

ПЕРМСКИЙ  
ГОСУДАРСТВЕННЫЙ  
НАЦИОНАЛЬНЫЙ  
ИССЛЕДОВАТЕЛЬСКИЙ  
УНИВЕРСИТЕТ

# ИНОСТРАННЫЙ ЯЗЫК (АНГЛИЙСКИЙ)

ДЛЯ СОЦИАЛЬНЫХ  
И ГУМАНИТАРНЫХ ИССЛЕДОВАНИЙ



МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ  
РОССИЙСКОЙ ФЕДЕРАЦИИ

Федеральное государственное автономное  
образовательное учреждение высшего образования  
«ПЕРМСКИЙ ГОСУДАРСТВЕННЫЙ  
НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ»

# ИНОСТРАННЫЙ ЯЗЫК (АНГЛИЙСКИЙ)

## ДЛЯ СОЦИАЛЬНЫХ И ГУМАНИТАРНЫХ ИССЛЕДОВАНИЙ

*Допущено методическим советом  
Пермского государственного национального  
исследовательского университета в качестве  
учебно-методического пособия для студентов,  
обучающихся по направлению подготовки бакалавров  
и специалистов экономического факультета*



Пермь 2021

УДК 811.110(075.8)  
ББК 81.2я7  
И683

Составитель: **Е. Г. Михайлова**

**Иностранный язык** (английский) для социальных и гуманитарных исследований [Электронный ресурс] : учебно-методическое пособие / составитель Е. Г. Михайлова ; Пермский государственный национальный исследовательский университет. – Электронные данные. – Пермь, 2021. – 1,84 Мб ; 113 с. – Режим доступа: <http://www.psu.ru/files/docs/science/books/uchebnie-posobiya/mihajlova-inostrannyj-yazyk-dlya-socialnyh-i-gumanitarnyh-issledovanij.pdf>. – Заглавие с экрана.

ISBN 978-5-7944-3771-3

Цель пособия – формирование у студентов лексических навыков профессионально ориентированного чтения, развитие навыка говорения.

Издание отвечает современным программным требованиям к изучению английского языка на неязыковых факультетах. Подготовлено на основе оригинальных британских и американских источников.

УДК 811.110(075.8)  
ББК 81.2я7

*Издается по решению ученого совета  
факультета современных иностранных языков и литератур  
Пермского государственного национального исследовательского университета*

*Рецензенты:* кафедра «Иностранные языки и связи с общественностью» Пермского национального исследовательского политехнического университета (зав. кафедрой – д-р филол. наук, доцент **С. С. Шляхова**);

доцент кафедры «Иностранные языки и связи с общественностью» Пермского национального исследовательского политехнического университета, канд. филол. наук **О. В. Шестакова**

ISBN 978-5-7944-3771-3

© ПГНИУ, 2021  
© Михайлова Е. Г., составление, 2021

## CONTENTS

Методические рекомендации по работе с текстами.....	4
Innovations.....	6
Working remote.....	12
Networking. Crowdfunding.....	23
Agile.....	30
Artificial Intelligence.....	42
Fintech.....	48
Wealth Management.....	59
Stock Market.....	67
Consumption .....	77
Education. New Trends .....	77
Appendix.....	84
I. For and Against Essay.....	84
II. Opinion Essay.....	85
III. Giving Presentations.....	87
IV. Article Review.....	94
SUPPLEMENTARY READING.....	95
Consumer Tech.....	95
Isolation Economy.....	99
Big Data.....	102
The Colours of Economy.....	106
Zero Waste.....	108

## МЕТОДИЧЕСКИЕ РЕКОМЕНДАЦИИ ПО РАБОТЕ С ТЕКСТАМИ

Настоящее учебное пособие предназначено для широкого круга студентов, специализирующихся на социальных и гуманитарных исследованиях. Цель этого пособия – помочь студентам овладеть базисной экономической лексикой для последующего использования при чтении профессионально-ориентированной литературы на языке оригинала, а также научиться понимать и интерпретировать аутентичные тексты и обсуждать вопросы экономической тематики.

Сборник состоит из десяти разделов, дополненных заданиями. Тексты знакомят студентов с современной экономической проблематикой. Все тексты взяты из оригинальных источников.

Тексты предназначены для развития умений изучающего и поискового чтения, включают достаточный лексический материал, необходимый для самостоятельного чтения студентами литературы по специальности на языке оригинала.

Также, в пособие включен раздел *Supplementary Reading*, который содержит дополнительные тексты по изучаемым темам, представленным в этом пособии. Материал из данного раздела может быть предложен студентам для индивидуального внеаудиторного чтения.

В данном пособии студентам не предлагаются предтекстовые задания, направленные на предварительное снятие языковых трудностей текста, так как данное учебное пособие направлено на развитие одного аспекта, чтения, и является дополнительным к базовому курсу. Предполагается, что материалы базового курса помогают студентам облегчить процесс восприятия и понимания содержания текстов.

Послетекстовые задания включают соотношение определений со словами из текста, выбор правильного слова из ряда предложенных, заполнение пропусков в тексте словами, упражнения на перевод с русского языка на английский и с английского на русский, истинные и ложные утверждения, выбор ответа из нескольких предложенных, ответы на вопросы. Также студентам предложены вопросы для обсуждения и коммуникативные задания, выполнение которых требует использования экономических знаний.

Предполагается, что студенты уже имеют сформированное представление о грамматической системе английского языка. Для контроля и дальнейшего совершенствования грамматических навыков представлены упражнения на перевод.

Каждый блок упражнений пособия построен по определенной схеме. Сначала прорабатывается и закрепляется новая тематическая лексика (перевод слов и словосочетаний, соотношение определений со словами из текста, выбор правильного слова из ряда предложенных, заполнение пропусков в тексте словами, упражнения на перевод предложений с русского на английский). Подробная проработка изучаемого лексического материала в разнообразных упражнениях позволяет совершенствовать лексический навык чтения профессионально-ориентированной литературы.

В заключительной части разделов представлены коммуникативные задания, которые помогают обучающемуся лучше понять содержание текста и выводят студентов на обсуждение затронутых в нем проблем.

Повторяемость слов в тренировочных упражнениях способствует выработке у учащихся навыка употребления активной лексики.

В пособии также приводится дополнительный раздел Appendix, где представлена информация для выполнения дополнительных письменных и устных заданий.

При работе с материалами пособия преподаватель может использовать принцип вариативности, ориентируясь на уровень языковой подготовки группы. Рекомендуется сочетать аудиторную и самостоятельную работу студентов.

Данное пособие апробировано в учебном процессе со студентами экономического факультета Пермского государственного национального исследовательского университета.

## INNOVATIONS

Innovation is the process of creating new technologies and using them in the economy. Economists usually use a very broad definition of technology, so when we're talking about innovation, we're not just thinking about new machines or inventions, but any new way of doing things.

Innovation economics is an economic doctrine that reformulates the traditional model of economic growth so that knowledge, technology, entrepreneurship, and innovation are positioned at the center of the model rather than seen as independent forces that are largely unaffected by policy. Innovation economics, also named neo-Schumpertarian economics, new growth economics, endogenous growth theory, new institutional economics, and evolutionary economics, is established on two basic principles: 1) The first principle is that the major aim of economic policy must be to stimulate higher productivity and outstanding innovation. 2) The second principle is that the markets depending on price indications only will not constantly be as effective as smart public-private partnerships in spurring higher productivity and greater innovation. This is in contrast to the two other conventional economic doctrines, neoclassical economics and Keynesian economics.

Innovation economists believe that what primarily drives economic growth in today's knowledge-based economy is not capital accumulation, as claimed by neoclassicalists, but innovation. The major changes in the U.S. economy of the last 15 years have occurred not because the economy accumulated more capital to invest in even bigger steel mills or car factories; rather they have occurred because of innovation. The U.S. economy developed a wide array of new technologies, particularly information technologies, and used them widely. Although capital was needed for these technologies, capital was not the driver; nor was capital a commodity in short supply.

The major drivers of economic growth are productive efficiency and adaptive efficiency. The focus in neoclassical economics is "the study of how societies use scarce resources to produce valuable commodities and distribute them among different people," getting the price signals right to maximize the efficient allocation of scarce resources.

In contrast to neoclassical economics, the focus in innovation economics is the study of how societies create new forms of production, products, and business models to expand wealth and quality of life. Innovation economics is focused on spurring economic actors – from the individual, to the organization or firm, and to broader levels, such as industries, cities, and even an entire nation – to be more productive and innovative. From the standpoint of innovation economists, if government policies to encourage innovation "distort" price signals and result in some minor deadweight

loss to the economy, so be it, because allocative efficiency is not the major factor in driving economic growth in the 21st century knowledge-based economy.

Spurring evolving and learning institutions is the key to growth. Neoclassical economics, which focuses principally on markets and individuals and firms acting in them as atomistic particles responding pretty much exclusively to price signals along supply and demand curves does explain a share of the economy. But innovation in the neoclassical economic model is an exogenous process – a black box that works its magic solely in response to price signals. In this sense, the neoclassical model sees innovation as falling like “manna from heaven”, not something that can be induced by proactive economic policies.

Innovation is quite the buzzword these days. Businesses and governments talk about the power of innovation, universities present themselves as engines of innovation, and cities jockey to create innovation hotspots like Silicon Valley in San Francisco. The process of developing and implementing new technologies really is quite important for economies. Technology is a big factor for explaining why some countries are richer than others, and for determining how fast the economy grows, or if it grows at all. Countries make large investments into researching new ideas and developing those ideas into economically useful things. Some countries, like Israel and South Korea, devote over 4 percent of their national income to research and development.

Investment in research and development was usually either done by the government or by private companies. But now, it’s fairly common for governments to invest directly in companies doing exciting research. For example, since 2008, the US has invested heavily in companies developing clean energy technologies—including the Tesla Motor company. Economists have long fought about how much the government needs to do to promote innovation—a lot of them think it should only fund basic research which no company would have an incentive to do on its own; others think it should play a much more active role.

But increasingly, economists find it more helpful to look at the big picture of how the research at universities and government labs connects with companies in the private sector. They call this the ‘systems of innovation’ approach, as it sees new technologies as coming not from a single company or inventor, but from the interactions between countless organizations and individuals. The iPhone is a great example of how a system of innovation works; while Steve Jobs and Apple got credit for designing the innovative phone, much of the technology that made the phone possible – including the internet, GPS, touchscreens and voice recognition technology – was developed with government money.

## **Tasks**

### **I. Find Russian equivalents for the following:**

invention, entrepreneurship, independent forces, endogenous growth theory, outstanding innovation, public-private partnerships, drivers of economic growth, to spur higher productivity, conventional economic doctrines, knowledge-based economy, capital accumulation, a wide array of new technologies, to allocate scarce resources, to produce valuable commodities, supply and demand curve, to expand wealth and quality of life, an exogenous process, innovation hotspots, to implement new technology, to do research, to promote innovation, incentive.

### **II. Find words and expressions in the text which correspond to the following definitions:**

1. introduction of new ideas, methods, or things;
2. (the study and knowledge of) the practical, especially industrial, use of scientific discoveries;
3. the good use of time and energy in a way that does not waste any;
4. an arrangement where a government and a profit-making company invest in and work on an activity together;
5. an increase in the economy of a country or an area, especially of the value of goods and services the country or area produces;
6. used to describe a company, job, etc. that is based on the use of ideas and information;
7. a popular and exciting place;
8. to give something to someone as their share of a total amount, to use in a particular way;
9. resulting in or providing a large amount or supply of something;
10. the part of a business that tries to find ways to improve existing products, and to develop new ones.

### **III. Answer the questions.**

1. What is innovation?
2. What is innovation economics?
3. What is the main focus in neoclassical economics?

4. What is the main focus in innovation economics?
5. What two principles are important in innovation economics?
6. What is the role of business and government in innovation economics?
7. What is important for economic growth?

**IV. Complete the sentences using the information from the text.**

1. Innovation economy places technology, innovation, entrepreneurship and knowledge..... .
2. Adaptive and productive efficiencies are ..... .
3. Neoclassical economics focuses on ..... .
4. Innovation economics deals with..... .
5. The neoclassical approach relies on predicting the price signal right to efficiently allocate..... .
6. Innovation economics spurs economic actors (organization or firm, individual, industries, nations) to be more..... .

**V. Which of the following statements and words refer to Traditional Neoclassical Doctrine, and which – Innovation Economic Doctrine?**

1. The cause of economic growth is capital aggregation.
2. The causes of economic growth are innovation, knowledge and productivity.
3. Major economic policy aim is economic growth and regulating business phases.
4. The principal operators of growth are dynamic and flexible efficiency.
5. Communities employ limited resources to create valuable products and allocate them between people.
6. Communities design new shapes of production, products or services to increase well-being of population.

**VI. Read the following text about leadership concepts for creating innovation economics. Five sentences have been removed from the text below. For each question, choose the correct answer. There are three extra sentences which you do not need to use.**

Innovation economics relies on the leadership skills that the leader employs. Some of the ways to ensure innovation economics include:

### **Initiating a cross-collaborative culture**

A leader is responsible for bringing his employees together to form a collaborative culture and to be better situated for the changes to come. This process requires both creative and analytical culture and talent. The behavior and skills of the team members influence how people in the organization interact. 1)..... . Learning teams keep the organization from being too trapped and internally focused within their comfort zones. 2)..... They navigate politics, red tapes, and processes to deliver the innovation. Building teams connect the learning and organizing teams. They make new things by applying insights from the learning team and channeling the empowerment from the organizing team.

### **Repeatable processes**

To enjoy long-term economic innovation, leaders must establish repeatable processes that enhance the processes. 3)..... The leader should also design and enhance future scenarios with interconnected blueprints. Lastly, they need to ensure they realize preservation and value creation through ongoing performance.

### **A leader's emotional intelligence**

A leader should influence and inspire the employees under him. 4)..... The impact of innovation economics needs to be continuous for it to be felt. For that reason, then the leader should be futuristic when setting goals. Setting futuristic goals ensure that the company thrives and strives in innovative and creative economy. 5)..... An ecosystem has people with unique skills and perspectives and together the company can overcome challenging times.

1. He argued that evolving institutions, entrepreneurs and technological changes were at the heart of economic growth.
2. There are three kinds of teams in an organization: learning team, organizing team and building team.
3. The term “organizational innovation” refers to the studies of innovation in business and public organizations.

4. When employees are inspired, they strive to make sure the work is done; no one pushes them.
5. One of the processes is to continuously identify innovation opportunities which can be assets, people, and processes for success, markets, guidelines and knowledge of the capabilities.
6. The best innovation teams have people with various skillsets and backgrounds who think and approach things differently.
7. Organizing teams bring the innovation to the market.
8. To achieve the goals, the leader has to create an ecosystem inside and outside the organization.

**VII. There are methodological approaches designed by International Institutions. To investigate interdependence of the sources of economic growth a few methodological approaches and indicators can be used:**

The Global Innovation Index (GII), created by World Economic Forum and INSEAD methodology;

The Human Development Index (HDI), established by United Nations Development Programme (UNDP) methodology;

The Well-being index (WBI), designed by Gallup World Survey and Sustainable Development Solutions Network (SDSN);

**Read the following paragraph about GII. Translate it into Russian.**

The Global Innovation Index (GII), presently accessible for numerous countries, was designed by INSEAD and World Economic Forum to demonstrate level to which countries are answering to the innovation challenges. The GII is constructed from the 84 variables distributed into eight aggregated indicators (pillars) that are arranged as 5 input indicators and 3 output indicators. The 5 input indicators involve: institutions and policies, infrastructure, human capacity, technological sophistication, business markets and capital (WEF, 2017). These indicators present factors that increase the innovation scope. The 3 output indicators incorporate competitiveness, knowledge and wealth. The GII employs reliable information strained from different public or private organizations such as World Bank, International Monetary Fund, etc., and subjective data strained from the Executive Opinion Survey by the World Economic Forum. The innovation system of emerging economies share specific weaknesses, involving a deficiency of experienced human resources, incompetent innovation capacities in firms or companies, and weak cooperation between industries, universities, and research organizations. Above-mentioned weaknesses should be

directed in innovation policies, the utilization of which will depend upon adequate governance.

### **VIII. Internet Search. Find information about HDI and WBI.**

The Human Development Index (HDI), established by United Nations Development Programme (UNDP) methodology;

The Well-being index (WBI), designed by Gallup World Survey and Sustainable Development Solutions Network (SDSN).

### **Resources used in this Unit:**

<https://www.ecnmy.org/learn/your-future/technology-innovation/what-is-innovation/>

<https://www.cleverism.com/lexicon/innovation-economics-definition/>

<https://www.cleverism.com/lexicon/innovation-economics-definition/>

file:///C:/Users/%D0%A1%D0%BE%D1%84%D1%8C%D1%8F/Downloads/LejlaTERZI\_PhDProfessor\_RomanianjournalofEconomicsVolume46\_2018\_June.pdf

<https://dictionary.cambridge.org/dictionary/english/hotspot>

## **WORKING REMOTE**

Even before the global pandemic made working from home temporarily routine for millions, increasing numbers of people had been saying goodbye to their onerous commute to work. Thanks to ever-evolving technologies like Skype, Facetime, Slack, Zoom, Google Hangouts, authenticator apps, and cloud computing—not to mention texting and email—it's no longer necessary to be in an office full-time to be a productive member of the team. In fact, many kinds of work can be done just as effectively, if not more so, from a home office.

It wouldn't be such a strong trend if employers didn't also recognize benefits from their side of the desk. Companies with work-from-anywhere policies can boost employee productivity, reduce turnover, and lower organizational costs, according to recent research at Harvard Business School. Telecommuting workers with very complex jobs who don't require a lot of collaboration or social support can perform better than their office-based counterparts, according to another study.

### ***How to Work Effectively From Home***

Whether you're working remotely one day per week (or more) or full-time, it's important to ensure that you are set up to be productive. This includes

- having a designated workspace with the right technology;

- ways of dealing with kids, pets, and other potential disruptions;
- a schedule that allows for the social contact and stimulation that ordinarily comes from being in a workplace with others.

Here are some strategies and tips to be successful as a remote worker:

- know the ground rules;
- set up a functional workspace;
- get the internet speed you need;
- use phone apps;
- minimize distractions;
- plan extra social interactions.

### ***The Top Types of Work-From-Home Jobs***

Not all work-at-home jobs are for corporate employees. Many people work for firms as freelancers, choosing to form their own businesses. Companies are increasingly turning to independent contractors to fill a variety of positions. Working from home also offers the opportunity for those who have the time and organizational skills to manage two or three jobs at once.

Here are some of the most common work-from-home options. Some are more on the unskilled/entry-level side, while others require specialized training and expertise.

#### Virtual assistants

Think of a virtual assistant as an off-site secretary. A traditional secretary comes with many expenses to a company. Virtual assistants work from home, often communicating with the boss via chat, Facetime, Slack, or another real-time service. They can do most of what a traditional administrative assistant does—responding to emails, creating business documents, calling clients, scheduling appointments, handling social media, bookkeeping and data entry—but at a lower cost. Key talents for this sort of job include good communication skills and some office experience.

#### Translators

International companies need translators all the time. They may translate files and documents, or transcribe and translate conversations and conference calls. People who speak uncommon languages are even more in demand, and these home-based jobs are plentiful.

#### Call center/customer service representatives

Many companies, large and small, outsource their customer service work to home-based agents. Most of these types of jobs entail inbound calls, helping people with orders or account information, but some also require outbound calling. Most also come with a set work schedule—though the pay is often by the hour (or sometimes

minute), while you're on an actual call. The typical qualifications needed for this type of job are good communication and people skills. An outgrowth of the traditional customer service job is that of the chat agent, who answers customer questions live via the company's website or social media.

### Data entry and transcription

Data entry and transcription jobs usually require the same skills and qualifications. Data entry involves entering facts and figures into a software program or spreadsheet. It could involve entering payroll data, catalog or inventory items, or working with a customer relationship management system. Transcription work involves creating documents from audio files. This is typically done for businesses that need documentation of meetings, workshops, conference calls, or podcasts. For both jobs, employers generally look for detail-oriented people with good typing skills.

### Teacher/tutor

With the growth of online education, there is a growing demand for online instructors. Virtual schools are popping up everywhere, offering elementary-, high school- and college-level programs of study. While many online teaching jobs require teaching credentials, jobs for online tutors do not (although an educational background is often desired). Tutors for advanced subjects, such as calculus and physics, can earn a higher hourly rate. There are also opportunities to simply do standardized test scoring at home. Scoring jobs may require a teaching background or a college degree, at a minimum.

It must surely be worth exploring *the pros* and *the cons* of remote employment.

Firstly, let's take a look at some of *the pros*...

#### 1. More freedom and flexibility

The best part about working remotely is that you get to work from anywhere. Instead of being stuck in traffic/on a packed train, and then sitting at the same desk every day, you can have an extra few hours in bed, and then open your laptop sat on your sofa with a nice cup of coffee. There is also the flexibility of when you work too. When working remotely, you are no longer bound by the usual time constraints found when working in an office. Remote workers generally find that they are trusted to set their own hours, and plan their own schedule accordingly.

#### 2. You'll save money

Remote employees can save a ton of money working from home. There is no need to spend money on fuel/public transport for the commute. Morning coffee and lunch is made at home, and unless you have video meetings scheduled, there is no need for remote workers to wear anything more than their pyjamas. All this totals up to an

average saving of around \$4000 (USD) per year in major US cities (according to the compiled results of several surveys).

### 3. You'll teach yourself new skills

Remote workers constantly find themselves learning new skills as and when they need them, on a task-by-task basis. Just as entrepreneurs must proactively create their own solutions, remote workers must do the same, acting entrepreneurially by taking their work seriously, carefully planning their work activities, and always striving for the highest quality in their work.

### 4. Increased talent pool for businesses to pick from

As well as the above, a major positive element of allowing remote workers to be a part of your business is that the potential talent pool expands immensely.

It's common that the best candidates won't live within commuting distance and can't, or aren't willing to relocate. Assembling a team of top employees through remote work from all over the country or even the world is more than doable nowadays, thanks to a variety of interactive technologies. All this means that expensive business trips are virtually eliminated, the need for physical office space is reduced, and increased productivity of employees is due to the flexibility that remote working allows.

OK, so what about *the disadvantages*?

#### 1. It can be a challenge to keep everyone fully in the loop

Even with all of the modern advancements in technology regarding communications and collaboration (conferencing apps, emails, SMS, cloud-sharing services, etc.) nothing can beat being physically present when thrashing out ideas.

