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АНГЛИЙСКИЙ ЯЗЫК В ЛОГИСТИКЕ

Рекомендовано учебно-методическим советом федерального государственного бюджетного образовательного учреждения высшего образования «Красноярский государственный аграрный университет» для внутривузовского использования в качестве учебного пособия для обучающихся по направлению подготовки 38.04.02 – Менеджмент, направленность (профиль) «Логистика и управление цепями поставок в АПК»

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А 36 **Айснер, Л.Ю.**
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Цель пособия – обучить студентов активному владению английским языком в сфере профессиональной деятельности. Основной задачей учебного пособия является формирование у обучающихся иноязычной коммуникативной компетенции как основы профессиональной деятельности на иностранном языке (английском).

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ОГЛАВЛЕНИЕ

ВВЕДЕНИЕ

Учебное пособие «Английский язык в логистике» адресовано магистрам, обучающимся по направлению подготовки 38.04.02 – Менеджмент, направленность (профиль) «Логистика и управление цепями поставок в АПК».

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Структура учебного пособия выстроена логично: учебное пособие включает в себя следующие разделы: «Введение», шесть тематических глав (разделов), охватывающих основные аспекты профессиональной деятельности менеджеров в сфере логистики, каждый раздел заканчивается тестом для самопроверки, разделы «Задания для самостоятельной работы», «Методические рекомендации по подготовке и написанию аннотации, реферата», «Заключение», в конце учебного пособия приведен список использованной литературы.

Краткий англо-русский словарь логистических терминов, представленный в данном пособии, содержит наиболее употребительные общие термины и терминологические словосочетания в области международных перевозок, а также организации оптовой и розничной торговли, управления грузовыми перевозками и т.д. В словаре собран и систематизирован лексический материал из современной зарубежной научной литературы, освещающей данную тему. Структура словаря определяется практическими задачами, т.е. облегчить пользование справочником, помочь быстро найти нужное слово или словосочетание. Ключевые термины расположены в алфавитном порядке, характерные, наиболее употребительные словосочетания следует искать по определяемому слову. Отдельные слова и словосочетания повторяются в разном окружении. Такая структура способствует дальнейшему развитию у обучающихся языковых навыков и формированию практических умений работы со справочной литературой, необходимой для корректного восприятия и понимания аутентичных профессионально ориентированных текстов.

Для облегчения понимания сложности формулировок основных понятий логистики на английском языке и формирования устойчивых навыков их употребления в профессиональной иноязычной коммуникации в пособии имеется терминологический словарь с определениями базовых логистических терминов.

UNIT 1: HISTORY AND THEORY OF LOGISTICS

Vocabulary:

Words / Word combinations:	
Logistics	логистика
Managerial	управленческий
Organizational	организационный
Production	производство, производственный
Effectively	эффективно
Ensure	обеспечить
Application	применение
Quality	качество
Quantity	количество
Costs	затраты
Quartermaster service	интендантская служба
Treatise	трактат
Military art	военное искусство
Byzantine Emperor	Византийский император
Logistician	логист
Inca Empire	империя инков
Official	чиновник
Dispatch	отправка
Planned economy	плановая экономика
Supply	снабжение
Appear	появляться, возникать
Cause-and-effect relationships	причинно-следственные отношения
Pattern	закономерность
Inherent	присущий, свойственный
Determine	определять
Supply chain	цепь поставок
Material flow	материальный поток

Vocabulary Exercises

Exercise 1.1. Find the Russian equivalents for the English words:

Dispatch; Determine; Cause-and-effect relationships; Quartermaster service; Official; Production; Supply; Planned economy; Supply chain;

Costs; Material flow; Quality; Inherent; Quantity; Ensure; Application; Logistics; Managerial; Logistician; Pattern.

Exercise 1.2. Find the English equivalents for the Russian words:

производственный; чиновник; свойственный; эффективно; появляться, возникать; цепь поставок; организационный; трактат; отправка; снабжение; материальный поток; управленческий; Византийский император; закономерность; затраты; обеспечить; военное искусство; логистика; причинно-следственные отношения.

Exercise 1.3. Make word combinations using the words from the left column (*numbers*) and the words from the right column (*letters*), and translate them into Russian. Each word can be used only <u>once</u>.

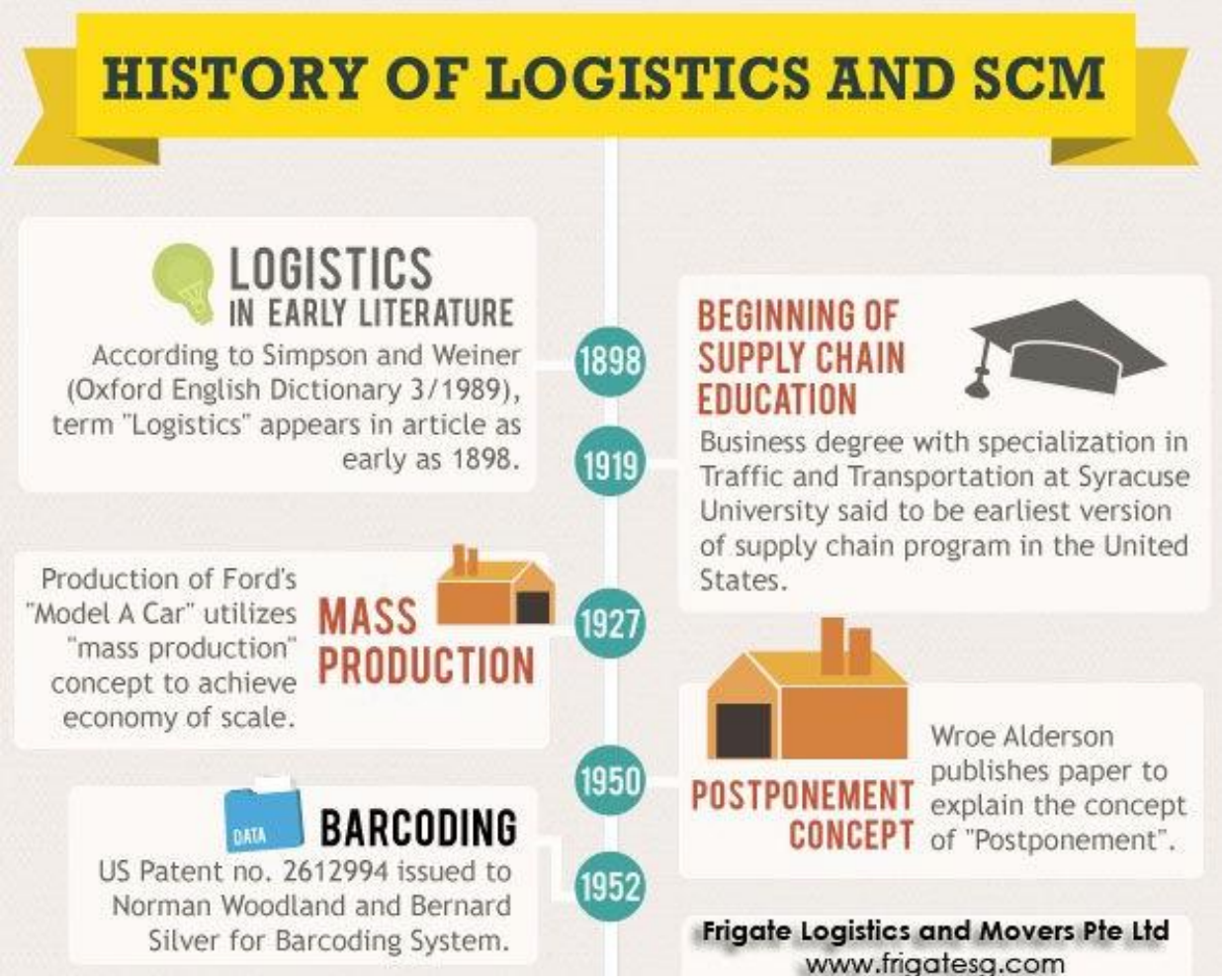
1	Military	a	functions
2	Managerial	b	costs
3	Supply	c	service
4	Inca	d	flow
5	Material	e	art
6	Quartermaster	f	records
7	Planned	g	processes
8	Keep	h	empire
9	Logistic	i	chain
10	Minimal	j	economy

Text. **History and Theory of Logistics**

Logistics is a set of organizational, managerial, production and technological processes to effectively ensure the organization of the movement of material and other resources.

A broader definition of logistics interprets it as the knowledge of planning, managing and controlling the movement of material, informational and financial resources in various systems.

From the point of view of its practical application, logistics is the choice of the most effective option for providing goods of the right quality, the right quantity, at the right time, in the right place at minimal costs.



Picture 1. History of Logistics (Source: Яндекс картинки)

The term “logistics” appeared originally in the quartermaster service of the armed forces and comes from the ancient Greek word “λογιστική”, which means “counting art”. It was first used in Treatises on military art by the Byzantine Emperor Leo VI (865-912). In the Byzantine Empire, there were “logisticians” at the court of the emperor, whose duties included the distribution of food.

Developed logistical methods can be found in many cultures of different eras. For example, in 1572 the Spanish economist Juan Polo de Ondegardo reported that in the Inca Empire, officials kept records of the current necessary products for the Inca court, taking into account the place of dispatch, the delivered products, the delivery time, and, possibly, distance.

The French military specialist Antoine Zhomini introduced the term “logistics” into the Russian language at the beginning of the 19th century. In Soviet times, under the conditions of a planned economy, it was re-

placed by the term “supply”. The enterprises had supply departments, whose task was not only to find the right resource, but to ensure its supply through the decisions of ministries and departments. With the spread of computer technologies, automated logistics systems have appeared.

Theory of Logistics

The content of logistics as a science is the establishment of cause-and-effect relationships and patterns inherent in the process of goods movement, in order to determine and put into practice effective organizational forms and methods of managing material and information flows.

The main objects of research in logistics are:

- logistics operations;
- supply chains;
- logistics systems;
- logistic functions;
- material flows;
- information flows;
- logistics costs.

Text Exercises

Exercise 1.4. Read and translate the text. Look up the meanings of the new words in the dictionary.

Exercise 1.5. Answer the questions:

1. What is logistics?
2. How is logistics broadly interpreted?
3. When and where did the term “logistics” appear?
4. What did the term “logistics” previously mean?
5. What is the practical meaning of logistics?
6. Where and when were the logistical methods used?
7. When was the term “logistics” first used in the Russian language?
8. What term replaced the term “logistics” in Soviet times? Why?
9. What is the scientific content of logistics?
10. What are the main research objects in logistics?

Exercise 1.6. Match the words / word combinations with their definitions:

1. official	a. relating to managers or management
2. dispatch	b. an economic system in which goods and services are made, sold, and shared and prices set by the balance of supply and demand
3. managerial	c. the process of planning and organizing to make sure that resources are in the places where they are needed, so that an activity or process happens effectively
4. logistics	d. the amount of money that is spent to produce goods or services, before any profit is added for the manufacturer or producer
5. (to) supply	e. to provide something that is wanted or needed, often in large quantities and over a long period of time
6. planned economy	f. to send something, especially goods or a message, somewhere for a particular purpose
7. market economy	g. an economic system in which industry is controlled by the government and the government makes all decisions about what to do with the money made
8. costs	h. a person who has a position of responsibility in an organization

Exercise 1.7. Fill in the gaps with the missing information given in the box below:

Logistics; Cause-and-effect relationships; Planning; Officials; Practical application; Minimal costs; Goods movement; Distance; Counting art; Supply; Automated logistics systems; Financial; Dispatch; The term "logistics"; Providing goods.

1. In Soviet times, under the conditions of a planned economy, the term "logistics" was replaced by the term "_____".

2. In the Inca Empire, _____ kept records of the current necessary products for the Inca court, taking into account the place

of_____, the delivered products, the delivery time, and, possibly, _____.

3. The term "_____" appeared originally in the quartermaster service of the armed forces and comes from the ancient Greek word "λογιστική", which means "_____".

4. The content of logistics as a science is the establishment of _____ and patterns inherent in the process of _____.

5. A broader definition of logistics interprets it as the knowledge of _____, managing and controlling the movement of material, informational and _____ resources in various systems.

6. From the point of view of its _____, logistics is the choice of the most effective option for _____ of the right quality, the right quantity, at the right time, in the right place at _____.

7. With the spread of computer technologies, _____ have appeared.

8. The French military specialist Antoine Jomini introduced _____ into the Russian language at the beginning of the 19th century.

Exercise 1.8. Decide if the following statements are *true* or *false*:

1. The term "logistics" comes from the ancient Greek word which means "military art".

2. The Italian military specialist Antoine Jomini introduced the term "logistics" into the Russian language.

3. In the Byzantine Empire, officials kept records of the current necessary products for the Byzantine court.

4. The term "logistics" was first used in Treatises on military art by the Byzantine Emperor Leo VI (865-912).

5. Some main objects of research in logistics are: logistics operations and supply chains.

6. Logistics is the choice of the least effective option for providing goods of the right quality, the right quantity, at the right time, in the right place at minimal costs.

7. Information flows and material flows are not considered the objects of logistics.

8. The Soviet enterprises had supply departments, whose task was not only to find the right resource, but to ensure its supply through the decisions of ministries and departments.

Exercise 1.9. Translate the sentences into English:

1. С распространением компьютерного оборудования появились автоматизированные логистические системы.

2. В Империи инков чиновники вели учёт по текущим необходимым продуктам для инкского двора, при этом учитывались место отправки, доставляемая продукция, срок доставки и, возможно, расстояние.

3. В Византийской империи при дворе императора были «логистики», в обязанности которых входило распределение продуктов питания.

4. Более широкое определение логистики трактует её как учение о планировании, управлении и контроле движения материальных, информационных и финансовых ресурсов в различных системах.

5. В русский язык термин «логистика» ввёл в начале XIX века французский военный специалист Антуан Жомини.

6. Развитые логистические методы можно обнаружить в различных культурах разных эпох.

7. Содержанием логистики как науки является установление причинно-следственных связей и закономерностей, присущих процессу товародвижения, в целях определения и реализации на практике эффективных организационных форм и методов управления материальными и информационными потоками.

8. С точки зрения практического применения логистика – выбор наиболее эффективного варианта обеспечения товаром нужного качества, нужного количества, в нужное время, в нужном месте с минимальными затратами.

Exercise 1.10. Make a summary of the text “History and theory of logistics”.

Test yourself:

1. Logistics is:

a. a person who has a position of responsibility in an organization;

b. a set of organizational, managerial, production and technological processes to effectively ensure the organization of the movement of material and other resources;

c. an amount of money that is spent to produce goods or services, before any profit is added for the manufacturer or producer.

2. The term “logistics” appeared originally in …
a. the Inca Empire;
b. the Russian language at the beginning of the 19th century;
c. the quartermaster service of the armed forces.

3. The name of the specialist to introduce the term “logistics” into the Russian language was…
a. Juan Polo de Ondegardo;
b. Leo the VI-th ;
c. Antoine Zhomini.

4. A broader definition of logistics interprets it as the knowledge of planning, managing and controlling the movement of _____ resources in various systems.
a. material, informational and financial;
b. organizational, managerial, and technological;
c. organizational, technical, and material.

5. One of the main objects of research in logistics is:
a. to satisfy customers;
b. to perform logistics functions;
c. to produce and sell goods.

6. The Inca officials _____ records of the current necessary products for the Inca court.
a. keep;
b. will keep;
c. kept.

7. Logistics _____ the choice of the most effective option for providing goods of the right quality, the right quantity, at the right time, in the right place at minimal costs.
a. was;
b. are;
c. is.

8. In the Byzantine Empire, there were _____ at the court of the emperor, whose duties included the distribution of food.
a. logics;

b. logisticians;
c. logistics.

9. In Soviet times, under the conditions of a _____, it was replaced by the term “supply”.
a. market economy;
b. mixed economy;
c. planned economy.

10. With the spread of computer technologies, automated logistics systems _____.
a. will appear;
b. appeared;
c. have appeared.

UNIT 2: COMMERCIAL LOGISTICS

Vocabulary:

Words / Word combinations:	
Commercial logistics	бизнес-логистика
Commodity circulation	обращение товаров
Purchase	закупка; закупать
Commodity producer	товаропроизводитель
Inventory	товарно-материальная ценность
Intermediation	посредничество
Solution	решение
Formation	образование, формирование
Coincide (with)	совпасть (с)
In accordance with	в соответствии (с)
Emphasize	подчеркивать, акцентировать
Individual enterprise	частное предприятие
Perception	восприятие
Implementation	внедрение
Input	вход, ввод
Output	выход, вывод
Approach	подход, принцип
Company's activities	виды деятельности компании
Dedicated to	посвященный ч-л.

External environment	внешнее окружение
Costs reduction	снижение затрат
Profit growth	рост прибыли
Current	текущий, актуальный
Entrepreneurial	предпринимательский
Increase	рост, увеличение; увеличиваться, возрастать
Cost	стоимость
Entrepreneur	предприниматель
Consignee	товарополучатель
Buyer	покупатель
Ownership	собственность
Supplier	поставщик
Possession	владение
Use	использование
Disposal	распоряжение
Warehouse	склад
Due to	из-за ч-л., по причине ч-л.
Variety	множество, разнообразие
Decision-making	принятие решений
Consumption	потребление
Direction	направление
Implement	внедрять
Guarantee	гарантия; гарантировать
Cargo	груз
Capacity	мощность
Reveal	вскрывать, обнаруживать
Comparison	сравнение
Income	доход
Expenses	расходы
Order lead times	сроки выполнения заказов
Contractual obligations	контрактные обязательства
Impact	воздействие, влияние
Growth	рост
Competitiveness	конкурентоспособность

Vocabulary Exercises

Exercise 2.1. Find the Russian equivalents for the English words:

Individual enterprise; Company's activities; Commercial logistics; Intermediation; Competitiveness; Increase; Ownership; Contractual obligations; Supplier; Consumption; Cargo; Order lead times; External environment; Capacity; Entrepreneur; Disposal; Consignee; Profit growth; Impact; Use; Inventory; Commodity producer; Purchase; Commodity circulation; Possession; Approach.

Exercise 2.2. Find the English equivalents for the Russian words:

покупатель; стоимость; вход, ввод; принятие решений; внедрять; предпринимательский; гарантия; гарантировать; снижение затрат; расходы; в соответствии (с); закупка; закупать; решение; склад; сравнение; доход; текущий, актуальный; множество, разнообразие; направление; вскрывать, обнаруживать; выход, вывод; использование; восприятие; совпасть (с).

Exercise 2.3. Make word combinations using the words from the left column (*numbers*) and the words from the right column (*letters*), and translate them into Russian. Each word can be used only <u>once</u>.

1	Decision	a	obligations
2	Order	b	activities
3	Commercial	c	logistics
4	Individual	d	reduction
5	Company's	e	making
6	Contractual	f	circulation
7	Commodity	g	lead times
8	Costs	h	growth
9	Supplier	i	entrepreneur
10	Profit	j	of goods

Text. **Commercial logistics**

Commercial logistics is the organization of management of economic flow systems in the sphere of commodity circulation. Covering all flow processes in the sphere of circulation, commercial logistics extends to the

purchase of material and technical resources, the sale of finished products of commodity producers and includes logistics operations related to the transformation of inventory and services in the field of commercial intermediation, as well as the development of methods for modeling logistics systems and finding optimal solutions for managing these systems.

The formation of Russian commercial logistics coincided with the beginning of the economic reforms of the 1990s, in accordance with which commercial logistics emphasized market forms of logistics and marketing of finished products. Subsequently, with the formation and development of the logistics systems of individual enterprises and the perception of logistics not only at the technological, but also at the strategic level, it became possible to concentrate commercial logistics on the implementation of the logistics approach at the "input" and "output", to focus logistics on optimizing the final results of the company's activities.

Commercial logistics, or business logistics, is a section of logistics dedicated to the design, formation and optimization of meso- and macrologistic concentration-distribution systems and their effective use in managing logistics flows in the external environment of a commercial or industrial enterprise. The main goal of commercial logistics can be represented as the formation of an integrated system for the regulation and control of material, financial and information flows that ensures competitive product quality, costs reduction and profit growth at the current price level.

The modern understanding of commercial logistics is based on the characteristics of commerce as an entrepreneurial activity, which can only exist if there is a profit generated as a result of an increase in the initial cost of the goods, which is justified by such actions of the entrepreneur as the process of purchasing goods, assuming financial risk for the capital placed in the goods, storage, sale to the consumer at a convenient time for him, in the right assortment, the required quality and the required quantity, providing credit to consignees. The functional content of commercial logistics follows from the economic essence. A commercial firm is both a buyer and a supplier of goods; in the process of commercial activity, the rights of ownership of the goods (possession, use, disposal) change.

From the point of view of the resource aspect, the content of commercial logistics is very diverse: transport, warehouse, information, and other types of logistics. All these components are not only present in commercial logistics, but also, due to the large variety of economic rela-

tions and a wide choice of potential logistics channels, require deep study both at the level of operations research and management decision-making.

Picture 2. Commercial logistics (Source: Яндекс картинки)

Although the general scheme of commerce is in many respects similar to the scheme of production and entrepreneurial activity, it also has serious differences: the material resources acquired by the entrepreneur are bought by him in the form of a finished product, which is then sold to the consumer. These features have a serious impact on the specifics of the logistics of this type of business, which has received the stable name of commercial logistics. If necessary, its individual elements can be combined into trade logistics, which will most clearly reflect such specific functions of trade as the direction of the flow of goods from the producer to the consumer; storage of stocks necessary to ensure timely supply to customers with changing demand; bridging the time gap between production and consumption. The most common is the approach to commercial logistics as a scientific and practical direction, which consists in the effective management of material flows in the areas of production and circulation; as a system that implements transport and warehouse processes, and as a system for providing trade and procurement activities. The main goal of commercial logistics is to adapt to the needs of the consumer, which means ensuring that their orders are completed quickly and delivery conditions are met exactly. This goal is specified in the following tasks:

• guarantee of an optimal system for organizing the flow of materials, cargo and goods, ensuring the reliability of supply at minimal costs and maximizing the use of existing capacities;

• creation of a control system that reveals non-optimized processes and forms new goals for the enterprise based on current comparisons of income and expenses;

• formation of a functional coordinated organizational structure of the enterprise.

Commercial logistics represents transportation, production, marketing, warehousing, etc. as a single, continuous process and is aimed at the development and implementation of such systems for the synchronous management of material, information, financial and other flows, which are based on logistics principles and methods. The implementation of the concept of commercial logistics leads to the following results: a reduction in the production cycle and order lead times, a steady observance of contractual obligations, an increase in the importance of innovative processes and their impact on the growth of competitiveness.

Text Exercises

Exercise 2.4. Read and translate the text. Look up the meanings of the new words in the dictionary.

Exercise 2.5. Answer the questions:

1. What is commercial logistics?
2. When did the formation of commercial logistics begin in Russia?
3. When did Russian commercial logistics start to concentrate on optimizing the final results of the company's activities?
4. What is commercial logistics dedicated to?
5. What are the main goals of business logistics?
6. What is the modern understanding of commercial logistics based on?
7. What is the meaning of commercial logistics from the point of view of the resource aspect?
8. What is the most common approach to commercial logistics?
9. What are the special tasks of commercial logistics?
10. What are results of commercial logistics implementation?

Exercise 2.6. Match the words / word combinations with their definitions:

1	cargo	a	a large building for storing things before they are sold, used, or sent out to shops
2	consumption	b	the process by which money that has been invested in a bank, etc. is lent to people, companies, etc. who want to borrow it
3	entrepreneurial	c	the amount of goods a shop has, or the value of them
4	warehouse	d	the total amount that can be contained or produced
5	intermediation	e	relating to someone who starts their own business or is good at seeing new opportunities to make money
6	competitiveness	f	an amount of something that is used, or the process of using something, esp. so that there is less of it
7	capacity	g	the goods carried by a ship, aircraft, or other large vehicle
8	inventory	h	the fact of being able to compete successfully with other companies, countries, organizations, etc.

Exercise 2.7. Fill in the gaps with the missing information given in the box below:

Optimization; Finished products; External environment; Resource aspect; Commodity producers; Business logistics; Steady observance; Solutions; Consumer; Supplier; Circulation; Functional content; Enterprise; Warehouse; Material resources; Delivery conditions; Commercial intermediation; Buyer; Commercial activity; Entrepreneurial; Goal; Reduction in the production cycle; Competitiveness.

1. From the point of view of the _____, the content of commercial logistics is very diverse: transport, _____, information, and other types of logistics.

2. Commercial logistics, or_____, is a section of logistics dedicated to the design, formation and _____of meso- and macrologistic concentration-distribution systems and their effective use in managing logistics flows in the _____of a commercial or industrial_____.

3. Covering all flow processes in the sphere of_____, commercial logistics extends to the purchase of material and technical resources, the sale of _____of _____ and includes logistics operations related to the transformation of inventory and services in the field of_____, as well as the development of methods for modeling logistics systems and finding optimal _____for managing these systems.

4. The _____of commercial logistics follows from the economic essence.

5. A commercial firm is both a _____and a _____of goods; in the process of_____, the rights of ownership of the goods (possession, use, disposal) change.

6. Although the general scheme of commerce is in many respects similar to the scheme of production and _____activity, it also has serious differences: the _____acquired by the entrepreneur are bought by him in the form of a finished product, which is then sold to the consumer.

7. The main _____of commercial logistics is to adapt to the needs of the_____, which means ensuring that their orders are completed quickly and _____are met exactly.

8. The implementation of commercial logistics results in a _____and order lead times, a _____of contractual obligations, an increase in the importance of innovative processes and their impact on the growth of_____.

Exercise 2.8. Decide if the following statements are *true* or *false*:

1. With the formation and development of the logistics systems of individual enterprises it became possible to focus logistics on optimizing the final results of the company's activities.

2. Commercial logistics includes logistics operations related to the transformation of inventory and services in the field of commercial intermediation.

3. Commercial logistics doesn’t include the development of methods for modeling logistics systems and finding optimal solutions for managing these systems.

4. The general scheme of commerce is similar to the scheme of production and entrepreneurial activity, it has not any serious differences.

5. The task of commercial logistics is to create a control system that reveals non-optimized processes and forms new goals for the enterprise based on current comparisons of income and expenses.

6. The implementation of commercial logistics doesn’t result in a reduction in the production cycle and order lead times.

7. Commercial logistics is the organization of management of economic flow systems in the sphere of production.

8. The functional content of commercial logistics doesn’t come from the economic essence.

Exercise 2.9. Translate the sentences into English:

1. При необходимости отдельные её элементы могут слагаться в торговую логистику, в которой наиболее отчетливо отразятся такие специфические функции торговли, как направление товарного потока от производителя к потребителю; хранение запасов, необходимых для своевременного обеспечения поставок покупателям при изменяющемся спросе; перекрывание временного разрыва между производством и потреблением.

2. Все эти составляющие не только присутствуют в коммерческой логистике, но и, вследствие большого многообразия хозяйственных связей и широкого выбора потенциальных логистических каналов, требуют глубокой проработки как на уровне исследования операций, так и принятия управленческих решений.

3. Коммерческая фирма является одновременно покупателем и поставщиком товара; в процессе коммерческой деятельности изменяются правомочия собственности на товар (владение, пользование, распоряжение).

4. Главную цель коммерческой логистики можно представить в виде формирования интегрированной системы регулирования и контроля материального, финансового и информационного потоков, обеспечивающей конкурентоспособное качество товара, снижение издержек и рост прибыли при текущем уровне цен.

5. Эти особенности оказывают серьезное влияние на специфику логистики данного вида предпринимательства, получившей устойчивое наименование коммерческая логистика.

6. Коммерческая логистика представляет материально-техническое обеспечение, транспорт, производство, сбыт, складирование – единым, непрерывным процессом и направлена на разработку и внедрение таких систем синхронного управления материальными, информационными, финансовыми и прочими потоками, которые основываются на логистических принципах и методах.

7. Коммерческая логистика – это раздел логистики, посвященный проектированию, формированию и оптимизации мезо- и макрологистических концентрационно-распределительных систем и их эффективному использованию при управлении логистическими потоками во внешней среде торгового или промышленного предприятия.

8. Коммерческая логистика распространяется на закупки материально-технических ресурсов, сбыт готовой продукции товаропроизводителей и включает в себя логистические операции, связанные с преобразованием товарно-материальных ценностей и услугами в сфере коммерческого посредничества.

Exercise 2.10. Make a summary of the text "Commercial logistics".

Test yourself:

1. The formation of Russian commercial logistics coincided with:
a. the World War II;
b. the Great October revolution;
c. the beginning of the economic reforms of the 1990s.

2. Commercial logistics is the organization of management of _____in the sphere of commodity circulation.
a. logistics principles and methods;
b. economic flow systems;
c. contractual obligations.

3. The content of commercial logistics is very _____.
a. simple;
b. diverse;
c. productive.

4. _____ is the other name for commercial logistics.
a. competitive logistics;
b. managerial logistics;
c. business logistics.

5. A commercial firm can be both _____of goods.
a. an entrepreneur and a competitor;
b. a buyer and a supplier;
c. a producer and a customer.

6. The main goal of commercial logistics can _____as the formation of an integrated system for the regulation and control of material, financial and information flows.
a. represent;
b. be represented;
c. representing.

7. The modern understanding of commercial logistics _____ on the characteristics of commerce as an entrepreneurial activity.
a. base;
b. bases;
c. is based.

8. The material resources acquired by the entrepreneur _____ by him in the form of a finished product.
a. are bought;
b. bought;
c. buy.

9. Its individual elements can _____ into trade logistics.
a. combine;
b. be combined;
c. combined.

10. The initial cost of the goods is justified by such actions of the entrepreneur as the process of purchasing goods, assuming financial risk for the capital placed in the goods, storage, and sale to the consumer.
a. justifies;
b. justify;
c. is justified.

UNIT 3: PURCHASING AND SALES LOGISTICS

Vocabulary:

Words / Word combinations:	
Purchasing logistics	логистика закупок
Production	производство
Satisfy	удовлетворять
Cost efficiency	экономически эффективные материалы
Suppliers-manufacturers	поставщики-изготовители
Method	метод, способ
Required	требуемый
Amount	количество, объем
In demand	необходимый, требующийся, пользующийся спросом
Sales logistics	сбытовая логистика
Interrelated	взаимосвязанный
Consumer	потребитель
Minimal costs	минимальные затраты
Is aimed at	нацелен(а) на ч-л.
Channel	канал
Route	маршрут
Item	товар
Network	сеть
Object of study	объект изучения
Subject	предмет, субъект
Participant	участник
Manufacturer	производитель
Intermediary institution	посредническая организация
Insurance company	страховая компания
Composition	состав
Distinction	различие
Receipt	получение
Order	заказ
Assembly	комплектация, установка, сборка
Shipment of product	доставка товара, продукции
Place of consumption	место потребления
Post-sales service	послепродажное обслуживание

Accounting	учет
Deployment	дислокация
Distribution center	дистрибьюторский центр
Returnable packaging	возвратная тара
Waste	отходы
Inventory management	управление запасами
Dispersal of goods	распределение товаров
Transfer of ownership	передача права собственности
Maintaining quality standard	поддержание стандартов качества готовой продукции
Tax payment	уплата налога
Pricing	ценообразование, ценовая политика
Competitor	конкурент
Maintenance of relationships	поддержка отношений
Means	средство

Vocabulary Exercises

Exercise 3.1. Find the Russian equivalents for the English words:

Network; Sales logistics; Consumer; Suppliers-manufacturers; Purchasing logistics; Minimal costs; Channel; Means; Interrelated; Satisfy; Item; Cost efficiency; Route; Assembly; Transfer of ownership; Inventory management; Pricing; Composition; Object of study; Shipment of product; Tax payment; Dispersal of goods; Maintaining quality standard; Order; Intermediary institution; Accounting.

Exercise 3.2. Find the English equivalents for the Russian words:

производство; производитель; отходы; поддержка отношений; послепродажное обслуживание; дислокация; страховая компания; конкурент; дистрибьюторский центр; возвратная тара; место потребления; предмет, субъект; получение; нацелен(а) на ч-л.; количество, объем; различие; распределение товаров.

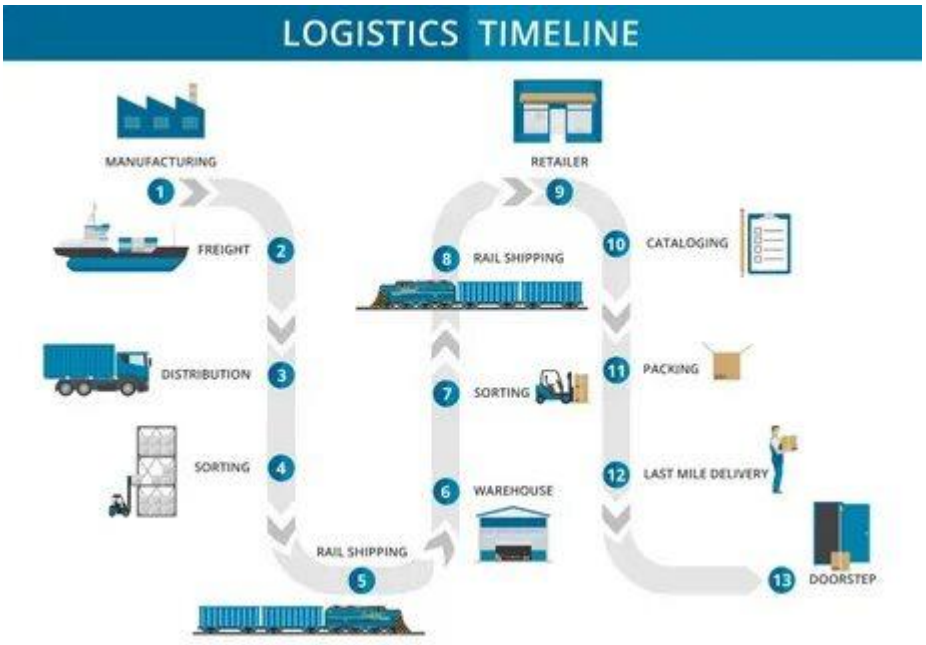
Exercise 3.3. Make word combinations using the words from the left column (*numbers*) and the words from the right column (*letters*), and translate them into Russian. Each word can be used only <u>once</u>.

1	Intermediary	a	of ownership
2	Post-sales	b	service
3	Maintenance	c	logistics
4	Returnable	d	costs
5	Transfer	e	efficiency
6	Distribution	f	institution
7	Purchasing	g	payment
8	Minimal	h	center
9	Cost	i	packaging
10	Tax	j	of relationships

Text. **Purchasing and Sales Logistics**

Purchasing logistics

The main goal of *purchasing logistics* is to satisfy the production with maximum cost efficiency materials, of quality, and in due time. Purchasing logistics is based on the search and choice of alternative suppliers-manufacturers.



Picture 3. Logistics Timeline (Source: Яндекс картинки)

The main methods of purchasing logistics are traditional and operational ones. The traditional method is carried out by supplying the required amount of goods at a time, and the operational method is carried out as the goods are in demand.

Sales logistics

Sales logistics is a complex of interrelated functions implemented in the process of distribution of material and information, cash or service flows between different consumers. Sales logistics is also called *distribution logistics* or *marketing logistics*.

The main goal of sales logistics is to ensure that the right goods are delivered to the right place, at the right time, with minimal costs. So, sales logistics tasks are:

- Deliver products to the consumer in a timely manner.
- Deliver products to the consumer in the required quantity.
- Deliver products to the consumer without compromising its quality.
- Deliver products to the consumer at minimal cost.

Sales or distribution logistics is aimed at solving such problems as: through which channel to bring products to the consumer; how to pack products; which route to choose to send the items; whether logistics needs a network of warehouses; what level of service to provide, as well as a number of other issues.

The marketing logistics *object of study* is the material, information, financial and service flows.

The *subjects* of marketing logistics are the participants of the marketing network: manufacturers; intermediary institutions aggregating various functions of promoting the commodity and material flow (trading and functional intermediaries); final users. The micro- level subjects are: the logistics department; sales department; warehouses; transportation department; information support department; financial department; department of standardization and quality.

The macro- level subjects are: sales organizations; distribution centers and warehouses; transport organizations; insurance companies; information support companies; trade organizations; consulting firms; consumer unions.

Sales logistics functions

There are two main functional approaches to sales logistics: 1. the composition of the main and supporting functions; 2. identification and distinction between the functions of marketing logistics at the micro- and macro- levels.

The composition of the main functions of marketing logistics includes:

- Sales • Storage • Transportation.

The micro- level functions are as follows: • organizing the receipt and processing of orders; • planning the implementation process; • choice of product packaging, its assembly and conservation; • organization of shipment of products; • control over transportation to the place of consumption and delivery of products to the consumer; • organization of post-sales service; • accounting for the movement of finished products in warehouses.

The macro- level functions are: • building the organizational structure of distribution channels and networks; • deployment of distribution centers (bases, warehouses) and other parts of the logistics network in distribution channels; • transportation of finished products, returnable packaging and waste; • warehousing; • inventory management, consolidation and dispersal of goods; • transfer of ownership of finished products; ensuring the safety and protection of goods.

The composition of the supporting functions includes: standardization, financing, risk insurance, information and scientific support, logistics services. The micro- level functions are as follows: maintaining quality standards for finished products; calculation of tax payments and profits, accounting; monitoring the implementation of the product supply plan. The macro- level functions are: risk insurance; pricing; information and computer support for sales, and special logistics functions.

Sales logistics plans and ensures the delivery of products from the manufacturer to consumers by carrying out: • continuous study of consumer demand; • study of products created by competitors; • collection of complete information about goods of own production; • search for real and potential customers, creation, maintenance and development of relationships with them; • putting forward proposals on ways to adapt their own production to the needs of consumers in order to maximize their satisfaction; • selection of distribution channels for products, intermediaries; • organization of deliveries and their control; • participation in the formation of the strategy and tactics of the enterprise in the planning of production and costs.

Sales logistics looks for ways and means to optimize distribution channels. The *key concepts* in distribution logistics are the distribution channel and the supply chain.

A distribution channel is a partially arranged set of entities to carry out the material flow from the producer to the consumer. *The logistics supply chain* (LSC) is an optimized set of entities that bring the material flow from the manufacturer to the consumer.

Text Exercises

Exercise 3.4. Read and translate the text. Look up the meanings of the new words in the dictionary.

Exercise 3.5. Answer the questions:

1. What is purchasing logistics based on?
2. What is the main goal of purchasing logistics?
3. What is the difference between traditional and operational methods in purchasing logistics?
4. What is sales logistics?
5. What are the aims and tasks of sales logistics?
6. What are the objects and subjects of study in sales logistics?
7. Which functions does marketing logistics perform?
8. What are the micro- and macro-level functions of marketing logistics?
9. What are the supporting functions of sales logistics?
10. What does marketing logistics plan and ensure?
11. What are the key concepts in distribution logistics?
12. What is “A distribution channel”?
13. What is “The supply chain”?

Exercise 3.6. Match the words / word combinations with their definitions:

1	deployment	a	unwanted matter or material of any type, especially what is left after useful substances or parts have been removed
2	order	b	use of something or someone, especially in order to achieve a particular effect
3	accounting	c	goods that are easily made available, or a detailed list of goods, property, etc.
4	competitor	d	a request to make, supply, or deliver food or goods
5	waste	e	a person who buys goods or services for their own use
6	inventory	f	the process of putting together the parts of a machine or structure, or the thing produced by this process

7	consumer	g	the skill or activity of keeping records of the money a person or organization earns and spends
8	assembly	h	a person or a business trying to be more successful than each other, for example by making more sales in a market

Exercise 3.7. Fill in the gaps with the missing information given in the box below:

Channel; Supply chain; Maintaining quality standards; Macro-level; The right goods; Pricing; Suppliers-manufacturers; Minimal costs; Warehouses; a timely manner; Sales logistics; Tax payments; Purchasing logistics; Compromising its quality; Consumers; Route; Key concepts; The right place; The required quantity.

1. The micro- level functions are as follows: _____ for finished products; calculation of_____ and profits, accounting; monitoring the implementation of the product supply plan.
2. _____ is a complex of interrelated functions implemented in the process of distribution of material and information, cash or service flows between different_____.
3. Sales or distribution logistics is aimed at solving such problems as: through which _____to bring products to the consumer; how to pack products; which _____to choose to send the items; whether logistics needs a network of_____; what level of service to provide, as well as a number of other issues.
4. The _____in distribution logistics are the distribution channel and the_____.
5. _____ is based on the search and choice of alternative_____.
6. The main goal of sales logistics is to ensure that _____ are delivered to the right place, at the right time, with _____.
7. The _____ functions are: risk insurance; _____; information and computer support for sales, and special logistics functions.
8. Sales logistics tasks are: 1) deliver products to the consumer in _____; 2) deliver products to the consumer in _____; 3) deliver products to the consumer without _____; 4) deliver products to the consumer at minimal cost.

Exercise 3.8. Decide if the following statements are *true* or *false*:

1. Purchasing logistics is a complex of interrelated functions implemented in the process of distribution of material and information, cash or service flows between different consumers.
2. The main methods of marketing logistics are traditional and operational ones.
3. The objects of study of marketing logistics are the participants of the marketing network: manufacturers; intermediary institutions aggregating various functions of promoting the commodity and material flow (trading and functional intermediaries); final users.
4. The marketing logistics subjects of study are the material, information, financial and service flows.
5. The key concepts in distribution logistics are the distribution channel and the supply chain.
6. The logistics supply chain is a set of entities that carry out the material flow from the producer to the consumer.
7. The composition of the main functions of marketing logistics includes: • Sales • Storage • Transportation.
8. The main goal of sales logistics is to ensure that the right goods are delivered to the right place, at the right time, with minimal costs.

Exercise 3.9. Translate the sentences into English:

1. Закупочная логистика осуществляет поиск и выбор альтернативных поставщиков-изготовителей.
2. Субъектами сбытовой логистики являются участники сбытовой сети: производители; посреднические институты, агрегирующие разные функции продвижения товарно-материального потока (торговые и функциональные посредники); конечные потребители.
3. Основной целью сбытовой логистики является обеспечение доставки нужных товаров в нужное место, в нужное время с оптимальными затратами.
4. Ключевыми понятиями в сбытовой логистике являются распределительный канал и логистическая сбытовая цепь.
5. Состав обеспечивающих функций: стандартизация, финансирование, страхование от рисков, информационное и научное обеспечение, логистический сервис.
6. Основными способами логистики закупок являются традиционный и оперативный способы.

7. Задачи сбытовой логистики: 1) доставить потребителю продукцию своевременно; 2) доставить потребителю продукцию в нужном количестве; 3) доставить потребителю продукцию без ущерба для её качества; 4) доставить потребителю продукцию с минимальными затратами.

8. Основной целью логистики закупок является удовлетворение производства материалами с максимальной экономической эффективностью, качеством и кратчайшими сроками.

Exercise 3.10. Make a summary of the text "Purchasing and Sales logistics".

Test yourself:

1. The tasks of sales logistics do not include:
a. delivery of products to the consumer in a timely manner;
b. insurance of products;
c. delivery of products to the consumer in the required quantity.

2. Sales logistics is also called …
a. purchasing logistics;
b. commercial logistics;
c. distribution logistics.

3. The key concept in distribution logistics is …
a. a manufacturer;;
b. a consumer;
c. the supply chain.

4. A distribution channel is …
a. cash or service flows between different consumers;
b. a set of entities that bring the material flow from the manufacturer to the consumer;
c. a partially arranged set of entities to carry out the material flow from the producer to the consumer.

5. The composition of the main functions of marketing logistics includes:
a. transportation;

b. production;
c. assembly.

6. One of the main methods of purchasing logistics is:
managerial;
international;
traditional.

7. The macro- level functions of sales logistics do not include:
a. returnable packaging and waste;
b. transfer of ownership of finished products;
c. maintaining quality standards for finished products.

8. The micro- level subjects of marketing logistics are:
a. distribution centers and warehouses;
b. department of standardization and quality;
c. insurance companies.

9. The macro- level subjects of marketing logistics are:
a. sales department;
b. department of standardization and quality;
c. consumer unions.

10. The purchasing logistics operational method is carried out …
a. by supplying the required amount of goods at a time;
b. as the goods are in demand;
c. in due time.

UNIT 4: TRANSPORT AND CUSTOMS LOGISTICS

Vocabulary:

Words / Word combinations	
Substance	вещество
Route	маршрут
Stipulated time	предусмотренный срок
Harm	вред, ущерб
Path	направление
Vehicle	транспортное средство

Pendulum	маятник
Ring	кольцо
Length	длина
Negative impact	негативное воздействие
External	внешний
Joint	совместный
Modes of transport	виды транспорта
Technological unity	технологическое единство
Interconnected	взаимосвязанный
Through warehousing	сквозное складирование
Permanent	постоянный
Re-completed	заново укомплектованный
Re-registered	перерегистрированный
Batch	партия (товаров)
Pallet	поддон
Composition	состав
Perishable	скоропортящийся
Unprofitable	невыгодный, неприбыльный
Turnover	товарооборот
Remote order	дистанционный заказ
Benefit	преимущество
Reducing	снижение
Eliminating	устранение
Storage costs	расходы на хранение
Expanding	увеличение
Retail	розничный, розница
Accidental	случайный, непредвиденный
Splitting	разъединение
Customs logistics	таможенная логистика
Border	граница
Execution	заполнение (документов), исполнение
Assessment	оценивание
Compliance with	соответствие ч-л.
Accompanying	сопровождение

Vocabulary Exercises

Exercise 4.1. Find the Russian equivalents for the English words:

Technological unity; Through warehousing; Retail; Customs logistics; Transport logistics; Pallet; Storage costs; Accompanying; Batches; Unprofitable; Eliminating; Modes of transport; Re-completed; Remote order; Border; Perishable; Length; Path; Vehicle; Stipulated time Stipulated time; Assessment; Re-registered; Substance; Negative impact; Composition; Benefit.

Exercise 4.2. Find the English equivalents for the Russian words:

маршрут; внешний; расходы на хранение; случайный, непредвиденный; сопровождение; сквозное складирование; партии (товаров); разъединение; транспортное средство; кольцо; вред, ущерб; предусмотренный срок; дистанционный заказ; товарооборот; совместный; заполнение (документов), исполнение; соответствие ч-л.; розничный, розница; невыгодный, неприбыльный.

Exercise 4.3. Make word combinations using the words from the left column (*numbers*) and the words from the right column (*letters*), and translate them into Russian. Each word can be used only <u>once</u>.

