



WYDAWNICTWO POLITECHNIKI KOSZALIŃSKIEJ

LOGISTICS

Joanna Stankiewicz-Majkowska



POLITECHNIKA KOSZALIŃSKA

Joanna Stankiewicz-Majkowska

Logistics

KOSZALIN 2023

ISBN 978-83-7365-603-1

Przewodniczący Uczelnianej Rady Wydawniczej
Zbigniew Danielewicz

Recenzja
Czesław Kiński

Projekt okładki
Aleksandra Iwaszkiewicz
Anna Stępień

© Copyright by Wydawnictwo Uczelniane Politechniki Koszalińskiej
Koszalin 2023

WYDAWNICTWO UCZELNIANE POLITECHNIKI KOSZALIŃSKIEJ
75-620 Koszalin, ul. Raławicka 15-17

Koszalin 2023, wyd. I, ark. wyd. 4,77

Spis treści

STRESZCZENIE	5
SUMMARY	5
1. Logistics definitions	7
2. Logistics' Past and Present	11
3. COVID-19 Impact	15
4. Hubs	18
5. Auto Store	21
6. Warehousing Space	23
7. Tycoons	27
8. Out of the Box	31
9. Supply Chain Management	34
10.E-commerce.....	37
11.Polish Logistics Market.....	42
12.The Suez Canal.....	47
13.A Future beyond gridlock.....	50
14.Future of delivery	53
15.Revision.....	56
16.Answer key.....	59
17.Netografia.....	103

STRESZCZENIE

Podręcznik jest przeznaczony dla studentów studiów licencjackich i magisterskich na kierunku Logistyka. Oparty jest na autentycznych materiałach dostępnych w Internecie. Powstał w ramach projektu „Dostępna Uczelnia – Politechnika Koszalińska” o numerze POWR.03.05.00-00-A018/20 dla celów edukacyjnych, niekomercyjnych.

Słowa kluczowe: Logistyka, transport, infrastruktura logistyczna

SUMMARY

The textbook is dedicated to first-cycle students and second-cycle students of Logistics. It is based on authentic materials available online. It was created within the project ‘Accessible University – Koszalin University of Technology’ - POWR.03.05.00-00-A018/20 for educational, non-commercial purposes.

Keywords: Logistics, transportation, logistics infrastructure

loger meaning "to lodge". Around 1670, the French King Louis XIV created the position of *Maréchal des loges*, an officer responsible for planning (4), establishing camp sites, and regulating transport and (5)..... The term *logistique* soon came to refer to his duties. It was in this sense that Antoine-Henri Jomini referred to the term in his *Summary of the Art of War* (1838). In the English translation, the word became (6) ".....".¹

2b Discuss in groups which of the following definitions of logistics is the most comprehensive? Do you think they can be understood by everyone? Explain your choice and decide how you would formulate a definition easy for you to remember.

- A. Logistics, which involves such concerns as the delivery of personnel or supplies in an efficient manner, can often employ logic, such as by reasoning out the path least likely to interrupt the flow of a delivery²
- B. Logistics is planning, execution, and control of the procurement, movement, and stationing of personnel, material, and other resources to achieve the objectives of a campaign, plan, project, or strategy. It may be defined as the 'management of inventory in motion and at rest'³
- C. logistics (of something) the practical organization that is needed to make a complicated plan successful when a lot of people and equipment are involved⁴
- D. In military science, logistics is concerned with maintaining army supply lines while disrupting those of the enemy, since an armed force without resources and transportation is defenceless. Military logistics was already practiced in the ancient world and as the modern military has a significant need for logistics solutions, advanced implementations have been developed. In military logistics, logistics officers manage how and when to move resources to the places they are needed.⁵
- E. "The line between disorder and order lies in logistics (coordination)" Sun Tzu a Chinese military strategist from circa 496 B.C. in "The Art of War"

¹ Military logistics - Wikipedia

² Logistics Definition & Meaning - Merriam-Webster

³ Logistics - Business Dictionary

⁴ logistics noun - Definition, pictures, pronunciation and usage notes | Oxford Advanced Learner's Dictionary at OxfordLearnersDictionaries.com

⁵ Logistics - Wikipedia

3a Watch the first 5 minutes of the film about Alexander's the Great army logistics and decide which of the above definitions best correlates with this film and try to explain why.

Alexander the Great: Logistics - Bing video

3b Watch the first 5 minutes of the film again and answer the questions:

- a. What were the conventions that Greek armies followed?
- b. Who accompanied them? Were they helpful or unhelpful? Why?
- c. Who and why realised things had to change?
- d. What did Philip II and Xenophon have in common?
- e. What were the supplies carried by the Macedonian soldiers? How much did they weigh?
- f. What did Philip forbid to his soldiers? What were the consequences of his actions?
- g. What happened in 335 B.C.?

3c Study the text below and decide what words from the film best would complete it:

Alexander's 35,000-man army could (1).....no more than a 10-day supply of food when remote from sea transport.¹ Yet, he and his troops (2).....over thousands of miles at a rate of 19.5 miles in any one day without problem. In the process, Alexander (3).....every nation and city on which he set his sights. At the most basic level, he was able to perform his legendary fights because he included logistics and (4).....management into his strategic plans, just as any modern corporation should do to maintain a competitive edge.

4a Study the example and try to add more information:

If Alexander were a CEO today, he would include logistics in strategic planning.

If Alexander were a CEO today, he.....

4b What do the ancient commanders and modern logistics managers have in common?

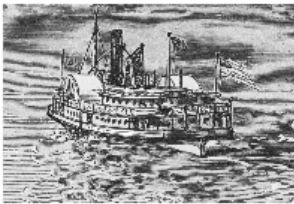


source: [gettyimages.com](https://www.gettyimages.com)

2. Logistics' Past and Present

1 Discuss the questions in pairs:

- Which human activities had an impact on the development of logistics?
- If you look at the pictures below, how did these inventions or phenomena change logistics?
- What changes might await logisticians in the future?



source: gettyimages.com

2a Choose the correct synonym for each of the following words:

- | | |
|----------------------|--------------------------------------------------------------|
| a. baggage (n) | 1. availability |
| b. accessibility (n) | 2. guiding, piloting |
| c. storage (n) | 3. involving transportation by more than one form of carrier |
| d. weaponry (n) | 4. stream, torrent |
| e. depot (n) | 5. safekeeping |
| f. supply(n) | 6. cargo |
| g. routing (n) | 7. deliver |
| h. intermodal (adj) | 8. luggage |
| i. flow (n) | 9. ammunition |
| j. freight (n) | 10. warehouse |

2b Complete the text with words in bold which were removed from the text:

Logistics History Before 1850

storage warfare cavalry accessibility baggage depots weaponry

When you consider the limited forms of transportation, communication and (a)..... that armies had access to before 1850, the scale of historical (b).....is impressive. Ancient armies seemed to have been supplied by a combination of local supplies and (c).....located along their march routes. The 13th century Mongol (d)..... was well-known for its organized and efficient logistics system. The army was divided into corps and each one travelled with cattle, pack animals and (e)..... carts. Food was stored along the way, but campsites were also chosen based on (f)..... to grazing and forage. Everything was carefully organized, and baggage and equipment were kept light to make transport easier.

A notable development during this period was the growth in the size of armies that were mobilized. The time of Napoleon brought about the development of magazines, or (g)..... depots containing supplies, and rolling magazines, which were mobile versions that carried supplies for a few days. Overtime, supplies shifted from animals to the soldiers. The growth of civilization and more densely populated areas made resupply easier.

Mid-19th to mid-20th centuries

engine industrial telegraph

The birth of the (h)..... era changed logistics considerably. Technological innovations in tools, machines, transportation and

communication transformed not only military activity, but also daily life, businesses and the global economy.

In the last half of the 19th century, railroad, steamships and the (i)..... dramatically changed how armies, governments, industries and people communicated and travelled. The birth of the internal combustion (j)....., powered vehicles that could travel on multiple surfaces, pipeline, air transport, telephone, radio, radar, television and telephotography continued this transformation in the 20th century.