Fully remote teams can meet daily and do their best to keep each other in the loop, but what about when the teams have traditional office workers, as well as remote workers? The guys and gals in the office are having daily chats at the water cooler, and thrashing out ideas on whiteboards, how are the remote workers kept in the loop? It's possible, but it is a hurdle that must be overcome.

#### 2. Remote workers can find it harder to feel part of the team

A lack of team cohesion can come as a result of having teams full of remote workers. Remote meetings aren't the same as in-person discussions. The usual difficulties faced are that it may take longer to establish trust, and develop smooth working relationships within a remote team than with an in-person team. There is also the risk that remote employees will be focused only on their part of the work. It takes a lot of work to make sure everyone is up-to-date with each others' progress, and this is something that can be a drain on productivity.

### 3. Keeping motivated and focused can be tough

Motivation is a big issue when it comes to remote working. Some people simply aren't suited to remote work. These types don't have the discipline or temperament. Even if you can stay motivated to get your tasks done, there is the tricky business of keeping yourself focused to contend with.

You don't have people coming past to ask your thoughts on the weekend's game/the latest soap opera scandal, but your home is full of things that can sap your concentration away from your work. Parents might find themselves overwhelmed looking after children, while non-parents can easily find themselves lost in their record collection picking some tracks out to put on to "help them stay in the zone".

If you're not careful, these distractions can multiply when working remotely. Either way, you can try to increase your productivity and motivation through a variety of mac productivity apps or even productivity blogs.

### 4. The risk of burnout

While remote workers can often be more productive than their in-office counterparts, one of the biggest problems remote employees face is burnout. Working from home has been shown to bring an increase in productivity, but it also means that you can find it difficult to disconnect from your work.

Remote workers often find themselves just doing a "little bit extra" before they go to bed, just because they can. As a result, quality downtime away from your workstation becomes rarer and rarer, and mental health certainly suffers as a result. Office employees might stay late, but once they go home, they're home, and can switch off. For remote employees, home is the workplace. This is something that must be properly understood before anyone embarks on a career working from home.

So, what's the answer?

Working from home can be exciting, empowering and even profitable, provided you are realistic about the pros and cons. And what works for one company, team, or individual won't always work for the next.

Whether you are a freelancer, a company part-timer, or a full-time employee who just doesn't hit the office on certain days, it's a way to escape the daily grind. But there are added responsibilities that come with freedom, not to mention planning, foresight, self-discipline, and focus. And hours of uninterrupted hard work.

But as technology continues to advance, and our world grows more, and more connected, it becomes clearer and clearer that remote work trends grow and remote work is going to play a crucial role in the future of business.

It's worthwhile, to honestly consider both the pros and cons of remote work before deciding whether or not it's right for you, or your employees. As many home-based employees will tell you, it's not easier to work from home—it's just a different location.

## **Tasks**

### **I. Find Russian equivalents for the following:**

office-based counterparts, a designated workspace, to deal with disruptions, ground rules, social interactions, virtual assistant, to speak uncommon languages, detail-oriented people, teaching credentials, tutors for advanced subjects, to stick to work schedule, time constraints, to commute, task-by-task basis, to keep each other in the loop, team cohesion.

### **II. Match the following words with the corresponding definitions:**

1 remote working, 2 commute, 3 workspace, 4 schedule, 5 distraction, 6 app, 7 freelance, 8 flexibility, 9 time constraints, 10 productive, 11 motivation, 12 burnout, 13 full-time

- a) to regularly travel a long distance to get to work;
- b) a plan of what someone is going to do and when they are going to do it;
- c) a piece of computer software that does a particular job;
- d) working independently for different companies rather than being employed by one particular company;
- e) the reason why you want to do something;
- f) for all the hours of a week during which it is usual for people to work, study etc.
- g) the feeling of always being tired because you have been working too hard;
- h) when people working for a company work from their homes;
- i) the area in an office, house etc. where you work at a desk;
- j) something that stops you paying attention to what you are doing;
- k) the limited amount of time that is available;
- l) achieving a lot;
- m) the ability to change or be changed easily to suit a different situation.

### III. Translate from Russian into English.

поездка на работу, постоянно развивающиеся технологии, облачная обработка данных, удаленная работа, повышать производительность труда, коллега, рабочее пространство, отвлекающие факторы, опыт, должность начального уровня;

назначать встречу, говорить на редких языках, привлекать внешних подрядчиков, входящий/исходящий звонок, ввод данных, управление взаимоотношениями с клиентами, внимательный к деталям, достоинства и недостатки;

нехватка времени, создать команду, исключить дорогие поездки, развитие современных технологий, сотрудничество, проработать идеи, преодолевать препятствия, держать друг друга в курсе, чувствовать себя частью команды, сталкиваться с трудностями, ровные рабочие отношения, быть в курсе, ослаблять внимание, быть загруженным;

выгорание, рутинная работа, предусмотрительность, непрерывная работа, играть важную роль.

### IV. Read the following text and fill in the blanks with the words below.

job, telework, telecommuting, remote employees, work-life balance, telecommuting workers, mobile workers, commute, employers

#### **Flexible workers tend to be happier with their jobs**

This Forbes headline says it all: “You’re 87% More Likely to Love Your Job If You Work from Home.”

A study conducted by Leadership IQ revealed that just 24 percent of people who work in an office say they love their jobs. But 38 percent of 1)..... (those who use multiple workspaces in and out of the office) and a whopping 45 percent of 2)..... love their jobs.

The opportunity to achieve a better 3)..... undoubtedly plays a huge role in the satisfaction level of 4)..... . Just forgoing a 5)..... can get the day off on a better note. But don’t ignore the influence of other factors, too.

6)..... encourages people to work at their most productive times, not always bound to traditional hours. Chances to move around help eliminate sluggishness, aches, and boredom. And remote workers know that 7)..... involves a great deal of trust on the part of 8)..... . When your manager displays this type of confidence, you’re bound to feel more positive about your 9)..... .

**V. You have read about strategies and tips to be successful as a remote worker. Match the following strategies with the corresponding description. Underline the words or phrases which helped you make your decision.**

- 1) know the ground rules
- 2) set up a functional workspace
- 3) get the internet speed you need
- 4) use phone apps
- 5) minimize distractions
- 6) plan extra social interactions

a) Not everyone has a designated home office, but it's critical to have a private, quiet space for your work. If you can, separate your work area from your personal spaces and use it just for work, not for other activities.

b) If your job involves making long distance and/or international calls, Google Hangouts, WhatsApp, and Skype all let you call over the Internet across the globe on the cheap. And if you and the person you're calling are on the same service, the call will be free.

c) Does your employer require a nine-to-five schedule, or is there flexibility? Are you allowed to work on public Wi-Fi? Which tech tools might you need, such as Zoom for video conferencing, Slack or Microsoft Teams for group chats, or Trello for project management? If you work for someone else, it's important that your employer spells out the ground rules and ensures you have the appropriate equipment, such as a laptop, as well as network access, passcodes, and instructions for remote login, including two-factor authentication. Be sure to do trial runs and work out any problems that might impede your work.

d) If you have a barking dog or a jack-hammering worker outside your windows, consider investing in noise-cancelling headphones, such as Apple's Air Pod Pros. And if the kids are home and you're without childcare (say, during the summer or a natural emergency), see if you and your spouse (or a neighbor in a similar situation) can take turns with care—which may mean you have to talk to your manager about working evening hours.

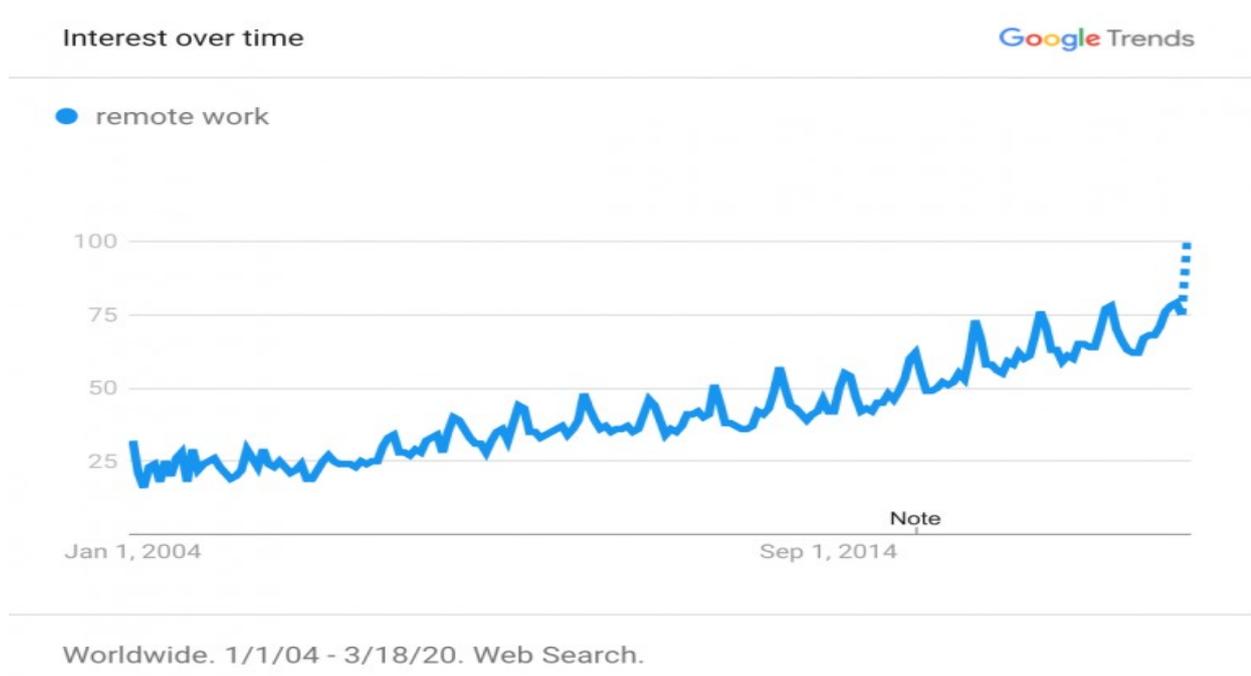
e) Some folks love the thought of working in solitude, but even the most introverted among us can start feeling a little claustrophobic after a few weeks at home, alone, staring at the same project for long hours. It can get lonely. Be ready for that and try to schedule some connect-with-the-outside-world time, like a lunch date (even if you take it at 3 PM), a video chat with a friend, or an exercise class.

f) If you have kids, their Face Timing and Xbox habits may slow your connection and download speeds. Moving as close as you can to your Wi-Fi router can help (devices that are distant tend to draw on bandwidth), or you can consider switching to Ethernet. You'll likely need a dongle since laptops don't have Ethernet ports these days, plus an Ethernet cable to connect your computer to your router.

## VI. Read the following information.

### 20 Interesting Stats About Remote Work

The COVID-19 (Coronavirus) pandemic has forced even the most traditional organizations to wake up and smell the coffee – remote work is the future of work. However, this is not a swift realization. Since the beginning of the millennium, organizations all around the world have been gradually warming up to the idea of remote work. Check out this graph from Google Trends to see how interest in remote work has been increasing with the emergence of cloud technologies. It's now higher than ever before.



When modern-day business leaders speak fondly of remote work, it's because a lot of research has been done on the subject and it unanimously points towards one direction – remote work is here to stay. Teams that have recently made the transition to remote work are scrambling to establish the best processes and find the best tools to support them along the way.

So, did you know that...

1. Remote employees say that they are happy at work 29% more than their on-site peers.

2. 98% of remote employees would like to continue working remotely (at least for some time) for the rest of their careers.
3. Flexibility (in schedule and location) is the #1 reason why people prefer remote work. Collaboration and communication are the biggest challenges.
4. There could be over 1 billion remote workers by 2035.
5. Working from home half of the week can reduce greenhouse emissions by 58 million tons every year.
6. By 2028, 73% of all teams will have remote workers.
7. 86% of remote workers work from their home.
8. 50% of remote workers state that remote work has reduced their sick days.
9. 85% of world's 15000 global businesses have confirmed that location flexibility boosts productivity.
10. There are more than 19K co-working spaces worldwide.
11. Remote companies have a higher percentage of women founders and CEOs than traditional organizations.
12. Loneliness and communication are the biggest challenges for remote workers.

**Internet Search. Use the Internet to find interesting facts about remote work. Share this information with your groupmates.**

## **VII. Questions for discussion.**

1. What does working remote mean?
2. Why do people work remotely?
3. What are the top fields for remote work?
4. What is the best way to work remotely?
5. What equipment will remote workers need?
6. What are the best ways for employees and managers to keep in touch?
7. Which is the biggest struggle with working remotely?
8. How do you think remote work affects older workers?
9. Would you like to work remotely? Why/Why not?

## **VIII. Translate the following sentences into English.**

1. Удалённая работа – это способ занятости, при которой человек (исполнитель) выполняет поставленные задачи дистанционно, контактируя с работодателем через интернет.

2. Удалённый ассистент может быть как фрилансером, так и сотрудником организации, предоставляющей соответствующие услуги. Использование удалённых ассистентов в организации является видом аутсорсинга.
3. Джек Ниллес придумал понятия «teleworking» и «telecommuting», которые в переводе означают «работу на расстоянии». В 1972-м году он высказал идею, что не обязательно держать работников в офисе, так как современные средства связи позволяют поддерживать контакт между сотрудниками на расстоянии.
4. Удаленная работа требует большей самоорганизации и самомотивации.
5. Существуют десятки различных профессий, знания и навыки которых можно применять для удалённой работы.
6. Большинство обычных профессий подходят для удалённой работы, например, бухгалтер, менеджер по продажам, маркетолог, журналист и так далее.
7. Технологии развиваются, многие компании уже не имеют офисов, их сотрудники работают удалённо и находятся по всему миру.
8. Крупные международные корпорации практикуют частично удалённый график для сотрудников, а молодые эффективные стартапы редко рассматривают стандартные офисы как пространство для рабочего процесса.

**IX. What are the major advantages and disadvantages of working remotely? Do you have any tales that you would like to share? Write an essay presenting advantages and disadvantages of working remote. Use the plan below.**

Introduction: Introduce the problem, signal that there are pros and cons without giving an opinion;

Give arguments FOR;

Give arguments AGAINST;

Conclusion: Sum up the discussion and give your opinion.

**Before doing this task, read useful tips and study useful vocabulary from Appendix.**

**Resources used in this Unit:**

<https://www.investopedia.com/personal-finance/work-from-home-guide/>

<https://krisp.ai/blog/remote-work-pros-cons/>

<https://remote.co/4-facts-you-didnt-know-about-the-remote-workforce/>

<https://taskworld.com/blog/20-interesting-stats-about-remote-work/>

<https://ru.wikipedia.org/wiki/>

## **NETWORKING. CROWDFUNDING**

### **NETWORKING**

Networking is the exchange of information and ideas among people with a common profession or special interest, usually in an informal social setting. Networking often begins with a single point of common ground.

Networking is used by professionals to expand their circles of acquaintances, to find out about job opportunities in their fields, and to increase their awareness of news and trends in their fields or in the greater world. (The term computer networking refers to linking multiple devices so that they can readily share information and software resources.)

People generally join networking groups based on a single common point of interest that all members share. The most obvious is a professional affiliation, such as stockbrokers, but some people find effective networking opportunities in a college alumni group, a church or synagogue social group, or a private club.

For professionals, the best networking opportunities may occur at trade shows, seminars, and conferences, which are designed to attract a large crowd of like-minded individuals. Networking helps a professional keep up with current events in the field, and develops relationships that may boost future business or employment prospects. It also provides opportunities to help other people find jobs, make connections, and catch up on the news.

Small business owners network to develop relationships with people and companies they may do business with in the future. These connections help them establish rapport and trust among people in their own communities. Successful business networking involves regularly following up with contacts to exchange valuable information that may not be readily available outside the network.

Business owners and entrepreneurs often join their local chamber of commerce in an effort to promote their business interests and to help others in their community do the same. There are many additional benefits to joining a chamber of commerce, such as receiving deals and discounts from other chamber members, having one's business listed in the chamber directory, and the ability to influence policies related to the area's business and economic activity.

Professional networking platforms provide an online location for people to engage with other professionals, join groups, post blogs, and share information. And, of course, they provide a place to post a resume that can be seen by prospective employers, to search for jobs, or to identify job candidates.

These days, a business-to-business (B2B) customer pipeline can be developed almost entirely through the use of a social networking site. Online networking forums allow professionals to demonstrate their knowledge and connect with like-minded people.

Given the growing number of networking opportunities available to people looking to start or advance their careers, it's important to take some time to explore your options before committing to a specific networking group. While it's tempting for a new business owner or someone looking for a dream job to join as many networks as possible, a better strategy is to target your time and efforts toward those groups that best fit your needs and interests. Many networking organizations will host special meet and greet events that give potential new members an opportunity to attend a meeting before becoming a member.

Once you join a networking group, it's important to become a contributing member. Rather than just using the association simply to further their own goals, people who use networking effectively look to offer something of value to other members of the group. Networking can help you identify opportunities for collaboration, strategic joint ventures, partnerships, and new areas to expand your business.

## **CROWDFUNDING**

Even if you've never heard the term crowdfunding, you've probably come across an example of it on social media. Crowdfunding simply refers to the idea of raising funds for a project or cause through a large group of people online. Individuals or small businesses can take advantage of it to get early-stage support for their ideas.

In most jurisdictions, restrictions apply to who can fund a new business and how much they are allowed to contribute. Similar to the restrictions on hedge fund investing, these regulations are supposed to protect unsophisticated or non-wealthy investors from putting too much of their savings at risk. Because so many new businesses fail, their investors face a high risk of losing their principal.

Crowdfunding has created the opportunity for entrepreneurs to raise hundreds of thousands or millions of dollars from anyone with money to invest. Crowdfunding provides a forum to anyone with an idea to pitch it in front of waiting investors. One of the more amusing projects to receive funding was from an individual who wanted to create a new potato salad recipe. His fundraising goal was \$10, but he raised more than \$55,000 from 6,911 backers. Investors can select from hundreds of projects and invest as little as \$10. Crowdfunding sites generate revenue from a percentage of the funds raised.

There are typically three types of crowdfunding: reward crowdfunding, debt crowdfunding, and equity crowdfunding. With reward crowdfunding, you raise your

funds by reaching out to supporters, who receive a small gift or product sample if they pledge a certain amount. As for debt crowdfunding, you receive a loan and pay it within a specific time frame – some prefer this over a bank loan because it can be much faster. And last, but not least, equity crowdfunding means you give a portion of company ownership to the people who provide you with funding.

When you're looking for a site to fundraise, you want to check for fees as well as if it's an all-or-nothing site. Many platforms will take processing fees from each contributing transaction as well as a small percentage of your overall earnings, while a few sites use an all or nothing model, which means you only get your money if you reach your intended goal. Below there are 7 Internet's best crowdfunding sites of 2021:

Best Overall: Kickstarter

Runner-Up, Best Overall: Indiegogo

Best for Nonprofits: Causes

Best for Creators: Patreon

Best for Personal Fundraising: GoFundMe

Best for Equity Crowdfunding: Circle Up

Best for Business Loans: Lending Club

**Kickstarter** is one of the biggest names when it comes to crowdfunding, known for helping tech and creative entrepreneurs fund their projects before getting a loan or raising money for venture capital. The company has raised over \$5.6 billion with more than 197,425 (as of January 2021) projects funded since its inception in 2009. Potential funders can browse a number of verticals from arts and film to publishing.

It's also easy to use on the fundraising side—begin by setting your goal and then a time period to complete it. Before your campaign can launch, you'll have to be approved by Kickstarter. For each level of money raised per individual, you set a small gift or personal experience for your donor.

Kickstarter is an all-or-nothing platform, which means that you don't get your funds unless you complete your campaign. It also means that the funder's credit card won't be charged unless you meet your campaign goal. The fee is 5% on top of processing payment charges (3% to 5%) per transaction. If you raise enough money, there's a 14-day waiting period for funds.

**Patreon** is popular among digital creatives, such as YouTubers, podcasters, and bloggers. As opposed to you collecting one-off campaign donations, you have a subscription model where patrons regularly contribute a set amount of money every month or per creation. The site allows artists to form relationships with their fans, and creators can even deliver exclusive content to their Patreon subscribers as an incentive to continue funding them. This service works best if you regularly share work on your personal platform. Otherwise, pledgers do have the option of canceling their subscription if creators don't produce content.

Patreon collects a 2.9% fee and 30 cents from each pledge. The site boasts two million active patrons and over 200,000 active creators.

One drawback with Patreon is that it doesn't market creators as much as sites such as Indiegogo or Kickstarter, which have entire verticals and pages on their projects for potential donors to browse.

**Lending Club** is a crowdfunding site that provides up to \$40,000 for personal loans and up to \$500,000 for business loans. It's a form of debt crowdfunding that's usually easy to qualify for and is often faster than going through a regular bank. As opposed to most equity crowdfunding, it won't require things such as business visits or plans and projects.

With Lending Club, you get your loan with a 1-year or 5-year term, according to its website. Interest rates can be high depending on your credit score—the total annualized interest typically ranges from 12.15% to 29.97% (as of April 2021). Lending Club requires at least one year in business, \$50,000 in annual sales, no recent bankruptcies or tax liens, and ownership of at least 20% of the business. In other words, you should be in good financial health.

The most obvious advantage of crowdfunding for a start-up company or individual is its ability to provide access to a larger and more diverse group of investors/supporters. With the ubiquity of social media, crowdfunding platforms are an incredible way for businesses and individuals to both grow their audience and receive the funding they need.

Furthermore, many crowdfunding projects are rewards-based; investors may get to participate in the launch of a new product or receive a gift for their investment. For instance, the maker of a new soap made out of bacon fat may send a free bar to each of its investors. Video games are a popular crowdfunding investment for gamers, who often receive advance copies of the game as a reward.

Equity-based crowdfunding is growing in popularity because it allows startup companies to raise money without giving up control to venture capital investors. In

some cases, it also offers investors the opportunity to earn an equity position in the venture. In the United States, the Securities and Exchange Commission (SEC) regulates equity-based crowdfunding.

Potential disadvantages of crowdfunding include the possible damage to you or your company's reputation caused by "resorting" to crowdfunding, the fees associated with the crowdfunding site, and, at least on some platforms, if you don't reach your funding goal, any finance that has been pledged will be returned to your investors and you will receive nothing.

