Л. Д. Ермолаева

БИЗНЕС-ИНФОРМАТИКА
BUSINESS-INFORMATICS

Учебное пособие по английскому языку

Рецензенты:
Кандидат педагогических наук,
доцент кафедры профессиональной языковой подготовки
Владимирского юридического института
Федеральной службы исполнения наказаний
С. П. Фокина

Кандидат филологических наук,
доцент кафедры иностранных языков профессиональной коммуникации
Владимирского государственного университета
имени Александра Григорьевича и Николая Григорьевича Столетовых
Н. А. Камайданова

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Направлено на развитие навыков чтения и устной речи на основе переработки информации оригинальных текстов и системы тренировочных упражнений. Современная методика обучения чтению и устной речи делают пособие актуальным и доступным для использования в качестве основного материала на занятиях по английскому языку

Предназначено для студентов специальности «Бизнес-информатика», обучающихся по программе подготовки бакалавров и магистров в неязыковом вузе.

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ПРЕДИСЛОВИЕ

Предлагаемое Вашему вниманию учебное пособие предназначено для использования в учебном процессе студентами специальности «Бизнес-информатика» на завершающем этапе обучения иностранному языку в неязыковом вузе.

Пособие ставит своей целью подготовить студентов к чтению оригинальной литературы по тематике, связанной с их будущей специальностью, а также способствовать дальнейшему совершенствованию речевых навыков и умений студентов в данной профессиональной сфере коммуникации. Пособие состоит из 12 разделов и включает следующие темы: роль информации в работе менеджера, виды информационных систем, информационные технологии, бизнес-аналитика, моделирование бизнес-процессов, электронный бизнес.

В пособии использованы современные материалы из оригинальных английских и американских источников с учётом их актуальности и познавательного значения.

Структура пособия является однотипной и построена по следующей единой схеме: 1) основной текст, содержащий постановку той или иной актуальной проблемы; 2) комплекс упражнений (предтекстовых и послетекстовых), направленных на накопление, расширение и усвоение словарного запаса студентов, а также на развитие и закрепление их коммуникативных навыков и умений; 3) тематический список слов и выражений для активного усвоения и понимания текстов.

Автор стремился к тому, чтобы студенты не только получили информацию о своей будущей специальности, но также научились высказывать своё собственное мнение, принимать самостоятельные решения по поставленным проблемам.

TEXT 1

1. Translate the groups of words of the same root.

To communicate – communicative – communication; to relate – relation – relatively; to disseminate – dissemination; to observe – observation; act – activity – actively; different – to differentiate – differently – to differ; sufficient – sufficiently; capable – capability; to provide – provision; excess – excessive – excessively; to mean – means –meaning; value – valuable; reliable – reliability – reliably; available – availability.
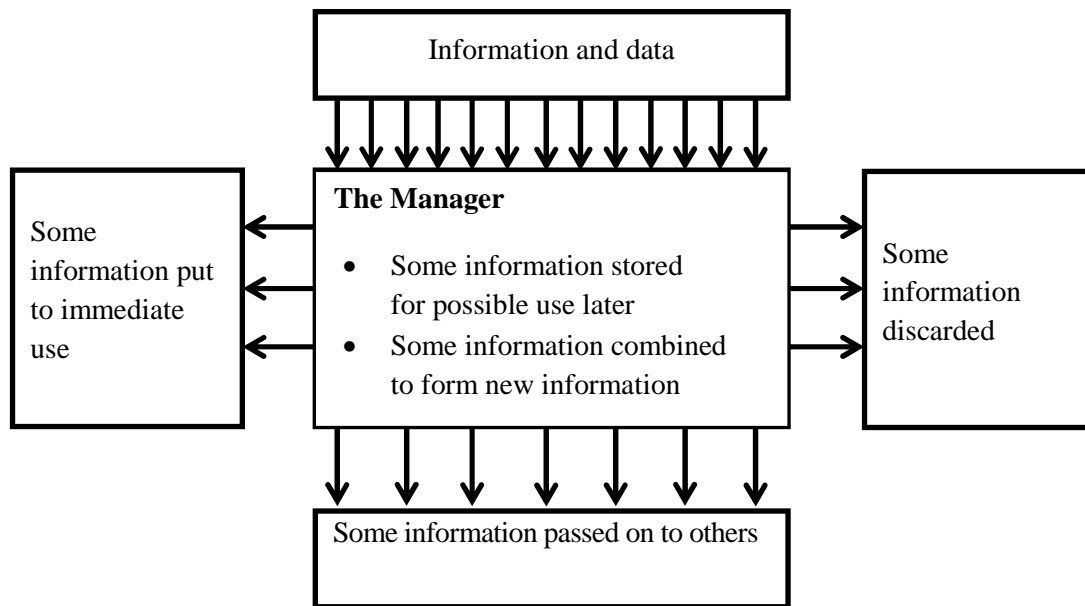
2. Arrange the pairs of synonyms.

a) to be related, circumstance, relevant, reliable, human resource manager, costs, valid, dissemination, particular, complete, accurate, to transfer to

b) to move to, precise, condition, dependable, personnel manager, to be connected, expenses, specific, full, spreading, having power, appropriate.

THE ROLE OF INFORMATION IN THE MANAGER'S JOB

Information has always been an integral part of every manager's job. Given that information is a vital part of communication, it follows that management and information **are** closely **related.** Indeed, it is possible to conceptualize management itself as a series of steps involving the reception, processing, and **dissemination** of information. As illustrated in figure, the manager is constantly bombarded with data and information. He receives a great many pieces of information from both formal and informal conversations and meetings, telephone calls, personal observations, letters, reports, **memos**, and trade publications.

A key part of information-processing activity is differentiating between data and information. Data are **raw** figures and facts reflecting a single aspect of reality. The facts that a plant has 35 machines, that each machine is capable of producing 1,000 units of output per day, that current and projected future demand for the units is 30,000 per day, and that workers **sufficiently** skilled to run the machines make $15 an hour are data. Information is data presented in a way or form that has meaning. Thus, summarizing four pieces of data given above provides information – the plant has excess capacity and is therefore **incurring** unnecessary **costs**. Information has meaning to a manager and provides a basis for action. The plant manager might use the information and decide to sell four machines (keeping one as a back-up) and transfer five operators to other jobs.

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┌─────────────────────────────────────┐
│          Information and data         │
└─────────────────────────────────────┘
        ↓↓↓↓↓↓↓↓↓↓↓↓↓↓
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The Manager diagram: "Information and data" flows down into "The Manager" box which contains bullet points "Some information stored for possible use later" and "Some information combined to form new information". Arrows point left to "Some information put to immediate use", right to "Some information discarded", and down to "Some information passed on to others".

Information is good if it is accurate, timely, complete and relevant. For information to be of real value to a manager, it must be accurate. Accuracy means that the information must provide a **valid** and **reliable** reflection of reality.

Information needs to be timely. **Timeliness** does not necessary needs to be available in time for appropriate managerial action. What constitutes timeliness is a function of the situation facing the manager.

Information must tell a complete story for it to be useful to a manager. If it is less than complete, the manager is likely to get an inaccurate or distorted picture of reality.

Information must be relevant. Relevance, like timeliness, is defined according to the needs and **circumstances** of a **particular** manager. Operations managers need information on costs and productivity; human resource managers need information on **hiring** needs and **turnover rates**; and marketing managers need information on sales projections and **advertising rates.**

3. Which terms do the following sentences define?
1. Unorganized facts such as numbers, names, and quantities are called
   a) collection   b) ability   c) data   d) information
2. Availability of information in time for appropriate managerial action means
   a) capacity   b) costs   b) accuracy   d) timeliness

3. Provision of precise reflection of reality implies
   a) accuracy   b) facts   c) situation   d) dissemination
4. Spreading widely the received information is called
   a) validity   b) dissemination   c)sales   d) rates
5. Giving work to somebody in return for payment means the process of
   a) advertizing   b) hiring   c) incurring   d) observation
6. Telling people about products through mass media to promote their sales
   is called
   a) processing   b) projecting   c) advertizing   d) incurring losses

4. Answer questions to the text
1. How can you explain that management and information are closely related?
2. From what sources can the manager receive information?
3. What is the difference between data and information?
4. Can you give your own example when the availability of information provides a basis for action?
5. What are the main characteristics of information?
6. What is meant by timeliness?
7. How can relevance be explained?

5. Describe the figure demonstrating managers as information processors.

6. Study the Useful language box below. Then role play the talk between two students on how business informatics influences the attainment of organizational objectives.
Student A: You are not quite clear about the role of information for companies' success. You ask to give you some reasons (explanation).
Student B: You explain the importance of information for different companies as well as for different departments. Using an example you describe how the lack of proper information may lead to the failure of the company.

I'd like to find out ….	*What I mean is ….*
What do you think?	*What I want to say is ….*
What is your opinion?	*As I understand it…*
Could you give me an example?	*I'm not quite clear about …*
I completely agree.	*I object to this opinion.*

Essential words and phrases

Advertising	– реклама
Appropriate	– соответствующий, подходящий
Capacity	– мощность, способность
Circumstance	– обстоятельство
Dissemination	– распространение
Excess	– избыточный, излишний
Human resource manager	– начальник отдела кадров
To incur costs	– понести расходы
Memo (memorandum)	– меморандум
Meaning	– смысл, значение
Particular	– конкретный
Productivity	– производительность
Raw	– сырой, необработанный
To be related	– быть взаимосвязанным
Rate	– тариф, ставка, норма, темп
Reliable	– надёжный
Sale	– продажа
Sufficiently	– достаточно
Timeliness	– своевременность
Turnover rate	– процент текучести кадров
Valid	– действительный, веский, обоснованный

TEXT 2

1. Translate the groups of words of the same root.

To decide-decision-decisive; to improve-improvement-improved; to consider-consideration-considerably-considerable; to compete-competition-competitor; flexible-flexibility-flexibly; profit-profitability-profitable; to summarize-summary; to anticipate-anticipation; virtual-virtually-virtuality; to recur-recurrence-recurrent; to pay- payable-payment; to aggregate- aggregative-aggregation.

