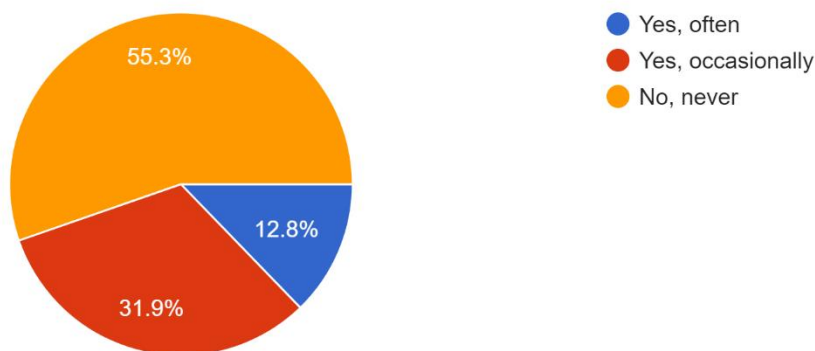47 responses
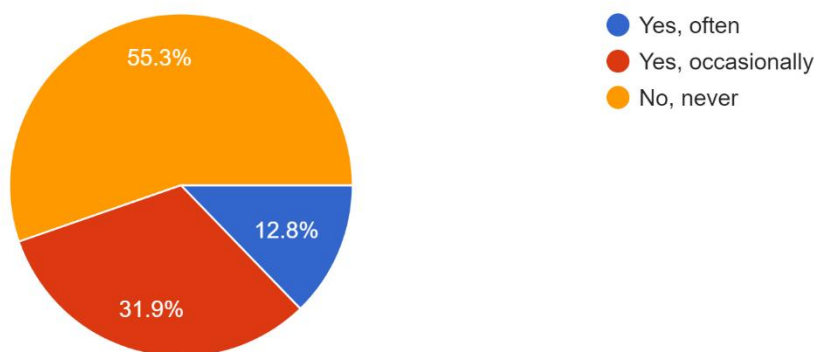


According to the above study 55.3% of sample size never experienced issues with the delivery of decathlon products and 31.9% occasionally experienced issues with the delivery and rest of sample size which is 12.8% oftenly experienced issues with the delivery of decathlon products.
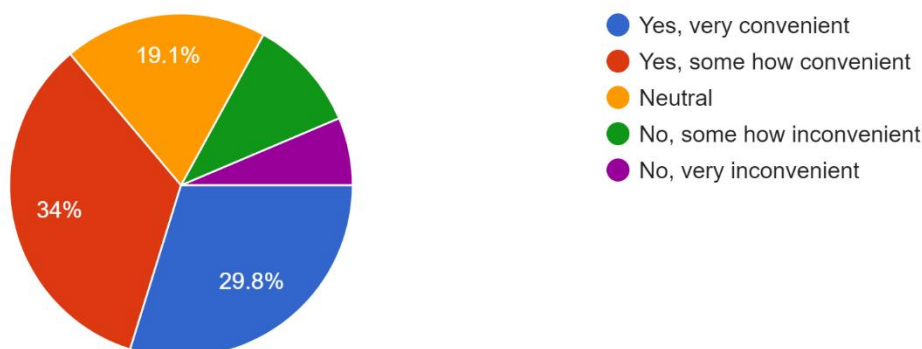
Have you ever experienced issues with the delivery of Decathlon products ?
47 responses



- Yes, often
- Yes, occasionally
- No, never

Do you find Decathlon return and exchange policy convenient ?
47 responses



- Yes, very convenient
- Yes, some how convenient
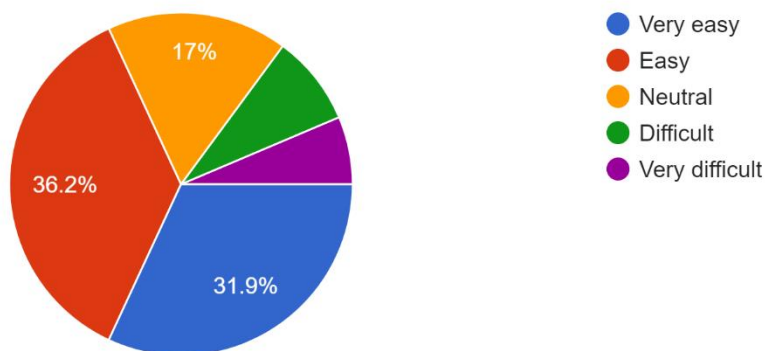- Neutral
- No, some how inconvenient
- No, very inconvenient