## **Tasks**

### **I. Find Russian equivalents for the following:**

#### **Networking**

Networking, exchange of information and ideas among people, common interest, informal social setting, common ground, to expand the circles of acquaintances, job opportunities in the fields, to increase the awareness of news and trends, like-minded individuals, to keep up with current events, to boost future business or employment prospects, establish rapport and trust among people, to exchange valuable information, to promote business interests, to engage with professionals, to commit to a specific networking group, to host events, to further goals, opportunities for collaboration, strategic joint ventures, to expand business.

#### **Crowdfunding**

Crowdfunding, fundraising, to take advantage, early-stage support, to contribute, hedge fund, to face a high risk of losing the principal, backers, to generate revenue, reward crowdfunding, debt crowdfunding, equity crowdfunding supporters, to pledge an amount, to receive a loan, to provide with funding, a transaction, overall earnings, venture capital, a vertical, to launch a campaign, to subscribe, to raise money.

### **II. Are the following statements True or False?**

1. Networking is the exchange of information and ideas among business people.
2. People generally join networking groups to find a perspective job.
3. Business-to-Government (B2G) relations can be developed almost entirely through the use of a social networking site.
4. Many networking organizations will host special events to give potential new members an opportunity to attend a meeting before becoming a member.
5. Networking platforms help a professional keep up with current events in the field.

6. People can post a resume using a networking platform.
7. There are not so many benefits in networking.
8. Crowdfunding represents a relatively new source of financial capital.
9. Reward-based crowdfunding is the practice of raising funds from individuals, in return for interest.
10. Many crowdfunding projects are equity-based.

**III. Answer the following question:**

1. What is networking?
2. What professional networks do you know?
3. How to network efficiently?
4. Why is networking useful?
5. Why should businesses network?
6. What is online networking?
7. What is crowdfunding?
8. What do people need crowdfunding for?
9. How does crowdfunding work?
10. What kind of rewards do you get for crowdfunding?
11. Are there any crowdfunding platforms in Russia?
12. How do they work?
13. What are advantages and disadvantages of crowdfunding?
14. Find information about history of crowdfunding.

**IV. Complete the following sentences using information from the texts.**

1. Networking is used by professionals..... .
2. Business owners may network to ..... .
3. Professional networking platforms provide ..... .
4. Many networking organizations will host.....
5. Networking can help you.....
6. Kickstarter, Indiegogo, and GoFundMe are..... .
7. Crowdfunding is the use of ..... .

**V. Read the following text about crowdsourcing. For each question choose the correct answer.**

Crowdsourcing is the practice of utilizing the wisdom of a group for a common goal. It is best applied when attempting to solve complex 1)..... in an innovative way or streamline intricate processes.

The term was first 2)..... by Jeff Howe in a 2006 article about the practice. Though crowdsourcing has existed for centuries in some form, the practice rose to popularity around the same time as the emergence of commerce, social media, and the smartphone 3) ..... . Increased connectivity between people across the globe has been the biggest contributor to the growing interest in the practice.

Crowdsourcing has become an important 4)..... for businesses to leverage in a variety of areas, including data collection, creating operational efficiencies, and general problem-solving. It has allowed many companies to scale at an unprecedented rate, to the point where the practice has revolutionized entire industries.

In order to crowdsource successfully, a business must first break a larger 5) ..... up into individual micro-tasks. Workers will then unite to tackle these micro-tasks in small pieces, effectively expediting the process.

The way a business decides to gather workers that will perform these..... tasks often correlates with the kind of task that needs to be 6)..... . A business may use a digital space – sometimes called a crowdsourcing 7)..... or micro-labor site – to unite these workers into one place and serve them the micro-tasks.

For more complex projects that require workers with particular specialties, the business may utilize a more specialized platform that is industry-specific. For example, many software 8)..... utilize GitHub for this purpose. If a business is gathering customer data, they may turn to social media or a similar consumer-facing platform to crowdsource information from customers.

- |                |                |               |              |
|----------------|----------------|---------------|--------------|
| 1. A decisions | B problems     | C exercises   | D goals      |
| 2. A invented  | B made         | C coined      | D decided    |
| 3. A culture   | B users        | C application | D owner      |
| 4. A decision  | B tool         | C task        | D device     |
| 5. A project   | B exercise     | C problem     | D process    |
| 6. A finished  | B solved       | C completed   | D revised    |
| 7. A group     | B society      | C company     | D platform   |
| 8. A users     | B applications | C companies   | D developers |

## **Resources used in this Unit:**

<https://www.thebalancesmb.com/best-crowdfunding-sites-4580494>

<https://www.investopedia.com/>

<https://www.thestreet.com/personal-finance/education/what-is-crowdsourcing-15026002>

## **AGILE**

Agile is the ability to create and respond to change. The authors of the Agile Manifesto chose “Agile” as the label for this whole idea because that word represented the adaptiveness and response to change which was so important to their approach.

It’s really about thinking through how you can understand what’s going on in the environment that you’re in today, identify what uncertainty you’re facing, and figure out how you can adapt to that as you go along.

The Agile Manifesto and the 12 Principles were written in 2001 by a group of software<sup>17</sup> independent-minded software developers (and a tester) to address issues that software developers faced. As Agile Software Development became more popular, people involved with software development activities but who didn’t personally develop software looked for some way to figure out how these Agile ideas applied in their line of work. When you think of Agile as a mindset, that mindset can be applied to other activities. When you do that, Agile becomes an adjective. It describes how you perform some activity.

When people attempted to move Agile “outside of software”, those efforts have resulted recently in the Business Agility movement. People seeking Business Agility ask themselves, “How might we structure and operate our organization in a way that allows us to create and respond to change and deal with uncertainty?”

The ideas behind business agility arose independently and simultaneously from a variety of sources. It appears that the ideas originated with agile manufacturing in the early 1990’s when members of industry, government, and academia got together to figure out how to make the United States competitive in manufacturing. These ideas were initially described as agile manufacturing and were later described as enterprise agility by some of the people involved in those original discussions.

While the participants didn’t often agree, they did find consensus around four core values:

**Individuals and interactions** over processes and tools

**Working software** over comprehensive documentation

## **Customer collaboration** over contract negotiation

### **Responding to change** over following a plan.

The following **12 Principles** based on the Agile Manifesto are the guiding practices that support teams in implementing and executing with Agility.

1. Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.
2. Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.
3. Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
4. Business people and developers must work together daily throughout the project.
5. Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.
6. The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.
7. Working software is the primary measure of progress.
8. Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
9. Continuous attention to technical excellence and good design enhances agility.
10. Simplicity – the art of maximizing the amount of work not done – is essential.
11. The best architectures, requirements, and designs emerge from self-organizing teams.
12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

Here are some useful terms used in Agile development:

**Business agility** is the ability of an organization to sense changes internally or externally and respond accordingly in order to deliver value to its customers.

**Customer development** is a four-step framework, originally identified by Steve Blank, to discover and validate that you have identified a need(s) that customers have, built the right product to satisfy that customer's need(s), tested the correct methods for acquiring and converting customers, and deployed the right resources in the organization to meet the demand for the product. The framework provides a way to use a scientific approach to validate assumptions about your product and business.

The **four steps** of the framework are:

*Customer discovery* – Understand customers and their needs that you may be able to satisfy.

*Customer validation* – You have a product that will satisfy your customer’s needs.

*Company creation* – You determine whether your product will satisfy all the customers’ needs.

*Company building* – You can grow your organization in order to support the demand for your product.

**The daily meeting** is one of the most commonly practiced Agile techniques and presents opportunity for a team to get together on a regular basis to coordinate their activities.

An Agile team **frequently releases** its product into the hands of end users, listening to feedback, whether critical or appreciative.

In an Agile context, **Incremental Development** is when each successive version of a product is usable, and each builds upon the previous version by adding user-visible functionality.

**The Kanban Method** is a means to design, manage and improve flow for knowledge work and allows teams to start where they are to drive evolutionary change.

The term “Kanban” is Japanese (看板), with the sense of a sign, poster or billboard, and derived from roots which literally translate as “visual board”. Its meaning within the Agile context is borrowed from the Toyota Production System, where it designates a system to control the inventory levels of various parts. It is analogous to (and in fact inspired by) cards placed behind products on supermarket shelves to signal “out of stock” items and trigger a resupply “just in time”. The Toyota system affords a precise accounting of inventory or “work in process”, and strives for a reduction of inventory levels, considered wasteful and harmful to performance. The phrase “Kanban method” also refers to an approach to continuous improvement which relies on visualizing the current system of work scheduling, managing “flow” as the primary measure of performance, and whole-system optimization – as a process improvement approach, it does not prescribe any particular practices.

**A Milestone Retrospective** is a team’s detailed analysis of the project’s significant events after a set period of time or at the project’s end.

**A Niko-Niko Calendar** is updated daily with each team member’s mood for that day. Over time the calendar reveals patterns of change in the moods of the team, or of individual members.

The team installs a calendar on one of the room’s walls. The format of the calendar allows each team member to record, at the end of every workday, a graphic evaluation of their mood during that day. This can be either a hand-drawn “emoticon”, or a colored sticker, following a simple color code, for instance: blue for a bad day, red for neutral, yellow for a good day.

Sprint 33	Mon	Tue	Wed	Thur	Fri	Mon	Tue	Wed	Thur	Fri
Lucinda	😊	😊	😊	😐	😐	😊	😊	😐	😊	😊
Theodore	😡	😐	😡	😡	😡	😐	😊	😐	😡	😐
Virginia	😐	😐	😐	😐	😡	😊	😐	😊	😊	😊
Olga	😊	😊	😊	😐	😐	😊	😊	😐	😊	😐
Elliot	😊	😊	😊	😐	😐	😊	😡	😊	😊	😊
Suresh	😐	😊	😊	😐	😐	😊	😊	😐	😐	😊
Emile	😐	😡	😐	😐	😐	😊	😡	😐	😐	😊

*Picture from Portfolio Visualization and Prioritization for Business Agility – Workshop*

The Japanese word “niko” means “smile”; following a common pattern of word doubling in Japanese, “niko-niko” has a meaning closer to “smiley”. The term “mood board” is also seen. It is an information radiator.

In **Open Space** meetings, events, or conferences, participants create and manage their own agenda of parallel sessions around a specific theme.

Agile teams generally prefer to express **estimates** in units other than the time-honored “man-hours.” Possibly the most widespread unit is “story points.”

**Project Chartering.** A high-level summary of the project’s key success factors displayed on one wall of the team room as a flipchart-sized sheet of paper.

**Retrospective.** The team meets regularly to reflect on the most significant events that occurred since the previous such meeting, and identify opportunities for improvement.

**Scrum** is a process framework used to manage product development and other knowledge work.

Teams following scrum are expected to learn and explore the following values:

*Commitment.* Team members personally commit to achieving team goals.

*Courage.* Team members do the right thing and work on tough problems.

*Focus.* Concentrate on the work identified for the sprint and the goals of the team.

*Openness.* Team members and stakeholders are open about all the work and the challenges the team encounters.

**Respect.** Team members respect each other to be capable and independent.

**Sign Up for Tasks.** Members of an Agile development team normally choose which tasks to work on, rather than being assigned work by a manager.

**Sustainable pace.** The team aims for a work pace that they would be able to sustain indefinitely.

The most basic form of a **task board** is divided into three columns labeled “To Do,” “In Progress,” and “Done.” Cards are placed in the columns to reflect the current status of that task.

The daily meeting is structured around some variant of the following **three questions**: What have you completed? What will you do next? What is getting in your way?

## **Tasks**

### **I. Suggest Russian equivalents for the following:**

to apply Agile ideas in the line of work, a mindset, to perform an activity, business agility, to deal with uncertainty, agile manufacturing, independent-minded software developers, to harness change, competitive advantage, shorter timescale, to convey information, primary measure of progress, to promote sustainable development, to maintain a constant pace, to enhance agility, to adjust behavior, to deliver value to customers, a framework, to validate assumptions, to deploy resources, to meet the demand, customer discovery, customer validation, frequent releases, incremental development, to designate a system, a process improvement approach, a milestone retrospective, to reveal patterns of change, open space meetings, to express estimates, project chartering, to reflect on significant events, to identify opportunities for improvement, to achieve team goals, sprint, to assign work, sustainable pace.

### **II. Use any expressions to make your own sentences.**

For example,

*Most of the international organizations do not **perform an activity** useful to society.*

**III. Work with any English-English dictionary and find definitions for the following:**

manifesto, software, principle, mindset, interaction, collaboration, competitive advantage, timescale, framework, sprint, validation, milestone, retrospective, commitment.

**IV. Work with a dictionary. Translate the following parts of speech.**

agile-agility

able-ability

adapt- adaptive-adaptiveness

certain-uncertain-uncertainty

develop-developer-development

act-active-activate-activity-activation

perform-performer-performance

govern-governor-government

compete-competitor-competition-competitive-competitiveness

collaborate-collaborator-collaboration-collaborative

value-valuable

prefer-preference-preferable-preferably

satisfy-satisfaction

science-scientist-scientific

use-user-usage-usable-usability

evolve-evolution-evolutionary

improve-improvement

participate-participant-participation

sustain-sustainable-sustainability

**V. Check what you have learnt about Agile. Answer the following question.**

1. What is Agile?

2. What is the Agile manifesto?

3. What values and principles guide the agile process?
4. What are the three questions in Agile?
5. What does it mean to be agile as a company?
6. Is Agile project management a good idea?
7. How can an Agile mindset improve morale?
8. What is Kanban?

**VI. See how well you know the vocabulary and processes specific to Agile. Choose the correct answer.**

1. Agile Manifesto explains the following:

1. Individuals and interactions over processes and tools.
2. Working software over comprehensive documentation.
3. Customer collaboration over contract negotiation.
4. Responding to change over following a plan.

A. 1,2

B. 3,4

C. 1,3,4

D. All of the above

2. There are 12 principles followed in Agile Manifesto. Below mentioned are few of them. Which are the correct ones?

1. Simplicity – the art of maximizing the amount of work done – is essential.
2. Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
3. Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.
4. Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.

A. 1,2,3

B. 1,2

C. 2,3,4

D. 1,2,3,4

3. Which set of priorities below is the opposite of the ideals put forth in the Agile Manifesto?

A. Processes and tools over individuals and interactions.

B. Working software over comprehensive documentation.

C. Customer collaboration over contract negotiation.

D. Responding to change over following a plan.

4. Agility is nothing more than the ability of a project team to respond rapidly to change.

A. True

B. False

5. Agile is:

A. A software development process

B. An adjective

C. A mindset

D. A set of best practices

6. Which of the following is NOT one of the 4 Agile values?

A. Individuals & Interactions

B. Planning & Meeting

C. Customer Collaboration

D. Working Software

7. 100% requirements testing achieves good testing.

A. True

B. False

8. What is the difference between a release and a sprint?

- A. A sprint contains many releases.
- B. A release consists of many sprints.
- C. Each is mutually exclusive.

9. Which is not one of the key questions that are answered by each team member at each daily Scrum meeting?

- A. What did you do since the last meeting?
- B. What obstacles are you encountering?
- C. What is the cause of the problems you are encountering?
- D. What do you plan to accomplish by the next team meeting?

## **VII. Translate from English into Russian.**

1. Agile – набор методов и практик для гибкого управления проектами в разных прикладных областях, от разработки ПО до реализации маркетинговых стратегий, с целью повышения скорости создания готовых продуктов и минимизации рисков за счет интерактивного взаимодействия членов команды и быстрой реакцией на изменения.

2. Agile применяется как эффективная практика организации труда небольших групп (которые делают однородную творческую работу) в объединении с управлением ими комбинированным (либеральным и демократическим) методом.

3. Основные идеи Agile:

- люди и взаимодействие важнее процессов и инструментов;
- работающий продукт важнее исчерпывающей документации;
- сотрудничество с заказчиком важнее согласования условий контракта;
- готовность к изменениям важнее следования первоначальному плану.

## **VIII. Read the following information about Agile Games. Play the game Company Trivia Session in your class. Ask as many questions as you can.**

Agile methodology training games assist teams in achieving their project goals. For this reason, agile managers implement them regularly. They can assist teams in

breaking projects up into multiple, smaller projects. They also teach teams how to work together to complete projects within the set iterations. Many managers combine these types of games with motivational games for staff meetings to build productive teams. Read on to discover the best agile methodology training games for team building.

Depending on how many times a game can be played, there are two types of team-building activities: *one-time games* and *multiple-time activities*. One-time activities are a great way to bring the entire team together but are not that much fun the second time you play them. But feel free to play them again when a new member joins the team. When it comes to multiple-time activities, the name says it all. As many times as you play them, they don't fail to entertain the team.

There are also activities that a team can play using tools for *synchronous* or *asynchronous* communication. When remote employees play the game at the same time, that's a real-time game. And when employees can play the activity when they feel it's most convenient for them, then that's an asynchronous activity.

And finally, there are activities that a team can play just for fun. They bring joy and laughter and everyone is incredibly happy while playing. But there are also games that are both fun and practical. Meaning, the team can be entertained and learn how to collaborate in a more concrete way.

**The Human Knot** is an agile methodology training game that gives teams the boost they need to produce higher quality work. To conduct the game, tell your team to stand shoulder-to-shoulder in a large circle. Instruct them to reach their left hand into the middle of the circle and grab another team member's hand. After, tell them to do the same with their right hands. Assure that no one grabs onto their neighbors' hands. Then, encourage your team to try to get out of the knot that they formed without letting go of each other. Teams who play this agile methodology training game learn how to analyze situations and communicate with one another better. As a result, they can hold better business discussions with one another.

Virtual team-building takes place in the online world with the support of technology. The players are not physically present in the same room, but they are using the same tools for online communication. Online games for virtual teams can be played using a range of tools, such as Slack, Zoom, Google Hangouts, Google Docs, Confluence, or PowerPoint. Especially now when the entire world is faced with a pandemic due to the COVID-19 pandemic, playing these easy team building activities for remote employees is more crucial than ever.

Here are some agile games and activities for distributed teams.

## **Virtual Coffee Chat**

Sync. or async.: sync

Practical or just for fun: practical

One-time or regular: regular

Tools required: video conferencing tool like Zoom or Google Hangouts

This activity only requires team members to join on a video conference call once a month. If you're the organizer, set up a time that works for everyone and start chatting.

What makes this virtual coffee chat such an amazing activity is that every meeting has a specific topic. You can get together and discuss favorite meals, most-loved places to travel, or tips for working more productively.

Topics: sharing fun facts about hometowns or countries, etc.

The outbreak motivated people to start a tradition of grabbing virtual coffee with the community once every month.

## **Travel Slack Channel**

Sync. or async.: async

Practical or just for fun: practical

One-time or regular: regular

Tools required: Slack

What makes Slack such an amazing tool is that you can have a separate channel for everything. The marketing team has its own channel, the engineering team their own, and there's also a general channel where everyone can stay up-to-date with current developments.

But who says that all channels have to be strictly work-related?

The suggestion is to create a Travel channel on Slack where everyone can send pictures and share stories of their travels. You can also exchange tips and recommend hotels and attractions.

A Travel channel is only one idea. You have a thousand other options. From #Cooking channels and #Podcasts to #Workout and #ProductivityTips, nothing is impossible with an amazing team and a great company.

## **Company Trivia Session**

Sync. or async.: async

Practical or just for fun: just for fun

One-time or regular: regular

Tools required: email/QuizBreaker

Another one of the remote team-building activities is a game called Company Trivia Session. You pick one person to prepare the questions and send them over to the team. The team will have 24 hours to give their answers.

The game lets colleagues discover slices of their coworkers' life. It makes them feel closer to each other and stronger as a team. The tool used is QuizBreaker.

Here are some examples of fun questions:

*Which team member saw Emilia Clarke at a gas station?*

*Which team member's favorite book is "Cosmos" by Carl Sagan?*

*Who recently got married?*

*Which team member can breakdance?*

*Which team member has been working at the company the longest?*

*Who recently celebrated his third year work anniversary?*

## **Resources used in this Unit:**

<https://www.agilealliance.org/agile-essentials/>

<https://adevait.com/blog/remote-work/agile-games-distributed-teams>

<https://searchsoftwarequality.techtarget.com/quiz/Quiz-yourself-on-Agile-project-management-principles>

<https://www.proprofs.com/quiz-school/story>.

<https://www.bigdataschool.ru/wiki/agile>

<https://ru.wikipedia.org/>

## ARTIFICIAL INTELLIGENCE

Artificial intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think like humans and mimic their actions. The term may also be applied to any machine that exhibits traits associated with a human mind such as learning and problem-solving.

The ideal characteristic of artificial intelligence is its ability to rationalize and take actions that have the best chance of achieving a specific goal. A subset of artificial intelligence is machine learning, which refers to the concept that computer programs can automatically learn from and adapt to new data without being assisted by humans. Deep learning techniques enable this automatic learning through the absorption of huge amounts of unstructured data such as text, images, or video.

Artificial intelligence is based on the principle that human intelligence can be defined in a way that a machine can easily mimic it and execute tasks, from the most simple to those that are even more complex. The goals of artificial intelligence include mimicking human cognitive activity. Researchers and developers in the field are making surprisingly rapid strides in mimicking activities such as learning, reasoning, and perception, to the extent that these can be concretely defined. Some believe that innovators may soon be able to develop systems that exceed the capacity of humans to learn or reason out any subject. But others remain skeptical because all cognitive activity is laced with value judgments that are subject to human experience.

As technology advances, previous benchmarks that defined artificial intelligence become outdated. For example, machines that calculate basic functions or recognize text through optical character recognition are no longer considered to embody artificial intelligence, since this function is now taken for granted as an inherent computer function.

AI is continuously evolving to benefit many different industries. Machines are wired using a cross-disciplinary approach based on mathematics, computer science, linguistics, psychology, and more.

Algorithms often play a very important part in the structure of artificial intelligence, where simple algorithms are used in simple applications, while more complex ones help frame strong artificial intelligence.

The applications for artificial intelligence are endless. The technology can be applied to many different sectors and industries. AI is being tested and used in the healthcare industry for dosing drugs and different treatment in patients, and for surgical procedures in the operating room. Other examples of machines with artificial intelligence include computers that play chess and self-driving cars.

Artificial intelligence also has applications in the financial industry, where it is used to detect and flag activity in banking and finance such as unusual debit card usage

and large account deposits – all of which help a bank's fraud department. Applications for AI are also being used to help streamline and make trading easier. This is done by making supply, demand, and pricing of securities easier to estimate.

