Business English News 45 - The 5G Revolution

There's a lot of **buzz** around **5G** technology these days. And it's not just tech **giants** like Samsung, Ericsson and Huawei that are getting excited. Everyone from consumers to governments are **paying attention**. And with the excitement comes **no small amount** of **controversy**. But what's all the **hype** about? And **for starters**, what exactly is 5G? Technology website Inventiva explains:

Put simply, 5G is an innovative mobile technology, which is expected to impact all **aspects** of our lives, including our homes, entertainment, work, and travel. In part, this is because it enables **download speeds** 10 to 20 times faster than the **4G** networks of today. But it's also much more **responsive** than the current networks, and allows many more devices to be connected to the internet. **In short**, it **radically** improves network **bandwidth**. With such speed and **capacity**, 5G is expected to **transform** everything around us.

Of course, when consumers hear about "innovative mobile technology," they **rush** for their phones. **Obsessed** with speed and **signal strength**, many people are hopeful about 5G's potential. And telecom networks are working to bring the new technology to **the masses**, despite recent challenges. As CNET reports on the American **front**:

Each of the major US wireless **carriers** is **deploying** 5G across the US in various cities. Much of this work began in 2019, but things were supposed to really **ramp up** in 2020. Then the **coronavirus pandemic hit**. "Our 5G deployment is proceeding, although we continue to **navigate** workforce and **permitting** delays," former AT&T CEO Randall Stephenson stated recently. He said AT&T has "no intention of slowing down on 5G and **fiber** deployment, but the reality is that a lot of it is not in our control."

Pandemic **notwithstanding**, there *are* things that can be controlled. And the push to a 5G future is being helped along by **state** influence as well **consumer demand**. In fact, as Tech Radar points out, this is where other countries may **have a leg up** on the US:

While the US receives lots of attention for its mobile technologies, Asia is quickly leading the way where 5G is concerned. In fact, four of the world's five most 5G-ready nations **reside** in this region: China, South Korea, Japan, and India. Thanks to **proactive** government policies and the **ever-increasing momentum** of technology in China, the nation has become a major 5G **player**. Since 2015, China has **doubled down** on 5G - the country has **outspent** the US by $24 billion to construct more than 350,000 5G-compatible cell towers. **For comparison's sake**, the US has built roughly 30,000 in that same amount of time.

China's 5G **preeminence** is represented by the success of Huawei, which is also **at the heart of** many countries' **national security** concerns. These concerns have **prompted aggressive moves** by some countries to **distance themselves** from Chinese technologies. As reported by the New York Times, the most recent announcement comes from the UK:

Asserting that Huawei created too much risk for such a **critical**, multibillion-dollar project, the British government said that it would **ban** the purchase of new Huawei equipment for 5G networks after December. Moreover, existing **gear** already installed would need to be **pulled** from the networks by 2027. "As facts have changed, so has our **approach**," said Oliver Dowden, the government minister in charge of telecommunications.

Given all this controversy, and the **extent** of the response, you might think that 5G is going to **revolutionize** human communication. But is it? Are mobile phone users really going to see a difference? Maybe not, according to the Outline:

Closer to earth, the revolutionary qualities of 5G seem a little more **prosaic**. Most consumers of 5G will experience some benefits: downloading **4K**-quality movies in a matter of seconds, or, if you're a **gamer**, less **lag**. It's hard to say much more beyond that, particularly because companies have spent many more years **hyping** the possibilities of 5G instead of actually laying the **infrastructure** for it.

In fact, the greatest impact of 5G isn't going to be felt **on the street**. Not directly, at least. Rather, it will have important **commercial applications** that consumers may not even see. But that makes them no less revolutionary, according to Dimitris Mavrakis, research director of ABI Research. As IT Web reports:

He noted that low **latency**, high-speed 5G connectivity has opened **infinite** opportunities for businesses, resulting in **productivity gains** and operational efficiency, boosting economic growth by over $7.5 trillion in the next decade. While 5G will **drive** future businesses across all sectors worldwide, Mavrakis said it is likely to be most beneficial to the commercial sector. "We expect that 5G will transform businesses in the same way 4G transformed consumers.

Vocabulary

Buzz: a feeling of energy or excitement; "This new productivity app has caused a lot of buzz, but I don't think it's actually that useful."

5G: a new mobile communications technology.

Giant: a very successful person or company; "With the economic downturn, even some of the biggest oil giants like BP have taken a financial hit."

To pay attention: to listen to, watch, or monitor something; "Whenever Warren Buffet expresses his opinion about the stock market, everybody pays close attention."

No small amount: a lot; "Unfortunately, our little safety accident has generated no small amount of bad press for us."