2. Find Russian equivalents on the right for the English word combinations on the left

1. demand variations	a. обработка операции, сделки
2. to cope with problems	b. изменения спроса
3. to assess charges	c. использоваться в значительной степени
4. anticipated orders	d. справляться с проблемами
5. to calculate projected sales	e. регистрировать сделку
6. information summary	f. подсчитывать поступления на счёт
7. to record transaction	g. ожидаемые заказы
8. transaction processing	h. подсчитать планируемый объём продаж
9. to be of considerable use	i. информационная сводка

BASIC KINDS OF INFORMATION SYSTEMS

Organizations that use information systems, especially large organizations, often find that they need several kinds of systems in order to manage their information effectively. The three most general kinds of information systems are **transaction-processing systems,** basic **management information systems, and decision support systems.**

Transaction-processing systems were the first computerized form of information system adopted by many businesses. TPS is a system designed **to handle** routing and **recurring transactions** within the business. Visa uses a TPS **to record charges t**o individual **credit accounts**, **credit payments** made on the accounts, and send monthly **bills** to customers. In general a TPS is most useful when the organization has a large number of highly **similar** transactions to process.
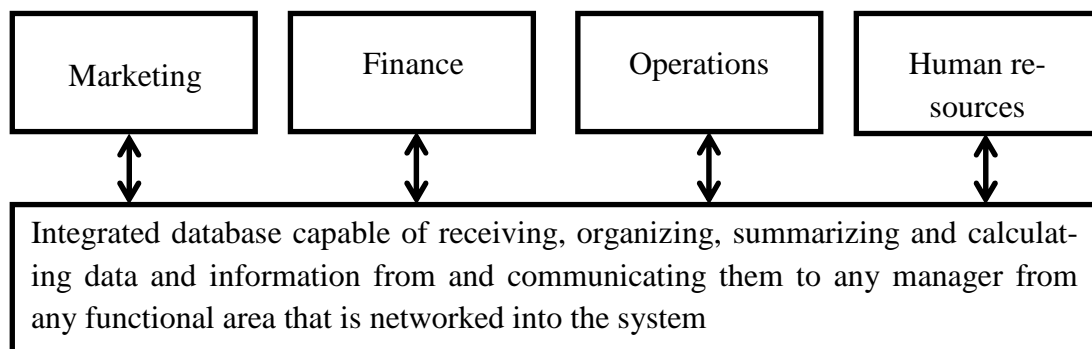
A TPS is especially helpful in **aggregating** large amounts of data into more manageable forms of information **summaries.** For example, a bank manager probably cares little about any given Visa transaction recorded for any single cardholder. More useful is information about **average** number of purchases made by each cardholder, their average daily balances, average monthly finance charges **assessed**, and so forth.

In general, a TPS is most useful to lower-level managers. Even though this approach was the earliest, it is still of **considerable** use to many organizations. Many of these organizations, however, have also found it necessary to develop more **sophisticated** systems.

The next step in the evolution of information management is generally called the management information system or MIS. A MIS is a system that gathers more **comprehensive** data, organizes and summarizes it in a form that is of value to functional managers, and then provides those same managers with the information they need to do their work.

An MIS for a manufacturing firm might develop a computerized **inventory system** that keeps track of both **anticipated** orders and inventory **on hand.** The plant manager can use the system to help determine how much of each of the firm's products to manufacture next week or next month.

The most **elaborate** and most powerful form of information system is called a decision support system or DSS. A DSS is a system that automatically **searches for**, manipulates, and summarizes information needed by managers for specific decisions. A DSS is much more **flexible** than a traditional MIS and can help **cope with** nonroutine problems and decisions.

Marketing	Finance	Operations	Human resources

Integrated database capable of receiving, organizing, summarizing and calculating data and information from and communicating them to any manager from any functional area that is networked into the system

A manager might be interested in knowing the likely **effects** of a price increase for a particular product sold by the firm. Thus she might decide **to query** the DSS to determine potential customers for price increase of 5, 7, and 10 percent. The DSS already knows the pricing history for the product, the prices charged by **competitors**, their most recent price changes, the effects of price on sales, seasonal variations in **demand** and price, inflation rates, and **virtually** any other relevant piece of information that might have already been determined. The system then calculates **projected** sales, market share, and **profit profiles** for each of the potential price-increase levels and provides them to the manager.

Decision support systems are very complex. They take considerable time and resources to develop and more time and resources to maintain and to teach managers how to effectively use them. They also seem to hold considerable potential for **improving** the quality of information available to managers as they make important decisions.

3. Find words or phrases in the text that mean the same as the following expressions

1) deals happening again or at intervals
2) something near
3) the process of gathering something into a whole or mass
4) to register debt to the account
5) highly complex or advanced
6) worked out carefully or developed in great detail
7) to handle problems or troubles
8) to make better

4. Interpret in your own words what figure 2 demonstrates.

5. Answer questions to the text.

1. What are the three most general kinds of information systems?
2. What is a TPS designed for?
3. In what case is a TPS most useful?
4. What is the result of aggregating large amounts of data with the help of a TPS?
5. Is a TPS mostly used by top-level managers?
6. What is meant by management information system?
7. What operations does this system include?
8. Can you give an example how a MIS may be used in some organization?
9. Why did a DSS get such a name?
10. What processes are involved in this system?
11. Can you give an example how this system helped in making any decision?

6. Using the table of information systems summary describe the categories of information systems and their characteristics.

Categories of Information System	Characteristics
Transaction Processing System	Substitutes computer-based processing for manual procedures. Deals with well-structured processes, includes record keeping applications.
Management Information System	Provides input to be used in the managerial decision process. Deals with supporting well-structured decision situations. Typical information requirements can be anticipated.
Decision Support Systems	Provides information to managers who must make judgments about particular situations. Supports decision-makers in situations that are not well-structured

Essential words and phrases

To anticipate	– ожидать, предвидеть
To aggregate	– собирать в одно целое, объединять
To assess	– оценивать
Average	– средний
A competitor	– конкурент
Comprehensive	– всесторонний, всеобъемлющий
Considerable	– значительный
To cope with	– справляться
Decision support system	– система поддержки принятия решений
Demand	– спрос
An effect	– воздействие, влияние, результат, следствие
Elaborate	– тщательно, детально разработанный,
Flexible	– гибкий

An inventory system	– система управления запасами
On hand	– в наличии, под рукой
To improve	– улучшать, совершенствовать
To handle transactions	– проводить операции, сделки
To make credit payments on account	– кредитовать счёт
Management information system	– система управленческой информации
To project	– планировать
To query	– осведомляться, дознаваться, выведывать
To record charges	– занести расходы на счёт, регистрировать расходы со счёта
To recur	– повторяться
To search for	– искать
Sophisticated	– сложный
Summary	– сводка, резюме, краткое изложение
Transaction	– сделка, операция
Virtually	– фактически, реально

TEXT 3

1. **Make adverbs by adding ”-ly” and translate them.**
Excessive, annual, general, total, external, internal, financial, quarter, high, time, abrupt, current, typical, month, week.

2. **Match words in A with their antonyms in B.**
A.Sometimes, expired, hard, top manager, internal, decline, demand, beyond, overall.
B.Within, partial, supply, increase, external, supervisory manager, valid, constantly, easy.

3. **Three management levels are referred to in the following text. Look through the text and say which they are.**

DIFFERING INFORMATION FOR DIFFERENT MANAGEMENT LEVELS

An organization's information system must provide information to managers with three levels of responsibilities: operational control, management control, and strategic planning. The design of the MIS must **take into account** the information needs of the various managerial levels as well as the routine transaction-processing needs of the total organization.

An MIS for operational control must provide highly accurate and detailed information on a daily or weekly basis. A production supervisor has to know if material **wastage** is excessive, if costly **overruns** are about **to occur**, or if the machine time for a job is **expired**. The MIS must provide a high volume of timely and detailed information **derived from** daily operations.

Middle-level managers, such as **division heads**, **are concerned with** the current and future performance of their **units.** They therefore need information on important matters that will affect those units – large-scale problems with **suppliers**, abrupt sales **declines**, or increased consumer **demand** for a particular **product line**. Thus, the type of information middle-level managers require consists of **aggregate** (summarized) data from within the organization as well as from sources outside the organization.

For top managers the MIS must provide information for strategic planning and management control. For strategic planning, the external sources of information – on economic conditions, technological developments, the actions of competitors – **assume paramount** importance. This information is hard to computerize because **supporting** data are generally **beyond** the control of the organization.
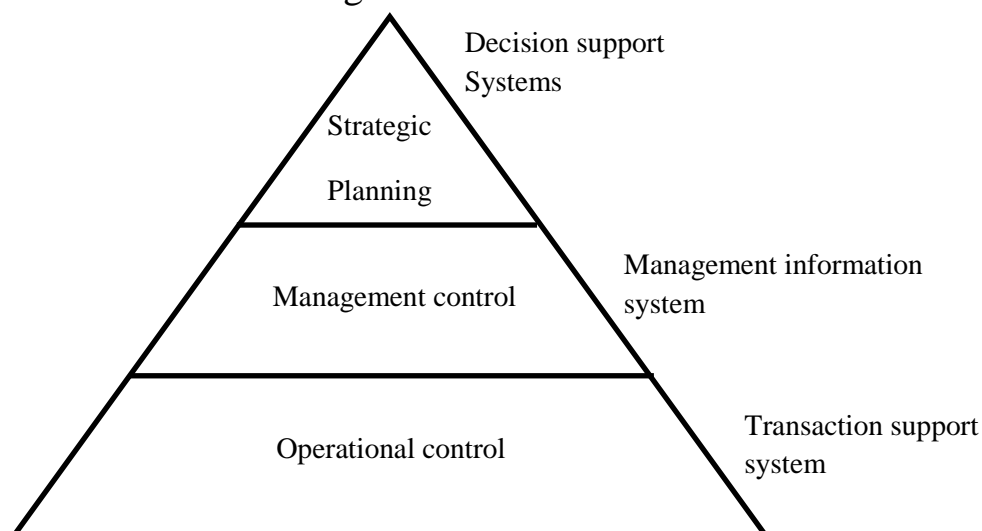
For the management control functions of top managers, however, the sources of information must be both internal and external. Top managers are typically concerned about the **overall** financial performance of their organizations. They therefore need information on **quarterly** sales and profits, on the other relevant indicators of financial performance (such as **stock value**), and on the performance of competitors. Internal control **reports** for top managers come in at monthly, quarterly, and sometimes even **annual** intervals.

