Internet of Things (IoT)

Student

Institutional Affiliation

Internet of things (IoT)

**Introduction**

As an IT consultant in the information technology industry, the IoT system has been playing a significant role in upgrading the quality and efficiency of medical treatments, which steadily aids in improving the physical and mental health of the patients effectively. The Internet of Things (IoT) is referred to as the network of internet-connected devices all over the world that can efficiently collect and exchange recorded or transmitted data. Due to the presence of the IoT system, in the hospitals, domestic homes and nursing homes, all the mechanical and advanced machines can easily sense and gather sensitive data and transmit the same to other device using the internet. By integrating digital intelligence and security in the information technology industry through IoT, the medical sector is consistently and strikingly developing in comparison to other industry. With the amalgamation of the physical and digital universe, the environment in the information technology industry is evolving rapidly.

Internet of things (IoT) is the network of physical objects that have been tightly implanted with electronics such as RFID chips, software, and sensors connected through an interface. Network connectivity enables electronic devices to collect data, which will be used to solve problems (Lee, and Lee, 2015:pp.431-440). Internet of things (IoT) is a trending topic in the telecommunication industry, IoT has made communication easy. IoT has made it easy to connect electronic devices and control them through smart devices like personal computers (Gubbi, Buyya, Marusic, and Palaniswami, 2013: pp.1645-1660). IoT is one of the things that show that technology is continuously making innovations in areas experiencing challenges. There are more than a billion IoT devices in the world that can now connect to the internet, sharing and collecting data. This research paper discusses the effects of IoT to the lives and the work of individuals.

Through the IoT, the devices that used to be controlled manually can now be controlled through available applications given that the devices have been connected to the internet. IoT devices, through the use of apps, are meant to simplify things in the office and at homes (Madakam, Lake, Lake, and Lake, 2015:p.164). IoT has made it easy for individuals to communicate in private internet connections in a vast range; it easy for individuals to communicate with those in Asia and Africa because of the interconnected devices. In the workplace, IoT devices are used positively to gather data on areas that need improvements like the medical fields and supply chain management. The data collected from IoT devices is helpful in enhancing human efficiency and improve their level of productivity (Farooq, Waseem, Mazhar, Khairi,and Kamal, 2015:pp.1-7). IoT solutions at homes and in the offices have enabled people to save energy, making them live in clean environments. Health care has also been improved, IoT devices have allowed remote monitoring of patients; medications can also be administered remotely.

Any electronic device that is connected to the internet has privacy implications. IoT devices are prone to hacks; they are unreliable when it comes to security. Hackers can leak data that an individual could have wanted to be kept private. Manufacturers have put less effort into ensuring that personal data is protected (Jia, Feng, Fan, and Lei, 2012:pp.1282-1285). There is also the issue of intelligence services that may use IoT devices to stalk and track individuals without their consent. IoT devices have their advantages, too; the devices are used to gather information. Having more information regarding an issue will aid in making informed decisions. M2M interaction allows for the accurate gathering of data, which leads to better efficiency.

Authentication, tracking and monitoring systems

There are several IoT devices that represent the next phase of technological innovations; the devices are; tracking and monitoring systems. Transport and logistics are using IoT technology to track their products. IoT tracking devices use GPS to monitor the tracks and what they are transporting (Mahmoud, Yousuf, Aloul, and Zualkernan, 2015:pp.336-341). The devices have been to use to ensure that employees stick to designated transport routes and also bring theft of company products to an end. The devices have helped the transport industry mitigate uncertainties and risks, which will reduce losses in the company.

IoT innovations will revolutionize the future. It will be hard to resist the adoption of the internet of things because it makes communication easy. It is everyone's dream to control things using applications where less effort is a need. Internet of things has taken people from analog generation to digital era. The only thing that is likely to hamper the adoption of IoT solutions is security issues. People need to be guaranteed that their private data will be safe from hackers. There are several IoT smart devices in the world, smart cars, smart fridges and, car tracking devices used by the logistics and transport industry to monitor their products. From the research, it is evident that in the future, IoT solutions will impact how human beings relate to their environments.