More people and more supplies could be mobilized over greater distances thanks to these developments. New techniques for organization and management were needed to keep up with these advances, and separate logistics functions started emerging in military units and industry.

Mid-20th century to 21st century

intermodal databases spreadsheet space routing

From the 1940s on, logistics technology shifted from manual labour to using mechanized ways of moving goods. With the development of pallet lifts, warehouse (k)..... could be used more efficiently. Starting in the 1950s, (l).....containers allowed these pallets to be transported via rail, ships and trucks more easily. Over time, freight transport increasingly transferred from rail to truck.

Up until the 1960s to 1970s, most record keeping was done manually. The birth of computers improved logistics planning, inventory management and optimization of truck (m). The growth of personal computers in the 1980s and emergence of the internet in the late 1990s furthered this data revolution.

Companies were able to use (n)..... technology and map-based interfaces to improve the planning and execution processes. Large-scale optimization models were built and eventually incorporated into commercial operations. During this time technological innovation led to advancements in automation. The term logistics started being used more and more to describe an important business function, rather than just describing military movements.

By the 1990s, lots of data existed in separate (o)..... To integrate these data sources, Enterprise Resource Planning (ERP) Systems were developed. These systems were capable of integrating multiple data sources, improving data accuracy and assisting in materials and logistics planning.

*21st century and beyond***inevitable real-time flow**

Globalization, development of computer technology and increasing internet access has dominated logistics developments in the current century. The term “supply chain management” is now broadly used to encompass strategy, planning and execution of the (p)..... of goods, services and information, with logistics being an important part of this process.

Logistics technology is certainly getting “smarter.” Cyber-Physical Systems (CPSs) link IT and logistics and enable goods to flow and be tracked in (r)..... through diverse and complicated systems. This provides an unprecedented level of transparency and information for suppliers and customers.

Going forward, it seems (s)..... that technology will continue to support faster and more complex flow of goods, services, supplies and information to wider and larger end users. As with many other industries and functions, it’s likely that logistics could also be transformed by emerging trends in the Internet of Things, automation and artificial intelligence.⁶

2c Read the sentences and decide if they are True or False.

- a. The Mongol army’s camps were placed next to pastures.
- b. Napoleon’s army travelled in wagons.
- c. The invention of internal combustion engine had little impact on logistics.
- d. Mechanized ways of moving goods appeared before World War II.
- e. ERP systems combined data sources.
- f. Supply chain management is a component of logistics.

3 Watch the video about evolution of logistics and write down what happened in the years from a. to f.[Evolution And History of Logistics - LogYcode Tech Solutions - Bing video](#)

- a. 3500 BC.....
- b. 3100 BC.....
- c. 1672.....
- d. 1911.....
- e. 1919.....
- f. 1935.....

⁶ <https://www.logmore.com/post/short-history-logistics-tech>

3. COVID-19 Impact



source: gettyimages.com

1 In pairs, discuss the following questions:

- What happened in March 2020 and caused a worldwide stagnation?
- What reactions in stores and warehouses did it cause?
- What products started disappearing from shop shelves?
- What products did you stock up on?

2 Match the following words to their definitions:

a. supply chain	1. a situation when there is not enough of the people or things that are needed
b. replenish	2. series
c. stockpiling	3. make up for time lost
d. shortage	4. the series of processes involved in the production and supply of goods, from when they are first made, grown, etc. until they are bought or used
e. bulky	5. to become involved in something
f. catch up with	6. to collect and keep a large supply of something
g. retailer	7. checkout, register
i. demand	8. to discover or notice something
j. detect	9. predict
k. cash till	10. a person or business that sells goods to the public
l. forecast	11. a very strong request for something; something that somebody needs
m. raise a red flag	12. large and difficult to move or carry
n. production run	13. to make something full again by replacing what has been used, top up
o. be caught up in sth	14. warn people of danger or problem

3 Fill in the sentences with the correct forms of words from ex.2.

- a. Due toin productions we cannot guarantee the delivery on time.
- b. The huge.....for IT programmers resulted in pay rise for these tech-savvy professionals.
- c. The authoritiesvaccines to prepare for the flu pandemic.
- d. How did you getin this mess?
- e. A high body-mass indexto doctors but a sudden weight loss can be more worrisome.
- f. The police released a video of an incident in which a suspect steals from the
- g. Hethe supply of wood in preparation for the winter.
- h.packages might cost more to send because of their weight and volume.

4 Listen to and watch a logistics expert Dr Andrew Potter explain how a toilet roll gets from the production line to a store shelf in the UK and answer the following questions:

[Corona virus: Logistics expert explains how a toilet roll reaches supermarket shelves - BBC News](#)

- a. Why is it called a short supply chain?
- b. How is the distribution organized?
- c. How long does it take for a toilet roll to get from the factory to the shelf?

source: BBC.com

5 Watch the Ted Talk by Dustin Burke about making the supply chain more resilient in the future and answer the following questions.

[Dustin Burke: How to fix broken supply chains | TED Talk](#)

1. What caused toilet paper shortages in 1973 in the USA?
2. What reasons for supply chain disruptions does he mention?
3. What are the three components for building more resilient supply chains in his opinion?
4. What industry does he compare creating buffers to?
5. What could pharmaceutical companies do in the future?

6. Why do we need a radical improvement in supply chain transparency?
7. How can technology help in building a more resilient supply chain management?
8. How would it resemble airline industry?
9. What previous mistake in supply chain management does he mention?⁷

Discuss in groups the questions below:

- a. Was the situation in your country/ region similar in the Covid reality?
- b. How has the Covid-19 pandemic changed the supply chain and logistics?
- c. How has it changed customers' shopping habits? Has it encouraged people to do shopping online?
- d. What consequences of Covid-19 are there for average customers in terms of logistics service?
- e. What consequences of Covid-19 are there for suppliers, logistics industry?
- f. Do you think the lessons learned from the pandemic are long-lasting?

⁷ Dustin Burke is a managing director and partner at BCG in Chicago and is the global co-leader of BCG's manufacturing and supply chain topic. He works with global shipping and logistics companies on cost-effectively capitalizing on evolving trends such as e-commerce growth and changing global trade context.

4. Hubs



source: gettyimages.com

1 Discuss the questions in pairs.

- a. What is a hub?
- b. What is the most common means of transport for trade globally?
- c. What do you know about Richard Hammond?
- d. What kind of company is Maersk?

2a Try to predict what these numbers might refer to before you watch the episode of Discovery programme with Richard Hammond

[How Do 80,000 "Lipsticks" Help The Largest Port In Europe Run On Automation? | Richard Hammond's Big - YouTube:](#)

- a. half a km, b. 450, c. 23,000, d. 7,000 000, e. 10,000 000 000, f. 40,000

2b Watch the first 2 minutes of the episode and check your predictions.

2c Watch the whole episode and answer the following questions:

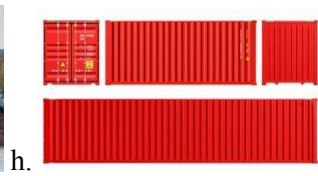
1. Why are there no humans loading and unloading the ship?
2. Why is the ship never empty?
3. How is the terminal operated?
4. What is the total cargo the port can handle a year?

5. Who is Hanz Den Boer?
6. How is the gantry crane operated?
7. Are humans redundant in the port?
8. Has Richard Hammond any experience with remotely controlled cars?
9. What is the function of high-visibility clothing?
10. What are the lipsticks from the title of the episode and how many are there in the port?

source: discovery.uk

2d Match the pictures with names:

1. gantry 2. crane 3. hi-vis vest 4. transponder 5. container 6. berth 7. stern
8. waste 9. stack 10. vessel



source: gettyimages.com

3a Study the general terms and conditions including tariffs at the port of Rotterdam and find answers to the following questions, make a note about the page number you find it:

[202112ID-247_Voorwaarden_2022_EN.indd \(portofrotterdam.com\)](#)

- a. What happens if some information in the brochure is incorrectly translated from Dutch into English?
- b. Who is Harbour master?
- c. Is the disposal of waste due to payment?
- d. How long after the departure must a transshipment statement be provided?
- e. Will you be charged for using port tugs?