4. Match the words to make partnerships from the text.

1.	overall	a.	data
2.	control	b.	performance
3.	expired	c.	functions
4.	abrupt	d.	decline
5.	quarterly	e.	head
6.	paramount	f.	machine time
7.	division	g.	sales
8.	supporting	h.	importance

5. Which of the following words are defined below.

responsibility, overrun, wastage, to occur, to expire, demand, product line, to be concerned with

1. Involved or interested in something
2. The amount of a product that customers are willing and able to buy at a given price
3. A group of products that are closely related in how they are used
4. To come to an end
5. Loss by use
6. To be beyond certain limits
7. To happen or to take place
8. Having obligations or duties

6. Read the text and write short headings for each paragraph.

7. Describe the figure relating the category of information system required to the management level.

8. Speak on the following:
1. While designing the MIS what should be taken into account?
2. What kind of information must MIS provide for operational managers?
3. Why do middle-level managers require information based on aggregate data?
4. Why is it difficult to get information for top managers for making strategic planning?
5. What kind of information do both external and internal sources of information provide for top managers? (Give examples)

Essential words and phrases

Abrupt	– резкий, внезапный, неожиданный
To aggregate	– суммировать
To assume	– приобретать, предполагать
Annual	– годовой
Beyond	– вне, за пределами
To be concerned with	– заниматься чем-либо, интересоваться чем-либо
Decline	– спад, понижение
Demand	– спрос
To derive from	– получать, извлекать
Division head	– руководитель отдела
To expire	– кончаться, извлекать
To occur	– иметь место, происходить
Overall	– полный, общий, всеобщий
Overrun	– перерасход, превышение
Paramount	– первостепенный
Product line	– ассортимент изделий, продуктовая линейка
A report	– отчёт
Quarterly	– трёхмесячный, квартальный
Stock value	– стоимость акции
Supplier	– поставщик
Supporting	– второстепенный, вспомогательный
Unit	– подразделение, административная единица
Wastage	– расход, отходы

TEXT 4

1. Translate the groups of words of the same root.
Digit – digital – digitally; to maintain – maintenance; to solve – solution; to mean – means – meaning; to define – definition – definitely; to apply – application – applicable; flaw – flawless – flawlessly; to increase – increasingly; to store – storage; to compete – competition – competitive – competitor; to advance – advancement – advanced.

2. Find Russian equivalents on the right for the English word combinations on the left.

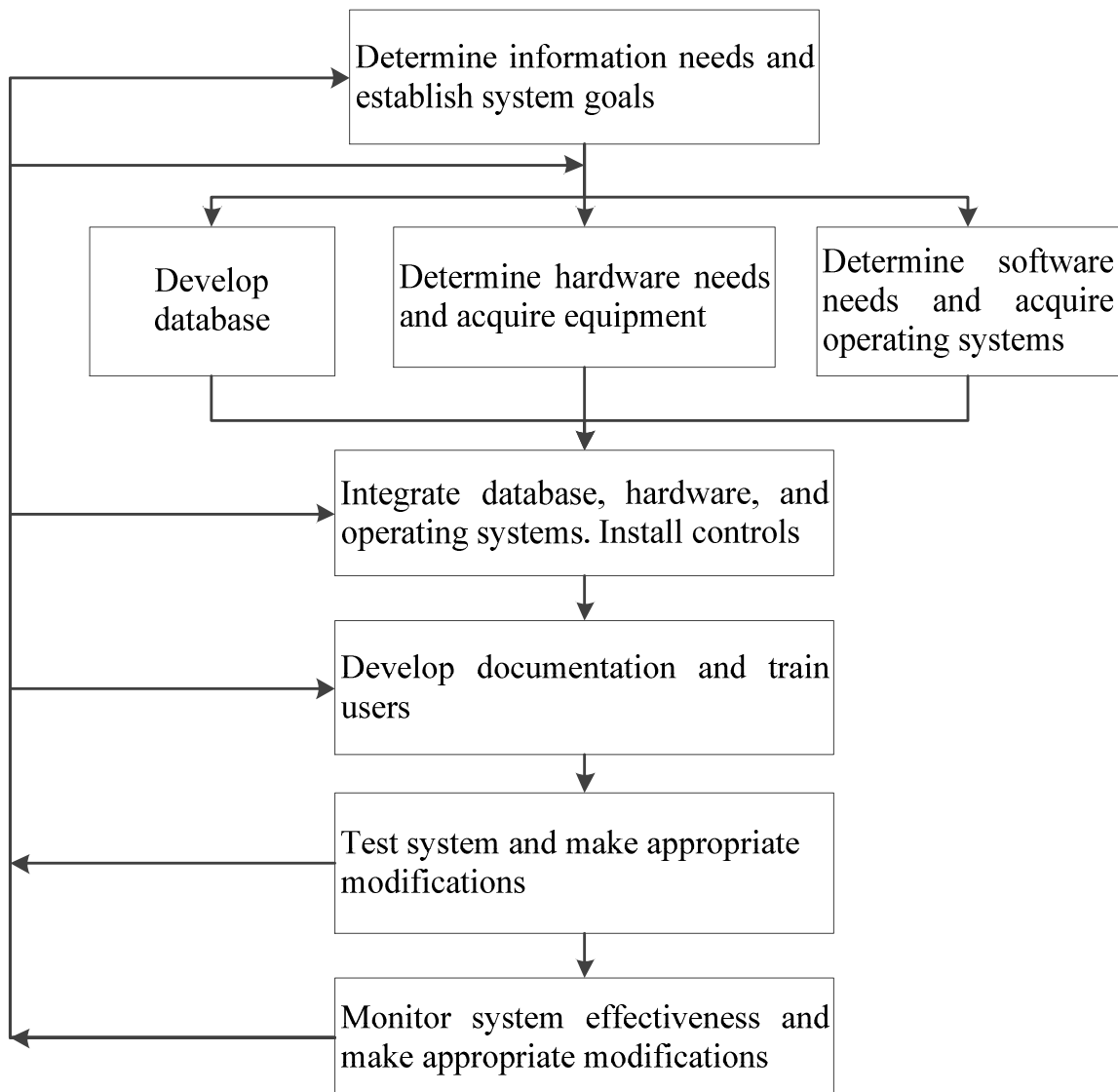|		
1.	data storage	a. работать безупречно
2.	to remain competitive	b. оставаться конкурентоспособным
3.	to propose solution	c. развивать качества
4.	to develop attributes	d. предлагать решение
5.	to work flawlessly	e. с помощью программного обеспечения
6.	specific meaning	f. хранение данных
7.	with the aid of software	g. в некоторой степени
8.	to some degree	h. определённое значение

WHAT IS BUSINESS INFORMATICS

Business informatics is an **emerging** discipline that combines various aspects of business management, information technology, and informatics. The goal of business informatics is to fully **integrate** computer science and business administration into one field. This particular discipline originated in Germany, and its popularity has **spread** throughout central Europe. Many institutions of higher learning, mostly in Europe, offer four-year degrees in business informatics. It is a field that changes and develops rapidly, and its teaching must therefore be constantly revised and reconsidered.

A field like business informatics is interdisciplinary in nature, meaning it combines several fields of study and **expertise** into one. To fully understand what business informatics is, it is helpful to understand its components. The first of these, informatics, is broadly defined as the science of **processing** information. Increasingly, it involves processing and analyzing information **digitally**, with the aid of computers. Informatics is often used **synonymously** with the term "computer science," although the latter has a somewhat more **specific** meaning. Medicine and biology, as well as the social sciences, can use informatics **to advance** their work.

Information technology, also called IT for short, is the second component of business informatics, and varies slightly from informatics. IT usually refers to the **setup**, **configuration**, and **maintenance** of computer systems, including **hardware** and **software applications.** Students of business informatics are taught not only to be able to know and explain IT-related problems, but also to propose and work through **solutions**, possibly by applying new strategies and technologies. Business management or administration **constitutes** the third component of business informatics. Those who study this discipline learn and develop **attributes** such as leadership and strategic thinking, which are important abilities for anyone in management to have.

Someone who is properly trained in business informatics will act as a go-between or a bridge to connect management with the information side of a company. By understanding both sides, qualified experts in business informatics will ideally be able to help both those who build and those who use computers and information systems. The chief information officer (CIO) is the human link between top management and information. As the architect of the firm's computerized information systems, the CIO is responsible for overseeing the preparation and dissemination of policies and procedures for new and existing systems.

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┌─────────────────────────────┐
│ Determine information needs and │
│ establish system goals          │
└─────────────────────────────┘

┌──────────────┐  ┌──────────────────────────┐  ┌──────────────────────┐
│ Develop      │  │ Determine hardware needs │  │ Determine   software │
│ database     │  │ and acquire equipment    │  │ needs   and   acquire│
│              │  │                          │  │ operating systems    │
└──────────────┘  └──────────────────────────┘  └──────────────────────┘

┌─────────────────────────────┐
│ Integrate database, hardware, and │
│ operating systems. Install controls │
└─────────────────────────────┘

┌─────────────────────────────┐
│ Develop documentation and train │
│ users                           │
└─────────────────────────────┘

┌─────────────────────────────┐
│ Test system and make appropriate │
│ modifications                    │
└─────────────────────────────┘

┌─────────────────────────────┐
│ Monitor system effectiveness and │
│ make appropriate modifications   │
└─────────────────────────────┘
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Unlike traditional data processing managers, who focus on day-to-day operations, the CIO focuses on planning and developing creative and innovative ways to meet managers' growing information needs. It is speculated by many that companies structured around business informatics will **increasingly** become the norm. This is particularly the case with businesses in the life sciences industries, which need large amounts of data **storage,** and need it to work **flawlessly**. As business becomes more **driven** by quality of information, most companies will likely see the need to apply business informatics **to some degree**, in order **to remain competitive.**

3. Which of these statements true? Correct the false ones.

1. As business informatics develops rapidly its teaching must therefore remain unchanged.
2. BI consists of three components: informatics, information technology, and business management.
3. Those engaged in management must develop such abilities as leadership and strategic thinking.
4. Students of business informatics are primarily taught to solve IT-related problems.
5. Informatics is related to setup, configuration, and maintenance of computer systems.
6. The aim of business informatics is to connect management with the information side of a company in order to remain competitive.