Artificial intelligence can be divided into two different categories: *weak* and *strong*. Weak artificial intelligence embodies a system designed to carry out one particular job. Weak AI systems include video games such as the chess example from above and personal assistants such as Amazon's Alexa and Apple's Siri. You ask the assistant a question, it answers it for you. Strong artificial intelligence systems are systems that carry on the tasks considered to be human-like. These tend to be more complex and complicated systems. They are programmed to handle situations in which they may be required to problem solve without having a person intervene. These kinds of systems can be found in applications like self-driving cars or in hospital operating rooms.

Since its beginning, artificial intelligence has come under scrutiny from scientists and the public alike. One common theme is the idea that machines will become so highly developed that humans will not be able to keep up and they will take off on their own, redesigning themselves at an exponential rate.

Another is that machines can hack into people's privacy and even be weaponized. Other arguments debate the ethics of artificial intelligence and whether intelligent systems such as robots should be treated with the same rights as humans.

Self-driving cars have been fairly controversial as their machines tend to be designed for the lowest possible risk and the least casualties. If presented with a scenario of colliding with one person or another at the same time, these cars would calculate the option that would cause the least amount of damage.

Another contentious issue many people have with artificial intelligence is how it may affect human employment. With many industries looking to automate certain jobs through the use of intelligent machinery, there is a concern that people would be pushed out of the workforce. Self-driving cars may remove the need for taxis and car-share programs, while manufacturers may easily replace human labor with machines, making people's skills more obsolete.

There are predictions which tell us about the possibility of millions of people facing unemployment in the next decade due to automation and neural networks. There is significant transformation in business, education, market and government sector due to AI.

### **Sectors where AI can replace humans:**

*Transportation:* With enhanced automation and machine learning we are able to design and create vehicles that are capable of sensing environment and move safely with no or little human input. These vehicles are self-driven and do not require any

human driver for its movement. With the growth in these automated vehicles the demand for professionals like car drivers, sailors and pilot would rapidly dropdown.

*Electronic Commerce:* Electronic-Commerce will undergo massive transformation due to AI. With robots navigating the space to collect products and execute customer orders; to be sent or even delivered to customers, also automatically with autonomous drones and cars. Thus, reducing the demand for salespersons and network stores.

*Healthcare:* Before AI didn't exist, patients required a nurse to monitor patients health at regular intervals and notify the doctor regarding patients health. But now with the help of AI-enabled devices attached to patient's body so that doctors can monitor patient's health at regular intervals and thus enabling him to take necessary decisions regarding patient's health. Thus, there would be no need for a nurse to monitor patients health at regular intervals.

*Teaching:* A virtual assistant is a software which can perform the task for task-based human verbal commands. Nowadays virtual assistants are being designed in such a way that they can teach students like human teacher. Thus, students can study online with the help of virtual assistant at an affordable price and soon the need for teachers and professors would drop down.

#### **Areas where AI is replacing human work:**

*Couriers:* Courier and delivery people are already being replaced by drones and robots within few years automation would dominate this field. It is expected this space would grow by 5% in 2024.

*Information Technology:* It is expected that automation would increase by 12% in 2024. Previously for testing any software code we needed a human for it. But now there is no need for any human tester as automated testing is performed. Thus, reducing the need for IT professionals in industry.

*Real Estate:* Real estate plays a significant role in buying and selling of the home. In this age of information, everything is possible on our fingertips. Online services like magic bricks and 99 acres help customers to search for their properties. Thus, a tech-savvy seller would easily be able to reach customers without any need of agent.

In the long run, we would witness certain jobs that are less relevant and finally obsolete. Though artificial intelligence has numerous benefits if implemented in day-to-day life by making work easier and faster. But it is also becoming a cause for unemployment. So, the biggest challenge would be to implement it in such a way that it doesn't enhance unemployment.

## Tasks

### I. Suggest Russian equivalents for the following:

to take actions, to achieve goals, deep learning techniques, unstructured data, mimicking human cognitive activity, to exceed the capacity of humans to learn, value judgments, be subject to, technology advances, benchmarks, outdated, to take smth for granted, to evolve, application, to detect and flag activity in banking and finance, unusual debit card usage, large account deposits, fraud department, streamline, to estimate, personal assistants, human-like, complicated system, to handle situations, to solve problems without having a person intervene, at an exponential rate, to hack into people's privacy, to be treated with the same rights as humans, fairly controversial, to cause damage, to push out people of the workforce, obsolete skills, neural networks, significant transformation, to replace humans, enhanced automation and machine learning, vehicles capable of sensing environment, human input, task-based human verbal commands, to drop down, real estate, fingertips, tech-savvy, to enhance unemployment.

### II. Make up at least 10 sentences with the words and expressions from exercise I and translate them into Russian.

For example,

*She worked for three years as a **personal assistant** to the managing director.*

### III. Complete the sentences using information from the text.

1. Artificial intelligence refers to .....
2. Artificial intelligence is based on the principle .....
3. Algorithms often play a very important part in .....
4. The goals of artificial intelligence include .....
5. AI is being used across different industries including .....
6. Weak AI tends to be .....
7. Strong AI carries on tasks that are .....
8. There are predictions .....
9. Sectors where AI can replace humans.....
10. Areas where AI is replacing human work.....

#### IV. Answer the following questions.

1. What is AI?
2. What is machine learning?
3. What are the various areas where AI (Artificial Intelligence) can be used?
4. How can AI be applied in financial industry?
5. Give an explanation on the difference between strong AI and weak AI.
6. What are good things about AI?
7. What are some problems with AI?
8. How will AI impact jobs?
9. What are the examples of robots replacing humans?
10. What would happen if intelligent robots replaced humans at most of the work (such as driver, farmer, janitor, teacher, etc.)? Would there be a giant unemployment crisis? Would people start breaking robots apart?
11. What steps do you think should be taken to reduce unemployment caused by robots?

#### V. Complete the gaps with the words below.

- a) machines b) simulate c) research d) difference e) think f) coined g) approach h) knowledge i) imitate j) intelligent

The term artificial intelligence was first 1)..... by John McCarthy in 1956 when he held the first academic conference on the subject. But the journey to understand if 2)..... can truly think began much before that. In Vannevar Bush's seminal work *As We May Think* he proposed a system which amplifies people's own 3) ..... and understanding. Five years later Alan Turing wrote a paper on the notion of machines being able to 4)..... human beings and the ability to do 5) ..... things, such as play Chess. The Turing test is a central, long term goal for AI 6)..... – will we ever be able to build a computer that can sufficiently 7) ..... a human to the point where a suspicious judge cannot tell the 8)..... between human and machine? The Turing test takes a simple pragmatic 9)....., assuming that a computer that is indistinguishable from an intelligent human actually has shown that machines can 10)..... .

## **VI. Translate from Russian into English.**

1. Безработица возникает не из-за повышения производительности труда и внедрения технологий искусственного интеллекта, а из-за несоответствия текущих компетенций населения изменившимся требованиям экономики.

2. Повышение производительности труда за счет цифровизации, внедрение инструментов информационного самообслуживания и искусственного интеллекта снижают стоимость производимых товаров и услуг. В результате у населения появляется возможность приобрести что-нибудь новое, на что у них раньше не было средств.

3. Цифровые технологии сегодня успешно заменяют человека: мы все реже посещаем офисы банков, решая свои финансовые проблемы через смартфон и компьютер, все чаще заказываем товары и бронируем гостиницы в интернете, а новости узнаем не из газет, а из социальных сетей. По этой причине сотрудники банков, магазинов, турфирм, радиостанций и СМИ сегодня массово теряют работу.

## **VII. Write an essay on the following topic:**

The tech community has long debated the threats posed by artificial intelligence.

**Before doing this task read recommendations from Appendix.**

### **Resources used in this Unit:**

<https://www.roboticsbusinessreview.com/ai/new-research-shows-how-ai-will-impact-the-workforce/>

<https://www.investopedia.com/terms/a/artificial-intelligence-ai.asp>

<https://www.business.com/articles/john-barnett-artificial-intelligence-job-market/>

<https://www.geeksforgeeks.org/artificial-intelligence-cause-of-unemployment/>

<https://www.quora.com/>

<https://www.forbes.ru/obshchestvo/373267-mify-o-robotah-pochemu-cifrovizaciya-ne-privedet-k-bezrobotice>

<https://courses.cs.washington.edu/courses/csep590/06au/projects/history-ai.pdf>

## **FINTECH**

Financial technology (Fintech) is used to describe new tech that seeks to improve and automate the delivery and use of financial services. Fintech is utilized to help companies, business owners and consumers better manage their financial operations, processes, and lives by utilizing specialized software and algorithms that are used on computers and smartphones. Fintech, the word, is a combination of "financial technology".

When fintech emerged in the 21st Century, the term was initially applied to the technology employed at the back-end systems of established financial institutions. Since then, however, there has been a shift to more consumer-oriented services and therefore a more consumer-oriented definition. Fintech now includes different sectors and industries such as education, retail banking, fundraising and nonprofit, and investment management to name a few. Fintech also includes the development and use of crypto-currencies such as bitcoin. While that segment of fintech may see the most headlines, the big money still lies in the traditional global banking industry and its multi-trillion-dollar market capitalization.

### **Understanding Fintech**

Broadly, the term "financial technology" can apply to any innovation in how people transact business, from the invention of digital money to double-entry bookkeeping. Financial technology has grown explosively, and fintech, which originally referred to computer technology applied to the back office of banks or trading firms, now describes a broad variety of technological interventions into personal and commercial finance. Fintech describes a variety of financial activities, such as money transfers, depositing a check with your smartphone, bypassing a bank branch to apply for credit, raising money for a business startup, or managing your investments, generally without the assistance of a person. According to EY's ([www.ey.com](http://www.ey.com)) 2017 Fintech Adoption Index, one-third of consumers utilize at least two or more fintech services and those consumers are also increasingly aware of fintech as a part of their daily lives.

### **Fintech's Expanding Horizons**

Up until now, financial services institutions offered a variety of services under a single umbrella. The scope of these services encompassed a broad range from traditional banking activities to mortgage and trading services. In its most basic form, Fintech unbundles these services into individual offerings. The combination of streamlined offerings with technology enables fintech companies to be more efficient and cut down on costs associated with each transaction.

If one word can describe how many fintech innovations have affected traditional trading, banking, financial advice, and products, it's 'disruption,' like financial

products and services that were once the realm of branches, salesmen and desktops move toward mobile devices or simply democratize away from large institutions.

## **Fintech and New Tech**

New technologies, like machine learning/artificial intelligence, predictive behavioral analytics, and data-driven marketing, will take the guesswork and habit out of financial decisions. "Learning" apps will not only learn the habits of users but will engage users in learning games to make their automatic, unconscious spending and saving decisions better. Fintech is also a keen adaptor of automated customer service technology, utilizing chatbots to and AI interfaces to assist customers with basic task and also keep down staffing costs. Fintech is also being leveraged to fight fraud by leveraging information about payment history to flag transactions that are outside the norm.

Some of the most active areas of fintech innovation include or revolve around the following areas:

- *Cryptocurrency and digital cash.*
- *Blockchain technology*, including Ethereum, a distributed ledger technology (DLT) that maintain records on a network of computers, but has no central ledger.
- *Smart contracts*, which utilize computer programs (often utilizing the blockchain) to automatically execute contracts between buyers and sellers.
- *Open banking*, a concept that leans on the blockchain and posits that third-parties should have access to bank data to build applications that create a connected network of financial institutions and third-party providers. An example is the all-in-one money management tool Mint.
- *Insurtech*, which seeks to use technology to simplify and streamline the insurance industry.
- *Regtech*, which seeks to help financial service firms meet industry compliance rules, especially those covering Anti-Money Laundering and Know Your Customer protocols which fight fraud.
- *Robo-advisors*, such as Betterment, utilize algorithms to automate investment advice to lower its cost and increase accessibility.
- *Unbanked/underbanked services* that seek to serve disadvantaged or low-income individuals who are ignored or underserved by traditional banks or mainstream financial services companies.
- *Cybersecurity*, given the proliferation of cybercrime and the decentralized storage of data, cybersecurity and fintech are intertwined.

## **Fintech Users**

There are four broad categories of users for fintech:

- 1) B2B for banks and
- 2) their business clients, and
- 3) B2C for small businesses and
- 4) consumers.

Trends toward mobile banking, increased information, data, and more accurate analytics and decentralization of access will create opportunities for all four groups to interact in heretofore unprecedented ways.

As for consumers, as with most technology, the younger you are the more likely it will be that you are aware of and can accurately describe what fintech is. The fact is that consumer-oriented fintech is mostly targeted toward millennials. Some fintech watchers believe that this focus on millennials has more to do with the size of that marketplace than the ability and interest of Gen Xers and Baby Boomers in using fintech. Rather, fintech tends to offer little to older consumers because it fails to address their problems.

When it comes to businesses, before the advent and adoption of fintech, a business owner or startup would have gone to a bank to secure financing or startup capital. If they intended to accept credit card payments, they would have to establish a relationship with a credit provider and even install infrastructure, such as a landline-connected card reader. Now, with mobile technology, those hurdles are a thing of the past.

## **Regulation and Fintech**

Financial services are among the most heavily regulated sectors in the world. As technology is integrated into financial services processes, regulatory problems for such companies have multiplied. In some instances, the problems are a function of technology. In others, they are a reflection of the tech industry's impatience to disrupt finance.

For example, automation of processes and digitization of data makes fintech systems vulnerable to attacks from hackers. Recent instances of hacks at credit card companies and banks are illustrations of the ease with which bad actors can gain access to systems and cause irreparable damage. The most important questions for consumers in such cases will pertain to the responsibility for such attacks as well as misuse of personal information and important financial data.

Regulation is also a problem in the emerging world of cryptocurrencies. Initial coin offerings (ICOs) are a new form of fundraising that allows startups to raise capital

directly from lay investors. In most countries, they are unregulated and have become fertile ground for scams and frauds. Regulatory uncertainty for ICOs has also allowed entrepreneurs to slip security tokens disguised as utility tokens past the SEC (The U.S. Securities and Exchange Commission) to avoid fees and compliance costs.

Because of the diversity of offerings in fintech and the disparate industries it touches, it is difficult to formulate a single and comprehensive approach to these problems. For the most part, governments have used existing regulations and, in some cases, customized them to regulate fintech.

They have established fintech sandboxes to evaluate the implications of technology in the sector. The passing of General Data Protection Regulation, a framework for collecting and using personal data, in the EU is another attempt to limit the amount of personal data available to banks. Several countries where ICOs are popular, such as Japan and South Korea, have also taken the lead in developing regulations for such offerings to protect investors.

## **Tasks**

### **I. Translate from English into Russian:**

back-end systems, consumer-oriented services, retail banking, fundraising, digital money, to utilize services, to encompass, mortgage, streamlined offerings, disruption, artificial intelligence, predictive behavioral analytics, data-driven marketing, to fight fraud, unconscious spending, digital cash, a distributed ledger technology, all-in-one money management tool, to increase accessibility, to mainstream financial services companies, proliferation of cybercrime, landline-connected card reader, irreparable damage, lay investors, scams and frauds, to avoid fees and compliance costs.

### **II. Match the following terms with their definitions:**

1) fintech 2) bitcoin 3) retail banking 4) fundraising 5) cryptocurrency 6) artificial intelligence 7) blockchain 8) cybersecurity 9) to digitize 10) digital cash

a) banking for individual customers;

b) a type of computer technology which is concerned with making machines work in an intelligent way, similar to the way that the human mind works;

c) digital technology used to support banking and financial services;

d) the state of being safe from electronic crime and the measures taken to achieve this;

e) a digital currency used as a means of payment on the internet;

f) money that can be stored in electronic form and used to buy goods and services, for example over the internet;

g) the act of collecting or producing money for a particular purpose, especially for a charity;

h) a decentralized digital medium of exchange which is created, regulated, and exchanged using cryptography and (usually) open-source software;

i) a system used to make a digital record of all the occasions a cryptocurrency (= a digital currency such as bitcoin) is bought or sold, and that is constantly growing as more blocks are added;

j) to put information into the form of a series of the numbers 0 and 1, usually so that it can be understood and used by a computer.

### **III. Translate from Russian into English.**

владелец бизнеса, управлять финансовыми операциями, специализированное программное обеспечение, серверная система, сбор средств, вести бизнес, система учета методом двойной записи, вмешательство технологии, единое целое, ипотека, оказывать помощь клиентам, сокращать издержки, отделение банка;

подать заявление на кредит, бороться с мошенничеством, история платежей, проверять операции, цифровая наличность, вести учет, иметь доступ к данным, страхование, хранение данных, взаимодействовать, мобильный банк, клиентоориентированный, предназначаться, обеспечивать безопасность денежных средств, стационарный считыватель карт, препятствие;

вырасти в разы, уязвимый, непоправимый вред, первичное размещение токенов; издержки, связанные с соблюдением норм; комплексный подход.

### **IV. Answer the following questions.**

1. What does FinTech stand for?
2. Is fintech a good major?
3. What are the biggest challenges facing FinTech industry?
4. What is a digital transaction?

## **V. Translate the following from Russian into English.**

1. Финтех (финансовые технологии) – это предоставление финансовых услуг и сервисов с использованием инновационных технологий, таких как «большие данные» (Big Data), искусственный интеллект и машинное обучение, роботизация, блокчейн, облачные технологии, биометрия и других.
2. Сейчас финансовые технологии становятся неотъемлемой частью всех видов финансовых услуг: кредитование, платежи и переводы, сбережения, инвестирование, страхование и иные, трансформируя бизнес-модели и повышая их клиентоориентированность.
3. Финтех – развивающаяся отрасль, которая использует технологии для улучшения деятельности в области финансов. Использование смартфонов для мобильного банкинга, инвестирования, онлайн-кредитования и криптовалют являются примерами технологий, направленных на то, чтобы сделать финансовые услуги более доступными для широкой публики.
4. Финансовые технологические компании состоят как из стартапов, так и из созданных финансовых институтов и технологических компаний, пытающихся заменить или расширить использование финансовых услуг, предоставляемых существующими компаниями.
5. Этот термин также используется, когда говорят о фирмах, которые создают и предоставляют такие инновационные финансовые продукты и услуги.
6. Финтех использует технологические инструменты, чтобы помочь потребителям и компаниям более эффективно управлять своими финансовыми транзакциями.
7. Приложения мобильного банкинга позволяют любому, у кого есть смартфон, легко переводить деньги и управлять своими финансами.

## **VI. Read the following text about Cryptocurrency and fill in the blanks with the words below:**

- a) financial transactions   b) blockchain   c) processing fees   d) medium of exchange  
e) traditional financial institutions   f) central authority   g) investment   h) legal tender  
i) digital currency   j) Cash System   k) cryptographic electronic payments   l) ecash

Cryptocurrency is an internet-based 1)..... which uses cryptographical functions to conduct 2)..... . Cryptocurrencies leverage blockchain technology to gain decentralization, transparency, and immutability.

The most important feature of a cryptocurrency is that it is not controlled by any 3)..... : the decentralized nature of the 4) .....makes cryptocurrencies theoretically immune to the old ways of government control and interference.

Cryptocurrencies can be sent directly between two parties via the use of private and public keys. These transfers can be done with minimal 5) ....., allowing users to avoid the steep fees charged by 6)..... .

In 1983, the American cryptographer David Chaum conceived an anonymous cryptographic electronic money called 7)..... . Later, in 1995, he implemented it through Digicash, an early form of 8) .....which required user software in order to withdraw notes from a bank and designate specific encrypted keys before it can be sent to a recipient. This allowed the 9) ..... to be untraceable by the issuing bank, the government, or any third party.

In 2009, the first decentralized cryptocurrency, bitcoin, was created by presumably pseudonymous developer Satoshi Nakamoto. In his announcement of Bitcoin, Satoshi said he developed “A Peer-to-Peer Electronic 10)..... .“

Since the release of bitcoin, other cryptocurrencies have been created.

In June 2021, El Salvador became the first country to accept Bitcoin as 11) .....

The market of cryptocurrencies is fast and wild. Nearly every day new cryptocurrencies emerge, old die, early adopters get wealthy and investors lose money. Every cryptocurrency comes with a promise, mostly a big story to turn the world around. Few survive the first months, and most are pumped and dumped by speculators and live on as zombie coins until the last bagholder loses hope ever to see a return on his 12)..... .

## **VII. Discussion. Read what experts say about cryptocurrencies. What do you think about the future of cryptocurrencies?**

### **Cody Littlewood, the founder and CEO of Codelitt:**

“In 2 years from now, I believe cryptocurrencies will be gaining legitimacy as a protocol for business transactions, micropayments, and overtaking Western Union as the preferred remittance tool. Regarding business transactions – you’ll see two paths: There will be financial businesses that use it for it’s no fee, nearly-instant ability to move any amount of money around, and there will be those that utilize it for its blockchain technology. Blockchain technology provides the largest benefit with trustless auditing, single source of truth, smart contracts, and color coins.”

**Brad Mills, Serial Tech entrepreneur:**

“If the trend continues, the average person will not be able to afford to purchase one whole bitcoin in 2 years. As global economies inflate and markets exhibit signs of recession, the world will turn to Bitcoin as a hedge against fiat turmoil and an escape against capital controls. Bitcoin is the way out, and cryptocurrency as a whole is never going away, it’s going to grow in use and acceptance as it matures.”

**Erik Voorhees, cryptocurrency entrepreneur:**

“It is that narrative of human development under which we now have other fights to fight, and I would say in the realm of Bitcoin it is mainly the separation of money and state.”

**Caleb Chen, London Trust Media:**

“In the next few years, we are going to see national governments take large steps towards instituting a cashless society where people transact using centralized digital currencies. Simultaneously, the decentralized cryptocurrencies – that some even view as harder money – will see increased use from all sectors.”

**VIII. Read the following information about fraud in Fintech and complete the sentences using the information from the text.**

The fintech industry is evolving with every passing day. This industry has shown splendid growth using artificial intelligence and machine learning approaches. With monitored financial transactions online, fintech advancements have risen to new heights. This has led to an increase in businesses with online financial transactions. But there has observed an alarming increase in online fraud proving to be a breakneck for businesses involving online transactions. Fraudsters are also enhancing their strategies in committing frauds and scams for financial gains.

Some most common fintech frauds are phishing or spoofing, identity fraud, account fraud, transaction fraud, well the list goes on. Here is the how you can stay a step ahead of these:

**Spoofing or Phishing Attacks**

Spoofing or phishing is the malicious activity to get access to a victim’s personal information or an organization’s computer networks. This can cause victims to lose important personal information and for organizations, it is an opportunity for cyber-attacks and network infections. Such scams can give access to all your accounts to scammers and this results in other frauds.