Controversy: an issue that a lot of people disagree strongly about; "There's a lot of public controversy about whether the government should support big businesses during the crisis."

Hype: a lot of advertisement or promotion about something; "We've managed to create a ton of hype through social media for our big product launch."

For starters: used for introducing the first of several things you want to talk about; "I've got a few suggestions on this… for starters, why don't we do a policy review?"

Put simply: used to say that you are talking about something in a clear and simple way; "Why shouldn't we choose Judith for the work team? Put simply: she doesn't get along with anyone."

Aspects: parts or features of something; "Once we're done talking about the technical aspects of your idea, let's talk about the financial ones."

Download speeds: how fast a device can receive data from a server; "With our new Internet3000 service, you'll have the best download speeds possible."

4G: fourth generation mobile communications technology, in widespread use in 2020.

Responsive: reacting quickly to information or commands; "If the website isn't responsive, try closing your browser and opening it again."

In short: briefly; "So let me be clear Terry: in short, you oppose the idea of relocating our office?"

Radically: greatly or extremely, for change; "Many companies resisted work-from-home arrangements, but with COVID-19, that has changed radically."

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Bandwidth: the amount of information that can be sent each second over a network connection; "Looks like our bandwidth isn't good enough to stream this video during the meeting."

Capacity: the amount of something that can be held or handled; "With this new server, we're doubling our digital storage capacity."

To transform: to change completely; "After so much scandal and crisis, Uber is trying hard to transform its reputation and public image."

To rush: to move quickly to do something; "Instead of rushing into this new technology, let's wait and see how truly effective it is for others."

Obsessed: thinking constantly about something or someone; "The economic recession is a real blow to investors who are obsessed with rapid growth."

Signal strength: a measure of how well data is transmitted or sent, such as through wifi or cellular network; "Sorry folks, my signal strength is poor, so don't be surprised if I suddenly drop off the call."

The masses: ordinary people or the general public; "Meat producers are competing hard to bring a good plant-based protein product to the masses."

Front: aspect of a situation; "Sure, our sales are up, but on the HR front I think we've got some real problems to deal with."

Carrier: a company that provides cell phone service.

To deploy: to use something, such as employees or resources, for a task; "We're testing this new software in our Chicago office before deploying it across the country."

To ramp up: to increase something's rate or level of activity; "We need to ramp up our production to meet increasing consumer demand."

Coronavirus: one of a type of viruses that causes illnesses such as COVID-19.

Pandemic: a situation where many people in a country or the whole world are affected by a disease; "When the World Health Organization declared COVID-19 a pandemic, countries started taking drastic action."

To hit: to start to affect; "During difficult economic times, auto repair shops aren't hit negatively like other businesses are."

To navigate: to deal with or find a path through difficulties; "We've been trying to open a restaurant for months, but navigating the health and safety laws is impossible."

Permitting: related to permits and licenses.

Fiber: short for "fiber-optic," which is the use of glass or plastic fibers for transmitting information quickly as light; "Listen, with our new fiber you'll be getting much faster Internet than with the old copper wire."

Notwithstanding: despite something; "Notwithstanding the high price, I think the Mercedes trucks are a much better purchase than the Toyotas."

State: national governments; "The United States is one of the only developed countries that doesn't have a state-run healthcare system."

Consumer demand: how much of something people want to buy; "With more people baking their own bread, consumer demand for yeast and flour has gone way up."

To have a leg up: to have an advantage; "Sure, there are lots of applicants for the job, but you have a leg up because you know the CEO."

To reside: to live or be located in a place; "The storm is expected to have terrible impacts on people who reside along the coast."

Proactive: making decisions or taking action before necessary, rather than waiting for problems; "With a proactive approach, you can stop conflict among employees before it really becomes problematic."

Ever-increasing: continually growing in scope or number; "It seems that ever-increasing online sales are creating opportunities for small retailers."

Momentum: the force gained by moving forward or progressing; "We've accomplished a lot on this project this week, so let's keep that momentum into next week."

Player: a person or organization that influences a situation, especially in business or politics; "The biggest players in tech are Amazon, Apple, Alphabet, and Facebook."

To double down: to increase efforts; "With so many small companies in trouble, it's an opportunity for us to double down on our acquisitions strategy."

To outspend: to spend more than someone else; "Pharmaceutical companies outspend those in other industries on research and development."

For comparison's sake: used to introduce a fact that is different from another in an interesting way; "China has 188 cars per 1,000 people. For comparison's sake, the United States has 838."

Preeminence: the fact of being better or more important than others in a place, situation, or field; "According to Jay Abraham, business leaders who want to achieve preeminence in their industry need to learn to think differently than everyone else."