4. Answer the following questions to the text.

1. What components does business informatics consist of?
2. What is the goal of business informatics?
3. Why must teaching of this discipline be constantly revised and reconsidered?
4. What is the way for better understanding what BI is?
5. How can we define informatics?
6. What is meant by information technology?
7. What attributes do the students learn while studying Business Management?
8. Why must most companies apply business informatics?

5. Speak on the following.

a. Three components of business informatics
b. The importance of business informatics for companies.
c. The main responsibilities of Chief Information Officer.

6. Study the figure and describe how an expert in business informatics develops a new information system.

7. Study the Useful language box below. Then role play the talk between two students.

Student A is an applicant.
Student B is an undergraduate student.
Applicant: You want to be on business informatics side in future and you are going to apply for this major. You want to know what job opportunities you may find after graduating from the University.
Undergraduate: You try to persuade that this specialty is very actual and demanding nowadays. You describe what positions qualified experts in business informatics can occupy in organizations and what their duties might be.

How do you feel about …. ?	*What I mean is ….*
What do you think?	*What I want to say is ….*
What is your opinion?	*As I understand …*
Could you tell me exactly?	*I'm not quite clear about …*

Essential words and phrases

Ability	– способность
To advance	– продвигать, развивать
Application	– применение
An attribute	– свойство, качество
Competitive	– конкурентоспособный
To constitute	– составлять
Digitally	– с помощью цифр, в цифровой форме
To drive	– приводить в действие
Expertise	– специальные знания
Flawlessly	– без изъяна, безупречно, превосходно
Hardware	– аппаратное обеспечение
To integrate	– объединять, интегрировать
Increasingly	– всё больше, во всё возрастающем размере
Life science	– общественная наука
Maintenance	– эксплуатация, обслуживание
To process	– обрабатывать
To propose	– предлагать
To remain	– оставаться
Setup	– установка, наладка

To some degree	– в некоторой степени
Somewhat	– до некоторой степени, несколько, отчасти, немного
Software	– программное обеспечение
Specific	– особенный, определённый, специфический
To speculate	– размышлять, делать предположение
To spread	– распространяться
Storage	– накопление, хранение
Study	– наука, область науки
To work through	– прорабатывать

TEXT 5

1. Discuss these questions.

1. Do you use the internet as a source of information?
2. Do you buy goods and services over the telephone (using call centres, help desks) or internet?
3. Do you prefer shopping this way, or do you prefer to see goods in shops?
4. Do you regularly download words or music from the internet, or do you prefer CDs, newspapers, books?
5. Do you think that, in future, everyone will regularly use the internet for information or e-commerce, or will there always be people who do not use it, either out of choice or for economic reasons?

2. Translate into Russian the following word combinations.

A wide range, incredible capacity, to develop compact devices, massive dependence, mainframe computers, flexible in operation, to replace copper cables, to allow to make something, required functions, database management systems, to be made up of several administrators, to be concerned with data storage, to be at the top.

3. Match words in A with their synonyms in B.
A. Security, complex, substantial, conventional, to make up, department, increasingly, range, to retrieve, to transmit, to report to;
B. Row or quantity, common, large, to communicate to, not simple, to get back, to form, to be accountable to, more and more, protection, division.

INFORMATION TECHNOLOGY

Information technology (IT) **covers** a wide range of operations based on a combination of computing and telecommunication techniques. In **actuality**, information technology is the use of computers and software to manage information. In some companies, this is referred to as Management Information Services (or MIS) or simply as Information Services (or IS). The information technology department of a large company would be responsible for storing information, **protecting** information, processing the information, transmitting the information as necessary, and later **retrieving** information as necessary.

In the past, information management involved massive dependence on paper, but today tiny electronic pulses are stored on flash cards**.** Although modern disks have an **incredible** capacity, newer and even more compact devices are being developed.

Microelectronics involves the design, application and production of very small electronic devices **containing** many **miniaturized** components. Microcomputers are **obviously** much smaller in size than the **mainframe computers**. They are also cheaper and more flexible in operation. A **substantial** range of software programs are on offer to perform many of the key office functions such as **accounting**, **stock control** and **word processing.**

The other branch of information technology is telecommunications, which covers the transmission of information by electronic cables (telephone and telegraph) or **radio waves**. **Fibre** optics (very fine **strands of glass**) transmitting high speed pulses of light are **replacing** the old-fashioned, **conventional copper cables** and allow many thousands more telephone calls to be made. Using microwave transmissions, static **space satellites** are also revolutionizing international communication.

"Here's the story, gentlemen. Sometime last night, an eleven-year-old kid in Akron, Ohio, got into our computer and transferred all our assets to a bank in Zurich."

In order to perform the complex functions required by information technology department today, the modern Information Technology Department would use computers, servers, database management systems, and cryptography. The department would be made up of several System Administrators, Database Administrators and at least one Information Technology Manager. The group usually **reports to** the Chief Information Officer (CIO). Information Technology Departments will be increasingly concerned with data storage and management, and will find that information **security** will continue to be at the top of the priority **list**. Cloud computing remains a growing area to watch.

4. Find definitions to the terms given in the left column.

1. word processor	a. a powerful computer used primarily by corporate or governmental organizations for critical application and bulk data processing
2. retrieval	b. a device which has a magnetic covering and is used for storing computer information

3.	accounting	c.	getting back data from a computer memory store
4.	incredible	d.	the process of capturing, processing and communicating financial information
5.	replacement	e.	a computerized machine used for producing texts and diagrams
6.	satellite	f.	improbable to be possible
7.	flexible	g.	provision an equivalent for something
8.	strand	h.	a small planet revolving a larger one
9.	floppy disc	i.	easily adaptable
10.	mainframe computer	j.	fibres or wires twisted together to form a cable

5. Complete the following sentences to summarize the text.
1. IT is the use of ……….. .
2. IT department is responsible for ……….. .
3. Microelectronics involves …………. .
4. A great deal of software programs are used for performing ……… .
5. Telecommunications transmit information by …………. .
6. Common copper cables are being replaced by ……….. .
7. Today modern IT departments use …………. .
8. Such department is made up of …………. .
9. The challenges IT department is increasingly concerned with are …… .

6. Speak on the following using all accessible sources.
1. What are the duties of System Administrators in big and small companies?
2. What are the responsibilities of Database Administrators in big and small companies?
3. What is information security and why is it becoming increasingly important?

4. What newest information technologies have appeared lately?
5. What is meant by "cloud" computing and why did it get such a name?

7. Read the text and decide which of the titles goes with the given passage. Then translate the text in a written form.

IT as a determinant of organizational success

The link between information and attainment of organizational success

The need of developing an information strategy by businesses

In his presidential address to the Chartered Institute of Bankers, Sir John Quinton said information technology was at the heart of banking. 'Whether as corporations or as individuals,' he said, 'we ignore the implications of IT at our peril.' The impact of IT upon banking is so radical that it will be a key determinant of success or failure in the industry; a key determinant of whether 'banks' as a recognizable grouping continue to exist, and a key determinant of the differentiation between competitors in financial services.'

If information is seen as a resource, it follows that it can be managed. We can attempt to produce it in the most cost-effective manner, determining how it should be processed, stored, retrieved and disposed of. The implication is that businesses – not only banks – should be prepared to develop an information strategy.

To relate information to the management function it has to contribute to the achievement of some organizational objective. The relationship between the information and the attainment of the objective needs to be clearly shown, and the relationship has to be capable of being tested empirically. If we see information as a resource, it also follows that we have to be selective. As Sir John Quinton also said, 'it really comes back to the basic question that all companies need to ask themselves – what business, or should I say, businesses, are we in? Having answered that question we can decide what information we need, how it is to be obtained, and how it is to be treated.

Essential words and phrases

Actuality	– действительность, факт
Accounting	– бухгалтерский учёт
Chief information officer	– главный специалист по информационным технологиям
Conventional	– обычный, традиционный, общепринятый
To contain	– содержать
Copper cable	– кабель из меди
Fibre	– волокно
A floppy disk	– дискета
Incredible	– удивительный, невероятный
Information security	– защита информации
A main frame computer	– универсальная вычислительная машина
Miniaturized	– миниатюрный
Obviously	– очевидно
To protect	– защищать
To replace	– заменять
To report to	– подчиняться
To retrieve	– возвращать, восстанавливать, искать
Space satellite	– космический спутник
Stock control	– управление запасами
Strands of glass	– пряди, пучки стекла
Substantial	– существенный, значительный
To transmit	– передавать
Wave	– волна
Word processing	– обработка, редактирование текстов

TEXT 6

1. Most people think that information technology and the internet represent progress, and are clearly a change for the better.
Some people disagree and they see many problems ahead.
Read this article and write a brief heading for each paragraph, summarizing its content.

THE DANGERS OF INFORMATION TECHNOLOGY

1._____

We are at the **threshold** of a new age of communication, and many observers appear to be feeling optimistic about it. Information technology will bring knowledge and power to the **dispossessed**, they predict, making life easier for everyone. For them, the internet is the **ultimate** democracy. Are they right? I doubt it. The optimists are ignoring the **likelihood** that the new information technology will disenfranchise large sections of society. The **certainties** of the 20th century – in politics, economics, business and society– are **evaporating**. Everything is changing, and anyone who does not **embrace** the change will **go under**.

2._____

So just how will the changes affect you and me, the governments we elect and the countries we live in? To begin with, as electronic commerce grows, governments will find it harder to raise **taxes**. Every day, trillions of dollars move around the global electronic money markets as corporations carry out their transactions in low-tax **jurisdictions**. As products and services that have traditionally been delivered physically are transferred electronically, the tax deficit will grow. People are increasingly buying goods and services **via** the internet from places where sales taxes are lowest.