**Digitalization And Humanoid Susceptibility**

Different from the olden time's digitalization in the 21st century has impacted individuals from all wakes of life largely. Piece by piece, the internet, mobile phones abolishes the true definition of human connections, detaching us from the biosphere and directing us to a looming milieu of segregation. Alternatively, we make calls, text, and email or flash message avatars to express our feeling or moods instead of spending personal time with our allies. Such alternatives look and feel simpler; however, we lose the essential part of relationships with family or a friend, which is face time.

Handheld devices have invaded our homes, offices, zoo-time, and other social areas and topics such as dating where the good old dating is no longer critical as too much talking is involved. On the contrary, information fed on an individual online is enough to judge the individual one will date, and rejection loses its meaning as individuals have a dozen choices to choose. Furthermore, individuals have become so obsessed with technology, which one cannot stay without checking their phone for calls or messages in case they missed it (Da Xu, He, and Li, 2014:pp.2233-2243). Also, breaking relationships has become so simplified as persons unfriend each other digitally without meeting or hiding away from individuals through the blocking sections.

Normalcy, in this era, necessitates being in a state where an individual is connected to the world through technology, while the lack of the same makes an individual look backdated. However, Lee, and Lee, (2015:pp.431-440) reiterates that we are handing over all our power to robotics thinking we are trying to connect, but we are only leading ourselves to a life of loneliness. Besides, digital devices not only change what we do in our lives but change who we are as we depend solely on what other people say about us more through the bits of information we have issued (Gubbi, Buyya, Marusic, and Palaniswami, 2013: pp.1645-1660). Also, even though we know how to communicate in social media, we forgo how to talk to each other. Additionally, parents have brought up a generation that has the negligible practice of sitting for dinner or communicating with their allies without handheld gadgets. Although human beings a robust and could easily show emotions after a few days without devices as human beings are wired to interconnect vocally, it is still a threat to how parentages have raised progenies.

Communication means giving full attention to the person individuals are interactive. However, most individuals communicate without face time, cutting up information which is often controlled (Madakam, Lake, Lake, and Lake, 2015:p.164). Moreover, talking digitally, with automated digital voices such as Siri, is because of the individual's thirst for the need to be heard since everyone else is too busy to listen. Besides, most parents have also lost how to be verbally connected with their children even when they are physically around as some tend to do chores while communicating online. Moreover, even though interacting through gadgets is not wrong, it does not convey the message as precisely and as interactive as verbally would. Plus, keying information brings about a different meaning than when the same message would have been delivered vocally.

Relationships, whether familial, romantic, friendly, or even societal, can be very chaotic and challenging; however, the same offers s rich sense of belonging that does not compare to the feelings associated with technology. Most individuals use devices as a way to connect to the outside world as the world feels more "accepting and understanding." However, this is not the case as even though only bids of information are given online, the human being is judgmental, and the more one keeps connecting online, the more he gets disconnected to the real world leading to loneliness (Farooq, Waseem, Mazhar, Khairi,and Kamal, 2015:pp.1-7). Additionally, replacing humanoid relationships for robotic relationships just for mere connections robs individuals of chances to know each other on a more personal level.

Companies and hospitals also have lost touch as well due to hand devices and computerized systems that handle business with minimal contact. Hospitals have screens that doctors look into having little or no eye contact, companies, on the other hand, have employees or employers who are so busy on their mobile phones during board meetings as they excuse themselves from sending emails. Real conversations are real and happen in real-time; however, digital communications are edited, retouched to perfection to fit societal preferences, and rob ourselves of real heartfelt conversations and interactions.