3b In pairs, prepare 3 questions to ask other students about the terms and fees at the port of Rotterdam. Make sure you know where the answer is. Once your questions are ready, all groups try to find the answer to your question. The quickest one wins.

5. Auto Store

1 Discuss the questions in pairs.

- What do you associate with the name Auto Store? Have you heard their advertising slogan ‘stop air housing, start warehousing’?
- Where is the company based?
- What do you know about their products?
- If you look at the pictures, can you try and explain how Auto Store works.



2 Watch the short presentation video of Auto store

[Auto Store | Introduction: Stop Air housing, Start Warehousing - YouTube](#)

and answer the questions below:

- What kind of system is Auto Store?
- What advantage does Auto store solution have over shelf-based solutions?
- How are bins stacked?
- How are items delivered from bins to workstations?
- Where and why are the bins placed after they are delivered to the workstation?
- What are the requirements for buildings to construct Auto Store system?
- Can the system be expanded without stopping operations?

- g. What happens if the robot 'gets ill'?
- h. How much energy do 10 robots use?

3 What benefits and drawbacks of the system can you think about? Find out where the Auto Store systems are used. You can use the websites below:

[Auto Store Review \(2021\) | Don't Buy Without Seeing This... \(snagsuccess.com\)](https://snagsuccess.com)

[Cases \(autostoresystem.com\)](https://autostoresystem.com)

[Auto Store Consumer Report 2021 \(autostoresystem.com\)](https://autostoresystem.com)

[Auto Store | Goods to Person Order Fulfillment | Bastian Solutions](https://autostoresystem.com)

4 Use Present Simple or modal verbs in active or passive voice to complete the description of Auto Store system. Use the verbs in the brackets.

- a. Auto Store..... with five modules (assemble) Two moving modules: the robot and workstation. Two static modules: the grid and bin. Controller is the command centre.
- b. Hardworking robots drive along the top of the grid and will retrieve any bin, from top to bottom, with gripper plates. All robotswirelessly..... and will charge themselves when not in use (connect).
- c. The aluminium grid holds the bins stacked neatly while providing tracks for the robots to drive on. The modular gridin any shape (build).
- d. AutoStore workstations Ports (call). This is where bins for picking, replenishing or other inventory actions (present).
- e. Durable, specialized and stackable binsto hold inventory and the weight of many other bins above (make).
- f. The controller track of everything (keep). This module is the command centre, traffic control and database holder of Auto Store.

6. Warehousing Space



source: [gettyimages.com](https://www.gettyimages.com)

1 Discuss in groups the questions below:

- a. Which is a better option: buying or leasing warehouse space? Why?
- b. What do you need to think about before making your decision? Why?
- c. What aspects from point b. would you consider the most important? Why?

2a Complete the crossword with words connected with a warehouse:

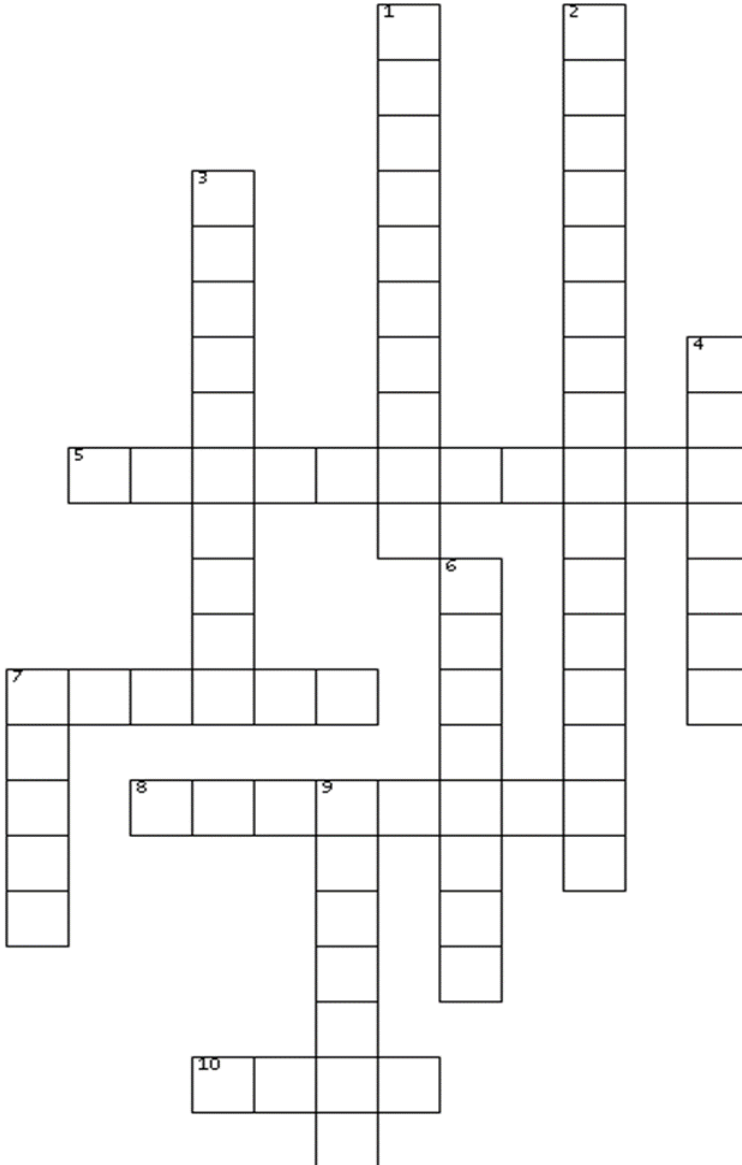
ACROSS

5. the act of keeping something in good condition by checking or repairing it regularly
7. a device that can react to light, heat, pressure, etc. in order to make a machine, etc. do something or show something.
8. (of a substance) that changes easily into a gas.
10. a piece of equipment, usually made of bars for holding things or for hanging things on

DOWN

1. a piece of equipment that uses light and heat energy from the sun to produce hot water and electricity.
2. a metal container with water or chemicals inside for putting out small fires.
3. buildings, services, equipment, etc. that are provided for a particular purpose.
4. a feature or service that makes a place pleasant, comfortable or easy to live in.

6. a small window in a roof.
7. _____ of-the-art -modern and advanced.
9. a small room with a tightly closed door at each end which you go through to reach another area at a different air pressure.



2b Take the virtual tour [Panattoni Tour \(panattonieurope.com\)](http://panattonieurope.com) of Panattoni's Eco-warehouse. In groups find and make notes about features of the following spaces:

ROOF	SURROUNDINGS	INTERIOR	OFFICES

2c Would you consider leasing space in such a warehouse? Why? Why not? What other information would you ask about?

3a If you look at the map below, what makes Koszalin an attractive location to build 65,000 square metres of warehousing space?



3b Read the text and in pairs prepare answers to the following questions:

- a. What is Panattoni Park Koszalin?
- b. Why is it going to be attractive for diverse business sectors?

Koszalin is a dynamically growing city in the north-western part of Poland. Its location close to the German border, well-developed urban infrastructure and people-friendly living conditions attract qualified staff and entrepreneurs. In response to the growing demand for warehouse space, Panattoni is offering two more modern class A warehouse buildings totalling over 65,000 sqm.

Panattoni Park Koszalin is the developer's another project in the Zachodniopomorskie Province, and at the same time the first multi-tenant facility in Koszalin. Unit layout within the park can be adapted in a flexible manner to meet the requirements of customers representing diverse business sectors. It features spacious parking lots and service yards, round-the-clock security service as well as numerous environmental solutions as evidenced by BREEAM certification with a "Very Good" rating.