3._____

Another example is the regulation of large organizations. Governments will find it more and more difficult **to keep track of** the activities of corporations and non-governmental organizations that operate simultaneously all over the world. Now that better communications are increasing the globalization of business, how can governments control companies that produce and sell in several different countries.

4._____

As with most new technologies, rich companies will be among the first to benefit. It won't be **rosy** if you're poor. India and China are rapidly being **wired up** with mobile telecommunications networks. So, in theory, a small farmer from China will be able to exchange e-mail notes with his **counterpart** in India. But this is likely to remain a "theoretical" possibility. How many Chinese small farmers do you know who are ready to use the internet? Like traditional networks, the internet will attract wealth along its **highways**. Those living off the **beaten tracks** will be **cast into obscurity**.

5. _____

In this way, information technology will accelerate **inequality**. As this change **is bound** to alienate and **dispossess** many people, civil **unrest** is **inevitable**. Information warfare will be **commonplace** between individuals, **pressure groups**, companies, and the state.

The dispossessed will **hit** capitalists where they are the most **vulnerable**: in their computer and telecommunications infrastructure. Criminals will be able **to exploit** people in the same way. The internet makes it very difficult **to police rogue** traders because buyer and seller do not live in the same jurisdiction. It's clear what all this means: the **underlying** order of life is **breaking up**. Most of us are blind to the change. Drugs, crime and terrorism, once localized problems, are now organized globally. Unemployment among the semi-skilled will increase as more production jobs are automated.

6. _____

Natural selection will decide which parts of societies will **degenerate** and which **mutate** into stable **survivors** in the new environment of the Information Age. People with computer skills are likely to end up winners. Those without are likely **to emerge** as losers. The power of the nation state will weaken. Communities that invest substantially in communication technologies will **thrive**. Those that don't, or those whose citizens are isolated from the new ways to communicate, will **suffer**. Change is inevitable. The Information Age will be kindest to those who adapt.

2. Match up the words on the left with the definitions on the right.

1. threshold	a. beginning
2. likelihood	b. criminals who do not supply goods customers have paid for
3. jurisdiction	c. demonstrations against the government, riots, etc.
4. keep track of	d. follow and control the development of
5. civil unrest	e. geographical area with a particular legal system
6. rogue traders	f. probability

3. Find words or phrases in the text that mean the same as the following expressions. Several of the words or phrases you are looking for are used metaphorically

1. People without belongings, money and power
2. To take away people's power
3. Disappearing
4. Accept, take account of
5. Fail to survive
6. Promising, hopeful
7. In remote places, a long way from economic centres
8. Become marginal and unimportant
9. Don't see or understand
10. Decline, get much worse
11. Change (from one thing to another)
12. Grow and be healthy

4. Which of the following things does the author of the article believe?

1. A new age of communication is beginning.
2. Consumers avoid paying taxes.
3. Corporations avoid paying taxes.
4. Drug smuggling and terrorism are local problems.
5. Everyone has to adapt to the current political, economic and social changes.
6. Governments can control multinational corporations.
7. Governments will find themselves without enough tax revenue.
8. Indian and Chinese farmers will soon be exchanging e-mails.
9. Information technology will be available to everyone.
10. Information technology will lead to terrorism.
11. Information technology will lead to increased unemployment.
12. Information technology will leave a large number of people without any power.
13. Information technology will make governments stronger.
14. People will have to adapt, as in Darwinian evolution.
15. The internet is very democratic.
16. The internet will lead to increased crime.
17. The internet will make everyone's life easier.
18. The new age of communication will give poor people knowledge and power.

5. Using phrases from the Useful language box below express your point of view on how developing information technologies will influence the following:

a) unemployment;

b) control of national corporations by government;

c) adaptation of people to current political, economic and social changes;

d) spreading of terrorism;

e) strengthening of governments;

f) crime;

g) increasing welfare of poor people;

h) peoples knowledge and power;

i) tax revenues

Useful language

In my opinion ….	*I'm (not) sure that ….*
It's my opinion that ….	*It's very (un) likely that …*
I maintain (that) ….	*Maybe*
I (really) believe	*That's (quite, very) possible*
think (that) ….	*That's (quite, very) likely*
* feel*	

Essential words and phrase

To alienate	– отдалять, заставлять отвернуться
Beaten track	– протоптанный, проторенный путь, дорога
To be bound	– обязательно, непременно
To break up	– разрушать(ся)
To cast into	– ввергнуть в
Certainty	– уверенность
Commonplace	– обычное явление, привычное дело, типичный случай
Counterpart	– партнёр
To degenerate	– вырождаться, ухудшаться, становиться хуже
Disenfranchise	– лишать гражданских (особенно избирательных) прав
To dispossess	– лишать собственности, имущества
Dispossessed	– неимущие

To embrace	– воспользоваться, принимать, воспринимать
To emerge	– выходить, появляться
To evaporate	– исчезать
To exploit	– использовать в своих интересах, пользоваться
To go under	– исчезать, гибнуть, умирать, разоряться
Highway	– главный путь
To hit	– причинять неприятности
Inequality	– неравенство
Inevitable	– неизбежный
Jurisdiction	– подведомственная область
To keep track of	– следить
Likelihood	– вероятность
To live off	– жить за счёт
To mutate	– видоизменять(ся)
Obscurity	– непонятность, неясность
To police	– контролировать, управлять
Pressure group	– влиятельная группа, оказывающая давление на политику
Rogue	– не поддающийся контролю; мошенник, жулик
Rosy	– радужные (перспективы)
To suffer	– страдать
Survivor	– выживший
Tax	– налог
Threshold	– преддверие, отправной пункт, канун, начало
To thrive	– процветать, преуспевать
Ultimate	– исходный, основной, начальный
Underlying	– основной; лежащий в основе
Unrest	– беспокойство, тревога; волнение, смятение
Via	– через
Vulnerable	– уязвимый; ранимый
Warfare	– война, столкновение
To wire up with	– связывать, опутывать

TEXT 7

1. Make nouns by adding suffixes:

- **tion** to act, to compete, to add, to solve, to consult, to segment, to specialize, to dedicate, to inform, to oppose, to identify;
- **ment** to assort, to require, to manage, to involve, to employ, to state.

2. Find Russian equivalents on the right for the English word combinations on the left.

1.	service computing	a. конкурентное преимущество
2.	cloud computing	b. главная цель
3.	shared resources	c. заниматься делами
4.	dedicated department	d. удовлетворять потребности
5.	primary goal	e. эффективно
6.	to meet requirements	f. широкий профиль
7.	in efficient manner	g. соответствующий отдел
8.	to handle needs	h. отвечать требованиям
9.	to handle concerns	i. управленческие информационные системы
10.	competitive advantage	j. объединённые ресурсы
11.	broad background	k. облачные вычисления

SERVICES COMPUTING

Services computing is a computer discipline which sits between traditional information technology (IT) systems and business services. It acts to provide businesses with solutions to their **assorted** computer needs, including web programming and services; **cloud computing,** which involves allowing network users access to a **server-side pool** of **shared resources**; consulting methods for businesses without a dedicated IT department; and business process **utilities.** The primary goal of service computing is to ensure that a business's computer-related **requirements** are **met** in a timely and efficient fashion.

The emerging field of services computing is a branched **subfield** of traditional information technology services. The difference is that, **unlike** traditional information technology firms, which are focused upon a far

broader spectrum of services than **handling** standard business **needs**, firms involved in services computing are specialists, strictly dedicated to **handling** business **concerns**. This is **akin** to how a cardiologist is a specialist of a general surgeon. In services computing, these business-related concerns can range from setting up an individual network to modeling a business plan with information technology **tools**. As specialists, individuals practicing in the field of service computing are theoretically better at managing and handling the basic needs of business.

Services computing is an example of the general trend for increasing specialization within a discipline to fill a market niche. Niche marketing is the practice of focusing one's business **efforts** on a very specific and **identifying** group, segmenting the market into additional parts. In theory, this provides a business involved in services computing — as opposed to general IT practices — with a competitive **advantage.** Just as an individual would likely prefer to have heart surgery conducted by a specialist **as opposed** to a general practitioner, the hope is that individuals will also prefer to employ technicians, engineers, and consultants who have a stated interest and extensive experience in business **affairs**, as opposed to an IT consultant with a broader **background.**

3. Match words in A with their synonyms in B.
A. Primary, affairs, assorted, shared, unlike, to handle, to focus, to employ, background, tools, identifying. to be dedicated;
B. Matters, means, to manage, to be involved, education, to concentrate, as opposed, various, general, certain, main, to hire.

4. Complete the following statements using information from the text.
1. Niche marketing is .... the market in additional parts.
2. Specialists involved in service computing are ………. to handling business concerns.
3. Information technology firms are focused on a ……. spectrum of services than services computing.
4. Services computing is a …….. of traditional information technology.
5. To meet business's computer-related requirements is a main …. of services computing.

6. Cloud computing allows ……. users access to a server-side pool.
7. One of the business-related concerns in service computing is …... business plan.

5. Having read the text answer these questions in your own words.
1. How can you define Services Computing?
2. What kinds of solutions does SC provide?
3. What is the difference between Services Computing and Information Technology?
4. What is the goal of Services Computing?
5. What kind of specialist will Services Computing firm prefer to employ?

6. Speak on the following using all accessible sources.
1. What is niche marketing?
2. What is server-side pool of shared resources?
3. Why do sometimes firms prefer to employ specialists with extensive experience in business affairs than IT consultants?

Essential words and phrases

Affair	– дело
Akin	– похожий, сходный
As opposed	– в противоположность
To assort	– подбирать, классифицировать
Assorted	– многообразный
Background	– образование, квалификация
Cloud computing	– «облачные вычисления» (метод взаимодействия клиента и сервера, при котором клиентская информация обрабатывается и хранится на удалённом сервере, позволяет уменьшать требования к аппаратному и программному обеспечению компьютера клиента)
Dedicated	– предназначенный, занимающийся, соответствующий
To focus efforts	– сосредоточить усилия

To handle concerns	– решать проблемы, заниматься делами
To handle needs	– удовлетворять потребности
To identify	– определять
To meet requirements	– удовлетворять требованиям
Subfield	– подобласть
Server-side pool	– общий, объединённый серверный фонд, резерв
Service computing	– управленческие информационные системы; информационные бизнес-системы
Shared	– общий, объединённый
A tool	– средство, способ
Utility	– обслуживание

TEXT 8

1. Make nouns by adding suffixes-*(t)ion/ation* and translate them into Russian:

to compete, to consider, to evolve, to install, to predict, to create, to operate, to dedicate, to expect, to segment, to collect.