According to the above study 34% of sample size find somehow convenient on decathlon return and exchange policy and 29.8% of sample size finds very convenient and 19.1% of sample size find neutral.

How would you rate the ease of finding information about Decathlon products on their website?
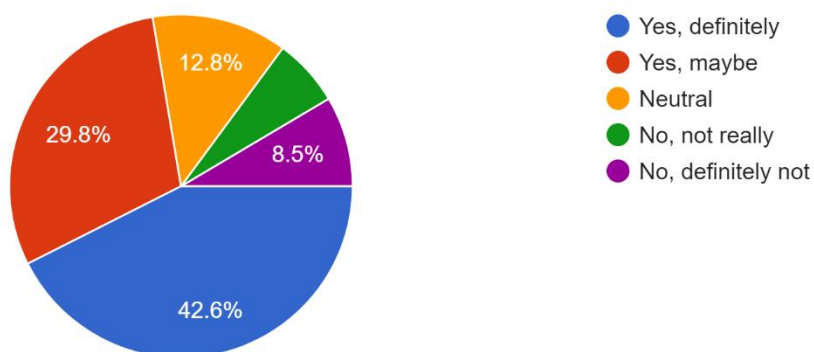47 responses



According to the above study 36.2% of sample size rated for easy to find information about decathlon products on their website and 31.9% of sample size rated for very easy to find information on their website and 17% of sample size rated neutral.

Would you like to see more Decathlon stores opening in your area ?
47 responses



According to the above study 42.6% of sample size rated definitely for like to see more decathlon stores around them and 29.8% of sample size rated maybe for more decathlon stores. However 8.5% of sample size rated definitely not for more decathlon stores.

How likely are you to recommend Decathlon for friend or colleague ?
47 responses



Legend:
- Very likely
- Likely
- Neutral
- Unlikely
- Very unlikely
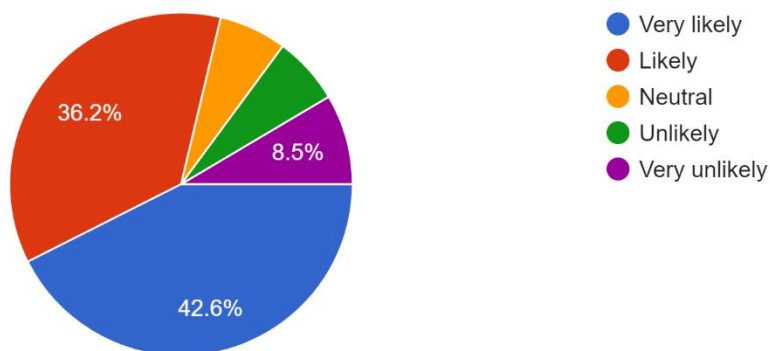
According to the above study 42.6% of sample size are very likely to recommend decathlon for friend or colleague and 36.2% of sample size are likely to recommend .However 8.5% of sample size are very unlikely to recommend decathlon for friend or colleague.

**RESULTS AND FINDING**

1.      Decathlon logistics involves the intricate management of the supply chain for the French sporting goods retailer Decathlon. It encompasses processes like procurement, inventory management, transportation, and distribution to ensure efficient delivery of products to stores and customers worldwide.

2.      This research was opened to all the individuals i.e custumer through snowball sampling.

3.      Age differed from 18 to 20 ,20 to 26.

4.      Customers bought products from decathlon every 6 months few of them bought products once a month or in every two months.

5.      Majority of customers at a local decathlon store rated good as a response for availability of products .

6.      Customer are satisfied with the variety of products offered at decathlon.

7.      Customers considered that it is extremely important to deliver products online from decathlon with fast delivery and timeliness.

