

Business English News 38 - Automation and the Rise of AI

Throughout the **course of history**, society has often been hesitant to accept **widespread** change. A day doesn't pass without a new technological advance being reported. This has led many to worry about the effects of **artificial intelligence**, or **AI**, on our daily lives. As Tech-News-Tube explains:

Looking back on 2016, it would be easy to think that this was the year that artificial intelligence arrived. Media outlets **bombarded** us with news on the future of AI and **automation**. The vision of a **dystopian future** where robots do all the work and humans are **trapped** in a jobless, meaningless existence **drove headlines** of all kinds.

The advantages of AI are clear, but they also raise a number of questions. What impact will it have on jobs? Could our smart machines lead to **mass unemployment**? What can we learn from history that will help us better respond to AI's technological advances? As the Economist notes, it's not the first time we've dealt with this issue as a society:

Panic about "**technological unemployment**" **struck** in the 1960s when firms first installed computers and robots and the 1980s when PCs **landed** on desks. Each time, it seemed that widespread automation of skilled workers' jobs was **just around the corner**.

The science might still be at a **nascent stage** but growth in the sector is a **foregone conclusion**; a forecast for 2017 and beyond from analyst firm IDC notes that we can expect to continue seeing **robotic** and AI technologies becoming more **cost-effective**, more capable, and easier to use. As Sci-Tech Today explains:

It's hard **to bet against** the continued **rise** of automation, robots, and artificial intelligence,, all of which are already having major impacts on how we work, learn, shop, and play. But being able to **predict** that robotics and AI will change our lives is a lot easier than predicting *how* they will change our lives.

AI is an exciting technology, but it has yet to fully arrive. What we see today is instead the continuation of a **decades-long**, if not **centuries-long process**: the automation of **dull** tasks, resulting in jobs that are safer and more stimulating - not to mention **abundant**. From Beta News:

It's not to say there is nothing new in the world of automation. On the contrary, we are seeing a **quantum leap** in terms of what is possible within the **realm** of automation. The automation of **mundane** physical tasks **has long been** the key form of automation, from the Ford assembly line in Detroit to Chinese plants **churning out** iPhones.

A **legitimate** concern for many is the impact automation will have on their jobs. During his farewell address, outgoing President Barack Obama pointed out that AI is an **economic disrupter** facing the United States:

“There are no **quick fixes** to this long-term trend. I agree that our **trade** should be **fair** and not just **free**. But the next wave of **economic dislocation** won’t come from overseas. It will come from the **relentless pace** of automation that makes many good, middle-class jobs **obsolete**.”

Government support is one approach to help **alleviate** these stresses. Labor policy adjustments may help **amplify** the positive effects of automation and **temper** the negative ones as the New York Times explains:

Labor economists say there are ways to **ease the transition** for workers whose jobs have been **displaced** by robots including **retraining programs**, more **public-sector** jobs, a higher minimum wage, a bigger **earned-income tax credit** and, for the next **generation** of workers, more focus on **post-secondary education**.

In this **digital world**, the only constant is change; and it’s accelerating quickly. While AI will increase productivity as it’s **zapping** all those jobs, there may be opportunities for the government to try different solutions **to compensate**. As Fortune Magazine notes:

By the time AI fully arrives, **forward-thinking** companies and **policymakers** will have **ratcheted up** critical retraining efforts. If it results in a significant reduction in employment or **pressure** on wages, some ideas such as negative income taxes, **universal basic income**, conditional transfers, and adapted **social safety nets** could be considered and tested.

Although the **proliferation** of AI will continue, the reality is that there are some tasks that humans will always be better at. The **human touch** is something that machines, no matter how advanced will ever be able to take away from us. TechCrunch concludes:

People still matter. And that’s an important point **to keep in mind**. Even in **scenarios** that don’t involve advanced education like physicians, it doesn’t mean that we as humans don’t want **to interact** with people instead of machines.

Vocabulary

Course of history: The way things have happened or will happen in the future.

Widespread: Found or distributed over a large area or to a large number of people; "After Trump won the election, there was widespread concern in the global stock markets."

Artificial Intelligence (AI): The development of computer systems able to perform tasks that are normally done by humans.

To bombard: To continuously deliver information to, question, or criticize someone; "Rumors of our big merger have spread around the office; I'm getting bombarded with questions from everyone on my team!"

Automation: The use of automatic equipment in a manufacturing or other process or facility; "There's no question that the increase of automation in airplanes has helped to reduce accidents."

Dystopian future: A future period in which society is exactly the opposite of "utopian" or perfect.