The Park is located in the direct vicinity of national road no. 11 and close to its junction with S6. The location guarantees excellent land connections to the major markets at home and abroad. On the other hand, as the park finds itself close to the city with its university campuses, its location makes for easy access to qualified workers and an excellent commute. 62, 455 sqm
www.panattonieurope.com 2 2 1

source: [Panattoni Park Koszalin \(panattonieu.com\)](http://Panattoni Park Koszalin (panattonieu.com))

4 Work in groups and using web search prepare answers to the following questions:

- a. What is the minimum lease term at Panattoni park?
- b. What is the minimum area to lease?
- c. What other benefits does Panattoni offer to lease holders?
- d. What companies could be interested in leasing space from Panattoni?
- e. What company leases 14,000 sqm at present?
- f. Are there any drawbacks of such a solution?

7. Tycoons

1 Match the pictures of people in logistics with their companies, names and then with information about them or their quotes.



Jeff Bezos	InPost
Pierre Morad Omidyar	UPS
Rafał Brzoska	Ebay
James E. Casey	Amazon

- “If the Internet was the new rock and roll ...was its Elvis ... [Today he’s] the ultimate dotcom survivor.” — BBC News.com
- He started out by founding Integer Group in 1999, which distributed leaflets.
- He was 28 years old when he wrote the computer code that would eventually become his greatest business. At that time, the program went by the name of "Auction Web."
- “One measure of your success will be the degree to which you build up others who work with you. While building up others, you build yourself”

1a Which of the information surprised you? Did you know any of the people before?

2a Match the words (1-10) with their definitions (a-k):

- | | |
|-----------------------|--------------------------------------------------------------|
| 1) surge | a. the act of selling shares in a company for the first time |
| 2) IPO | b. not private |
| 3) 3 comma club | c. the group of billionaires |
| 4) morph into | d. large quantity of leaflets or letters |
| 5) bulk mail | e. buy |
| 6) land a contract | f. get an official written agreement |
| 7) parcel lockers | g. change into |
| 8) get under the skin | h. APM |
| 9) state-run | i. a sudden increase in the amount of something |
| 10) purchase | j. to annoy |
| 11) subvert | k. challenge/undermine somebody's idea, |

2b Complete the questions with the correct forms of the words from ex. 2a and ask them to your partner.

1. Which prices have.....recently?
2. When was the last time you picked sth up or dropped sth at the? Did you use an app or QR code?
3. Do you know any company that made a(n)..... last month?
4. Do you know if Poczta Polska is a.....company?

2c Read the text and put the paragraphs in the correct order:

1.... 2.... 3....4....5....6....

A. Brzoska created the company Integer.pl in 1999 while he was a student at Krakow University of Economics. Integer.pl distributed bulk mail advertising leaflets for pizza restaurants as well as a range of other businesses. He moved on to challenge Poland's post office by offering cheaper delivery of utility bills. Poland's private postal services have a minimum weight requirement.

B. Rafał Brzoska is Poland's newest billionaire and it took a pandemic to elevate his net worth to the three comma club. The 44-year-old is the founder of InPost SA, a postal-locker company. Shares in his company have surged more than 32% since it made its debut on the Amsterdam stock market on January 26th. The IPO valued the company at \$9.7 billion, making Brzoska's 12% stake worth \$1.5 billion. Brzoska is the CEO of InPost, which started out as a logistics company and over the course of five years, has morphed into a technology company.

C. Brzoska made his debut on the list of the richest people in Poland in 2011. On the 2015 list of the richest Poles, he was ranked 68th. With the IPO, Brzoska's \$1.5 billion net worth leaves him tied for the sixth richest person in Poland. Brzoska is married to television weather presenter Omena Mensah. The couple has a son named Vincent who was born in 2017. Brzoska is also an author of the books "Tomorrow in New York" and "Bible e-business 2."

D. To subvert this, Brzoska inserted small metal plates in each piece of mail. In 2013, he successfully landed a contract to deliver letters for Poland's judicial system. He also started working on his idea for a network of parcel lockers located in public places. That idea became InPost, which allows customers to pick up and drop off packages from the parcel lockers instead of waiting for packages to be delivered at home. People access the lockers with codes sent via text message. InPost's success made him one of the youngest millionaires in Poland. His entrepreneurial nature got under the skin of Poland's state-run State Post and they fought Brzoska to regain control of those judicial system/court mail deliveries.

E. InPost raised \$3.4 billion in its IPO, which was Europe's largest IPO since 2018. Shares debuted at 16 Euros each, which was the top end of its projected range. By 10:08 am on the day of InPost's IPO, shares had climbed 26% to 20.22 Euros. InPost is the biggest debut on a European exchange since Germany's Knorr-Bremse AG, a maker of truck and train brakes that raised \$4.5 billion in its October 2018 IPO. InPost chose to make its debut in Amsterdam due to its concentration of technology-focused investors. InPost plans to expand to France, Spain, and Italy in the near future.

F. InPost's success made him one of the youngest millionaires in Poland. His entrepreneurial nature got under the skin of Poland's state-run State Post and they fought Brzoska to regain control of those judicial system/court mail deliveries. That was a significant hit to Brzoska's business. His company nearly went under. Fortunately, an investment from private-equity firm Advent International kept Brzoska from going under. Another investment from KKR & Co helped InPost restructure its debt and grow. As of the end of 2020, InPost owns 12,254 parcel machines in Poland and the U.K. InPost handled 249

million deliveries in 2020 as the pandemic increased the number of e-commerce purchases being made.

source: Poland's Newest Billionaire Cashes In On Pandemic-Fueled E-Commerce Frenzy To Join The Three Comma Club

By Amy Lamareon

2d Read the text again and in pairs find answers to the following questions:

- a. What did Brzoska's first company deal with?
- b. How did he challenge his competition - Poczta Polska?
- c. How did Poczta Polska react?
- d. What were the consequences for InPost?
- e. What was InPost's debut on the European Exchange Euronext Amsterdam like?

3 Would you consider applying for a job or internship at InPost? Why or why not?

[Internship | InPost](#)

<https://careers.inpost.co.uk/>

8. Out of the Box

1a What is the animal in the picture and what connection do you think it might have with logistics?



source: gettyimages.com

1b Watch the TedTalk by Katie Francfort and compare your predictions:

[Katie Francfort: What if we used the problem as part of the solution? | TED Talk](#)

You have about 10 minutes to compare your predictions and write down the main message she is trying to convey. What do you think about it?

1c Watch the talk once again and complete the sentences with the missing words:

- a. What if I tell you that the most dangerous animal in the world is something smaller than a (1)..... (2)....., lighter than a feather? This creature causes more human suffering worldwide than any other animal.
- b. They kill over (3)..... million people every year. They spread diseases like malaria, denga (4)....., yellow (5)....., West Nile virus, and chickungunya or Zika virus.
- c. It was only 120 years ago when scientists discovered that mosquitoes were the (6).....spreading those diseases
- d. The solutions that scientists are working on won't solve the problem if we can't get them to the right people, in the right places at the right time. I spend my days working on (7)..... logistics.

- e. Logistics is basically getting things from point A to point B, which sounds simple but it can be incredibly complex especially when it comes to temperature (8).....vaccines.
- f. Scientists knew that vaccines must be kept within a very specific temperature range in order to maintain their (9)..... but there were no guidelines for their transport.
- g. Even now almost (10).....of vaccine doses are wasted. They never even make it inside the human body and the major leading factor is improper handling during logistics especially to remote areas.
- h. Most vaccines are (11)..... in the US and Europe. They are (12)..... by plane in a refrigerated containers in this (South Sudan's) case going to the airport of Juba. The tricky thing is that this container must be (13)..... periodically in order to maintain that set temperature.
- i. Once it arrives, it must go through (14)....., which can take hours or weeks. After that it must travel to a central warehouse by plane or truck. At this point the vaccine will be (15)..... in a cooler and taken to a local clinic which are still hours away. It would travel by van or motorcycle, bicycle or donkey or maybe even on foot.
- j. What if we take a step back and think of that problem as a solution and use mosquitoes to kill mosquitoes? It's actually is (16).....done today in (17).....
- k. Other researchers are looking at ways to (18).....the DNA or inject them with a certain bacteria that would block the disease.
- l. Scientists have injected cancer patients with viruses such as measles polio and HIV that have been (19)..... to target cancer cells. This triggers the patient's own immune system to recognise and fight that cancer. In many cases the results have been miraculous.
- m. What if we can inject the mosquitoes with the vaccine and then release them into the right areas of the world so that they can go out and (20)..... it to the local population.
- n. This could get rid of all the temperature sensitive (21).....that I mentioned earlier.
- o. Most importantly, this delivery mechanism allows us to (22)..... some of those hurdles of final (23)..... delivery so that we can access the people in the right places who are dying every day.