1	Technological	a	impact
2	Modes	b	products
3	Customs	c	order
4	Pendulum	d	splitting
5	Negative	e	unity
6	Perishable	f	of transport
7	Accidental	g	logistics
8	Stipulated	h	route
9	Storage	i	time
10	Remote	j	costs

Text. **Transport and Customs Logistics**

Transport logistics

Transport logistics is a system for organizing delivery of any material objects, substances, etc. The optimal route is considered the route along which it is possible to deliver the logistics object in the shortest possible

time (or the stipulated time) with minimal costs, as well as with minimal harm to the delivery object.

Route types

The route in which the path of the vehicle in the forward and reverse directions passes along the same track is called *a pendulum route*. A route in which the path of the vehicle is a closed loop is called *a ring route*. The distance traveled by a vehicle from the starting point to the final point is called *the route length*.

The main function of transport logistics is *transportation*. Transportation consists in the movement of products by a vehicle according to a certain technology in the supply chain and consists of logistics operations and functions.

Picture 4. The Steps of Global Logistics (Source: Яндекс картинки)

Harm for the delivery object is considered to be a negative impact on the logistics object both from external factors (transportation conditions) and from the time factor during the delivery of objects falling into this category.

The tasks of transport logistics are:

1. Selecting the type of vehicle.

2. Joint planning of transport processes with warehouse and production operations.

3. Joint planning of transport processes for various modes of transport.

4. Ensuring the technological unity of the transport and storage process.

5. Determination of rational delivery routes.

All these tasks are solved interconnected, in a complex way.

Cross-docking, or *through warehousing* is the process of receiving and shipping goods through the warehouse directly, without placement in the long-term storage area. Cross-docking is a set of logistics operations within the supply chain, thanks to which the shipment from the warehouse and the delivery of goods are most accurately coordinated in time. As a result, the products are delivered within the stipulated time.

Cross-docking can be of several types:

• one-stage cross-docking - the cargo passes through the warehouse as a permanent separate order;

• two-stage cross-docking - the arrived cargo is re-completed (re-registered, divided into groups, marked) and then sent to customers;

• three-stage cross-docking - several different cargoes are regrouped and original batches are formed from them for shipment to customers.

Storage of goods in the warehouse in both cases is excluded. Also, as a rule, the pallet remains the unit of movement without changing its composition.

Goods of high demand and a significant amount of transportation such as consumer goods that are in constant demand, perishable products, high quality goods are considered optimal for through storage. The organization of cross-docking is unprofitable when a turnover is small, or there is a need for long-term storage of goods. Conversely, companies with large volumes of remote orders prefer to use the services of cross-docking providers to minimize shipping costs.

Benefits of cross-docking are as follows:

• Optimizing the supply chain from point of origin to point of sale.

• Reducing labor costs due to fewer operations.

• Reducing overall costs by reducing storage time and the need for safety stocks.

• Products are delivered to the distributor and therefore to the customer faster.

• Reducing or eliminating storage costs.

• Expanding retail product line.

• Reducing the risks associated with warehousing.

Possible risks of cross-docking are:

• Potential partners may not have the necessary infrastructure.

• An adequate vehicle fleet is required for operation.

• A computerized logistics system is needed.

• Additional handling of the shipment may result in damage to the products.

• Labor costs associated with the movement and delivery of inventory.

• Accidental splitting of packages larger than one pallet can result in multiple deliveries or lost orders.

Customs logistics

Customs logistics is a set of measures aimed at moving cargo across the border while minimizing the costs of these procedures. Customs logistics solves the following tasks:

1. implementation of transportation of imported and exported cargo;
2. obtaining the necessary certificates for imported / exported goods;
3. execution of customs documentation;
4. assessment of the cost, condition and compliance with customs requirements of the cargo;
5. accompanying the further movement of cargo that has passed the customs border.

Text Exercises

Exercise 4.4. Read and translate the text. Look up the meanings of the new words in the dictionary.

Exercise 4.5. Answer the questions:

1. What is transport logistics?
2. What are the route types in transport logistics?
3. What is the basic function of transport logistics?
4. What are the aims and tasks of transport logistics?
5. What is cross-docking?
6. How many types of cross-docking are there?
7. What are the benefits of cross-docking?
8. What are the risks of cross-docking?
9. What is customs logistics?
10. What are the aims and tasks of customs logistics?

Exercise 4.6. Match the words / word combinations with their definitions:

1	pallet	a	the activity of selling goods to the public, usually in small amounts, for their own use
2	batch	b	judging or deciding the amount, value, quality, or importance of something
3	turnover	c	used to describe products, especially food, that decay quickly
4	assessment	d	a powerful effect that something, especially something new, has on a situation or person
5	perishable	e	the amount of business that a company does in a period of time
6	impact	f	a line that has been agreed to divide one country from another
7	retail	g	a group of things that are dealt with or produced at the same time, or a group of people who are similar in some way
8	border	h	a flat wooden structure that heavy goods are put onto so that they can be moved using a fork-lift truck

Exercise 4.7. Fill in the gaps with the missing information given in the box below:

Demand; Supply chain; Placement; Through warehousing; Through storage; Track; Shipping goods; Overall costs; Products; Obtaining the necessary certificates; a closed loop; Logistics operations; Customs logistics; Customs border; Minimizing; Accompanying; Eliminating storage costs.

1. Goods with high _____ and a significant amount of transportation such as consumer goods that are in constant demand; perishable products; high quality goods are considered optimal for_____ .
2. A route in which the path of the vehicle is _____is called a ring route.
3. Cross-docking, or _____ – the process of receiving and _____ through the warehouse directly, without _____ in the long-term storage area.

4. The route in which the path of the vehicle in the forward and reverse directions passes along the same _____ is called a pendulum route.

5. Transportation consists in the movement of _____ by a vehicle according to a certain technology in the _____ and consists of _____ and functions.

6. _____ is a set of measures aimed at moving cargo across the border while _____the costs of these procedures.

7. Customs logistics solves the tasks of _____ for imported / exported goods and _____ of the further movement of cargo that has passed the_____.

8. Benefits of cross-docking are as follows: reducing _____ by reducing storage time and the need for safety stocks, and reducing or_____.

Exercise 4.8. Decide if the following statements are *true* or *false*:

1. A route in which the path of the vehicle is a closed loop is called a pendulum route.

2. The distance traveled by a vehicle from the starting point to the final point is called the route length.

3. Possible risk of cross-docking is reducing or eliminating storage costs.

4. Customs logistics solves the task of customs documentation execution.

5. Two-stage cross-docking means that several different cargoes are regrouped and original batches are formed from them for shipment to customers.

6. Transport logistics is a system for organizing delivery of any material objects or substances.

7. The organization of cross-docking is profitable when a turnover is small.

8. The tasks of transport logistics are solved interconnected.

Exercise 4.9. Translate the sentences into English:

1. Одноэтапный кросс-докинг означает, что груз проходит через склад в качестве неизменного отдельного заказа; двухэтапный кросс-докинг означает, что прибывший груз заново комплектуется (переоформляется, разделяется по группам, маркируется) и затем отправляется заказчикам; трёхэтапный кросс-докинг означает, что несколь-

ко разных грузов подвергаются перегруппировке и из них формируются оригинальные партии для отправки заказчикам.

2. Одним из преимуществ сквозного складирования является то, что оно снижает общие затраты за счёт сокращения времени хранения и необходимости иметь страховочные запасы.

3. К рискам сквозного складирования относится то, что дополнительная обработка груза может привести к повреждениям продуктов.

4. Под термином «таможенная логистика» подразумевается комплекс мероприятий, который направлен на перемещение груза через границу с минимизацией затрат на эти процедуры.

5. Транспортировка заключается в перемещении продукции транспортным средством по определенной технологии в цепи поставок и состоит из логистических операций и функций.

6. При небольшом товарообороте, а также при потребности в длительном хранении грузов организация кросс-докинг невыгодна.

7. Путь, проходимый транспортным средством от начального до конечного пункта, называется длиной маршрута.

8. Задачами транспортной логистики являются: совместное планирование транспортных процессов на различных видах транспорта и определение рациональных маршрутов поставки.

Exercise 4.10. Make a summary of the text “Transport and Customs logistics”.

Test yourself:

1. The route in which the path of the vehicle in the forward and reverse directions passes along the same track is called ...

a) direct route;
b) ring route;
c) pendulum route.

2. One-stage cross-docking means …

a) the arrived cargo is re-completed (re-registered, divided into groups, marked) and then sent to customers;

b) several different cargoes are regrouped and original batches are formed from them for shipment to customer;

c) the cargo passes through the warehouse as a permanent separate order.

3. Two-stage cross-docking means …

a) the arrived cargo is re-completed (re-registered, divided into groups, marked) and then sent to customers;

b) several different cargoes are regrouped and original batches are formed from them for shipment to customer;

c) the cargo passes through the warehouse as a permanent separate order.

4. Three-stage cross-docking means …

a) the arrived cargo is re-completed (re-registered, divided into groups, marked) and then sent to customers;

b) several different cargoes are regrouped and original batches are formed from them for shipment to customer;

c) the cargo passes through the warehouse as a permanent separate order.

5. A route in which the path of the vehicle is a closed loop is called …

a) direct route;
b) pendulum route;
c) ring route.

6. _____is the process of receiving and shipping goods through the warehouse directly, without placement in the long-term storage area.

a) Transport logistics;
b) Route type;
c) Cross-docking.

7. _____ is a set of measures aimed at moving cargo across the border while minimizing the costs of these procedures.

a) Sales logistics;
b) Customs logistics;
c) Purchasing logistics.

8. Customs logistics doesn’t solve the task:

a) execution of customs documentation;
b) expanding retail product line;
c) implementation of transportation of imported and exported cargo.

9. _____ consists in the movement of products by a vehicle according to a certain technology in the supply chain and consists of logistics operations and functions.

a) Production;

b) Transportation;

c) Assessment of the cost, condition and compliance with customs requirements of the cargo.

10. One of the benefits of cross-docking is …

a) additional handling of the shipment may result in damage to the products;

b) accidental splitting of packages larger than one pallet can result in multiple deliveries or lost orders;

c) optimizing the supply chain from point of origin to point of sale.

UNIT 5: COMPLEX LOGISTICS

Vocabulary:

Words / Word combinations:	
Complex logistics	комплексная логистика
Entire	полный
Life cycle	цикл жизни (товара)
Related	связанный, относящийся
Order execution	выполнение заказа
Logistics agent	логистический агент
Allow	позволять, разрешать
Evenly	равномерно
Undesirable circumstance	нежелательное обстоятельство
Overcome	преодолеть
Extremely	крайне
Consistency	согласованность
Variability	разнообразие, изменчивость
Individual activity	отдельный вид деятельности
Purpose	цель
Continuity	бесперебойность
Acceleration	ускорение
Order service cycle	цикл обслуживания заказа
Complex agency	комплексное агентирование

Customs clearance	таможенное оформление, тамо-женная очистка
Collection	сбор
Interaction	взаимодействие
Customs authority	таможенный орган
Ratio of insurance premium	коэффициент страховой премии
Throughout	в течение
Delivery cycle	цикл поставки
Reliable	надежный
Assessment of damage	оценка ущерба
Insurance payment	страховая выплата
Complement	дополнять
Enhance	усиливать
Logistics division	логистическое подразделение
One-time	разовый, единовременный
Shortage	дефицит
Labor	труд
Launch of new projects	запуск новых проектов
Core business	основной бизнес
Evaluation	оценивание
Effectiveness	эффективность
Assign	предписывать, относить
Liability	ответственность
Agent's account	счет агента
Reduction in risks	снижение рисков
Growth	рост
Revenue	выручка
Relative	относительный
Performance indicator	показатель деятельности
Scheduled	запланированный
Groupage	сборный, сгруппированный; группа
Tool	инструмент
Implementation	внедрение, введение
Consignment	партия
Is affected by	подвержено влиянию ч-л.
Intersection	пересечение
Participant	участник

Advantage	преимущество
Flight	рейс, рейд
Benefit	преимущество
Risk aversion	уклонение от рисков
Replenishment	пополнение
Receivables	дебиторская задолженность
Profit	прибыль
Liquid risk	ликвидный риск
Insolvency of debtors	неплатежеспособность дебиторов
Interest rate	процентная ставка
Exchange rate	обменный курс
Price index (pl. – indices)	ценовой индекс (мн.ч. – индексы)
Imperfection	несовершенство
Insufficient qualification	недостаточная квалификация
Personnel	персонал
Adverse external event	неблагоприятное внешнее событие

Vocabulary Exercises

Exercise 5.1. Find the Russian equivalents for the English words:

Delivery cycle; Customs clearance; Continuity; Order execution; Evenly; Replenishment; Implementation; Complex logistics; Purpose; Life cycle; Exchange rate; Ratio of insurance premium; Variability; Reduction in risks; One-time; Consignment; Evaluation; Advantage; Profit; Receivables; Scheduled; Performance indicator; Interaction; Interest rate; Collection; Effectiveness; Personnel; Assign; Adverse external event; Insufficient qualification.

Exercise 5.2. Find the English equivalents for the Russian words:

преимущество; прибыль; таможенное оформление; связанный, относящийся; выполнение заказа; отдельный вид деятельности; ускорение; выручка; в течение; цикл обслуживания заказа; логистическое подразделение; запуск новых проектов; разнообразие, изменчивость; рейд, рейс; инструмент; подвержено влиянию ч-л.; оценка ущерба; труд; дефицит; участник; партия; нежелательное обстоятельство; дебиторская задолженность; ответственность; счет агента; цикл поставки.

Exercise 5.3. Make word combinations using the words from the left column (*numbers*) and the words from the right column (*letters*), and translate them into Russian. Each word can be used only <u>once</u>.

1	Customs	a	of new projects
2	Complex	b	activity
3	Undesirable	c	risk
4	Individual	d	agency
5	Launch	e	authority
6	Ratio	f	of debtors
7	Liquid	g	index
8	Risk	h	circumstance
9	Insolvency	i	aversion
10	Price	j	of insurance premium

Text. **Complex logistics**

Complex logistics is a systematic approach to organizing the entire life cycle of a product and related activities in the period from the moment of production of its components to the moment of consumption. This is an effective system for managing material, informational and financial flows associated with the life cycle of a product.

Picture 5. Logistics Center (Source: Яндекс картинки)

The main object of analysis of the logistics system is the functional cycle of order execution. The main task of a logistics agent is to plan the structure of the functional cycle, which will allow logistics tasks to be

completed as quickly as possible, but most importantly more evenly. The minimum cycle can be considered if undesirable circumstances are overcome in the shortest possible time; maximum - if overcoming the same undesirable circumstances requires an extremely long time period.

The task of managing the functional cycle is to ensure consistency of actions by controlling the variability in individual activities, if possible, to achieve the completion of the overall cycle within the normative or expected terms of order execution. The purpose of the logistics operator is to ensure the continuity and acceleration of the order service cycle. Complex agency includes:

- logistics agency,
- customs agency,
- insurance agency,
- contract agency,
- financial agency.

Logistics agency is the construction of an optimal supply chain, processing and storage of components and goods in warehouses, organization of transportation in the international space. Customs agency includes activities for choosing a point of customs clearance, collection and preparation of documents, early declaration of goods before they arrive at the point of customs control, interaction with customs authorities in the process of clearance of goods. Insurance agency includes determining the optimal ratio of insurance premium, sums and risks insured, choosing an insurance partner, paperwork, insurance support of cargo throughout the entire delivery cycle, a reliable assessment of damage (if any), the organization of insurance payments.

Contract agency is a special product, individually designed to solve a set of Client's tasks related to business logistics support. It complements, enhances and gives new opportunities to the already existing logistics division of the Client's company with a one-time or constant increase in the volume of logistics work, a shortage of labor and financial resources (seasonal peaks, launches of new projects, etc.). It provides the possibility of full concentration of the Client on the core business, saves resources and time, and allows reducing activities that are not related to the core business, which increases the efficiency of the Customer's core business.

Financial agency is a set of the special financial instruments or their combination, allowing optimizing international financial flows associated with the functional cycle of the product.

Evaluation of the effectiveness of complex agency services

Complex agency services assign the risks and liability arising in connection with the execution of the Client's instructions to the Agent's account, which is the single center of responsibility of the complex agency system. The client receives a significant reduction in risks, financial, logistical and organizational support for the growth of the total number of shipments, which significantly increases the total revenue, and positively affects the absolute and relative performance indicators.

Scheduled groupage cargo shipments

One of the most modern and effective tools used in the implementation of the concept of the complex logistics service is the regular dispatch of consignments of groupage cargo along certain routes in accordance with a predetermined schedule. In operations with consolidated cargoes, logistics agency requires maximum control over material, financial and information flows in real time, as it is affected by the maximum number of various risks and is associated with the intersection of the interests of the largest number of participants in the logistics market.

The advantage of scheduled route shipments is an additional opportunity for the Client to independently and in advance plan their shipments for a specific flight, which optimizes the process of planning a change in the stages of the life cycle of goods.

Benefits for the Client of using a complex logistics service are:

- risk aversion;
- preferential terms of payment;
- replenishment of working capital;
- increasing the liquidity of receivables;
- acceleration of working capital turnover;
- improving the structure of the balance sheet and the emergence of new opportunities for loans to expand the business or start working with a new group of goods;
- expansion of market share;
- growth in purchases;
- expansion of the range;
- sales growth;
- profit growth.

The main *risks* in the complex agency system are:

- liquid risks of late payment for goods and services;
- credit risks of insolvency of debtors;
- interest rate risks of a sharp change in the cost of credit resources;

• currency risks associated with unfavorable changes in exchange rates;

• price risks associated with unfavorable changes in price indices;

• operational risks caused by errors or imperfection of processes in the organization, errors or insufficient qualification of personnel or adverse external events.

Text Exercises

Exercise 5.4. Read and translate the text. Look up the meanings of the new words in the dictionary.

Exercise 5.5. Answer the questions:

1. What is Complex logistics?
2. What is the main object of analysis of the logistics system?
3. What is the main task of a logistics agent?
4. What is the task of managing the functional cycle?
5. What is the purpose of the logistics operator?
6. What does complex agency include?
7. What is considered logistics agency?
8. Which activities does customs agency include?
9. What does insurance agency do?
10. What is contract agency?
11. What is financial agency?
12. What do complex agency services assign?
13. What are the effective tools of the complex logistics service?
14. Why does the client benefit using a complex logistics service?
15. What are the risks in the complex agency system?

Exercise 5.6. Match the words / word combinations with their definitions:

1	interaction	a	the act of sending goods to a bu siness that ordered them
2	continuity	b	the people who are employed in a company, organization, or one of the armed forces
3	revenue	c	an occasion when two or more peo-ple or things communicate with or react to each other

4	consignment	d	smth. or smb. that is accurate or able to be trusted
5	authority	e	the fact of something continuing for a long period of time without being changed or stopped
6	personnel	f	the income that a government or company receives regularly
7	shortage	g	a group of people with official responsibility for a particular area of activity
8	reliable	h	a situation in which there is less of something than people want or need

Exercise 5.7. Fill in the gaps with the missing information given in the box below:

Functional cycle; Logistics agent; Support; Insurance premium; Complex logistics; Expand the business; Financial; Qualification; Logistics operator; Balance sheet; Organization; Service cycle; Insurance; Client's tasks; Insured; Consumption.

1. The purpose of the _____ is to ensure the continuity and acceleration of the order _____.

2. Operational risks can be caused by errors or imperfection of processes in the_____, errors or insufficient _____ of personnel or adverse external events.

3. Improving the structure of the _____and the emergence of new opportunities for loans to _____ or start working with a new group of goods is beneficial for the Client.

4. Comprehensive agency includes _____ agency and _____ agency.

5. The main task of a _____ is to plan the structure of the_____, which will allow logistics tasks to be completed as quickly as possible.

6. Contract agency is a special product, individually designed to solve a set of _____ related to business logistics _____.

7. Insurance agency includes determining the optimal ratio of _____, sums and risks _____, choosing an insurance partner.

8. _____ is a systematic approach to organizing the entire life cycle of a product and related activities in the period from the moment of production of its components to the moment of _____.

Exercise 5.8. Decide if the following statements are *true* or *false*:

1. The maximum cycle can be considered if undesirable circumstances are overcome in the shortest possible time; minimum – if overcoming the same undesirable circumstances required an extremely long time period.

2. The purpose of the logistics operator is to ensure the continuity and acceleration of the order service cycle.

3. One of the most modern and effective tools used in the implementation of the concept of an integrated logistics service is the irregular dispatch of consignments of groupage cargo along uncertain routes in accordance with an approximate schedule.

4. Logistics agency in operations with consolidated cargoes requires minimum control over material, financial and information flows in real time.

5. Customs logistics is a systematic approach to organizing the entire life cycle of a product and related activities in the period from the moment of production of its components to the moment of consumption.

6. The risks in the complex agency system are: acceleration of working capital turnover and improving the structure of the balance sheet and the emergence of new opportunities for loans to expand the business or start working with a new group of goods.

7. The advantage of scheduled route shipments is an additional opportunity for the Client to independently and in advance plan their shipments for a specific flight.

8. Contract agency provides the possibility of full concentration of the Client on the core business, saves resources and time, and allows reducing activities that are not related to the core business.

Exercise 5.9. Translate the sentences into English:

1. Одним из наиболее современных и эффективных инструментов, используемых при реализации концепции комплексного логистического сервиса, являются регулярные отправки партий сборных грузов по определенным маршрутам в соответствии с заранее установленным расписанием.

2. Финансовое агентирование – это специальные финансовые инструменты или их комплекс, позволяющие оптимизировать международные финансовые потоки, связанные функциональным циклом товара.

3. Таможенное агентирование – это мероприятия по выбору пункта таможенного оформления, сбор и подготовка документов, заблаговременное декларирование товаров до их прихода на пункт таможенного контроля, взаимодействие с таможенными органами в процессе оформления товаров.

4. Основная задача логистического агента – спланировать структуру функционального цикла, которая позволит выполнять задачи логистики как можно быстрее, но главное равномернее.

5. Преимуществами для клиента при использовании комплексного логистического сервиса являются: уклонение от рисков, льготные условия оплаты, пополнение оборотных средств и др.

6. Основными рисками в системе комплексного агентирования являются:

– ликвидные риски несвоевременной оплаты товаров и услуг;

– кредитные риски неплатежеспособности дебиторов;

– процентные риски резкого изменения стоимости кредитных ресурсов и др.

7. Преимуществом маршрутных отправок по расписанию является дополнительная возможность для клиента самостоятельно и заблаговременно планировать свои отправки на конкретный рейс, что оптимизирует процесс планирования смены стадий жизненного цикла товаров.

8. Комплексная логистика – это эффективная система управления материальными, информационными и финансовыми потоками, связанными с жизненным циклом товара.

Exercise 5.10. Make a summary of the text "Complex logistics".

Test yourself:

1. The benefit for the Client of using a complex logistics service is:

a. currency risks associated with unfavorable changes in exchange rates;

b. price risks associated with unfavorable changes in price indices;

c. increasing the liquidity of receivables.

2. The risk in the complex agency system is:

a. expansion of the range;

b. interest rate risks of a sharp change in the cost of credit resources;

c. risk aversion.

3. The advantage of scheduled route shipments …

a. doesn't optimize the process of planning a change in the stages of the life cycle of goods;

b. optimizes the process of planning a change in the stages of the life cycle of goods;

c. is not important.

4. The main object of analysis of the logistics system is the _____ cycle of order execution.

a. production;

b. delivery;

c. functional.

5. The _____ cycle can be considered if undesirable circumstances are overcome in the shortest possible time.

a. average;

b. minimum;

c. maximum.

6. _____ is the construction of an optimal supply chain, processing and storage of components and goods in warehouses, organization of transportation in the international space.

a. Insurance agency;

b. Customs agency;

c. Logistics agency.

7. _____ is a set of the special financial instruments or their combination, allowing optimizing international financial flows associated with the functional cycle of the product.

a. Customs agency;
b. Financial agency;
c. Insurance agency.

8. _____ receives a significant reduction in risks, financial, logistical and organizational support for the growth of the total number of shipments.

a. Agent
b. Nobody;
c. Client.

9. _____ includes determining the optimal ratio of insurance premium, sums and risks insured, choosing an insurance partner, paperwork.

a. Customs agency;
b. Financial agency;
c. Insurance agency.

10. The purpose of the logistics operator is to ensure the continuity and _____ of the order service cycle.

a. reduction;
b. effectiveness;
c. acceleration.

UNIT 6: LOGISTICS PROVIDERS

Vocabulary:

Words / Word combinations:	
Logistics provider	провайдер логистики
Supplier	поставщик
Cargo	груз
Owner	собственник
Outsource	отдать на аутсорсинг
Hire	нанимать
Employee	сотрудник

Issue	вопрос
Insourcing	инсорсинг
Outsourcing	аутсорсинг
Provider forwarder	экспедитор
Representative	представитель
Defender	защитник
Engage	привлекать к ч-л.
Specific direction	особое направление
Flexibility	гибкость, подвижность
Rely on	полагаться на ч-л.
Organizational and legal services	организационно-правовые услуги
Operational and production services	операционно-производственные услуги
Vehicle	транспортное средство
Container	контейнер
Warehouse	склад
Crane	кран
Barge	баржа
Safety	безопасность
Speed	скорость
Taking into account	принимая во внимание
Inventory management	управление складами и запасами
Handling	погрузочно-разгрузочные работы
Packaging	упаковывание
Labeling	маркировка
Insurance	страхование
Customs clearance	таможенная очистка
Information support	информационная поддержка
Relevant	актуальный
Party logistics	провайдер логистики
Distinguishing feature	отличительная особенность
Niche	ниша
Customs broker	таможенный брокер
Worldwide	всемирный
Conventionally	конвенционально
Intermediary	посредник
Appear	возникать, появляться
Indicate	указать

Point of departure	пункт отправки (груза)
Destination	назначение
Sue	выступать в суде, судиться
Presumption	презумпция
Operator's fault	вина оператора
Apply	применяться, действовать
Meet the deadline	уложиться в срок
Budget	бюджет
Determine the route	определять маршрут

Vocabulary Exercises

Exercise 6.1. Find the Russian equivalents for the English words:

Supplier; Party logistics; Destination; Indicate; Customs broker; Operator's fault; Distinguishing feature; Cargo; Organizational and legal services; Safety; Specific direction; Information support; Inventory management; Barge; Determine the route; Sue; Operational and production services; Provider forwarder; Outsourcing; Insourcing; Labeling; Niche; Handling; Flexibility; Appear.

Exercise 6.2. Find the English equivalents for the Russian words:

отдать на аутсорсинг; инсорсинг; отличительная особенность; актуальный; применяться, действовать; уложиться в срок; определять маршрут; всемирный; выступать в суде, судиться; посредник; безопасность; маркировка; погрузочно-разгрузочные работы; транспортное средство; полагаться на ч-л.; привлекать к ч-л.; представитель; аутсорсинг; сотрудник; экспедитор; поставщик.

Exercise 6.3. Make word combinations using the words from the left column (*numbers*) and the words from the right column (*letters*), and translate them into Russian. Each word can be used only <u>once</u>.

1	Determine	a	forwarder
2	Point	b	the deadline
3	Party	c	broker
4	Inventory	d	the route
5	Information	e	logistics
6	Logistics	f	employees

7	Provider	g	provider
8	Hire	h	support
9	Customs	i	management
10	Meet	j	of departure

Text. **Logistics providers**

A logistics provider is a supplier company that provides services in the field of logistics. For a cargo owner, the choice of a provider depends on their own logistics capabilities and their own logistics strategy. For example, if a company focuses only on the production of goods, then it will outsource sales and other things, and will not hire new employees or buy infrastructure. For the cargo owner, the issue of providers is closely related to the insourcing / outsourcing of their logistics services.

The concept of a logistics forwarder, or operator, or logistics provider is a representative and defender of the interests of the cargo owner, providing logistics services to the cargo owner. The cargo owner company either performs the services itself or engages logistics providers. As a rule, small and medium-sized companies outsource most of their services (they can't invest because they don't have enough money, or they don't want to because they prefer to focus on production). Large companies, as a rule, deal with logistics in a complex way by themselves, attracting providers in specific directions. For them, the flexibility of their own logistics system and the quality of services plays an important role.

Even the largest company does not completely rely on its own resources, while no small company, as a rule, outsources all logistics services. The reason is that logistics is a broad concept, and it includes many parameters.

Main types of logistics services and logistics costs

The main positions that can be outsourced to logistics providers are associated with the main costs of logistics. The types of logistics services are:

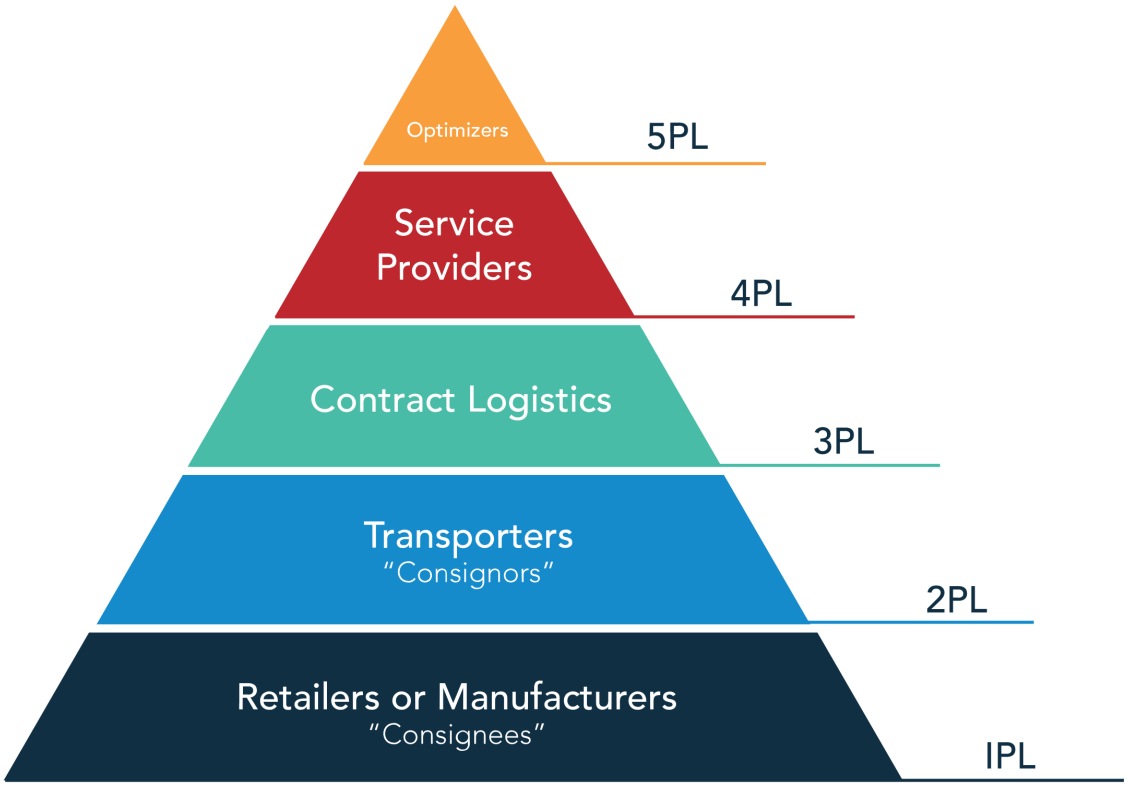
• Organizational and legal services that allow the company to work without a material and technical base (for example: services for organizing transportation, consulting on logistics issues).

• Operational and production services that require a material and technical base (for example: the most common among logistics providers are vehicles, containers, warehouses, but depending on the countries there may be specific ones, including their own cranes in ports, barges, etc.).

In addition, the cargo owner decides on which directions to attract a logistics provider. The decision is based on: 1) the strategy of the cargo owner company as a whole; 2) a strategy in the field of management logistics in particular (correlation of such parameters as cost, safety, and speed), taking into account its main logistics costs.

The main logistics costs include transportation (more than 50% of all costs), warehouse and inventory management (more than 20% of costs), handling (7%), packaging and labeling (up to 5%), insurance (3%), customs clearance (up to 15%), as well as information support of the cargo.

In Russia, the services of cargo transportation, rental of warehouses and customs brokers are especially relevant.



Picture 6. Types of logistics providers (Source: Яндекс картинки)

Traditionally, there are 5 types (levels) of logistics providers ("n" *party logistics*, or PL). A description of the distinguishing features between the types of logistics operators is as follows:

1. 1PL is a small logistics company that operates locally or in its own niche (for example, a customs broker);

2. 2PL is a larger logistics company that can operate worldwide, it acts conventionally (traditionally), organizes transportation, acts as an in-

termediary between the cargo owner and the company. All relationships are between the cargo owner and the port, etc.;

3. 3PL appeared after the adoption of the "UN Convention on International Multimodal Transport" in 1980. The operator does everything himself, and the cargo owner indicates only the point of departure and destination. The operator carries himself, sues himself, packs and, if necessary, marks. At the same time, the presumption of the operator's fault applies, that is, if something happens to the cargo, the operator is responsible, since he is responsible for the entire process.

4. 4PL is 3PL including management logistics. Here, the cargo owner announces not only the point of departure and destination, but also emphasizes the criteria (for example, meets the deadline, or budget, or determines the route).

5. 5PL - "virtual" logistics. When a 4PL provider also starts providing network business services, it becomes a 5PL operator.

There are not many 4-level providers (4PL) in the world, and there are not very many 3-level operators (3PL) in Russia. It is convenient for the cargo owner to use 3PL or 4PL services. But, if the company can provide logistics services itself (for example, the company has its own transport), then in order to save money, it does not use all the services.

Text Exercises

Exercise 6.4. Read and translate the text. Look up the meanings of the new words in the dictionary.

Exercise 6.5. Answer the questions:

1. What is a logistics provider?
2. What does a choice of the provider depend on?
3. What is the concept of a logistics provider?
4. Why do small or medium-sized companies outsource?
5. What types of logistics services and logistics costs do you know?
6. What do operational and production services include?
7. What do organizational and legal services offer?
8. How does the cargo owner decide on the directions to attract a logistics provider?
9. What do the main logistics costs include?
10. How many types of logistics providers do you know?

11. What is 1 PL?
12. What is 2 PL?
13. What is 3 PL?
14. What is 4 PL?
15. What is 5 PL?
16. Why are there not many 3- and 4 PLs in the world?

Exercise 6.6. Match the words / word combinations with their definitions:

1	outsourcing	a	a company, person, etc. that provides things that people want or need, especially over a long period of time
2	container	b	the fact of work being done by the employees of a company rather than another organization being employed to do it
3	presumption	c	marking a company that produces goods for sale, the goods themselves, or the company's name or symbol
4	supplier	d	someone who speaks or does something officially for another person or group of people
5	insourcing	e	a plan to show how much money a person or organization will earn and how much they will need or be able to spend
6	representative	f	getting work done by making a contract with another company to do it, often in another country, rather than in your own company
7	labeling	g	the act of believing that something is true without having any proof
8	budget	h	a hollow object, such as a box or a bottle, that can be used for holding something, especially to carry or store it

Exercise 6.7. Fill in the gaps with the missing information given in the box below:

Warehouse and inventory management; Logistics services; Customs clearance; Production of goods; Cargo owner; Insurance; UN Convention on International Multimodal Transport; Small company; Transportation; Outsource; Presumption; Packaging and labeling; To save money; Infrastructure; Handling; Engages; Information support; The largest company; Performs; 3PL; Capabilities; Operator.

1. If a company focuses only on the_____ , then it will _____ sales and other things, and will not hire new employees or buy_____.
2. The main logistics costs include _____ (more than 50% of all costs), _____ (more than 20% of costs), _____ (7%), _____ (up to 5%), _____ (3%), _____ (up to 15%), as well as _____ of the cargo.
3. If the company can provide _____ itself (for example, the company has its own transport), then in order _____, it does not use all the services.
4. Even _____ does not completely rely on its own resources, while no_____ , as a rule, outsources all logistics services.
5. The cargo owner company either _____ the services itself or _____ logistics providers.
6. _____ appeared after the adoption of the "_____" in 1980.
7. For a_____, the choice of a provider depends on their own logistics _____ and their own logistics strategy.
8. The _____ of the operator's fault applies, that is, if something happens to the cargo, the _____ is responsible, since he is responsible for the entire process.

Exercise 6.8. Decide if the following statements are *true* or *false*:

1. The decision of the cargo owner to attract a logistics provider is based only on the strategy of the cargo owner company as a whole.
2. Organizational and legal services require a material and technical base, for example: vehicles, containers, warehouses, barges, etc.

3. Organizational and legal services allow the company to work without a material and technical base.

4. 2PL is a logistics company that acts traditionally, organizes transportation, acts as an intermediary between the cargo owner and the company.

5. A logistics provider is a supplier company that produces, sells and delivers goods.

6. There are many 4-level providers (4PL) in the world.

7. It is not convenient for the cargo owner to use 3PL or 4PL services.

8. In Russia, the services of cargo transportation, rental of warehouses and customs brokers are especially relevant.

Exercise 6.9. Translate the sentences into English:

1. Грузовладелец объявляет не только пункт отправления и назначения, но и делает упор на таких критериях, как, например, уложиться в срок, или в бюджет, или определить маршрут.

2. Если компания может оказать логистические услуги сама, например, когда у нее есть свой собственный транспорт, то для экономии средств такая компания не станет использовать услуги провайдера.

3. На сегодняшний день в России особенно актуальны услуги транспортировки груза, аренды складов и таможенных брокеров.

4. Даже самая крупная компания не будет полностью полагаться на собственные силы, при этом ни одна малая компания, как правило, не будет отдавать все логистические услуги на аутсорсинг.

5. В тех случаях, когда компания сфокусировалась только на производстве товара, тогда и сбыт и прочее она отдаст на аутсорсинг, а не будет нанимать новых сотрудников или покупать инфраструктуру.

6. Для крупных компаний большую роль играет гибкость собственной логистической системы и качество оказываемых услуг.

7. Экспедитор, или логистический провайдер, – это представитель и защитник интересов грузовладельца, оказывающий логистические услуги грузовладельцу.

8. В число основных логистических издержек входят транспортировка, управление складами и запасами, погрузочно-разгрузочные работы, упаковка и маркировка, страхование, таможенная очистка, а также информационное обеспечение груза.

Exercise 6.10. Make a summary of the text “Logistics providers”.

Test yourself:

1. The main logistics costs do not include:
a. insurance;
b. customs clearance;
c. production of goods.

2. There are _____ types of logistics providers.
a. 3;
b. 5;
c. 4

3. _____ – "virtual" logistics.
a. 3 PL;
b. 2 PL;
c. 5 PL.

4. "UN Convention on International Multimodal Transport" was adopted in …
a. 1970;
b. 1980;
c. 1990.

5. Packaging and labeling account to _____ of logistics costs.
a. 15 %;
b. 7 %;
c. 5 %.

6. Warehouse and inventory management account to _____ of logistics costs.
a. 3 %;
b. 15 %;
c. 20 %.

7. More than 50% of all logistics costs are payed for …
a. insurance;
b. transportation;
c. handling.

8. The difference between 3 PL and 4 PL is in …
a. marketing logistics;
b. production logistics;
c. management logistics.

9. A supplier company that provides services in the field of logistics is ...
a. logistics provider;
b. information provider;
c. sales provider.

10. The company does not use the logistics provider’s services if …
a. it doesn’t want to;
b. it has its own transport;
c. it wants to save money.

ЗАДАНИЯ ДЛЯ САМОСТОЯТЕЛЬНОЙ РАБОТЫ
TASKS FOR INDEPENDENT WORK

Text 1. Green Logistics: Strategies for Eco-Friendly Delivery

Author: Zahava Dalin-Kaptzan (https://www.bringg.com/blog/logistics/green-logistics/)

With consumers today showing a preference for retailers and brands that work to reduce their impact on the environment, green logistics is more than a talking point – it's a growing imperative.

According to an IBM Research Insights report, 57% of consumers are willing to change their eCommerce purchasing habits to help reduce their environmental impact. Companies, in turn, are adjusting their supply chains and logistics systems to meet these new expectations. That transition is slowly happening, as more CEOs place sustainability higher in their corporate priorities.

Still, many companies resist investing in sustainability solutions. In one survey, only 10% of companies said that they distinguished their business and plan to gain more market share based on having the most eco-friendly delivery service. Yet when the right technology and supply chain strategies are implemented, these solutions can actually reduce cost to deliver and boost brand image at the same time. This is especially true for last mile logistics, where retailers and logistics companies can reduce carbon emissions and overhead costs at the same time.

In this article, we'll take a look at what green logistics is, the concerns that are still keeping these sustainability solutions from widespread adoption, and best practices that every business can adopt to create an environmentally friendly delivery service.

What is Green Logistics?

Green logistics is the process of reducing the environmental impact of delivery and logistics processes. As more customers become more environmentally conscious and place emphasis on choosing green companies, shippers must decrease their carbon dioxide emissions, deal with waste disposal and overall waste management, use recyclable materials, and more.

Green logistics includes the carbon footprint of the supply chain, dealing with carbon emissions from waste management and waste disposal, packaging, recycling, reducing energy consumption, etc. Between dif-

ferent national and global entities encouraging or enforcing more sustainability among companies, and more consumers prioritizing green consumption, more companies are pledging zero-net targets in an effort to go as green as possible.

A green supply chain includes first, middle and last mile logistics. For all and any stage of logistics operations, the process of going greener is most easily achieved through digitizing processes. Digitization can be used to eliminate the paper trail, and reduce energy consumption through alternative fuels and increased efficiencies.

Are green logistics and reverse logistics the same thing?

This is a common misconception. Reverse logistics is when a product travels backwards through the logistics flow. This can happen for any number of reasons, such as recycling or returns.

While some types of reverse logistics address environmental issues, they do not all relate specifically to logistics practices. For example, if a company delivers a new electronic item or piece of furniture, they may take away the old product for recycling. This is ecologically friendly (and encouraged) because it's reducing waste – but is not in itself about sustainable logistics. In order for the logistics process itself to be considered green, the transportation solution must include efforts to reduce carbon emissions. This may be done by including pickups of various things as part of a driver's delivery flow. For example, a driver will drop off items with certain customers and will pick up other items on their way back to the factory (or even from the same customer).

Why has green logistics become a priority in retail and the logistics industry?

Freight and the transportation industry have had a major impact on greenhouse gas emissions. Transportation as a sector is the single largest contributor of greenhouse gas emissions in the U.S., standing in at 28%. With the expected increase in online shopping and subsequently last mile delivery, this number is expected to grow to 30% according to the WEF.

Retail supply chains are the biggest contributors to emissions in the logistics industry, ranking in at over 50% of the industry. This isn't surprising, especially in the aftermath of COVID-19. eCommerce exploded, and packaging volumes soared, even exceeding many logistics providers' capacity.

While this is alarming, it has caused all of the players in the logistics operations game – including retailers, transporters and consumers – to recognize the importance of adopting green logistics strategy and practices in

their supply chains. Retailers and carriers are increasingly taking the Net-Zero pledge together with strategic plans to develop and implement policies that promote environmental sustainability.

The US was behind in its sustainability efforts until recently, although the re-joining of the Paris Agreement sets the US up to become a political force in the industry (which is necessary due to investor demands).

The cost of (not) going green

Retailers and logistics operations that don't go green will be left behind in the coming years.

This will be a combined effort between companies and logistics providers who will look together to cut down their carbon footprint and therefore have a unique selling proposition (USP) to gain new customers. Not only are consumers looking for ways to minimize their environmental impact personally, many are willing to pay a premium for greener products.

The bottom line? A company that doesn't adopt green logistics operations will be at a crucial disadvantage.

With correct supply chain management, green practices essentially create more efficient logistics processes that reduce energy consumption, which in the long run, can increase profit.

This can be seen in delivery routes. When the transportation industry prioritizes sustainability in their operations, they are able to decrease the time and mileage spent performing the same amount of deliveries. This reduction in time also leads to greater drop density (more deliveries are performed by the same driver on the same run) and therefore a lower carbon footprint.

Cutting costs through green logistics

Logistics needs to be greener, but it doesn't have to be a costly burden. In fact, an environmental focus goes hand-in-hand with reducing supply chain costs. Here are seven ways to ensure that your last mile logistics and delivery operations are as eco-friendly and efficient as possible.

7 ways to cut costs through efficient, green logistics:

1. Incentivize sustainable delivery options at checkout
2. Automate route optimization to increase vehicle efficiency
3. Use order batching to increase drop density
4. Dispatch first to electric delivery vehicles (EV) or an eco-friendly partner fleet
5. Perform hyperlocal deliveries from nearby stores
6. Use bikes for local, urban delivery

7. Digitize the paper trial, from product details to proof of delivery

Incentivize sustainable delivery options at checkout

On-demand delivery is incredibly wasteful, with couriers delivering a few items in a vehicle that could easily fit multiple packages. And believe it or not, it's not always necessary – many customers will choose to save money and get their order a bit later. According to an Accenture Strategy report, 36% of online shoppers are happy to wait longer for free delivery.

Even moving an order from same-day to next-day gives time for more optimized dispatching and routing, and generally results in lower costs for the business.

Incentivizing planned delivery is a triple win: The customer pays less, you pay less, and the environment pays less.

Market your scheduled delivery for what it is: an environmentally friendly logistics service.

Increase vehicle efficiency with automated route optimization

It's simple: the less mileage your drivers consume on the road, the lower your contribution to greenhouse gas emissions.

Thanks to technological advancements in the logistics industry, you can provide your teams with a route planner app that optimizes multi-stop routes, increasing vehicle efficiency. By creating more efficient routes, costs are cut by needing less drivers and trucks, and energy use is reduced. It's a quick win for more sustainable logistics.

Batch goods together for higher drop density

This goes hand in hand with automated route planning. By 'batching' or grouping together goods going out to the same area in the same time window, businesses can reduce the number of vehicles dispatched and maximize their energy efficiency.

Use intelligent fleet management to dispatch to electric delivery vehicles (EV) fleets

Using intelligent fleet management, algorithms can prioritize dispatch of an eco-friendly fleet first. This can be done by purchasing EV vehicles, or by collaboration with an EV fleet.

Perform hyperlocal deliveries from stores rather than regional warehouses

While this may seem counterintuitive, hyperlocal fulfillment can actually cut costs for retailers by eliminating large shipping fees and distribution center costs. Local ship from store logistics both enables faster delivery and lowers fuel costs.

