Meeting: Internet of Things

Committee: Enhancing ethics of IOT usage

Country: China

Introduction

The Internet of things (IoT) is the network of physical devices, vehicles, home appliances, and other items embedded with electronics, software, sensors, actuators, and connectivity which enables these things to connect, collect and exchange data, creating opportunities for more direct integration of the physical world (Wikipedia. 2018). Practical areas of applications of IoT are depicted in the figure below:



Examples of benefits of internet in China

(a) Smart Farming

Chinese dairy farmers are already connecting their herds to the internet. Cows wear collars with wireless sensors that collect biometric data such as body temperature and heart rate. Insights from this information are then used to improve milk production. This has the potential of assisting farmers earn an additional \$420 per cow in a year, which translates to increase in total profits by 50 percent annually (Hu, 2018).

(b) Smart Cars

The use of smart cars (electric cars) in China is growing rapidly. Smart car is projected to reach 50 percent of new car sales by 2020 (Fusheng , 2018). This will reduce environmental pollution.

(c) Smart Health

China is already far ahead of the US in artificial intelligence (AI) enabled diagnosis (Dai, 2018). The author also notes that there are over 2,000 kinds of skin diseases in China. It is difficult for doctors to be familiar with them all. This can put many patients at risk. However, with innovation using Al, this eases way of attending to patients as real time diagnosis is conducted which reduces burden on the doctors.

(d) Smart City

A smart city is a designation given to a city that incorporates information and communication technologies (ICT) to enhance the quality and performance of urban services such as energy, transportation and utilities with a view to reducing resource consumption, wastage and overall costs (Techopedia, 2018). The main aim of a smart city is to enhance the quality of living for its citizens through the use of smart technology. Collected data are analyzed to monitor and manage traffic and transportation systems, power plants, water supply networks, waste management, law enforcement, information systems, schools, libraries, hospitals, and other community services (Wikipedia, 2018). Available data indicates that China has over 500 smart cities, which is the highest in the world (The Economic Times, 2018).

However, the benefits that come with IoT in a country like China cannot be over emphasized. In a recent study by Nie, Sousa-Poza, and Nimrod (2017), the authors found that intensive use of internet in China is associated with low subjective well-being.

The success of China in IoT is not a coincidence because statistics has shown that China is now boast of 802 million internet users , which is about 57.7 percent with 788 million (about 98 percent) people reportedly mobile internet users. The number of internet users in China is now more than the combined populations of Japan, Mexico, Russia, and the U.S., as noted by Bloomberg.

Concluding Remarks

Connecting more "things" to the internet has the potential to increase efficiency, raise productivity, reduce waste, and stimulate economic growth. Thus, empowering people with connectivity is the key to bringing about positive change at all levels of society. Incidentally, China is one of the leading countries on the progressive ladder in this aspect.

References

The Economic Times. (2018). China has highest number of smart city pilot projects:

Report Retrieved from

https://economictimes.indiatimes.com/news/international/world-news/china-has-highest-number-of-smart-city-pilot-projects-report/articleshow/62998738.cms

Dai, S. (2018). China counts on AI to find a cure for its ailing health care system Retrieved from https://www.thestar.com.my/tech/tech-news/2018/07/02/china-counts-on-ai-to-find-a-cure-for-its-ailing-health-care-system/

Fusheng, L. (2018). Smart car target set at 50% of new sales by 2020. *China Daily*. Retrieved from http://www.chinadaily.com.cn/a/201801/08/WS5a5326f8a31008cf16da5c7a.html

- Hu, K. (2018). How internet of things can benefit everyone. *China Daily*. Retrieved from http://usa.chinadaily.com.cn/a/201809/03/WS5b8c7028a310add14f3891f6.html
- Nie, P., Sousa-Poza, A., & Nimrod, G. (2017). Internet use and subjective well-being in China. *Social Indicators Research*, *132*(1), 489-516.

Techopedia (2018). Smart City. https://www.techopedia.com/definition/31494/smart-city

Wikipedia (2018). *Internet of things*. Retrieved from https://en.wikipedia.org/wiki/Internet of things

Wikipedia (2018). Smart City. Retrieved from https://en.wikipedia.org/wiki/Smart city