1d Watch the Ted Talk for the last time and answer the following questions:

- a. What medical and ethical dilemmas does she mention regarding her idea?
- b. What do healthcare logisticians need to think about in her opinion and why?
- c. Do you agree it's reasonable to think of a problem as a solution?
 - What solution would you think about in case of losing some documentation such as customs, contracts, delivery notes, bills of lading, invoices? What solution can you think about for late payment for service? Many European countries indicate that the maximum period for payment of invoices is between 30 or 60 days but the reality is that these are missed in a large number of cases.

2 Look at the sentences from ex.1c (h,i). Using the passive voice write a similar description of a product's supply chain for the other classmates to guess what product is being described

e.g., It is grown on paddy fields, transported in sacks, sold to a mill or another processing facility, and then it is transported to distributors or wholesalers in various containers such as bags and finally sold to customers.

9. Supply Chain Management

Are there any products or services that have always been difficult to plan and forecast?

Are there any products and services that are very consistent and predictable in their demand?



source: [Supply Chain Management jobs in South Africa explained | PeopleShop](#)

1a In pairs, study the infographic and try to write down at least two problems that might occur on each stage and how they can be avoided:

1. e.g., raw material can be limited in supply so the producer should have more than one supplier to diversify the source of raw materials, the negotiated deal should take environmental issues into consideration

1b In groups watch the short films about supply chain management, write the new information down and present what you have learned to the others.

- a. [What is Supply chain Management \(SCM\)? | What is Supply chain? - Bing video](#)
- b. [Lean Supply Chain Management - Definition & Examples | AIMS UK - Bing video](#)
- c. [Agile Supply Chain Management & Strategies | AIMS UK - Bing video](#)

1c On the basis of the information you have, try to answer the following questions:

A

- a. What does supply chain start and finish with?
- b. What are the 5 aspects of a supply chain?
- c. What are KPIs (Key Performance Indicators)? What are the common ones?

B

- g. What is Lean Supply Chain?
- h. What are the advantages of Lean Supply Chain?

C

- i. What is Agile Supply Chain system?
- j. What are the advantages of Agile Supply Chain?

2a Using the information from the previous exercise and your own knowledge, complete the table:

	Lean Supply Management	Agile Supply Chain Management
What does it rely on?		
What does it focus on?		
What does it incorporate?		
What to react to?		
Companies incorporating it		

2b Is there a clear winner? Is it possible to create a hybrid strategy? Are there any products and services that have always been difficult to plan and forecast?

Are there any products and services that are very consistent and predictable in their demand?

10. E-commerce

1 Discuss in pairs or groups the following questions:

Do you know the advert in the picture below?

What product did it advertise?

Was it memorable?



This advert got more than 500,000 views in its first 24 hours online. Financial Times

The advert has been seen more than two million times on YouTube

The Independent

...has hit seven million YouTube views in 10 days, with almost a million more views on the site's Facebook page

2 Watch the advert and answer the questions:

<https://www.bing.com/videos/search?q=allegro+%c5%9bwi%c4%85teczna+reklama+2016&docid=608008893849076382&mid=EF6B7BACF154E4AC1757EF6B7BACF154E4AC1757&view=detail&FORM=VIRE>

- Why did the man decide to purchase “English for Beginners”?
- Why did he do it online?
- Did he achieve his aim?

3 Read the article about the advert and decide if the sentences below are True or False.

Hi, the elderly gentleman says tentatively as he bends down in front of the small girl. “I’m your grandpa”. It is a **poignant**, emotional end to a three-minute commercial that is sweeping across Poland’s social media channels: the tale of an old man who orders an English-language learning **kit** on the internet so he can fly to London for Christmas and meet his English-speaking granddaughter for the first time racked up more than 500,000 views in its first 24 hours online. But online retailer Allegro, the advert’s creator, is **targeting** more than just tears and smiles and Christmas cheer. Poland’s largest ecommerce platform plans to profit from a surge in internet shopping after a \$3.25bn **buyout** that has put the country on the internet shopping map. Poland is surprisingly late to the dotcom retail game. It lags well behind other countries in terms of online shopping and internet penetration, which is surprising given its relatively young population and reputation as a global leader in electronic payments. The online shopping market in the EU’s sixth-largest economy is worth about €10bn a year, about one-sixth of the size in neighbouring Germany, and far below the UK, whose ecommerce sector is estimated at between €120bn and €150bn. **Annual** spending per internet user lags behind other EU peers. That said, the market is expected to double in value during the next four years as smartphone and internet usage rises to reach levels seen in the rest of Europe. Such forecasts are drawing in investors. “There is a huge **shift** of consumers from offline to online and that gives a great tailwind for the Allegro business,” says David Barker, partner at private equity house Cinven, which combined with Permira and Mid Europe Partners, to buy Allegro in October. Mr Barker reckons the market will see double-digit growth for the best part of a decade, and that Allegro, whose 14m users make it eastern Europe’s largest ecommerce platform, can continue to expand its market share from about 40 percent today. That might be difficult. While some big international operators such as eBay have **struggled** to connect with Polish shoppers and much of the market is fragmented among 20,000 retailers, Amazon, the world’s largest online player, **looms large**. Polish shoppers have been using its German website for years, giving it a solid foothold in the country without it even officially entering the market. Rumours of its **imminent** entry into Poland have swirled for years. But Amazon’s decision to launch a Polish-language version of its German site five days after the Allegro deal was announced was seen as a signal that an assault may be imminent. The Seattle-based retailer has also rolled out Polish-language customer service and has pledged to steadily increase the number of products described in Polish, and offer more items made in the country. At the same time, rivals are **stepping up** their activities. France’s Carrefour, which has a large supermarket business in Poland, announced recently that it was starting

online food retailing in the country. Allegro's new owners, who bought the site from South Africa's Naspers, accept that a full entry by Amazon would be the biggest challenge to their business. According to Mr Barker, it was the single biggest issue in their **due diligence** ahead of the deal. Richard Sanders, a partner at Permira, says they have already earmarked necessary investments in the company "to defend against that threat". Ahead of increased competition, the site is investing in a more intuitive recommendation engine, a new consumer review system, financing options and other add-on services that Amazon and others already employ. But even if the Allegro deal heralds a rush into Poland's ecommerce market, there may be enough growth to go round. Ecommerce accounts for just 6.8 per cent of Poland's retail market, about half the share seen in the UK. Smartphone penetration stands at 41 per cent, well below the 65 per cent in Germany. And **disposable income** is steadily rising — it is predicted to increase 27 per cent in the decade to 2020. Without a doubt, more and more Polish grandfathers will be ordering gifts online in the future. But time will tell whether it will be Allegro, Amazon or someone else that brings their grandchildren's Christmas presents.

source: henry.foy@ft.com

[Online retailers target hearts and wallets of Polish shoppers | Financial Times \(ft.com\)](#)

- a. The advert had more than 10 million views in its first 24 hours online.
- b. Poland falls behind other countries in terms of online shopping and internet penetration.
- c. The e-commerce market in Poland is said to double in value during the next four years.
- d. Amazon officially entered the Polish market before Allegro.
- e. Competition from Amazon is not scary for Allegro.
- f. Ecommerce's share in the the UK retail market is about twice bigger than in Poland.