2. Translate the following word combinations into Russian.

Customer survey information, to delve further in something, to create business intelligence group, to undertake a number of activities, general overview, to mine for data, to be in charge of something, to be tied together, valuable insights, targeted marketing campaign, evolving conditions, a core part, tracking of patent filing, a covert surveillance system, corporate newsletters, to take advantage of something.

3. Match the following headings to the appropriate paragraphs of the text.

__ The relation of companies to industrial espionage.
__ Kinds of activities included in BI.
__ Benefits achieved by a company having a business intelligence system.
__ Methods and sources of getting information by the company.
__ Differentiating of BI systems from conventional forms of gathering information.

BUSINESS INTELLIGENCE

1. **Business intelligence** is a general term used to refer to a number of activities a company may **undertake** to gather information about their market or their competitors. Some areas often included under the **blanket heading** of business intelligence are: competition analysis, market analysis, and industry analysis. Some people also consider industrial espionage that operates for information-gathering purposes to be a form of business intelligence.

2. In most cases, a company will either **hire** an outside agency or **create** their own dedicated business intelligence group. This group will then gather information from inside the company about how well the company has been performing and where **improvements** may be made. The group then looks to outside sources, which may include public **records** of other businesses in the same sector, market analysis by third-parties, and customer **survey** information. The group may then **delve** further into specific competitors, both by examining their public information and business model, and in some cases by using an industrial **spy** to **covertly** gather information.

3. Business intelligence systems are contrasted to more classic forms of information gathering by their **interdepartmental** focus and their general **overview** towards business performance. They are also unique in their use of advanced technology and techniques **to mine** for data and **to crunch** that data in the most optimal manner. While a group **in charge of** market analysis might have a strong understanding of the particular sector of the market in which a business operates, their **lack** of the same detailed understanding about specific competitors and the inner management of the company make their information less useful. In a business intelligence model, all these various forms of business improvement **are tied** together so that communication is quick and easy, and each segment helps inform the other segments so their **insights** are even more **valuable** than they would be on their own.

4. Once a business intelligence system is in a place, a company can expect to find improved **turnaround** times on data collection, ideas for

new business initiatives, more **targeted** marketing campaigns, a much more **precise** picture of customer needs and desires, and a strong understanding of how best to compete with top competitors. The improvement in business **agility** that comes with business intelligence is **substantial** in most cases, and allows a company to take better advantage of constantly **evolving** market conditions.

     5. The use of industrial espionage in business intelligence is widely considered something of a grey area. Some businesses choose not **to engage in covert** information gathering, while others consider it a **core** part of a healthy business intelligence program. Many areas commonly referred to as industrial espionage are fully legal, such as careful **tracking** of **patent filings** and **corporate newsletters to predict** where a competitor is moving in the marketplace. Other methods, such as using **bribery** to get information from top researchers, or **installing** covert **surveillance systems** within company **headquarters**, are not.

4. Find words or expressions in the text that mean the following:
1. to be involved in something
2. central element of something
3. hidden watch system
4. to use for one's own benefit
5. gradually developing state of being
6. main rivals
7. exact idea
8. to be responsible for
9. to get data
10. to form a group
11. to process data

5. Translate the following sentences from Russian into English.
1. Группа по бизнес-аналитике может собирать информацию о своих конкурентах.
2. Промышленный шпионаж может быть частью бизнес аналитики.
3. Информация, собранная группой бизнес-аналитики, как правило, используется для повышения эффективности работы компании.

4. Системы бизнес-аналитики используют современные технологии и методы для получения и обработки информации.

5. Внешние агентства, нанятые компанией, могут использовать шпионов для тайного сбора информации.

6. Компания, использующая бизнес-аналитику, имеет более точное представление о потребностях клиентов и о том, как проводить более целенаправленную рекламную компанию.

7. Бизнес-аналитика позволяет компаниям лучше адаптироваться к постоянно изменяющимся рыночным условиям.

8. К законному виду промышленного шпионажа относится прослеживание регистрации патентов и издания корпоративных информационных бюллетеней.

6. Speak on the following.
1. What is BI?
2. What areas are included in BI?
3. In what way do companies carry out BI and what sources do they use?
4. What is the difference between BI and traditional information gathering?
5. Why are various forms of business improvement tied together?
6. What does the usage of BI lead to?
7. What is the relation of some companies to industrial espionage?

Essential words and phrases

Agility	– подвижность, быстрота
A blanket heading	– общий заголовок
Bribery	– взяточничество, подкуп
Intelligence	– сведения, данные разведки, информация, разведывательные данные
Business intelligence	– бизнес-аналитика (общий термин, описывающий концепции и методы для улучшения принятия бизнес-решений с использованием систем и бизнес-данных; интеллектуальные ресурсы предприятия, корпоративный интеллект

Core	– существенный, главный
Corporate news letter	– информационный бюллетень компании
Covertly	– скрыто, тайно
To crunch	– перерабатывать
To delve	– извлекать, рыться, погружаться,
To engage in	– заниматься чем-либо
To evolve	– развиваться
To hire	– нанимать
Improvement	– улучшение, совершенствование
In charge	– отвечать за
Insight	– понимание, догадка, проникновение в суть, нахождение решения, охватывание сути проблемной ситуации
To install	– устанавливать
Interdepartmental	– межведомственный
(To) lack	– отсутствие, отсутствовать, нехватка
To mine	– добывать, собирать
Overview	– представление, обзор, впечатление в общих чертах
Patent filing	– регистрация, хранение патентов
Precise	– точный
To predict	– предсказывать
Records	– сведения, данные
A spy	– шпион
Substantial	– существенный
Surveillance system	– система наблюдения
Survey	– обзор, обследование, исследование
Targeted	– целенаправленный, нацеленный
To be tied	– быть связанным
To track	– прослеживать
Turnaround time	– оборотное время, с учётом времени
To undertake	– предпринимать
Valuable	– ценный

TEXT 9

1. Translate the following word combinations into Russian.

To emerge from interaction, a subset of organizational informatics, detailed consideration of concept, to rely on systems of information, in pursuit of some goal, a key output, distribution of information, output data, to support activity systems.

2. Match words and their definitions.

1. to draw from	a. concerning a particular person or a group; not general
2. to be interested in	b. a general notion
3. output	c. acting on each other
4. to be considered	d. following something to achieve an objective
5. in pursuit of	e. to be taken into account
6. voluntary	f. information delivered by a computer
7. interaction	g. feeling or showing curiosity
8. concept	h. to get from some source
9. private	i. given or done of one's own free will

ORGANIZATIONAL INFORMATICS AND BUSINESS INFORMATICS

Business informatics can be seen to be a **subset** of organizational informatics. Organizational informatics is fundamentally interested in the application of information, information systems and ICT within organizations of various forms including private sector, public sector and **voluntary** sector organizations.

Organizational informatics is interested not in ICT, information systems, information and organizations in isolation but in their **interaction** and **in the effects** that emerge from such interaction. As such, the area **draws** much of its analytic **focus from** the concept of system and the ap-

plication of **systemics**. Three types of organizational system and their interaction are considered: activity systems, information systems and ICT systems.

Organizational informatics also builds its conception of the **relationship** between three types of organizational system around a detailed consideration of the concept of information. Hence the concept of information system is central to the area.

Business organizations are considered as systems of activity which rely on systems of information. Within the modern business, information systems, **in turn, rely on** systems of technology, particularly systems of information and communication technology (ICT).The **distinctions** between these three types of business system are as follows:

An activity system is a logical collection of activities performed by some group of people **in pursuit of** some goal. The key **output** of an organizational activity system is therefore activity or action. Another term now used as a synonym for an activity system is organizational or business process.

An information system is a system of communication between people. Information systems are systems involved in the gathering, processing, distribution and use of information. The key output of an information system is clearly information which is used to support activity systems in organizations.

An ICT system is an organized collection of hardware, software, data and communication technology **designed** to support aspects of some information system. An ICT system outputs data for **interpretation** as information within some activity system.

3. Find words or expressions in the text that mean the following:
Separately
To become visible
Results
Usage
Subgroup or subdivision
Explanation or translation

Difference
Field
To be intended for
To keep or to maintain

4. Are these statements true or false? Correct the false ones.

1. Organizational informatics is designed only for private sector.
2. Organizational informatics includes business informatics as its subdivision.
3. Organizational informatics deals with ICT, information systems, information and organizations separately.
4. The concept of information system is central in organizational informatics.
5. Business systems rely on technology systems, systems of information and business organizations.
6. The result of an organizational activity system is the development of some concept.
7. The output of information system is the information for keeping up activity systems in the organization.
8. An ICT is intended for keeping up aspects of some information system.

5. Answer the following questions to the text.

1. What does organizational informatics involve?
2. In what way is OI interested in ICT, information systems, information and organizations?
3. What three types of organization system are there?
4. Why is the concept of information system considered to be central to the area of organizational informatics?
5. On what systems do information systems rely on within the modern business?
6. What is the key result of an organizational activity system?
7. What definition can you give to IS?
8. Where is the key output of an information system used?
9. What does ICT system involve?
10. What is this system intended for?

Essential words and phrases

Activity system	– система деятельности
To design	– предназначать
Distinction	– отличие
To draw focus from	– отводить внимание
An effect	– результат, следствие
To emerge	– появляться
Goal	– цель
Interaction	– взаимодействие
Pursuit	– выполнение, исполнение, достижение
Output	– результат, выход информации
Relationship	– взаимоотношение
To rely on	– полагаться на
A subset	– подраздел, подмножество
Voluntary	– добровольный, неоплачиваемый

TEXT 10

1. Choose appropriate words in A, B or C to complete the sentences while reading the text.

DIFFERENCES BETWEEN BUSINESS INFORMATICS
AND INFORMATION SYSTEMS

Business Informatics (BI) shows numerous …………. (1) to the discipline of Information Systems (IS) which can mainly be found in English speaking parts of the world. **Nevertheless** there are a few major differences that make Business Informatics very ………… (2) for employers:

Business Informatics includes information technology, like the relevant portions of applied computer science, **to** a much larger **extent**……….. (3) to Information Systems.