To trap: To trick someone or put them in a position where they cannot change, move, adjust; "The reporter tried to trap him in to admitting that they broke the law."

To drive (headlines): To provide the power or energy that makes something happen or occur; "The production plant is driven entirely by solar and green energy."

Mass unemployment: A situation in which a lot of people suddenly lose their jobs.

Technological unemployment: Losing one's job due to technological advances in that sector; "McDonalds has started using robots to take a customer's order; this has led to an increase in technological unemployment in the fast food industry."

To strike: To take place, happen, or occur; "We don't know when the next financial crisis will strike, but it will likely be worse than the one we saw in 2009."

To land: To become available or arrive; "Our new line of office supplies should land in stores at the end of the month."

(To be) just around the corner: Something which will take place or occur very soon; "We just celebrated Christmas, but it already feels like Easter is just around the corner."

Nascent stage: Early period of development, growth, or progress.

(To be a) foregone conclusion: Something that is almost certain to happen; "Regardless of your beliefs, the fact that the planet will continue getting hotter is a foregone conclusion. Society needs to adapt."

Robot/Robotic: A mechanical device capable of performing a variety of often complex human tasks; "Advances in medical technology will mean that one day people may have an actual robotic heart."

Cost-effective: Producing good results without costing too much money; "Dean is a financial planner, and he advised me on the most cost-effective way to invest in the stock market."

To be against: To oppose or resist an idea or action; "They've stated that they're completely against using outside contractors to do the work."

Rise: An increase or escalation; "In the coming years, we'll see a big rise in the use of virtual reality for business and training purposes. The technology is amazing!"

To predict: To guess, forecast, or foresee; "It's not official yet, but I predict that Roberta will take the lead on this new project."

Decades/centuries-long: An activity or action that takes place over a long period of time.

Dull: Boring, uninteresting, or unexciting; "Daniel was a great speaker, but I found the topic of his presentation a little bit dull."

Abundant: An amount that is plentiful, sufficient, or existing in large quantities; "The market research has concluded that there's abundant demand for this type of food delivery service."

It's not to say (that): It doesn't necessarily mean that; "I'm content with the final result of the project, but it's not to say that we can't do better."

Quantum leap: A sudden large increase or advance; "In the last 10 years, there's been a quantum leap in the quality of wines produced in Canada."

Realm: A field or domain of activity or interest; "Sam has become a master in the realm of 360° photography."

Mundane: Repetitive, tedious, and uninteresting; "I've only been there for three months, but there are some aspects of my job that are quite mundane; it's the same work every day."

To long be: Something that has been occurring or taking place for an extended period of time; "As a language teacher, I've long been in favor of using technology in the classroom, and I think my students appreciate it."

To churn out: To produce, develop, or create a product in a way that is usually rapid and a large volume; "Pasquale was hired for his ability to churn out beautifully designed graphics on a consistent basis."

Legitimate: Logical, authentic, or genuine; "Don't worry; requesting time off so you can move to a new apartment is a legitimate reason."

Economic disrupter: An act or event that causes instability or uncertainty in the economy.

Quick fix: An easy remedy or solution, usually one that is temporary and fails to address underlying problems; "Investors will need to be patient and not expect any quick fixes."

Fair trade: Trade between companies in developed countries and producers in developing countries in which fair prices are paid to the producers.

Free trade: International trade left to its natural course without tariffs, quotas, or other restrictions.

Economic dislocation: The effects felt by a person or group due to sudden and often unexpected changes to the economy.

Relentless pace: Motion or activity that doesn't show any sign or indication of slowing; "Smartphones change at such a relentless pace it's impossible to have the absolute latest technology."

Obsolete: No longer produced or used, or out of date; "The disposal of old and obsolete machines has created a significant amount of waste worldwide."

To alleviate: To make suffering, deficiency, or a problem less severe; "In order to alleviate poverty, it's important that every citizen has access to quality education and health care."

To amplify: To make (something) more marked or intense; "Technology has amplified the average person's ability to be creative in so many ways it's hard to count them."

To temper: act as a neutralizing or counterbalancing force to (something); "His excitement after receiving the promotion was tempered by the reality that he needed to reach some difficult targets."

To ease the transition: To make the adjustment to a new reality or experience easier and more efficient.

To displace: To move or relocate something from its proper position; "Since coming back from a long holiday, Fred has been feeling displaced in the office."

Retraining program: A training course specifically designed and intended for someone who is trying to learn about a new job sector, usually after they've lost their previous job.

Public sector: The part of the economy that is controlled by the state; "The best thing about public sector jobs, such as working with the local or provincial government, is the great benefits that staff receive."