4 Match the highlighted words or phrases in the article with their synonyms below.

- a) to try extremely hard to achieve something, even though it is very difficult – _____
- b) trying to affect a person – _____
- c) making you feel sad or full of pity – _____
- d) to increase the amount of an activity or the speed of a process in order to improve a situation – _____
- e) a situation in which someone gains control
<https://www.ldoceonline.com/dictionary/controlof> a company by buying all or most of its shares – _____
- f) a set of tools, equipment etc that you use for a particular purpose – _____
- g) gross income of an individual or firm from which direct taxes have been deducted – _____
- h) to seem important, worrying, and difficult to avoid – _____
- i) when a company thinking of buying another looks carefully at its accounts, as it must do by law before the deal can be agreed- _____
- j) yearly – _____
- k) an unpleasant event which will happen very soon – _____
- l) a change, move – _____

5 Try to use the words from ex. 4 in the correct form in the following sentences:

- a. While technical issues of using the Internet for the older generations _____, the greatest challenges are still psychological.
- b. With the digitalization process _____, all citizens need to acquire digital skills.
- c. The percentage of _____ spent at grocery stores has been declining since the 1970s.
- d. Lots of companies are _____ against prolonged recession.
- e. There is a strong need to _____ more resources toward health care.
- f. Cinven, Permira and Mid Europe have joined for the _____ of Allegro from South African media group Naspers for \$3.253bn.

6 Prepare answers to the following questions:

Which of the e- platforms in the pictures do you use?

What do they specialize in?

What incentives do they offer to customers?

Do your parents and grandparents do shopping online?



source: gettyimages.com

11. Polish Logistics Market

The Polish transport and logistics industry, split by transport mode, is composed thusly:

Road = 75.19%

Railway = 14.32%

Sea = 3.90%

Pipeline = 6.32%

Inland waterway = 0.22%

Air = 0.04%

Multi-modal development underway in Poland

Poland is keen to shave \$700 million in transport costs by developing inter-modal transport links. This is vital, given two major transport corridors cross the country: North-South (Baltic-Adriatic leg) and the East-West link.

Along the Baltic-Adriatic route, which starts in Gdynia on Poland's northern coast, a spate of rail upgrades is underway. Included in this programme are track enhancements and construction of key trunk lines.

Poznan Franowo, one of the largest intermodal terminals in Poland, was opened at the end of 2013. The terminal handles containerised cargo carried by combined transport, in this case rail and road. Franowo's annual capacity is around 26,000 tons a year.

Poland's biggest intermodal terminal is Malaszewicze, which handles 40,000 TEUs annually. Established in 1975, the terminal lies on the main transit route from the EU to Russia, which explains its transshipment capacity. At the moment the terminal accepts not only domestic shipments but also those from Germany and China.⁸

⁸ [A look at transport & logistics in Poland | ITE Transport & Logistics \(transport-exhibitions.com\)](http://www.ite-transport.com)

1a Study the information about the Polish freight and logistics market's segmentation and try to think of at least one example of a company in each sector:

a. segmented by function

freight transport ___ PKP cargo _____

freight forwarding ___ DHL _____

warehousing _____

value-added services (e.g. with free delivery service or customer support) _____

b. segmented by end user

construction _____

oil and gas _____

agriculture _____

fishing _____

automotive _____

distributive trade _____

telecommunications _____

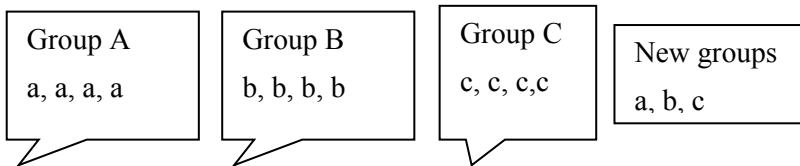
pharmaceutical _____

1b Before you read the report; check your understanding of the following words and phrases by matching them to their definitions: (e.g. 1h)

1. CAGR	a. referring to an activity across the border between two countries
2. disruption	b. property in the form of land or houses
3. deploy	c. opposite of foreign
4. intersect	d. relating to a type of retail which integrates the different methods of shopping available to consumers (e.g. online, in a physical shop, or by phone)
5. real estate	e. situation in which sth is prevented from continuing in a usual way
6. domestic	f. a third-party warehouse that picks, packs and ships your orders for you

7. cross-border	g. meet or go across each other
8. omnichannel	h. Compound Annual Growth Rate
9. return logistics	i. use sth for a particular purpose
10. fulfilment services	j. process of dealing with products that have been returned

2 Work in groups. Each group will study the report about Polish freight and Logistics market prepared by Mordor Intelligence. Each group have to take notes (a) and then in new groups compiled from members of previous groups (b) share them to prepare a short presentation under the headings at the bottom of next page.



GROUP A

Market Overview

The Polish freight and logistics market is expected to record a CAGR of more than 4.5% during the forecast period, 2022-2027. The increasing consumption in the country, growth of the e-commerce sector, and a rising number of retail outlets are expected to lead to the growth of the Polish logistics market in the upcoming years.

As in previous years, the positive development of the Polish logistics market continued in 2021. Despite disruption connected with the COVID-19 pandemic, the market remained stable. The rapidly growing supply, primarily due to speculative investments, has increased by almost 40% over the last two years. New technologies are continuously deployed across the Polish freight and logistics sector, changing the logistics landscape.

One of the key features in developing transport in Poland is its geographical location. Poland lies in Central Europe on the border of the European Union. It has access to the sea and is a place where the most important European transit routes intersect. For many years, Poland has been investing enormous financial resources into developing road, rail, and air infrastructure.

With a strong investment in the industrial real estate warehousing segment, the market is also experiencing favourable growth. Investment volume has been growing every year. The growth in warehousing has been a result of rapid e-commerce growth in the country. With government support and increasing investment in the freight and logistics sector, Poland is prepared to observe strong growth.

Competitive Landscape

The competitive landscape of the Polish freight and logistics market shows high levels of fragmentation. Some of the major players in the market are PKP Cargo, DPD Group, LOTOS, DHL, Kuehne + Nagel, FedEx, and DB Schenker. The major competition is observed in Poland's road freight and warehousing segment.

GROUP B

Recent Developments

April 2021: CEVA Logistics was ready to serve the rapidly growing logistics and fulfilment services market in Eastern Europe. Eastern Europe, despite the pandemic, confirmed its enormous growth potential and its key role on the logistics map of Europe. The Eastern European region saw the highest growth in demand for the logistics space in Europe, in markets like Hungary, Poland, Romania, and Slovakia.

May 2021: CEVA Logistics upgraded its express block train solution from Xi'an to Mukran. Since April 1, the existing regular connection to Duisburg, Germany, has also been operating a high-speed and high-security premium service every Thursday. In addition, CEVA will begin operating an additional regular block train from Xi'an to Duisburg via Malaszewicze, Poland, with a port-to-port delivery time of 15 days.

GROUP C

STRONG E-COMMERCE GROWTH IN POLAND DRIVING THE LOGISTICS MARKET

Poland is an attractive market for the development of e-commerce, a young industry, which is growing fast. The number of online purchases reached an all-time record in Poland last year. This was due to the COVID-19 lockdowns. Nevertheless, Poland is still one of the fastest-growing e-commerce markets in Europe. In 2020, online spending reached EUR 10 billion on the main product categories, i.e., clothing, consumer electronics, furniture, food, and toys. This

was an increase of about 25% compared to 2019. Given Poland's strategic location at the crossroads of major transport routes, further improvements to its transport infrastructure, and the growth of urban and cross-border logistics, the market outlook for 2022 remains positive.