Use bikes for local, urban logistics

While urgent SLAs leave minimal room for route optimization, there are other ways to keep on demand delivery eco-friendly, starting with making local deliveries by bike or on foot. Bikes may not be the right option for all products, they can be the perfect solution for a company with hyperlocal urban deliveries of small orders. No gas, no emissions, and the delivery person even gets a workout during the job.

Digitize the paper trail

Shipments are full of paper: order details, invoices, and proof of delivery, to name a few. There's no reason for a retail or logistics company to be using paper today. Technological advancements and applications make it easy for companies to digitize all operations and cut back on paper costs as well as saving trees along the way.

The challenges of measuring and reporting

How do you measure and report on energy efficiency? Without a way to measure results, it's impossible to ensure ROI for green initiatives.

In addition to gathering the data, a company must be able to report on its carbon reductions to stakeholders in the delivery flow. For example, imagine sending the following automated message to customers: "Congrats! You've saved 5 trees with this delivery!" This is a great way to keep customers loyal and truly feel that they are making a difference by choosing sustainable fulfillment options.

Brands also need to make customers aware of these services. They may choose to incentivize these more environmentally-friendly services by making them the default at checkout. Such services can include slower delivery times, disposal for an older product, sustainable packaging materials, return options and more.

Taking action to reach zero waste

While not every organization is running to adopt green logistics strategies, the message from the market is clear: A company that tackles environmental issues in its supply chain will find that it pays to be green. This is increasingly important as businesses scale up their last mile logistics operations to cope with growing demand.

To successfully create cost-effective, green logistics, businesses must prioritize sustainability in their logistics processes this year, including adopting technology and collaborating with green partners. These steps are essential to making an actual impact, and communicate that impact to stakeholders.

As green logistics becomes a top concern for all involved in the logistics process, companies that incorporate eco-friendly practices will be able to not only please customers but also significantly reduce carbon emissions and their fuel consumption – producing energy savings for their business while leaving our world in a better place than it is today.

Exercise 1. Read and translate the text using the dictionary

Exercise 2. Answer the following questions

1. What is Green Logistics?
2. Are green logistics and reverse logistics the same thing?
3. Why has green logistics become a priority in retail and the logistics industry?
4. What can create green practices with correct supply chain management?
5. What are the ways to cut costs through efficient, green logistics?

Exercise 3. Using the information given in the text, prepare your own topic about Green Logistics.

Text 2. Greenness and Logistics

Authors: Dr. Jean-Paul Rodrigue, Dr. Brian Slack and Dr. Claude Comtois (https://transportgeography.org/contents/applications/green-logistics/)

Most considerations in sustainable transportation focus on passengers, leaving freight issues somewhat marginalized. Logistics are at the heart of the operation of modern transport systems and implies a degree of organization and control over freight movements that only modern technology could have brought into being. It has become one of the most important developments in the transportation industry. Greenness has become a code word for a range of environmental concerns and is usually considered positively. It is employed to suggest compatibility with the environment, and thus, like logistics, it is perceived as beneficial. When put together, the two words suggest an environmentally friendly and efficient transport and distribution system.

Green Logistics. Supply chain management practices and strategies that reduce the environmental and energy footprint of freight distribution.

It focuses on material handling, waste management, packaging, and transport.

The loosely defined term covers several dimensions related to production planning, materials management, and physical distribution. It opens the door to a wide array of potential applications of environmentally friendly strategies along supply chains. This implies that different stakeholders could be applying different strategies, all labeled as green logistics. One corporation could be focusing on product packaging while another on alternative fuel vehicles; both are undertaking green logistics. However, a closer look at the concept and its applications, a great many paradoxes and inconsistencies arise, which suggests that its application may be more difficult than what might have been expected in the first place. Although there has been much debate about what green logistics truly entails, the transportation industry has developed very narrow and specific interests in the issue. If transportation costs are reduced, and assets such as vehicles, terminals, and distribution centers are better utilized, the assumption is that green logistics strategies are being implemented.

In common with many other areas of human endeavor, greenness became a catchword in the transportation industry. It grew out of the emerging awareness of environmental problems and negative externalities, which started in the 1950s when the fast growth of trucking impacted urban communities. Factors such as truck size, emissions, and noise became public concerns, leading to the first legislation focusing on pollutant and noise emissions and road access conditions. In a more recent context, well-publicized issues such as sustainability, energy, waste disposal, and climate change have contributed to establishing green logistics as a formal field of inquiry and mitigation. Environmental concepts, such as material flows or the carbon cycle, became readily applicable to supply chain management. The World Commission on Environment and Development Report (1987) established environmental sustainability as a goal for international action, giving green issues a significant boost in political and economic arenas. The transportation industry was recognized as a major contributor to environmental issues through its modes, infrastructures, and flows. The developing field of logistics was seen as an opportunity for the transportation industry to become more environmentally friendly. Yet, environmental perspectives and transportation sustainability issues remain predominantly focused on passenger transportation.

Interest in the environment by the logistics industry manifested itself most clearly in terms of exploiting new market opportunities. While tradi-

tional logistics seeks to organize forward distribution, that is, the transport, warehousing, packaging, and inventory management from the producer to the consumer, environmental considerations opened up markets for recycling and disposal and led to an entire new sub-sector; reverse logistics. This reverse distribution involves the transport of waste and the movement of used materials. Even if the term reverse logistics is widely used, other names have been applied, such as reverse distribution, reverse-flow logistics, and even green logistics. A more recent framework is the circular economy, which is inserting logistics into reuse, remanufacturing, recycling, and waste disposal into a feedback loop. It is becoming an emerging approach that considers the full extent of logistics, which is the greening of both the forward and reverse segments of supply chains.

Green Logistics and its Paradoxes

An overview of the standard characteristics of logistical systems reveals several inconsistencies with regard to the mitigation of environmental externalities. They take the form of five basic paradoxes.

a. Costs

The purpose of logistics is to reduce costs, notably transport costs. While the former remains the most salient logistics cost, inventory carrying costs come second. In addition, economies of time and improvements in service reliability, including flexibility, are further objectives. Corporations involved in the physical distribution of freight are highly supportive of strategies to cut transport costs in a competitive setting. Economies of scale in transportation and higher load densities are common cost-saving strategies that concomitantly lead to environmental benefits in terms of lower fuel consumption per ton-km. On some occasions, the cost-saving strategies pursued by logistic operators can be at variance with environmental considerations that become externalized. This means that the benefits of logistics are realized by the users and eventually to the consumer if the benefits are shared along the supply chain.

However, the environment assumes a wide variety of burdens and costs, which form a hierarchy ranging from costs internal to the supply chain to externalized costs. Society is becoming less willing to accept these costs, and pressure is increasingly being put on governments and corporations to include more significant environmental considerations in their activities. A salient example concerns food supply chains that have been impacted by lower transport costs, enabling diversification of the suppliers and longer transport chains. The concept of food-miles has been developed as an attempt to capture the full costs of food distribution by using the dis-

tance food is carried as a proxy. Such measures are controversial since sourcing can vary substantially for a product based on changing input costs and seasonality.

b. Time

In logistics, time is often the essence. By reducing the time of flows, the velocity of the distribution system is increased, and consequently, its efficiency. This is mainly achieved by using the most polluting and least energy-efficient transportation modes. The significant increase in air freight and trucking is partially the result of time constraints imposed by logistical activities. The time constraints are the result of the increased flexibility of industrial production systems and the retailing sector. Logistics offers door-to-door (DTD) services, mostly coupled with just-in-time (JIT) strategies. Other modes cannot satisfy the requirements such a situation creates as effectively. This leads to a vicious circle; the more DTD and JIT strategies are applied, the further the negative environmental consequences of the traffic it creates. The slow steaming strategy pursued by maritime shipping companies is further challenging time management within long-distance supply chains.

c. Reliability

At the heart of logistics is the overriding importance of service reliability. Its success is based upon the ability to deliver freight on time with the least breakage or damage. Logistics providers often realize these objectives by utilizing the modes that are perceived as being the most reliable. The least polluting modes are generally regarded as being the least reliable in terms of on-time delivery, lack of breakage, and safety.

Ships and railways have inherited a reputation for poor customer satisfaction. For instance, the schedule reliability of container shipping is around 50%, implying that about half the time, a container ship will not arrive at a port terminal on the scheduled day. Lower reliability levels are linked with lower asset utilization levels and higher inventory levels, which is wasteful and indirectly damaging to the environment. The reliability of the logistics industry is built around air and truck shipments which are the two least environmentally-friendly modes.

d. Warehousing

Logistics is an important factor in promoting globalization and international flows of commerce. Modern logistics systems economies are based on reducing inventories, as the speed and reliability of deliveries remove the need to store and stockpile. Consequently, a reduction in warehousing demands is one of the advantages of logistics. However, this

means that inventories have been transferred to a certain degree to the transport system, especially to roads and terminals. Inventories are actually in transit, contributing still further to congestion and pollution. The environment and society, not the logistical operators, are assuming the external costs. Not all sectors exhibit this trend, however.

For example, in some industrial sectors, computers, there is a growing trend for vertical disintegration of the manufacturing process, in which extra links are added to the supply chain. Intermediate plants where some assembly is undertaken have been added between the manufacturer and consumer. While facilitating the customizing of the product for the consumer, it adds external movement of products in the production line.

e. Information Technologies

Information technologies have led to new dimensions in retailing. One of the most dynamic markets concerns e-commerce. This is made possible by an integrated supply chain with data interchange between suppliers, assembly lines, and freight forwarders. Even if there is an appearance of a movement-free transaction for online customers, distribution created by online transactions may consume more energy than other retail activities. The distribution activities that have benefited the most from e-commerce are parcel-shipping companies that rely solely on trucking and air transportation. Information technologies related to e-commerce applied to logistics can have positive impacts. So once again, the situation may be seen as paradoxical.

It can be argued that the paradoxes of green logistics make it challenging for the logistics industry to become significantly greener. The internal inconsistencies between the goal of environmental sustainability and an industry that gives undue preference to road and air transport can be seen as being irreconcilable. Yet internal and external pressures promoting a more environmentally-friendly logistics industry appear to be inexorable. How the logistics industry has responded to the environmental imperatives is not unexpected, given its commercial and economic imperatives, particularly given the paradoxes it is facing.

A Blueprint for Green Logistics

Environmental pressures in many economic sectors are already manifest, and for the logistics industry, it is latent but quickly emerging. The matter is how these pressures are going to take shape and which actors are going to be the most proactive. Over the later three scenarios are possible, but they are not mutually exclusive:

A top-down approach where environmental standards are imposed on the logistic industry by government policies through regulations;

A bottom-up approach where environmental improvements are coming from the industry itself through the adoption of best practices through innovative firms;

A compromise between the government and industry, notably through certification schemes leading to accreditation to desirable environmental standards.

First is that government action will force a green agenda on the industry, in a top-down approach. Although this is the least desirable outcome for the logistics industry, it is already evident that government intervention and legislation are reaching ever more directly over environmental issues. In Europe, there is a growing interest in charging for external costs, as the EU moves towards a 'fair and efficient' pricing policy. A sharp increase in costs could have a more severe impact than a more gradual, phased-in tax. In North America, there is a growing interest in road pricing, with the re-appearance of tolls on new highways and bridges built by the private sector, and by congestion pricing, especially in metropolitan areas.

Pricing is only one aspect of government intervention. Legislations controlling the movement of hazardous goods, reducing packaging waste, stipulating the recycled content of products, the mandatory collection, and recycling of products are already evident in most jurisdictions. Indeed, it is such legislation that has given rise to the reverse logistics industry. Truck safety, driver education, limits on driver's time are among many types of government action with the potential to impact the logistics industry.

A difficulty with government intervention is that the outcomes are often unpredictable, and in an industry as complex as logistics, many could lead to unintended consequences. Environmentally-inspired policies may impact freight and passenger traffic differently, just as different modes may experience widely variable results of common regulation. Issues concerning the greenness of logistics extend beyond transport regulations. The sitting of terminals and warehouses is crucial to moving the industry towards the goal of sustainability. Yet, these are often under the land use and zoning control of lower levels of government whose environmental interests may be at variance with national and international bodies. A positive trend has been the joint planning and sitting of logistics zones and intermodal terminals as co-located facilities.

If a top-down approach appears inevitable, at least a bottom-up solution would be the industry preference in some respects. Its leaders oppose leaving the future direction to be shaped by government action. There are several ways a bottom-up approach might come about. As with reverse logistics, these occur when the business interests of the industry match the imperatives of the environment. One such match is the concern of the logistics industry with empty movements, which range from empty trucking backhauls for regional freight distribution to the repositioning of empty containers across oceans. Further gains are achievable with the growing sophistication of fleet management and IT control over scheduling and routing. Another match involves fine-tuning the routing and operations of freight transport systems with higher energy prices. The adoption of slow steaming strategies by maritime shipping companies uses the rationale of environmentalism to reduce fuel consumption and improve the utilization of their ship assets.

Less predictable, but with a much greater potential impact on the greenness of the industry, are possible attitudinal changes within logistics and without. These changes are comparable to that which has already occurred in recycling. There has emerged striking public support for domestic recycling. Some firms have extended this in successfully marketing their compliance and adoption of green strategies. Firms have found that by advertising their friendliness towards the environment and their compliance with environmental standards, they can obtain an edge in the marketplace over their competitors. Traditionally, price and quality characteristics formed the basis of choice, but greenness can become a competitive advantage because environment preservation is seen as desirable in general. Ultimately, pressure from within the industry can lead to greater environmental awareness. Corporations that stand apart will lose out because purchasers will demand environmental compliance.

The compromise appears to be the most desirable option with the industry following up through implementing environmental management systems (EMS). Although governments are involved in varying degrees, a number of voluntary systems are in place, notably ISO 14001 and EMAS (Environmental Management and Audit System). In these systems, firms receive a certification based on establishing an environmental quality control tailored to that firm and the setting up of environmental monitoring and accounting procedures. Obtaining certification is seen as evidence of the firm’s commitment to the environment and is frequently used as a public relations, marketing, and government relations advantage. This repre-

sents a fundamental commitment of the corporation to engage in environmental assessment and audits that represent a significant modification of traditional practices, in which efficiency, quality, and cost evaluations prevailed. The challenges of certification schemes include:

Certification can be biased to represent or protect the interests of specific stakeholders and markets.

Attaining compliance can be a costly endeavor in terms of time and resources in regard to the uncertainty of the benefits. Figures vary, and it can take from 6 months to two years to go through the certification process. This can be a negative factor for smaller firms or developing economies. Thus, certification can create barriers to entry, effectively protecting the market advantage of the compliant firms.

Once a certification has been achieved, auditing and review can continue to be time and resources intensive as they can take place every three years. They can also relapse, implying that the certified firm may not consistently adhere to the standards they have been certified for.

Of the three possible directions by which a greener logistics industry may emerge, it is realistic to consider that they will help shape the industry in the future. Although there is a clear trend in policy guidelines to make the users pay the full costs of using the infrastructures, logistical activities have largely escaped these initiatives. Environmental policy focuses on private cars (e.g. emission controls, gas mixtures, and pricing). While there are increasingly strict regulations being applied to air transport (noise and emissions), the degree of control over trucking, rail, and maritime modes is less. For example, diesel fuel is significantly cheaper than gasoline in many jurisdictions, despite the negative environmental implications of the diesel engine. Yet trucks contribute on average 7 times more per vehicle-km to nitrogen oxide emissions than cars and 17 times more for particulate matter. The trucking industry has avoided the bulk of environmental externalities it created, notably in North America.

Applying Green Logistics to Supply Chains

Although the environment was not a significant preoccupation or priority in the industry itself, the last decades have shown a remarkable change as green logistics became increasingly part of the supply chain management discourse and practices. The standard themes of materials management and physical distribution can be expanded with an additional focus on strategies able to mitigate the paradoxical nature of green logistics:

Product design and production planning. The conventional focus of product design and development is the improvement of its commercial and

competitive attributes such as price, quality, features, and performance. There is also planned obsolescence in product design with the expectation that it will be discarded after a certain amount of time or uses. This process is common for electronic goods as each new generation of a product (computers, phones, televisions) is quantitatively and qualitatively better. Products are increasingly being considered from a supply chain perspective, namely their sourcing and distribution, where the concern is about designing or redesigning supply chains that are more environmentally friendly. This can involve the physical characteristics of the product itself, such as its material intensity (lighter, alternative materials) or production processes that allow for a higher transport density of parts. Suppliers that are closer (near sourcing) may be considered even if they may be more expensive so that transportation costs can be reduced. A decision can also be made to preferably contract suppliers that have demonstrated that the parts and resources they provide have been procured in a sustainable manner.

Physical distribution. Concerned about strategies to reduce the environmental impacts of physical distribution, namely the transportation and warehousing processes. It could involve the usage of facilities that have been certified as environmentally efficient (Leadership in Energy & Environmental Design – LEED – is a globally recognized certification scheme) as well as carriers abiding by environmentally friendly principles. Preferences could also be placed on delaying shipments until a sufficient load factor is reached. The usage of alternative modes and fuels is increasingly applied, particularly for city logistics. For long-distance travel, a modal shift to rail and economies of scale on maritime shipping are considered strategies that may lead to greener supply chains.

Materials management. Concerned about reducing the environmental impacts related to the manufacturing of goods in all their stages of production along a supply chain. A salient strategy involves better packing and packaging to increase the load density as well as to reduce materials consumption and waste. Low impact materials, particularly recycled resources, can be preferred as industrial inputs. As products, or their components, tend to be increasingly recyclable, waste management strategies are being pursued to ensure that the end products are either discarded properly or, preferably, being recycled for other uses.

Reverse distribution. Concerned about activities and movements related to taking back consumed goods as well as waste to be recycled or discarded. It has opened up new market opportunities over specific aspects of materials management (mostly recycling and waste disposal) and physi-

cal distribution (collection channels). Here the environmental benefits are derived rather than direct. The transportation industry itself does not necessarily present a greener face, indeed in a literal sense, reverse logistics adds further to the traffic load and facilities required to handle them. The manufacturers and domestic waste producers are the ones achieving environmental credit.

Applying green logistics to supply chains must also consider the network and spatial footprint of freight distribution. The hub structures supporting many logistical systems result in a land take that is exceptional. Airports, seaports, and rail terminals are among the largest consumers of land in urban areas. For many airports and seaports, development costs are so large that they require subsidies from local, regional, and national governments. User costs rarely completely reflect the dredging of channels in ports, the provision of sites, and operating expenses. For example, in the United States, local dredging costs were nominally to come out of a harbor improvement tax, but this has been ruled unconstitutional, and channel maintenance remains under the authority of the US Corps of Army Engineers. In Europe, national and regional government subsidies are used to assist infrastructure and superstructure provision.

The trend in logistics towards hub formation is clearly not green as it incites the convergence of traffic flows and their externalities within a well-defined area. On the positive side, this confers opportunities to mitigate these environmental externalities since they are focused and identifiable.

Improvement of logistics flows and performance required setting new facilities in suburban areas, a trend labeled as “logistics sprawl”. In turn, this process is related to additional land take and a level of disorganization of freight flows within a metropolitan area. Logistics zones provide a more coherent setting for distribution centers, including shared facilities such as parking areas and intermodal terminals. They confer the advantage of minimizing the impacts of freight distribution on surrounding areas more effectively, such as with direct access ramps to highways (less local intrusion) or the setting of buffers to mitigate noise and emissions. There is an array of rationale and settings for logistics zones and, correspondingly, environmental mitigation strategies. Still, the environmental impacts of distribution centers remain a daunting issue to mitigate.

There is growing evidence that green logistics increases supply chain performance, particularly since greenness, particularly because it favors an integrated perspective about supply chains. The actors involved in logisti-

cal operations have a strong bias to perceive green logistics as a means to internalize cost savings while avoiding the issue of external costs. The top environmental priority is commonly reducing packaging and waste. The rise in energy prices is giving supply chain managers additional incentives to improve logistics and will correspondingly push energy and emissions at the forefront.

These observations support the paradoxical relationship between logistics and the environment: reducing costs does not necessarily reduce environmental impacts. Overlooking significant environmental issues, such as pollution, congestion, resource depletion, means that the logistics industry is still not very green. Green logistics remains an indirect outcome of policies and strategies to improve the cost, efficiency, and reliability of supply chains. A key aspect of more environmentally friendly freight distribution systems concerns city logistics, where the "last mile" in freight distribution takes place as well as a large share of reverse logistics activities. Still, even in this context, the driving force is not directly environmental issues but factors linked with costs, time, reliability, warehousing, and information technologies.

Exercise 1. Read and translate the text using the dictionary.

Exercise 2. Answer the following questions:

1. What are Logistics?
2. What is the paradox of Green Logistics?
3. What is a compromise between the government and industry?
4. What do you think about product design and production planning?
5. What does it mean – physical distribution?

Exercise 3. Using the information given in the text, prepare your own topic about applying Green Logistics to supply chains.

Text 3. The e-commerce game changer

(Delivering the Goods: E-commerce Logistics Transformation World Economic Forum https://www3.weforum.org/docs/WEF_Delivering_Goods_E_commerce_logistics_transformation_report_2018.pdf)

E-commerce has transformed the retail sector over the past two decades. Well known players have faced restructuring, or even bankruptcy, amid fierce competition from emergent online platforms. The latter devel-

oped innovative business models based on the spread of the internet and other technologies – stores open 24/7 via a laptop or mobile device, the ability to compare products and prices, and delivery to the consumer's door or even their fridge. Last year, Walmart started piloting a service that would allow its delivery drivers entry to consumers' homes via a passcode and a "smart lock". Amazon is also testing a similar service.

The new retail environment has led to shifts in the associated logistics and transport sector. Companies agile enough to embrace changing distribution channels with a host of new services have prospered. Not least among these have been stakeholders responsible for last mile business to consumer (B2C) and consumer to consumer (C2C) deliveries. New logistics service providers large and small have been born. The postal sector has also changed dramatically in the past two decades, with some previously nationalized postal operators transformed into commercial independent actors, and some postal operations riding the e-commerce wave offering services akin to couriers.

At the outset, it was far from certain that many of the major express players, such as UPS, FedEx or DHL, would embrace home delivery due to the higher costs involved in the number of undelivered parcels caused by absent end recipients. E-commerce also required logistics companies to work with smaller businesses less used to shipping locally, much less globally. Yet today it is hard to convey the extent of the change in management sentiment as well as operational and technological focus, with B2C now an important part of the major players' thinking and revenues. Several smaller new logistics players have also emerged, aiming to capture a share of the growing small package trade in specifically targeting the needs of small businesses on fulfilment, warehousing and logistics services. Examples include wnDirect and ILG.

Looking to the future, delivery times are getting ever shorter, with the number of same day and one or two hour delivery services rising. The result is a knock on effect on customer expectations. End recipients are demanding greater flexibility as well as more delivery options, fitting around their lifestyles, rather than around the operational processes of parcel delivery companies. Technology is being harnessed to bridge the gap – leading to more responsive customer service and convenience for both shippers and end recipients. Technology solutions are, however, more frequently applied by large firms due to the high costs involved.

Alternative delivery solutions are being developed. Lockers, in car and pick up/drop off networks are growing in popularity as retailers face

rising cost pressures to ensure e-commerce orders are delivered first time. Many logistics providers have tailored value added solutions for transport, fulfillment and returns.

Cross border e-commerce is growing in popularity thanks to the borderless potential of the digital economy. Consultancy firm Forrester forecasts annual global e-commerce growth of 17% between 2017 and 2022, compared with 12% for overall e-commerce (cross-border and domestic, B2B and B2C).

A report by DHL suggests that cross-border e-commerce already accounts for 15% of total e-commerce sales and will expand to 22% by 2020. One signal, however imprecise, of cross-border B2C e-commerce expansion can be seen in the uptick of international parcel shipments.

According to the Universal Postal Union (UPU), these increased by 73% between 2011 and 2015. The scope of what is sold globally online is also changing. Fashion and electronics have long been cross-border top sellers, but consumers are now branching out further to produce categories including beauty and cosmetics, pet care, food and beverage items, pharmaceuticals, home decor and sporting goods. An increase in e-commerce on perishable goods or medicine refills undoubtedly requires rapid and efficient cross-border delivery logistics.

Despite significant opportunities, however, the support systems for cross-border e-commerce may not always be up to scratch. Small businesses, in particular, which are less able to shoulder frictional costs, point to trade challenges related to customs clearance and advanced knowledge of duties or taxes. Often, cross-border e-commerce operations rely on establishing separate warehouses or central locations in different countries, as a way of minimizing border hassle, shipping costs and other challenges related to global logistics. Although a workaround for some, the associated costs and inconvenience underscore the importance of examining logistics and delivery as a vital enabler of more inclusive global e-commerce.

Exercise 1. Read and translate the text using the dictionary.

Exercise 2. Answer the following questions:

1. What is E-commerce?
2. What is Cross-border e-commerce?
3. What changes have taken place in the logistics and transport sector?
4. What are the main requirements in e-commerce?
5. Which delivery technologies are in the greatest demand among consumers?

Exercise 3. Using the information given in the text, prepare your own topic about E-commerce.

Text 4. Retail Logistics: What It Is & How to Improve

(Written by: Kristina Lopienski, the Director of Marketing Communications at ShipBob, where she writes various articles, case studies, and other resources to help ecommerce brands grow their business https://www.shipbob.com/blog/retail-logistics/)

Having furniture delivered to your home. Curbside pickup. Ordering clothes online. These are all forms of retail logistics.

Today's consumers expect a fast and effortless experience with your brand. This involves meeting them where they are, and giving them both the shopping and transportation options they want.

From managing inventory flow to ensuring that customers receive shipments on time, retail logistics streamlines the different stages of your ecommerce supply chain to keep your business running smoothly.

As ecommerce sales continue to grow throughout 2021, it's time for online retailer to rethink their retail logistics strategy to meet customer demands, lower shipping costs, offer faster shipping options, and improve the overall customer experience.

In this article, you will learn the ins and outs of retail logistics and tips on how to improve your logistics management process.

What are retail logistics?

Retail logistics involve all the inbound and outbound processes that result in the flow of finished goods from a business to the end user. The optimization of a solid retail logistics strategy is key to operating a sustainable direct-to-consumer (DTC) retail business.

Stages of the retail logistics process include warehouse receiving, inventory management, fulfillment, and shipping. Every stage of the logistics process must be optimized in order to meet customer expectations around fast, affordable delivery.

This means a retail logistics operation often requires both labor (both warehouse workers and upper-level management roles, such as a logistics director) and supply chain technology – which can increase logistics costs significantly. In many cases, DTC brands will outsource retail logistics to a third-party to save on time and costs.

COVID's impact on retail logistics

The way retailers handle logistics has changed dramatically as a result of the pandemic.

Business owners now face challenges like supply and demand disruptions, inventory delays, global lockdowns, changing trade policies, and evolving consumer shopping behaviors. The need to build flexibility into your supply chain is more important than ever.

In 2020, global retail sales exceeded $23 trillion, and experts predict ecommerce demand to continue expanding. One of the biggest challenges for growing ecommerce businesses today is managing increased order volume.

Partnering with the right 3PL takes the challenges that come with managing retail logistics off your plate and puts them into the hands of experts.

Investing in retail logistics expertise can help build supply chain resilience by delegating logistics, so you can focus more on increasing sales, product development, market research, and customer service initiatives.

What are the functions of retail logistics?

On the surface, fulfilling orders may seem straightforward. You pick items, package them up, and ship orders to their destination. Easy, right?

The reality is that there is so much more involved in achieving an optimized retail supply chain.

As online shoppers expect more – free returns, free and fast shipping, even share-worthy unboxing moments – retail logistics has turned to a technology-enabled approach that is focused on speed, location, and automation.

Procuring inventory

Procurement refers to sourcing merchandise on time to meet demand, and it affects the ways your online retail business activities (like sales, inventory management, and distribution) can be performed.

Having insight into what's going on during the procurement process can help you find ways to build a more agile supply chain.

For instance, instead of viewing procurement as a separate part of your supply chain logistics, think of it as the first (and the most critical) stage of logistics management.

Inefficient procurement that is not aligned with your retail logistics strategy can lead to reduce efficiency, delays, and less inventory visibility.

For example, you may have trouble procuring inventory fast enough to meet demand and fulfill orders as soon as they come in. This can cause

stockouts and backorders, which can lead to lost sales and lower customer satisfaction.

Less visibility over the procurement phase can also result in missed opportunities to optimize.

Receiving & processing inventory

To fulfill orders, first your products must be received and processed. This is the unloading and official "checking in" of incoming ecommerce inventory, followed by its proper documentation and storage.

Inventory receiving and processing is so important. Not only does it enable efficiency and speed up the fulfillment process, but it also ensures that what is being received matches what was ordered.

Lacking clear procedures for things like unloading, receiving, or assigning SKUs makes it all too easy to wind up with loss (which can cause inventory shrinkage), impacting both your customers and your bottom line.

Distributing inventory

"Distributed inventory" is an inventory allocation method that disperses inventory across multiple warehouses or fulfillment centers instead of just one. The idea behind this system is simple: it puts your products closer to your customers, making it one of the most effective ways to shorten delivery times while reducing shipping costs.

Because shipping zones affect the price of fulfilling retail orders, the less distance a package must travel, the lower the cost for customers (think about an Uber or Lyft ride, where the farther the destination, the more expensive it will be).

In an economy that relies on fast fulfillment, distributing inventory among numerous retail warehouses can take your business to the next level by unlocking the ability to offer affordable, 2-day shipping – a perk many consumers expect thanks to retailers like Amazon.

Since many fast-growing brands don't have the time or resources to manage multiple warehouses, they outsource fulfillment to a 3PL like ShipBob, which operates a large network of fulfillment center locations.

Order fulfillment

Don't underestimate customer expectations on fast, affordable delivery. Having a cost-effective and efficient order fulfillment strategy in place is crucial.

Once your customer clicks "Submit Order," a number of synchronized processes take place, which ensures customer information is validated, and the right products are picked and packaged as soon as possible. It's known as the order-to-cash (O2C) process.

During the O2C cycle, some inventory management and accounting tasks must occur, such as locating items in the available inventory to fulfill the order and receiving customer payments.

A healthy O2C cycle also requires an order management system to track orders and record historical order data, which is later used to analyze O2C performance.

If you partner with a 3PL like ShipBob, the order processing and fulfillment process is automated. Once your online store is connected to ShipBob's fulfillment software, orders are sent to the nearest fulfillment center to the shipping destination.

From there, a picker at the fulfillment center receives a list of the items, quantities, and storage locations to identify and retrieve the items. Then, the order is securely packed and shipped through the most cost-effective route available.

Tracking inventory & orders

Throughout the entire ecommerce supply chain, it's important to have systems in place to manage inventory in real-time.

Without real-time inventory management, it's a challenge to maintain optimal inventory levels and know when it's time to replenish inventory to meet demand, without overstocking and increasing holding costs.

Along with inventory tracking, you will also need to track orders. Digital order tracking allows you to monitor orders and shipments in real time, as well as provide tracking information for your customers.

For instance, with ShipBob's technology that integrates with your ecommerce platform(s), you can:

Automatically send a confirmation email and share the tracking number and tracking information with each customer.

View the order status as it moves from processing to shipping (and any step in between) in real-time.

Filter orders by status and search for specific orders.

Edit shipping details in situations where your customer made a mistake (e.g., entered the wrong address) up to the point when the order is picked.

Shipping

As soon as an order is picked and packed, it is then shipped. If you have multiple warehouses within your logistics network, the shipment is sent out from the nearest location to the destination.

Ecommerce shipping involves preparing orders to be transported to the end user in the most reliable, cost-effective way possible.

Developing a strategic shipping strategy is crucial, as it helps to maintain customer loyalty and customer satisfaction. Oftentimes, a winning shipping strategy is a combination of different shipping methods and partnering with the right mix of carriers.

If done right, shipping incentives are also used as marketing tool, such as 2-day shipping and free shipping. To help offset the cost of shipping (and free shipping), brands will use product bundles, minimum spend thresholds, and partner with a 3PL that takes care of shipping, as well as offer negotiated bulk shipping rates then pass the savings on to you and your customers.

Returns management

If not managed correctly, returns can be a large cost for ecommerce businesses. In 2019, 48% of customers returned products they purchased online, resulting in billions in losses.

The returns management process can involve additional receiving, packing, assessment, re-processing, and even replacements, which can quickly increase costs when not managed properly.

Fortunately, returns can be looked as an opportunity to further enhance the customer experience. By training your customer service team to initiate returns quickly while also asking for feedback is a great way to improve products by listening to what your customers have to say.

Overall, incorporating retail logistics solutions that make returns more efficient can have a huge impact on your business growth.

Exercise 1. Read and translate the text using the dictionary.

Exercise 2. Answer the following questions:

1. What are retail logistics?
2. What are the functions of retail logistics?
3. What is procuring inventory?
4. What is returns management?
5. What is ecommerce shipping?

Exercise 3. Using the information given in the text, prepare your own topic about Retail Logistics.

Text 5. Agrologistics: the concept, significance, types

Authors: S.M. Kurbatova, L.Yu. Aisner and V.A. Vlasov (https://iopscience.iop.org/article/10.1088/1757-899X/918/1/012136/pdf)

1. Introduction

Due to the current difficult economic situation in many countries, due to the coronavirus pandemic, complicated by other problems (for example, the presence of a number of sanctions by some states against Russia), the significance of the most powerful sectors of the economy is of particular importance for each country. For example, for Russia, agribusiness is one of these strong economic sectors. It was agribusiness that became one of the means of overcoming the protracted crisis that began from the moment sanctions were imposed by Western partners. However, it should be understood and accepted as a fact that the agricultural sector itself cannot develop separately from other sectors of the economy. Moreover, it is important for other areas of great importance for society and the state, for example, for food security, and at the global level, which is important, given other problems of modern society and the state. Its effective development is impossible without a developed transport infrastructure. For example, for Russia, the problem of agrologistics is one of the major problems for this business sector.

Agrologistics is a relatively new interdisciplinary field in the agricultural sector, including the management of supply chains of agricultural products and raw materials from production to delivery to the consumer, combining agricultural production, marketing, management, and logistics. At the same time, agrologistics refers to the branch types of logistics and is responsible for material flows in the agro-industrial complex.

Agrologistics is associated with the application of logistics methods and provisions in the field of agricultural production, aimed at minimizing labour costs, resource costs, transport costs, by optimizing transportation routes, and ultimately reducing the cost of agricultural products.

The peculiarity of transport is that it does not process raw materials and does not create products, but by means of transport, services are provided for the delivery of relevant products to its consumer with a minimum duration of time, with the solution of related issues (customs, documentation, cargo safety, etc.).

However, its role in the economy is very important:

- according to experts, due to outdated transport infrastructure, Russia loses 20-25% of the entire grain crop, while in economically developed countries this figure is equal to 1-2%;

- building optimal routes and correctly determining the effective distance is very important for planning the budget for the delivery of fertilizers, seeds, herbicides, and crops;
- excessive financial losses (which could be avoided) will affect the overall financial position of the agricultural enterprise;
- the extra expenses that were initially laid down for inflated distances are one of the methods of embezzlement in the agricultural sector, which takes the situation to a different level, requiring attention from law enforcement agencies.

The Russian transport system consists of road, rail, aviation, sea, river and pipeline transport. For the agricultural sector, rail, road and river transport are the most important.

2. Railway agrologistics

Railway transport is of great importance for the agricultural sector of the economy (for example, most grain is transported by rail). In Russia, 2/3 of all freight traffic is carried out by railway transport.

However, the very state of railways and related infrastructure is becoming an increasing problem. The main reasons are the heavy load on this means of transport and significant wear and tear of rolling stock, as well as a lack of investment in the development of the railway, which results in significant delays in the allocation of grain cars during active periods of agricultural exports. Thus, about 62% of grain cars already have a service life of 21 to 30 years, taking into account the maximum standard service life of 30 years. With the assumption that grain cars are a specific product, they will not be used for a whole year (in fact, they will not make a profit). Thus, the purchase of such cars is not too profitable for railway companies, and therefore, not a priority, but for the agricultural sector the issue of the need to purchase its own fleet of cars is raised, which poses another question: where to get funds for its formation and maintenance.

It should also be noted that there was a shortage of cars in 2015. By decision of the Government of the Russian Federation, the maximum service life of freight railway equipment was reduced. This led to the write-off of 200,000 transport units, more than half of which were in the low-sided car segment.

As a result, operators of large car fleets began to inflate prices for shippers. In 2015-2017, rates for renting low-sided cars increased from 560 rubles to 2000 rubles per unit per day. All that happens despite the fact that there is a constant increase in tariffs for rail transport, which puts an additional burden on domestic agricultural producers.

There are many other problems, which, given the importance of railway transport for agribusiness, makes it necessary to involve the state in their solution. An example is the Long-Term Development Program of open joint stock company "Russian Railways" (hereinafter - the holding) until 2025, approved by the order of the Government of the Russian Federation, which key initiatives for the development of transport and logistics services include:

- building long-term relationships with customers in the holding, improving customer feedback, increasing their loyalty, by means of creating and implementing an automated customer relationship management system in the field of freight transport among other things;
- creation of an automated resource for maintaining a unified catalog of services in the field of cargo transportation in the holding company, which provides consumers with access to the entire range of services, conditions and parameters of cargo transportation;
- development of logistics capabilities to meet the needs of customers in complex services, including global transport chains, logistics outsourcing of industrial enterprises (a program for the development and modernization of freight yards is being worked out, which is estimated at 27.4 billion rubles);
- increasing the predictability of cargo delivery by improving transportation with agreed departure and arrival times, reducing delivery times;
- adapting transport products and services to the needs of shippers and developing new products and services;
- standardization of the service quality in the field of cargo transportation with the establishment of parameters of availability, timeliness and reliability of transportation, cargo safety, the range of logistics and terminal storage services, delivery speed;
- development of small and medium-sized cargo shipments;
- development of technology for piggyback transportation; and others.

Another example is the formation of a nodal freight multimodal transport and logistics centers, defined by a complex plan for the modernization and expansion of trunk infrastructure for the period up to 2024, approved by the order of the Government of the Russian Federation from September 30, 2018 No. 2101-R.

Under the conditions of the macroeconomic trends laid down in it, the increase in loading until 2025 under the basic scenario will be 18%,

cargo turnover – 21%, and under the optimistic scenario – 30% and 37%, respectively.

It is also important to harmonize the carrier's liability for late delivery of goods and empty freight cars, which would help to align the competitive conditions of its activities with other means of transport and other railway carriers within the framework of the Eurasian economic Union (EEU). In general, the analysis of methods for improving the quality of use of freight cars shows that in modern conditions, the most relevant of them are:

- transport routing;
- increasing the load capacity of cars;
- modification of cars;
- organization of cargo transportation on "solid" lines of the schedule.

3. Automotive agrologistics

Road transport acts as a set of discrete economic agents that do not have significant links between themselves and technological dependence on the track infrastructure (as for example, this is the case in the railway transport system: "train-route-track infrastructure"). At the same time, road transport is an important element of agrologistics, providing the necessary flexibility and throughput.

Among the problems of automotive agrologistics that need to be addressed are:

1. For farmers, as well as for other road users, there is an urgent question about the quality of the latter. To solve the problem of improving roads in Russia, we should use the positive experience of other countries, namely:

- strengthen control over the quality and management of road construction and repair work. To do this, you need to invite representatives from independent companies, including international experts.
- greater implementation of public-private partnership forms. This is very common in other countries when building bridges, roads, tunnels, and other infrastructure. However, for the effective implementation of such forms, it is important to determine the mechanism for obtaining profit by a private investor. For example, this is:
- charge for use of motorways (despite the fact that you must first make such roads to introduce a fee for them).
- compensation by the state to investors at the expense of the budget if they do not receive profit. At the same time, we can immediately state that for Russia this should become the rule, not the exception, given the

income of the population in general, and the financial capabilities of many companies in the agricultural sector, in particular, and its ability to implement additional spending, including budget refunds for toll roads.

2. Agricultural producers often exceed the weight standards when transporting their goods by road. Although this is an advantage for them directly, since fewer trucks are used, which makes grain deliveries more mobile and also reduces transport costs, this negatively affects the quality of roads. As a result, this turns against the farmers themselves, who are forced to carry cargo on broken roads. The solution to this problem is seen in the fact that the state:

- implemented the rationing policy in this area more clearly;
- exercised control (which would be a preventive measure to possible violations) on a permanent basis;
- has legally established serious sanctions against violators (so that the possibility of consequences for violators is commensurate with the fact of violation of regulatory requirements).

3. It is necessary to rethink the existing approaches to the organization of transport work in the agricultural sector, based on the awareness of their shortcomings and applying the achievements of scientific technologies that are quite accessible.

- when using the calculation of the optimal route on waybills, for accurate planning of the transport budget in the fields, you can use the technology of GPS: Agrologistics. The system will find the best routes and calculate the exact distances between fields, farms, and warehouses. Moreover, it will automatically insert the distance in the process map, which will reduce errors in manual operations;
- it is necessary to control transport transposition along the established routes. Moreover, to achieve maximum effect, it is important to do this from a unified management center. For example, in the solution of GPS: Agricultural Management for crop production, it is convenient to analyze the transport transposition. For these purposes, the analyst has a planned route and the actual track of vehicles.

Savings from using the new scenario only at the logistics planning stage can save more than 200 thousand rubles per 1000 hectares.

4. River agrologistics

In many countries, river transport has not been widely used for various reasons. Including for solving transport problems in the field of agribusiness. Including in Russia, where river transport is not currently in de-

mand. However, it should be noted that the prospects for development of this type of transport are very high. In particular, because river transport is much more profitable than rail and road, because it is less energy-intensive, although it is significantly inferior to the latter in the speed of cargo transportation. In this regard, many experts agree that the future of agribusiness is connected with river transport.

Until 1990, more than 160 million tons of cargo were transported along large rivers and shipping channels. Now the cargo traffic has significantly decreased. The main cargo is agricultural products (oilseeds and cereals). According to data provided by experts of the international company Baker

Tilly, today the opportunities of domestic rivers are used by less than 1%, while in Germany and Romania this figure is from 13% to 27%. Due to the increase in prices for rail transport, it becomes obvious that the qualitative indicators of the waterway efficiency need to be improved, which is impossible without structural reforms.

This type of transport is considered promising for Russia due to the increase in prices for rail transport, although it is not as fast as others are. In addition, the river infrastructure is in poor technical condition. There are no modern elevators and shipping terminals built on water, which significantly reduces the capacity of river ports, river locks in most cases have exhausted the depreciation period, only about half of the internal waters of our country have guaranteed depths for safe navigation. The seasonality of river transport is considered another limitation for the development of river agrologistics. It is believed that the interest in river transport exists only in agricultural companies that have the same season of cargo transportation and navigation on the rivers. Companies that are engaged in transportation throughout the year are not interested in the development of river transport.

5. Conclusions

In order to realize properly the huge agricultural potential of Russia, as a country with a powerful agricultural sector, it is necessary to:

- pay special attention to the development of transport infrastructure and improving its efficiency;
- carry out analytical work to identify existing problems (for example, knowledge of "weak" places allows you to concentrate point-to-point activities to strengthen them);
- to introduce new approaches to legislation, changing the current one and forming a new one;

- develop comprehensive programs (for example, food security, environmental engineering, etc.) to attract new participants to the agricultural sector and provide additional opportunities to solve existing problems there;
- generate human resource to train specialists in relevant areas at the appropriate level and thus, modernize the education system under the expectations and demands of the agricultural market in the context of creating conditions for realization of the right to education;
- use the achievements of science and technology (new technologies and the process of digitalization, taking into account its global nature should centrally and purposefully cover the agricultural sector, helping to optimize transport chains, ensuring the effectiveness of solving logistics issues).

Exercise 1. Read and translate the text using the dictionary.

Exercise 2. Answer the following questions:

1. What is agrologistics?
2. What are the main problems of agrologistics?
3. What types of transport systems are there in Russia?
4. What types of transport system of Russia are the most important for the agricultural sector?
5. What measures should be taken to increase the agro-industrial potential of Russia?

Exercise 3. Using the information given in the text, prepare your own topic about Agrologistics.

ЗАКЛЮЧЕНИЕ

Использование учебного пособия «Английский язык в логистике» для обучающихся по направлению подготовки 38.04.02 – Менеджмент, профиль/направленность «Логистика и управление цепями поставок в АПК» способствует успешному овладению дисциплинами «Иностранный язык» (английский) и «Английский язык в логистике» у магистрантов данного направления подготовки и помогает формированию и совершенствованию межкультурной коммуникативной компетенции в сфере профессионального общения, развитию языковых навыков и речевых умений на основе межкультурного подхода, самостоятельному применению этих знаний в разнообразных ситуациях межкультурного и профессионального иноязычного общения.

Успешное овладение дисциплиной «Английский язык в логистике» способствует более полному формированию профессиональных компетенций в сферах экономики, менеджмента, логистики, торговли и т.д., благодаря расширению возможностей использования в профессиональной деятельности аутентичных источников, а также приобретенным умениям и навыкам общения на английском языке.

Умение извлекать и использовать информацию из аутентичных источников расширяет возможности изучения всех последующих учебных дисциплин основной образовательной программы (магистратуры/аспирантуры).