Earned income tax credit: A benefit for working people, often with children, who have low to moderate income.

Generation: All of the people born and living at approximately the same time in history; "Regardless of your political beliefs, he'll be remembered as one of the most influential leaders we've ever seen."

Post-secondary education: A level of education that goes beyond secondary (senior/high school); specifically, this refers to college, university, or vocational schools.

Digital world: The current reality of everyone and everything being connect through technology; this allows citizens all over the world to communicate, share ideas and opinions more easily and efficiently than ever before.

To zap: To destroy or obliterate; "Martina enjoys her new job, but it zaps her energy at the end of the day."

To compensate: To reduce, offset, or counteract an undesired effect; "His enthusiasm for the job compensates for his lack of technical expertise."

Forward-thinking: Thinking about and planning for the future; "Apple has always been a forward-thinking company; they're great at predicting what consumers and users will want in the future."

Policymaker: Someone responsible for formulating or creating policies, usually in politics; "I can't understand why our federal policymakers and elected officials are taking such extreme actions."

To ratchet up: To increase something over a period of time; "The debate on the environment should ratchet up public awareness of the dangers of global warming."

Pressure: The stress that's placed on something when force is applied; "The only way we're going to walk away with a good deal is if we start putting some pressure on them; we need to be prepared to walk away from this merger."

Universal basic income: A form of social security in which all citizens of a country receive a guaranteed fixed sum of money from the government.

Social safety net: Collection of services provided by the government including programs such as welfare, unemployment, and healthcare.

Proliferation: Rapid increase in the number or amount of something; “The proliferation of the English language in global business has created a huge demand for in-company language training programs.”

Human touch: A friendly and pleasant way of treating other people; “He’s a good analyst, but Frank’s colleagues say he lacks the human touch to be a great leader.”

To keep (something) in mind: To remember or continue to think about something; “While you’re finishing this report, keep in mind that all of the spelling needs to be in British, not American, English.”

Scenario: A sequence or development of events; “One possible scenario is that we take all of the profits from this event and donate them to a charity.”

To interact: To act or behave in a way that will have an effect on others; “All of these different departments interact with each other throughout the day; we want everyone to know what everyone else is working on.”

Language Review

A. Collocations

Match words from each column to make collocations found in the article.

1. Digital	a. Touch	
2. Public	b. Pace	
3. Quantum	c. Dislocation	
4. Human	d. Unemployment	
5. Dystopian	e. Sector	
6. Relentless	f. Leap	
7. Mass	g. Future	
8. Economic	h. World	

B. Vocabulary Quiz

- Which of the following would be used to teach a new set of skills to someone who recently lost their job?
 - Technological unemployment
 - Retraining program
 - Nascent stage
 - Post-secondary education
- Which of the following is a fixed amount of money given to each citizen every month?
 - Economic disrupter
 - Earned income tax credit
 - Guaranteed basic income
 - Social safety net
- Which of the following terms is most appropriate to describe a conference that you didn't enjoy?
 - Dull
 - Abundant
 - Obsolete
 - Proliferation
- "We've just moved to a new office building. Now begins the _____ work of unpacking all of the boxes."
 - Robotic
 - Mundane
 - Rise
 - Scenario

5. "I was an hour late for the big sales presentation. My boss, _____, was unimpressed."
- Predict
 - Prediction
 - Predictive
 - Predictably
6. "It's a great product, but we I think we need to _____ quickly if we're going to take advantage of this need in the market."
- Trap
 - Temper
 - Strike
 - Land
7. "I'm not looking for a _____ solution on this, you guys. We need something that's going to correct these problems once and for all."
- Foregone conclusion
 - Quick fix
 - Cost-effective
 - Ratcheting
8. "These courses are so cool! It's all really _____ and with a smartphone or tablet you can study anywhere!"
- Interactive
 - Interaction
 - Interacts
 - Interactivity
9. A: "I can't believe how fast this week has gone. I'm so far behind on this report!"
 B: "I know what you mean. The end of the fiscal year _____"
- "is decades-long from now"
 - "will be forward-thinking"
 - "should ease the transition"
 - "is just around the corner"
10. "In order to _____ the stress around the office, we've started encouraging people to bring their dogs to work with them, and it's led to a huge increase in productivity!"
- compensate
 - displace
 - alleviate
 - amplify

up

Answers

A. Collocations

Digital World
Public Sector
Quantum Leap
Human Touch
Dystopian Future
Relentless Pace
Mass Unemployment
Economic Dislocation

B. Vocabulary Quiz

1/b, 2/c, 3/a, 4/b, 5/d, 6/c, 7/b, 8/a, 9/d, 10/c