The rapid growth of e-commerce is largely driven by the expansion of omnichannel and the rising penetration rate of online retailing (share of total sales). Retailers are focusing on customer experience to enable convenient and quick shopping on any device. In response to customers' needs, they are already developing additional mobile sales channels. This is expected to affect return logistics and improve processing times considerably. With further technological advancements and new sales channels gaining importance, e-commerce tenants will force the warehouse market to change. With warehousing stock for e-commerce growing, it is clear that the rapid expansion of e-commerce in Poland will drive the logistics market. During the observed period, the number of internet users in Poland increased and reached 28.8 million in 2021.

source: [Poland Freight and Logistics Market Size, Forecast \(2022 - 27\)](https://mordorintelligence.com) (mordorintelligence.com)

HEADINGS:

CURRENT SITUATION	MAIN PLAYERS	DEVELOPMENTS & INVESTMENT	LOCATION	KEY MARKET TRENDS

12. The Suez Canal

1a Look at the map below and find information about the Suez Canal under the following headings:

History	Location	Size	Traffic

1b Discuss why this location is crucial to supply chain management flow.



source: gettyimages.com

2a Watch the short news extract and complete the sentences below:

[Suez Canal blocked after huge container ship wedged across it - BBC News - Bing video](#)

- a. The giant container ship ran in the Suez Canal on 28th March, 2021.
- b. The container ship's weight was aroundtonnes.
- c. The ships passing the canal carry aboutof the world's trade.
- d. The container ship was heading towards the when it lost all power and steering.
- e. One reason for this, which seemed to be the case there, was experiencing high
- f. The position of Evergiven totally blocked the
- g. The ship managersout any mechanical or engine failures.
- h. It was the largestever to.....aground in the Suez Canal.
- i. This had hugefor the global trade especially between Asia and Europe.
- j. The main alternative for ships to go between Asia and Europe is to go around

2b Find out information how many days it took to free the container ship and what was the compensation from the ship's owner for the Suez Canal Authority.

2c Imagine what arguments the ship's owner and the Suez Canal Authority might have used to negotiate the compensation deal:

The Suez Canal Authority	The ship's owner
We had to use all the available resources to free the container ship.	It was the weather conditions that caused the ship wedge diagonally.

[Suez Canal blockage: A lasting impact on global trade? | DW News - Bing video](#)

3 Watch the Ted Talk video about the Suez Canal history and decide if the sentences below are True or False. Correct these which are False.

https://www.ted.com/talks/lucia_carminati_how_the_suez_canal_changed_the_world

- a. The Evergiven was only blocking other ships.
- b. First plans to construct the canal were obstructed by cost, politics, and the ever-shifting sands.
- c. Signed in 1798, a pair of concessions gave de Lesseps authority to establish the Suez Canal Company and finance it by selling shares to “capitalists of all nations.”
- d. Foreign workers from all over Europe and the Middle East laboured alongside dredgers and bucket excavators removed 74 million cubic meters of dirt.
- e. The finished canal was 164 kilometres long, with a width of 56 meters at the surface, and it was officially inaugurated on October 17th, 1869.
- f. The canal is a major source of Egypt's national revenue and helped redeem the canal's imperialist legacy.

4 In pairs find out about one of two other canals that are choke points or eyes of a needle for the global supply chain, complete the table below and compare your findings.

	the Panama Canal	the Kiel Canal
History		
Location		
Size		
Traffic		
Possible ramifications of incidents		
Alternative routes		

13. A Future beyond gridlock

1

- How many synonyms for gridlock can you find in a dictionary? Why do they occur?
- What solutions for gridlocks can you see in the pictures below?
- Are the pictures and statistics below good news or bad news? Why?



source: [gettyimages.com](https://www.gettyimages.com)

European road freight transport fell by 0.9 % from 2019 to 2020, breaking the upwards trend recorded in recent years. The main factor was a decrease in international transport, while national transport also fell.

Compared to the first quarter of 2020, the number of tonne-kilometres performed in the EU in the second quarter of 2020 fell by 7.9 %, to 416.0 billion tonne-kilometres.

source: [Statistics | Eurostat \(europa.eu\)](https://www.eurostat.europa.eu)

2a Find 12 words in the word search connected with cars and environment. Words can go in any direction. Words can share letters as they cross over each other.

E	U	R	S	W	O	I	F	W	K	D	L	P	G	Y
N	J	W	O	I	M	T	Q	W	C	O	V	T	T	E
H	P	U	F	P	Y	E	C	H	U	R	J	I	O	N
A	Q	O	A	U	O	O	C	W	R	I	L	Q	E	V
N	V	C	E	K	E	Q	F	R	T	I	B	L	L	I
C	T	Y	L	Z	Z	L	E	G	B	R	N	I	C	R
E	G	E	F	N	J	R	S	A	U	V	X	Q	U	O
K	Y	O	V	M	O	G	N	I	M	O	O	L	L	N
G	Y	S	M	U	T	I	Y	C	T	U	T	Z	F	M
R	N	L	T	S	A	O	O	J	E	L	K	U	H	E
J	U	E	V	T	A	F	K	Q	K	R	J	S	U	N
H	S	X	S	O	H	B	C	Y	K	E	P	X	L	T
C	E	U	I	O	Q	V	A	X	X	I	J	Y	C	R
L	S	I	W	U	R	K	W	Y	F	D	O	Q	K	Q
O	F	O	S	S	I	L	E	V	R	E	S	E	R	P

2b Try to use the words from 2a in the sentences:

- I'd jump behind the _____ and take the new model around the driveway.
- Apart from cars my other great passion is the _____.
- It never really occurred to me that my love of cars and _____ would ever be in conflict with nature.
- Ford and other car companies fill the sky with _____.
- There were some within Ford who believed that all this ecological nonsense should just disappear and that I needed to stop hanging out with "environmental _____."

- f. _____ is the use of natural products and energy in a way that does not harm the environment.
- g. Just think about the _____ that more and more cars are going to have on our daily lives.

3a Watch the Ted Talk by a great-grandson of Henry Ford – Bill Ford whose sentences you have completed in ex. 2b. Can cars and the environment –actually come into harmony? What do you think he is going to talk about?

https://www.ted.com/talks/bill_ford_a_future_beyond_traffic_gridlock

3b Watch the video again from **9.57** to **11.03** and write down the system solutions that are already being used or will be used in the near future in the following cities:

One person should concentrate on one city.

Masdar Abu Dhabi	New York City's 34th Street	Hong Kong

3c Do you think these ideas are practical and might help to reduce congestion and fuel? What other solutions can you think about?



4 Watch the video from **11.03** to **13.01** again and make notes about what Bill Ford calls a smart vehicle network.

14. Future of delivery

1 Discuss the questions below:

- a. What do you know about the ideas in the pictures?
- b. How can they be connected with logistics?
- c. Which of them require infrastructure that still needs to be built?
- d. Which are dedicated to smaller shipments?



HyperloopCargoCap



"I have never worked in a company before where it is so clear where we are going."



DeLorean autonomous starship robot



3D printing delivery

source: [gettyimages.com](https://www.gettyimages.com)

2a You are going to watch a Ted Talk by Alan Amling who is a TED speaker and thought leader on harnessing digital disruption for success. Alan helped drive innovation over a 27-year career with UPS and is currently a Distinguished Fellow at The University of Tennessee and CEO of advisory firm Thrive and Advance LLC.

https://www.ted.com/talks/alan_amling_the_future_of_delivery_in_our_new_on_demand_economy

2b Check your understanding of the following words and phrases before you watch by matching the correct words/phrases to their definitions:

1. pragmatic	a) to believe that something is true without making sure
2. scour	b) a very large road on which you can drive fast for long distances
3. space (v)	c) whenever someone asks
4. customized	d) dealing with problems in a sensible practical way
5. competitive advantage	e) used to say that you do not think something will happen
6. on demand	f) to search a place or thing carefully and completely to find sth
7. profound	g) all the goods in a store or warehouse
8. conform to	h) somebody else has either to agree with your opinion or to leave
9. superhighway	i) to obey a rule, law
10. take for granted	j) made or changed to suit the needs of the owner or user
11. inventory	k) to stop paying attention and just look in front of you without thinking
12. paradigm shift	l) failure to do something that you are supposed to do according to the law or because it is your duty
13. when pigs fly	m) a great and important change in the way something is done or thought about
14. default	n) deep, complete, strong
15. my way or the highway	o) something that makes a company more able to succeed against others

source: www.oxfordlearnersdictionaries.com; www.ldoconline.com

2c While you watch, answer the questions below:

1. What do we take for granted today that didn't exist in the 1980s?
2. How has access to information changed consumers?
3. When was the term Industry 4.0 coined?
4. Which of the ideas from ex. 1 does he mention?
5. What real life example does he use to visualize 'my way highway' logistics?