**Synthetic Identity Fraud**

Synthetic identity fraud is when a scammer creates new identities by combining fake data with stolen original data. Scammers steal data from different sources like documents, IDs cards, phone numbers, social media accounts, etc. They incorporate this stolen information with fake data. This gives rise to a new fake data which shows no identifiable victim. The identity thief often remains undetected and a continuous threat to business organizations.

#### Account Takeover Frauds

Account frauds are another type of rising fraud in the fintech world. To loot large amounts of money from banks, scammers use this technique. They then disappear after stealing the money. This type of scammer usually has a good credit score and then at once takes large amounts of loans and disappears which usually leads to bad debts and losses for the lending company.

#### Transaction Fraud

Transaction fraud is a dangerous type of fraud that can cause hefty losses to the business. In this scammers use stolen credit cards or identities to make large purchases. It gives very little time for the business to verify the authenticity of the user. The fraud is only detected when the victim reports the loss of money in their account and the company ends up paying the compensation to the victim, the scammer usually going undetected.

#### How To Prevent Frauds?

Scammers commit such fraud by applying for loans. When the businesses somehow lend the loans, it turns out that they have been scammed. This is usually done by using various APIs to look up the customer's history of relationships with banks. The other way to detect and prevent fraud is by identifying high-risk customers by using digital identity verification solutions. This way is economical as it cuts the cost required for manual identification. This type of advanced digital solutions has proven to reduce fraud by a large extent.

1. Most common fintech frauds are .....
2. Spoofing or phishing.....
3. Synthetic identity fraud.....
4. Account frauds are.....
5. Transaction fraud is.....
6. The other way to detect and prevent fraud.....

**IX. Internet search. Test Your Fintech IQ. Read the following questions and try to answer them.**

1. Choose the option which best describes the state of Bank & Fintechs today

- A. Enemies
- B. Frenemies
- C. Strategic Partnerships

2. Top 3 cities considered as the leading Global Fintech Hubs

- A. Tel Aviv, San Francisco, New York
- B. London, Shanghai, San Francisco
- C. Beijing, San Francisco, New York

3. Which ONE of these sectors has been impacted the MOST by Fintech innovation in the last 5 years?

- A. Payments (and Fund Transfers)
- B. Retail/Consumer banking (Incl. Lending)
- C. Investing (institutional asset management) and Wealth management (financial advice, retirement services)

4. Investing and Wealth Management are the TOP two sectors within financial services that have the most FinTech Unicorns (Private firms with valuation >\$1B) worldwide?

- A. True
- B. False

5. Which among the following is the highest focus area for Bank/Fintech partnerships

- A. Digital Account Openings
- B. Payments
- C. Lending & Credit
- D. Fraud/Risk Management

6. Cryptocurrencies can also be referred to as

- A. Coded money
- B. Credit card
- C. Virtual currencies
- D. Cash policy

7. As opposed to central banking systems, cryptocurrencies make use of

- A. Cryptocoin
- B. Coded cash
- C. Gold coins
- D. Decentralized electronic money

8. A public ledger that records bitcoin transactions is called

- A. Script
- B. Code
- C. Blockchain
- D. Program

9. A record-keeping service done through the use of computer processing power is referred to as

- A. Coding
- B. Mining
- C. Scripting
- D. Blocking

**X. Find more information on Fintech. Prepare Article Review. Use useful vocabulary from Appendix.**

UK government set to offer fintech visa ([computerweekly.com](http://computerweekly.com)).

What solution providers must know about fintech companies ([techtarget.com](http://techtarget.com)).

Jobs in fintech bounce back after brief lockdown lull (computerweekly.com).

The Fintech 50 2021 (forbes.com).

The future of payments: Fintech 50 2021 (forbes.com).

How Fintech is opening the gateway to fraud – Scam Detector (scam-detector.com).

### **Resources used in this Unit:**

<https://www.investopedia.com/terms/f/fintech.asp>

<https://dictionary.cambridge.org/>

<https://www.collinsdictionary.com/>

<https://www.cbr.ru/fintech/>

<https://cdto.wiki/>

<https://en.wikipedia.org/wiki/Cryptocurrency>

<https://blockgeeks.com/guides/what-is-cryptocurrency/>

<https://www.proprofs.com/quiz-school/quizshow>

<https://medium.com/shufti-pro/fraud-in-fintech-how-to-detect-and-prevent-69f941fdf050>

## **WEALTH MANAGEMENT**

There are many different kinds of financial planning services, but wealth management is one of the most comprehensive. This offering typically includes advice on multiple financial matters at once, such as planning for retirement, investment management, financial planning, estate planning and more. While wealth management is typically reserved for the more affluent, almost anyone can benefit from the service in one way or another.

There is a wide range of professionals who can provide financial advice, including financial planners, asset managers, investment managers and brokers. While each of these professionals offer their own specialties, wealth managers often provide holistic services. This means that instead of focusing on a specific type of advice, such as retirement planning, portfolio management or estate planning, wealth management rolls all of these important needs into one. A wealth manager can work with you during every step of your financial journey to make sure you're prepared for what lies ahead.

If you're searching for a wealth manager, you may find that their minimum relationship sizes are quite high. That's because they usually work with affluent people and their families, who are also referred to as "high-net-worth individuals". In turn, it's not uncommon for a wealth management firm to ask for a minimum in the range of \$1 million or more.

In addition to the aforementioned financial requirements that are needed to gain access to wealth management, you'll need to be transparent with your advisor about all of your money and goals. In many cases, this means giving them the ability to make investment decisions on their own, though some advisors offer non-discretionary management.

As noted, wealth management is a comprehensive advisory offering that covers a wide range of services. Each of these services is designed to hit on a specific area of your finances. At the same time, though, they are all built to work together towards your ultimate objectives. Services that may be part of the client-wealth manager relationship include:

- Retirement planning
- Estate planning
- Investment management
- General consulting
- Tax planning
- Business succession planning
- Education funding planning
- Debt consolidation and management
- Liquidity planning
- Family office services.

Wealth management also gives you access to a dedicated wealth planner who can guide you through any financial issues you may need advice on. Having this level of close support could be incredibly helpful, as they'll be extremely familiar with your overall financial situation. In addition, this consolidates your services at a single firm, making it easier to view your finances holistically.

While every wealth management firm may have a slightly different process when it managing clients' needs, most follow a path that resembles the following:

1. Gather data
2. Determine the client's objectives
3. Analyze the client's current situation
4. Create and recommend a complete plan for the future
5. Implement the plan
6. Monitor the Plan.

As you'd expect, every wealth management relationship begins with gathering information about the client's financial situation. This includes discerning their risk tolerance, income needs, time horizon, goals and other characteristics. This process can also involve looking at the client's current loans, bank accounts, investments and more.

The more information a client can provide to their wealth manager, the better and more comprehensive the wealth management services will be. From here, advisors and wealth managers will devise a plan and work to implement it. These plans often include both long- and short-term plans.

Another key to the wealth management process is the fact that these relationships are typically ongoing. Given the comprehensive nature of wealth management services, wealth managers will consistently update the plans that they've created for you. By adjusting for changes in a client's financial situation, advisors can ensure that they're providing timely and effective advice.

Wealth management can often be prohibitively expensive for people who don't have substantial wealth. This also means that those with a relatively simple financial situation might find these services to be unnecessary. That said, there are a number of different options out there for people who are nonetheless interested in planning for their financial future.

While wealth managers provide many different types of services, each of them can likely be had on a standalone basis at a financial planning or investment-centric firm. This will undoubtedly cut down on the cost of these services, though you'd miss out on the holistic nature of wealth management. Despite this, a one-off client-advisor relationship might be right for some people.

If you're interested in the above, try finding a financial planner or investment manager. The minimums with these types of advisors are often much lower than their wealth manager counterparts. And while a wealth manager typically charges a percentage of your assets, pure financial planning services may be charged as a fixed or hourly fee.

Cheaper still are robo-advisor services, which automate the management of your investment portfolio. Firms like Wealthfront and Vanguard have robo-advisor services that adhere to specific strategies and make trades for you. For your financial plan, programs like Mint can help you track and manage your spending and savings, all for far cheaper than a wealth manager or even a financial planner. However, in both of these cases, the services you receive won't be near as personalized as what a dedicated wealth manager can provide.

Wealth management is a comprehensive service that can be incredibly helpful in aligning all of your financial planning and investing needs. While other services may

only focus on certain parts of your financial journey, wealth management is designed to go above and beyond. Although these services may be expensive and are often restricted to people above a certain net worth, it can be worth it if your finances are complex enough that you need an extra hand in sorting through it all.

If you don't think you're ready to work with a wealth manager, you may opt for cheaper, less comprehensive options. For example, you can also work with a financial planner or investment manager if you only need help with a specific aspect of your financial picture.

## **Tasks**

### **I. Translate from English into Russian:**

financial planning services, wealth management, advice on multiple financial matters, planning for retirement, investment management, estate planning, affluent, to provide financial advice, asset manager, investment manager, portfolio management, transparent, comprehensive advisory offering, to cover a wide range of services, client-wealth manager relationship, tax planning, business succession planning, education funding planning, debt consolidation, liquidity planning, family office services, to gather data, to determine the client's objectives, current situation, a complete plan, to implement a plan, to monitor.

### **II. Match the following words with their corresponding definitions:**

a) to monitor b) wealth management c) to determine d) portfolio management e) debt consolidation f) to implement g) financial planning h) liquidity i) financial advisor j) estate planning

1. the business or activity of advising people, especially rich people, on how to invest and manage their money and property;
2. the activity of making decisions about how someone should manage their financial arrangements;
3. the activity of managing a collection of shares and other investments that are owned by a particular person or organization;
4. a person whose job is to give advice to other people about money and investments;
5. a method used for managing debt, in which you take out a single new loan and use it to pay back several of your other debts;

6. money, rather than investments or property, or assets that can be changed into money easily;
7. to control or influence something directly, or to decide what will happen;
8. to start using a plan or system;
9. to check regularly the development or progress;
10. the process of deciding what should happen to your money and other assets when you die.

### **III. Translate the following sentences from English into Russian in writing.**

1. The changes to the national health system will be implemented next year.
2. The determination of policy is not your business – your job is to implement it.
3. The number of staff we can take on will be determined by how much money we're allowed to spend.
4. The amount of money the bank is willing to lend is determined by the value of the property.
5. This liquidity problem is very serious for small and medium-sized business.
6. Liquidity has been one of the biggest drawbacks to investing in Africa.
7. The majority of debt consolidation loans took the form of a second mortgage.
8. A good financial adviser will assess a client's goals and tolerance for risk before suggesting investment options.
9. Estate planning just doesn't seem that important until you get married and have children.
10. Investors pay a lot of money for portfolio management services because they do not know enough to pick sensible funds on their own.
11. e cover all aspects of financial planning including creating a budget, saving money, planning for college, retirement, taxes, etc.
12. There is an increasing demand for after-retirement wealth management.
13. You need feedback to monitor progress.

#### **IV. Discussion. Answer the following question.**

1. What is wealth management?
2. What services do wealth managers provide?
3. What needs does wealth management address?
4. What tips can you give for finding a wealth manager?
5. What professionals can provide financial advice?
6. What are the alternatives of wealth management?
7. How do you measure financial success?
8. Do you (Will you) work for money or wealth?

#### **V. Translate from Russian into English.**

1. Управление частным капиталом – комплекс консультационных услуг, охватывающих все аспекты финансовой жизни частного клиента с крупным состоянием – финансовые инвестиции, планирование, бухгалтерский учёт и налогообложение.
2. Клиентам предлагаются методы портфельного управления для достижения их финансовых целей.
3. Консультант по управлению активами является профессионалом высокого уровня.
4. Менеджер по управлению активами разрабатывает план, который будет поддерживать и увеличивать состояние клиента.
5. После того, как первоначальный план разработан, менеджер регулярно встречается с клиентами, чтобы определить новые цели, пересмотреть и сбалансировать финансовый портфель.

#### **VI. Read the following text about lifestyle inflation. Prepare for a discussion. Answer the questions after the text.**

Lifestyle inflation refers to an increase in spending when an individual's income goes up. Lifestyle inflation tends to become greater every time an individual gets a raise and can make it difficult to get out of debt, save for retirement, or meet other big-picture financial goals. Lifestyle inflation is what causes people to get stuck in a cycle of living paycheck to paycheck where they have just enough money to pay the bills every month.

Avoiding lifestyle inflation means that when you receive a raise, you don't increase your purchases. Instead, you make plans for that extra money and use it to further build your financial security. It can be a slippery slope, so if you find yourself itching to spend after scoring a big promotion at work, try these tips to keep the money in your pocket.

### 1. Be Conscious of Lifestyle Inflation

There's a lot to be said for reminding yourself that a raise or bump in salary isn't just "fun" money. If you spend it too fast, it won't feel like much of a raise at all.

### 2. Calculate Real Changes to Budget

After taxes and expenses, the effect of a raise is often less significant than you first think. Take the time to calculate the real change to your budget and determine how that extra money is going to affect you.

### 3. Value Experiences Over Things

If you start making more money, feel free to spend a little bit to improve your lifestyle. However, instead of going for a new car, house, or expensive wardrobe additions, consider investing in experiences.

### 4. Hang Out with Friends Who Have Similar Budgets

Feeling jealous about money and keeping up with the Joneses is part of human nature. Because you want to prove that you can afford the same things as your friends, you spend more than you want to – especially when you've gotten a bump in salary. That's why it pays to spend time with friends who have similar lifestyles and budgets as you.

### 5. Transfer the Excess

Before you start spending new, additional income, determine whether you're happy with your current lifestyle. If your needs are being met, set up an account and transfer the excess so you don't end up spending it needlessly.

### 6. Outline Your Goals

Changing jobs, getting a raise, or getting a promotion all have a way of forcing you to focus on your financial goals, and for good reason. Without clear objectives for you and your family, you could end up spending that extra cash on things that don't bring you closer to those goals.

### 7. Avoid New Debt

Pay off any debts you currently have, starting with the smallest. Throw more than just the minimum payment at them if you want to make a real impact. Then, when

everything is paid off, open savings accounts for things you eventually want, such as a car or home. This can help you put together a larger down payment and often get a lower interest rate when the time comes.

## 8. Make Gradual Changes

It's important to keep in mind that when you increase your lifestyle, you also increase your long-term expenditures. plan your next move, remembering that small, incremental changes are much more sustainable than huge, life-altering decisions.

## 9. Don't Equate Success With Material Things

Stop measuring your success in life with material goods – yours and your neighbors'. The true measures of success are health, love, friends, family, and experiences. As long as you're happy with your quality of life, you shouldn't feel the need to prove it. In fact, you just might find yourself the object of envy when others see how easily you're able to retire, send your kids to college, travel, and otherwise enjoy life while they're still paying off debt into their later years.

Greater income helps you achieve increasing financial goals as you advance through life. Be careful, though: Feeling that you have the right to spend more in order to prove your success is tempting, and could have you blowing through that windfall before it makes a meaningful difference. Instead, make a plan and remember that your success shouldn't be tied to material goods, but rather how you put your money to work for you and your long-term goals.

1. What is lifestyle inflation?
2. Have you ever experienced lifestyle inflation?
3. Is it hard to avoid the lifestyle inflation? How can people avoid it?
4. Do you spend less when you make more money?
5. What should you do if your income increases?
6. How can you tell your friends if they live an inflated lifestyle?
7. Do you agree with tips 3 and 4?
8. Do you equate success with material things?

### **Resources used in this Unit:**

<https://smartasset.com/financial-advisor/what-is-wealth-management>

<https://www.collinsdictionary.com/dictionary/english/>

<https://dictionary.cambridge.org/spellcheck/english/>

<https://www.investopedia.com/terms/w/wealthmanagement.asp>

## STOCK MARKET

**The stock market** (also known as the equity market) refers to the collection of markets and exchanges where the issuing and trading of equities (stocks of publicly held companies), bonds and other sorts of securities takes place, either through formal exchanges or over-the-counter markets, and is one of the most vital components of a free-market economy.

The stock market allows companies to raise money by offering stock shares and corporate bonds. It lets investors participate in the financial achievements of the companies, making money through the dividends (essentially, cuts of the company's profits) the shares pay out and by selling appreciated stocks at a profit, or capital gain. Of course, the downside is that investors can lose money if the share price falls or depreciates, and the investor has to sell the stocks at a loss.

The stock market can be split into two main sections: the primary market and the secondary market. The primary market is where new issues are first sold through **initial public offerings** (IPOs). Institutional investors typically purchase most of these shares from investment banks; the worth of the company "going public" and the amount of shares being issued determine the opening stock price of the IPO. All subsequent trading goes on in the secondary market, where participants include both institutional and individual investors. (A company uses money raised from its IPO to grow, but once its stock starts trading, it does not receive funds from the buying and selling of its shares).

Stocks of larger companies are usually traded through exchanges, entities that bring together buyers and sellers in an organized manner where stocks are listed and traded. Today most stock market trades are executed electronically, and even the stocks themselves are almost always held in electronic form, not as physical certificates.

Two general types of securities are most frequently traded on stock markets: **over-the-counter** (OTC) and listed securities. Listed securities are those stocks traded on exchanges and need to meet the reporting regulations of the SEC as well as the requirements of the exchanges on which they are listed. Over-the-counter securities are traded directly between parties, usually via a dealer network, and are not listed on any exchange, although these securities may be listed on pink sheets. Pink sheet securities often do not meet the requirements for being listed on an exchange and tend to have low float. OTC securities do not need to comply with SEC reporting requirements, so finding credible information on them can be difficult. The lack of information makes investing in pink sheet securities similar to investing in private companies.

The two biggest stock exchanges in the United States are the New York Stock Exchange (NYSE), founded in 1792 and located on Wall Street, and **the Nasdaq**, founded in 1971. The Nasdaq originally featured over-the-counter (OTC) securities, but today it lists all types of stocks. Stocks can be listed on either exchange if they meet the listing criteria, but in general technology firms tend to be listed on the Nasdaq.

The British major companies are traded on **the London Stock Exchange**. London Stock Exchange is one of the world's oldest stock exchanges and can trace its history back more than 300 years. The Exchange is part of the London Stock Exchange Group. Newer and smaller companies trade on over-the-counter market, such as the Unlisted Securities Market in London.

There are many different players associated with the stock market, including stockbrokers, traders, stock analysts, portfolio managers and investment bankers. Each has a unique role, but many of the roles are intertwined and depend on each other to make the market run effectively.

Stockbrokers, also known as registered representatives in the U.S., are the licensed professionals who buy and sell securities on behalf of investors. The brokers act as intermediaries between the stock exchanges and the investors by buying and selling stocks on the investors' behalf.

Stock analysts perform research and rate the securities as buy, sell or hold. This research gets disseminated to clients and interested parties to decide whether to buy or sell the stock. Portfolio managers are professionals who invest portfolios, collections of securities, for clients. These managers get recommendations from analysts and make buy/sell decisions for the portfolio. Mutual fund companies, hedge funds and pension plans use portfolio managers to make decisions and set the investment strategies for the money they hold. Investment bankers represent companies in various capacities such as private companies that want to go public via an IPO or companies that are involved with pending mergers and acquisitions.

If you want to know how the stock market is performing, you can consult an index of stocks for the whole market or for a segment of the market. Indexes are used to measure changes in the overall stock market. There are many different indexes, each made up of a different pool of stocks (though there may be overlap among them). The most popular indexes in the world are the stock indexes of companies traded on the U.S. (DJI, S&P 500, NASDAQ 100) and European (DAX, CAC 40, FTSE 100) Exchanges, as well as the Japanese stock index called NIKKEI 225. In the U.S., examples of indexes include the Dow Jones Industrial Average, NASDAQ Composite Index, Russell 2000, and Standard and Poor's 500 (S&P 500).

**The Dow Jones Industrial Average (DJIA)** is perhaps the best-known index. It was developed in 1884 in the United States. Charles Dow began to count the average change in market prices for 11 major industrial companies. Since 1928, the Dow Jones has been calculated for 30 companies.

The Dow is comprised of the 30 largest companies in the U.S., and the daily Dow shows how their stocks perform on a given day. The Dow average is a price-weighted average, meaning its number is based on the price of the stocks. The S&P 500 is comprised of the 500 largest capitalization stocks traded in the U.S.

The DAX or **DAX 30 Index** (abbreviation for Deutscher Aktienindex) is the most significant stock index in Germany. The index is computed as a weighted average of value of prices of stocks of the 30 largest German stock companies (capitalization is calculated only for shares in free float). The DAX index takes into account the dividends on shares as well. Thus, the DAX 30 reflects the total income of the shareholders.

**The CAC 40 Index** (abbreviation for Cotation Assistée en Continu) is the most significant stock index in France. The index is calculated as a weighted average of the value of the prices of the 40 largest French stock companies. Shares of these companies are in free float and are traded in Euronext Paris Stock Exchange. The CAC 40 Index does not consider stock dividends.

**The FTSE 100 Index** (abbreviation for Financial Times Stock Exchange Index) – is the most significant stock index in Great Britain. The index is computed by the independent company FTSE Group. The FTSE 100 Index is computed as a weighted average of value of prices of stocks of the 100 largest stock companies, trading on the London Stock Exchange (LSE). Stocks of these companies are in free float. Total capitalization of these companies is 80% of capitalization of all stocks, traded on the LSE.

**The Euro Stoxx 50** is the index of stocks of the 50 largest companies of Eurozone working in various sectors of the economy, and characterizes the state of the stock market of the European Union. The index is calculated by Stocks Ltd, the global provider of indexes, which is owned by the Deutsche Boerse Group. The Euro Stoxx 50 is computed as a weighted average of value of prices of stocks of the 50 largest stock companies trading on the Eurex Exchange. The Euro Stoxx 50 index takes into account the volume of paid dividends as well.

A notable specialized index type is those for ethical investing indexes that include only those companies satisfying ecological or social criteria, e.g. those of The Calvert Group, FTSE4Good Index, Dow Jones Sustainability Index, Standard Ethics Italian Index and Wilderhill Clean Energy Index.

In 2010, the OIC (Organization of Islamic Cooperation) announced the initiation of a stock index that complies with Islamic law's ban on alcohol, tobacco and gambling. Other such equities, such as **the Dow Jones Islamic Market World Index**, already exist.

As a financial barometer, the stock market has become an integral and influential part of decision-making for everyone from the average family to the wealthiest executive.