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ПРИЛОЖЕНИЯ

Приложение 1

ЛОГИСТИЧЕСКИЕ ТЕРМИНЫ
КРАТКИЙ АНГЛО-РУССКИЙ СЛОВАРЬ

A

acceptable quality	допустимое качество
access time	время доступа
accommodation	приспособление
account of charges	счет расходов
accountant	бухгалтер
acquisition	приобретение
act of god	стихийное бедствие
active stock	текущий запас
ad frequency	частота показа рекламы
additional income	дополнительная прибыль
additional payment	дополнительный платеж
add-on-sale	дополнительный объем продаж
adjustment	корректировка
advantage	преимущество
advertisement	рекламное объявление
advertiser	рекламодатель
advice of dispatch / advice of shipment	извещение об отправке
advisory	совещательный; консультативный
affiliates programs	партнерская программа
affiliation	объединение
affreightment	фрахтование
agent	доверенное лицо (юридическое или физическое), совершающее определенные действия по поручению другого лица (принципала) от его имени и в его интересах
agreement	договор, соглашение
air transport	воздушный транспорт
air waybill (AWB)	авианакладная (воздушная накладная)

allocated	зарезервирован
alternate delivery	альтернативная доставка
annual report	годовой отчет
approach pallet	входящий поддон
arrest	арест, задерживать
arrival date	дата прибытия
article	артикул
assessment of the dutiable value	определение стоимости, облагаемой налогами
asset	активы
assortment	ассортимент
attorney	адвокат
auto save	автосохранение
automatic merchandising	автоматическая торговля
average bond	аварийная гарантия, бонд
average cost	средние издержки
ability to pay	платежеспособность
accelerated development	ускоренное развитие
acceptance	принятие
account executive	ответственный исполнитель
accumulation account	счет накопления
active buyer	активный покупатель
advantages and disadvantages	преимущества и недостатки

B

back order	допоставка
banner ads	баннерная реклама
banner exchange service	баннерообменная система
barcode	штрих-код
basic route	основной маршрут
basic unit	базовая единица
benefit segmentation	сегментация полезности
bale	кипа, тюк
bank draft	банковский чек, драфт
bay number	номер секции стеллажа
bay plan	план погрузки судов
bill	счет
bill of exchange	вексель

bill of lading (b/ l)	коносамент
billboard	рекламный щит
bonded warehouse	таможенный склад
booking	бронирование, букирование, заказ
booking confirmation	подтверждение заказа
boot sector	загрузочный сектор
border	граница
box rate	ставка фрахта за контейнер
brand building	построение бренда
brand recognition	осведомленность о бренде
breakage	уничтоженный товар
break bulk agent	агент по деконсолидации сборных отправок
broker	агент-посредник, брокер
brokerage	куртаж, брокерская комиссия
budget performance	исполнение бюджета
bulk	масса
bulk cargo	насыпной, навалочный или наливной груз
bulletin board	доска объявлений
bundling	пакетирование
bunker adjustment factor (BAF)	поправочный коэффициент на бункер к ставке фрахта
buyer	покупатель

C

cancellation	отмена (заказа), аннулирование
cancelling/ cancelling date	канцелинг – согласованный чартером срок прибытия судна в порт отправления и его готовности к погрузке
capability	возможности
cargo	груз, продукция, товар
cargo agent	грузовой агент
cargo insurance	страхование грузов
cargo manifest	грузовой манифест
cargo unit	единица груза, грузовое место

cargo volume	грузовой объем
carriage and insurance paid to (CIP)	перевозка и страхование оплачены
carriage forward	с оплатой доставки получателем
carriage paid to … (CPT)	перевозка оплачена до...
carrier	перевозчик
cartage	автоперевозка, перевозка автотранспортом
cash equivalents	денежные эквиваленты
cash flow	денежный поток
cash on delivery (COD)	оплата при доставке, наложенный платеж, оплата после сдачи груза
cell protection	защита ячейки
certificate of origin	сертификат происхождения
certificate of shipment	свидетельство об отгрузке
cession	уступка, передача прав, переуступка
chamber of commerce	торговая палата
charge (*v*)	грузить/ погружать; груз
charges collect	расходы подлежат оплате грузополучателем
charges for consignee's account	расходы за счет получателя
charges prepaid	заранее оплаченные расходы
chart	график, диаграмма
charter party	договор морской перевозки, чартер
chief executive officer	главный администратор
choice assistance	помощь потребителю при его выборе
circulation	тираж, обращение, циркуляция
circulation of money	обращение денег
claim	претензия, иск, требование, рекламация
clause paramount	общая статья чартера
clearance	очистка от пошлин
click through ratio (CTR)	соотношение кликов к количеству показов
closed loop	замкнутая обратная связь

closed loop marketing	маркетинг с замкнутой обратной связью
code of practice	обычай
collaboration	сотрудничество
collaborative customization	совместная подгонка продукции
collection	сбор, получение денег, совокупность
combined transport	смешанная перевозка
combined transport operator (CTO)	оператор смешанной перевозки
commercial invoice	коммерческий счет-фактура
commercial practice	торговая практика
commercial value	коммерческая стоимость
commission	комиссия, поручение, вознаграждение
commodities	товары
commodity code	товарный код
commodity rate	единая тарифная ставка
common carrier	контрактный перевозчик
common market	общий рынок
company profile	информация о компании
comparative accuracy	сравнительная точность
compatibility	совместимость
compete	конкурировать
competition	конкуренция
competitor	конкурент
complaint	рекламация, жалоба
complete delivery	завершенная поставка
concept to reality	понятие, концепция реальности
concession	уступка, концессия
condition	условие, положение, состояние
conference	конференция, картельное соглашение
confirmation	подтверждение
congestion surcharge	надбавка к фрахту в связи со скоплением судов в порту
consignee	грузополучатель
consignment	отправка, груз, партия товара

consignment note	транспортная накладная
consignor	грузоотправитель
consolidated shipment	сборная отправка
consolidation	организация сборной отправки, консолидация
consolidator	экспедитор, организующий сборные отправки
consular invoice	консульская фактура
consumer behavior	поведение потребителей
consumer unit	потребительская единица
container terminal	контейнерный терминал
container yard	контейнерный двор
contamination	загрязнение, порча
contents	содержание
contract	договор, соглашение, контракт
contribution	вклад, пожертвование, взнос
control equipment	оборудование для контроля
convention	конвенция, соглашение, договор
conventional penalty	установленная неустойка, штраф
conversion rate	обменный курс
co-production	совместное производство
cost and freight (CFR)	стоимость и фрахт
cost, insurance and freight (CIF)	стоимость, страхование, фрахт
costs and risks for consignee	стоимость и риски для получателя
costs of production	производственные издержки
counterpurchase	встречная (взаимная) сделка
country of destination	страна назначения
country of origin	страна происхождения
cover note	временное свидетельство о страховании
crane	грузоподъемный кран
credit note	кредитовое авизо, кредит
currency	валюта
currency adjustment factor c.a.f.	валютный поправочный коэффициент
current account	текущий счет
customer	покупатель

customer relationship management	управление взаимоотношениями с клиентом
customer support	служба поддержки потребителей
customization	подгонка продукции на заказ
customs agent/ customs broker	таможенный агент/ таможенный брокер
customs authorities	таможенные органы
customs clearance	таможенная очистка
customs declaration	таможенная декларация
customs duties	таможенные пошлины
customs entry	таможенная декларация
customs formalities	таможенные формальности
customs house	таможня
customs law	таможенное законодательство, право
customs procedure	таможенный режим
customs tariff	таможенный тариф
customs union	таможенный союз
customs value	таможенная стоимость
customs warehouse	таможенный склад

D

damage	ущерб, вред, порча, авария, убыток, поврежденный товар
damage limitation	ограничение убытков
dangerous goods	опасные грузы
dangerous goods declaration	декларация об опасных грузах
dangerous goods note	извещение об опасных грузах
data movement	движение данных
data processing	обработка данных
data source	источник данных
date of issue	дата выдачи; дата выписки
date of maturity	срок погашения; число, когда наступает срок
date of receipt	дата получения
date of shipment	дата отправки
dead freight	мертвый фрахт
dead line	крайний срок сдачи

dead loss	чистые убытки
dead weight	полная грузоподъемность судна в тоннах
dealer list	список поставщиков
debit note	дебетовое авизо
debt	долг
decision model	модель принятия решений
decision support system	система поддержки принятия решения
deck cargo	палубный груз
declarant	декларант
declaration of origin	декларация о происхождении
declaration of the consignor	декларация грузоотправителя
deferment	отсрочка
definitely	определенно, точно
definitive exportation	окончательный экспорт
delay	задержка, опоздание
delay and lags	задержки и отставания
delayed delivery	отложенная доставка
delivered at frontier (DAF)	поставка до границы
delivered duty paid (DDP)	поставка с оплатой пошлины
delivered duty unpaid (DDU)	поставка без оплаты пошлины
delivered ex quay (DEQ)	поставка с пристани
delivery date	дата поставки
delivery note	транспортная накладная
delivery order	накладная на выдачу товара со склада
delivery period	срок поставки
delivery point	место доставки
delivery schedule	график поставок
delivery slot	интервал доставки
delivery terms	условия поставки
demand	спрос
demeurer	демередж, дополнительная выплата судовладельцу за задержку судна по вине фрахтователя под погрузкой/ выгрузкой (т.е. за превышение сталийного времени, согласованного в чартере)

demise	сдача (в аренду)
demurrage (rail-road)	простой вагона
demurrage (sea)	простой судна
density of population	плотность населения
dependent service	зависимый сервис
deposit	аванс, задаток, депозит
deport	депо
description of goods	описание товара
destination	назначение, пункт назначения
digital money	цифровые деньги
direct access	прямой доступ
direct communication	прямые коммуникации
direct delivery	прямая поставка
direct store delivery	прямая поставка в магазин
direct load	прямой груз
disable service	недоступная услуга
disbursement	выплата, расходы, расходы по обслуживанию
discharge	выгрузка, разгрузка
disclosure	раскрытие, разоблачение, объявление
discount	скидка
discrepancy	расхождение, противоречие
dispatch	отправка
dispatch documents	отгрузочные документы
dispatch note	спецификация на отправленный груз
dispatch unit	единица отгрузки
distribution	распределение, распространение товара
distribution	рассылка, распределение
diversification	расширение ассортимента в разных сферах
dockyard	портовый двор, верфь
documentary credit	документарный аккредитив
documents against acceptance	документы против акцепта
domestic transport	внутренние перевозки
domicile	местожительство

door-to-door	от двери – до двери (поставка)
draft	проект, эскиз, план
draft of vessel	осадка, величина погружения судна в воду, исчисляемая от нижней кромки киля судна до поверхности спокойной воды
draught survey	определение веса погруженного или выгруженного груза по осадке судна
draw sample (*v)*	получать образец, отбирать образец
drawback	возврат пошлины, недостаток
drawee	трассат; лицо, на которое выставлена тратта
drawer	трассант; лицо, выставившее тратту
dry dock	сухой док
due date	дата платежа
dumping	вывоз по бросовым ценам, демпинг
dunnage	подстилочный материал, материал для компактной укладки
duplicate	копия, дубликат
durable goods	товары длительного срока пользования
duty/ tax	долг, пошлина, обязанность

E

E-commerce	электронная коммерция
E-commerce impact on web sites	воздействие электронной коммерции вебсайты
effort	усилие
embargo	запрет, запрещать, задерживать
endorsement	передаточная надпись, индоссамент
engage in trade	вести торговлю
entrepreneurship	предпринимательство

estimate of transport costs	оценка, калькуляция транспортных расходов
estimated time of arrival (ETA)	расчетное время прихода
estimated time of departure (ETD)	расчетное время отхода
europallet	европоддон
ex works (EXW)	франко завод
examination by customs officers	таможенный досмотр
excess	излишек, избыток
exchange rate	обменный курс валюты
excise duties	акцизный сбор
exemption from duty	освобождение от пошлины
expensive	дорогой
expiration date	дата окончания
expired	просрочен
expiry	истечение, окончание срока
expiry date	истечение срока
export declaration	экспортная декларация
export documents	экспортные документы
export figures	экспортная статистика, данные
exporter	экспортер
extra goods	излишки

F

fair	ярмарка, выставка
fall back	запас, резерв
fast freight	скоростной груз, доставка большой скоростью
fast moving consumer goods	ходовая продукция
feedback	обратная связь; ответная реакция
feeder	фидер, порт загрузки
feeder port	фидерный порт, порт загрузки
ferry	паром
field research	полевое исследование
final consumer	конечный потребитель
final notice	окончательный нотис
financial aid	финансовая помощь
financial applications	финансовые приложения
firm offer	твердое предложение

first carrier	первый перевозчик
flat–rate tariff	единообразная, единая ставка
flowchart	блок-схема
force majeure	обстоятельства непреодолимой силы
foreign bank	западный (иностранный) банк
foreign currency	иностранная валюта
forklift	вилочный погрузчик
forwarder	экспедитор
forwarders certificate of receipt (FCR)	экспедиторская расписка (фиата)
forwarders certificate of transport (FCT)	транспортный сертификат (фиата)
forwarding	экспедирование
forwarding agent	экспедитор
forwarding instructions	экспедиторское поручение
fragile	хрупкий
franco/ free domicile	франко
free alongside ship (FAS)	свободно вдоль борта судна
free border/ frontier	франко граница
free carrier (FCA)	франко перевозчик
free circulation	свободное обращение
free domicile duty paid	франко получателя с оплатой таможенной пошлины
free in	свободно от расходов по погрузке
free in and out	свободно от расходов по погрузке и разгрузке
free of charge	бесплатно, свободно, безвозмездно
free on board (FOB)	франко борт, свободно на борту
free on rail/ free on truck (FOR-FOT)	франко вагон, франко борт
free on truck/ lorry	франко автомобиль
free out	свободно от расходов по выгрузке
free port	франко порт
free time	льготное свободное от оплаты время, которое судовладелец предоставляет фрахтователю перед сталийным временем для организационных работ, связанных с погрузкой/ разгрузкой

freight	фрахт, расходы по фрахтованию
freight all kind (FAK)	фрахт для всех грузов, единый тариф
freight and duties paid	стоимость перевозки и пошлины оплачены
freight charges	расходы по перевозке, транспортные расходы
freight collect	фрахт оплачивается по доставке
freight commission	комиссия за фрахт
freight contracting (charter)	фрахтование судна, заключение договора морской перевозки
freight forwarder	экспедитор
freight paid	фрахт оплачен
freight paid to	фрахт оплачен до
freight payable at destination	фрахт оплачивается по доставке
freight prepaid	фрахт оплачен авансом
freight rate	ставка фрахта
freight rebate	скидка с фрахта
freighter	грузовое судно
friendly technology	приемлемые технологии
frontier	граница
frontier railway station	пограничная железнодорожная станция
full container load (FCL)	груз, достаточный для полной загрузки контейнера
full load	полная загрузка, полный груз
full set of bills of lading	полный комплект коносамента
furniture removal	перевозка мебели

G

gauge	колея, ширина железнодорожной колеи
gauging	измерение, выверка, градуировка
general average	общая авария
general cargo	тарно-упаковочный груз (генеральный груз)
general terms of delivery and payment	общие условия поставки и платежа

general terms of sale and delivery	общие условия продажи и поставки
globalisation	глобализация
goods	товар, груз
goods flow	товарный поток
goods owner	владелец товара
grace time	льготное свободное от оплаты время, которое судовладелец предоставляет фрахтователю перед сталийным временем для организационных работ, связанных с погрузкой/ разгрузкой
gross price	цена брутто
gross profit	валовая прибыль
gross registered tonnege	регистровая вместимость судна, регистровый тоннаж
gross weight	вес брутто
ground handling charges	основные расходы по перевалке товара
groupage	комплектация мелких отправок в сборные, укрупненные
groupage operator	экспедитор, занимающийся сборными отправками
guarantee	гарантия
guarantee charges	гарантийные расходы

H

half height container	полуконтейнер
handle with care	обращаться осторожно
handling	перевалка, обработка грузов
harbour	порт, гавань
harbour dues	портовые сборы
haulier	автоперевозчик
hazardous cargo	опасный груз
hazmat	опасные материалы
heavy lift	тяжеловесный груз
heterogeneity goods	смешанные товары
high seas	открытое море

hold QC	задержан на контроле качества
homogeneity goods	однородные товары
hosting	аренда сервера
house air waybill (HAWB)	домашняя авианакладная
house bill of lading	домашний (внутренний) коноса-мент
house to house	от дома до дома (поставка)
hub	транспортный узел
huge	большой, огромный

I

impact	сильное воздействие; влияние
implementation	внедрение, насаждение, выполнение
import duty	импортная пошлина
importer	импортер
in bulk	навалом, без упаковки
individual consumer choice	потребительский выбор (индиви-дуальный)
individuals	отдельный представитель
inflammable	огнеопасный, легковоспламе-няющийся
information flow	информационный поток
inhibited area	карантин, запрещенная зона
inland haulage	внутренняя перевозка
inland navigation	плавание по внутренним водным путям
inland transport	внутренний транспорт
in progress	в работе
in transit	в транзите
в транзите	изотермический контейнер
insurance	страхование
insurance broker	страховой брокер
insurance policy	страховой полис
integrator	интегратор
interactivity	интерактивность
intermediaries	посредники
intervention	вмешательство
inventory	инвентаризация

investment behaviour	(поведение) динамика инвестиций
invoice	счет, счет-фактура
invoice unite	единица оплаты
irrevocable letter of credit	безотзывный аккредитив

J

jetsam	выброшенный за борт и потонувший груз
joint-stock company	акционерное общество
just in time	точно вовремя, как раз вовремя

K

kit	комплект

L

labelling	маркировка
lag	задержка
land carriage	сухопутная, наземная перевозка
landing charges	сбор за выгрузку или высадку
lay-days	стояночное время
lead time	время выполнения заказа
lease	аренда
left overs	остатки
length	длина
less than container load (LCL)	мелкая отправка, недостаточная для полной загрузки контейнера
letter of credit	аккредитив
levy	сбор, налог, обложение
liabilities	задолженность
liability	ответственность
licence	разрешение, лицензия
lien	залоговое право
life-cycle segmentation	сегментация потребителей по образу жизни
lighter	лихтер, баржа
liner	рейсовое судно
liner terms	линейные условия
liquid	жидкий, жидкость, ликвидный

load (v)	грузить
load line	грузовая линия
load reference height	габарит погрузки по высоте
loading charges	расходы по погрузке
loading expenses	стоимость погрузочных работ
loading list	погрузочная ведомость, грузовая спецификация
loading space	полезный объем
loading/ load	погрузка, груз
logistic label	логистическая этикетка
logistics	логистика
loose (bulk) goods	неупакованный, навалочный груз
lorry	грузовой автомобиль
loss	потеря, убыток, утрата, пропажа
lot size	партия поставки
lumpsum rate	твердая аккордная ставка, ставка «лумпсум»
laydays or laytime	сталийное время, согласованное сторонами чартера время, в течение которого судовладелец предоставит судно в согласованное место под погрузку/ выгрузку без дополнительных к согласованному фрахту платежей

M

manifest	список товаров на судне, манифест
market penetration	проникновение на рынок
marketing methods	маркетинговые методы
marketing research system	система маркетингового исследования
master air waybill (mawb)	международная авианакладная
mate's receipt	штурманская расписка
means of transportation	транспортное средство
mentioned	упомянутый
merchant	купец, коммерсант, торговец
merchandise structure (MS)	структура классификации артикулов

merger	поглощение, слияние, объединение
misplacement	пересортица, ошибка размещения
mixed consignment	смешанная отправка, смешанный груз
monetary policy	денежная политика
most favoured nation clause	оговорка о режиме наибольшего благоприятствования
multilingual	многонациональный
multimodal transport	смешанная перевозка

N

negotiable	товарораспорядительный
net price	цена нетто, чистая цена
non-negotiable bills of lading	необоротный коносамент
non-retumable	невозвратная
notice of readness	нотис/ извещение о готовности судна к погрузке/выгрузке
notice time	льготное свободное от оплаты время, которое судовладелец предоставляет фрахтователю перед сталийным временем для организационных работ, связанных с погрузкой/ разгрузкой
notify party	уведомить сторону
net registered tonnege	нетто-регистровый или чистый тоннаж (объем судна за вычетом помещений, не предназначенных под перевозку груза)
net income	чистый доход
non-manufacturing business	сфера услуг
nonprofit organization	некоммерческая компания
non sold goods	непродаваемые товары
notable company	значительная компания

O

obsolete stocks	неиспользуемые запасы
obvious	очевидный
occur	происходить

ocean bill of lading	морской коносамент
ocean freight charges	морской фрахт
offer	предложение
on board	на борту
on carriage	дальнейшая перевозка
one-way packing	одноразовая упаковка
online communication	онлайновые коммуникации
online community	онлайновое сообщество
online customer support	онлайновая потребительская под-держка
online mass customization	онлайновая массовая подгонка на заказ
online quality enhancements	оптимизация онлайнового качества
open cover	генеральный полис
operating expenses	операционные расходы
order return	заказ на возврат
orderable assortment	заказываемый ассортимент
order tracking	слежение выполнения заказа
out of gauge	негабаритный
out of profile	негабаритный груз
out of stock	отсутствует на складе
outdoor advertising	наружная реклама
outsider	аутсайдер, посторонний
overstocks	излишние запасы
overweight	перевес, излишек веса
official representative	официальный представитель

P

package	грузовое место, упаковка
package goods	штучный товар
packaging charges	расходы по упаковке
packer	упаковщик
packing	упаковка, тара
packing included	включая упаковку
packing list	упаковочный лист
paid by hour	оплата в час
pallet	поддон, паллета
paper mill	бумажная фабрика

parcel service	почтово-посылочные услуги
part load	частичная загрузка
part load consignment	частичная отправка
particular average	частная авария
passive seller	пассивный продавец
payload	полезный груз
payment by negotiation	платеж после передачи
payment within 30 days of receipt of invoice	платеж в течение 30 дней после получения счета
performance bond	исполненное долговое обязательство
perishables	скоропортящиеся продукты
pick up & delivery	сбор грузов у клиентов и их доставка перевозчику
pick-up date	установленная для доставки дата
piece goods	штучный товар
piggy-back traffic	контрейлерные перевозки
place of destination	место назначения
place of dispatch	место отправки
place of entry	место входа, место ввоза
place of receipt	место получения
plant	завод
plimsoll line	грузовая марка; отметка на борту коммерческого судна. Буквы на грузовой марке означают: TF – tropical fresh water – пресная вода в тропиках F – fresh water – пресная вода T – tropical seawater – морская вода в тропиках S – summer seawater – летняя морская вода W – winter seawater – зимняя морская вода WNA – winter north atlantic – зимняя северо-атлантическая
point of shipment	место отгрузки

point of view	точка зрения
pooling	сборные грузы
population	генеральная совокупность
port	порт
pre-carriage	доперевозочные операции
price current	прейскурант
price list	цена по прейскуранту
price sensitivity	чувствительность к ценам
primary data	первичные данные
principal	заказчик, клиент, принципал
private income	частный доход
private practice	частное предпринимательство
probability methods	вероятностные методы
profile	габарит
profitable	прибыльный
pro-forma invoice	счет-проформа
prohibited goods	запрещенные товары
promotion	продвижение
public opinion	общественное мнение
public relations	связи с общественностью
purchase	покупка
put-away	размещение

Q

quantitative analysis	количественный анализ
quantity	количество

R

railway-station	железнодорожная станция
raise output	поднимать производительность
rapid release	быстрый выпуск на рынок
rate of interest	процентная ставка
realty	недвижимость
reasonable prices	приемлемые цены
rebate	скидка, уступка, вычет
receipt	получение, расписка
receiver	получатель, грузополучатель
receptacle	контейнер

recipient	получатель, получающий
red goods	активный товар
redelivery	перепоставка
redirection	перенаправление
reefer container	рефрижераторный контейнер
reexportation	реэкспорт
registered tonnege	регистровая тонна – единица измерения регистровой вместимости. 1 регистровая тонна равна 100 кубическим футам, или 2,83 кубическим метрам
registration fee	регистрационный взнос
reimportation	реимпорт
rejection	отказ от приемки товара
rejects	некондиционный товар
relationship marketing	маркетинг отношений
relevant	значимый
reliability	надежность
reliable connection	надежное соединение
reliable partner	надежный партнер
remainders	остатки
rental equipment	оборудование, сдаваемое в аренду
repayment	возмещение, погашение, уплата
repeat use	повторное использование
replenishment	пополнение
reseller	торговый посредник
reservations	оговорка, условие, резервирование
reshipment	перегрузка, перевалка
response time	время ответа
restocking interval	интервал поставки, пополнение
restricted articles	товары, подпадающие под действие запрета
retail alliances	союзы розничной торговли
retail trade	розничная торговля
return money	возврат денег
returnable packing	возвратная упаковка
revenue-based business models	бизнес-модели, ориентированные на получение прибыли

reversible laydays	(в чартере) согласованное общее время для операции погрузки и выгрузки
revocable letter of credit	отзывный аккредитив
revolving letter of credit	револьверный, пополняемый аккредитив
risk	риск, опасность
risk management	управленческий риск
road haulage	грузовые автоперевозки
road haulage agent	посредник (агент) по грузовой автоперевозке
road haulier	грузовой автоперевозчик
roll on-roll off (RO-RO)	перевозка грузов на судах с горизонтальной системой погрузки «РО-РО»
royalties	пошлина, плата за разрешение
rummaging	таможенный досмотр, обыск; перекладывание грузов

S

salary	заработная плата
sale	продажа
sample of no commercial value	образец, не имеющий коммерческой стоимости
satisfaction of needs	удовлетворение потребностей
schedules	список, график, добавочный лист
scientific discovery	научное открытие
seals	печать, пломба
seatransport	морские перевозки, морской транспорт
secure layer	защитный слой
security	безопасность, гарантия, охрана, защита
seller	продавец
semi-trailer	полуприцеп
sender	отправитель
serial shipping container code (SSCC)	серийный код транспортной упаковки

settlement	урегулирование, платеж
shareholder	акционер
sharing	совместное использование
shelf capacity	емкость полки
shelf life	срок хранения, срок годности
shipbroking	судовое брокерство, маклерство
shipment	отгрузка, отправка
shipment (on board)	отгрузка (на борту судна)
shipment unit	отгрузочная единица, место
shipped on board bill of lading	отправлено по бортовому коноса-менту
shipper	грузоотправитель, экспортер
shipping agent	судовой агент, экспедитор
shipping companies	судоходные компании
shipping company/shipping line	судоходная компания, судоходная линия
shipping documents	грузовые, погрузочные документы
shipping point	место отгрузки, отправки
ship's papers	судовые документы
shop-keeper	заведующий магазином
short shipped	недопущенный, недопоставлен-ный
shortage	нехватка, недостача
shrinkage	потери
shut out	отказывать, не допускать
SKU description	описание товара
SKU ID	код товара
smart browsing	умный просмотр
smuggler	контрабандист, контрабандное судно
social responsibilities	социальная ответственность
society	общество
spoilage	испорченный товар
spontaneous combustion	самовоспламенение
spot rate	курс по кассовым сделкам, курс по сделкам «спот»
stack	полка, стеллаж, штабель, кипа, укладывать в штабель

standard gauge	железнодорожная колея нормальной ширины
standards marketing	маркетинг и стандарты
statement of facts	акт стояночного времени
stevedore	грузчик, стивидор, грузить
stock	запас, инвентарь, наличный товар
stock accounting	счет ценных бумаг, капиталов, товаров
stock check	инвентаризация
stock exchange	фондовая биржа
stock list	номенклатура продукции склада
storage	хранение, складирование
store	склад, магазин
stow (v)	укладывать груз на судне
stowage	штивка, укладка груза на судне
stowage plan	каргоплан, план размещения груза на судне
stripping	снятие, лишение, разборка
stuffing	загрузка контейнера
stumbles	сбои
successful negotiations	успешные переговоры
supplements	добавки
supplier	поставщик
surcharge	надбавка, перегрузка, штраф
surface transport	сухопутные перевозки, наземный транспорт
surplus	излишек, остаток
survey	осмотр, освидетельствование
swap body	сменный кузов (разновидность контейнера)

T

take samples (v)	взятие образцов
tank container	цистерна-контейнер
tank wagon	цистерна-вагон
tare	тара, упаковка
tare weight	вес тары
target audience	целевая аудитория
tariff	тариф, расценка, пошлина

tariff regulations	тарифное регулирование
tax	налог
temporary exportation	временный вывоз (экспорт)
temporary importation	временный ввоз (импорт)
terminal	терминал, конечный пункт
terms of delivery	условия поставки
terms of payment	условия платежа
through rate	сквозная ставка фрахта
time charter	тайм-чартер, аренда судна на время
time sheet	таймшит (ведомость учета стояночного времени судна на погрузочные/ разгрузочные операции)
total market value	общая рыночная стоимость
total sum	общая сумма
traceability	отслеживаемость
trade balance	торговый баланс
trader	торговец, торговое судно
trailer truck (road train)	грузовой автопоезд
trailer	тягач
transaction	сделка
transit	транзит
transit time	транзитное время
transparent customization	прозрачная подгонка продукции
transport chain	транспортная цепь
transport charges	транспортные расходы
transport medium	транспортное средство
transport users	пользователи транспортных средств
transshipment	перегрузка, перевалка
trip	рейс, поездка, плавание
truck	грузовик, товарный вагон
turnkey contract	контракт под ключ
twenty equivalent unit (TEU)	20-футовый эквивалент

U

ubiquity	всеохватность, вездесущность
underwriter	страхователь
unit load	укрупненное, объединенное грузовое место

unit load device (ULD)	приспособление для укрепление грузового места
unloading	разгрузка, выгрузка
unloading point	место разгрузки
usance	торговый обычай; установленный обычаем срок платежа

V

validation	проверка
valuable	ценный
value chain	стоимостная цепочка
vendor	поставщик, розничный торговец
venture investment	рискованные инвестиции
visa	виза
volumetric	объемный
voyage charter	рейсовый чартер

W

wagon	вагон, грузовой вагон
warehouse	склад
warehouse keeper	владелец склада
warehouse receipt	складская расписка
warehouse-warrant	складское свидетельство
warehousing charges	складские расходы
waterlinie	ватерлиния (нидерл.) – линия соприкосновения спокойной поверхности воды с корпусом плавающего судна
way bill	транспортная накладная
weekly revenue	недельный доход
weight	вес
wharf	причал, пристань
wharfage	причальный сбор
wholesale	оптовая продажа
written statement	письменное заявление

Y

yield management	управление доходом

Приложение 2

BASIC ENGLISH SUPPLY CHAIN MANAGEMENT TERMS AND GLOSSARY

24/ 7/ 365: referring to operations that are conducted 24 hours a day, 7 days aweek, 365 days per year, with no breaks for holidays, etc.

24/ 7: referring to operations that are conducted 24 hours a day, 7 days a week.

80/ 20 rule: a term referring to the Pareto principle. This principle suggests that most effects come from relatively few causes; that is, 80% of the effects (or sales or costs) come from 20% of the possible causes (or items).

A

ABC analysis	a classification of items in an inventory according to importance defined in terms of criteria such as sales volume and purchase volume
ABC classification	classification of a group of items in decreasing order of annual dollar volume or other criteria. This array is then split into three classes called A, B, and C. The A group represents 10 to 20% by number of items, and 50 to 70% by projected dollar volume. The next grouping, B, represents about 20% of the items and 20% of the dollare volume. The C – class contains 60 to 70% of the items, and represents about 10 to 30% of the dollar volume
ABC inventory control	an inventory control approach based on the ABC volume or sales revenue classification of products (A items are highest volume or revenue, C – or perhaps D – are lowest volume SKUs.)
ABC model	in cost management, a representation of resource costs during a time period that are consumed through activities and traced to products, services, and customers, or to any other object that creates a demand for the activity to be performed

ABC system	in cost management, a system that maintains financial and operating data on an organization's resources, activities, drivers, objects and measures. ABC Models are created and maintained within this system
abnormal demand	Demand in any period that is outside the limits established by management policy. This demand may come from a new customer or from existing customers whose own demand is increasing or decreasing
absorption costing	in cost management, an approach to inventory valuation in which variable costs and a portion of fixed costs are assigned to each unit of production. The fixed costs are usually allocated to units of output on the basis of direct labor hours, machine hours, or material costs. Synonym: Allocation Costing
accelerated commercial release operations support system (ACROSS)	a Canada Customs system to speed the release of shipments by allowing electronic transmission of data to and from Canada Customs 24 hours a day, 7 days a week
acceptable quality level (AQL)	in quality management, when a continuing series of lots is considered, AQL represents a quality level that, for the purposes of sampling inspection, is the limit of a satisfactory process average
acceptable sampling plan	in quality management, a specific plan that indicates the sampling sizes and the associated acceptance or non-acceptance criteria to be used
acceptance number	in quality management, 1) a number used in acceptance sampling as a cut off at which the lot will be accepted or rejected. For example, if x or more units are bad within the sample, the lot will be rejected. 2) the value of the test statistic that divides all possible values into acceptance and rejection regions

acceptance sampling	1) the process of sampling a portion of goods for inspection rather than examining the entire lot. The entire lot may be accepted or rejected based on the sample even though the specific units in the lot are better or worse than the sample. There are two types: attributes sampling and variables sampling. In attributes sampling, the presence or absence of a characteristic is noted in each of the units inspected. In variables sampling, the numerical magnitude of a characteristic is measured and recorded for each inspected unit; this type of sampling involves reference to a continuous scale of some kind. 2) a method of measuring random samples of lots or batches of products against predetermined standards
accessibility	a carrier's ability to provide service between an origin and a destination
accessorial charges	a carrier's charge for accessorial services such as loading, unloading, pickup, and delivery, or any other charge deemed appropriate
accountability	being answerable for, but not necessarily personally charged with, doing specific work. Accountability cannot be delegated, but it can be shared. For example, managers and executives are accountable for business performance even though they may not actually perform the work
accounts payable (A/P)	the value of goods and services acquired for which payment has not yet been made
accounts receivable (A/R)	the value of goods shipped or services rendered to a customer on whom payment has not been received. Usually includes an allowance for bad debts
accreditation	certification by a recognized body of the facilities, capability, objectivity, competence,

	and integrity of an agency, service, operational group, or individual to provide the specific service or operation needed. For example, the Registrar Accreditation Board accredits those organizations that register companies to the ISO 9000 Series Standards
accredited standards committee (ASC)	a committee of ANSI chartered in 1979 to develop uniform standards for the electronic interchange of business documents. The committee develops and maintains US generic standards (X12) for Electronic Data Interchange
accumulation bin	a place, usually a physical location, used to accumulate all components that go into an assembly before the assembly is sent out to the assembly floor. Synonym: Assembly Bin
accuracy	in quality management, the degree of freedom from error or the degree of conformity to a standard. Accuracy is different from precision. For example, four-significant-digit numbers are less precise than six- significant-digit numbers; however, a properly computed four-significant- digit number might be more accurate than an improperly computed six- significant-digit number
acknowledgement	a communication by a supplier to advise a purchaser that a purchase order has been received. It usually implies acceptance of the order by the supplier
acquisition cost	in cost accounting, the cost required to obtain one or more units of an item. It is order quantity times unit cost
action message	an alert that an MRP or DRP system generates to inform the controller of a situation requiring his or her attention
active stock	goods in active pick locations and ready for order filling

activity	work performed by people, equipment, technologies, or facilities. Activities are usually described by the action-verb-adjective-noun grammar convention. Activities may occur in a linked sequence and activity-to-activity assignments may exist. (1) in activity-based cost accounting, a task or activity, performed by or at a resource, required in producing the organization's output of goods and services. A resource may be a person, machine, or facility. Activities are grouped into pools by type of activity and allocated to products. (2) in project management, an element of work on a project. It usually has an anticipated duration, anticipated cost, and expected resource requirements. Sometimes major activity is used for larger bodies of work
activity analysis	the process of identifying and cataloging activities for detailed understanding and documentation of their characteristics. An activity analysis is accomplished by means of interviews, group sessions, questionnaires, observations, and reviews of physical records of work
activity-based budgeting (ABB)	an approach to budgeting where a company uses an understanding of its activities and driver relationships to quantitatively estimate workload and resource requirements as part of an ongoing business plan. Budgets show the types, number of, and cost of resources that activities are expected to consume based on forecasted workloads. The budget is part of an organization's activity-based planning process and can be used in evaluating its success in setting and pursuing strategic goals
activity-based costing	a methodology that measures the cost and

(ABC)	performance of cost objects, activities, and resources. Cost objects consume activities and activities consume resources. Resource costs are assigned to activities based on their use of those resources, and activity costs are reassigned to cost objects (out puts) based on the cost objects proportional use of those activities. Activity-based costing incorporates causal relationships between cost objects and activities and between activities and resources
activity-based costing model	in activity-based cost accounting, a model, by time period, of resource costs created because of activities related to products or services or other items causing the activity to be carried out
activity-based costing system	a set of activity-based cost accounting models that collectively defines data on an organization's resources, activities, drivers, objects, and measures
activity-based management (ABM)	a discipline focusing on the management of activities within business processes as the route to continuously improve both the value received by customers and the profit earned in providing that value. AMB uses activity-based cost information and performance measurements to influence management action
activity-based planning (ABP)	activity-based planning (ABP) is an ongoing process to determine activity and resource requirements (both financial and operational) based on the ongoing demand of products or services by specific customer needs. Resource requirements are compared to resources available and capacity issues are identified and managed
activity-based budgeting (ABB)	is based on the outputs of activity-based planning
activity dictionary	a listing and description of activities that

	provides a common/standard definition of activities across the organization. An activity dictionary can include information about an activity and/or its relationships, such as activity description, business process, function source, whether value added, inputs, outputs, supplier, customer, output measures, cost drivers, attributes, tasks, and other information as desired to describe the activity
activity driver	the best single quantitative measure of the frequency and intensity of the demands placed on an activity by cost objects or other activities. It's used to assign activity costs to cost objects or to other activities
activity level	a description of types of activities dependent on the functional area. Product-related activity levels may include unit, batch, and product levels. Customer-related activity levels may include customer, market, channel, and project levels
activity ratio	a financial ratio used to determine how an organization's resources perform relative to the revenue the resources produce. Activity ratios include inventory turnover, receivables conversion period, fixed- asset turnover, and return on assets
actual cost system	a cost system that collects costs historically as they are applied to production, and allocates indirect costs to products based on the specific costs and achieved volume of the products
actual costs	the labor, material, and associated overhead costs that are charged against a job as it moves through the production process
actual demand	actual demand is composed of customer orders (and often allocations of items, ingredients, or raw materials to production or dis-

	tribution). Actual demand nets against or consumes the forecast, depending on the rules chosen over a time horizon. For example, actual demand will totally replace forecast inside the sold-out customer order backlog horizon (often called the demand time fence), but will net against the forecast outside this horizon based on the chosen forecast consumption rule
actual to theoretical cycle time	the ratio of the measured time required to produce a given output divided by the sum of the time required to produce a given output based on the rated efficiency of the machinery and labor operations
administrative monetary penalty system (AMPS)	a Canada Customs system of monetary penalties that will be imposed against violations of Canada Customs regulations
AD valorem duty	a duty calculated as a percentage of the shipment value
advance material request	ordering materials before the release of the formal product design. This early release is required because of long lead times
advanced planning and scheduling (APS)	techniques that deal with analysis and planning of logistics and manufacturing over the short, intermediate, and long-term time periods. APS describes any computer program that uses advanced mathematical algorithms or logic to perform optimization or simulation on finite capacity scheduling, sourcing, capital planning, resource planning, forecasting, demand management, and others. These techniques simultaneously consider a range of constraints and business rules to provide real-time planning and scheduling, decision support, available-to-promise, and capable-to-promise capabilities. APS often generates and evaluates multiple scenarios. Management then selects one scenario to

	use as the official plan. The five main components of an APS system are demand planning, production planning, production scheduling, distribution planning, and transportation planning
advanced shipment notice (ASN)	an EDI term referring to a transaction set (ANSI 856) where the supplier sends out a notification to interested parties that a shipment is now outbound in the supply chain. This notification is list transmitted to a customer or consignor designating items shipped. The ASN may also include the expected time of arrival
advanced shipping notice (ASN)	detailed shipment information transmitted to a customer or consignee in advance of delivery, designating the contents (individual products and quantities of each) and nature of the shipment. May also include carrier and shipment specifics, including time of shipment and expected time of arrival
aerodynamic drag	wind resistance
after-sale service	services provided to the customer after products have been delivered. This can include repairs, maintenance, and/or telephone support. Synonym: field service
agency tariff	a rate bureau publication that contains rates for many carriers
agent	an enterprise authorized to transact business for, or in the name of, another enterprise
agglomeration	a net advantage a company gains by sharing a common location with other companies
aggregate forecast	an estimate of sales, oftentimes phased, for a grouping of products or product families produced by a facility or firm. Stated in terms of units, dollars, or both, the aggregate forecast is used for sales and production planning (or for sales and operations planning) purposes

aggregate planning	a process to develop tactical plans to support the organization's business plan. Aggregate planning usually includes the development, analysis and maintenance of plans for total sales, total production, targeted inventory, and targeted inventory, and targeted customer backlog for families of products. The production plan is the result of the aggregate planning process. Two approaches to aggregate planning exist - production planning and sales and operations planning
aggregate tender rate	a reduced rate offered to a shipper who tenders two or more class-related shipments at one time and one place
agility	the ability to successfully manufacture and market a broad range of low-cost, high-quality products and services with short lead times and varying volumes that provide enhanced value to customers through customization. Agility merges the four distinctive competencies of cost, quality, dependability, and flexibility
air cargo	freight that is moved by air transportation
air cargo agent	an agent appointed by an airline to solicit and process international airfreight shipments
air cargo containers	containers designed to conform to the inside of an aircraft. There are many shapes and sizes of containers. Air cargo containers fall into three categories: 1) air cargo pallets 2) lower deck containers 3) box type containers
air carrier	an enterprise that offers transportation service via air
airport and airway trust fund	federal fund that collects passenger ticket taxes and disburses those funds for airport facilities
air taxi	an exempt for-hire air carrier that will fly anywhere on demand; air taxis are restricted

	to a maximum payload and passenger capacity per plane
air transport association of America	A U.S. airline industry association
air waybill (AWB)	a bill of lading for air transport that serves as a receipt for the shipper, indicates that the carrier has accepted the goods listed, obligates the carrier to carry the consignment to the airport of destination according to specified conditions
algorithm	a clearly specified mathematical process for computation; a set of rules, which, if followed, produce a prescribed result
all-cargo carrier	an air carrier that transports cargo only
allocation	1) a distribution of costs using calculations that may be unrelated to physical observations or direct or repeatable cause-and-effect relationships. Because of the arbitrary nature of allocations, costs based on cost causal assignment are viewed as more relevant for management decision-making; 2) allocation of available inventory to customer and production orders
all water	term used when the transportation is completely by water
American national standards institute (ANSI)	a non-profit organization chartered to develop, maintain, and promulgate voluntary US national standards in a number of areas, especially with regards to setting EDI standards. ANSI is the US representative to the International Standards Organization (ISO)
American society for quality (ASQ)	founded in 1946, a not-for-profit educational organization consisting of 144,000 members who are interested in quality improvement
American society of transportation & logistics	a professional organization in the field of logistics

American trucking associations	a motor carrier industry association composed of sub-conferences representing various motor carrier industry sectors
American waterway operators	a domestic water carrier industry association representing barge operators on inland waterways
Amtrak	the National Railroad Passenger Corporation, a federally created corporation that operates most of the United States' intercity passenger rail service
anti-dumping duty	An additional import duty imposed in instances where imported goods are priced at less than the "normal" price charged in the exporter's domestic market and cause material injury to domestic industry in the importing country
any-quantity (AQ) rate	a rate that applies to any size shipment tendered to a carrier; no discount rate is available for large shipments
APU	APUs automatically shut down the main locomotive engine idle while maintaining all vital main engine systems at greatly reduced fuel consumption
acquisition logistics	acquisition logistics is everything involved in acquiring logistics support equipment and personnel for a new weapons system. The formal definition is "the process of systematically identifying, defining, designing, developing, producing, acquiring, delivering, installing, and upgrading logistics support capability requirements through the acquisition process for Air Force systems, subsystems, and equipment
arrival notice	a notice from the delivering carrier to the Notify Party indicating the shipment's arrival date at a specific location (normally the destination)

artificial intelligence	a field of research seeking to understand and computerize the human thought process
assemble to order	a production environment where a good or service can be assembled after receipt of a customer's order. The key components (bulk, semifinished, intermediate, subassembly, fabricated, purchased, packing, and so on) used in the assembly or finishing process are planned and usually stocked in anticipation of a customer order. Receipt of an order initiates assembly of the customized product. This strategy is useful where a large number of end products (based on the selection of options and accessories) can be assembled from common components
assembly	a group of subassemblies and/or parts that are put together and constitute a major subdivision for the final product. An assembly may be an end item or a component of a higher-level assembly
assignment	a distribution of costs using causal relationships. Because cost causal relationships are viewed as more relevant for management decision making, assignment of costs is generally preferable to allocation techniques
association of American railroads	a railroad industry association that represents the larger U.S. railroads
attributes	a label used to provide additional classification or information about a resource, activity, or cost object. Used for focusing attention and may be subjective. Examples are a characteristic, a score or grade of product or activity, or groupings of these items, and performance measures
audit	in reference to freight bills, the term audit is used to determine the accuracy of freight bills
auditability	a characteristic of modern information systems gauged by the ease with which data can be substantiated by tracing it to source

	documents, and the extent to which auditors can rely on pre-verified and monitored control processes
auditing	determining the correct transportation charges due the carrier; auditing involves checking the freight bill for errors, correct rate, and weight
audit trail	manual or computerized tracing of the transactions affecting the contents or origin or a record
autoID	referring to an automated identification system. This includes technology such as bar coding and radio frequency tagging (RFID)
automated broker interface (ABI)	the U.S. Customs program to automate the flow of customs-related information among customs brokers, importers, and carriers
automated call distribution	a feature of large call center or "Customer Interaction Center" telephone switches that routes calls by rules, such as next-available employee, skill set, etc.
automated guided vehicle system (AGVS)	a computer-controlled materials handling system consisting of small vehicles (carts) that move along a guideway
automated storage/ retrieval system (AS/ RS)	a high-density rack inventory storage system with unmanned vehicles automatically loading and unloading products to/from the racks
automatic tire inflation system	automatic tire inflation systems monitor and continually adjust the level of pressurized air to tires, maintaining proper tire pressure even when the truck is moving
available to promise (ATP)	the uncommitted portion of a company's inventory and planned production maintained in the master schedule to support customer-order promising. The ATP quantity is the uncommitted inventory balance in the first period and is normally calculated for each period in which an MPS receipt is scheduled. In the first period, ATP includes on-

	hand inventory less customer orders that are due and overdue. Three methods of calculation are used: discrete ATP, cumulative ATP with look ahead, and cumulative ATP without look ahead
average cost	total cost, fixed plus variable, divided by total output