Although most official work is done more efficiently and fast through our digital gadgets forming equilibrium by taking a break by using old methods like writing down or drafting ideas provides much needed offline time (Jia, Feng, Fan, and Lei, 2012:pp.1282-1285). Additionally, during board meetings, drafting down plans ensures that individuals are not distracted, ultimately resulting in a more productive and efficient assembly. Also, being flexible and adapting to the new life as Lee, and Lee, (2015:pp.431-440) says that just as the eras before had innovations and persons embraced the pen and paper method to communicate, so the persons in this era should adapt to the digital inventions as it is another historical development.

Getting control back from robotic devices by switching off all digital gadgets is the best approach to get time to reconnect again to individuals. Moreover, even though the technology is one of the best inventions made by man to ease the workload, it interferes with not only relationships but an individual's ability to amalgamate views artistically (Jia, Feng, Fan, and Lei, 2012:pp.1282-1285). The regular mortal in today's culture longs the connectedness that is made available by digital devices; therefore, an individual's dreads retreats that have nullity in-network services. According to Da Xu, He, and Li, (2014:pp.2233-2243), wisdom grounds us in the world, subsequently giving affluence, totality, and augments jobs and relationships. However, while it is the most indispensable element of a decent existence, and a unique potential we esteem majorly in others, digitalization is its enemy.

Society being digitally busy is a threat to solid relationships as individuals are busy making ghost appearances digitally, although they are physically present in their homes (Da Xu, He, and Li, 2014:pp.2233-2243). Actual productivity depends solely on the cognitive skills of an individual; nevertheless, society believes that digital devices are tools for productivity. Digitalization permits access to entities so fast that we do not get the chance to experience any contact as we click away from one link to another; nevertheless, Lee, and Lee, (2015:pp.431-440) says that we can still redesign how we built and implement our digital devices.

**Conclusion**

With the advancement in technology and internet-connected devices, it is becoming more convenient for the individuals running a business, regardless of the sector or industry. Using IoT, one can efficiently gain access to more information and sensitive data related to the products, services and the entire internal system hassle-free. A business owner can drive more profits if he adds sensors to the minute components of different materials as he will gain a comprehensive idea about the performance of the products in the market by checking out the accurate data collected by the sensors and transmitted back to the owner. With more precise data, it becomes convenient to improve the agility and efficiency of the supply chains of the business system. Many times we have given up our interactive relationships for poor connections digitally, but being single issues a chance to find ourselves. Additionally, we are so besotted with digital machinery. We are frightened to converse verbally as we are afraid too much talk will disintegrate amorousness, and we become petrified of being alone. Nevertheless, solitude gives us the chance to become creative.

References

Da Xu, L., He, W. and Li, S., 2014. Internet of things in industries: A survey. *IEEE Transactions on industrial informatics*, *10*(4), pp.2233-2243.

Farooq, M.U., Waseem, M., Mazhar, S., Khairi, A. and Kamal, T., 2015. A review on internet of things (IoT). *International Journal of Computer Applications*, *113*(1), pp.1-7.

Gubbi, J., Buyya, R., Marusic, S. and Palaniswami, M., 2013. Internet of Things (IoT): A vision, architectural elements, and future directions. *Future generation computer systems*, *29*(7), pp.1645-1660.

Jia, X., Feng, Q., Fan, T. and Lei, Q., 2012, April. RFID technology and its applications in Internet of Things (IoT). In *2012 2nd international conference on consumer electronics, communications and networks (CECNet)* (pp. 1282-1285). IEEE.

Lee, I. and Lee, K., 2015. The Internet of Things (IoT): Applications, investments, and challenges for enterprises. *Business Horizons*, *58*(4), pp.431-440.

Madakam, S., Lake, V., Lake, V. and Lake, V., 2015. Internet of Things (IoT): A literature review. *Journal of Computer and Communications*, *3*(05), p.164.

Mahmoud, R., Yousuf, T., Aloul, F. and Zualkernan, I., 2015, December. Internet of things (IoT) security: Current status, challenges and prospective measures. In *2015 10th International Conference for Internet Technology and Secured Transactions (ICITST)* (pp. 336-341). IEEE.