## **Tasks**

### **I. Suggest Russian equivalents for the following:**

stock market, securities, over-the-counter market, bond, capital gain, prices depreciate, to sell at a loss, primary market, secondary market, to go public, IPO, listed security, dealer network, to meet the listing criteria, stock index, to take into account, to reflect, shareholder, total income, free float, to comply with law.

### **II. Find words and expressions in the text which correspond to the following definitions:**

1. profit that is made when asset is sold for more than it cost;
2. to become a public company (a company that has shares owned by the public);
3. an official list of the average price of shares in a group of companies on a particular market;
4. initial public offering; an occasion when a company issues shares on a stock market for the first time;
5. one of the bonds or shares that are traded on the main financial markets;
6. in the US, information on shares in very small companies that are traded on a stockmarket or over the counter;
7. a place where companys shares are bought and sold;
8. a share index of about 30 leading companies, whose movements show the direction of the New York stock market as a whole;
9. an official order or law that forbids something from being used or done.

**III. Work with a business dictionary and find what the following words and abbreviations mean:**

Hang Seng Index, S&P 500, Nikkei average, FTSE SmaLL Cap Index.

**IV. Answer the following questions.**

1. What is the stock market?
2. What is NYSE?
3. When was the New York Stock Exchange created?
4. How many companies make up Dow Jones Industrial Average?
5. What is the purpose of the DJIA?
6. Name any company on the DJIA today.
7. How does the stock market work?
8. What is stock trading?
9. What are the performance indicators?
10. What factors do you think affect stock market?
11. Who works on the stock market?
12. Why is the stock market important?
13. Why are more people taking interest in the stock exchange?
14. What professions are associated with financial markets?

**V. Complete the sentences with one of the following words:**

a) share    b) appreciate    c) over-the-counter    d) capital gain    e) stockbroker  
f) index    g) gambling    h) dividend

1. The securities can be sold any business day by placing an order with a .....
2. Friendly companies and banks alone hold 56% of all ..... in Germany's listed companies.
3. The Egyptian pound has .....against European currencies, and this is not good for Egyptian exporters.
4. The company raised its regular..... on common shares 19% to 25 cents.
5. The Standard & Poor's ..... of 500 stocks was down 0.17 point to 396.47.

6. Paribas said much of its profit increase came from the sale of an office building for a ... of FF 1.3 billion.

7. here were sharp gains among smaller stocks, particularly in the ..... market.

8. The defendants are accused of illegal ..... and conspiracy.

## VI. Translate from Russian into English.

1. Доу-Джонс является старейшим среди существующих американских рыночных индексов. Этот индекс был создан для отслеживания развития промышленной составляющей американских фондовых рынков. Индекс охватывает 30 крупнейших компаний США. В настоящее время многие из компаний, входящих в индекс, не принадлежат к отрасли промышленности. Первоначально индекс рассчитывался как среднее арифметическое цен на акции охваченных компаний.

2. Одной из задач фондовой биржи является предоставление централизованного места, где может происходить как продажа ценных бумаг их первым владельцам, так и вторичная их перепродажа.

3. Фондовый рынок – это совокупность рынков и бирж, где происходит торговля акциями, облигациями и другими видами ценных бумаг на официальных биржах или внебиржевых рынках. Фондовый рынок является одним из наиболее важных элементов рыночной экономики.

## VII. Read the text about types of stocks and answer the questions after the text.

### Types of Stocks: Understanding the Different Categories

Investing in the stock market has historically been one of the most important pathways to financial success. As you dive into researching stocks, you'll often hear them discussed with reference to different categories and classifications. Here are the major types of stocks you should know.

#### Common stock and preferred stock

Most stock that people invest in is common stock. *Common stock* represents partial ownership in a company, with shareholders getting the right to receive a proportional share of the value of any remaining assets if the company gets dissolved. Common stock gives shareholders theoretically unlimited upside potential, but they also risk losing everything if the company fails without having any assets left over.

*Preferred stock* works differently, as it gives shareholders a preference over common shareholders to get back a certain amount of money if the company dissolves. Preferred shareholders also have the right to receive dividend payments before common shareholders do. The net result is that preferred stock as an investment often more closely resembles fixed-income bond investments than regular common stock. Often, a company will offer *only* common stock, and trading in common shares tends to have much higher volumes than preferred share trading.

### **Large-cap, mid-cap, and small-cap stocks**

Stocks also get categorized by the total worth of all their shares, which is called market capitalization. Companies with the biggest market capitalizations are called large-cap stocks, with mid-cap and small-cap stocks representing successively smaller companies.

There's no precise line that separates these categories from each other. However, one often-used rule is that stocks with market capitalizations of \$10 billion or more are treated as large-caps, with stocks having market caps between \$2 billion and \$10 billion qualifying as mid-caps and stocks with market caps below \$2 billion getting treated as small-cap stocks.

Large-cap stocks are generally considered to be safer and more conservative as investments, while mid-caps and small-caps have greater capacity for future growth but are riskier.

### **Domestic stocks and international stocks**

You can categorize stocks by where they're located. For purposes of distinguishing domestic U.S. stocks from international stocks, most investors look at the company's official headquarters.

However, it's important to understand that a stock's geographical category doesn't necessarily correspond to where the company gets its sales. **Philip Morris International** (NYSE: PM) is a great example, as its headquarters are in the U.S., but it sells its tobacco and other products exclusively outside the country. Especially among large multinational corporations, it can be hard to tell from business operations and financial metrics whether a company is truly domestic or international.

### **Growth stocks and value stocks**

Another categorization method distinguishes between two popular investment methods. Growth investors tend to look for companies that are seeing their sales and profits rise quickly. Value investors look for companies whose shares are inexpensive, whether relative to their peers or to their own past stock price.

Growth stocks tend to have higher risk levels, but the potential returns can be extremely attractive. Successful growth stocks have businesses that tap into strong and rising demand among customers, especially in connection with longer-term trends throughout society that support the use of their products and services. Competition can be fierce, though, and if rivals disrupt a growth stock's business, it can fall from favor quickly. Sometimes, even just a growth slowdown is enough to send prices sharply lower, as investors fear that long-term growth potential is waning.

Value stocks, on the other hand, are seen as being more conservative investments. They're often mature, well-known companies that have already grown into industry leaders and therefore don't have as much room left to expand further.

### **Dividend stock and nondividend stocks**

Many stocks make dividend payments to their shareholders on a regular basis. Dividends provide valuable income for investors, and that makes dividend stocks highly sought after among certain investment circles. Technically, paying even \$0.01 per share qualifies a company as a dividend stock.

However, stocks don't *have* to pay dividends. Nondividend stocks can still be strong investments if their prices rise over time. Some of the biggest companies in the world don't pay dividends, although the trend in recent years has been toward having more stocks making dividend payouts to their shareholders.

### **Cyclical stocks and noncyclical stocks**

National economies tend to follow cycles of expansion and contraction, with periods of prosperity and recession. Certain businesses have greater exposure to broad business cycles, and investors therefore refer to them as cyclical stocks.

Cyclical stocks include shares of companies in industries like manufacturing, travel, and luxury goods, because an economic downturn can take away customers' ability to make major purchases quickly. When economies are strong, however, a rush of demand can make these companies rebound sharply.

By contrast, noncyclical stocks, also known as secular or defensive stocks, don't have those big swings in demand. Some examples would include grocery store chains, because no matter how good or bad the economy is, people still have to eat. Noncyclical stocks tend to perform better during market downturns, while cyclical stocks often outperform during strong bull markets.

### **Stock market sectors**

You'll often see stocks broken down by the type of business they're in. The basic categories most often used include:

- **Communication Services** – telephone, internet, media, and entertainment companies;
- **Consumer Discretionary** – retailers, automakers, hotel, and restaurant companies;
- **Consumer Staples** – food, beverage, tobacco, and household and personal products companies;
- **Energy** – oil and gas exploration and production companies, pipeline providers, and gas station operators;
- **Financial** – banks, mortgage finance specialists, and insurance and brokerage companies;
- **Healthcare** – health insurers, drug and biotech companies, and medical device makers;
- **Industrial** – airline, aerospace and defense, construction, logistics, machinery, and railroad companies;
- **Materials** – mining, forest products, construction materials, packaging, and chemical companies;
- **Real Estate** – real estate investment trusts and real estate management and development companies;
- **Technology** – hardware, software, semiconductor, communications equipment, and IT services companies;
- **Utilities** – electric, natural gas, water, renewable energy, and multiproduct utility companies.

### **Blue chip and penny stocks**

Finally, there are stock categories that make judgments based on perceived quality. Blue chip stocks tend to be the cream of the crop in the business world, featuring companies that lead their respective industries and have gained strong reputations. They typically don't provide the absolute highest returns, but their stability makes them favorites among investors with lower tolerance for risk.

By contrast, penny stocks are low-quality companies whose stock prices are extremely inexpensive, typically less than \$1 per share. With dangerously speculative business models, penny stocks are prone to schemes that can drain your entire investment. It's important to know about the dangers of penny stocks.

You've probably heard that diversification is important for developing a strong, stable investment portfolio. Keep all of these stock classifications in mind as you plan for

diversity – investing across companies of different market capitalizations, geographies, and investing styles all contributes to a well-balanced portfolio.

1. How are stocks categorized?
2. What is the difference between common stock and preferred stock?
3. What is market capitalization?
4. Why are large-cap stocks considered to be safer than mid-cap and small-cap stocks?
5. How do stocks differ according to the investment methods?
6. What is a dividend?
7. When do cyclical stocks perform better? Noncyclical?
8. How are stocks categorized according to the type of business?
9. Which is the opposite of a blue chip stock?
10. What is the definition of a penny stock?
11. Which statement about blue chip stocks is correct?
  - a) Earnings are used for reinvestment in order to maintain the growing trend of the stocks.
  - b) No dividends.
  - c) They are traded below its market price.
  - d) The stocks are consistently profitable with a dividend payment.
12. Why is diversification important in an investment portfolio?

**Resources used in this Unit:**

Учебное пособие «Иностранный язык в профессиональной сфере деятельности (английский). Пермь. 2017. Составители Михайлова Е.Г., Ряпина Н.Е.

<https://www.proprofs.com/>

<https://www.nasdaq.com/articles/types-of-stocks>

<https://www.investopedia.com/terms/s/stockmarket.asp>

## CONSUMPTION

### (self-study Unit)

**Study the information and be ready to speak how COVID- 19 changed consumer behaviour.**

<https://www.mckinsey.com/~media/mckinsey/industries/retail/our%20insights/how%20covid%2019%20is%20changing%20consumer%20behavior%20now%20and%20forever/how-covid-19-is-changing-consumer-behaviornow-and-forever.pdf>

## EDUCATION. NEW TRENDS

2020 brought drastic changes to all fields of life, including education, due to the global macroeconomic downfall by pandemics.

Besides, it was the era when digital trends in educational technology got skyrocketing.

Education trends are constantly evolving. As technology advances, so does the learning system. If we don't keep up, it becomes impossible to provide students with learning opportunities that will prepare them for their future careers.

The need for traditional classroom studies is long gone. Now, it's all about engaging students with chances that can help them grow. The ongoing pandemic has speeded things up a bit. Now professors have to familiarize themselves with the latest developments.

Here is a list of the most popular trends in education.

**E-learning** means learning through internet-enabled handy devices or computers.

The old ways of learning did not provide such a broad facility of research and evaluation as provided by e-learning. Although this trend in education has already attained popularity, it is going to be more important for the students because:

- The coming years pose increased health risks in physical interactions as a result of pandemic outbreak 2020
- Online learning technology is growing up at an incredible pace
- And the spreading scope of the internet to all parts of the world.

Students can use the internet to get access to high-quality educational tools. They can also get feedback from teachers online. Distance learning became such a popular solution that over 6 million students enrolled in distance courses, published the National Center for Education Statistics. While this option doesn't help students

practice soft skills, it encourages them to research, participate in group projects, and gain constant access to online lectures.

They can use platforms to view recorded material and study at home. Educators can also rely on artificial intelligence if they want to personalize their teaching outcomes. They can use it to organize their work and develop better learning analytics.

Simply put, technology gives students flexibility and can accommodate unique styles of learning. It doesn't interrupt the class and can help track coaching if needed.

### **Artificial Intelligence**

Artificial Intelligence is the power of machines to think and respond in many forms like a robot. It means that machines can reason and perform tasks like human beings. AI is not a new thing for the students of the coming years.

With the addition of new features like smart content and virtual global conferences, artificial intelligence has become more impactful.

It is going to emerge as one of the current trends in educational technology for 2021, mainly because:

- It lets the learners get more personalized in learning
- It is a quicker way of teaching and learning
- AI supports the teachers to spot learning incapacities
- It has globalized the world in terms of education systems
- The students get learning matter in a more understandable form
- Educators get more knowledge to become a source of knowledge for others
- And, students can submit technologically written feedback.

### **Exam-Management**

Many schools have moved their tests online. This created a massive surge in demand for Artificial Intelligence (AI) – monitored management. This digital trend can have a huge role in changing the way exams are managed. It removes any barriers and allows students to take a test no matter where they are.

The idea is to track any signs of cheating and monitor the tests fairly. With this type of technology everywhere, the education sector can go a long way. Not only is it necessary for a student's progress, but it also provides the teacher with peace of mind.

## **Virtual and Augmented Reality Learning**

Virtual reality is one of the most amazing and engaging trends in education 2021. It produces either an unreal or real world through the virtual tool on the eyes of the learner. The learner can see the world, move here and there in it, and intermingle with things. There are many benefits of virtual reality learning in the coming years, like:

- The students can visualize places and things they cannot get access to in the conventional study environment
- It is so much interesting that everybody wants to wear the virtual learning tool at least once in a life
- It lets the learners enjoy learning for hours
- VR has removed the concept of language as a learning obstacle
- The education field has come up with quality content in different subjects.

## **Mobile-First Learning**

Mobile-first learning system has given rise to educational trends and issues for 2021. It means the mobile app of a desktop site, which is adaptable to greater screens for students.

They can get fast access to course materials with their mobile phones without physically moving to their colleges or universities.

Whether they are traveling or eating during breaks, the courses are available with a couple of taps on their mobiles. Thus, M-learning has won the attention of educators for designing an education system for future generations.

## **Gamification**

Gamification has appeared as one of the most predictably popular educational technology trends. It simply means learning through fun and gaming to improve results. The educators who follow this learning tactic convert their classroom into a gaming zone unlocking students' active creativity.

Consequently, the learners purposefully experiment with their creative power. They also understand the value of collaboration and teamwork. Subsequently, the play and fun lead them to grow their aptitude and knowledge on the related subject.

Different educational levels have different types of games for an enjoyable learning environment for the students. Not only junior classes but also senior classes get closer to their subject matter through this popular educational trend.

Gamification has another plus point of bringing students out of uniformity and seek mastery over the subject through fun. Although it is a powerful learning practice for school and college classrooms, they are more inclined toward online gamification.

The online gamification has additional features, advanced tools, and multiple options unavailable in classroom fun learning. As WWW seems to have increased value for the coming generation, online gamification can prove more popular for students in 2021.

However, you must not forget that fun and play, even purposeful, can distract you from your studies. Particularly, the students who get involved in games more than anything can forget about important assignments of other subjects.

## **5G Technology**

The education field has incredibly grown by 5G or fifth-generation wireless technology of networking a refined form of 4G LTE. 5G, as one of the current educational trends, has made educational experiences more technological by adding speed and dependency.

The students can interact with multiple devices to complete their assignments in the least amount of time. Furthermore, 5G, has put forth an assortment of learning apps with increasing numbers day by day. These apps have created a learning atmosphere, which was just a dream one decade ago.

Let us see how 5G will change the world's learning perspective and experience in the New Year:

- It will provide more support in the learning process
- Students will learn in an immersive 3D environment
- Internet of things will transform the traditional classrooms
- The students will enjoy video uploading/downloading at incredibly fast speed
- And it will spread even in rural areas in 2021 as an advanced learning system.

## **Soft Skills Learning Have Become the Main Focus**

For employers, problem-solving, creative thinking, innovation, and people skills are a necessity in the workplace. Since old-school lectures didn't provide students with this kind of knowledge, teachers had to implement them as soon as possible.

Of course, adapting to the latest trend has made the change a little bit difficult to achieve. They had to incorporate new strategies that will give learners the opportunity to cope with a highly competitive environment.

Higher education is now mainly focused on preparing students for their future careers, encouraging them to develop these skills. With a strategically planned class and plenty of new content, educators finally managed to help their class build soft skills. With options such as these, it's much easier for graduates to get employed.

## **Inspiring Empathy and Acceptance**

In the past, empathy and acceptance weren't that big of a focus. But now, teachers are bent on helping each student learn about different cultures, ethnicities, and people from all around the world. This is not just a 2020 trend, but this year, it has managed to grow exponentially. Students have become more open and willing to interact with others. Since the sole purpose is to improve empathy and acceptance, so far, we are on the right path.

Every modern age should bring something new to the table. It should change society for the better. Right now, it's all about implementing technology that can help students grow. The new educational means will be quicker, more technological, and promising. Their role is to provide people with a better chance at a successful future. The coming generation is going to learn through advanced, engaging, and tech-based, global educational schemes. Both teachers and students will get the advantages of a revolutionized approach to education.

But, technology is not the only thing that matters. Teaching social acceptance and empathy in the classroom has become another growing trend.

All of these changes can help the education sector move forward.

## **Tasks**

### **I. Translate the following from English into Russian:**

drastic changes, global macroeconomic downfall, digital trends in educational technology, to get skyrocketing, technology advances, learning opportunities, traditional classroom studies, to engage, to familiarize oneself with, internet-enabled handy devices, a broad facility of research and evaluation, pandemic outbreak, at an incredible pace, the spreading scope of the internet, to get access to high-quality educational tools, to get feedback from teachers, distance learning, be enrolled in distance courses, to practice soft skills, to participate in group projects, to gain constant access to online lectures, to record material, to accommodate unique styles of learning, to perform tasks, smart content, impactful, to spot learning incapacities, a massive surge in demand for, to cheat, Virtual Reality Learning, conventional study environment, virtual learning tool, mobile app of a desktop site, couple of taps on the mobiles, the value of collaboration and teamwork, aptitude, to seek mastery over the subject through fun, to be inclined toward smth, assignments, wireless technology, current educational trends, learning apps, an immersive 3D environment, an advanced learning system, a highly competitive environment, empathy and acceptance, to grow exponentially, to be on the right path, the coming generation, to move forward.

**II. Use the words and expressions from exercise I to make up at least 15 sentences. Read them out to your groupmates and ask them to translate these sentences into Russian.**

For example,

*We are focusing on **soft skills** such as team building and communications.*

**III. Complete the sentences using information from the text.**

1. New trends in education are....
2. Artificial Intelligence helps.....
3. E-Learning is.....
4. Soft skills are the main focus because.....
- 5.5-G technologies provide...

**IV. Read the text about the Internet of Things. Complete the gaps with the words.**

a) technology   b) absent   c) parents   d) schools   e) sensors   f) campus   g) assignment   h) tools

While the Internet of Things (IoT) may have yet to pay off when it comes to creating smart cities, it does hold tremendous potential in terms of creating smarter, more connected 1)..... . On the obvious end, it's helping save money in terms of energy and lighting usage. But in a more obscure way, it's also helping to keep schools and students safer and more connected. For instance, by using 2)..... to track traffic throughout the 3)..... , schools may be able to determine where security features like lighting would benefit students and visitors. Using real-time communication 4) ....., they can share homework 5)..... with 6)..... so they can stay on top of less communicative children. These tools can also let parents know when their child is 7)..... from class. Using time-stamp 8)....., they can alert parents and students when an assignment has gone missing. The bottom line is that the IoT has the chance to keep all of us more connected, engaged, and on our toes. And that's always a good thing.

## **V. Discussion Questions.**

1. What are the current trends in education?
2. How did technology change education?
3. What are the best online learning platforms?
4. Why are virtual learning platforms important for educators?
5. What are the benefits of e-learning over traditional courses?
6. What are the disadvantages of e-learning?

## **VI. Translate from Russian into English.**

1. Онлайн-образование продолжает набирать популярность.
2. Интенсивное развитие технологий сделало возможным получение качественного обучения в онлайн формате практически для любых специальностей.
3. Технологии виртуальной и дополненной реальности можно использовать для обучения публичным выступлениям, дизайну, работе со сложными клиентами и многого другого.
4. Обучение в игровом формате устраняет рутину, делает уроки менее скучными. Геймификация эффективна при обучении детей и взрослых. Мини онлайн-квесты, интеллектуальные поединки, викторины, помогающие запоминать термины и пр. Все это повышает интерес студентов к процессу, делает его более увлекательным.
5. Ожидается рост популяризации мобильного контента и распространение технологий виртуальной реальности в онлайн-образовании.

## **VII. Internet Search. Find information about most popular trends in education. Prepare a presentation. Useful vocabulary is in Appendix.**

### **Resources used in this Unit:**

<https://eturbonews.com/581752/modern-educational-trends-2020/>

<https://www.momooze.com/educational-trends-for-2021/>

<https://www.forbes.com/sites/>

<https://coursemaster.ru/articles/prodyuseram/trendy-v-onlajn-obrazovanii-v-2021-godu.html>

## APPENDIX

### I. «FOR AND AGAINST» ESSAY

1. If the task requires you to present the 'advantages and disadvantages' or 'arguments for and against', the introduction should state the topic or issue, but not your opinion (keep that for the conclusion). The topic can be introduced in the form of a question.
2. The main body of the essay should consist of two paragraphs of approximately the same length: one 'for' and one 'against'. Which arguments should be presented first? Here are two possible solutions:
  - a) First the arguments 'for' and then 'against'.
  - b) Present the arguments you agree with second – they will appear stronger as well as providing a smooth transition to the conclusion, where you state your opinion.
3. The conclusion should not introduce new arguments, as this gives the impression that the text is unfinished. It should sum up the discussion and give your opinion on the issue in question.
4. An essay should be written in a formal style. Do not use colloquial language or contractions (don't, haven't, etc.).

**Task:** *Many young people start work before finishing their studies. Write an essay presenting the advantages and disadvantages of such a step.*

(Introduction: Introduce the problem, signal that there are pros and cons without giving an opinion):

Many young people nowadays do not wait to graduate before they start work. They find their first job while still at university. **What are the advantages and disadvantages of taking such a step?**

(Arguments for):

**The main benefit**, of course, is that you have your own income and do not have to rely on your parents to cover all your expenses. It is easier for them and for you. **Moreover**, if the job is connected with the area you are studying, you can gain valuable skills which may be useful to you in the future. **Not only that**, but when you start applying for full-time jobs after graduating, your CV will already show previous experience.