B

back order	product ordered but out of stock and promised to ship when the product becomes available
backhaul	the process of a transportation vehicle returning from the original destination point to the point of origin. The 1980 Motor Carrier Act deregulated interstate commercial trucking, thereby allowing carriers to contract for the return trip. The backhaul can be with a full, partial, or empty load. An empty backhaul is called deadheading
backorder	(1) the act of retaining a quantity to ship against an order when other order lines have already been shipped. Backorders are usually caused by stock shortages. (2) the quantity remaining to be shipped if an initial shipment(s) has been processed. Note: In some cases, backorders are not allowed. This results in a lost sale when sufficient quantities are not available to completely ship an order or order line
backsourcing	pulling a function back in house as an outsourcing contract expires
balanced scorecard	a structured measurement system based on a mix of financial and non-financial measures of business performance. A list of financial and operational measurements used to evaluate organizational or supply chain performance. The dimensions of the balanced scorecard might include customer perspec-

	tive, business process perspective, financial perspective, and innovation and learning perspectives. It formally connects overall objectives, strategies, and measurements. Each dimension has goals and measurements
balance of trade	the surplus or deficit which results from comparing a country's exports and imports of merchandise only
bale	a large compressed, bound, and often wrapped bundle of a commodity, such as cotton or hay
bar code	a symbol consisting of a series of printed bars representing values. A system of optical character reading, scanning, tracking of units by reading a series of printed bars for translation into a numeric or alphanumeric identification code. A popular example is the UPC code used on retail packaging
bar code scanner	a device to read bar codes and communicate data to computer systems
bar coding	a method of encoding data for fast and accurate readability. Bar codes are a series of alternating bars and spaces printed or stamped on products, labels, or other media, representing encoded information which can be read by electronic readers called bar
barge	the cargo-carrying vehicle which may or may not have its own propulsion mechanism for the purpose of transporting goods. Primarily used by Inland water carriers, basic barges have open tops, but there are covered barges for both dry and liquid cargoes
barrier to entry	factors that prevent companies from entering into a particular market, such as high initial investment in equipment
barter	the exchange of commodities or services for other commodities or services rather than the purchase of commodities or services

	with money
base currency	the currency whose value is "one" whenever a quote is made between two currencies
basing-point pricing	a pricing system that includes a transportation cost from a particular city or town in a zone or region even though the shipment does not originate at the basing point
batch picking	a method of picking orders in which order requirements are aggregated by product across orders to reduce movement to and from product locations. The aggregated quantities of each product are then transported to a common area where the individual orders are constructed
benchmarking	the process of comparing performance against the practices of other leading companies for the purpose of improving performance. Companies also benchmark internally by tracking and comparing current performance with past performance
benefit-cost ratio	an analytical tool used in public planning; a ratio of total measurable benefits divided by the initial capital cost
best in class	an organization, usually within a specific industry, recognized for excellence in a specific process area
best practice	a specific process or group of processes which have been recognized as the best method for conducting an action. Best practices may vary by industry or geography depending on the environment being used. Best-practices methodology may be applied with respect to resources, activities, cost object, or processes
bilateral contract	an agreement where-in each party makes a promise to the other party
billing	a carrier terminal activity that determines

	the proper rate and total charges for a shipment and issues a freight bill
bill of activities	a listing of activities required by a product, service, process output, or other cost object. Bill of activity attributes could include volume and/or cost of each activity in the listing
bill of lading (BOL)	a transportation document that is the contract of carriage containing the terms and conditions between the shipper and carrier.
bill of lading number	the number assigned by the carrier to identify the bill of lading
bill of lading, through	a bill of lading to cover goods from point of origin to final destination when interchange or transfer from one carrier to another is necessary to complete the journey
bill of material (BOM)	a structured list of all the materials or parts and quantities needed to produce a particular finished product, assembly, subassembly, or manufactured part, whether purchased or not
bill of material accuracy	conformity of a list of specified items to administrative specifications, with all quantities correct
bill of resources	a listing of resources required by an activity. Resource attributes could include cost and volumes
bin center	a drop off facility that is smaller than a public warehouse
binder	a strip of cardboard, thin wood, burlap, or similar material placed between layers of containers to hold a stack together
blanket purchase order	a long-term commitment to a supplier for material against which short-term releases will be generated to satisfy requirements. Oftentimes, blanket orders cover only one item with predetermined delivery dates. Synonyms: Blanket Order, Standing Order
blanket rate	a rate that does not increase according to the

	distance a commodity is shipped
blanket release	the authorization to ship and/or produce against a blanket agreement or contract
blanket wrap	a service pioneered by the moving companies to eliminate packaging material by wrapping product in padded "blankets" to protect it during transit, usually on "air ride" vans
bleeding edge	an unproven process or technology so far ahead of its time that it may create a competitive disadvantage
blow through	an MRP process which uses a "phantom bill of material" and permits MRP logic to drive requirements straight through the phantom item to its components. The MRP system usually retains its ability to net against any occasional inventories of the item
bonded warehouse	warehouse approved by the Treasury Department and under bond/guarantee for observance of revenue laws. Used for storing goods until duty is paid or goods are released in some other proper manner
booking	the act of requesting space and equipment aboard a vessel for cargo which is to be transported
booking number	the number assigned to a certain space reservation by the carrier or the carrier's agent
bottleneck	a constraint, obstacle, or planned control that limits throughput or the utilization of capacity
boxcar	an enclosed railcar used to transport freight
bracing	to secure a shipment inside a carrier's vehicle to prevent damage
bracketed recall	recall from customers of suspect lot numbers, plus a specified number of lots produced before and after the suspect ones
branding	the use of a name, term, symbol, or design, or a combination of these, to identify a product

break-bulk	the separation of a consolidated bulk load into smaller individual shipments for delivery to the ultimate consignee. The freight may be moved intact inside the trailer, or it may be interchanged and rehandled to connecting carriers
break bulk cargo	cargo that is shipped as a unit or package (for example: palletized cargo, boxed cargo, large machinery, trucks) but is not containerized
break bulk vessel	a vessel designed to handle break bulk cargo
break-even point	the level of production or the volume of sales at which operations are neither profitable nor unprofitable. The break-even point is the intersection of the total revenue and total cost curves
broker	There are 3 definitions for the term "broker": 1) an enterprise that owns and leases equipment2) an enterprise that arranges the buying & selling of transportation of, goods, or services 3) a ship agent who acts for the ship owner or charterer in arranging charters
bucketed system	an MRP, DRP, or other time-phased system in which all time-phased data are accumulated into time periods, or buckets. If the period of accumulation is one week, then the system is said to have weekly buckets
buffer	1) a quantity of materials awaiting further processing. It can refer to raw materials, semi-finished stores, or hold points, or a work backlog that is purposely maintained behind a work center. 2) in the theory of constraints, buffers can be time or material, and support throughput and/or due date performance. Buffers can be maintained at the constraint, convergent points (with a constraint part), divergent points, and shipping points

buffer management	in the theory of constraints, a process in which all expediting in a shop is driven by what is scheduled to be in the buffers (constraint, shipping, and assembly buffers). By expediting this material into the buffers, the system helps avoid idleness at the constraint and missed customer due dates. In addition, the causes of items missing from the buffer are identified, and the frequency of occurrence is used to prioritize improvement activities
buffer stock	a quantity of goods or articles kept in storage to safeguard against unforeseen shortages or demands
build to inventory	a "push" system of production and inventory management. Product is manufactured or acquired in response to sales forecasts
build to order	a method of reducing inventory by not manufacturing product until there is an actual order from the customer
bulk area	a storage area for large items which at a minimum are most efficiently handled by the pallet load
bulk cargo	unpacked dry cargo such as grain, iron ore or coal. Any commodity shipped in this way is said to be in bulk
bullwhip effect	an extreme change in the supply position upstream in a supply chain generated by a small change in demand downstream in the supply chain. Inventory can quickly move from being backordered to being in excess. This is caused by the serial nature of communicating orders up the chain with the inherent transportation delays of moving product down the chain. The bullwhip effect can be eliminated by synchronizing the supply chain
bundle	a group of products that are shipped togeth-

	er as an unassembled unit
bundling	an occurrence where two or more products are combined into one transaction for a single price
burn rate	the rate of consumption of cash in a business. Used to determine cash requirements on an on-going basis. A burn rate of $50,000 would mean the company spends $50,000 a month above any incoming cash flow to sustain its business. Entrepreneurial companies will calculate their burn rate in order to understand how much time they have before they need to raise more money, or show a positive cash flow
business application	any computer program, set of programs, or package of programs created to solve a particular business problem or function
business continuity plan (BCP)	a contingency plan for sustained operations during periods of high risk, such as labor unrest or natural disaster. CSCMP provides suggestions for helping companies do continuity planning in their Securing the Supply Chain research. A copy of this research is available on CSCMP's web site at www.cscmp.org
business logistics	the process of planning, implementing, and controlling the efficient, effective flow and storage of goods, services, and related information from the point of origin to the point of consumption for the purpose of conforming to customer requirements
business plan	(1) a statement of long-range strategy and revenue, cost, and profit objectives usually accompanied by budgets, a projected balance sheet, and a cash flow (source and application of funds) statement. A business plan is usually stated in terms of dollars and grouped by product family. The business

	plan is then translated into synchronized tactical functional plans through the production planning process (or the sales and operations planning process). Although frequently stated in different terms (dollars versus units), these tactical plans should agree with each other and with the business plan. (2) a document consisting of the business details (organization, strategy, and financing tactics) prepared by an entrepreneur to plan for a new business
business performance measurement (BPM)	a technique that uses a system of goals and metrics to monitor performance. Analysis of these measurements can help businesses periodically set business goals, then provide feedback to managers on progress towards those goals. A specific measure can be compared to itself over time, compared with a present target, or evaluated along with other measures
business process outsourcing (BPO)	the practice of outsourcing non-core internal functions to third parties. Functions typically outsourced include logistics, accounts payable, accounts receivable, payroll, and human resources. Other areas can include IT development or complete management of the IT functions of the enterprise
business process reengineering (BPR)	the fundamental rethinking and radical redesign of business processes to achieve dramatic organizational improvements
business-to-business (B2B)	as opposed to business-to-consumer (B2C). Many companies are now focusing on this strategy, and their web sites are aimed at businesses (think wholesale) and only other businesses can access or buy products on the site. Internet analysts predict this will be the biggest sector on the web
business-to-consumer (B2C)	the hundreds of e-commerce web sites that sell goods directly to consumers are consid-

	ered B2C. This distinction is important when comparing web sites that are B2B as the entire business model, strategy, execution, and fulfillment is different
business unit	a division or segment of an organization generally treated as a separate profit-and-loss center
buyer	an enterprise that arranges for the acquisition of goods or services and agrees to payment terms for such goods or services
buyer behavior	the way individuals or organizations behave in a purchasing situation. The customer-oriented concept finds out the wants, needs, and desires of customers and adapts resources of the organization to deliver need-satisfying goods and services

C

cab extenders	also called gap seals, which help to close the gap between the tractor and the trailer
cabotage	a federal law that requires coastal and inter-coastal traffic to be carried in U.S.-built and registered ships
cage	a secure enclosed area for storing highly valuable items; a pallet-sized platform with sides that can be secured to the tines of a forklift and inwhich a person may ride to inventory items stored well above the warehouse floor
caged	referring to the practice of placing high-value or sensitive products in a fenced off area within a warehouse

calendar days	the conversion of working days to calendar days is based on the number of regularly scheduled workdays per week in your manufacturing calendar. Calculation: To convert from working days to calendar days: if work week = 4 days, multiply by 1.75; = 5 days, multiply by 1.4; = 6 days, multiply by 1.17
call center	a facility housing personnel who respond to customer phone queries. These personnel may provide customer service or technical support. Call center services may be in house or outsourced. Synonym: Customer Interaction Center
can-order point	an ordering system used when multiple items are ordered from one vendor. The can-order point is a point higher than the original order point. When any one of the items triggers an order by reaching the must-order point, all items below their can-order point are also ordered.The can-order point is set by considering is set by considering the additional holding
capacity management	the concept that capacity should be understood, defined, and measured for each level in the organization to include market segments, products, processes, activities, and resources. In each of these applications, capacity is defined in a hierarchy of idle, non-productive, and productive views
capacity planning	assuring that needed resources (e.g., manufacturing capacity, distribution center capacity, transportation vehicles, etc.) will be available at the right time and place to meet logistics and supply chain needs

capacity	the physical facilities, personnel, and processes available to meet the product or service needs of customers. Capacity generally refers to the maximum output or producing ability of a machine, a person, a process, a factory, a product, or a service
CAPEX	a term used to describe the monetary requirements (CAPital EXpenditure) of an initial investment in new machines or equipment
capital	the resources, or money, available for investing in assets that produce output
cargo	merchandise carried by a means of transportation
carmack amendment	an Interstate Commerce Act amendment thatdelineates the liability of common carriers and the bill of lading provisions
carnet	a Customs document permitting the holder to carry or send specialcategories of goods temporarily into certain foreign countries without paying duties or posting bonds
carousel	a rotating system of layers of bins and/or drawers that can store many small items using relatively little floor space
carrier	a firm that transports goods or people via land, sea, or air
carrier assets	items that a carrier owns (technically or outright) to facilitate the services they provide
carrier certificate and release order	used to advise customs of the shipment's details. By means of this document, the carrier certifies that the firm or individual named in the certificate is the owner or consignee of the cargo

carrier liability	a common carrier is liable for all shipment loss, damage, and delay with the exception of that caused by act of God, act of a public enemy, act of a public authority, act of the shipper, and the goods' inherent nature
cartel	a group of companies that agree to cooperate rather than compete, in producing a product or service. Thus limiting or regulating competition
cartage	there are two definitions for this term: charge for pick-up and delivery of goods; movement of goods locally (short distances)
carton flow rack	a storage rack consisting of multiple lines of gravity flow conveyors
cash against documents (CAD)	a method of payment for goods in which documents transferring title are given to the buyer upon payment of cash toan intermediary acting for the seller
cash conversion cycle	in retailing, the length of time between the sale of products and the cash payments for a company's resources; in manufacturing, the length of time from the purchase of raw materials to the collection of accounts receivable from customers for the sale of products or services
cash in advance (CIA)	a method of payment for goods whereby the buyer pays the seller in advance of shipment of goods
cash-to-cash cycle time	the time it takes for cash to flow back into acompany after it has been spent for raw materials. Synonym: Cash Conversion Cycle. Calculation: Total Inventory Days of Supply + Days of Sales Outstanding - Average Payment Period for Material in Days
cash with order (CWO)	a method of payment for goods where cash is paid at the time of order, and the transaction becomes binding on both buyer and seller

catalog channel	a call center or order processing facility that receives ordersdirectly from the customer based on defined catalog offerings, and ships directly to the customer
category management	the management of product categories as strategic business units. This practice empowers a category manager with full responsibility for the assortment decisions, inventory levels, shelf-space allocation, promotions, and buying. With this authority and responsibility, the category manager is able to more accurately judge the consumer buying patterns, product sales, and market trends of that category
cause-and-effect diagram	in quality management, a structured process usedto organize ideas into logical groupings. Used in brainstorming and problem-solving exercises. Also known as Ishikawa or fish bone diagram
CELL	a manufacturing or service unit consisting of a number of workstations, and the materials transport mechanisms and storage buffers that interconnect them
center-of-gravity approach	a supply chain planning methodology for locating distribution centers at approximately the location representing the minimum transportation costs between the plants, the distribution centers, and the markets
central dispatching	the organization of the dispatching function into one central location. This structure often involves the use of data collection devices for communication between the centralized dispatching function which usually reports to the production control department and the shop manufacturing departments

centralized authority	the restriction of authority to make decisions to few managers
centralized inventory control	inventory decision-making (for all SKUs) exercised from one office or department for an entire company
certificate of compliance	a supplier's certification that the supplies or services in question meet specified requirements
certificate of insurance	a negotiable document indicating that insurance hasbeen secured under an open policy to cover loss or damage to a shipment while in transit
certificate of origin	a document containing an affidavit to prove the originof imported goods. Used for customs and foreign exchange purposes
certificate of public convenience and necessity	the grant of operatingauthority that common carriers receive. A carrier must prove that a public need exists and that the carrier is fit, willing, and able to provide theneeded service. The certificate may specify the commodities the carrier may haul, and the routes it may use
certificated carrier	a for-hire air carrier that is subject to economic regulation and requires an operating certification to provide service
certified supplier	a status awarded to a supplier who consistently meets predetermined quality, cost, delivery, financial, and count objectives. Incoming inspection may not be required
chain of customers	the sequence of customers who, in turn, consume the output of each other, forming a chain. For example, individuals are customers of a department store which in turn is the customer of a producer who is the customer of a material supplier

change management	the business process that coordinates and monitors all changes to the business processes and applications operated by the business, as well as to their internal equipment, resources, operating systems, and procedures. The change management discipline is carried out in a way that minimizes the risk of problems that will affect the operating environment and service delivery to the users
change order	a formal notification that a purchase order or shop order must be modified in some way. This change can result from a revised quantity, date, or specification by the customer; an engineering change; a change in inventory requirement data; etc
changeover	process of making necessary adjustments to change or switchover the type of products produced on a manufacturing line. Changeovers usually lead to downtime and for the most part, companiestry to minimize changeover time to help reduce costs
channel	1. a method whereby a business dispenses its product, such as a retail or distribution channel, call center, or a web-based electronic storefront. 2. a push technology that allows users to subscribe to a web site to browse offline, automatically display updated pages on their screen savers, and download or receive notifications when pages in the web site are modified. Channels are available only in browsers that support channel definitions such as Microsoft Internet Explorer version 4.0

channel conflict	this occurs when various sales channels within a company'ssupply chain compete with each other for the same business. An exampleis where a retail channel is in competition with a web-based channel set up by the company
channel partners	members of a supply chain (i.e., suppliers, manufacturers,distributors, retailers, etc.) who work in conjunction with one another to manufacture, distribute, and sell a specific product
channels of distribution	any series of firms or individuals that participates in the flow of goods and services from the raw material supplier and producer to the final user or consumer. Also see: Distribution Channel
chargeable weight	the shipment weight used in determining freight charges.The chargeable weight may be the dimensional weight or, for container shipments, the gross weight of the shipment less the tare weight of the container
charging area	a warehouse area where a company maintains battery chargers and extra batteries to support a fleet of electrically powered materials handling equipment. The company must maintain this area in accordance with government safety regulations
chassis	a specialized framework that carries a rail or marine container
chock	a wedge, usually made of hard rubber or steel, that is firmly placedunder the wheel of a trailer, truck, or boxcar to stop it from rolling
city driver	a motor carrier driver who drives a local route as opposed to along-distance, intercity route

civil aeronautics board	a federal regulatory agency that implemented economic regulatory controls over air carriers
CL	carload rail service requiring shipper to meet minimum weight
claim	a charge made against a carrier for loss, damage, delay, or overcharge
class I carrier	a classification of regulated carriers based upon annual operating revenues - motor carriers of property; $5 million; railroads; $50 million; motor carriers of passengers; $3 million
class II carrier	a classification of regulated carriers based upon annual operating revenues -- motor carriers of property: $1-$5 million; railroads: $10-$50 million; motor carriers of passengers: $3 million
class III carrier	a classification of regulated carriers based upon annual operating revenues -- motor carriers of property: $1 million; railroads $10 million
class 1 railroad	a line haul freight railroad of US ownership with operating revenue in excess of $272.0 million. There are seven (7) Class 1 Railroads in the United States. Two Mexican and two Canadian railroads would also qualify, if they were US companies
class rates	a grouping of goods or commodities under one general heading. All the items in the group make up a class. The freight rates that apply toall items in the class are called "class rates"
classification	an alphabetical listing of commodities, the class or rating into which the commodity is placed, and the minimum weight necessary for therate discount; used in the class rate structure

classification yard	a railroad terminal area where railcars are grouped together to form train units
clearance	a document stating that a shipment is free to be imported into the country after all legal requirements have been met
clearinghouse	a conventional or limited-purpose entity generally restrictedto providing specialized services, such as clearing funds or settling accounts
CLM	council of Logistics Management, now known as The Council of Supply Chain Management Professionals
closed loop MRP	a system build around material require-ments planning thatincludes the additional planning processes of production planning (sales and operations planning), master production scheduling, and capacity re-quirements planning. Once this planning phase is complete and the plans have been accepted as realistic and attainable, the execution processescome into play. These processes include the manufacturing control process of input-output (capacity) measurement, detailed scheduling and dispatching, as well as anticipated delay reports from both the plant and suppliers, supplier schedul-ing, and so on. The term "closed loop im-plies not only that each of these processes is included in the overall system, but also that feedback is provided by the execution processes so that the planning can be kept valid at all times
co-destiny	the evolution of a supply chain from intra-organizational management to inter-organizational management

co-packer	a contract co-packer produces goods and/or services for other companies, usually under the other company's label or name. Co-packers are more frequently seen in consumer packaged goods and foods
co-managed inventory (CMI)	a form of continuous replenishment in whichthe manufacturer is responsible for replenishment of standard merchandise, while the retailer manages the replenishment of promotional merchandise
coastal carriers	water carriers that provide service along coasts servingports on the Atlantic or Pacific Oceans or on the Gulf of Mexico
code	a numeric, or alphanumeric representation of text for exchanging commonly-used information. For example: commodity codes, carrier codes
codifying	the process of detailing a new standard
collaborative planning, forecasting, and replenishment (CPFR)	acollaboration process whereby supply chain trading partners can jointly plan key supply chain activities from production and delivery of raw materials, to production and delivery of final products to end customers. Collaboration encompasses business planning, sales forecasting, and all operations required to replenish raw materials and finished goods; a process philosophy for facilitating collaborative communications. CPFR is considered a standard, endorsed by the Voluntary Inter-Industry Commerce Standards

collect freight	freight payable to the carrier at the port of discharge or ultimate destination. The consignee does not pay the freight charge if the cargo does not arrive at the destination
collective paper	all documents (commercial invoices, bills of lading, etc.)submitted to a buyer for the purpose of receiving payment for a shipment
combi aircraft	an aircraft specially designed to carry unitized cargo loads on the upper deck of the craft, forward of the passenger area
commercial invoice	a document created by the seller. It is an official document which is used to indicate, among other things, the name and address of the buyer and seller, the product(s) being shipped, and their value for customs, insurance, or other purposes
commercial zone	the area surrounding a city or town to which rate carriers quote for the city or town also apply; the ICC defines the area
committed capability	the portion of the production capability that is currently in use, or is scheduled for use
committee of american steamship lines	an industry association representing subsidized U.S. flag steamship firms
commodities	any article exchanged in trade, most commonly used to refer toraw materials and agricultural products
commodities clause	a clause that prohibits railroads from hauling commodities that they produced, mined, owned, or had an interest in
commodity buying	grouping like parts or materials under one buyer's control for the procurement of all requirements to support production

commodity code	a code describing a commodity or a group of commodities pertaining to goods classification. This code can be carrier tariff or regulating in nature
commodity procurement strategy	the purchasing plan for a family of items. This would include the plan to manage the supplier base and solve problems
commodity rate	a rate for a specific commodity and its origin-destination
common carrier	transportation available to the public that does not provide special treatment to any one party and is regulated as to the rates charged, the liability assumed, and the service provided. A common carrier must obtain a certificate of public convenience and necessity from the Federal Trade Commission for interstate traffic. Antonym: private carrier
common carrier duties	common carriers must serve, deliver, charge reasonable rates, and not discriminate
common cost	a cost that a company cannot directly assign to particular segments of the business; a cost that the company incurs for the business asa whole
commuter	an exempt for-hire air carrier that publishes a time schedule on specific routes; a special type of air taxi
company culture	a system of values, beliefs, and behaviors inherent in a company. To optimize business performance, top management must defineand create the necessary culture
comparative advantage	a principle based on the assumption that an area will specialize in producing goods for which it has the greatest advantageor the least comparative disadvantage

competitive advantage	value created by a company for its customers that clearly distinguishes it from the competition, provides its customers areason to remain loyal
competitive benchmarking	benchmarking a product or service against competitors. Also see: Benchmarking
competitive bid	a price/ service offering by a supplier that must compete with offerings from other suppliers
complete and on-time delivery (COTD)	a measure of customer service.All items on any given order must be delivered on
	time for the order to be considered as complete and on time
complete manufacture to ship time	average time from when a unit is declared shippable by manufacturing until the unit actually ships to acustomer
compliance	meaning that products, services, processes, and/or documents comply with requirements
component	material that will contribute to a finished product but is not the finished product itself. Examples include tires for an automobile, power supply for a personal computer, or a zipper for a ski parka
computer-aided engineering (CAE)	the use of computers to model design options to stimulate their performance
computer-based training	training that is delivered via computer workstation and includes all training and testing materials
conference	a group of vessel operators joined for the purpose of establishingfreight rates
conference carrier	an ocean carrier who is a member of an association known as a "conference." The purpose of the conference is to standardize shipping practices, eliminate freight rate competition, and provide regularly scheduled service between specific ports

configuration	the arrangement of components as specified to produce an assembly
configure/package to order	a process where the trigger to begin to manufacture, final assembly, or packaging of a product is an actual customer order or release rather than a market forecast. In order to be considered a configure-to-order environment, less than 20% of the value added takes place after the receipt of the order or release, and virtually all necessary design and process documentation is available at time of order receipt
confirmation	with regards to EDI, a formal notice (by message or code) from a electronic mailbox system or EDI server indicating that a message sent to a trading partner has reached its intended mailbox or has been retrieved by the addressee
confirming order	a purchase order issued to a supplier listing the goods or services and terms of an order placed orally or otherwise before the usual purchase document
conformance	an affirmative indication or judgment that a product or servicehas met the requirements of a relevant specification, contract, orregulation. Synonym: compliance
conrail	the Consolidated Rail Corporation established by the Regional Reorganization Act of 1973 to operate the bankrupt Penn Central Railroad and other bankrupt railroads in the Northeast; the 4-R Act of 1976 provided funding
consignee	the party to whom goods are shipped and delivered. The receiver of a freight shipment

consignment	a shipment that is handled by a common carrier; the process of a supplier placing goods at a customer location without receiving payment until after the goods are used or sold
consignment inventory	goods or products that are paid for when theyare sold by the reseller, not at the time they are shipped to the reseller; goods or products which are owned by the vendor until they are sold to the consumer
consignor	the party who originates a shipment of goods (shipper). Thesender of a freight shipment, usually the seller
consolidation	combining two or more shipments in order to realize lower transportation rates. In-bound consolidation from vendors is called make- bulk consolidation; outbound con-solidation to customers is called break-bulk consolidation
consolidation point	the location where consolidation takes place
consolidator	an enterprise that provides services to group shipments, orders,and/ or goods to facilitate movement
consolidator's bill of lading	a bill of lading issued by a consolidator as a receipt for merchandise that will be grouped with cargo obtained from other shippers
consortium	a group of companies that works together to jointly produce a product, service, or project
constraint	a bottleneck, obstacle, or planned control that limits throughput or the utilization of capacity

consul	a government official residing in a foreign country, charged with representing the interests of his or her country and its nationals
consular declaration	a formal statement made to the consul of a country describing merchandise to be shipped to that consul's country. Approval must be obtained prior to shipment
consular documents	special forms signed by the consul of a country to which cargo is destined
consular invoice	a document, required by some foreign countries, describing a shipment of goods and showing information such as the consignor, consignee, and value of the shipment. Certified by a consular official of the foreign country, it is used by the country's custom
consumer-centric database	database with information about a retailer'sindividual consumers used primarily for marketing and promotion
consumption entry	an official Customs form used for declaration of reported goods, also showing the total duty due on such transaction
container	a box, typically 10 to 40 feet long, which is primarily used for ocean freight shipments. For travel to and from ports, containers are loadedonto truck chassis or on railroad flatcars; the packaging, such as a carton, case, box, bucket, drum, bin, bottle, bundle, or bag, that an item is packed and shipped in
container chassis	a vehicle built for the purpose of transporting a container so that, when a container and chassis are assembled, the produced unit serves as a road trailer
container depot	the storage area for empty containers

container freight station (CFS)	the location designated by carriers for receipt of cargo to be packed into containers/equipment by the carrier. At destination, CFS is the location designated by the carrier for unpacking of cargo from equipment/containers
container freight station charge	the charge assessed for services performedat the loading or discharge location
container freight station to container freight station (CFS/ CFS)	A type of steamship-line service in which cargo is transported between container freight stations, where containers may be stuffed, stripped, or consolidated.Usually used for less-than-container load shipments
container I.D.	an identifier assigned to a container by a carrier. See also: Equipment ID
containerization	a shipment method in which commodities are placed in containers, and after initial loading, the commodities, per se, are not rehandled in shipment until they are unloaded at the destination
container on flat car (COFC)	A container that is transported on a rail flatcar. It can be shipped via tractor/trailer using a chassis as the wheel section
container terminal	an area designated to be used for the stowage of cargoin containers that may be accessed by truck, rail, or ocean transportation
container vessel	a vessel specifically designed for the carriage of containers
container yard	the location designated by the carrier for receiving, assembling, holding, storing, and delivering containers, and wherecontainers may be picked up by shippers or redelivered by consignees
container yard to container yard (CY/ CY)	a type of steamship-line service in which freight is transported from origin container yard to destination container yard

contingency planning	preparing to deal with calamities (e.g., floods) and noncalamitous situations (e.g., strikes) before they occur
continuous flow distribution (CFD)	the streamlined pull of products in response to customer requirements while minimizing the total costs of distribution
continuous-flow, fixed-path equipment	materials handling devices that include conveyors and drag lines
continuous improvement (CI)	a structured, measurement-driven process that continually reviews and improves performance
continuous process improvement (CPI)	a never-ending effort to expose and eliminate root causes of problems; small- step improvement as opposedto big-step improvement. Synonym: continuous improvement
continuous replenishment	continuous replenishment is the practice of partnering between distribution channel members that changes the traditional replenishment process from distributor-generated purchase orders based on economic order quantities to the replenishment of productsbased on actual and forecasted product demand
continuous replenishment planning (CRP)	a program that triggers the manufacturing and movement of product through the supply chain when the identical product is purchased by an end user
contract	an agreement between two or more competent persons or companies to perform or not to perform specific acts or services or to deliver merchandise. A contract may be oral or written. A purchase order, when accepted by a supplier, becomes a contract. Acceptance may be in writing or by performance, unless the purchase order requires acceptancein writing

contract administration	managing all aspects of a contract to guarantee thatthe contractor fulfills his obligations
contract carrier	a for-hire carrier that does not serve the general public but serves shippers with whom the carrier has a continuing contract. Thecontract carrier must secure a permit to operate
contract of affreightment	a contract between a cargo shipper and carrier forthe transport of multiple cargoes over a period of time. Contracts areindividually negotiated and usually include cargo description, quantities per shipment and in total, load and discharge ports, freight rates and duration of the contract
contribution	the difference between sales price and various costs. Contribution is used to cover fixed costs and profits
contribution margin	an amount equal to the difference between sales revenue and variable costs
controlled access	referring to an area within a warehouse or yard that is fenced and gated. These areas are typically used to store high-value items and may be monitored by security cameras
conveyance	the application used to describe the function of a vehicle of transfer
conveyor	a materials handling device that moves freight from one warehouse area to another. Roller conveyors utilize gravity, whereas belt conveyors use motors
cooperative associations	groups of firms or individuals having common interests; agricultural cooperative associations may haul up to 25 percent oftheir total interstate non- farm, nonmember goods tonnage in movements incidental and necessary to their primary business

coordinated transportation	two or more carriers of different modes transporting a shipment
core competency	bundles of skills or knowledge sets that enable a firm to provide the greatest level of value to its customers in a way that's difficult for competitors to emulate and that provides for future growth. Core competencies are embodied in the skills of the workers and in the organization. They are developed through collective learning, communication, and commitment to work across levels and functions in the organization and with the customers and suppliers. A core competency could be the capability of a firm to coordinate and harmonize diverse production skills and multiple technologies. To illustrate: advanced casting-processes for making steel require the integration of machine design with sophisticated sensors to track temperature and speed, and the sensors require mathematical modeling of heat transfer. For rapid and effective development of such a process, materials scientists must work closely with machine designers, software engineers, process specialists, and operating personnel. Core competencies are not directly related to the product or market
core process	that unique capability that is central to a company's competitive strategy
cost accounting	the branch of accounting that is concerned with recording and reporting business operating costs. It includes the reporting of costs by departments, activities, and products
cost and freight (C & F)	the seller quotes a price that includes the cost of transportation to a specific point. The buyer assumes responsibility for loss and damage and pays for the insurance of the shipment

cost allocation	in accounting, the assignment of costs that cannot be directlyrelated to production activities via more measurable means, e.g., assigning corporate expenses to different products via direct labor costs or hours
cost center	in accounting, a sub-unit in an organization that is responsiblefor costs
cost driver	in accounting, any situation or event that causes a change in the consumption of a resource, or influences quality or cycle time. An activity may have multiple cost drivers. Cost drivers do not necessarily need to be quantified; however, they strongly influence the selection and magnitudeof resource drivers and activity drivers
cost driver analysis	in cost accounting, the examination, quantification, and explanation of the effects of cost drivers. The results are often used for continuous improvement programs to reduce throughput times, improve quality, and reduce cost
cost element	in cost accounting, the lowest level component of a resource activity, or cost object
cost, insurance, freight	a freight term indicating that the seller is responsible for cost, the marine insurance, and the freight charges on an ocean shipment of goods
cost management	the management and control of activities and drivers to calculate accurate product and service costs, improve business processes, eliminate waste, influence cost drivers, and plan operations. The resulting information can be very useful in setting and evaluating an organization's strategies
cost of capital	the cost to borrow or invest capital

cost-of-goods sold (COGS)	the amount of direct materials, direct labor,and allocated overhead associated with products sold during a given period of time, determined in accordance with Generally Accepted Accounting Principles (GAAP)
cost of lost sales	the forgone profit companies associate with a stockout
cost trade-off	the interrelationship among system variables in which a change in one variable affects other variables' costs. A cost reduction inone variable may increase costs for other variables, and vice versa
cost variance	in cost accounting the difference between what has beenbudgeted for an activity and what it actually costs
council of supply chain management professionals (CSCMP)	the CSCMPis a not-for-profit professional business organization consisting of individuals throughout the world who have interests and/or responsibilities in logistics and supply chain management, and the related functions that make up these professions. Its purpose is to enhance the development ofthe logistics and supply chain management professions by providing these individuals with educational opportunities and relevant information through a variety of programs, services, and activities
countertrade	a reciprocal trading agreement that includes a variety of transactions involving two or more parties
countervailing duties	an additional import duty imposed to offset Government subsidies in the exporting country, when the subsidized imports cause material injury to domestic industry in the importing country
country of destination	the country that will be the ultimate or final destination for goods

country of origin	the country where the goods were manufactured
courier service	a fast, door-to-door service for high- valued goods and documents; firms usually limit service to shipments weighing fifty pounds or less
crane	a materials handling device that lifts heavy items. There are twotypes: bridge and stacker
credit level	the amount of purchasing credit a customer has available. Usually defined by the internal credit department and reduced by anyexisting unpaid bills or open orders
credit terms	the agreement between two or more enterprises concerning the amount and timing of payment for goods or services
critical differentiators	this is what makes an idea, product, service, orbusiness model unique
critical success factor (CSF)	those activities and/or processes that must be completed and/or controlled to enable a company to reach its goals
critical value analysis	a modified ABC analysis in which a company assigns a subjective critical value to each item in an inventory
crossdock	crossdock operations in a warehouse involve moving goodsbetween different trucks to consolidate loads without intermediate storage
cross docking	a distribution system in which merchandise received at the warehouse or distribution center is not put away, but instead is readied for shipment to retail stores. Cross docking requires close synchronization of all inbound and outbound shipment movements. By eliminating the put- away, storage, and selection operations, it can significantly reduce distribution costs

cross sell	the practice of attempting to sell additional products to a customer during a sales call. For example, when the CSR presents a camera case andaccessories to a customer that is ordering a camera
cross shipment	material flow activity where materials are shipped to customers from a secondary shipping point rather than from a preferred shipping point
cubage	cubic volume of space being used or available for shipping orstorage
cube out	the situation when a piece of equipment has reached its volumetric capacity before reaching the permitted weight limit
cube utilization	in warehousing, a measurement of the utilization of thetotal storage capacity of a vehicle or warehouse
cubic capacity	the carrying capacity of a piece of equipment according to measurement in cubic feet
cubic space	in warehousing, a measurement of space available, or required, in transportation and warehousing
cumulative lead time	the total time required to source components, build, and ship a product
cumulative source/make cycle time	the cumulative internal and external lead time to manufacture shippable product, assuming that there is no inventory on hand, no materials or parts on order, and no prior forecasts existing with suppliers. (An element of Total Supply Chain ResponseTime) Calculation: The critical path along the following elements: Total Sourcing Lead Time, Manufacturing Order Release to Start Manufacturing, total Manufacture Cycle Time (Make to Order, Engineer to Order, Configure/Package to Order) or Manufacture Cycle Time (Make to

	Stock), Complete Manufacture to Ship Time. Note: Determined separately for Make-to-Order, Configure/ Package-to-Order, Engineer-to-Order, andMake-to-Stock products
currency adjustment factor (CAF)	a surcharge imposed by a carrier on ocean freight charges to offset foreign currency fluctuations
customer	in VMI, the trading partner or reseller, i.e., Wal-Mart, Safeway,or CVS; in direct consumer, the end customer or user
customer acquisition or retention	the rate at which new customers are acquired, or existing customers are retained. A key selling point to potential marquis partners
customer driven	the end user, or customer, motivates what is produced or how it is delivered
customer facing	those personnel whose jobs entail actual contact with the customer
customer order	an order from a customer for a particular product or a number of products. It is often referred to as an actual demand to distinguish it from a forecasted demand
customer/order fulfillment process	a series of customers' interactions with an organization through the order-filling process, including product/servicedesign, production and delivery, and order stats reporting
customer profitability	the practice of placing a value on the profit generated by business done with a particular customer
customer relationship management (CRM)	this refers to information systems that help sales and marketing functions as opposed to the ERP (Enterprise Resource Planning), which is for back-end integration

customer segmentation	dividing customers into groups based on specific criteria, such as products purchased, customer geographic location, etc
customer service	the series of activities involved in providing the full range of services to customers
customer service representative (CSR)	an individual who provides customer support via telephone in a call-center environment
customer-supplier partnership	a long-term relationship between a buyer and a supplier characterized by teamwork and mutual confidence. The supplier is considered an extension of the buyer's organization. The partnership is based on several commitments. The buyer provides long- term contracts and uses fewer suppliers. The supplier implements quality assurance processes so that incoming inspection can be minimized. The supplier also helps the buyer reduce costs and improve product and process designs
customization	creating a product from existing components into an individual order. Synonym: build to order
customs	the authorities designated to collect duties levied by a country on imports and exports
customs automated data exchange system (CADEX)	a Canada Customs system that allows for the electronic transmission of import data for goods that have already been released. Additional information such as accountingdata and release notifications are also accessible
customs broker	a firm that represents importers/exporters in dealings with customs. Normally responsible for obtaining and submitting all documents for clearing merchandise through customs, arranging inland

	transport, and paying all charges related to these functions
customs clearance	the act of obtaining permission to import merchandise from another country into the importing nation
customs house broker	a business firm that oversees the movement of international shipments through Customs, and ensures that the documentation accompanying a shipment is complete and accurate
customs invoice	a document that contains a declaration by the seller, the shipper, or the agent as to the value of the shipment
customs value	the value of the imported goods on which duties will be assessed
cycle inventory	an inventory system where counts are performed continuously, often eliminating the need for an annual overall inventory. It is usually set up so that A items are counted regularly (i.e., every month),B items are counted semi- regularly (every quarter or six months), and C Items are counted perhaps only once a year
cycle time	the amount of time it takes to complete a business process
cycle time to process obsolete and end-of-life product returns for disposal	the total time to process goods returned as obsolete and end oflife to actual disposal. This cycle time includes the time a Return Product Authorization (RPA) is created to the time the RPA is approved, from Product Available for Pickup to Product Received and from Product Receipt to Product Disposal/Recycle

cycle time to repair or refurbish returns for use	the total time to process goods returned for repair or refurbishing. This cycle time includes the time a Return Product Authorization (RPA) is created to thetime the RPA is approved, from Product Available for Pickup to Product Received, from Product Receipt to Product Repair/ Refurbish Begin, and from Product Repair/Refurbish Begin to Product Available for Use

D

dangerous goods	articles or substances capable of posing a significant risk to health, safety, or property, and that ordinarily require special attention when transported
dashboard	a performance measurement tool used to capture a summary of the key performance indicators/metrics of a company. Metrics dashboards/ scorecards should be easy to read and usually have red, yellow, green indicators to flag when the company is not meeting its metrics targets. Ideally, a dashboard/ scoreboard should be cross functional in nature and include both financial and non-financial measures. In addition, scorecards should be reviewed regularly - at least on a monthly basis, and weekly in key functions such as manufacturing and distribution where activities are critical to the success of a company. The dashboards/scorecards philosophycan also be applied to external supply chain partners like suppliers toensure that their objectives and practices align. Synonym: scorecard

data dictionary	lists the data elements for which standards exist. The Joint Electronic Document Interchange (JEDI) committee developed a data dictionary that is employed by many EDI users
data interchange standards association (DISA)	the secretariat whichprovides clerical and administrative support to the ASC X12 Committee
data mining	the process of studying data to search for previously unknown relationships. This knowledge is then applied to achieving specific business goals
data warehouse	a repository of data that has been specially prepared tosupport decision- making applications. Synonym: decision- support data
database	data stored in computer-readable form, usually indexed or sorted in a logical order by which users can find a particular item of data they need
date code	a label on products with the date of production. In food industries,it's often an integral part of the lot number
days of supply	measure of quantity of inventory on hand in relation to number of days for which usage will be covered. For example, if a component is consumed in manufacturing at the rate of 100 per day and there are 1,585 units available on hand, this represents 15.85 days' supply
deadhead	the return of an empty transportation container to its point of origin
dead on arrival (DOA)	a term used to describe products which are not functional when delivered. Synonym: defective
deadweight tons (DWT)	the cargo carrying capacity of a vesel, including fuel oil, stores and provisions

decentralized authority	a situation in which a company management gives decision-making authority to managers at many organizational levels
decision support system (DSS)	software that speeds access and simplifies data analysis, queries, etc
declaration of dangerous goods	to comply with the U.S. regulations, exporters are required to provide special notices to inland and ocean transport companies when goods are hazardous
declared value for carriage	the value of the goods, declared by the shipper on a bill of lading, for the purpose of determining a freight rate or the limit of the carrier's liability
deconsolidator	an enterprise that provides services to ungroup shipments, orders, goods, etc., to facilitate distribution
dedicated contract carriage	a third party service that dedicates equipment (vehicles) and drivers to a single customer for its exclusive use on a contractual basis
defective goods inventory (DGI)	those items that have been returned, have been delivered damaged and have a freight claim outstanding, or have beendamaged in some way during warehouse handling
delivery appointment	the time agreed upon between two enterprises for goods or transportation equipment to arrive at a selected location
delivery-duty-paid	supplier/manufacturer arrangement in which suppliers are responsible for the transport of the goods they've produced, which are being sent to a manufacturer. This responsibility includes tasks such as ensuring that products get through Customs
delivery instructions	a document issued to a carrier to pick up goods at a location and deliver them to another location

delivery order	a document issued by the customs broker to the ocean carrieras authority to release the cargo to the appropriate party
delivery performance to commit date	the percentage of orders that are fulfilled on o before the internal commit date, used as a measure of internalscheduling systems effectiveness. Delivery measurements are based on the date a complete order is shipped or the ship-to date of a complete order. A complete order has all items on the order delivered in the quantities requested. An order must be complete to be considered fulfilled. Multiple- line items on a single order with different planned delivery dates constitute multiple orders, and multiple-planned delivery dates on a single line item also constitute multiple orders
delivery performance to request date	the percentage of orders that are fulfilled on or before the customer's requested date used as a measure of responsiveness to market demand. Delivery measurements are based on thedate a complete order is shipped or the ship-to date of a complete order. A complete order must be complete to be considered fulfilled. Multiple line items on a single order with different planned delivery dates constitute multiple orders, and multiple planned delivery dates on a single line item also constitute multiple orders
Delta Nu Alpha	a professional association of transportation and trafficpractitioners
demand chain management	the same as supply chain management, butwith an emphasis on consumer pull versus supplier push

demand planning systems	the systems that assist in the process of identifying, aggregating, and prioritizing all sources of demand for the integrated supply chain of a product of service at the appropriate level, horizon, and interval
demand pull	the triggering of material movement to a work center only when that work center is ready to begin the next job. In effect, it eliminatesthe queue from in from of a work center, but it can cause a queue at the end of a previous work center
demand side analysis	techniques such as market research, surveys, focus groups, and performance/ cost modeling used to identify emerging technologies
demand signal	a signal from a consumer, customer or using operation that triggers the issue of product or raw material
demand supply balancing	the process of identifying and measuring thegaps and imbalances between demand and resources in order to determine how tobest resolve the variances through marketing, pricing, packaging, warehousing, outsource plans, or some other action that will optimizeservice, flexibility, costs, assets, (or other supply chain inconsistencies) in an iterative and collaborative environment
deming circle	the concept of a continuously rotating wheel of plan-to-do- check-action (PDCA) used to show the need for interaction among market research, design, production, and sales to improve quality
demographic segmentation	in marketing, dividing potential markets by characteristics of potential customers, such as age, sex, income, and education

demurrage	the carrier charges and fees applied when rail freight cars and ships are retained beyond a specified loading or unloading time
denied party listing (DPL)	a list of organizations that is unauthorized to submit a bid for an activity or to receive a specific product. For example, some countries have bans on certain products like weapons or sensitive technology
density	a physical characteristic measuring a commodity's mass per unit volume or pounds per cubic foot; an important factor in ratemaking, since density affects the utilization of a carrier's vehicle
density rate	a rate based upon the density and shipment weight
deregulation	revisions or complete elimination of economic regulationscontrolling transportation. The Motor Carrier Act of 1980 and the Staggers Act of 1980 revised the economic controls over motor carriers and railroads, and the Airline Deregulation Act of 1978 eliminated economic controls over air carriers
derived demand	the demand for a product's transportation is derived from the product's demand at some location
design for manufacture/assembly (DFMA)	a product design methodology that provides a quantitative evaluation of product designs
design of experiments (DOE)	a branch of applied statistics dealing with planning, conducting, analyzing, and interpreting controlled tests to evaluate the factors that control the value of a parameter or group ofparameters
destination	the location designated as a receipt point for goods/shipment

detention	the carrier charges and fees applied when rail freight cars and ships are retained beyond a specified loading or unloading time
devanning	the unloading of cargo from a container or other piece of equipment
differential	a discount offered by a carrier that faces a service time disadvantage over a route
direct channel	this is when your own sales force sells to the customer. Your company may ship to the customer, or a third party may handle shipment, but in either case, your company owns the sales contract and retains rights to the receivable from the customer. Your end customer may be a retail outlet. The movement to the customer may be direct from the factory, orthe product may move through a distribution network owned by yourcompany. Order information in this channel may be transmitted by electronic means
direct cost	a cost that can be directly traced to a cost object since a direct or repeatable cause-and-effect relationship exists. A direct cost uses a direct assignment or cost causal re-lationship to transfer costs
direct product profitability (DPP)	calculation of the net profit contribution at-tributable to a specific product or product line
direct production material	material that is used in the
	manufacturing/content of a product. (Ex-ample: purchased parts, solder, SMT glues, adhesives, mechanical parts, bill-of-materials parts, etc.)
direct retail locations	a retail location that purchases products directly from your organization or respond-ing entity

direct store delivery (DSD)	process of shipping direct from a manufacturer's plant or distribution center to the customer's retail store,thus bypassing the customer's distribution center
disaster recovery planning	contingency planning specifically related to recovering hardware and software (e.g., data centers, application software, operations, personnel, telecommunications) in information system outages
discharge port	the name of the port where the cargo is unloaded from theexport vessel. This is the port reported to the U.S. Census on the Shipper's Export Declaration, Schedule K, which is used by U.S. companies when exporting. This can also be considered the first discharge port
discrete manufacturing	discrete manufacturing processes create products by assembling unconnected distinct parts as in the production of distinct items such as automobiles, appliances, or computers
disintermediation	when the traditional sales channels are disassembled and the middleman gets cut out of the deal. Such as where the manufacturer ships direct to a retailer, bypassing the distributor
dispatching	the carrier activities involved with controlling equipment;involves arranging for fuel, drivers, crews, equipment, and terminal space
distributed inventory	inventory that is geographically dispersed. For example, where a company maintains inventory in multiple distribution centers to provide a higher level of customer service

distribution	outbound logistics, from the end of the production line to the end user. The activities associated with the movement of material, usually finished goods or service parts, from the manufacturer to the customer. These activities encompass the functions of transportation, warehousing, inventory control, material handling, order administration, site and locationanalysis, industrial packaging, data processing, and the communications network necessary for effective management. It includes all activities related to physical distribution, as well as the return of goods to the manufacturer. In many cases, this movement is made through one or more levels of field warehouses. Synonym: Physical Distribution. The systematic division of a whole into discrete parts having distinctive characteristics
distribution center (DC)	the warehouse facility which holds inventory from manufacturing pending distribution to the appropriate stores
distribution channel	one or more companies or individuals who participate in the flow of goods and services from the manufacturer to the final user orconsumer
distribution channel management	the organizational and pipeline strategy for getting products to customers. Direct channels involve company sales forces, facilities, and/or direct shipments to customers; indirect channels involve the use of wholesalers, distributors, and/or other parties to supply the products to customers. Many companies use both strategies, depending on markets and effectiveness
distribution planning	the planning activities associated

	withtransportation, warehousing, inventory levels, materials handling, order administration,site and location planning, industrial packaging, data processing, and communications networks to support distribution
distribution requirements planning (DRP)	a system of determining demands for inventory at distribution centers and consolidating demand information in reverse as input to the production and materials system
distribution resource planning (DRP II)	the extension of distribution requirements planning into the planning of the key resources contained in adistribution system: warehouse space, workforce, money, trucks, freight cars, etc
distribution warehouse	a finished goods warehouse from which a companyassembles customer orders
distributor	a business that does not manufacture its own products, butpurchases and resells these products. Such a business usually maintains a finished goods inventory. Synonym: wholesaler
diversion	the process of changing the destination and/or the consignee whilethe shipment is enroute
dock receipt	a document used to accept materials or equipment at an ocean pier or accepted location. Provides the ocean carrier with verification of receipt and the delivering carrier with proof of delivery
document	in EDI, a form, such as an invoice or purchase order, that trading partners have agreed to exchange and that the EDI software handles within its compliance-checking logic
documentation	the papers attached or pertaining to goods requiring transportation and/or transfer of

	ownership
domestic trunk line carrier	a classification for air carriers that operate between major population centers. These carriers are now classified as major carriers
door to door	the through-transport of goods from con-signor to consignee
door to port	the through transport service from con-signor to port ofimportation
double bottoms	a motor carrier operation that involves one tractor pullingtwo trailers
double-pallet jack	a mechanized device for transporting two standardpallets simultaneously
doubles	double trucks are two 28-foot trailers that are pulled by one tractor. Doubles also are known as "double bottoms"
download	to merge temporary files containing a day's or week's worth of information with the main data base in order to update it
downstream	one or more companies or individuals who participate in the flow of goods and services moving from the manufacturer to the final user or consumer
drayage	the service offered by a motor carrier for pick-up and delivery of ocean containers or rail containers. Drayage agents usually handle full-loadcontainers for ocean and rail carriers
drayage firms	motor carriers that provide local pickup and delivery oftrailers and containers (on chassis)
driving time regulations	U.S. Department of Transportation rules that limit the maximum time a driver may drive in interstate commerce; the rules prescribe both daily and weekly maxi-mums

drop	a situation in which an equipment operator deposits a trailer or boxcar at a facility at which it is to be loaded or unloaded
drop ship	to take the title of the products but not actually handle, stock, or deliver it, e.g., to have one supplier ship directly to another or to have a supplier ship directly to the buyer's customer
drum-buffer-rope (DBR)	in the theory of constraints, the generalized process used to manage resources tomaximize throughput. The drum is therate or pace of production set by the system's constraint. The buffersestablish the protection against uncertainty so that the system can maximize throughput. The rope is a communication process from the constraint to the gating operation that checks or limits material releasedinto the system to support the constraint
dual operation	a motor carrier that has both common and contract carrier operating authority
dual rate system	an international water carrier pricing system in which a shipper signing an exclusive use agreement with the conference pays a rate 10 to 15 percent lower than non-signing shippers do for an identicalshipment
dumping	when a product is sold below cost in a foreign market and/or whena product is sold at a lower price in the foreign market than in a domestic market, with the intention of driving out competition in the foreign market
dunnage	the packing material used to protect a product from damage during transport
DUNS number	a coded, numerical representation assigned

	to a specific company (USA)
duty	a tax imposed by a government on merchandise imported from another country
duty drawback	a refund of duty paid on imported merchandise when it is exported later, whether in the same or a different form
duty free zone (DFZ)	an area where goods or cargo can be stored without paying import customs duties while awaiting manufacturing or future transport
dynamic process control (DPC)	continuous monitoring of process performance and adjustment of control parameters to optimize process output