3a The idiom Alan Amling uses, describes disbelief and lack of trust something will happen. It is illustrated in the picture below. How would you translate it into Polish?



source: [gettyimages.com](https://www.gettyimages.com)

3b In pairs or groups discuss the following questions:

1. Which of the ideas from this lesson might function on everyday basis in 50 years time?
2. Which services will be used for transporting smaller shipments?
3. What benefits can implementing data-traffic (e.g. 3D-printing) bring?
4. Which technologies should be supported by policymakers e.g., by granting subsidies and how they should be restricted e.g., by setting regulative restrictions?

What else does the future hold for e-commerce, delivery systems and transportation?


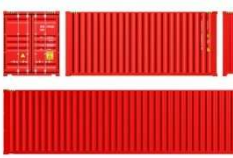

15. Revision


1 Complete the sentences with the words in bold:

sustainable fulfilment distribution accessibility raw resources
depot intermodal inventory facilities customized

- a. _____ is a transportation method that involves the use of more than one mode of transport to move cargo.
- b. The _____ managed in logistics may include tangible goods such as materials, equipment, and supplies, as well as food and other consumable items.
- c. The definition of a _____ s a terminal or storage station, or a place where buses and trains come.
- d. _____ materials meaning describes unprocessed substances or natural resources used to manufacture finished products for sale. They form an integral part of the _____ management and factors of production.
- e. The _____ channels are the different entities that intervene in the business structure and marketing of a product. Its objective is to ensure that the product is transferred from the factory to the final consumer.
- f. Some regions have very poor transportation _____ and little road infrastructure.
- g. A _____ centre stores ecommerce products for the retailers in their warehouse and has them on hand for when an order is placed.
- h. _____ is the design of products, devices, services, vehicles, or environments so as to be usable by people with disabilities.
- i. If a mass-produced product doesn't meet a customer's needs, the customer may seek a _____ solution.
- j. “_____ logistics” refers to the practices and processes aimed at improving supply-chain activities to minimize the impact on the environment.

1 Play the game in groups to revise the material from the script.

<p>1. What is presented in the picture?</p>	<p>4. Explain in English the words: routing and tracking.</p>	<p>27. What solutions for reducing traffic congestion do you know?</p>	<p>28. What is presented in the picture?</p>
			
<p>2. How are Alexander the Great and Napoleon connected with logistics?</p>	<p>5. What does the acronym SKU stand for?</p>	<p>26. How can 3D printers be used in logistics?</p>	<p>29. Move backwards two spaces</p>
<p>3. Define logistics using the following words: control, coordination, management, inventory, delivery, movement goods and people</p>	<p>6. Move forward two spaces</p>		<p>30. What does the acronym FTL stand for?</p>
<p>Start</p>	<p>7. What do you call a metal container with water or chemicals inside for putting out small fires?</p>	<p>24. Where is the Suez Canal and why is it crucial to supply chain flow?</p>	<p>Finish</p>

9. Move backwards three spaces	8. What are three differences between lean and agile supply management?	23. What does the acronym CIF stand for?	22. What does the acronym COD stand for?
10. What do these acronyms stand for? 3PL, SCM	11. What is return logistics?	12. Move backwards three spaces	21. What do you call a piece of equipment, usually made of bars for holding things or for hanging things on?
15. What does the acronym AWB stand for?	14. What do you call gross income from which direct taxes have been deducted?	13. What is presented in the picture? 	20. What does the acronym FMCG stand for?
16. Move forward three spaces	17. What does the acronym POS stand for?	18. Name at least transport modes? (not vehicles or vessels)	19. What does the acronym BOL (B/L) stand for?

17. Netografia

1. <https://www.logmore.com/post/short-history-logistics-tech> (22.10.2019)
2. <https://www.youtube.com/watch?v=ahfyIxLlbGA>, Kings and Generals (22.10.2022)
3. <https://youtube/7LTFdmrjT3k>, LogYcode.com (22.10.2022)
4. <https://businessdictionary.info/definition/logistics/>(22.10.2022)
5. <https://en.wikipedia.org/wiki/Logistics> (21.10.2022)
6. <https://www.merriam-webster.com/dictionary/logistics> (22.10.2022)
7. <https://www.ldoceonline.com/> (22.10.2022)
8. <https://www.oxfordlearnersdictionaries.com/> (22.10.2022)
9. https://en.wikipedia.org/wiki/Military_logistics (22.10.2022)
10. <https://www.bbc.com/news/av/uk-51791393> (8.03.2020)
11. https://www.ted.com/talks/dustin_burke_how_to_fix_broken_supply_chains (18.09.2021)
12. <https://youtu.be/NULoelb7PzA>, Richard Hammond's Big for DiscoveryUK (22.10.2022)
13. <https://youtu.be/iHC9ec591II>, AutoStore (9.03.2018)
14. <https://www.autostoresystem.com/cases> (22.10.2022)
15. <https://www.snagsuccess.com/autostore-review/>(22.10.2022)
16. <https://www.autostoresystem.com/insights/autostore-consumer-report-2021> (8.11.2021)
17. <https://www.bastiansolutions.com/solutions/technology/goods-to-person/autostore> (22.10.2022)
18. <https://panattonieurope.com/eco-warehouse/> (22.10.2022)
19. <https://panattonieurope.com/en-pl/find-properties/panattoni-park-koszalin> (22.10.2022)
20. <https://www.mordorintelligence.com/industry-reports/poland-freight-and-logistics-market> (2021)
21. Lamareon Amy, <https://www.celebritynetworth.com/articles/billionaire-news/polands-newest-billionaire-cashes-in-on-pandemic-fueled-e-commerce-frenzy-to-join-the-three-comma-club/> (17.02.2021)
22. <https://inpost.pl/en/internship#probation-positions-section> (22.10.2022)
23. <https://careers.inpost.co.uk/> (22.10.2022)
24. <https://www.ted.com/search?q=katie%20francfort> (1.10.2016)
25. <https://peopleshop.co.za/imagineering-your-way-through-your-supply-chain-management-career/>(22.10.2022)

26. <https://educationleaves.com>
27. <https://youtu.be/R8rYsCmAEEY> (22.10.2022)
28. <https://aims.education.uk>, <https://youtu.be/xN8g-GcjMbU> (22.10.22)
29. <https://aims.education.uk>, <https://youtu.be/cYqsVEzSBIE> (04.02.2022)
30. <https://youtu.be/tU5Rnd-HM6A>, Allegro Christmas Commercial (28.11.2016)
31. Foy Henry, *Financial Times*, <https://www.ft.com/content/f32c21d0-b6e5-11e6-ba85-95d1533d9a62> (30.11.2016)
32. <https://transport-exhibitions.com/Market-Insights/A-look-at-transport-logistics-in-Poland> (5.04.2017)
33. BBC News, Suez Canal Blockage, <https://youtu.be/C06Q4Mft0yQ> (21.03.2021)
34. DW News, <https://youtu.be/pFtVWndfmUw> (3.03.2021)
35. https://www.ted.com/talks/lucia_carminati_how_the_suez_canal_changed_the_world (22.10.2022)
36. <https://ec.europa.eu/eurostat/databrowser/view/ttr00005/default/map?lang=en> (29.09.2022)
37. https://www.ted.com/talks/bill_ford_a_future_beyond_traffic_gridlock (1.03.2011)
38. https://www.ted.com/talks/alan_amling_the_future_of_delivery_in_our_new_on_demand_economy (1.09.2015)
39. <https://gettyimages.com> (22.10.2022)



Fundusze Europejskie
Wiedza Edukacja Rozwój



Rzeczpospolita
Polska

Unia Europejska
Europejski Fundusz Społeczny



Projekt „Dostępna uczelnia - Politechnika Koszalińska”

Numer projektu POWR.03.05.00-00-A018/20

Projekt współfinansowany przez Unię Europejską ze środków Europejskiego Funduszu Społecznego w ramach Programu Operacyjnego Wiedza Edukacja Rozwój 2014-2020