(Arguments against):

**On the other hand**, having a job while studying **has its drawbacks**. **For one thing**, it may affect your studies. You have less time to study and you may be tired in class.

**In addition**, it leaves you less time for your social life, which is such an important part of the student experience. **Finally**, it may mean you have to give up the long holidays and with them the opportunity to travel.

(Conclusion: Sum up the discussion and give your opinion):

**In conclusion**, it seems that working while studying has as many benefits as drawbacks. **In my opinion**, it is worthwhile if the job is interesting or relevant to your future career. Ultimately, however, it is a matter of personal choice.

## II. OPINION ESSAY

1. If the exam task asks you to present your opinion, in the introduction you should state that opinion and in the conclusion – repeat it using different words.
2. The main body should contain arguments to support your opinion – one argument per paragraph. It is also a good idea to mention one or two arguments for the opposing view and explain why you disagree with them.
3. The style should be formal (no colloquial language, no contractions), to the point, neutral and unaggressive. Even if you have a very strong opinion on the issue you are writing about, avoid emotive expressions and exclamation marks.
4. The conclusion should not introduce new arguments, as this gives the impression that the text is unfinished.

**Task:** *More and more countries are introducing smoking bans in enclosed public places, including restaurants and cafes. Write an essay in which you give your opinion on this topic.*

(Introduction: Introduce the problem and your opinion):

More and more countries are introducing a ban on smoking in all enclosed public spaces, including restaurants, cafes and clubs. **In my opinion**, this regulation is beneficial to society.

(Argument 1):

**First and foremost**, there is the issue of public health. Smoking has been proved to cause lung cancer, heart disease and a number of other illnesses. Any measure to reduce this dangerous addiction must therefore be regarded as a positive step.

(Argument 2):

**What is more**, the risks are not restricted to smokers themselves. 'Passive smoking' – inhaling another person's tobacco smoke – is almost equally dangerous. In particular,

smoking anywhere where children are present is extremely harmful to their health and development, as is exposing a pregnant woman to cigarette smoke.

(Argument 3):

**Finally**, with regard to smoking in restaurants, non-smokers find tobacco smoke disturbs them while they are eating, as to them its smell is disgusting.

(Opposing argument and why it is wrong):

**In some countries**, cafe owners have opposed the smoking ban on the grounds that it is bad for business. Some people also complain about the crowds of smokers gathering on pavements outside cafes and office buildings, forcing all passers-by to walk through a cloud of tobacco smoke. **However, to my mind** these are minor problems, which will surely be solved in time, and their importance is incomparable with that of the health impact.

(Conclusion: Sum up the discussion and restate your opinion in different words):

**To sum up**, I strongly support the smoking ban. **It seems to be** a move in the right direction and I hope it can be extended to even more places that are open to the public.

## USEFUL VOCABULARY

### Introduction- for and against

What are the arguments for and against this idea?

What are the benefits and drawbacks of such a step?

This step/idea/solution can be said to have both advantages and disadvantages.

### Introduction- opinion

In this essay, I am going to argue that...

In my opinion...

### Introducing the first argument

First of all, First(ly), First and foremost, For one thing, To begin with, One (dis)advantage is that, The main argument in support of...is that, On the one hand,...

### More arguments

Secondly, Thirdly, Another (dis)advantage is that, Moreover, Furthermore, What is more, In addition, Not only that, but...

### Final argument

Finally, Last but not least,

### **Presenting the opposing opinion**

On the other hand, However, Nevertheless

### **Presenting your opinion**

In my opinion, To my mind...

### **Expressing an opinion cautiously**

It seems/appears that, It would seem/appear that, It is believed/recognised that, There is little/some/ no doubt that...

### **Summary**

To sum up, In conclusion, All things considered, All in all, On balance, On the whole,...

from Longman Exam Accelerator. classroom and self-study preparation for all B2 level exams. Bob Hastings, Marta Uminska, Domininka Chandler.

## **III. GIVING PRESENTATIONS**

### **INTRODUCTIONS**

When giving a presentation it is essential to give a clear idea of what you want to achieve. Do you want to inform your audience about essential facts, or to persuade them to accept your proposal? This main purpose or aim needs to be briefly stated in the opening part of the presentation.

#### **Stating the purpose**

Here are some useful expressions for stating the purpose of the presentation.

**In my presentation I'll be proposing...**

**In my presentation today I'm going to explain...**

**I'd like to review...**

**The subject/topic of this presentation is...**

**What I'd like to do is present the results of my study.**

**What I'm going to explain is/are...**

**What I'll be proposing in my presentation is/are...**

#### **Signposting a presentation**

Here are some useful expressions for signposting a presentation.

**I'll be developing three main points.**

**First, I'll give you... Second, ... Lastly, ...**

**Firstly... secondly... thirdly... lastly...**

**My presentation will be in two main parts. In the first part I'll... And then I'll...**

**First, I'd like to... Secondly, we can... And I'll finish with...**

**First of all... then... next... after that... finally...**

**To start with... later... to finish up...**

### **Involving the audience**

Include unusual and interesting facts and statistics about the topic in your introduction.

Use words like **you, your, us, our** to make your audience feel involved in the presentation.

Illustrate the point of your presentation with examples and stories from life.

Ask the audience to do something.

Ask the audience questions to involve them in the presentation (when you have a small audience).

With larger audience use rhetorical questions.

## **THE INFORMATIVE PRESENTATION**

### **Signposting the route through a presentation**

Here are some useful phrases and sentences.

**I'll begin by ... (+ verb in the ...ing form)**

**Let's start with (+noun)**

**Let me start by**

**I'll start by**

**First of all, I'll...**

**Starting with...**

**I'd like to begin by...**

**If I could now turn to... My next point is...**

**Now, turning to...**

**Now, what about...?**

**Let me now move on to...**

**Let me turn now to...**

**I'd like now to...**

**Next...**

**Let's look now at...**

## Using summaries

Give summaries at the end of major parts of your presentation or after a key point. Use them as check points to summarise or draw a conclusion before you move on to a new point.

**So that's the general picture for... and now let's look at ...**

**That completes my overview of ... so now I'd like to move on to...**

**Let's recap, shall we?**

**I'd like to sum up now...**

**Let me summarise briefly what I've said.**

**Let me remind you, finally, of some of the points I've made.**

**If I can just sum up the main points...**

**So, that completes my overview / the picture of...**

## Analysing performance

Here are some useful expressions if you want to give one main reason.

**The main explanation for this is...**

**A particular reason is...**

**A key problem is...**

Here are some useful expressions if you want to give more than one main reason.

**There are two reasons/ explanations for this. First,... Second,...**

**This is/ can be explained by two factors. Firstly, ...Secondly,...**

**This is due to... and also to...**

**One reason for this is ... Another reason is...**

## Using rhetorical questions

Rhetorical questions give one-way communication the appearance of a dialogue with the audience. Here are some examples of rhetorical questions:

**/ What's the explanation for this?**

**/ How can we explain this?**

**/ What can we do about it?**

Sales are down on last year. **/ How will this affect us?**

**/What are the implications for the company?**

**/Where does that take us? Let's look at this in**

**more detail.**

**/What does that mean for us? Translated into real**

**terms,...**

## THE PERSUASIVE PRESENTATION

### Building arguments

Highlight the relationship between the different points you want to make by using connecting words, e.g.

- to show a different argument

**however, on the other hand, although, in spite of this**

- to show a consequence

**therefore, so, consequently, because of this, as a result**

- to show an additional argument

**moreover, in addition to this, not only...but also...**

### Outlining options

If there are alternatives to your proposal, explain them. This will show that you have looked at different ways of dealing with the situation. Here are some useful expressions for explaining options.

**We've considered/ looked at three options.**

**One way to solve this problem is... Another is to...**

**There are two alternatives...**

**The first option is to...**

**But what about the second option?**

**So, now let's look at the third option, which is to...**

Outline both weaknesses and benefits for each of the options you consider.

**What are the benefits?**

**Now, what about the advantages?**

**Now, I'd like to look at the benefits.**

**There are, however, disadvantages...**

**But there are some problems too.**

**On the other hand...**

## REFERRING TO VISUALS

### Preparing the audience for a visual

Here are some useful expressions.

**Now, let's look at the position for...**

**Now, I'll show you the ...**

**For... the situation is very different.**

**Let's move on now and look at the figures for...**

**The next slide shows...**

**If we now turn to the...**

Explain what the visual shows.

**This chart compares benefits in two countries...**

**The upper part of the slide gives information about...**

**You can see here the development over the past year.**

### Focussing your audience's attention

**You can see the ...**

**As you/ we can see...**

**What is interesting/ important is...**

**I'd like to draw your attention to...**

**Notice/ Observe the...**

**It is important/interesting to notice that...**

Use a dramatic piece of vocabulary, e.g.

The position of this equipment is **extremely dangerous**.

This sudden rise in prices was **quite unexpected (remarkably, highly, totally, absolutely)**.

## CONCLUDING THE PRESENTATION

A persuasive presentation often include recommendations and/or a call for action from the audience. Notice how they are used:

**My suggestion**

**Our proposal**                      **would be / is to** set up a project group.

**The recommendation**

**We recommend**

**I'd like to suggest**                      setting up a project group.

**I propose**

**We suggest**

**I recommend**                      **you** set up a project group.  
**We propose**

### **Building up a conclusion**

A good conclusion will contain some or all of the following stages.

A **summary** is needed before you give your final conclusions. Review or restate your key points from the introduction and main body of the presentation.

So, to summarise/ sum up...

At this stage I'd like to go over / run through...

So, as we've seen in the presentation today, ...

As I've explained

**Conclusions** will often take the form of: a recommendation or call for action, a challenge, a dynamic concluding statement to reinforce your message.

### **Closing formalities**

I'd be happy to answer any questions.

If you have any questions, I'd be pleased to answer them.

I would welcome any comments/ suggestions.

Thank you for your attention.

## **HANDLING QUESTIONS**

Most presentations include time for questions and answers. Sometimes presenters ask for questions during the presentation, but more frequently there is a question time at the end of the presentation.

### **Getting more information**

*Could I ask you a couple of questions, please?*

*Could you tell me some more about...?*

*Excuse me, do you know...?*

### **Clarifying questions**

Make sure you really understand questions.

### **Rephrasing the original questions**

So, what you are asking is...

If I understand the question correctly, you would like to know...

### **Asking further questions to clarify the questions**

Are you looking at January/ February figures?

When you say... do you mean...?

### **Asking for repetition**

I'm sorry, I didn't hear. Which slide was it?  
Sorry, could you repeat that?

### **Before answering a question.**

Thank you, that's a very interesting question.  
I am glad you asked the question.

### **Evading difficult or hostile questions**

One way of evading difficult or hostile questions is to show you understand the questioner's position, and then to introduce an alternative way of looking at the situation.

#### **Show you understand**

Yes, I quite see your point...  
Yes, it's something we've thought about a lot.  
That's an accurate observation...  
On the other hand, if we consider...

#### **Evade by not accepting responsibility**

I'm afraid I'm not the right person to answer that.  
Jo Stockton is a much better person to answer that.

#### **Evade by delaying**

Could we leave that till later?  
That is scheduled for discussion at the next meeting.  
I'll deal with this later, if I may, but for now...  
I'll come back to this question later in my talk.  
We'll be examining this question in more detail later on.  
I am not sure, let me check.  
I'd prefer to deal with that point later.  
Maybe we could discuss that in more detail after the session.

#### **Ending a question and answer session**

If there are no (more) questions, we'll finish there.  
We only have time for one more question, please.  
I'm afraid, that's all the time we have, thank you.

#### **Give advice and recommendation**

It may be worth (+verb+ing)  
How about (verb+ing)?  
You should (+verb)  
Perhaps you could (+verb)

#### IV. ARTICLE REVIEW

Where from?	The article (I have read)	comes from “the Times”. is published in the issue of “the Guardian”.
Headline	The article  The headline of the article is ... It is entitled ... Its title is...	is headlined ... is entitled ...
Where?	It is published It is printed	in “Home News” column. in “Business” section.
Whom by?	It is written by	Paul Brown, business correspondent.
Topic	The article	deals with the problem of ... covers ... touches upon ... outlines ...
Contents	The author	stresses the importance of ... emphasizes ... criticizes ... argues about (that) ... gives evidence of ...
Details	The author  It is stressed that ... It is suggested that ... Much attention is given to...	gives details of ... describes ... reports on ... analyses ... comment on ... speaks against ... speaks in favour of ...
Opinion	In the author’s opinion ... It is the author’s view that ...	
Conclusion	In conclusion The author comes to The article ends with	the author states that ... a conclusion that ... a question asked by ... remark made by ...
Your view	I find the article The article is  My impression is that the author is (very)  The ideas of the author are	interesting, useful... actual worth reading easy/difficult to read critical of ... (un)biased  disputable controversial worth considering

## SUPPLEMENTARY READING

### CONSUMER TECH

Consumer technology, or consumer tech, refers to any form of technology that is intended for use by consumers in the general public, as opposed to technology created for governmental, military or commercial use. Consumer tech comes in a variety of different forms and offers a wide range of technological capabilities, encompassing many of the most commonly seen items that people utilize daily.

The roots of consumer tech can be traced back to the 19th century, with inventions from the likes of David Edward Hughes, Heinrich Rudolph Hertz, Nikola Tesla, Jagdish Edward Bose and several others facilitating the manipulation of electricity for widespread use throughout the world. In 1896, Guglielmo Marconi developed the first practical radio-wave communication system, allowing contact to be made with parties at a distance for the first time.

Marconi's utilization of radio waves opened the door for consumer tech and allowed others to explore cutting-edge methods to improve the ways we interact with our world. Bose's experiments introduced the use of semiconductor junctions and extreme high frequencies, while John Ambrose Fleming and the combination Robert von Lieben and Lee De Forest were able to pioneer the use of diodes and amplifier tubes in the 20th century's first decade. In 1927, Philo Farnsworth publicly demonstrated the first television, and by just 1947, William Shockley and Bell Labs invented the transistor – fundamentally altering the way signal is amplified and significantly reducing the size of electronic components. In 1959, transistors became small enough to be packaged in quantity within a single chip, known as an integrated circuit (IC) and laid the groundwork for the technological innovations that continue to be implemented today.

Much of the consumer tech we still interact with daily was invented during this period of innovation between the end of the 19th century and the mid-20th century, including computers (first developed between 1940-45), transistor radios (introduced in 1954), and the microwave oven (1946). Technology has continued to develop over time, improving and creating products that are thousands of times more capable than predecessors while enabling form factor to shrink and prices to decrease – creating a technological revolution with the power to reshape our world. Computers were once an exclusive product and would require an entire room to store just a few megabytes. Today, more powerful computers exist in the pockets of 81% of Americans in the form of smartphones, capable of housing hundreds of gigabytes of data with unlimited amounts of cloud space available at all times. Give it another few decades and the advances in consumer tech would be unfathomable to us today.

## **Types of consumer tech**

Technology has evolved to better meet and fulfill the needs of people, and as a result, people are now constantly interacting with consumer technology. Several categories and subcategories of customer technology exist, with plenty of overlap. As more products are introduced at conferences like the Consumer Electronics Show and others, these categories will inevitably expand. Some of today's most notable consumer tech categories include:

### **5G Devices**

Devices connected to 5G networks (or 4G, LTE or any other form of cellular network) are able to receive network signals from cellular towers and provide users with online connectivity. Many of the most common forms of consumer electronics fall into this category, including smartphones, tablets and portable hotspots.

### **IoT Devices**

Internet of Technology, or IoT, devices connect to specific applications via the internet or other forms of wireless networks for unparalleled user visibility and control. Some commonly found consumer tech IoT devices included smart home appliances, such as app-controlled thermostats, locks and lights, sensor-based products like doorbells with cameras set to alert users to movement, and various Bluetooth devices.

### **Computers**

Computers have developed mightily over time. As their capabilities have increased and costs decreased, more people have access to the resources needed to utilize different computers for different uses, from work to gaming, production and much more. Laptops, desktops, tablets, gaming computers, video game consoles, smartphones, hard drives and several other types of devices fall into this consumer tech category.

### **Self-Driving Cars and Vehicle Technology**

Since their emergence in the early 20th century, cars and motor vehicles of all kinds have grown to become one of the most critical forms of consumer tech to most societies around the world. And as technology has improved, so have cars, with vehicles now commonly possessing high-tech features such as built-in GPS, self-driving capabilities, automatic braking, lane sensors, rearview cameras, power steering, and a bevy of additional online and offline capabilities that enhance both safety and comfort. Many vehicles today are even powered entirely via electricity and have eliminated much of the need for wasteful natural gas resources.

## Televisions & Smart Screens

Television became a cultural phenomenon in the mid-20th century and its status has since become cemented as a focal point of modern society. The average American adult watches 4 hours and 16 minutes of television per day, as of 2020, which is only bolstered by the many advancements that the near-century old medium has undergone. Today's top-end "Smart Televisions" come loaded with WiFi/5G capabilities, built-in applications, internet search capabilities, built-in gaming features, computer monitoring and more.

## Smart speakers

Leading consumer tech companies like Amazon and Google have recently introduced a variety of home speakers with built-in virtual assistant technology. These speakers possess internet connectivity and can play music, look up information, place orders and complete a variety of additional tasks by linking to existing accounts. Three of the most popular smart speakers are the Amazon Echo, Apple iHome and Google Home.

## Appliances

Home appliances are a form of consumer tech that allow people to live easier, more fulfilling lives. From microwave ovens and various kitchen appliances to laundry machines, space heaters and more, appliances of some kind can be found in a majority of homes worldwide.

## Fitness & Wearables

Fitness and consumer tech have merged in seamless fashion, with people embracing devices that track their daily fitness goals and keep them engaged in their activities and workouts. Wearables expand beyond simply fitness, however, with devices and technology hitting the market that filter air, keep users temperate, alert the proper parties when in danger or in need of help, and much more. Wearable consumer tech includes smartwatches, fitness trackers, heart rate monitors, 911-alerting devices and tech-enabled clothing.

## Gaming

The video gaming industry has exploded since it's rise through the late 1970s and the 1980s. Today's systems possess the processing capabilities that would have been unfathomable to game designers back in those days, such as 5K graphics, online gameplay and lightning-fast processor speeds. Video gaming consoles, games, software, VR devices, gaming computers, handheld consoles, add-ons, and accessories are all included in this category.

## Drones & Robotics

Drones have been in military use since the 20th century, however, commercial and consumer drones began hitting the market in the early 21st century. Consumer drones have the ability to take photos, record videos and deliver packages at previously unreachable heights and distances, produced in a variety of form factors and with many accessories for customizing personal drone experiences.

## Audio, Music & Instruments

Some consumers, whether audiophiles or musicians, take sound very seriously. This category is meant to address that, creating technologically-advanced solutions that help them dial in the perfect sound response to their ears, in real time. Multi-room sound systems, Bluetooth speakers, amplifiers, interfaces, microphones, instruments, and additional hardware units and software all fall into this category of consumer tech.

## Photography

The first cameras emerged in the late 19th century, since then, photography equipment has embraced digital and technological advancements to unlock capabilities like faster shutter speeds, faster lens speeds, 5K video capturing, low-light shooting and much more. Photography consumer tech includes camera bodies, lenses, sensors, hard drives, memory cards, flash units and additional accessories.

## Software

Much of the consumer tech that people interact with is not a physical product but software that writes the rules to allow hardware to function. Software is responsible for enabling nearly all forms of consumer tech to work and interact, from menu screens to full-on computer programs.

Hundreds of other categories could be listed here and categories will continue to expand as technology evolves.

## **Top consumer tech companies**

Alphabet (Google) – 5G, computers, semiconductors, smart speakers, wearables, IoT devices, televisions, audio, photography, software, gaming

Apple – 5G, computers, semiconductors, smart speakers, wearables, IoT devices, televisions, audio, photography, software

Samsung – 5G, computers, appliances, audio, televisions, IoT devices, semiconductors, wearables

Sony – computers, photography, audio, appliances, semiconductors, gaming, televisions, wearables

LG – 5G, computers, appliances, audio, televisions, IoT devices

Sandisk – photography, software, computers, semiconductors

Intel – computers, semiconductors

Tesla – motor vehicles, semiconductors

Yamaha – audio, motor vehicles

Whirlpool – appliances

Texas Instruments – semiconductors

NVIDIA – semiconductors

DJI Innovations – drones

Trend Micro – software

Adobe – software

Cannon – photography

from <https://builtin.com/consumer-tech>

## **ISOLATION ECONOMY**

Over the past decade, the sharing economy was supposed to transform how we live, travel and function. The sharing economy was built on the premise that multiple people could share unused or under-utilized assets. If you had a car that you did not use for 90% of the time, why not let someone else use it while it is idle? If you have a home and are going away for a few months, why not let someone else use it, so you make some money on the side, and by the way, find someone at your destination willing to do the same for you.

The sharing economy was designed by companies attempting to change how we live and incenting us to share our assets. It was not due to the shifting habits of consumers, and consequently, it worked in a few cases and failed in others. Systemic industry transformation happens when capital infusion follows societal trends, never the other way around. And societal trends emerge as a result of breakthrough innovation, natural or human-made circumstances, or significant lifestyle shifts.

Today we are at the cusp of a trend, percolating for a while, and catalyzed by the deadly coronavirus. We are entering *The Isolation Economy*. Since social change is leading the way, this transformation will result in a lasting business model for

companies who innovate and build products and services to enable our lifestyle transformation.

The Isolation Economy is based on the principle that people will travel less to complete everyday activities. Instead, they will be able to complete them just as effectively from their homes. This transformation is already upon us. Going to the office is being replaced by working from home. Driving to Safeway is replaced by home delivery. Going to the gym is replaced by streaming fitness as Peloton sales surge and innovations like Mirror come into vogue. Going to the movies or visiting the mall is increasingly a thing of the past. Schools and universities will encourage more online learning, just as doctor visits will move towards telemedicine.

We don't even need to leave our home to buy a new home; we use Zillow and DocuSign for most of the tasks involved, including viewing properties with 3D virtual tours. And a push of a button on your Nespresso machine coupled with a click on Zoom replaces your daily ritual of meeting people over a \$4 espresso.

In the Isolation Economy, you don't go out for things; they come to you, a concept that has been in the making for years. Coronavirus has not created this way of life; it has just made us aware of how we can continue to thrive even as we increasingly seclude ourselves from our neighbors. The forced isolation has taught us how to be productive and entertained. It has taught us how to make it work in large and small cities and around the world.