At the heart of: at the center of something; "The lack of advertising is at the heart of this downturn in sales."

National security: the safety and defense of an entire country; "With the biggest military in the world, the United States spends more on national security than any other nation."

To prompt: to cause something to happen or be done; "Customer complaints have prompted us to review how we handle requests for technical support."

Aggressive moves: actions that are meant to show force, strength, or to attack someone; "Amazon has been criticized for making some aggressive moves to eliminate its smaller competitors."

To distance oneself: to become less connected or say you are not connected to something or someone; "After firing the CEO for his misbehavior, we had to work hard to distance ourselves from him."

To assert: to say firmly that something is true; "The CFO has clearly asserted that a spending freeze is necessary to get the company back on track."

Critical: very important or necessary; "I feel that one of the most critical issues this year is replacing our old equipment."

To ban: to make something illegal or not allowed; "In an effort to improve youth health, the British government is considering banning online ads for junk food."

Gear: equipment; "Tim could you help the photographer bring all his gear up to the 2nd floor for our photo shoot?"

To pull: to remove someone or something from a situation; "When someone got sick from our lettuce, we pulled all our products from grocery stores immediately."

Approach: a way of dealing with or behaving toward something or someone; "A calm approach hasn't worked with Darren, so I'm thinking I need to be harder on him."

Extent: the size or scope of something; "We need to bring in an inspector here to figure out the full extent of the damage from the flood."

To revolutionize: to completely change; "Smart phones have revolutionized how people communicate and browse the Internet."

Closer to earth: used to introduce an idea that relates more to average life or people; "Yes, corporate profits are down, but closer to earth I'm worried about people losing their jobs and houses."

Prosaic: ordinary or unexciting; "I was excited by virtual reality when it first came out, but it's more prosaic than I expected."

4K: very high resolution for TV screens.

Gamer: a person who avidly plays video games; "A lot of gamers are looking forward to the release of Sony's new PS5 console."

Lag: a delay, especially in the transmission of data; "I'm sorry if I'm slow to respond folks, but there's a three-second lag in our connection."

To hype: to try to get people excited about something; "Although we hyped the new app as much as possible, we've had disappointingly few downloads."

Infrastructure: the basic physical set of systems that allow something to happen; "To stimulate the economy, governments are spending money on infrastructure projects, such as new roads."

On the street: for the general public or in typical situations; "Many business leaders are excited about the productivity gains from remote working, but the feeling on the street is that it's too lonely."

Commercial applications: practical uses for businesses; "I don't think driverless cars will be widely popular for personal travel, but the commercial applications for trucking have great potential."

Latency: in networks, how fast a request can be sent, received, and fulfilled.

Infinite: without end; "Many people are now questioning whether capitalism's promise of infinite growth is realistic."

Productivity gains: increases in how much work can be done; "We've seen productivity gains of 30% since installing the new machines."

To drive: to provide the energy or push for something; "Young consumers who care about the planet are driving a lot of companies to improve their environmental practices."

Language Review

A. Collocations

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

1. Signal	a. down	
2. To have	b. speeds	
3. To double	c. oneself	
4. Aggressive	d. strength	
5. Put	e. moves	
6. Download	f. gains	
7. Productivity	g. simply	
8. To distance	h. a leg up	

B. Vocabulary Quiz

1. Which of the following have similar meanings? [choose 2]

    a. Hype
    b. Pre-eminence
    c. Latency
    d. Buzz

2. We can _____ people or resources to accomplish a task.

    a. Prompt
    b. Deploy
    c. Rush
    d. Pay attention to

3. Which of the following expressions means "have an advantage?"

    a. To have a leg up
    b. To ramp up
    c. To double down
    d. To assert

4. While average consumers won't see any benefits from the new device, it will have many important _____.

      a. Aggressive moves
      b. Commercial applications
      c. Critical approaches
      d. Proactive momentums

5. When we completely change something, we can say we _____ or _____ it. [choose 2]

      a. Revolutionize
      b. Hype
      c. Drive
      d. Transform

6. Protecting Internet infrastructure is _____ to _____.

      a. Proactive / consumer demand
      b. Critical / national security
      c. Responsive / bandwidth
      d. Prosaic / productivity gains

7. Which of the following words means providing the initial energy for something to happen? [choose 2]

      a. Hype
      b. Drive
      c. Navigate
      d. Prompt

8. Due to an increase in _____, we have decided to _____ production.

      a. Consumer demand / ramp up
      b. Capacity / deploy
      c. Controversy / hype
      d. Momentum / double down

Answers

A. Collocations

1/d, 2/h, 3/a, 4/e, 5/g, 6/b, 7/f, 8/c

B. Vocabulary Quiz

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