E

EAN.UCC: European Article Numbering/ Uniform Code Council	the EAN.UCC System provides identification standards to uniquely identify trade items, logistics units, locations, assets, and service relationsworldwide. The identification standards define the construction of globally-unique and unambiguous numbers
early supplier involvement (ESI)	the process of involving suppliers early in the product design activity and drawing on their expertise, insights, and knowledge to generate better designs in less time and ones that are easierto manufacture with high quality
earnings before interest and taxes (EBIT)	a measure of a company'searning power from ongoing operations, equal to earnings (revenues minuscost of sales, operating expenses, and taxes) before deduction of interest payments and income taxes. Also called operating profit
economic order quantity (EOQ)	an inventory model that determines how much to order by determining the amount that will meet customer service levels while minimizing total ordering and holding

	costs
economic value added (EVA)	a measurement of shareholder value as a company's operating profits after tax, less an appropriate charge for the capital used in creating the profits
economy of scale	a phenomenon whereby larger volumes of production reduce unit cost by distributing fixed costs over a larger quantity
EDI interchange	communication between partners in the form of a structured set of messages and service segments starting with an inter-change control header and ending with an interchange control trailer. In the context of X.400 EDI messaging, the contents of the primary bodyof an EDI message
EDIFACT	Electronic Data Interchange for Admin-istration, commerce, and Transport. The United Nations' EDI standard
EDI standards	criteria that define the data content and format requirements for specific business transactions (e.g., purchase orders). Using standard formats allows companies to ex-change transactions with multiple trading partners more easily. Also see: American National Standards Institute
EDI transmission	a functional group of one or more EDI transactions that are sent to the same loca-tion in the same transmission, and are iden-tified bya functional group header and trailer
efficient consumer response (ECR)	a demand-driven replenishment system de-signed to link all parties in the logistics channel to create a massive flow-through distribution network. Replenishment is based on consumer demand and point-of-sale information

electronic commerce (EC)	also written as e-commerce. Conducting business electronically via traditional EDI technologies, or online via the Internet. In the traditional sense of selling goods, it's possible to do this electronically because of certain software programs that run the main functions of e-commerce support, such as product display, ordering, shipment, billing, and inventory management. The definition of e- commerce includes business activity that is business- to-business (B2B) and/or business-to-consumer (B2C)
electronic data interchange (EDI)	intercompany, computer-to-computer transmission of business information in a standard format. For EDI purists, computer to computer means direct transmission from the originating application program to the receiving or processing application program. AnEDI transmission consists only of business data, not any accompanyingverbiage or free-form messages. Purists might also contend that a standard format is one that is approved by a national or international standards organization, as opposed to formats developed by industry groups or companies
electronic data interchange association	a national body that propagatesand controls the use of EDI in a given country. All EDIAs are nonprofit organizations dedicated to encouraging EDI growth. The EDI in the UnitedStates was formerly TDCC and administered the development of standards in transportation and other industries

electronic funds transfer (EFT)	a computerized system that processes financial transactions and information about these transactions or performs the exchange of value. Sending payment instructions across a computer network, or the company-to-company, company-to-bank, or bank-to bank electronic exchange of value
electronic mail (E-Mail)	the computer-to-computer exchange of messages. E-mail is usually unstructured (free-form) rather than in a structured format. X.400 has become the standard for e-mail exchange
embargo	a prohibition upon exports or imports, either with specific products or specific countries
empirical	pertaining to a statement or formula based on experience orobservation rather than on deduction or theory
end item	a product sold as a completed item or repair part; any item subjectto a customer order or sales forecast. Synonym: Finished Goods Inventory
end-of-life inventory	inventory on hand that will satisfy future demand for products that are no longer in production at your company
end user	the final buyer of the product who purchases the product for immediate use
engineering change	a revision to a drawing or design released by engineering to modify or correct a part. The request for the change can be from a customer or from production, quality control, another department,or a supplier. Synonym: Engineering Change Order
engineering change order (ECO)	a documented and approved revision to a product or process specification

engineer to order	a process in which the manufacturing organization must first prepare (engineer) significant product or process documentation before manufacture may begin
enroute	a term used for goods in transit or on the way to a destination
enterprise application integration (EAI)	a computer term for the tools and techniques used in linking ERP and other enterprise systems together.Linking systems is key for e-business. Gartner says "firms implementing enterprise applications spend at least 30% on point-to-point interfaces"
enterprise resource planning (ERP) system	A class of software for planning and managing enterprise-wide the resources needed to take customer orders, ship them, account for them, and replenish all needed goods according to customer orders and forecasts. Often includeselectronic commerce with suppliers. Examples of ERP systems are the application suites from SAP, Oracle, PeopleSoft, and others
entry form	the document that must be filed with Customs to obtain the release of imported goods and to allow collection of duties and statistics
enveloping	an EDI management software function that groups all documents of the same type, or functional group, and bound for the same destination into an electronic envelope. Enveloping is useful where there are multiple documents such as orders or invoices issued to a single tradingpartner that need to be sent as a packet
environmentally sensitive engineering	designing features in a product and its packaging that improve recycling, etc. It can include elimination of compounds that are hazardous to the environment

EPC or ePC	electronic product code. An electronically coded tag that is intended as an improvement to the UPC bar code system. The EPC is a 96-bit tag which contains a number called the global Trade Identification Number (GTIN). Unlike a UPC number, which only provides information specific to a group of products, the GTIN gives each product its own specific identifying number, giving greater accuracy in tracking
equipment	the rolling stock carriers use to facilitate the transportation services that they provide, including containers, trucks, chassis, vessels,and airplanes, among others
equipment I.D.	an identifier assigned by the carrier to a piece of equipment
equipment positioning	the process of placing equipment at a selected location
ergonomic	the science of creating workspaces and products which are human friendly to use
ethical standards	a set of guidelines for proper conduct by business professionals
evaluated receipts settlement (ERS)	a process for authorizing payment for goods based on actual receipts with purchase order data when price has already been negotiated. The basic premise behind ERS is that all of the information in an invoice has already been transmitted in the shipping documentation. Therefore, the invoice is eliminated and the shipping documentation is used to pay the vendor
exception rate	a deviation from the class rate; changes(exceptions) made tothe classification
exclusive patronage agreements	a shipper agrees to use only a conference's member liner firms in return for a 10 to 15 percent rate reduction

exclusive use	vehicles that a carrier assigns to a specific shipper for its exclusive use
exempt carrier	a for-hire carrier that is free from economic regulation. Trucks hauling certain commodities are exempt from Interstate Commerce Commission economic regulation. By far, the largest portion of exempt carriers transports agricultural commodities or seafood
expediting	moving shipments through regular channels at an accelerated rate; to take extraordinary action because of an increase in relative priority. Synonym: stock chase
expert system	a computer program that mimics a human expert
export	to send goods and services to another country
export compliance	complying with rules for exporting products, including packaging, labeling, and documentation
export broker	an enterprise that brings together buyer and seller for a fee, then eventually withdraws from the transaction
export declaration	a document required by the U.S. Treasury department and completed by the exporter to show the value, weight, consignee, destination, etc., pertinent to the export shipment. The document servestwo purposes: to gather trade statistics and to provide a control document ifthe goods require a valid export license
export license	a document secured from a government authorizing an exporter to export a specific quantity of a controlled commodity to a certain country. An export license is often required if a government has placed embargoes or other restrictions upon exports

export management company	a private firm that serves as the export department for several manufacturers, soliciting and transacting exportbusiness on behalf of its clients in return for a commission, salary, or a retainer plus commission
export sales contract	the initial document in any international transaction; itdetails the specifics of the sales agreement between the buyer and seller
export trading company	a firm that buys domestic products for sale overseas. A trading company takes title to the goods; an export- management company usually does not
exporter identification number (EIN)	a number required for the exporter on the Shipper's Export Declaration. A corporation may use their Federal Employer Identification Number as issued by the IRS; individuals can use their Social Security Numbers
express	carrier payment to its customers when ships, rail cars, or trailers are unloaded or loaded in less than the time allowed by contract andreturned to the carrier for use; the use of priority package delivery to achieve overnight or second-day delivery
extended enterprise	the notion that supply chain partners form a larger entity which works together as though it were a single unit
extensible markup language (XML)	a computer term for a language that facilitates direct communication of data among computers on the Internet. Unlike the older hypertext markup language (HTML) which provides data tags that give instructions to a web browser on how to display information, XML tags give instructions to a browser or to application software which help to define specifics about the category of information

external factory	a situation where suppliers are viewed as an extension of the firm's manufacturing capabilities and capacities. The same practicesand concerns that are commonly applied to the management of the firm's manufacturing system should also be applied to the management of the external factory
extranet	a computer term describing a private network (or a secured link on the public Internet) that links separate organizations and uses the same software and protocols as the Internet. Used for improving supply chain management. For example, extranets are used to provide access to a supplychain partner's internal inventory data which is not available to unrelated parties. Antonym: Intranet
ex works	the price that the seller quotes applies only at the point of origin. The buyer takes possession of the shipment at the point of origin and bears all costs and risks associated with transporting the goods to the destination
5-point annual average	method frequently used in PMG studies to establisha representative average for a one-year period
5-S program	a program for organizing work areas. Sometimes referred to as elements, each of the five components of the program begins with the letter"S." They include sort, systemize, shine or sweep, standardize, and sustain.In the UK, the concept is converted to the 5-C program comprising five comparable components: clear out, configure, clean and check, conformity,and custom and practice. Sort - get rid of clutter; separate out what is

	needed for the operations. * Systemize/Set in Order - organize the work area; make it easy to find what is needed. Shine - clean the work area; make it shine. Standardize - establish schedules and methods of performing the cleaning and sorting. Sustain – implement mechanisms to sustain the gains through involvement of people, integration into the performance measurement system, discipline, and recognition. The 5-S program is frequently combines with precepts of the Lean Manufacturing Initiative. Even when used separately, however, the 5-S (or 5-C) program is said to yield excellent results. Implementation of theprogram involves introducing each of the five elements in order, which reportedly generates multiple benefits, including product diversification, higher quality, lower costs, reliable deliveries, improved safety, and higher availability rate

F

fabricator:	a manufacturer that turns the product of a raw materials supplier into a larger variety of products. A fabricator may turn steel rods into nuts, bolts, and twist drills, or may turn paper into bags and boxes
facilities:	ahe physical plant, distribution centers, service centers, and related equipment
failure modes effects analysis (FMEA)	a pro-active method of predicting faults and failures so that preventive action can be taken
fair return	a profit level that enables a carrier to realize a rate of return on investment or property value that the regulatory agencies deem acceptable for that level of risk

fair value	fair value the value of the carrier's property; the calculation basis has included original cost minus depreciation, replacement cost, and market value
federal aviation administration	the federal agency that administers federal safety regulations governing air transportation
federal maritime commission	regulatory agency responsible for rates and practices of ocean carriers shipping to and from the United States
field finished goods:	inventory which is kept at locations outside the four walls of the manufacturing plant (i.e., distribution center or warehouse)
field service parts	parts inventory kept at locations outside the four walls of the manufacturing plant (i.e., distribution center or warehouse
field warehouse:	a warehouse that stores goods on the goods' owner's property while the goods are under a bona fide public warehouse manager's custody. The owner uses the public warehouse receipts as collateral for a loan
fill rate:	the percentage of order items that the picking operation actually found
fill rates by order:	whether orders are received and released consistently, or released from a blanket purchase order, this metric measures the percentage of ship-from-stock orders shipped within 24 hours of order "release." Make-to-stock schedules attempt to time the availability of finished goods to match forecasted customer orders or releases. Orders that were not shipped within 24 hours due to consolidation but were available for shipment within 24 hours are reported separately. In calculating elapsed time for order fill rates, the interval begins at ship release and ends when material is consigned for shipment
final assembly	the highest level assembled product, as it is shipped to customers. This terminology is typically used when products consist of many possible features and options that may only be combined when an actual order is received

final assembly schedule (FAS):	a schedule of end items to finish the product for specificм customers' orders in a make-to-order or assemble-to-order environment. It's also referred to as the finishingммм schedule because it may involve мoperations other than just the final assembly; also, it may not involve assembly, but simply final mixing, cutting, packaging, etc. The FAS is prepared after receipt of a customer order as constrained by the availability of material and capacity, and it schedules the operations required to complete the product from the level where it is stocked (or master scheduled) to the end-item level
final destination:	the last stopping point for a shipment.
finance lease	an equipment-leasing arrangement that provides the lessee with a means of financing for the leased equipment; a common method for leasing motor carrier trailers
financial responsibility:	motor carriers must have bodily injury and property damage (not cargo) insurance of not less than $500,000 per incident per vehicle; higher financial responsibility limits apply for motor carriers transporting oil or hazardous materials
finished goods inventory (FG or FGI)	products completely manufactured, packaged, stored, and ready for distribution
firewall	a computer term for a method of protecting the files and programs on one network from users on another network. A firewall blocks unwanted access to a protected network while giving the protected network access to networks outside of the firewall. a company will typically install a firewall to give users access to the Internet while protecting their internal information
firm planned prder	in a DRP or MRP system, a planned order whose status has been updated to a fixed order

first in first out (FIFO):	in inventory control and financial accounting, this refers to the practice of using stock from inventory on the basis of what was received first and is consumed first
first in first out (FIFO):	market innovator, putting the company in the leadership position
fixed costs:	costs which do not fluctuate with business volume in the short run. Fixed costs include items such as depreciation on buildings and fixtures
fixed order quantity:	a lot-sizing technique in MRP or inventory management that will always cause planned or actual orders to be generated for a pre-determined fixed quantity, or multiples thereof, if net requirements for the period exceed the fixed order quantity
fixed overhead	traditionally, all manufacturing costs, other than direct labor and direct materials, that continue even if products are not produced. Although fixed overhead is necessary to produce the product, it cannot be directly traced to the final product
fixed quantity inventory model	a setup wherein a company orders the same (fixed) quantity each time it places an order for an item
flatbed:	a type of trailer on a truck that consists of a floor and no enclosure
flatcar:	a railcar without sides, used for hauling machinery
flexibility:	ability to respond quickly and efficiently to changing customer and consumer demands
flexible-path equipment:	materials handling devices that include hand trucks and forklifts
flexible-path equipment:	a strategy based on multi-use equipment, skilled workers, innovative senior management to accommodate the continuous change that occurs in the marketplace
flight number:	an identifier associated with the air equipment (plane). Typically a combination of two letters, indicating the airline, and three or four digits indicating the number of the voyage

float:	the time required for documents, payments, etc. to get from one trading partner to another
floor-ready merchandise (FRM)	goods shipped by suppliers to retailers with all necessary tags, prices, security devices, etc. already attached so goods can be cross docked rapidly through retail DCs, or received directly at stores
flow rack:	a storage method where product is presented to picking operations at one end of a rack and replenished from the opposite end
flow-through distribution	a process in a distribution center in which products from multiple locations are brought in to the D.C. and are re- sorted by delivery destination and shipped in the same day. Also known as a "cross-dock" process in the transportation business
FOB:	a term of sale defining who is to incur transportation charges for the shipment that is to control the shipment movement, or where title to the goods passes to the buyer; originally meant "free on board ship"
FOB destination	title passes at destination, and seller has total responsibility until shipment is delivered
FOB origin	title passes at origin, and buyer has total responsibility over the goods while in shipment
forecast:	an estimate of future demand. A forecast can be constructed using quantitative methods, qualitative methods, or a combination of methods, and can be based on extrinsic (external) or intrinsic (internal) factors. Various forecasting techniques attempt to predict one or more of the four components of demand: cyclical, random, seasonal, and trend
forecasting:	predictions of how much of a product will be purchased by customers. Relies upon both quantitative and qualitative methods. Also see: Forecast
foreign trade zone (FTZ):	an area or zone set aside at or near a port or airport under the control of the US Customs Service, for holding goods duty-free pending Customs clearance

for-hire carrier	a carrier that provides transportation service to the public on a fee basis
forklift truck	a machine-powered device used to raise and lower freight and to move freight to different warehouse locations
form utility	the value the production process creates in a good by changing the item's form
four P's	a set of marketing tools to direct the business offering to the customer. The four P's are product, price, place, and promotion
four-wall inventory	the stock which is contained within a single facility or building
fourth party logistics (4PL)	differs from third party logistics in the following ways: (1) 4PL organization is often a separate entity established as a joint venture or long-term contract between a primary client and one or more partners; (2) 4PL organization acts as a single interface between the client and multiple logistics service providers; (3) all aspects (ideally) of the client's supply chain are managed by the 4PL organization; (4) It is possible for a major third party logistics provider to form a 4PL organization within its existing structure
free alongside (FAS)	the seller agrees to deliver the goods to the dock alongside the overseas vessel that is to carry the shipment. The seller pays the cost of getting the shipment to the dock; the buyer contracts the carrier, obtains documentation, and assumes all responsibility from that point forward
free alongside ship:	a term of sale indicating that the seller is liable for all changes and risks until the goods sold are delivered to the port on a dock that will be used by the vessel. Title passes to the buyer when the seller has secured a clean dock or ship's receipt of goods
free on board (FOB):	contractual terms between a buyer and a seller that define where title transfer takes place

free time	the period of time allowed for the removal or accumulation of cargo before charges become applicable
freight	goods being transported from one place to another
freight bill	the carrier's invoice for payment of transport services rendered
freight-all-kinds (FAK)	an approach to rate making whereby the ante is based only upon the shipment weight and distance; widely used in TOFC service
freight carriers	companies that haul freight, also called "for-hire" carriers. Methods of transportation include trucking, railroads, airlines, and sea borne shipping
freight charge	the rate established for transporting freight.
freight collect	the freight and charges to be paid by the consignee.
freight consolidation	the grouping of shipments to obtain reduced costs or improved utilization of the transportation function. Consolidation can occur by market area grouping, grouping according to scheduled deliveries, or using third party pooling services such as public warehouses and freight forwarders
freight forwarder	an organization which provides logistics services as an intermediary between the shipper and the carrier, typically on international shipments. Freight forwarders provide the ability to respond quickly and efficiently to changing customer and consumer demands and international shipping (import/export) requirements
freight quotation	the freight forwarder industry association
freight prepaid	the freight and charges to be paid by the consignor
freight quotation	a quotation from a carrier or forwarder covering the cost of transport between two specified locations
fronthaul	the first leg of the truck trip that involves hauling a load or several loads to targeted destinations
fulfillment	the act of fulfilling a customer order. Fulfillment includes order management, picking, packaging, and shipping

full container load (FCL)	a term used when goods occupy a whole container
full-service leasing	an equipment-leasing arrangement that includes a variety of services to support the leased equipment; a common method for leasing motor carrier tractors
full-time connection	a communication link between two (or more) entities which is normally maintained continuously
full truckload (FTL)	same as full container load, but in reference to motor carriage instead of containers
fully allocated cost	the variable cost associated with a particular output unit plus a common cost allocation
functional acknowledgement (FA)	a specific EDI Transaction Set (997) sent by the recipient of an EDI message to confirm the receipt of data but with no indication as to the recipient application's response to the message. The FA will confirm that the message contained the correct number of lines, etc., via control summaries, but does not report on the validity of the data
functional group	part of the hierarchical structure of EDI transmissions, a functional group contains one or more related transaction sets preceded by a functional group header and followed by a functional group trailer
functional silo	a view of an organization where each department or functional group is operated independently of other groups within the organization. Each group is referred to as a "Silo." This is the opposite of an integrated structure

G

gain sharing:	a method of incentive compensation where supply chain partners share collectively in savings from productivity improvements. The concept provides an incentive to both the buying and supplier organizations to focus on continually reevaluating, reenergizing, and enhancing their business relationship. all aspects of value delivery are scrutinized, including specification design, order processing, inbound transportation, inventory management, obsolescence programs, material yield, forecasting and inventory planning, product performance, and reverse logistics. The focus is on driving out limited value cost while protecting profit margins
gathering lines	oil pipelines that bring oil from the oil well to storage areas
general agreement on tariffs and trade (GATT):	a multilateral trade agreement aimed at expanding international trade as a means of raising world welfare
general-commodities carrier	a common motor carrier that has operating authority to transport general commodities, or all commodities not listed as special commodities
general-merchandise warehouse	a warehouse used to store goods that are readily handled, are packaged, and do not require a controlled environment
general order (GO)	a customs term referring to a warehouse where merchandise not entered within five working days after the carrier's arrival is stored at the risk and expense of the importer
global positioning system (GPS)	a system which uses satellites to precisely locate an object on earth. Used by trucking companies to locate over-the- road equipment

global strategy	a strategy that focuses on improving worldwide performance through the sales and marketing of common goods and services with minimum product variation by country. Its competitive advantage grows through selecting the best locations for operations in other countries
globalization:	the process of making something worldwide in scope or application
going-concern value	the value that a firm has as an entity, as opposed to the sum of the values of each of its parts taken separately; particularly important in determining a reasonable railroad rate
gondola	a railcar with a flat platform and sides three to five feet high, used for top loading long, heavy items
goods	a term associated with more than one definition: 1) common term indicating movable property, merchandise, or wares. 2) all materials which are used to satisfy demands. 3) whole or part of the cargo received from the shipper, including any equipment supplied by the shipper
government bill of lading (GB/L)	the bill of lading used for shipments made by U.S. Government agencies
grandfather clause	a provision that enabled motor carriers engaged in lawful trucking operations before the passage of the Motor Carrier Act of 1935 to secure common carrier authority w/o proving public convenience and necessity; a similar provision exists for other modes
granger laws	state laws passed before 1870 in Midwestern states to control rail transportation
great lakes carriers	water carriers that operate on the five Great Lakes
grid technique	a quantitative technique to determine the least-cost center, given raw materials sources and markers, for locating a plant or warehouse

gross margin	the difference between total revenue and the cost-of-goods sold. Synonym: Gross Profit Margin
gross national product (GNP)	a measure of a nation's output; the total value of all final goods and services a nation produces during a time period
gross weight	the total weight of the vehicle and the payload of freight or passengers
global tracking identification number or global trade item number (GTIN)	the globally-unique EAN.UCC System identification number, or key, used for trade items (products and services). It's used for uniquely identifying trade items (products and services) sold, delivered, warehoused, and billed throughout the retail and commercial distribution channels. Unlike a UPC number, which only provides information specific to a group of products, the GTIN gives each product its own specific identifying number, giving greater accuracy in tracking
guaranteed loans	railroad loans that the federal government cosigns and guarantees

H

handling costs	the cost involved in moving, transferring, preparing, and otherwise handling inventory
hard copy	computer output printed on paper
harmonized commodity description & coding system (harmonized code)	an international classification system that assigns identification numbers to specific products. The coding system ensures that all parties in int'l. trade use a consistent classification for the purposes of documentation, statistical control, and duty assessment
haulage	the inland transport service which is offered by the carrier under the terms and conditions of the tariff and of the relative transport document

hawthorne effect	from a study conducted at the Hawthorne Plant of Western Electric Company from 1927-1932 which found that the act of showing people that you are concerned usually results in better job performance. Studying and monitoring of activities are typically seen as being concerned and results in improved productivity
hazardous goods	articles or substances capable of posing a significant risk to health, safety, or property, and that ordinarily require special attention when transported
hazardous material	a substance or material which the Department of Transportation has determined to be capable of posing a risk to health, safety, and property when stored or transported in commerce
heijunka	in the just-in-time philosophy, an approach to level production throughout the supply chain to match the planned rate of end product sales
hierarchy of cost assignability	in cost accounting, an approach to group activity costs at the level of an organization where they are incurred, or can be directly related to. Examples are the level where individual units are identified (unit level), where batches of units are organized or processed (batch level), where a process is operated or supported (process level), or where costs cannot be objectively assigned to lower level activities or processes (facility level). This approach is used to better understand the nature of the costs, including the level in the organization at which they are incurred, the level to which they can be initially assigned (attached), and the degree to which they are assignable to other activity and/or cost object levels, i.e., activity or cost object cost, or sustaining costs
hi-low:	usually refers to a forklift truck on which the operator must stand rather than sit

highway trust fund	a fund into which highway users (carriers and automobile operators) pay; the fund pays for federal government's highway construction share
highway use taxes	taxes that federal and state governments assess against highway users (the fuel tax is an example). The government uses the use tax money to pay for the construction, maintenance, and policing of highways
home page	the starting point for a web site. It's the page that's retrieved and displayed by default when a user visits a web site. The default home-page name for a server depends on the server's configuration. On many web servers, it is index.html or default.htm. Some web servers support multiple home pages
hopper cars	railcars that permit top loading and bottom unloading of bulk commodities; some hopper cars have permanent tops with hatches to provide protection against the elements
horizontal play/horizontal hub	this is a term for a function that cuts across many industries and usually defines a facility or organization that is providing a common service
hostler	an individual employed to move trucks and trailers within a terminal or warehouse yard area
house air waybill (HAWB)	a bill of lading issued by a forwarder to a shipper as a receipt for goods that the forwarder will consolidate with cargo from other shippers for transport
household goods warehouse	a warehouse that stores household goods

hub	1) a large retailer or manufacturer having many trading partners. 2) a reference for a transportation network as a "hub and spoke" which is common in the airline and trucking industry. For example, a hub airport serves as the focal point for the origin and termination of long-distance flights where flights from outlying areas are fed into the hub airport for connecting flights. 3) a common connection point for devices in a network. 4) a web "hub" is one of the initial names for what is now known as a "portal." It came from the creative idea of producing a web site which would contain many different "portal spots" (small boxes that looked like ads with links to different, yet related content). This content, combined with Internet technology, made the idea a milestone in the development and appearance of web sites, primarily due to the ability to display a lot of useful content and store one's preferred information on a secured server. The web term "hub" was replaced with portal. 5) an Internet web site that provides a central repository for data or a central planning capability in an industry or supply network
hub airport	an airport that serves as the focal point for the origin and termination of long-distance flights; flights from outlying areas meet connecting flights at the hub airport
human resources (HR)	the function broadly responsible for personnel policies and practices within an organization
hundredweight (CWT)	a pricing unit used in transportation (equal to 100 pounds)

I

igloos	pallets and containers used in air transportation; the igloo shape fits the internal wall contours of a narrow-body airplane

import	movement of products from one country into another. The import of automobiles from Germany into the US is an example
importation point	the location where goods will be cleared for importation into a country
import/ export license	official authorization issued by a government allowing the shipping or delivery of a product across national boundaries
in bond	goods are held or transported In-Bond under customs control either until import duties or other charges are paid, or to avoid paying the duties or charges until a later date
inbound logistics	the management of materials from suppliers and vendors into production processes or storage facilities
incentive rate	a rate that induces the shipper to ship heavier volumes per shipment
INCOTERMS	international terms of sale developed by the International Chamber of Commerce to define sellers' and buyers' responsibilities
independent action	a carrier that is a rate bureau member may publish a rate that differs from the rate the rate bureau publishes
independent trading exchange (ITE)	often used synonymously with B2B, e-marketplace, or Virtual Commerce Network (VCN). ITE is a more precise term, connoting many-to-many transactions, whereas the others do not specify the transactions
indirect cost	a resource or activity cost that cannot be directly traced to a final cost object since no direct or repeatable cause-and-effect relationship exists. An indirect cost uses an assignment or allocation to transfer cost

indirect/distributor channel	your company sells and ships to the distributor. The distributor sells and ships to the end user. This may occur in multiple stages. Ultimately, your product may pass through the Indirect/Distributor Channel and arrive at a retail outlet. Order information in this channel may be transmitted by electronic means. These means may include EDI, brokered systems, or linked electronic systems
indirect retail locations	a retail location that ultimately sells your product to consumers, but who purchases your products from an intermediary, like a distributor or wholesaler
inherent advantage	the cost and service benefits of one mode compared with other modes
inland bill of lading	the carriage contract used in transport from a shipping point overland to the exporter's international carrier location
inland carrier	an enterprise that offers overland service to or from a point of export
insourcing	the opposite of outsourcing, that is, a service performed in house
inspection certificate	a document certifying that merchandise (such as perishable goods) was in good condition immediately prior to shipment. insurance: a system of protection against loss under which a number of parties agree to pay certain sums (premiums) for a guarantee that they will be compensated under certain conditions for specified loss and damage
insurance certificate	a document issued to the consignee to certify that insurance is provided to cover loss of or damage to the cargo while in transit
integrated carrier	an airfreight company that offers a blend of transportation services such as air carriage, freight forwarding, and ground handling

integrated logistics	a comprehensive, system-wide view of the entire supply chain as a single process, from raw materials supply through finished goods distribution. All functions that make up the supply chain are managed as a single entity rather than managing individual functions separately
interchange	in EDI, the exchange of electronic information between companies. Also, the group of transaction sets transmitted from one sender to one receiver at one time. Delineated by interchange control segments
intercoastal carriers	water carriers that transport freight between East and West Coast ports, usually by way of the Panama Canal
intercorporate hauling	a private carrier hauling a subsidiary's goods and charging the subsidiary a fee; this is legal if the subsidiary is wholly owned or if the private carrier has common carrier authority
interleaving	the practice of assigning an employee multiple tasks which are performed concurrently
interline	two or more motor carriers working together to haul a shipment to a destination. Carriers may interchange equipment but usually they rehandle the shipment without transferring the equipment
intermediate destination	a stopping point for a shipment prior to the final destination
intermediately positioned warehouse	a warehouse located between customers and manufacturing plants to provide increased customer service and reduced distribution cost
intermittent-flow, fixed-path equipment	materials handling devices that include bridge cranes, monorails, and stacker cranes
intermodal container transfer facility	a facility where cargo is transferred from one mode of transportation to another, usually from ship or truck to rail

intermodal marketing company (IMC)	an intermediary that sells intermodal services to shippers
intermodal transportation	transporting freight by using two or more transportation modes, such as by truck and rail or truck and oceangoing vessel
internal customer	the recipient (person or department) of another person's or department's output (good, service, or information) within an organization
internal labor and overhead	the portion of COGS that is typically reported as labor and overhead, less any costs already classified as "outsourced"
internal water carriers	water carriers that operate over internal, navigable rivers such as the Mississippi, Ohio, and Missouri
international air transport association	an international air carrier rate bureau for passenger and freight movements
international civil aeronautics organization	an international agency responsible for air safety and for standardizing air traffic control, airport design, and safety features worldwide
international import certificate	a document required by the importing country indicating that the importing country recognizes that a controlled shipment is entering their country. The importing country pledges to monitor the shipment and prevent its re-export, except in accordance with its own export control regulations
international maritime bureau (IMB)	a special division of the International Chamber of Commerce
international maritime organization (IMO)	a United Nations-affiliated organization representing all maritime countries in matters affecting maritime transportation, including the movement of dangerous goods. The organization also is involved in deliberations on marine environmental pollution

international standards organization (ISO)	an organization within the United Nations to which all national and other standard-setting bodies (should) defer. Develops and monitors international standards, including OSI, EDIFACT, and X.400
internet	a computer term which refers to an interconnected group of computer networks from all parts of the world, i.e., a network of networks. Accessed via a modem and an online service provider, it contains many information resources and acts as a giant electronic message routing system
interstate commerce	the transportation of persons or property between states; in the course of the movement, the shipment crosses a state boundary
interstate commerce commission (ICC)	an independent regulatory agency that implements federal economic regulations controlling railroads, motor carriers, pipelines, domestic water carriers, domestic surface freight forwarders, and brokers
interstate system	the National System of Interstate and Defense Highways, 42,000 miles of four-lane, limited-access roads connecting major population centers
in-transit inventory	material moving between two or more locations, usually separated geographically; for example, finished goods being shipped from a plant to a distribution center. In-transit inventory is an easily overlooked component of total supply chain availability
intrastate commerce	the transportation of persons or property between points within a state. A shipment between two points wi a state may be interstate if the shipment had a prior or subsequent move outside of the state and the shipper intended an interstate shipment at time of shipment
inventory	raw materials, work in process, finished goods, and supplies required for creation of a company's goods and services. The number of units and/ or value of the stock of goods held by a company
inventory accuracy	when the on-hand quantity is equivalent to the perpetual balance (plus or minus the designated count tolerances)

inventory carrying cost	one of the elements comprising a company's total supply chain management costs
opportunity cost	the opportunity cost of holding inventory. This should be based on your company's own cost of capital standards using the following formula
shrinkage	the costs associated with breakage, pilferage, and deterioration of inventories. Usually pertains to the loss of material through handling damage, theft, or neglect
insurance and taxes	the cost of insuring inventories and taxes associated with the holding of inventory
total obsolescence for raw material, wip, and finished goods inventory	inventory reserves taken due to obsolescence and scrap and includes products exceeding the shelf life, i.e., spoils and is no good for use in its original purpose (do not include reserves taken for Field Service Parts)
channel obsolescence	aging allowances paid to channel partners, provisions for buy-back agreements, etc. Includes all material that becomes obsolete while in a distribution channel. Usually, a distributor will demand a refund on material that goes bad (shelf life) or is no longer needed because of changing needs
field service parts obsolescence	reserves taken due to obsolescence and scrap. Field service parts are those inventories kept at locations outside the four walls of the manufacturing plant i.e., distribution center or warehouse
inventory cost	the cost of holding goods, usually expressed as a percentage of the inventory value; includes the cost of capital, warehousing, taxes, insurance, depreciation, and obsolescence
inventory in transit	inventory in a carrier's possession, being transported to the buyer
inventory management	the process of ensuring the availability of products through inventory administration

inventory planning systems	the systems that help to strategically balance the inventory policy and customer service levels throughout the supply chain. These systems usually calculate time-phased order quantities and safety stock using selected inventory strategies. Some inventory planning systems conduct what-if analysis and compare the current inventory policy with simulated inventory scenarios to improve the inventory ROI
inventory turns	the cost of goods sold divided by the average level of inventory on hand. This ratio measures how many times a company's inventory has been sold during a period of time. Operationally, inventory turns are measured as total throughput divided by average level of inventory for a given period. How many times a year the average inventory for a firm changes over or is sold
inventory velocity	the speed at which inventory moves through a defined cycle (i.e., from receiving to shipping)
invoice	a detailed statement showing goods sold or shipped and amounts for each. The invoice is prepared by the seller and acts as the document that the buyer will use to make payment
irregular route carrier	a motor carrier that may provide service utilizing any route
ISO 9000	a series of quality assurance standards compiled by the Geneva, Switzerland-based International Standards Organization. In the United States, ISO is represented by the American National Standards Institute based in Washington, DC
ISO 14000 series standards	a series of generic environmental management standards under development by the International Organization of Standardization which provide structure and systems for managing environmental compliance with legislative and regulatory requirements and affect every aspect of a company's environmental operations

issuing carrier	the carrier whose name is printed on the bill of lading and with whom the contract of carriage exists
item	any unique manufactured or purchased part, material, intermediate, sub-assembly, or product

J

jidoka	the concept of adding an element of human judgment to automated equipment. In doing this, the equipment becomes capable of discriminating against unacceptable quality, and the automated process becomes more reliable
joint cost	a common cost in cases where a company produces products in fixed proportions and the cost the company incurs to produce one product entails producing another; the backhaul is an example
joint rate	a rate over a route that requires two or more carriers to transport the shipment
joint supplier agreement (JSA)	indicative of Stage 3 Sourcing Practices, the JSA includes terms and conditions, objective, process flows, performance targets, flexibility, balancing, and incentives
just in time (JIT)	an inventory control system that controls material flow into assembly and manufacturing plants by coordinating demand and supply to the point where desired materials arrive just in time for use. An inventory reduction strategy that feeds production lines with products delivered just in time. Developed by the auto industry, it refers to shipping goods in smaller, more frequent lots
just in time II (JIT II)	vendor-managed operations taking place within a customer's facility. JIT II was popularized by the Bose Corporation. The supplier reps, called "inplants," place orders to their own companies, relieving the customer's buyers from this task. Many also become involved at a deeper level such as participating in new product development projects and manufacturing planning (concurrent planning)

just-in-time logistics (or quick response)	the process of minimizing the times required to source, handle, produce, transport, and deliver products in order to meet customer requirements

K

kaizen	a Japanese term for improvement - continuing improvement involving everyone - managers and workers. In manufacturing, kaizen relates to finding and eliminating waste in machinery, labor, or production methods
kanban	Japanese word for visible record, loosely translated means card, billboard, or sign. Popularized by Toyota Corporation, it uses standard containers or lot sizes to deliver needed parts to the assembly line just in time for use
keiretsu	a form of cooperative relationship among companies in Japan where the companies largely remain legally and economically independent, even though they work closely in various ways, such as sole sourcing and financial backing. A member of a keiretsu generally owns a limited amount of stock in other member companies. A keiretsu generally forms around a bank and a trading company but distribution (supply chain) keiretsus exist, linking companies from raw material suppliers to retailers
key performance indicator (KPI)	a measure which is of strategic importance to a company or department. For example, a supply chain flexibility metric is Supplier On-Time Delivery Performance which indicates the percentage of orders that fulfilled on or before the original requested date
kitting	light assembly of components or parts into defined units, Kitting reduces the need to maintain an inventory of prebuild, completed products, but increases the time and labor consumed at shipment

L

lading	the cargo carried in a transportation vehicle
laid-down cost	the sum of the product and transportation costs. The laid- down cost is useful in comparing the total cost of a product shipped from different supply sources to a customer's point of use

land bridge	the movement of containers by ship-rail-ship on Japan-to- Europe moves; ships move containers to the U.S. Pacific Coast, rails move containers to an East Coast port, and ships deliver containers to Europe
land grants	grants of land given to railroads to build tracks during their development stage
landed cost	cost of product plus relevant logistics costs, such as transportation, warehousing, handling, etc.
lash barges	covered barges that carriers load on board oceangoing ships for movement to foreign destinations
LASH vessel	a ship measuring at least 820 feet long with a deck crane able to load and unload barges through a stern section that projects over the water. The acronym LASH stands for Lighter (barge) Aboard Ship
last in first out (LIFO)	in inventory control and financial accounting, this refers to the practice of using stock from inventory on the basis of what was received last is consumed first. This has limited use in stock keeping and is primarily a cost-accounting method
last updated	a date and time stamp that is recorded when a field or record was last modified by the user
lead logistics provider (LLP)	An organization that organizes other third party logistics partners for outsourcing of logistics functions
lead time	the total time that elapses between an order's placement and its receipt. It includes the time required for order transmittal, order processing, order preparation, and transit
leg	a leg has an origin, destination, and carrier and is composed of all consecutive segments of a route booked through the same carrier. Also called Bookable Leg
less-than-carload (LCL)	shipment that is less than a complete rail car load (lot shipment)
less-than-containerload (LCL)	a term used when goods do not completely occupy an entire container. When many shipper's goods occupy a single container, each shipper's shipment is considered to be LCL

less-than-truckload (LTL)carriers	Trucking companies that consolidate and transport smaller (less than truckload) shipments of freight utilizing a network of terminals and relay points
less-than-truckload (LTL)	trucking companies that consolidate and transport smaller (less than truckload) shipments of freight by utilizing a network of terminals and relay points
lessee	a person or firm to whom a lessor grants a lease
lessor	a person or firm that grants a lease
letter of credit (LOC)	a method of payment for goods in which the buyer established his credit with a local bank, clearly describing the goods to be purchased, the price, the documentation required, and a time limit for completion of the transaction. Upon receipt of documentation, the bank is either paid by the buyer or takes title to the goods themselves and proceeds to transfer funds to the seller
leverage	taking something small and exploding it. Leverage can be financial or technological
life cycle cost	in cost account, a product's life cycle is the period that starts with the initial product conceptualization and ends with the withdrawal of the product from the marketplace and final disposition. A product life cycle is characterized by certain defined stages, including research, development, introduction, maturity, decline, and abandonment. Life cycle cost is the accumulated costs incurred by a product during these stages
lift on, lift off (LO/ LO)	a method by which cargo is loaded onto and unloaded from an ocean vessel, which in this case is with a crane
lighter	a barge-type vessel used to carry cargo between shore and cargo ship. While the terms barge and lighter are used interchangeably, a barge usually refers to a vessel used for a long haul, while a lighter is used for a short haul
lighterage	the cost of loading or unloading a vessel by means of barges
line functions	the decision-making areas companies associate with daily operations. Logistics line functions include traffic management, inventory control, order processing, warehousing, and packaging

line-haul shipment	a shipment that moves between cities and over distances more than 100 to 150 miles in length
line item	a specific and unique identifier assigned to a product by the responsible enterprise
liner service	international water carriers that ply fixed routes on published schedules
link	the transportation method a company uses to connect nodes (plants, warehouses) in a logistics system
linked distributed systems	independent computer systems owned by independent organizations linked in a manner to allow direct updates to be made to one system by another. For example, a customer's computer system is linked to a supplier's system and the customer can create orders or releases directly in the supplier's system
live	a situation in which the equipment operator stays with the trailer or boxcar while it is being loaded or unloaded
local area network (LAN)	a data communications network spanning a limited geographical area, usually a few miles at most, providing communications between computers and peripheral devices
load factor	a measure of operating efficiency used by air carriers to determine a plane's utilized capacity percentage or the number of passengers divided by the total number of seats
load tender (pick-up request)	an offer of cargo for transport by a shipper
load tender (pick-up request)	Load tender terminology is primarily used in the motor industry
load tendering	the practice of providing a carrier with detailed information and negotiated pricing (the tender) prior to scheduling pickup. This practice can help assure contract compliance and facilitate automated payments (self billing)
loading allowance	a reduced rate that carriers offer to shippers and/or consignees who load and/or unload LTL or Any Quantity shipments

loading port	the port where the cargo is loaded onto the exporting vessel. This port must be reported on the Shipper's Export Declaration, Schedule D. Schedule D is used by U.S. companies when exporting to determine which tariff is used to freight rate the cargo for carriers with more than one tariff
local rate	a rate published between two points served by one carrier
local service carriers	a classification of air carriers that operate between less-populated areas and major population centers. These carriers feed passengers into the major cities to connect with major carriers. Local service carriers are now classified as national carriers
localized raw material	a raw material found only in certain locations
locational determinant	the factors that determine a facility's location. For industrial facilities, the determinants include logistics
logbook	a daily record of the hours an interstate driver spends driving, off duty, sleeping in the berth, or on duty but not driving
logistics	the process of planning, implementing, and controlling procedures for the efficient and effective storage of goods, services, and related information from the point of origin to the point of consumption for the purpose of conforming to customer requirements. This definition includes inbound, outbound, internal, and external movements
logistics channel	the network of supply chain participants engaged in storage, handling, transfer, transportation, and communications functions that contribute to the efficient flow of goods
logistics costs	the factors associated with the acquisition, storage, movement, and disposition of goods
logistics data interchange (LDI)	a computerized system that electronically transmits logistics information

logistics management as defined by the council of supply chain management professionals (CSCMP)	logistics management is that part of supply chain management that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customers' requirements. Logistics management activities typically include inbound and outbound transportation management, fleet management, warehousing, materials handling, order fulfillment, logistics network design, inventory management, supply/ demand planning and management of third party logistics services providers. To varying degrees, the logistics function also includes sourcing and procurement, production planning and scheduling, packaging and assembly, and customer service. It is involved in all levels of planning and execution - strategic, operational, and tactical. Logistics management is an integrating function which coordinates and optimizes all logistics activities with other functions, including marketing, sales, manufacturing, finance, and information technology
long ton	2,240 pounds
lot control	a set of procedures (e.g., assigning unique batch numbers and tracing each batch) used to maintain lot integrity from raw materials, from the supplier through manufacturing to consumers
lot size	the quantity of goods a company purchases or produces in anticipation of use or sale in the future
LTL shipment	a less-than-truckload shipment, one weighing less than the minimum weight a company needs to use the lower truckload rate
lumping	when a driver assists with loading and unloading the trailer contents