Business Informatics has significant constructive **features meaning** that a major focus is on the development of **solutions** for business problems ……… ………. (4) simply describing them.

On the other hand, information systems strongly ………… (5) on explaining **empirical** phenomena of the real world. IS has often been called an "explanation-oriented" **approach**………… (6) the "solution-oriented" BI approach. IS researchers try to explain why things in the real world are the way they are and conduct a lot of empirical …………. (7) **whereas** a BI researcher tries to develop IT solutions for problems they have **observed** or **assumed**. Academics in BI, for example, are often fond of applying new technologies to business problems and doing ………….. (8) studies by building software prototypes. BI students are also taught this constructive approach. Their ability to not only explain reality, but rather ………… (9) it, is what makes them very attractive employees for companies as well as good candidates for entrepreneurs in the business IT field. ………. (10) connections between research and teaching is another tradition of Business Informatics. Recent **insights** .... (11) in research projects become part of the curricula quite fast because most researchers are also lecturers at the same time. The ……….. (12) of scientific and technological progress in BI is quite fast, therefore subjects taught are under permanent **reconsideration** and **revision**.

 1. A differences   B interpretations   C similarities
 2. A organizational   B attractive   C decisive
 3. A compared   B designed   C covert
 4. A rather than   B whereas   C either
 5. A relies   B depends   C focuses
 6. A according   B   in contrast   C leading
 7. A developments   B interpretations   C surveys
 8. A feasibility   B interaction   C approach
 9. A compare   B shape   C analyze
10. A permanent   B real   C tight
11. A gained   B considered   C involved
12. A availability   B pace   C application

2. Choose the phrase A, B or C, which best complete each sentence.

1. Some differences of Business Informatics to Information Systems
    a) make it less in demand.
    в) make it widely spread in English speaking countries.
    c) make it attractive for employees.

2. Business Informatics is a constructive science

    a) because it includes information technology.

    в) because it concentrates on development of solutions of business problems.

    c) because it concentrates on description of business problems.

3. Business Informatics uses solution-orientated approach

    a) rather than explanation-orientated approach.

    в) rather than constructive features.

    c) rather than difference-orientated approach.

4. In order to do feasibility studies academics

    a) should build software prototypes.

    в) should conduct a lot of empirical surveys.

    c) should explain many things in the real world.

5. Because of the fast scientific and technological progress subject related to Business Informatics

    a) must be replaced by new ones.

    в) must be reconsidered and revised.

    c) must remain unchanged.

Essential words and phrases

Academic	– преподаватель, профессор, научный со-трудник высшего учебного заведения
Approach	– подход
To assume	– предполагать
To compare	– сравнивать
In contrast to	– по сравнению, в противоположность
Empirical	– эмпирический, основанный на опыте
Feasibility	– технико-экономическое обоснование, анализ экономической целесообразности
Feature	– особенность, черта
To gain insight	– понять, получить разгадку, решение
To mean	– означать, значить, иметь в виду
Nevertheless	– тем не менее
Pace	– скорость, темп
Rather than	– а не
Reconsideration	– пересмотр
Revision	– переработка

To shape	– создавать
Similarity	– сходство
Solution	– решение
To larger extent	– в большей степени
Tight	– тесный
Whereas	– в то время как

TEXT 11

1. Translate the groups of words of the same root into Russian. Refer to the lost of essential words and phrases when it is necessary.

To close – closed – closely, to encourage – encouraging – encouragement, to execute – executer – executable – executive, to retrieve – retrieval, to oppose – opposition, to specify – specification – specific, complex – complexity, to depend – dependence – dependable – dependent, to create – creative – creativity – creatively, real – reality – to realize, to improve – improvement – improved.

2. Match the words and phrases below which have the same meaning.

1.	master	a.	income
2.	to improve	b.	a usual method
3.	to execute	c.	basic structure
4.	to encourage	d.	to consist of
5.	severely	e.	to be named
6.	complex	f.	to carry out
7.	facilities	g.	model
8.	to be called	h.	to make better
9.	to comprise	i.	means
10.	framework	j.	extremely
11.	practice	k.	not simple
12.	revenue	l.	to give support

3. While reading the text, decide which paragraph could be given one of the following headings.

_____ The definition of business model

_____ Core aspects reflected by a business model

_____ The appearance of business process modeling
_____ Aiming at improving of processes
_____ The results of advances in technology
_____ The aim of BPM

BUSINESS PROCESS MODELING

1. Business Process Modeling (BPM) in systems engineering is the activity of representing processes of an enterprise, so that the current process may be analyzed and improved. BPM is typically performed by business analysts and managers who are seeking to improve process efficiency and **quality**. The process improvements **identified** by BPM may or may not require Information Technology involvement, although that is a common **driver** for the need to model a business process, by creating a **process master**.

2. Change management programs are typically involved **to put** the improved business processes **into practice**. With advances in technology from large **platform vendors**, the **vision** of BPM models becoming fully **executable** (and capable of simulations and **round-trip engineering**) is coming closer to reality every day.

3. In the 1990s the term "process" became a new productivity paradigm. Companies were encouraged to think in processes instead of functions and procedures. **Process thinking** looks at the chain of **events** in the company from purchase to supply, from **order retrieval** to sales etc. The traditional modeling tools were developed to picture time and costs, while modern methods focus on **cross-function** activities. These cross-functional activities have increased severely in number and importance due to the growth of **complexity** and **dependencies**. New methodologies such as business process **redesign**, business process innovation, business process management, integrated business planning among others all "aiming at improving processes across the traditional functions that **comprise** a company".

4. In the field of software engineering the term "business process modeling" **opposed** the common software process modeling, **aiming** to focus more on the state of the practice during software development. In that

time early 1990s all existing and new modeling techniques to picture business processes were considered and called "business process modeling languages." In the Object Oriented approach, it was considered to be an essential step in the specification of Business Application Systems. Business process modeling became the base of new methodologies, that for example also supported data collection, data flow analysis, process flow diagrams and **reporting facilities**. Around 1995 the first visually oriented tools for business process modeling and implementation were being presented.

5. A business model is a **framework** for creating economic, social, and/or other forms of value. The term 'business model' is thus used for a broad range of informal and formal descriptions to represent core aspects of a business, including purpose, offerings, strategies, infrastructure, organizational structures, trading practices, and operational processes and policies.

6. In the most basic sense, a business model is the method of doing business by which a company can **sustain** itself, that is, generate revenue. The business model **spells-out** how a company makes money by specifying where it is positioned in the **value chain**.

4. Match the definitions in the right column to the words in the left column.

1.	to sustain	a. to think about in order to understand or decide
2.	strategy	b. to show visibly or to describe
3.	driver	c. collective name for programs and computer languages
4.	productivity	d. especially an important occurrence
5.	to seek	e. method of procedure in carrying out a scientific or mechanical operation
6.	event	f. to try to find
7.	technique	g. the quantity of output produced per worker
8.	software	h. a thing that communicates motion
9.	to picture	i. a plan or action based on this
10.	to consider	j. to keep in existence

5. Translate the sentences from Russian into English.

1. Моделирование бизнес-процесса используется для анализа и улучшения какого-то процесса на предприятии.

2. Благодаря достижениям в технологии картины (образы) моделей, получаемые при бизнес-моделировании, с каждым днём всё больше приближаются к реальности.

3. Решение проблем с учётом взаимосвязанности процессов означает восприятие их как цепочки событий, имеющих место в компании, а не рассмотрение этих процессов как отдельных функций или процессов.

4. Современные методы моделирования в основном сфокусированы на кросс-функциональной деятельности.

5. Инновация бизнес-процессов, управление бизнес-процессами, интегрированное бизнес-планирование – это примеры новых методологий.

6. Моделирование процесса разработки программ всё больше учитывает положение вещей, существующих на практике.

7. В 1995 году были представлены первые визуальные средства (методы) для моделирования бизнес-процессов.

8. Бизнес-модель может представлять (демонстрировать) основные аспекты бизнеса.

9. Бизнес-модель показывает (определяет), где компания позиционирует в стоимостной цепочке.

6. Answer the questions to the text.

1. What is BPM?
2. What is the purpose of BPM?
3. Why is the vision of BPM coming closer to reality every day?
4. What is meant by process thinking?
5. In what way do modern methods differ from traditional modeling tools?
6. What processes did the appearance of new methodologies in 1990s allow to support?
7. What is the difference between BPM and common software process modeling?

8. When were the first visually-orientated tools for BPM presented?
9. For description of what aspects of business is the term "business model" used?
10. In what way does the business model spell-out how company makes money?

Essential words and phrases

To aim at	– нацеливать на
Complexity	– сложность
To comprise	– составлять, состоять из
To contribute to	– способствовать, содействовать
Cross-function	– кросс-функциональный
Dependence	– зависимость, несамостоятельность, условность
Driver	– носитель, движитель, драйвер
Enactment	– положение, условие, статья
Engineering	– разработка, проектирование, организация
Event	– событие, сделка, операция
Executable	– выполнимый, исполнимый
To foster	– способствовать, благоприятствовать
Framework	– основа
To identify	– определять, устанавливать
Process master	– модель, образец процесса, первый оригинал
To oppose	– противопоставлять
Order retrieval	– поиск заказа
Platform vendor	– вендор, поставщик платформ операционных систем
Process thinking	– решение (рассмотрение) проблем с учётом взаимосвязанности процессов
To put into practice	– осуществлять, приводить в жизнь
Quality	– качество
To redesign	– реорганизовать
Reporting facilities	– средства отчётности
Revenue	– доход
Round-trip engineering	– метод, основанный на циклической разработке

To spell-out	– объяснять
To sustain	– поддерживать, подкреплять
Value chain	– стоимостная цепочка
Vision	– видение, предвидение, образ, картина, представление

TEXT 12

1. Make adverbs by adding ”-ly” and translate them.

Efficient, flexible, entire, basic, beneficial, close, common, essential, external, additional.