Many of the lifestyle changes we are making now will become permanent. At some point, we will resume travel and go to the movie theater and participate in crowded sporting events, and of course, return to our offices. We just won't do it at the same rate and intensity as before because we have learned that we don't have to. Consequently, the Isolation Economy stands to alter the very fabric of the business landscape, the social landscape, the way we interact, the way we collaborate, the way we create value, the way we manage our time and the way we manage relationships.

### **We all need to connect**

The need to be connected socially is one of the most basic human needs. Social isolation, or the lack of contact between an individual and society, often leads to mental health issues, increased aggressiveness towards people we are unfamiliar with, negative self-esteem, loneliness and fear.

Fortunately, we are living in a time when technology allows us to remain in constant touch with family, friends, and colleagues and even help us create new social circles and bonds across younger and older generations. Studies of older adults who use technology to stay connected show they have better health and wellbeing and lower depression. The costs of staying connected are zero. We don't pay any more for

mobile plans or internet service as we remain isolated, we just use them more to keep in touch with people.

Although physically inaccessible, people are finding ways to feel increasingly connected. Your six-inch, sixteen-inch, and sixty-inch screens are equally accessible, and you can pick any one of them for a task. You never have to feel alone. For any activity, you can join your friends or connect with a local, national, or even a global community.

The Isolation Economy does not leave us in a state of perpetual solitude. Families and businesses are getting creative in staying connected through cyber coffee meets or virtual happy hours with friends. While isolation will prevent the irreplaceable warm embrace from a loved one, technology will allow us to stay close in many other ways.

### **A New Breed of Winners**

The last thing people want to do right now is share. You don't want to share your transportation, you don't want to share your personal space, you don't want to share your home with strangers, you don't want to share your dog walker (who you probably won't need because you are at home all day) and you don't want to share a conference room.

And consequently, everything changes. Companies will soon find that their real estate needs are different because many of them were just as productive without paying for expensive office space. And after you return to a smaller office, how you design it will change. Will you still have open offices or desk sharing? Homes will trend in the opposite direction, getting larger and more conducive to the increased number of hours and the increased number of tasks conducted there.

Businesses, universities and other organizations that provide services at their location will rethink how to offer many of the same services at your location. Innovation always follows landmark shifts, and this one will be no different.

The early winners of the Isolation Economy are clear. While Uber, Airbnb and WeWork were the poster children for the sharing economy, companies like Zoom, Peloton and Netflix epitomize the Isolation Economy. Venture funds that invested in the sharing economy will now pivot to investing in new ventures that support the Isolation Economy.

The same technology created to support a mobile workforce will now support an immobile workforce. Companies already riding the changing trends will continue to prosper. These will be related to delivery, home productivity and home entertainment, remote services, technology providers, 5G companies, security companies, or any other business that provides value to an increasingly static consumer.

Companies in the Isolation Economy will be profitable because there is a receptive customer base who will pay for the right set of products and services. Unlike the sharing economy, the Isolation Economy winners will not have to spend billions on marketing and demand creation. We will not see examples like WeWork, a company in shambles, or Uber, though used by millions, remains a company searching for a profit. The business model of the Isolation Economy will be sustainable because it starts with existing demand, which is followed by companies and capital designed to create offerings that fulfill it.

Our way of life is transforming, and the next generation of business winners will be the ones who help us facilitate the change.

from [www.forbes.com](http://www.forbes.com)

## **BIG DATA**

Hot on the heels of Web 2.0 and cloud computing, Big Data is without doubt one of the Next Big Things in the IT world. Whereas Web 2.0 linked people and things online, and cloud computing involves the transition to an online computing infrastructure, Big Data generates value from the storage and processing of very large quantities of digital information that cannot be analyzed with traditional computing techniques.

The quantity of computer data being generated on Planet Earth is growing exponentially for a number of related reasons. For a start, as a result of e-commerce and loyalty card schemes, retailers are starting to build up vast databases of recorded customer activity. Organizations working in the logistics, financial services, healthcare and many other sectors are also now capturing more and more data and wish to generate additional value from it. The public use of social media is also creating vast quantities of digital material that may potentially be mined and crowdsourced to generate valuable insights.

As vision recognition improves, it is additionally starting to become possible for computers to glean useful information and data relationships from still images and video. As more smart objects go online, Big Data is also being generated by an expanding **Internet of Things (IoT)**. And finally, several areas of scientific advancement -- including rapid genome sequencing, nanotechnology, synthetic biology, and climate simulation -- are starting to generate and rely on vast quantities of data that were until very recently almost unimaginable.

Capturing, storing and generating value from Big Data raises a number of technical and conceptual challenges that go beyond the capabilities of traditional computing. To get a handle on the issues involved, most commentators describe the characteristics and challenges of Big Data using the "three Vs" of volume, velocity and variety (a model first developed by Doug Laney).

**Volume** is Big Data's greatest challenge and as well as its greatest opportunity. This is because storing, interlinking and processing vast quantities of digital information offers tremendous possibilities for a wide range of activities. These include predicting customer behaviour, diagnosing disease, planning healthcare services, and modelling our climate. However, traditional computing solutions like relational databases are increasingly not capable of handling such tasks. Most traditional computer hardware solutions are also not scalable to Big Data proportions.

Big data **velocity** also raises a number of key issues. For a start, the rate at which data is flowing into most organizations is increasing beyond the capacity of their IT systems to store and process. In addition, users increasingly want streaming data to be delivered to them in real time, and often on mobile devices. Online video, location tracking, augmented reality and many other applications now rely on large quantities of such high velocity data streams, and for many companies delivering them is proving quite a challenge.

Finally, as already highlighted, Big Data is characterised by its **variety**, with the types of data that many organizations are called on to process becoming increasingly diverse and dense. Gone are the days when data centres only had to process documents, financial transactions, stock records, and personnel files. Today, photographs, audio, video, 3D models, complex simulations and location data are all being piled in to many corporate data silo. Many of these Big Data sources are also almost entirely unstructured, and hence not easy to categorize, let alone process, with traditional computing techniques. All of this means that Big Data is in reality messy data, with a great deal of effort required in complex pre-processing and data cleansing before any meaningful analysis can be carried out.

Due to the challenges of volume, velocity and variety, many organizations at present have little choice but to ignore or rapidly excrete very large quantities of potentially very valuable information. Indeed, if we think of organizations as creatures that process data, then most are currently rather primitive forms of life. Their sensors and IT systems are simply not up to the job of scanning and interpreting the vast oceans of data in which they swim. As a consequence, most of the data that surrounds organizations today is ignored. A large proportion of the data that they gather is then not processed, with a significant quantity of useful information passing straight through them as "**data exhaust**".

For example, until very recently the vast majority of the data captured via retailer loyalty card systems was not processed in any way. And still today, almost all video data captured by hospitals during surgery is deleted within weeks. This is almost scandalous given that interlinking and intelligently mining these image streams could improve both individual patient outcomes and wider healthcare planning.

Due to the issues raised by its volume, velocity and variety, Big Data requires new technology solutions. Currently leading the field is an open-source project from Apache called **Hadoop**. This is developing a software library for reliable, scalable, distributed computing systems capable of handling the Big Data deluge, and provides

the first viable platform for Big Data analytics. Hadoop is already used by most Big Data pioneers.

What Hadoop does is to distribute the storage and processing of large data sets across groups or "clusters" of server computers using a simple programming model. The number of servers in a cluster can also be scaled easily as requirements dictate, from maybe 50 machines to perhaps 2000 or more. Whereas traditional large-scale computing solutions rely on expensive server hardware with a high fault tolerance, Hadoop detects and compensates for hardware failures or other system problems at the application level. This allows a high level of service continuity to be delivered from clusters of individual server computers, each of which may be prone to failure. Processing vast quantities of data across large, lower-cost distributed computing infrastructures therefore becomes a viable proposition.

Technically, Hadoop consists of two key elements. The first is the **Hadoop Distributed File System** (HDFS), which permits the high-bandwidth, cluster-based storage essential for Big Data computing. The second part of Hadoop is then a data processing framework called **MapReduce**. Based on Google's search technology, this distributes or "maps" large data sets across multiple servers. Each of these servers then performs processing on the part of the overall data set it has been allocated, and from this creates a summary. The summaries created on each server are then aggregated in the so-termed "Reduce" stage. This approach allows extremely large raw data sets to be rapidly pre-processed and distilled before more traditional data analysis tools are applied.

At present, many Big Data pioneers are deploying a Hadoop ecosystem alongside their legacy IT systems in order to allow them to combine old and new data in new ways. However, in time, Hadoop may be destined to replace many traditional data warehouse and rigidly-structured relational database technologies and to become the dominant platform for many kinds of data processing.

Many organizations are unlikely to have the resources and expertise to implement their own Hadoop solutions. Fortunately they do not have to, as cloud solutions are already available. Offered by providers including Amazon, [Netapp](#) and Google, these allow organizations of all sizes to start benefiting from the potential of Big Data processing. Where public Big Data sets need to be utilized, running everything in the cloud also makes a lot of sense, as the data does not have to be downloaded to an organization's own system. For example, Amazon Web Services already hosts many public data sets. These include US and Japanese Census data, and many genomic and other medical and scientific Big Data repositories.

Looking further ahead, Big Data will progress in leaps and bounds as artificial intelligence advances, and as new types of computer processing power become available. For example, quantum computing may in the future greatly improve Big Data processing. Quantum computers store and process data using quantum mechanical states, and will in theory excel at the massively parallel processing of unstructured data.

While mining datasets measured in the terabytes, petabytes and even exabytes is technically challenging, it also offers significant opportunities. In fact, not that many years hence, Big Data techniques and technologies are likely to allow some kind of additional, secondary value to be generated from almost every piece of digital information that ever gets stored.

More specifically, Big Data has the potential to improve analytical insight, as well as allowing the creation of new products and services that were previously impossible. Pioneers such as Google, Amazon and Facebook have already demonstrated how Big Data can permit the delivery of highly personalised search results, advertising, and product recommendations. In time, Big Data may also help farmers to accurately forecast bad weather and crop failures. Governments may use Big Data to predict and plan for civil unrest or pandemics.

Big Data developments are fundamentally about creating new IT systems that are more "systems of engagement" rather than just silos for data storage. For too long we have got used to putting data into computer systems for relatively little return. But by amalgamating and analyzing increasingly big datasets, we may start to get more value out of computer systems than we put in.

For example, by using Big Data techniques to analyze the 12 terabytes of tweets written every day, it is already becoming possible to conduct real-time sentiment analysis to find out how the world feels about things. But this really is just the beginning, with Big Data offering all sorts of possibilities to potentially augment and improve the services that organizations deliver to their customers.

In a recent report on Big Data, the McKinsey Global Institute estimated that the US healthcare sector could achieve \$300 billion in efficiency and quality savings every year by leveraging Big Data, so cutting healthcare expenditures by about 8 per cent. Across Europe, they also estimate that using Big Data could save at least \$149 billion in government administration costs per year. More broadly, in manufacturing firms, integrating Big Data across R&D, engineering and production may significantly reduce time to market and improve product quality.

While Big Data may undoubtedly provide all manner of organizations with a **data stalking** ability that many may fear, the positive implications of Big Data are likely to outweigh the negative possibilities. For example, Big Data may increase sustainability by improving traffic management in cities and permitting the smarter operation of electricity generation infrastructures.

In effect, using Big Data, we could start to run the world and allocate resources based on what we really need, not what we blindly guess people may in the near future demand. Or in other words, the more we can know and learn about human activities, the less we will need to go on producing and transporting goods to fill up retail outlets with things that people may not actually want. Although it is currently a corporate computing development, the Big Data movement may therefore find that it has a great many advocates in the years and decades ahead . . .

from [www.explainingcomputers.com](http://www.explainingcomputers.com)

## **THE COLOURS OF ECONOMY**

### **Brown Economy**

A brown economy is one in which economic growth is largely dependent on environmentally destructive forms of activity, especially fossil fuels like coal, oil and gas.

One of the byproducts of this form of economy are massive levels of climate change causing greenhouse gas (GHG) which includes carbon dioxide and methane.

Air and water pollution are defining features of this type of economy and it also includes a range of harmful impacts on biodiversity. In this system economic development overtakes finite resources.

### **Blue Economy**

The blue economy, also called the marine economy is one that supports clean and healthy oceans, as well as coastal, and other aquatic ecosystems. This form of economy acknowledges that water is crucial to our financial, biological, cultural, and spiritual well-being. Although some have coined the term to apply to a comprehensive sustainability regime, in the context of this review, the blue economy primarily focuses on managing oceans, waterways and water resources.

The seas cover 71 percent of the Earth's surface and they are a rich repository of marine life, sea-based food, sea-embedded minerals, and coral reefs. Oceans are under threat from pollution, warming and acidification.

In a blue economy we are tasked to create more livelihood for an increasing number of people with better management of finite water resources. This type of economy implies water stewardship which entails less pollution and less waste as well as greater efficiency.

Specific economic activities associated with this type of economy include, sustainable commercial and recreational fisheries, tourism, recreation, that minimizes marine pollution and uses of ocean and coastal space that do not result in direct use or consumption of resources. Coastal restoration, protection, adaptation and offshore renewable energy development are also important parts of this type of economy.

### **Green Economy**

The UN succinctly defines the green economy as one that, "carries the promise of a new economic growth paradigm that is friendly to the earth's ecosystems and can also contribute to poverty alleviation." As indicated in a United Nations Environmental Program (UNEP) report on the green economy (page 16) diverse strategies for economic growth and environmental stewardship can complement one another.

UNEP defines a green economy as, “one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities.” This definition is in line with the three pillars of sustainable development (economic, social and environmental).

The green economy is premised on economic production which minimizes emissions, reduces resource consumption and lowers environmental costs. Part of this approach involves recycling natural resources in a model of economic development that can merge the economic with environmental and social benefits.

In its simplest essence the green economy is one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities.

### **Grey Economy**

The informal economy or grey economy is the diversified set of economic activities, enterprises, jobs, and workers that are not regulated or protected by the state. The concept originally applied to self-employment in small unregistered enterprises. It has been expanded to include wage employment in unprotected jobs and as the part of an economy that is neither taxed, nor monitored by any form of government. Unlike the formal economy, activities of the informal economy are not included in the gross national product (GNP) and gross domestic product (GDP) of a country.

### **Silver Economy**

Silver economy is a project focused on developing, promoting and disseminating strategies to face new challenges related to ageing population, especially regarding to technology services for wellbeing and health monitoring such as robotic assistance, electrical mobility or health sports, including health tourism and green care.

from <https://thegreenmarketoracle.com>

<https://arthamcc.wordpress.com>

## ZERO WASTE

What is zero waste exactly? And how does it make us reevaluate the way we view and use our natural resources? Here, we look at exactly what the zero-waste system entails and how it aims to reduce the environmental impact of our disposable culture and address climate change issues at the same time.

What is zero waste...really?

The definition of zero waste according to the Zero Waste International Alliance (ZWIA) is as follows:

“Zero waste: The conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health.”

At its core, zero waste takes aim at our “take, make, and waste” approach to production and consumption, encouraging a more circular approach to the way we use resources. On its most basic level, this means that the goal of zero waste is to push economies towards the target of sending no waste to landfill, incinerators, and the ocean.

However, while recycling and conscientious waste management remain core to achieving that goal, zero waste extends much further than simply dealing with “end-of-life” waste. In fact, it examines the entire lifecycle of a product or material, highlighting inefficiencies and unsustainable production and consumption practices. Zero waste refers not only to keeping waste out of landfill, but also pushing our economy to be less wasteful in production and consumption.

For those asking whether zero waste is realistic, the answer is clear. Zero waste is not merely an end goal, but a set of guiding principles that strive towards eliminating waste at any and all stages of the chain. From resource extraction through production to consumption and management of discarded materials, the aim is to close the loop, redefining the entire concept of waste and ensuring resources remain in use for as long as possible before being returned to the earth with little to no environmental impact.

What are the zero waste principles?

The zero waste principles include three underlying obligations that target different sections of society:

Producer Responsibility

Political Responsibility

Community Responsibility.

Each represents a specific stage of the waste stream. Producers are at the front end, and they must take responsibility for product design and manufacturing. The Community sits at the back end, taking responsibility for consumption and disposal. In between, political responsibility must bridge the gap between community and producer, promoting both environmental and human health while enforcing new laws designed to promote the zero waste principles.

The principles themselves are as follows, however, they are also constantly expanding to meet new challenges that arise as we continue to explore the realities of a zero waste economy.

- Design closed-loop systems
- Ensure processes (manufacturing, recycling, etc.) happen close to the source
- Conserve energy
- Don't export harmful waste
- Engage the community and promote change
- Keep products and materials in the loop as long as possible
- Build systems that provide feedback for continuous improvement
- Support local economies
- Promote materials as resources
- Minimize polluting discharges to land, water, and air
- Consider the true costs of opportunities
- Promote the Precautionary Principle
- Promote the Polluter Pays Principle
- Develop adaptable, flexible, and resilient systems.

What are the zero waste hierarchy and cradle-to-cradle thinking?

An important distinction between zero waste and conventional waste management and recycling is the prevention of wasteful practices at the start of the chain. This is otherwise known as cradle-to-cradle thinking, which stands in direct opposition to cradle-to-grave thinking. Here's what the terms mean:

- Cradle-to-grave – A linear model that begins with resource extraction, moves through manufacturing, and sees products end up in landfill. Considered an “open-loop” system that is inherently wasteful.
- Cradle-to-cradle – A circular model that minimizes waste and keeps resources in use for as long as possible. Considered a “closed-loop” that promotes sustainability and strives for zero waste through reduction, reuse, and recycling.

An example of cradle-to-cradle thinking is found within the sustainable natural cycles of organic farming and composting, and this efficient process serves as the perfect archetype for the broader concept. Food is grown using natural methods without

harmful chemical pesticides or fertilizers and is distributed and consumed (ideally using carbon-neutral distribution channels and reusable/compostable packaging). Once consumed, any food waste is composted, closing the loop as the compost contributes to the growing of more food.

However, while this simple and elegant example of the cradle-to-cradle concept works well with organics, when it comes to more complex products there is a clear need to reevaluate our approach. Here, the zero waste hierarchy comes to light, essentially expanding the three R's (reduce, reuse, recycle) to encourage policy-making, activity, and investment in systems that promote the cradle-to-cradle concept.

Zero waste hierarchy principles:

#### *Rethink*

Use reused, recycled, or sustainably gathered non-toxic materials. Incentivize cyclical materials and extended producer responsibility for the entire lifecycle of a product.

#### *Reduce*

Sustainable purchasing that supports social and environmental concerns and local markets, or take back programs to avoid disposal of products. Minimize the quantity and toxicity of materials while planning for consumption habits to minimize waste.

#### *Reuse*

Optimize the reuse of materials and products through repair, refurbishment, modular technologies, and repurposing in alternative ways.

#### *Recycle / Compost*

Support and expand existing systems that allow for high-quality recyclables and materials. Build local markets for collection and processing of recyclables. Promote decentralized composting at home.

#### *Material recovery*

Optimize material recovery and only use energy recovery systems that operate at biological temperatures and pressures.

#### *Residual management*

Minimize polluting gasses and toxic residuals from materials. Encourage the preservation of resources and minimize destructive disposal methods.

## *Unacceptable*

Disincentivize and remove support for the incineration of waste and waste-to-energy systems. Remove all toxic residuals from consumer products and in building materials.

What is the zero waste movement?

The zero waste movement is the collective pursuit of the zero waste principles, and as its popularity grows, individuals and communities around the world are helping push the agenda further. One of the most visible of many initiatives that are illuminating our consumption and waste generation habits is the ‘Mason Jar Challenge’ where participants reduce their waste down to a single mason jar over one year. However, the zero waste movement is gathering steam, and there are many more initiatives in the pipeline.

In fact, people taking responsibility for their own waste production is only the tip of the iceberg and by increasing awareness around the issue, both politicians and producers will be forced to take more responsibility. Zero-waste stores, zero-waste agriculture, zero-waste fashion, and even entire zero-waste lifestyles and jurisdictions are now entering the mainstream, with more people than ever striving to meet zero waste principles.

Today, the Zero Waste International Alliance (ZWIA) positions itself as the only peer-reviewed authority on the topic, and its guiding principles are among the most comprehensive. They ask the community:

- To adopt the ZWIA definition of the concept
- To establish benchmarks and a timeline for the zero waste agenda
- To engage the whole community – local, national, and international
- To demand the management and conservation of all resources and not just the management of waste
- To implement levies and taxes on waste that is sent to landfill
- To perform zero waste assessments
- To build separation and research facilities for residuals
- To develop rules, laws, and incentives to promote zero waste
- To enforce Extended Producer Responsibility (EPR) laws
- To remove government subsidies that allow and promote waste
- To expand zero waste infrastructure.

Why zero waste?

According to the EPA, only around 30% of the US waste stream is recycled and around 140 million tons of waste is sent to landfill each year. When it comes to single-use plastics only around 9% are recycled.

Landfills cannot continue to hold our waste, they are not only harmful to the environment, but they also release CO<sub>2</sub>, methane, hydrogen sulfide, and other harmful gasses. Additionally, leachate from landfills enters our groundwater and pollutes farmland and drinking water.

At our current waste generation levels, the recycling industry cannot hope to keep up with demand, and while recycling is highly important to the zero waste movement, it must not be so heavily relied on. Additionally, the extra resources and emissions associated with the recycling industry can and should be designed out, using better resource management and by encouraging producer responsibility.

Finally, if we hope to address the destructive impact of climate change then zero waste and a more circular economy are truly our most sensible and sustainable options.

from <https://www.zerowaste.com/blog/what-is-zero-waste-a-guide-to-resource-recovery-and-conservation/>

*Учебное издание*

Составитель:  
**Михайлова Елена Геннадьевна**

**Иностранный язык (английский)  
для социальных и гуманитарных исследований**

Учебно-методическое пособие

Издается в авторской редакции  
Компьютерная верстка: *Е. Г. Михайлова*

---

Объем данных 1,84 Мб  
Подписано к использованию 30.12.2021

---

Размещено в открытом доступе  
на сайте [www.psu.ru](http://www.psu.ru)  
в разделе НАУКА / Электронные публикации  
и в электронной мультимедийной библиотеке ELiS

Издательский центр  
Пермского государственного  
национального исследовательского университета  
614990, г. Пермь, ул. Букирева, 15