M

machine downtimes	time during which a machine cannot be utilized. Machine downtimes may occur during breakdowns, maintenance, changeovers, etc.

macro environment	the environment external to a business, including technological, economic, natural, and regulatory forces that marketing efforts cannot control
maintenance, repair, and operating supplies (MRO)	items used in support of general operations and maintenance, such as maintenance supplies, spare parts, and consumables used in the manufacturing process and supporting operations
major carrier	a for-hire certificated air carrier that has annual operating revenues of $1 billion or more; the carrier usually operates between major population centers
make-or-buy decision	the act of deciding whether to produce an item internally or buy it from an outside supplier. Factors to consider in the decision include costs, capacity availability, proprietary and/or specialized knowledge, quality considerations, skill requirements, volume, and timing
make to order (manufacture to order)	a manufacturing process strategy where the trigger to begin manufacture of a product is an actual customer order or release rather than a market forecast. For make-to-order products, more than 20% of the value added takes place after the receipt of the order or release, and all necessary design and process documentation is available at the time of order receipt
make to stock (manufacture to stock)	a manufacturing process strategy where finished product is continually held in plant or warehouse inventory to fulfill expected incoming orders or releases based on a forecast
management of all logistics	the effective management of all costs associated with logistics functions and activities so as to minimize their sum across the product supply chain
manifest	a document which describes individual orders contained within a shipment
manufacture cycle time	the average time between commencement and completion of a manufacturing process, as it applies to make-to-stock products

manufacturer's representative	one who sells goods for several firms but does not take title to them
manufacturing calendar	a calendar used in inventory and production planning functions that consecutively numbers only the working days so that the component and work order scheduling may be done based on the actual number of workdays available
Manufacturing Execution Systems (MES)	programs and systems that participate in shop-floor control, including programmed logic controllers and process control computers for direct and supervisory control of manufacturing equipment; process information systems that gather historical performance information, then generate reports; graphical displays; and alarms that inform operations personnel what is going on in the plant currently and a short history into the past. Quality control information is also gathered - a laboratory information management system may be part of this configuration to tie process conditions to the quality data that are generated. Thereby, cause-and-effect relationships can be determined. The quality data at times affect the control parameters that are used to meet product specifications, either dynamically or offline
manufacturing lead time	the total time required to manufacture an item, exclusive of lower-level purchasing lead time. For make-to-order products, it's the length of time between the release of an order to the production process and shipment to the final customer. For make-to-stock products, it's the length of time between the release of an order to the production process and receipt into finished goods inventory. Included are order preparation time, queue time, set-up time, run time, move time, inspection time, and put-away time. Synonym: Manufacturing Cycle Time

manufacturing resource planning (MRP-II)	a method for the effective planning of all resources of a manufacturing company. Ideally, it addresses operational planning in units, financial planning in dollars, and has a simulation capability to answer what-if questions. It consists of a variety of processes, each linked together: business planning, production planning (sales and operations planning), master production scheduling, material requirements planning, capacity requirements planning, and the execution support systems for capacity and material. Output from these systems is integrated with financial reports, such as business plan, purchase commitment report, shipping budget, and inventory projections in dollars. Manufacturing resource planning is a direct outgrowth and extension of closed-loop MRP
marginal cost	the cost to produce one additional unit of output. The change in total variable cost resulting from a one-unit change in output
marine cargo insurance – average	a term in marine cargo insurance signifying loss or damage to merchandise
marine cargo insurance - FPA (free of particular average)	a provision in a marine cargo insurance policy that no claim shall be paid for damage to goods in the course of a voyage unless a loss is sustained that totals or exceeds a certain percentage of the value as specified in the policy. The object of such a provision is the avoidance of petty claims
marine cargo insurance - general average	a loss arising out of a voluntary sacrifice made of any part of a shipment or cargo to prevent loss of the whole and for the benefit of all persons concerned
marine cargo insurance - open policy	a cargo insurance policy that is an open contract; i.e. it provides protection for all of an exporter's shipments afloat or in transit within a specified geographical trade area for an unlimited period of time, until the policy is cancelled by the insured or by the insurance company. It is "open" because the goods that are shipped are also detailed at that time. This is usually shown in a document called a marine insurance certificate

maritime administration (Mar Ad)	a U.S. government agency, not actively involved in vessel operation, that administers laws for maintenance of a merchant marine for the purposes of defense and commerce
market demand	in marketing, the total demand that would exist within a defined customer group in a given geographical area during a particular time period given a known marketing program
market dominance	the absence of effective competition for railroads from other carriers and modes for the traffic to which the rail rate applies. The Staggers Act stated that market dominance does not exist if the rate is below the revenue-to-variable-cost ratio of 160 percent in 1981 and 170 percent in 1983
market-positioned warehouse	warehouse positioned to replenish customer inventory assortments and afford maximum inbound transport consolidation economies from inventory origin points with relatively short- haul local delivery
market segment	a group of potential customers sharing some measurable characteristics based on demographics, psychographics, lifestyle, geography, benefits, etc.
marks and numbers	marks and numbers placed on goods used to identify a shipment or parts of a shipment
Marquis partners	key strategic relationships. This has emerged as perhaps the key competitive advantage and barrier to entry of e-marketplaces. Get the big players in the fold first, offering equity if necessary
mass customization	the creation of a high-volume product with large variety so that a customer may specify his or her exact model out of a large volume of possible end items, while manufacturing cost is low because of the large volume. An example is a personal computer order in which the customer may specify processor speed, memory size, hard disk size and speed, removable storage device characteristics, and many other options when PCs are assembled on one line and at a low cost

master air waybill (MAWB)	the bill of lading issued by air carriers to their customers
material acquisition costs	one of the elements comprising a company's total supply chain management costs. These costs consist of the following: Materials (Commodity) Management and Planning: All costs associated with the supplier sourcing, contract negotiation and qualification, and the preparation, placement, and tracking of a purchase order - including all costs related to buyer/planners. Supplier Quality Engineering: The costs associated with the determination, development/certification, and monitoring of suppliers' capabilities to fully satisfy the applicable quality and regulatory requirements. Inbound Freight and Duties: Freight costs associated with the movement of material from a vendor to the buyer, including all associated administrative tasks. Duties are those fees and taxes levied by government for moving purchased material across international borders. Customs broker fees should also be included in this category. Receiving and Put Away: all costs associated with taking possession of material and storing it. Note - inventory-carrying costs are normally covered in a separate worksheet. Incoming Inspection: All costs associated with the inspection and testing of received materials to verify compliance with specifications
materials handling	the physical handling of products and materials between procurement and shipping
material index	the ratio of the sum of the localized raw material weights to the weight of the finished product.
materials management	inbound logistics from suppliers through the production process. The movement and management of materials and products from procurement through production
materials planning	the materials management function that attempts to coordinate materials supply with materials demand

material requirements planning (MRP)	a decision-making methodology used to determine the timing and quantities of materials to purchase.
matrix organizational structure	an organization structure in which two (or more) channels of command budget responsibility, and performance measurement exist simultaneously. For example, both product and functional forms of organization could be implemented simultaneously; in other words, the product and functional managers have equal authority and employees report to both managers
maximum order quantity	an order quantity modifier applied after the lot size has been calculated that limits the order quantity to a pre-established maximum
m-C ommerce	mobile commerce applications involve using a mobile phone to carry out financial transactions. This usually means making a payment for goods or transferring funds electronically. Transferring money between accounts and paying for purchases are electronic commerce applications. An emerging application, electronic commerce has been facilitated by developments in other areas in the mobile world, such as dual slot phones and other smarter terminals, and more standardized protocols which allow greater interactivity and therefore, more sophisticated service
mean	the arithmetic average of a group of values
measurement ton	forty cubic feet; used in water transportation rate-making
median	the middle value in a set of measured values when the items are arranged in order of magnitude. If there is no single middle value, the median is the mean of the two middle values
merge in transit	the process of "merging" shipments from suppliers and going directly to the buyer or to the store, bypassing the seller. A "drop shipment" from several vendors to one buyer

merger	the combination of two or more carriers into one company that will own, manage, and operate the properties that previously operated separately
message	the EDIFACT term for a transaction set. A message is the collection of data, organized in segments, exchanged by trading partners engaged in EDI. Typically, a message is an electronic version of a document associated with a common business transaction, such as a purchase order or shipping notice. A message begins with a message header segment, which identifies the start of the message (e.g., the series of characters representing one purchase order). The message header segment also carries the message type code, which identifies the business transaction type. EDIFACT's message header segment is called UNH; in ANSI X12 protocol, the message header is called ST. A message ends with a message trailer segment, which signals the end of the message (e.g., the end of one purchase order). EDIFACT's message trailer is labeled UNT; the ANSI X12 message trailer is referred to as SE
micro-land bridge	an intermodal movement in which the shipment is moved from a foreign country to the U.S. by water and then moved across the U.S. by railroad to an interior, non-port city, or vice versa for exports from a non-port city
mileage allowance	an allowance, based upon distance, that railroads give to shippers using private railcars
mileage rate	a rate based upon the number of miles the commodity is shipped
mini-land bridge	an intermodal movement in which the shipment is moved from a foreign country to the U.S. by water and then moved across the U.S. by railroad to a destination that is a port city, or vice versa for exports from a U.S. port city
minimum weight	the shipment weight the carrier's tariff specifies as the minimum weight required to use the TL or CL rate; the rate discount volume

mixed loads	the movement of both regulated and exempt commodities in the same vehicle at the same time
modal split	the relative use that companies make of transportation modes; the statistics include ton-miles, passenger-miles, and revenue
motor carrier	an enterprise that offers service via motor carriage
movement of goods	the transfer of goods from one location to another
MRO items	maintenance, repair, and operating items--office supplies, for example
multi-currency	the ability to process orders using a variety of currencies for pricing and billing
multi-language	pertaining to the ability to process orders in many different country-specific languages using voice and text
multinational company	a company that both produces and markets products in different countries
multiple-car rate	a railroad rate that is lower for shipping more than one carload at a time
multi-skilled	pertaining to individuals who are certified to perform a variety of tasks

N

national carrier	A for-hire certificated air carrier that has annual operating revenues of $75 million to $1 billion; the carrier usually operates between major population centers and areas of lesser population.
national industrial transportation league	An association representing shippers' and receivers' interests in matters of transportation policy and regulation
nationalization	Public ownership, financing, and operation of a business entity

national motor bus operators organization	An industry association representing common and charter bus firms; now known as the American Bus Association.
national motor freight classification (NMFC)	a tariff, which contains descriptions and classifications of commodities and rules for domestic movement by motor carriers in the US
national railroad corporation	also known as Amtrak, the corporation established by the Rail Passenger Service Act of 1970 to operate most of the United States' rail passenger service
negotiable BOL	Provides for the delivery of goods to a named enterprise or to their order (anyone they may designate), but only upon surrender of proper endorsement and the bill of lading to the carrier or the carrier's agents. negotiations: a set of discussions between two or more enterprises to determine the business relationship
net assets	total net assets are calculated as Total Assets - Total Liabilities; where the total assets are made up of fixed assets (plant, machinery, and equipment) and current assets which is the total of stock, debtors, and cash (also includes A/R, inventory, prepaid assets, deferred assets, intangibles, and goodwill). The total liabilities are made up in much the same way as long-term liabilities and current liabilities (includes A/P, accrued expenses, deferred liabilities)
net weight	the weight of the merchandise, unpacked, exclusive of any containers
new product introduction (NPI)	the process used to develop products that are new to the sales portfolio of a company
node	a fixed point in a firm's logistics system where goods come to rest; includes plants, warehouses, supply sources, and markets
no location (No Loc)	a received item for which the warehouse has no previously established storage slot
non-certificated carrier	a for-hire air carrier that is exempt from economic regulation

nonconformity	failure to fulfill a specified requirement
non-negotiable BOL	provides for the delivery of goods to a named enterprise and to no one else. Also known as a straight bill of lading
non vessel operating common carrier (NVOCC)	a firm that offers the same services as an ocean carrier, but which does not own or operate a vessel. NVOCCs usually act as consolidators, accepting small shipments (LCL) and consolidating them into full container loads. They also consolidate and disperse international containers that originate at or are bound for inland ports. They then act as a shipper, tendering the containers to ocean common carriers. They are required to file tariffs with the Federal Maritime Commission and are subject to the same laws and statutes that apply to primary common carriers
North American free trade agreement (NAFTA)	a free trade agreement, implemented January 1, 1994, between Canada, the United States and Mexico
notify party	the name of an organization, or individual, that should be notified when a shipment reaches its destination
not otherwise specified/ not elsewhere specified (NOS/ NES)	this term often appears in ocean or airfreight tariffs respectively. If no rate for the specific commodity shipped appears in the tariff, then a general class rate (for example: printed matter NES) will apply. Such rates usually are higher than rates for specific commodities

O

obsolete inventory	inventory for which there is no forecast demand expected. A condition of being out of date. A loss of value occasioned by new developments that place the oldeer property at a competitive disadvantage
ocean bill of lading	the bill of lading issued by the ocean carrier to its customer
ocean carrier	an enterprise that offers service via ocean (water) transport

offline	a computer term which describes work done outside of the computer system or outside of a main process within the corporate system
offshore	utilizing an outsourcing service provider located in a country other than where the client is located
on-demand	pertaining to work performed when demand is present. Typically used to describe products which are manufactured or assembled only when a customer order is placed
one-piece flow	moving parts through a process in batches of one
one-way networks	the advantages generally lie with either the seller of buyer, but not with both. B2C web sites are one-way networks
online	a computer term which describes activities performed using computer systems
on-line receiving	a system in which computer terminals are available at each receiving bay and operators enter items into the system as they are unloaded
operating differential subsidy (ODS)	a payment to an American-flag carrier by the U.S. government to offset the difference in operating costs between U.S. and foreign vessels
operating ratio	a measure of operating efficiency defined as Operating expenses divided by the Operating revenues x 100
operational performance measurements	(1) in traditional management, performance measurements related to machine worker, or department efficiency or utilization. These performance measurements are usually poorly correlated with organizational performance. (2) in theory of contraints, performance measurements that link causally to organizational performance measurements. Throughput, inventory, and operating expense are examples
optimization	the process of making something as good or as effective as possible with given resources and constraints
order	a type of request for goods or services
order cycle	the time and process involved from the placement of an order to the receipt of the order

order cycle time	the time that elapses from placement of order until receipt of order. This includes time for order transmittal, processing, preparation, and shipping
order entry and scheduling	the process of receiving orders from the customer and entering them into a company's order processing system. Orders can be received through phone, fax, or electronic media. Activities may include "technically" examining orders to ensure an orderable configuration and provide accurate price, checking the customer's credit and accepting payment (optionally), identifying and reserving inventory (both on hand and scheduled), and committing and scheduling a delivery date
order fill	a measure of the number of orders processed without stockouts, or the need to back order, expressed as a percentage of all orders processed in the distribution center or warehouse
order management	the planning, directing, monitoring, and controlling of the processes related to customer orders, manufacturing orders, and purchase orders. Regarding customer orders, order management includes order promising, order entry, order pick, pack and ship, billing, and reconciliation of the customer account. Regarding manufacturing orders, order management includes order release, routing, manufacture, monitoring, and receipt into stores or finished goods inventories. Regarding purchase orders, order management includes order placement, monitoring, receiving, acceptance, and payment of supplier
order management costs	one of the elements comprising a company's total supply chain management costs. These costs consist of the following
new product release phase in and maintenance	this includes costs associated with releasing new products to the field, maintaining released products, assigning product ID, defining configurations and packaging, publishing availability schedules, release letters and updates, and maintaining product databases

create customer order	this includes costs associated with creating and pricing configurations to order and preparing customer order documents
order entry and maintenance	this includes costs associated with maintaining the customer database, credit check, accepting new orders, and adding them to the order system, as well as later order modifications
contract/program and channel management	this includes costs related to contract negotiation, monitoring progress, and reporting against the customer's contract, including administration of performance or warranty-related issues
installation planning	this includes costs associated with installation engineering, scheduling and modification, handling cancellations, and planning the installation
order fulfillment	this includes costs associated with order processing, inventory allocation, ordering from internal or external suppliers, shipment scheduling, order status reporting, and shipment initiation
distribution	this includes costs associated with warehouse space and management, finished goods receiving and stocking, processing shipments, picking and consolidating, selecting carriers, and staging products/systems
transportation, outbound freight, and duties	this includes costs associated with all company-paid freight duties from point of manufacturer to end customer or channel
installation	this includes costs associated with verification of site preparation, installation, certification, and authorization of billing
customer invoicing/accounting	this includes costs associated with invoicing, processing customer payments, and verification of customer receipt
order picking	assembling a customer's order from items in storage.
order processing	activities associated with filling customer orders.
ordering cost	the cost of placing an inventory order with a supplier
origin	the place where a shipment begins its movement

original equipment manufacturer (OEM)	a manufacturer that buys and incorporates another supplier's products into its own products. Also, products supplied to the original equipment manufacturer or sold as part of an assembly. For example, an engine may be sold to an OEM for use as that company's power source for its generator units
outbound logistics	the process related to the movement and storage of products from the end of the production line to the end user
out-of-pocket cost	the cost directly assignable to a particular unit of traffic and which a company would not have incurred if it had not performed the movement
outlier	a data point that differs significantly from other data for a similar phenomenon. For example, if the average sales for a product were ten units per month, and one month the product had sales of 500 units, this sales point might be considered an outlier
outpartnering	the process of involving the supplier in a close partnership with the firm and its operations management system. Outpartnering is characterized by close working relationships mutual respect, and emphasis on joint problem solving and cooperation. With outpartnering, the supplier is not viewed as an alternative source of goods and services (as observed under outsourcing), but rather as a source of knowledge, expertise, and complementary core competencies. Outpartnering is typically found during the early stages of product life cycle when dealing with products that are viewed as critical to the strategic survival of the firm
outsource	to utilize a third party provider to perform services previously performed in house. Examples include manufacturing of products and call center/customer support

outsourced cost-of-goods sold	operations performed on raw material outside of the responding entity's organization that would typically be considered internal to the entity's manufacturing cycle. Outsourced cost-of- goods sold captures the value of all outsourced activities that roll up as cost-of-goods sold. Some examples of commonly out-sourced areas are assembly, test, metal finishing or painting, and specialized assembly process
over, short, and damaged (OS&D)	this is typically a report issued at the warehouse when goods are damaged. Used to file a claim with a carrier
over-the-road	a motor carrier operation that reflects long-distance moves; the opposite of local operations
owner/ operator	a truck driver who owns and operates his/her tractor/trailer

P

packing list	a document containing information about the location of each Product ID in each package. It allows the recipient to quickly find the item he or she is looking for without a broad search of all packages. It also confirms the actual shipment of goods on a line item basis
pallet	the platform which cartons are stacked on and then used for shipment or movement as a group. Pallets may be made of wood or composite materials
pallet wrapping machine	a machine that wraps a pallet's contents in stretch-wrap to ensure safe shipment
parcel shipment	parcels include small packages like those typically handled by providers such as UPS and FedEx
pareto	a means of sorting data. For example, the number of quality faults by frequency of occurrence. An analysis that compares cumulative percentages of the rank ordering of costs, cost drivers, profits, or other attributes to determine whether a minority of elements have a disproportionate impact. Another example: identifying that 20% of a set of independent variables is responsible for 80% of the effect

part standardization	a program for planned elimination of superficial, accidental, and deliberate differences between similar parts in the interest of reducing part and supplier proliferation. A typical goal of part standardization is to reduce costs by reducing the number of parts that the company needs to manage
passenger-mile	a measure of output for passenger transportation that reflects the number of passengers transported and the distance traveled; a multiplication of passengers hauled and distance traveled
password	a private code required to gain access to a computer, an application program, or service
path to profitability (P2P)	The step-by-step model to generate earnings
pay on use	pay on use is a process where payment is initiated by product consumption, i.e., consignment stock based on withdrawal of product from inventory, This process is popular with many European companies
payment	the transfer of money, or other agreed upon medium, for provision of goods or services
payment collection	Obtaining money, or other agreed upon medium, for provision of goods or services
payroll	total of all fully-burdened labor costs, including wages, fringe, benefits, overtime, bonus, and profit sharing
peak demand	the time period during which customers demand the greatest quantity
peer to peer (P2P)	a computer-networking environment which allows individual computers to share resources and data without passing through an intermediate network server.
pegging	a technique in which a DRP system traces demand for a product by date, quantity, and warehouse location
per diem	payment rate one railroad makes to use another's cars
perfect order	the definition of a perfect order is one which meets all of the following criteria

performance and event management systems	the systems that report on the key measurements in the supply chain - inventory days of supply, delivery performance, order cycle times, capacity use, etc. Using this information to identify causal relationships to suggest actions in line with the business goals
performance measures	indicators of the work performed and the results achieved in an activity, process, or organizational unit. Performance measures should be both non-financial and financial. Performance measures enable periodic comparison and benchmarking
performance measurement program	a performance measurement program goes beyond just having performance metrics in place. Typical characteristics of a good performance measurement program include the following: Metrics that are aligned to strategy, and linked to the shop floor or line- level workers. A process and culture that drives performance and accountability to deliver performance against key performance indicators. An incentive plan that is tied to performance goals, objectives, and metrics. Tools/technology in place to support easy data collection and use
permit	a grant of authority to operate as a contract carrier
perpetual inventory	an inventory record keeping system where each transaction in and out isrecorded and a new balance is computed
personal computer (PC)	an individual unit an operator uses for creating and maintaining programs and files; can often access the mainframe simultaneously
personal discrimination	charging different rates to shippers with similar transportation characteristics, or, charging similar rates to shippers with differing transportation characteristics
physical distribution	the movement and storage of finished goods from manufacturing plants to warehouses to customers; used synonymously with business logistics
physical supply	the movement and storage of raw materials from supply sources to the manufacturing facility

pick/ pack	picking and packing immediately into shipment containers
picking	the operations involved in pulling products from storage areas to complete a customer order
picking by aisle	a method by which pickers pick all needed items in an aisle regardless of the items' ultimate destination; the items must be sorted later
picking by source	a method in which pickers successively pick all items going to a particular destination regardless of the aisle in which each item is located
pick list	a list of items to be picked from stock in order to fill an order; the pick list generation and the picking method can be quite sophisticated
pick to light	a laser identifies the bin for the next item in the rack; when the picker completes the pick, the bar code is scanned and the system then points the laser at the next bin
pick-up order	a document indicating the authority to pick up cargo or equipment from a specific location
piggyback	terminology used to describe a truck trailer being transported on a railroad flatcar
place utility	a value that logistics creates in a product by changing the product's location
plan-do-check-action(PDCA)	in quality management, a four-step process for quality improvement. In the first step (plan), a plan to affect improvement is developed. In the second step (do), the plan is carried out, preferably on a small scale. In the third step (check), the effects of the plan are observed. In the last step (action), the results are studied to determine what was learned and what can be predicted. The plan-do-check-act cycle is sometimes referred to as the Shewhart cycl(Walter A. Shewhart discussed the concept in his book Statistical Method from the Viewpoint of Quality Control) and as the Deming circle (W.Edwards Deming introduced the concept in Japan; the Japanese subsequently called it the Deming circle). Synonym: Shewhart Cycle

planned date	the date an operation such as a receipt, shipment, or delivery of an order is planned to occur
planned order	in DRP and MRP systems, a future order the system plans in response to forecasted demand
plant finished goods:	finished goods inventory held at the end manufacturing location
point of sale information (POS):	price and quantity data from the retail location as sales transactions occur
point of use delivery	delivery right to the production floor of an item
poka yoke (mistake proof)	the application of simple techniques that prevent process quality failure. A mechanism that either prevents a mistake from being made or makes the mistake obvious at a glance
police powers	the United States' constitutionally granted right for the states to establish regulations to protect their citizens' health and welfare; truck weight; speed, length, and height laws are examples
pooling	a shipping term for the practice of combining shipment from multiple shippers into a truckload in order to reduce shipping charges
port	a harbor where ships will anchor
port authority	a state or local government that owns, operates, or otherwise provides wharf, dock, and other terminal investments at ports
port of discharge	port where vessel is off loaded
port of entry	a port at which foreign goods are admitted into the receiving country
port of loading	port where cargo is loaded aboard the vessel
possession utility	the value created by marketing's effort to increase the desire to possess a good or benefit from a service
postponement	the delay of final activities (i.e., assembly, production, packaging, etc.) until the latest possible time. A strategy used to eliminate excess inventory in the form of finished goods which may be packaged in a variety of configurations

pre-expediting	the function of following up on open orders before the scheduled delivery date to ensure the timely delivery of materials in the specified quantity
prepaid	a freight term which indicates that charges are to be paid by the shipper. Prepaid shipping charges may be added to the customer invoice, or the cost may be bundled into the pricing for the product
prepaid freight	freight paid by the shipper to the carrier when merchandise is tendered for shipment that is not refundable if the merchandise does not arrive at the intended destination
present value	today's value of future cash flows, discounted at an appropriate rate
price erosion	what causes old-line executives to break out in a cold sweat? No question about it; traditional business models are threatened by the market efficiencies of B2B. When prices begin to plummet, the margin structures of older industries are also threatened
primary-business test	a test the ICC uses to determine if a trucking operation is bona fide private transportation; the private trucking operation must be incidental to and in the futherance of the firm's primary business
primary manufacturing strategy	your company's dominant manufacturing strategy. The primary manufacturing strategy generally accounts for 80- plus % of a company's product volume. According to a study by Pittiglio Rabin Todd & McGrath (PRTM), approximately 73% of all companies use a make-to-stock strategy
private carrier	a carrier that provides transportation service to the firm that owns or leases the vehicles and does not charge a fee. Private motor carriers may haul at a fee for wholly owned subsidiaries
private label	products that are designed, produced, controlled by, and which carry the name of the store or a name owned by the store; also known as a store brand or dealer brand. An example would be Wal-Mart's "Sam's Choice" products

private trucking fleets	private fleets serve the needs of their owners, and do not ordinarily offer commercial trucking services to other customers. Private fleets typically perform distribution or service functions
private warehouse	a company-owned warehouse
private warehousing	the storage of goods in a warehouse owned by the company that has title to the goods
proactive	the strategy of understanding issues before they become apparent and presenting the solution as a benefit to the customer, etc.
process	a series of time-based activities linked to complete a specific output
process benchmarking	benchmarking a process (such as the pick, pack, and ship process) against organizations know to be the best in class in this process. Process benchmarking is usually conducted on firms outside of the organization's industry
process improvement	a design or activity which improves quality or reduces costs, often through the elimination of waste on non-value-added tasks
process manufacturing	production that adds value by mixing, separating, forming, and/or performing chemical reactions. It may be done in a batch, continuous, or mixed batch/continuous mode
process yield	the resulting output from a process. An example would be a quantity of finished product output from manufacturing processes
procurement	the business functions of procurement planning, purchasing, inventory control, traffic, receiving, incoming inspection, and salvage operations. Synonym: Purchasing
product	something that has been or is being produced
product characteristics	all of the elements that define a product's character, such as size, shape, weight, etc.
product description	the user's description of the product
product family	a group of products with similar characteristics often used in production planning (or sales and operations planning)

product ID	a method of identifying a product without using a full description. These can be different for each document type and must, therefore, be captured and related to the document in which they were used. They must then be related to each other in context (also known as SKU, Item Code or Number, or other such name)
production capacity	measure of how much production volume may be experienced over a set period of time
production line	a series of pieces of equipment dedicated to the manufacture of a specific number of products or families
production planning and scheduling	the systems that enable creation of detailed, optimized plans and schedules, taking into account the resource, material, and dependency constraints to meet the deadlines
production-related material	production-related material is an item classified as a material purchase and included in cost-of-goods sold as a raw material purchase
productivity	a measure of resource utilization efficiency defined as the sum of the outputs divided by the sum of the inputs
profit ratio	the percentage of profit to sales--that is, profit divided by sales
profitability analysis	The analysis of profit derived from cost objects with the view to improve or optimize profitability. Multiple views may be analyzed, such as market segment, customer, distribution channel, product families, products, technologies, platforms, regions, manufacturing capacity, etc.
profitable to promise	this is effectively a promise to deliver a certain order on agreed upon terms, including price and delivery. Profitable to Promise (PTP) is the logical evolution of Available to Promise (AtP) and Capable to Promise (CTP). While the first two are necessary for profitability, they aren't sufficient. For enterprises to survive in a competitive environment, profit optimization is a vital technology

profit before interest and tax (PBIT)	The financial profit generated prior to the deduction of taxes and interest due on loans
pro-forma	a type of quotation or offer that may be used when first negotiating the sales of goods or services. If the pro-forma is accepted, then the terms and conditions of the pro-forma may become the request
pro forma invoice	an invoice, forwarded by the seller of goods prior to shipment, that advises the buyer of the particulars and value of the goods. Usually required by the buyer in order to obtain an import permit or letter of credit
promotion	the act of selling a product at a reduced price, or a buy one/ get one free offer, for the purpose of increasing sales
pro number	any progressive or serialized number applied for identification of freight bills, bills of lading, etc.
proof of delivery (POD)	information supplied by the carrier containing the name of the person who signed for the shipment, the time and date of delivery and other shipment delivery-related information. POD is also sometimes used to refer to the process of printing materials just prior to shipment (Print on Demand)
proportional rate	a rate lower than the regular rate for shipments that have prior or subsequent moves; used to overcome combination rates' competitive disadvantages
protocol	communication standards that determine message content and format, enabling uniformity of transmissions
public warehouse	the warehouse space that is rented or leased by an independent business providing a variety of services for a fee or on a contract basis
public warehousing	the storage of goods by a firm that offers storage service for a fee to the public
public warehouse receipt	the basic document a public warehouse manager issues as a receipt for the goods a company gives to the warehouse manager. The receipt can be either negotiable or nonnegotiable

pull signal	a signal from a using operation that triggers the issue of raw material
pull or pull-through distribution	supply chain action initiated by the customer. Traditionally, the supply chain was pushed; manufacturers produced goods and pushed them through the supply chain and the customer had no control. In a pull environment, a customer's purchase sends replenishment information back through the supply chain from retailer to distributor to manufacturer so goods are pulled through the supply chain
pull ordering system	a system in which each warehouse controls its own shipping requirements by placing individual orders for inventory with the central distribution center. A replenishment system where inventory is "pulled" into the supply chain (or "demand chain" by POS systems, or ECR programs). Associated with "build to order" systems
purchase order (PO)	the purchaser's authorization used to formalize a purchase transaction with a supplier. The physical form or electronic transaction a buyer uses when placing an order for merchandise
purchase price discount	a pricing structure in which the seller offers a lower price if the buyer purchases a larger quantity
purchasing	the functions associated with buying the goods and services the firm requires
pure raw material	a raw material that does not lose weight in processing
push distribution	the process of building product and pushing it into the distribution channel without receiving any information regarding requirements
push ordering system	a situation in which a firm makes inventory deployment decisions at the central distribution center and ships to its individual warehouses accordingly
put away	removing the material from the dock (or other location of receipt), transporting the material to a storage area, placing that material in a staging area, and then moving it to a specific location and recording the movement and identification of the location where the material has been place

Q

quality	Conformance to requirements or fitness for use. Quality can be defined through five principal approaches: Transcendent quality is an ideal, a condition of excellence. Product-based quality is based on a product attribute. User-based quality is fitness for use. Manufacturing-based quality is conformance to requirements. Value-based quality is the degree of excellence to an acceptable price. Also, quality has two major components: quality of conformance - quality is defined by the absence of defects. quality of design - quality is measured by the degree of customer satisfaction with a product's characteristics and features
quality circle	In quality management, a small group of people who normally work as a unit and meet frequently to uncover and solve problems concerning the quality of items produced, process capability, or process control
quality control	The management function that attempts to ensure that the goods or services in a firm manufacturers or purchases meet the product or service specifications
quality function deployment (QFD)	a structured method for translating user requirements into detailed design specifications using a continual stream of "what-how" matrices. QFD links the needs of the customer (end user) with design, development, engineering, manufacturing, and service functions. It helps organizations seek out both spoken and unspoken needs, translate these into actions and designs, and focus various business functions toward achieving this common goal

quarantine	the setting aside of items from availability for use or sale until all required quality tests have been performed and conformance certified
quick response (QR)	a strategy widely adopted by general merchandise and soft lines retailers and manufacturers to reduce retail out of stocks, forced markdowns, and operating expenses. These goals are accomplished through shipping accuracy and reduced response time. QR is a partnership strategy in which suppliers and retailers work together to respond more rapidly to the consumer by sharing point-of-sale scan data, enabling both to forecast replenishment needs

R

radio frequency (RF)	a form of wireless communications that lets users relay information via electromagnetic energy waves from a terminal to a base station which is linked, in turn, to a host computer. The terminal can be placed at a fixed station, mounted on a forklift truck, or carried in a worker's hand. The base station contains a transmitter and receiver for communication with the terminal. RF systems use either narrow-band or spread-spectrum transmissions. Narrow-band data transmissions move along a single limited radio frequency, while spread-spectrum transmissions move across several different frequencies. When combines with a bar code system of identifying inventory items, a radio frequency system can relay data instantly, thus updating inventory records in socalled real time
radio frequencyidentification (RFID)	the use of radio frequency technology such as RFID tags and tag readers to identify objects. Objects may include virtually anything physical, such as equipment, pallets of stock, or even individual units of product

ramp rate	a statement which quantifies how quickly you grow or expand an operation growth trajectory. Can refer to sales, profits, or margins
rationing	the allocation of product among customers, or components among manufactured goods during periods of short supply. When price is used to allocate product, it's allocated to those willing to pay the most
raw materials (RM)	crude or processed material that can be converted by manufacturing, processing, or a combination thereof into a new and useful product
real time	the processing of data in a business application as it happens, as contrasted with storing data for input at a later time (batch processing)
receiving	the function encompassing the physical receipt of material, the inspection of the shipment for conformance with the purchase order (quantity and damage), the identification and delivery to destination, and the preparation of receiving reports
receiving dock	distribution center location where the actual physical receipt of the purchased material from the carrier occurs
reengineering	(1)A fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in performance. (2) A term used to describe the process of making (usually) significant and major revisions or modifications to business processes. (3) Also called Business Process Reengineering
refrigerated carriers	truckload carriers designed to keep perishables good refrigerated. The food industry typically uses this type of carrier
release-to-start manufacturing	average time from order release to manufacturing to the start of the production process. This cycle time may typically be required to support activities like material movement and line changeovers

replenishment	the process of moving or resupplying inventory from a reserve (or upstream) storage location or facility to a primary (or downstream) storage or picking location, or to another mode of storage in which picking is performed
request for information (RFI)	a document used to solicit information about vendors, products, and services prior to a formal RFQ/ RFP process
request for proposal (RFP)	a document which provides information concerning needs and requirements for a manufacturer. This document is created in order to solicit proposals from potential suppliers. For example, a computer manufacturer may use an RFP to solicit proposals from suppliers of third party logistics services
request for quote (RFQ)	a document used to solicit vendor responses when a product has been selected and price quotations are needed from several vendors
resellers	organizations intermediate in manufacturing and distribution process such as wholesalers and retailers
resource driver	in cost accounting, the best single quantitative measure of the frequency and intensity of demands placed on a resource by other resources, activities, or cost objects. It's used to assign resource costs to activities and cost objects, or to other resources
resources	economic elements applied or used in the performance of activities or to directly support cost objects. They include people, materials, supplies, equipment, technologies, and facilities
retailer	a business that takes title to products and resells them to final consumers. Examples include Wal-Mart, Best Buy, and Safeway, but also include the many smaller independent stores

return disposal costs	the costs associated with disposing or recycling products that have been returned due to customer rejects, end of life, or obsolescence
return goods handling	processes involved with returning goods from the customer to the manufacturer. Products may be returned because of performance problems or simply because the customer doesn't like the product
return material authorization or return merchandise authorization (RMA)	a number usually produced to recognize and give authority for a faulty (perhaps) good to be returned to a distribution center or manufacturer. A form generally required with a warranty/return which helps the company identify the original product and the reason for the return. The RMA number often acts as an order form for the work required in repair situations, or as a reference for credit approval
return on assets (ROA)	financial measure calculated by dividing profit by assets
return on sales	financial measure calculated by dividing profit by sales
return order management costs	the costs associated with managing Return Material Authorization (RMA). Includes all applicable elements of the Level 2 component order management cost of total supply chain management cost
return product authorization (RPA)	also called Return Material or Goods Authorization (RMA or RGA). A form generally required with a warranty/return which helps the company identify the original product and the reason for the return. The RPA number often acts as an order form for the work required in repair situations or as a reference for credit approval
return to vendor (RTV)	material that has been rejected by the customer or the buyer's inspection department and is awaiting shipment back to the supplier for repair or replacement

returns inventory costs	the costs associated with managing inventory returned for any of the following reasons: repair, refurbish, excess, obsolescence, end of life, ecological conformance, and demonstration
returns material acquisition, finance, planning, and it costs	the costs associated with acquiring the defective products and materials for repair or refurbishing items, plus any finance, planning, and information technology costs to support return activity
returns processing cost	the total cost to process repairs, refurbished, excess, obsolete, and end-of-life products, including diagnosing problems and replacing products. Includes the costs of logistics support, materials, centralized functions, troubleshooting service requests, on-site diagnosis and repair, external repair, and miscellaneous. These costs are broken into returns order management, returns inventory carrying, returns material acquisition, finance, planning, IT, disposal, and warranty costs
returns to scale	a defining characteristic of B2B. Bigger is better. It's what creates the "winner takes all" quality of most B2B hubs. It also places a premium on being first to market and first to achieve critical mass
reverse engineering	a process whereby competitors' products are disassembled and analyzed for evidence of the use of better processes, components, and techniques
reverse logistics	a specialized segment of logistics focusing on the movement and management of products and resources after the sale and after delivery to the customer. Includes product returns for repair and /or credit
roof fairings	an integrated air deflector mounted on the top of the cab

root cause analysis	analytical methods to determine the core problem(s) of an organization, process, products, market, etc.
route trucks delivery	trucks that travel fixed routes
routing or routing guide	(1) process of determining how shipment will move between origin and destination. Routing information includes designation of carrier(s) involved, actual route of carrier, and estimate time en route. (2) right of shipper to determine carriers, routes, and points for transfer shipments. (3) in manufacturing, this is the document which defines a process of steps used to manufacture and/or assemble a product
routing accuracy	when specified activities conform to administrative specifications, and specified resource consumptions (both man and machine) are detailed according to administrative specifications and are within 10% of actual requirements
rules	documented definitions of how work is to be performed

