

Disruptive technology allows businesses to exchange real-time data with numerous facilities, operators, customers, supply chains, and other connected devices using Internet network infrastructure. Moreover, it directly integrates computer-based systems with the physical world through remote control and sensing, improving efficiency, accuracy, and economic benefits [7,9]. IoT offers promising opportunities for organizations to build vital applications and services, such as facility management, production, plant safety and security, energy management, asset management, quality control, and logistics and supply chains [10]. These IoT applications generate a new pattern that enables organizations to explore new markets, enhance production, streamline business operations, and more effectively and efficiently satisfy customer requirements while maintaining competitive advantages [3,11].

IoT adopters saw IoT as critical to business success in the coming years [12] and believed companies that do not embrace IoT will fall behind their competitors within five years [13,14]. Competitors who adopt IoT can produce goods faster and more efficiently and conquer market shares even as new competitors emerge [11,15]. Thus, the IoT will become a necessity rather than an option for competitive market success [11,12]. Furthermore, IoT can play a strategic role in preserving organizations and protecting them from collapse during crisis times, such as the COVID-19 pandemic outbreak that devastatingly affected human lives and the global economy [16,17]. Besides assisting in recovery from pandemic impacts, remote work and increased reliance on technology can also keep employees safe [16,18]. Consequently, organizations are increasingly looking toward emerging technologies for operational support in the wake of extreme disruption [12,19].

For a full list of references, see end of Unit.

► Activity 2: Answer the following questions:

1. What is IoT capable of doing due to its smart features?
2. How will the application of IoT affect the global economy?
3. What are the expected consequences for those who adopt and those who do not adopt IoT?
4. How can IoT be beneficial in a time of a pandemic?
5. What definition would you give to the term 'disruptive technology'?

► Activity 3: Find words in the text that correspond to the following meanings:

1. introduced (par. 1)		2. able to be used together with / functionally equivalent (par. 2)	
3. a point where two things join / meet (par. 2)		4. the basic systems that enable a country/society to function (par. 2)	
5. (give a shape to) make sth more efficient (par. 3)		6. of great importance (par. 4)	
7. following, as a result (par. 4)		8. catastrophically (par. 4)	
9. consequences, effects (par. 4)		10. fail to keep pace with (par. 4)	

► Activity 4: Fill in the gaps choosing from the words you supplied in Activity 3:

1. Due to long illness, he _____ with his studies.
2. The city's _____ was destroyed by heavy bombing.
3. _____ of the economic crisis some investors managed to make great gains.
4. The 1990s _____ a new era of innovation and opportunity in our city.
5. This Windows version is _____ with the Mac version of Office.
6. Digital technologies have greatly contributed to _____ system administration.