2. Find in the right column the words that are close in the meaning to the words in the left column.

1.	to be referred to	a. hopes
2.	to define	b. personnel management
3.	application	c. to cover
4.	to be focused	d. to cooperate
5.	to link	e. to create a new term
6.	to facilitate	f. to comprise
7.	to enhance	g. to be called
8.	to constitute	i. to determine
9.	to coin	j. usage
10.	to collaborate	k. to be concentrated on
11.	to involve	l. to connect
12.	human resource management	m. to make easy
13.	expectations	n. to enlarge

ELECTRONIC BUSINESS

Electronic business, commonly referred to as "e-Business" or "e-business", or an internet business, may be defined as the application of information and communication technologies (ICT) in support of all the activities of business. Commerce constitutes the exchange of products and

services between businesses, groups and individuals and can be seen as one of the essential activities of any business. Electronic commerce focuses on the use of ICT to enable the external activities and relationships of the business with individuals, groups and other businesses.

The term "e-business" was **coined** by IBM's marketing and Internet teams in 1996. Electronic business methods enable companies to link their internal and external data processing systems more efficiently and flexibly, to work more closely with suppliers and partners, and to better satisfy the needs and **expectations** of their customers.

In practice, e-business is more than just e-commerce. While e-business refers to more strategic focus with an emphasis on the functions that **occur** using electronic capabilities, e-commerce is a **subset** of an overall e-business strategy. E-commerce **seeks** to add revenue **streams** using the World Wide Web or the Internet to build and **enhance** relationships with clients and partners and to improve efficiency using the Empty Vessel strategy.

Often, e-commerce involves the application of knowledge management systems. E-business involves business processes **spanning** the **entire value chain**: electronic purchasing and supply chain management, processing orders electronically, **handling** customer **service**, and cooperating with business partners. Special technical standards for e-business **facilitate** the exchange of data between companies. E-business software solutions allow the integration of **intra** and **inter** firm business processes. E-business can be conducted using the Web, the Internet, **intranets, extranets,** or some combination of these.

Basically, electronic commerce (EC) is the process of buying, transferring, or exchanging products, services, and/or information **via** computer networks, including the internet. EC can also be beneficial from many perspectives including business process, service, learning, **collaborative**, community. EC is often **confused** with e-business.

Applications can be divided into three categories:

Internal business systems:

customer relationship management

enterprise resource planning

document management systems

human resources management

Enterprise communication and collaboration:
VoIP
content management system
e-mail
voice mail
Web conferencing
Digital work flows (or business process management)
electronic commerce - business-to-business electronic commerce (B2B) or business-to-consumer electronic commerce (B2C):
internet shop
supply chain management
online marketing
offline marketing

3. Choose the word which best completes each sentence.

1. External and internal data processing systems are …… efficiently by e-business methods.
   - A. enabled
   - B. linked
   - C. defined
2. All activities of business are ……. by information and communication technologies.
   - A. allowed
   - B. exchanged
   - C. supported
3. E-commerce is designed ……. profits of firms via the Internet.
   - A. to increase
   - B. to coin
   - C. to build
4. Intra and inter firm business processes are ……. with special e-business software solution.
   - A. enhanced
   - B. integrated
   - C. involved
5. The companies using electronic business methods …… the needs of their customers much better.
   - A. conduct
   - B. process
   - C. satisfy

6. E-commerce increases ……. with clients and partners via the Internet.
- A. expectations
- B. relationships
- C. orders

4. Translate the following sentences from Russian into English.
1. Коммерция – это один из основных видов деятельности любого бизнеса.
2. Информационные и коммуникативные технологии позволяют устанавливать контакты как с отдельными лицами, так и с компаниями.
3. Электронные бизнес-методы позволяют более тесно работать с поставщиками.
4. Цель электронной коммерции состоит в том, чтобы увеличить потоки прибылей с помощью использования Интернета.
5. Процесс покупки, передачи и обмена продуктами и услугами осуществляется через компьютерные сети.
6. Электронный бизнес включает такие бизнес-процессы, как покупка, руководство цепочкой поставок через Интернет, электронная обработка заказов, предоставление услуг клиентам и сотрудничество с деловыми партнёрами.
7. Электронная коммерция – это подобласть электронного бизнеса.
8. Области применения электронного бизнеса можно подразделить на три категории или группы: внутренние бизнес-системы, сотрудничество и коммуникация с предприятиями и электронная коммерция (между предприятиями и предприятиями и покупателями).

5. Answer the following questions to the text.
1. Which definition can you give to electronic business?
2. What does commerce comprise?
3. When did the term electronic business appear and by whom was it invented?
4. What do electronic business methods enable companies to do?
5. What is the difference between electronic business and electronic commerce?
6. What is electronic commerce designed for?
7. What processes does the entire value chain include?
8. What three categories can applications of EB be divided into?

9. What do special technical standards for electronic business facilitate?
10. How can E-business be generally conducted?

6. Speak on the following:
1. Definition of E-business
2. Capabilities of E-business methods
3. Methods of increasing revenue streams via E-commerce

7. Chris Peters is the manager of the Cambridge Arts Picture House part of a chain of British cinemas. The cinema advertises its programs on the internet, and sends weekly e-mails to 4,000 members in a town with a population of only 112,000 people. Read part of the interview with Chris Peters, and then briefly summarize his explanation of how these publicity tools work using the following words.
website   e-mail   program   members   online

My name is Chris Peters and I am the general manager of the Arts Picture House, Cambridge. My responsibilities are for more or less absolutely everything to do with the building, from the operation on the floor downstairs, to running the bar, marketing, publicity, promotions and of course putting together our very diverse and attractive program of films that we have on offer here.

The internet, the website and the e-mail systems that we use have been sort of foremost in development of the Picture House brand. City Screen, the company behind Picture House, have been pushing that from day one.

……there is a variety of things that you can do. We use it as a marketing tool to plug up-and-coming special events or to tell people about special deals that we have basic information, like ticket prices, location. But one of the main things is that people can obviously look at our program, get a review on the program and obviously of the times that that is showing, and then book online, you know, anything up to sort of midday of the day that particular film is showing.

We offer, you know, we offer a membership scheme here which is very successful. We've got over 4,000 members in total which is streets ahead of any other Picture House cinema. I think the next highest is something like 1,000 to 2,000 so it's a noticeable increase, and what happens, every Monday when the film times are confirmed for the following week, Friday

to Thursday, we will e-mail each of our members the film time and the programs. Again details of any special offers or special events that is happening, every week. So I mean that's a phenomenal task, it takes ages to watch them all go through, but it's, you know it's a worthwhile tool because obviously it's hitting them directly at work or directly at home. Saying, *boof,* this is what we've got showing next week, you know; e-mail back or go and visit the website and book now. Cause as soon as that goes out we update the box office system and we update the website so they should be able to, the mechanic is that they get e-mail, they see the film they want to see, they click into website, book straight away and then their booking's in the bank so to speak.

1.   What are the verbs Chris Peters uses that mean:
1. *Managing* the bar
2. *Planning* the program of films
3. *Emphasizing* or *encouraging* the website and the e-mail systems
4. *To promote* forthcoming special events
5. *To reserve* the ticket *via the internet*
6. *Contacting* people directly at work or at home

2.   What do the expressions in italics mean?
1.'which is *streets ahead'* of any other Picture House cinema?
2. 'that's a *phenomenal task'*
3.'it *takes ages* to watch them all'
4. 'it's a *worthwhile tool'*

Essential words and phrases

To coin	– создавать, выдумывать, изобретать
To confuse	– путать
Collaboration	– сотрудничество
Content management system	– система управления содержимым сайта, программное обеспечение, позволяющее управлять содержимым и структурой сайта
Customer Relationship Management	– система управления клиентами (прикладное программное обеспечение)

To enhance	– увеличивать, усиливать повышать цену, качество
Entire	– весь, целый, полный
Expectation	– ожидание, надежда
To facilitate	– облегчать
To handle service	– предоставлять услугу
Intra	– внутри
Intranet	– интернет сайт доступен только в локальной сети компании
Extranet	– корпоративный веб-портал, предназначенный не только для пользования внутри компании, но и для взаимодействия с внешними контрагентами, клиентами, поставщиками, потенциальными сотрудниками
To occur	– иметь место, происходить
Off-line	– вне сети, к «оффлайновым» методам относятся телерекламы, радиорекламы, информация в печатных изданиях и т.д.
On-line marketing	– Интернет-маркетинг
To seek	– стремиться
To span	– соединять, заполнять, включать
Stream	– поток
Subset	– подгруппа, подмножество
Value chain	– цепочка добавленной стоимости
Via	– через
VoIP (Voiceover IP)	– (IP – телефония) общее название коммуникационных протоколов, технологий и методов, обеспечивающих передачу речевого сигнала по сети Интернет или любым другим IP сетям
Web conferencing	– веб-конференции

ЗАКЛЮЧЕНИЕ

Данное учебное пособие предназначено для студентов вузов экономической направленности, обучающихся по специальности «Бизнес-информатика». Тематика разделов-уроков посвящена актуальным проблемам и ключевым понятиям бизнес-информатики, роли информации в работе менеджера и её влиянии на развитие экономики и социальной жизни общества. Тематика текстов также позволяет ознакомить студентов с видами информационных систем и информационными технологиями на английском языке.

Каждый из разделов-уроков включает англо-русский словарь по определённой тематике, а также разработанные задания и упражнения, позволяющие закрепить лексику урока и отработать навыки перевода текстов с русского языка на английский, расширить активный и пассивный запасы терминологической лексики, тренировать на материале специальной литературы грамматические конструкции. Задания и упражнения также предназначены для детальной отработки: отдельных элементов текста; синонимии; многозначности слов и т.д.

Цель пособия – развитие практических навыков чтения и перевода специальной, оригинальной англоязычной литературы, навыков устной речи и правильного восприятия информации в процессе делового общения.

Данное учебное пособие предполагает приложение в виде электронного издания методической разработки «Современные бизнес-технологии», которая познакомит студентов с самыми новейшими достижениями в области информационных технологий. Разработка будет предназначена для обучения аннотированию и реферированию студентов, обучающихся по специальности «Бизнес-информатика».

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