S

safety stock	the inventory a company holds above normal needs as a buffer against delays in receipt of supply or changes in customer demand
salable goods	a part of assembly authorized for sale to final customers through the marketing function
sales and operations planning (S&OP)	a strategic planning process that reconciles conflicting business objectives and plans future supply chain actions. S&OP usually involves various business functions, such as sales, operations, and finance to agree on a single plan/forecast that can be used to drive the entire business
sales mix	the proportion of individual product-type sales volumes that make up the total sales volume

sales plan	a time-phased statement of expected customer orders anticipated to be received (incoming sales, not outgoing shipment) for each major product family or item. It represents sales and marketing management's commitment to take all reasonable steps necessary to achieve this level of actual customer orders. The sales plan is a necessary input to the production planning process (or sales and operations planning process). It is expressed in units identical to those used for the production plan (as well as in sales dollars). Also see: Sales and Operations Planning
sales planning	the process of determining the overall sales plan to best support customer needs and operations capabilities, while meeting general business objectives of profitability, productivity, competitive customer lead times, and so on, as expressed in the overall business plan
sawtooth diagram	a quantity-versus-time graphic representation of the order point/order quantity inventory system showing inventory being received, used up, and reordered
scalability	1) how quickly and efficiently a company can ramp up to meet demand. 2) how well a solution to a problem will work when the size of the problem increases. The economies of scale don't really kick in until your reach the critical mass, then revenues start to increase exponentially
scan	a computer term referring to the action of scanning bar codes or RF tags
scanlon plan	a system of group incentives on a company-wide or plantwide basis that sets up one measure that reflects the results of all efforts. The Scanlon plan originated in the 1930s by Joe Scanlon and MIT. The universal standard is the ratio of labor costs to sales value added by production. If there's an increase in production sales value with no change in labor costs, productivity has increased while unit cost has decreased

scenario planning	a form of planning in which likely sets of relevant circumstances are identified in advance, and used to assess the impact of alternative actions
SCOR	Supply Chain Operations Reference Model. This is the model developed by the Supply-Chain Council (SCC), and is build around six major processes: plan, source, make, deliver, return, and enable. The aim of the SCOR is to provide a standardized method of measuring supply chain performance, and to use a common set of metrics to benchmark against other organizations
scorecard	a performance measurement tool used to capture a summary of the key performance indicators (KPIs)/metrics of a company. Metrics dashboards/scorecards should be easy to read and usually have red, yellow, green indicators to flag when the company is not meeting its metrics targets. Ideally, a dashboard/scorecard should be cross functional in nature and include both financial and non-financial measures. In addition, scorecards should be reviewed regularly – at least on a monthly basis and weekly in key functions, such as manufacturing and distribution where activities are critical to the success of a company. The dashboard/scorecards philosophy can also be applied to external supply chain partners like suppliers to ensure that their objectives and practices align. Synonym: Dashboard
seasonality	a repetitive pattern of demand from year to year (or other repeating time interval), with some periods considerably higher than others. Seasonality explains the fluctuation in demand for various recreational products which are used during different seasons
secure electronic transaction (set)	in e-commerce, a system of guaranteeing the security of financial transactions conducted over the Internet

self-billing	a transportation industry strategy which prescribes that a carrier will accept payment based on the tender document provided by the shipper
self-correcting	a computer term for an online process that validates data and won't allow the data to enter the system unless all errors are corrected
selling, general, and administrative (SG&A) expenses	includes marketing, communication, customer service, sales, salaries and commissions, occupancy expenses, unallocated overhead, etc. Excludes interest on debt, domestic or foreign income taxes, depreciation and amortization, extraordinary items, equity gains or losses, gain or loss from discontinued operations and extraordinary items
serial number	a unique number assigned for identification to a single piece that will never be repeated for similar pieces. Serial numbers are usually applied by the manufacturer but can be applied at other points by the distributor or wholesaler. Serial numbers can be used to support traceability and warranty programs
service level	a measure (usually expressed as a percentage) of satisfying demand through inventory or by the current production schedule in time to satisfy the customer's requested delivery dates and quantities
service parts revenue	the sum of the value of sales made to external customers and the transfer price valuation of sales within the company of repair or replacement parts and supplies, net of all discounts, coupons, allowances, and rebates
shared services	consolidation of a company's back-office processes to form a spinout (0r a separate "shared services" unit to be run like a separate business), providing services to the parent company and sometimes, to external customers. Shared services typically lower overall cost due to the consolidation, and may improve support as a result of focus

shareholder value	combination of profitability (revenue and costs) and invested capital (working capital and fixed capital)
shelf life	the amount of time an item may be held in inventory before it becomes unusable. Shelf life is a consideration for food and drugs which deteriorate over time, and for high-tech products which become obsolete quickly
Shingo's seven wastes	Shigeo Shingo, a pioneer in the Japanese just-in-time philosophy, identified seven barriers to improving manufacturing. They are the waste of overproduction, waste of waiting, waste of transportation,waste of stocks, waste of motion, waste of making defects, and waste of the processing itself
shipper	the party that tenders goods for transportation
shipper-carriers	shipper-carriers (also called private carriers) are companies with goods to be shipped that own or manage their own vehicle fleets. Many large retailers, particularly groceries and "big box" stores, are shipper-carriers
shipping	the function that performs the tasks for the outgoing shipment of parts, components, and products. It includes packaging, marking, weighing, and loading for shipment
shipping lane	a predetermined, mapped route on the ocean that commercial vessels tend to follow between ports. This helps ships avoid hazardous areas. In general transportation, the logical route between the point of shipment and the point of delivery used to analyze the volume of shipment between two points

shipping manifest	a document that lists the pieces in a shipment. A manifest usually covers an entire load regardless of whether the load is to be delivered to a single destination or many destinations. Manifests usually list the items, piece count, total weight, and the destination name and address for each destination in the load
shop floor production control systems	the systems that assign priority to each shop order, maintaining work-in-process quantity information, providing actual output data for capacity control purposes, and providing quantity by location by shop order for work-in-process inventory and accounting purposes
short shipment	piece of freight missing from shipment as stipulated by documents on hand
shrinkage	reductions of actual quantities of items in stock, in process, or in transit. The loss may be caused by scrap, theft, deterioration, evaporation, etc.
sigma	a Greek letter commonly used to designate the standard deviation of a population
six-sigma quality	a term generally used to indicate that a process is well controlled, I.e., tolerance limits are +-6 sigma (3.4 defects per million events) from the centerline in a control chart. The term is usually associated with Motorola which named one of its key operations initiatives Six-Sigma Quality
skills matrix	a visible means of displaying people's skill levels in various tasks. Used in a team environment to identify the skills required by the team and which team members possess those skills

slotting	warehouse slotting is defined as the placement of products within a warehouse facility. Its objective is to increase picking efficiency and reduce warehouse handling costs through optimizing product location and balancing the workload
small group improvement activity	an organizational technique for involving employees in continuous improvement activities. Also see: Quality Circle
SMART	a shorthand description of a way of setting goals and targets for individuals and teams
spam	a computer industry term referring to the act of sending identical and irrelevant postings to many different newsgroups or mailing lists. Usually this posting is something that has nothing to do with the particular topic of a newsgroup or of no real interest to the person on the mailing list
split delivery	a method by which a larger quantity is ordered on a purchase order to secure a lower price, but delivery is divided into smaller quantities and is spread out over several dates to control inventory investment, save storage space, etc.
spot demand	demand with a short lead time that's difficult to estimate. Usually supply for this demand is provided at a premium price. An example of spot demand would be when there's a spiked demand for building materials as a result of a hurricane
staging	pulling material for an order from inventory before the material is required. This action is often taken to identify shortages, but it can lead to increased problems in availability and inventory accuracy

stakeholders	people with a vested interest in a company, including manager, employees, stockholders, customers, suppliers, and others
standard components	components (parts) of a product for which there is an abundance of suppliers. Not difficult to produce. An example would be a power cord for a computer
standard cost accounting system	a cost accounting system that uses cost units determined before production for estimating the cost of an order or product. For management control purposes, the standards are compared to actual costs, and variances are computed
statement of work (SOW)	1) a description of products to be supplied under a contract. A good practice is for companies to have SOWs in place with their trading partners - especially for all top suppliers. 2) in projection management, the first project planning document that should be prepared. It describes the purpose, history, deliverables, and measurable success indicators for a project. It captures the support required from the customer and identifies contingency plans for events that could throw the project of course. Because the project must be sold to management, staff, and review groups, the statement of work should be a persuasive document
statistical process control (SPC)	a visual means of measuring and plotting process and product variation. Results are used to adjust variables and maintain product quality
stickering	placing customer-specific stickers on boxes of product. An example would be where Wal-Mart has a request for their own product codes to be applied to retail boxes prior to shipment

stock-keeping unit (SKU)	a category of unit with a unique combination of form, fit, and function (i.e., unique components held in stock). To illustrate: If two items are indistinguishable to the customer, or if any distinguishing characteristics visible to the customer are not important to the customer so that the customer believes the two items to be the same, these two items are part of the same SKU. As a further illustration: consider a computer company that allows customers to configure a complete computer from a selection of standard components. For example, they can choose from three keyboards, three monitors, and three CPUs. Customers may also individually buy keyboards, monitors, and CPUs. If the stock were held at the configuration component level, the company would have nine SKUs. If the company stocks at the component level, the company would have 36 SKUs. (9 component SKUs + 3*3*3 configured product SKUs.) If, as part of a promotional campaign, the company also specially packaged the products, the company would have a total of 72 SKUs
straight truck	straight trucks do not have a separate tractor and trailer. The driving compartment, engine and trailer are one unit
strategic alliance	business relationship in which two or more independent organizations cooperate and willingly modify their business objectives and practices to help achieve long-term goals and objectives
sub-optimization	decisions or activities in part made at the expense of the whole. An example of sub-optimization is where a manufacturing unit schedules production to benefit its cost structure without regard to customer requirements or the effect on other business units

subcontracting	sending production work outside to another manufacturer. This can involve specialized operations such as plating metals or complete functional operations
subhauler	a subhauler drives a tractor under contract for a company. Usually a subhauler is an owner/operator or a small company
sunk cost	the unrecovered balance of an investment. It's a cost already paid that is not relevant to the decision concerning the future that is being made. Capital already invested that for some reason cannot be retrieved. 2)a past cost that has no relevance with respect to future receipts and disbursements of a facility undergoing an economic study. This concept implies that since a past outlay is the same regardless of the alternative selected, it should not influence the choice between alternatives
supplier	1) a provider of goods or services. 2) a seller with whom the buyer does business, as opposed to vendor, which is a generic term referring to all sellers in the marketplace
supplier certification	certification procedures verifying that a supplier operates, maintains, improves, and documents effective procedures that relate to the customer's requirements. Such requirements can include cost, quality, delivery, flexibility, maintenance, safety, and ISO quality and environmental standards
supplier-owned inventory	a variant of Vendor-Managed Inventory and Consignment Inventory. In this case the supplier not only manages the inventory, but also owns the stock close to or at the customer location until the point of consumption or usage by the customer

supply chain	(1) starting with unprocessed raw materials and ending with the final customer using the finished goods, the supply chain links many companies together. (2) the material and informational interchanges in the logistical process, stretching from acquisition of raw materials to delivery of finished products to the end user. All vendors, service providers, and customers are links in the supply chain
supply chain design	the determination of how to structure a supply chain. Design decisions include the selection of partners, the location and capacity of warehouse and production facilities, the products, the modes of transportation, and supporting information systems
supply chain execution (SCE)	the ability to move the product out of the warehouse door. This is a critical capacity and one that only brick-and- mortar firms bring to the B2B table. Dot coms have the technology, but that's only part of the equation. The need for SCE is what is driving the dot coms to offer equity partnerships to the wholesale distributors
supply chain event management (SCEM)	SCEM is an application that supports control processes for managing events within and between companies. It consists of integrated software functionality that supports five business processes: monitor, notify, simulate, control, and measure supply chain activities
supply chain integration (SCI)	Likely to become a key competitive advantage of selected e-marketplaces. Similar concept to the back-end integration, but with greater emphasis on the moving of goods and services
supply chain inventory visibility	software applications that permit monitoring events across a supply chain. These systems track and trace inventory globally on a line-item level, and notify the user of significant deviations from the plans. Companies are provided with realistic estimates of when the material will arrive

supply chain management (SCM)	supply chain management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activites. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third party service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies. Supply chain management is an integrating function with primary responsibility for linking major business functions and business processes within and across companies into a cohesive, high-performing business model. It includes all of the logistics managment activities noted above, as well as manufacturing operations, and it drives coordination of processes and activities with and across marketing, sales, product design, finance, and information technology. – as defined by the Council of Supply Chain Management Professionals (CSCMP)
supply chain network design systems	The systems employed in optimizing the relationships among the various elements of the supply chain manufacturing plants, distribution centers, points of sale, as well as raw materials, relationships among product families, and other factors to synchronize supply chains at a strategic level
supply chain-related finance and planning cost element	one of the elements comprising a company's total supply chain management costs
supply-chain finance costs	Costs associated with paying invoices, auditing physical counts, performing inventory accounting, and collecting accounts receivable. Does NOT include customer invoicing/accounting costs

demand/ supply planning costs	Costs associated with forecasting developing finished goods, intermediate, subassembly or end-item inventory plans, and coordinating demand /supply
supply chain strategic planning	The process of analyzing, evaluating, and defining supply chain strategies, including network design, manufacturing and transportation strategy, and inventory policy
supply planning	The process of identifying, prioritizing, and aggregating, as a whole with constituent parts, all sources of supply that are required and add value in the supply chain of a product or service at the appropriate level, horizon, and interval
supply warehouse	A warehouse that stores raw materials. Goods from different suppliers are picked, sorted, staged, or sequenced at the warehouse to assemble plant orders
support costs	Costs of activities not directly associated with producing or delivering products or services. Examples are the costs of information systems, process engineering, and purchasing. Also see: Indirect Cost
surrogate [item] driver	In ABC costing, a substitute for the ideal cost driver, but closely correlated to the ideal driver, where [item] is Resource, Activity, or Cost Object. A surrogate driver is used to significantly reduce the cost of measurement while not significantly reducing accuracy. For example, the number of production runs is not descriptive of the material- disbursing activity, but the number of production runs may be used as an activity driver if material disbursements correlate well with the number of production runs
sustaining activity	an activity that benefits an organizational unit as a whole, but not any specific cost object

SWOT analysis	an analysis of the strengths, weaknesses, opportunities, and threats of and to an organization. SWOT analysis is useful in developing strategy
synchronization	the concept that all supply chain functions are integrated and interact in real time; when changes are made to one area, the effect is automatically reflected throughout the supply chain
3D loading	3D loading is a method of space optimizing designed to help quickly and easily plan the best compact arrangement of any 3D rectangular object set (boxes) within one or more larger rectangular enclosures (containers). It's based on three-dimensional, most-dense packing algorithms

T

tactical planning	the process of developing a set of tactical plants (e.g., production plan, sales plan, marketing plan, and so on). Two approaches to tactical planning exist for linking tactical plans to strategic plans - production planning and sales and operations planning
taguchi method	a concept of offline quality control methods conducted at the product and process design states in the product development cycle. This concept, expressed by Genichi Taguchi, encompasses three phases of product design, parameter design, and tolerance design. The goal is to reduce quality loss by reducing the variability of a product's characteristics during the parameter phase of product development
takt time	sets the pace of production to match the rate of customer demand and becomes the heartbeat of any lean production system. It's computed as the available production time divided by the rate of customer demand. For example,

	assume demand is 10,000 units per month, or 500 units per day, and planned available capacity is 420 minutes per day. The takt time = 420 minutes per day/500 units per day = 0.84 minutes per unit. This takt time means that a unit should be planned to exit the production system on average every 0.84 minutes
tare weight	the weight of a substance obtained by deducting the weight of the empty container from the gross weight of the full container
target costing	a target cost is calculated by subtracting the desired profit margin from an estimated or market-based price to arrive at a desired production, engineering, or marketing cost. This may not be the initial production cost, but one expected to be achieved during the mature production stage. Target costing is a method used in the analysis of product design that involves estimated a target cost, then designing the product/service to meet that cost
tariff	a tax assessed by a government on goods entering or leaving a country. The term is also used in transportation in reference to the fees and rules applied by a carrier for its services
tasks	the breakdown of the work in an activity into smaller elements
tender	the document which describes a business transaction to be performed
terms and conditions (T's &C's)	all the provisions and agreements of a contract
theory of constraints (TOC)	a production management theory which dictates that volume is controlled by a series of constraints related to work center capacity, component availability, finance, etc. Total throughput cannot exceed the capacity of the smallest constraint, and any inventory buffers or excess capacity at non-related work center is waste

third party logistics	outsourcing all or much of a company's logistics operations to a specialized company
third party logistics provider (3PL)	a firm which provides multiple logistics services for use by customers. Preferably, these services are integrated or bundled together, by the provider. These firms facilitate the movement of parts and materials from suppliers to manufacturers, and finished products from manufacturers, and finished products from manufacturers to distributors and retailers. Among the services they provide are transportation, warehousing, cross docking, inventory management, packaging, and freight forwarding
third party warehousing	the outsourcing of the warehousing function by the seller of the goods
throughput	a measure of warehousing output volume (weight, number of units). Also, the total amount of units received, plus the total amount of units shipped divided by two
total annual sales	they are total product revenue plus post-delivery revenues (e.g., maintenance and repair or equipment, system integration) royalties, sales of other services, spare parts revenue, and rental/lease revenues
total average inventory	average normal use stock, plus average lead stock, plus safety stock
total cost analysis	a decision-making approach that considers minimization of total costs and recognizes the inter-relationship among system variables, such as transportation, warehousing, inventory, and customer service
total cost curve	1) in cost-volume-profit (break-even) analysis, the total cost curve is composed of total fixed and variable costs per unit multiplied by the number of units provided. Break-even quantity occurs where the total cost curve and

	total sales revenue curve intersect.2) in inventory theory, the total cost curve for an inventory item is the sum of the costs of acquiring and carrying the item
total cost of ownership(TCO)	total cost of a computer asset throughout its life cycle, from acquisition to disposal. TCO is the combined hard and soft costs of owning networked information assets. "Hard" costs include items such as the purchase price of the asset, implementation fees, upgrades, maintenance, contracts, support contracts, disposal costs, and license fees that may or may not be up-front or charged annually. These costs are considered "hard costs" because they are tangible and easily accounted for
Total cumulative manufacture cycle time	Average time between commencement of upstream processing and completion of final packaging for shipment operations as well as release of approval for shipment. Does not include WIP storage time
total make cycle time	the average processing time between commencement of upstream processing and completion of all manufacturing process steps up to, but not including, packaging and labeling operations (i.e., from start of manufacturing to final formulated product ready for primary packaging.) Does not include hold or test and release times
total product revenue	the total value of sales made to external customers plus the transfer price valuation of intra-company shipments, net of all discounts, coupons, allowances, and rebates. Includes only the intra- company revenue for product transferring out of an entity, installation services if these services are sold bundled with end products, and recognized leases to customers initiated during the same period as revenue shipments, with revenue credited at

	the average selling price. Note: Total Product Revenue excludes post-delivery revenues (maintenance and repair of equipment, system integrations), royalties, sales of other services, spare parts revenue, and rental/lease revenues
total productive maintenance (TPM)	team-based maintenance process designed to maximize machine availability and performance and product quality
total supply chain management cost (five elements)	total cost to manage order processing, acquire materials, manage inventory, and manage supply chain finance, planning, and IT costs as represented as a percent of revenue. Accurate assignment of IT-related cost is challenging. It can be done using activity-based costing methods, or more traditional-based approaches. Allocation based on user counts, transaction counts, or departmental headcounts are reasonable approaches. The emphasis should be on capturing all costs, whether incurred in the entity completing the survey or in a supporting organization on behalf of the entity. Reasonable estimates founded in data were accepted as means to assess overall performance. All estimates reflected fully-burdened actuals inclusive of salary, benefits, space and facilities, and general and administrative allocations
total supply chain response time	the time it takes to rebalance the entire supply chain after determining a change in market demand. Also, a measure of a supply chain's ability to change rapidly in response to marketplace changes
total test release cycle time	the average total test and release time for all tests, documentation reviews, and batch approval processes performed from start of manufacturing to release of final packaged product for shipment

touch labor	the labor that adds value to the product - assemblers, welders, packagers, etc. This does not include indirect resources like material handlers who move and stage product, and mechanical and electrical technicians who maintain equipment
tracing	the practice of relating resources, activities, and cost objects using the drivers underlying their cost causal relationships. The purpose of tracing is to observe and understand how costs are arising in the normal course of business operations. Synonym: Assignment
tractor	the tractor is the driver compartment and engine of the truck. It has two or three axles
traceability	1) the attribute allowing the ongoing location of a shipment to be determined. 2) the registering and tracking of parts, processes, and materials used in production, by lot or serial number
tracking and tracing	monitoring and recording shipment movements from origin to destination
trading partner	companies that do business with each other via EDI (e.g., send and receive business documents such as purchase orders)
trading partner agreement	the written contract that spells out agreed upon terms between EDI trading partners
traffic	a department or function charged with the responsibility of arranging the most economic classification and method of shipment for both incoming and outgoing materials and products
traffic management	the management and controlling of transportation modes, carriers, and services
trailer	the part of the truck that carries the goods
trailer drops	when a driver drops off a full truck at a warehouse and picks up an empty one

trailer on a flat car (TOFC)	a specialized form of containerization in which motor and rail transport coordinate
transaction	a single completed transmission, e.g., transmission of an invoice over an EDI network. Analogous to usage of the term in data processing in which a transaction can be an inquiry or a range of updates and trading transactions. The definition is important for EDI service operators who must interpret invoices and other documents
transaction set	commonly used business transactions (e.g., purchase order, invoice, etc.) organized in a formal, structured manner consisting of a transaction set header control segment, one or more data segments, and a transaction set trailer control data segment
Transactional acknowledgement	specific transaction sets, such as the Purchase Order Acknowledgement (855), that both acknowledges receipt of an order and provides special status information, such as reschedules, price changes, back order situation, etc.
transaction set ID	a three digit numerical representation that identifies a transaction set
transit time	the total time that elapses between a shipment's pickup and delivery
transparency	the ability to gain access to information without regard to the system's landscape or architecture. An example would be where an online customer could access a vendor's web site to place an order and receive availability information supplied by a third party outsource manufacturer or shipment information from a third party logistics provider. Also see: Visibility
transportation management system	a computer system designed to provide optimized transportation management in various modes along with associated activities, including managing shipping units, labor planning and building, shipment scheduling

	through inbound, outbound, intra- company shipments, documentation management (especially when international shipping is involved), and third party logistics management
transportation mode	the method of transportation: land, sea, or air shipment
transportation planning	the process of defining an integrated supply chain transportation plan and maintaining the information which characterizes total supply chain transportation requirements, and the management of transporters, both inter- and intra-company
transportation planning systems	the systems used in optimizing assignments from plants to distribution centers, and from distribution centers to stores. The systems combine moves to ensure the most economical means are employed
trend	general upward or downward movement of a variable over time such as demand for a product. Trends are used in forecasting to help anticipate changes in consumption over time
trend forecasting models	methods for forecasting sales data when a definite upward or downward pattern exists. Models include double exponential smoothing, regression, and triple smoothing
truck stop electrification (TSE)	provides power outlets at truck parking spaces in which truck drivers can simply plug in, and turn off their engines, rather than idle their truck engine
truckload carriers (TL)	trucking companies which move full truckloads of freight directly from the point of origin to destination
truckload lot	a truck shipment that qualifies for a lower freight rate because it meets a minimum weight and/or volume
turnover	1) typically refers to inventory turnover 2) in the United Kingdom and certain other countries, turnover refers to annual sales volume

U

ubiquity	a raw material that is found at all locations
umbrella rate	an ICC ratemaking practice that held rates to a particular level to protect another mode's traffic
Unbundled payment/remittance	the process where payment is delivered separately from its associated detail
uniform code council (ucc)	a US association that administrates UCS, WINS, and VICS and provides UCS identification codes and UPC codes. Also, a model set of legal rules governing commercial transmissions, such as sales, contracts, bank deposits and collections, commercial paper, and letters or credit. Individual states give legal power to the UCC by adopting its articles of law
uniform product code (UPC)	a standard product numbering and bar coding system used by the retail industry. UPC codes are administered by the Uniform Code Council. They identify the manufacturer as well as the item, and are included on virtually all retail packaging. Also see: Uniform Code Council
uniform resource locator (url)	a string that supplies the Internet address of a web site or resource on the World Wide Web, along with the protocol by which the site or resource is accessed. The most common URL type is http://, which gives the Internet address of a web page. Some other URL types are gopher:/, which gives the Internet address of a Gopher directory, and ftp://, which gives the network location of an FTP resource
uniform warehouse receipts act	the act that sets forth the regulations governing public warehousing. The regulations define a warehouse manager's legal responsibility and define the types of receipts he or she issues
unit cost	the cost associated with a single unit of product. The total cost of producing a product or

	service divided by the total number of units. The cost associated with a single unit of measure underlying a resource, activity, product, or service. It's calculated by dividing the total cost by the measured volume. Unit cost measurement must be used with caution as it may not always be practical or relevant in all aspects of cost management
unit load device (ULD)	Refers to airfreight containers and pallets
unit of measure (UOM)	the unit in which the quantity of an item is managed, e.g., pounds, each, box of 12, package of 20, or case of 144. Various UOMs may exist for a single item. For example, a product may be purchased in cases, stocked in boxes, and issued in single units
unit train	an entire, uninterrupted locomotive, car, and caboose movement between an origin and destination
united nations standard product and service code (UN/SPSC)	developed jointly between the United Nations and Dun & Bradstreet (D&B). It has a five-level coding structure (segment, family, class, commodity, business function) for nearly 9,000 products
united states railway association	the planning and funding agency for Conrail; created by the 3-R Act of 1973
unitization	in warehousing, the consolidation of several units into larger units into larger units for fewer handlings
unitize	to consolidate several packages into one unit; carriers strap, band, or otherwise attach the several packages together
unplanned order	orders which are received that do not fit into the volumes prescribed by the plans developed from forecasts
upsell	the practice of attempting to sell a higher-value product to the customer
upside production flexibility	the number of days required to complete manufacture and delivery of an unplanned

	sustainable 20% increase in end-product supply of the predominant product line. The one constraint that is estimated to be the principal obstacle to a 20% increase in end- product supply as represented in days is Upside Flexibility: Principal Constraint. Upside flexibility can affect three possible areas: direct labor availability, internal manufacturing capacity, and key components or material availability
upstream	principal direction of movement for customer orders which originate at point of demand or use, as well as other flows, such as return product movements, payments for purchases, etc. Opposite of downstream
Urban mass transportation administration	A U.S. Department of Transportation agencythat develops comprehensive mass transport systems for urban areas and for providing financial aid to transit systems

V

valuation charges	transportation charges to shippers who declare a value of goods higher than the value of the carriers' limits of liability
value added	increased or improved value, worth, functionality, or usefulness
value-added network (VAN)	a company that acts as a clearinghouse for electronic transactions between trading partners. A third party supplier that receives EDI transmissions from sending trading partners and holds them in a mailbox until retrieved by the receiving partners
value-added productivity per employee	contribution made by employees to total product revenue minus the material purchases divided by total employment. Total employment is total employment for the entity being surveyed. This is the average full-time equivalent employee in all functions, including sales and marketing, distribution, manufactur-

	ing, engineering, customer service, finance, general and administrative, and other. Total employment should include contract and temporary employees on a full-time equivalent (FTE) basis
value adding/non-value adding	assessing the relative value of activities according to how they contribute to customer value or to meeting an organization's needs. The degree of contribution reflects the influence of an activity's cost driver(s)
value analysis	a method to determine how features of a product or service relate to cost, functionality, appeal and utility to a customer (i.e., engineering value analysis)
value based return (VPB)	a measure of the creation of value. It's the difference between economic profit and capital charge
value chain	a series of activities, when combined, define a business process; the series of activities from manufacturers to the retail stores that define the industry supply chain
value chain analysis	a method of identifying all the elements in the linkage of activities a firm relies on the secure the necessary materials and services starting from their point of origin to manufacture, and to distribution of their products and services to an end user
value-of-service pricing	pricing according to the value of the product the company is transporting; third-degree price discrimination; demand- oriented pricing; charging what the traffic will bear
value proposition	what the hub offers to members. To be truly effective, the value proposition has to be two-sided – a benefit to both buyers and sellers
variable cost	a cost that fluctuates with the volume or activity level of business
velocity	rate of product movement through a warehouse

vendor	the manufacturer or distributor of an item or product line
vendor code	a unique identifier, usually a number, assigned by a customer for the vendor it buys from. Example: a grocery store chain buys Oreo cookies from Nabisco. For accounting purposes, the grocery store chain identifies Nabisco as Vendor #76091. One company can have multiple vendor codes. Example: Welch's Foods sells many different products - frozen grape juice concentrate, chilled grape juice, bottled grape juice, and grape jelly. Because each of these items is a different type of product (frozen food, chilled food, beverages, dry food), they may also have a different buyer at the grocery store chain, requiring a different vendor code for each product line
vendor-managed inventory (VMI)	the practice of retailers making suppliers responsible for determining order size and timing, usually based on receipt of retail POS and inventory data. Its goal is to increase retail inventory turns and reduce stock outs
vertical hub/ vertical portal	serving one specific industry. Vertical portal web sites are ones that cater to customers within a particular industry. Similar to the term "vertical industry," these web sites are industry specific, and, like a portal, they make use of Internet technology by using the same kind of personalization technology. In addition to industry-specific vertical portals that cater to consumers, another definition of a vertical portal is one that caters solely to other businesses
vertical integration	the degree to which a firm has decided to directly produce multiple value-adding stages, from raw material to the sale of the product to the ultimate consumer. The more steps in the sequence, the greater the vertical integration. A manufacturer that decides to begin produc-

	ing parts, components, and materials that it normally purchases is said to be backward integrated. Likewise, a manufacturer that decides to take over distribution and perhaps sale to the ultimate consumer is said to be forward integrated
vessel	a floating structure designed for transport
vessel manifest	a list of all cargoes on a vessel
viral marketing	the concept of embedding advertising into web portals and pop ups, and as e-mail attachments to spread the word about products or services that the target audience may not otherwise have been interested in
virtual corporation	the logical extension of out partnering. With the virtual corporation, the capabilities and systems of the firm are managed with those of the suppliers, resulting in a new type of corporation where the boundaries between the suppliers' systems and those of the firm seem to disappear. The virtual corporation is dynamic in that the relationships and structures formed change according to the changing needs of the customer
virtual factory	a changed transformation process most frequently found under the virtual corporation. It's a transformation process that involves merging the capabilities and capacities of the firm with those of its suppliers. Typically, the components provided by the suppliers are hose that are not related to a core competency of the firm, while the components managed by the firm are related to core competencies. One advantage found in the virtual factory is that it can be restructured quickly in response to changing customer demands and needs
visibility	the ability to access or view pertinent data or information as it relates to logistics and the supply chain, regardless of the point in the chain where the data exists

vision	the shared perception of the organization's future - what the organization will achieve and a supporting philosophy. This shared vision must be supported by strategic objectives, strategies, and action plans to move in in the desired direction. Synonym: Vision Statement
voice activated	systems which guide users such as warehouse personnel via voice commands
von Thunen's belts	a series of concentric rings around a city to identify where agricultural products would be produced according to von Thunen's theory
voyage	the trip designation (trade route and origin/destination) identifier, usually numerically sequential

W

wall-to-wall inventory	an inventory management technique in which material enters a plant and is processed through the plant into finished goods without ever having entered a formal stock area
warehouse	storage place for products. Principal warehouse activities include receipt of product, storage, shipment, and order picking
warehousing	the storage (holding) of goods
warehouse management system (WMS)	the systems used in effectively managing warehouse business processes and direct warehouse activities, including receiving, put away, picking, shipping, and inventory cycle counts. Also includes support of radio frequency communications, allowing real-time data transfer between the system and warehouse personnel. They also maximize space and minimize material handling by automating put away processes
warranty costs	includes materials, labor, and problem diagnosis for products returned for repair or refurbishment
waste	1) in just in time, any activity that does not add value to the good or service in the eyes of

	the consumer. 2) a by-product of a process or task with unique characteristics requiring special management control. Waste production can usually be planned and controlled. Scrap is typically not planned and may result from the same production run as waste
waterway use tax	a per-gallon tax assessed barge carriers for waterway
wave picking	a method of selecting and sequencing picking lists to minimize the waiting time of the delivered material. Shipping orders may be picked in waves combined by a common product, common carrier, or destination, and manufacturing orders in waves related to work centers
waybill	document containing description of goods that are part of common carrier freight shipment. Shows origin, destination, consignee/consignor, and amount charged. Copies travel with goods and are retained by originating/delivering agents. Used by carrier for internal record and control, especially during transit. Not a transportation contract
weight break	the shipment volume at which the LTL charges equal the TL charges at the minimum weight
weight confirmation	the practice of confirming or validating receipts or shipments based on the weight
weight-losing raw material	a raw material that loses weight in processing
weight-point plan	a supplier selection and rating approach that uses the input gathered in the categorical plan approach and assigns weights to each evaluation category. A weighted sum for each supplier is obtained and a comparison made. The weights used should sum to 100% for all categories
weight unit qualifier	the unit of measure that the user wants to see for weight

what you see is what you get (WYSIWYG)	an editing interface in which a file created is displayed as it will appear to an end user
wharfage	a charge assessed by a pier or dock owner against the cargo or a steamship company for use of the pier or dock for the handling of incoming or outgoing cargo
wide-area network (WAN)	a public or private data communications system for linking computers distributed over a large geographic area
work in process (WIP)	parts and subassemblies in the process of becoming completed finished goods. Work in process generally includes all of the material, labor, and overhead charged against a production order which has not been absorbed back into inventory through receipt of completed products
World Trade Organization (WTO)	an organization established on January 1, 1995 replacing the previous General Agreement on Tariffs and Trade GATT that forms the cornerstone of the world trading system

X

X12	the ANSI standard for inter-industry electronic interchange of business transactions

Y

yard jockey	person who operates a yard tractor
yard mule/yard tractor	special tractor used to move trailers around a terminal, warehouse, distribution center, etc.
yield	the ratio of usable output from a process to its input

Z

zone picking	a method of subdividing a picking list by arrears within a storeroom for more efficient and rapid order picking. A zone-picked order must be grouped to a single location and the

	separate pieces combined before delivery, or must be delivered to different locations such as a work center
zone price	the constant price of a product at all geographic locations within a zone

ABBREVIATIONS

4PL	fourth party logistics
A/R	accounts receivable
ABC Costing	activity-based costing
ABI	automated broker interface
ABM	activity-based management
ABP	activity-based planning
ACD	automated call distribution
AGRN	advanced goods receiving note
ANSI	American national standards institute
ANSI	the American national standards institute - a private non-profit organization that oversees the development of voluntary consensus standards for products, services, processes, systems, and personnel in the United States
API	American petroleum institute
AQL	acceptable quality level
AS/ RS	automated storage/retrieval system
ASN	advanced shipping note
ATA	actual time of arrival
ATD	actual time of departure
ATFI	automated tariff filing information system
B2B	business-to-business
B2C	business-to-customer
BBD	best before date
BOL	bill of lading
BOM	bill of material
BPM	business performance measurement
BPO	business process outsourcing
BPR	business process reengineering
C & F	cost and freight
CAD	cash against documents

CADEX	customs automated data exchange system
CAE	computer-aided engineering
CAF	currency adjustment factor
CAPSTAN	computer-aided planned stowage and networking system
CARAT	cargo agents' reservation air waybill issuance and tracking
CBT	computer-based training
CFS	container freight station
CFS/ CFS	container freight station to container freight station
CI	continuous improvement
CIA	cash in advance
CIF	cost, insurance, freight
CMI	co-managed inventory
COFC	container on flat car
COGS	cost-of-goods sold
COTD	complete and on-time delivery
CPFR	collaborative planning, forecasting and replenish-ment
CPI	continuous process improvement
CRM	customer relationship management
CRP	continuous replenishment planning
CSCMP	council of supply chain management professionals
CSF	critical success factor
CSG	communications support group
CSR	customer service representative
CWO	cash with order
CY/CY	container yard to container yard
DC	distribution center
DFZ	duty free zone
DISA	data interchange standards association
DRP	distribution requirements planning
DRP II	distribution resource planning
DSD	direct store delivery
DSS	decision support system
DTS	direct-to-store delivery
EAI	enterprise application integration
EAN.UCC	European article numbering/uniform code Council
EBIT	earnings before interest and taxes

ECR	efficient consumer response
EDI	electronic data interchange
EDIA	electronic data interchange association
EFT	electronic funds transfer
E-Mail	electronic mail
EOQ	economic order quantity
ERP	enterprise resource planning system
ERS	evaluated receipts settlement
ESI	early supplier involvement
ETA	the estimated time of arrival
ETD	the estimated time of departure
EVA	economic value added
FA	functional acknowledgement
FAS	final assembly schedule
FCL	full container load
FEU	forty-foot equivalent unit, a standard size inter-modal container
FGI	finished goods inventory
FIFO	first in first out
FIPS	federal information processing standards
FPA	free of particular average
FTL	full truck load
FTZ	foreign trade zone and free trade zone
GATT	general agreement on tariffs and trade
GB/L	government bill of lading
GO	general order
GPS	global positioning system
GTDI	European guidelines for trade data interchange
GUI	graphical user interface
HR	human resources
ICC	International Chamber of Commerce
IMB	international maritime bureau
IMO	international maritime organization
ISO	international standards organization
ITE	independent trading exchange
JIT	just in time
JSA	joint supplier agreement
KPI	key performance indicator
LAN	local area network

LCL	less-than-carload and less-than-container load
LIFO	last in first out
LLP	lead logistics partner
LO/LO	lift on, lift off
LOC	letter of credit
LTL	less than truckload shipping
Mar Ad	maritime administration
MAWB	master air waybill
MES	manufacturing execution systems
MRO	maintenance, repair, and operating supplies
MRP	material requirements planning
MRP II	manufacturing resource planning
MSDS	material safety data sheet
NAFTA	north American free trade agreement
NITL	national industrial transportation league
NMFC	national motor freight classification
NPI	new product introduction
OS&D	over, short, and damaged
P & D	pickup and delivery
P2P	path to profitability
PBIT	profit before interest and tax
PDCA	plan-do-check-action
PM	particulate matter
PO	purchase order
POD	proof of delivery
POS	point of shipment, or point of sale
QFD	quality function deployment
QR	quick response
RF	radio frequency
RFID	radio frequency identification
RFQ	request for quote
RFP	request for proposal
RGA	return goods authorization
RM	raw materials
RMA	return material authorization
ROA	return on assets
S&OP	sales and operations planning
SAE	society of automotive engineers
SCE	supply chain execution

SCEM	supply chain event management
SCM	supply chain management
SCOR	supply chain operations reference model
SET	secure electronic transaction
SG&A	selling, general, and administrative expenses
SKU	stock-keeping unit
SMART	specific, measurable, achievable, realistic, time based
SOP	standard operating procedure
SOW	statement of work
SPC	statistical process control
TL	truckload carriers
TMS	transportation management system
TOC	theory of constraints
TOFC	trailer on a flat car, piggyback
T's & C's	terms and conditions
UN/ SPSC	United Nations Standard Product and Service Code
UNECE	United Nations Economic Commission for Europe
UOM	unit of measure
UPC	uniform product code
URL	uniform resource locator
VSA	vessel sharing agreement
WAN	wide area network
WIP	work in process
WMS	warehouse management system
WPA	with particular average
WTO	world trade organization
WWW	World Wide Web
XML	extensible markup language

Приложение 3

СТАНДАРТНЫЕ ФРАЗЫ, ОБОРОТЫ, КОНСТРУКЦИИ ДЛЯ РЕФЕРИРОВАНИЯ СТАТЬИ, НАПИСАНИЯ АННОТАЦИИ

Название статьи, автор, стиль.

The article, I'm going to give a review of, goes under the heading …	Статья, которую я сейчас хочу проанализировать, называется …
The article to be reviewed is taken from…	Статья, которую необходимо проанализировать, взята из…
The headline of the article is …	Заголовок статьи…
The author of the article is…	Автор статьи…
It is written by …	Она написана …
The article under discussion is …	Статья, которую мне сейчас хочется обсудить, ….
The title of the given article is …	Заголовок данной статьи…

Тема. Логические части.

The topic of the article is…	Тема статьи…
The key issue of the article is…	Ключевым вопросом в статье является…
The article under discussion is devoted to the problem of…	Статья, которую мы обсуждаем, посвящена проблеме…
The author in the article touches upon the problem of…	В статье автор затрагивает проблему….
I'd like to make some remarks concerning…	Я бы хотел сделать несколько замечаний по поводу…
I'd like to mention briefly that…	Хотелось бы кратко отметить…
I'd like to comment on the problem of…	Я бы хотел прокомментировать проблему…
The article under discussion may be divided into several logically connected parts which are…	Статья может быть разделена на несколько логически взаимосвязанных частей, таких как…

Краткое содержание.

At the beginning of the story the author	В начале истории автор
describes depicts touches upon explains introduces mentions recalls makes a few critical remarks on	описывает изображает затрагивает объясняет знакомит упоминает вспоминает делает несколько критических замечаний о ….
The story begins (opens) with a (the)	
description of statement introduction of mention of the analysis of a summary of –/ the characterization of (author's) opinion of author's recollections of the enumeration of	описанием заявлением представлением упоминанием кратким анализом характеристикой мнением автора воспоминанием автора перечнем
In conclusion the author	
dwells on points out generalizes reveals gives a summary of	останавливается на указывает на то обобщает показывает дает обзор

Отношение автора к отдельным моментам.

The author gives full coverage to…	Автор полностью охватывает…
The author outlines…	Автор описывает
The article contains the following facts…/ describes in details…	Статья содержит следующие факты …. / подробно описывает

The author starts with the statement of the problem and then logically passes over to its possible solutions.	Автор начинает с постановки задачи, а затем логически переходит к ее возможным решениям.
The author asserts that…	Автор утверждает, что …
The author resorts to … to underline…	Автор прибегает к …, чтобы подчеркнуть …
Let me give an example…	Позвольте мне привести пример …

Вывод автора.

In conclusion the author says / makes it clear that…/ gives a warning that…	В заключение автор говорит / проясняет, что … / дает предупреждение, что…
At the end of the story the author sums it all up by saying …	В конце рассказа автор подводит итог всего этого, говоря …
The author concludes by saying that../ draws a conclusion that / comes to the conclusion that…	В заключение автор говорит, что .. / делает вывод, что / приходит к выводу, что…

Ваш вывод.

Taking into consideration the fact that…	Принимая во внимание тот факт, что…
The message of the article is that …/The main idea of the article is…	Основная идея статьи (послание автора)…
In addition… / Furthermore…	Кроме того…
On the one hand…, but on the other hand…	С одной стороны …, но с другой стороны
Back to our main topic…	Вернемся к нашей основной теме…
To come back to what I was saying…	Чтобы вернуться к тому, что я говорил…
In conclusion I'd like to…	В заключение я хотел бы …
From my point of view…	С моей точки зрения …
As far as I am able to judge …	Насколько я могу судить...
My own attitude to this article is …	Мое личное отношение к…

I fully agree with/ I don’t agree with…	Я полностью согласен с/ Я не согласен с …
It is hard to predict the course of events in future, but there is some evidence of the improvement of this situation ...	Трудно предсказать ход событий в будущем, но есть некоторые свидетельства улучшения …
I have found the article dull/ important/ interesting/of great value …	Я нахожу статью скучной / важной/ интересной/ имеющую большое значение (ценность) …
It goes without saying that...	Само собой разумеется, что ...
It's important to remember that ...	Важно помнить, что ...
So, to sum it up, ...	Итак, подводя итог,…
In addition ...	К тому же ...
It's well known that ...	Известно, что ...
So far as we know, ...	Насколько нам известно, ...
Actually, ...	Фактически, ...
As to ...,	Что касается ...,
Moreover, ...	Более того, ...
In conclusion ...	В заключение …

Приложение 4

МЕТОДИЧЕСКИЕ РЕКОМЕНДАЦИИ ПО ПОДГОТОВКЕ И НАПИСАНИЮ АННОТАЦИИ, РЕФЕРАТА, ДЛЯ ПОДГОТОВКИ ПЕРЕСКАЗА ТЕКСТА НА АНГЛИЙСКОМ ЯЗЫКЕ

1. Правила написания аннотации

Что такое аннотация?

Написание аннотации (на родном и иностранном языках) является одним из важных умений письменной речи. Развитие этого умения у студентов приобретает особую актуальность в связи с постепенным повышением требований к профессиональной подготовке специалистов. Данное умение не обозначено в требованиях к уровню подготовки выпускников средней общеобразовательной школы, однако владение технологией написания аннотации необходимо в современной жизни любому образованному человеку, поскольку владение умением написания аннотации, согласно существующим в российской и мировой практике правилам, во многом помогает учащимся и специалистам любых профилей более эффективно представлять себя и позиционировать свой проект или научную работу.

Необходимо отметить, что в русском языке термин «аннотация» используется в разных значениях и включает в себя разное понятийное содержание, в зависимости от сферы употребления. **Аннотация к статье или тексту – это краткая характеристика работы, содержащая только перечень основных вопросов.** В этом смысле слово «аннотация» может быть использовано в качестве синонима термину «резюме» (статьи) и английскому «abstract». Аннотации могут быть по объему от 50 до 400 слов в зависимости от сложности материала и конкретных требований.

Структура аннотации

Умение написания аннотации во многом определяется развитием умения обобщения. В аннотации необходимо определить основные идеи (разделы) работы, соединить их вместе и представить в достаточно короткой форме. Аннотация как функциональный тип текста имеет свою структуру. Так, представляя содержание целой работы, аннотация должна включать в себя ее основные разделы: актуаль-

ность, постановку проблемы, пути разрешения поставленной проблемы, результаты и выводы. На каждый из разделов может отводиться по одному предложению. Четкость изложения мысли является ключевым моментом при написании аннотации.

При написании аннотации на иностранном языке (английском) необходимо также следовать данной структуре. Кроме того, для более четкой и ясной передачи смысла на иностранном языке рекомендуется использовать слова и выражения, принятые в англоязычном академическом дискурсе.

Коммуникативная задача	Выражения
Для обозначения актуальности (переход к проблеме)	However
Для перечисления разделов (освещенных вопросов)	Our paper (report/project) consists of several (three, four, five) sections:… In the paper, first …, then …, finally … First … Second … Third …
Для обозначения результатов исследования и выводов	The data revealed … The study showed … The study proved …

В качестве ***общих рекомендаций*** при написании аннотации следует обратить внимание на следующие вопросы:

– лимит слов (50, 100, 200 или 400);

– временное единство – аннотации к уже написанным статьям, текстам и т.п. логичнее всего писать в прошедшем времени;

– структура – при написании аннотации необходимо придерживаться общепринятой структуры (см. табл.);

– простота в изложении – язык аннотации должен быть простым и понятным как специалистам в конкретной области, так и широкому кругу читателей (для четкости выражения мысли следует использовать клише «В работе рассмотрены/изучены/представлены/проанализированы/обобщены/проверены…»);

– отсутствие деталей – в аннотации необходимо избегать лишних деталей и конкретных цифр.

Компонент аннотации	Описание
Актуальность	Сначала необходимо показать важность изучаемой проблемы, актуальность ее рассмотрения
Постановка проблемы	После раскрытия актуальности необходимо обозначить существующую проблему
Пути решения проблемы	В данном разделе аннотации необходимо отразить (перечислить) конкретные шаги, направленные на решение возникшей (существующей) проблемы: это может быть перечисление исследуемых теоретических вопросов, методик проведения экспериментальной работы, исследуемые переменные и т.п.
Результаты	В данном разделе представляются количественные или качественные результаты исследования
Вывод (выводы)	В заключение необходимо обозначить сферу внедрения результатов исследования, насколько проведенная работа расширила существующие представления об изучаемом вопросе или предложила новое решение существующей проблемы

2. Реферирование

Рефератом обычно называют текст, построенный на основе смысловой компрессии первоисточника с целью передачи его главного содержания. Материал в реферате излагается с позиций автора исходного текста и не содержит никаких элементов интерпретации или оценки. Реферирование можно охарактеризовать как рецептивно-продуктивную речевую деятельность. Как продуктивная деятельность, реферирование иноязычных текстов способствует развитию логичности изложения материала.

Реферативная деятельность помогает не только совершенствовать умения в разных видах чтения, но и в большей мере обеспечивает развитие умений в письменной речи на иностранном языке.

Известны разнообразные классификации типов рефератов. По характеру исходного материала рефераты могут быть монографические и обзорные; по типам отдельных видов операций свертывания текста (рефераты-выдержки, цитаты, перифразы, обобщения); по типам организации ключевого материала во вторичном тексте (реферат-конспект, реферат-резюме), прочие классификации (реферат тезисный, реферат телеграфного типа и т.д.).

Правила написания реферата

Сущность реферата

Сущность реферата заключается в кратком и обобщенном изложении содержания текста-оригинала.

Назначение реферата

Реферат как экономное средство ознакомления с материалом должен отражать его содержание с достаточной полнотой. Реферат отвечает на вопрос: «Какая основная информация заключена в реферируемом тексте?» В реферате объективно излагается то, что содержится в первичном тексте.

Требования к реферату

Это точность, краткость, простота изложения информации. Реферат – это самостоятельный текст со своей собственной логикой изложения.

Алгоритм работы над рефератом

1. Выбор темы.

2. Подбор и изучение основной литературы.

3. Составление библиографии.

4. Обработка и систематизация найденной по теме информации.

5. Написание работы.

Примерная структура реферата

Титульный лист

На титульном листе работы указываются: полное наименование учебного заведения, в котором выполнена работа, фамилия, имя, отчество исполнителя; тема реферата; фамилия, имя, отчество руководителя работы; год написания работы; город.

Оглавление

Последовательно излагаются названия глав и параграфов реферата с точным указанием страницы, с которой начинается глава или параграф. В оглавлении должны быть: введение, главы (обычно 2–3); в каждой главе – параграфы; заключение; список использованной литературы, приложение (фото, схемы, таблицы).

Введение

Определяется актуальность темы, формулируется суть проблемы, указываются цель и задачи реферата.

Основная часть

Каждый параграф раскрывает отдельный вопрос и является логическим продолжением предыдущего.

Заключение

Делается вывод (выводы) по теме реферата.

3. Методические рекомендации для подготовки пересказа текста на английском языке

The plan for rendering the text	Some expressions' to be used while rendering the text
1. The title of the text	The title of the text is …
2. The author of the text story, article	The author of the text is … The text is written by …
3. The main idea of the text	The main idea of the text is … The text is about … The text is devoted to … The text deals with …
4. The contents of the text some facts, names, figures	The author starts telling the readers (about, that) … The author writes (thinks, points out) that …

	The text describes … The main characters of the text are … According to the text … The text goes on to say… In conclusion… The author comes to the conclusion that …
5. Your opinion of the text	I found the text interesting (important, too hard to understand, etc.).

АНГЛИЙСКИЙ ЯЗЫК В ЛОГИСТИКЕ

Учебное пособие

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