8.    Majority of customers claimed that they experienced no issues with the delivery of decathlon.

9.    Majority of customers are very satisfied with the packaging of decathlon product upon delivery.

10.   Majority of customers found decathlon return and exchange policy convenient.

11.   Majority of customers found easy to access information about decathlon products on their website.


## CONCLUSION/ SUGGESTIONS

The study on the impact of e-commerce growth on Decathlon's logistics reveals significant implications for the company's operations. With the rapid expansion of online retail, Decathlon faces both challenges and opportunities in optimizing its logistics processes to meet the demands of digital commerce.


**Suggestions:**

1. Investment in technology: Decathlon should invest in advanced logistics technologies such as automation, artificial intelligence, and data analytics to streamline processes, improve efficiency, and reduce costs.

2. Flexible logistics network: Given the dynamic nature of e-commerce, Decathlon should develop a flexible logistics network that can quickly adapt to fluctuations in demand and customer preferences. This could involve leveraging third-party logistics providers or implementing a hybrid approach combining in-house and outsourced logistics.

3. Last-mile delivery optimization: Enhancing last-mile delivery capabilities is crucial for meeting customer expectations and reducing delivery times. Decathlon could explore options such as crowdshipping, micro-fulfillment centers, and alternative delivery methods like drones or autonomous vehicles.

By implementing these suggestions, Decathlon can effectively navigate the challenges posed by e-commerce growth and position itself for success in the digital retail landscape while ensuring a seamless and satisfying experience for its customers.

## REFERNCES

1.      Christopher, M. (2016). Logistics and Supply Chain Management. Pearson.

2.      Ghiani, G., Laporte, G., & Musmanno, R. (2013). Introduction to Logistics Systems Management. John Wiley & Sons.

3.      Mollenkopf, D. A., Stolze, H. J., Tate, W. L., &Ueltschy, M. (2010). Green logistics: the road to sustainability. Industrial Marketing Management, 39(5), 844-849.

4.      Sheffi, Y. (2015). The Power of Resilience: How the Best Companies Manage the Unexpected. MIT Press.

5.      Stank, T. P., Keller, S. B., & Daugherty, P. J. (2001). Supply chain collaboration and logistical service performance. Journal of Business Logistics, 22(1), 29-47.

## APPENDICES

1. How often do you purchase products from Decathlon?

   a) Once a month

   b) Every 2-3 months

   c) Every 6 months

   d) Once a year

   e) Rarely/Never

2. How would you rate the availability of products at your local Decathlon store?

   a) Excellent

   b) Good

   c) Average

   d) Poor

   e) Very poor

3. How satisfied are you with the variety of products offered by Decathlon?

   a) Very satisfied

   b) Satisfied

   c) Neutral

   d) Dissatisfied

   e) Very dissatisfied

4. How important is the speed of delivery when purchasing products online from Decathlon?

   a) Extremely important

   b) Important

   c) Neutral

   d) Not very important

   e) Not important at all

5. Have you ever experienced any issues with the delivery of Decathlon products?

   a) Yes, often

   b) Yes, occasionally

   c) No, never

6. How satisfied are you with the packaging of Decathlon products upon delivery?

   a) Very satisfied

   b) Satisfied

   c) Neutral

   d) Dissatisfied

e) Very dissatisfied

7. Do you find Decathlon's return and exchange policy convenient?

   a) Yes, very convenient

   b) Yes, somewhat convenient

   c) Neutral

   d) No, somewhat inconvenient

   e) No, very inconvenient

8. How would you rate the ease of finding information about Decathlon products on their website?

   a) Very easy

   b) Easy

   c) Neutral

   d) Difficult

   e) Very difficult

9. Would you like to see more Decathlon stores opening in your area?

   a) Yes, definitely

   b) Yes, maybe

   c) Neutral

   d) No, not really

   e) No, definitely not

10. How likely are you to recommend Decathlon to a friend or colleague?

   a) Very likely

b) Likely

c) Neutral

d) Unlikely

e) Very unlikely