

Smart Technology; Where Finance and IT Combines

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Abstract:

For any nation, the role of technology and education are two strong pillars. Education is most important for mental and social improvement and finances are very much needed to stay focused to learn. Demand and Supply ratio is always important in financial systems. Good finances are very much needed to buy new technology. As the internet has switched from simple device connections towards telecommunications, machine to machine and machine to human communications, this has generated the concept of the Internet of Things (IoT), intelligence improvement of the machine, automated systems; which has a direct influence on the economy. The countries which are fast in advance technology ultimately are getting more growth in financial aspects too. This has a direct impact to increase gross domestic product (GDP). The revenue-generating causes have changed over the past decade.

Key Words: GDP, Smart Technology, IoT, revenue, demand, and supply.

1. Introduction

The human beings live their lives in an efficient way and this quality differentiates them from other creatures. To make human efforts more useful and productive, the man-made machines which further became more refined to reduce human effort and get maximum output. Earlier, the machines were simple mechanical devices and with the gradual increase in the complexity and nature of equipment, needs, wisdom, brainstorming, the machines were made not only to make work easy but intelligently. These were working well with least human involvement. New inventions and innovations made human life more facilitating. Such dedicated mechanical devices are termed as smart devices. For example, geo- application systems determining the exact location of the person, smartwatch which is equipped with multiple features. They are functional in either no or least human interaction to start work and finally complete the task for which it was designed for. The multiple devices that are implementing technology in real life scenarios and automatically connected to the internet to intelligently implement called IoT. New inventions usage makes more demand that yields more supply and financial gains.

Due to a technological boost in last few decades, the communication switched from wired medium to wireless medium. For efficient machines, new infrastructures are being implemented to make the system more reliable. In the beginning, the internet was limited to the only end to end connection establishment and video and voice transference from sender to receiver and vice versa. It then moved to 5G, latest RFID and sensors network has almost reshaped the world. The web has driven simpler to cloud and even intelligent cloud architectures. This new technology is continuously improving and this has now become a very effective source to improve the economic development of a country. More and more portable machines are now equipped with intelligent applications, entertaining games, automated medical applications, stock exchange predictive software, geolocation informing applications and much more is available in a low weight smartphone. The user-friendly usage of this technology has made appealing users towards more purchase, yielding more demand, hence more supply. Smart technology

availability has created a market competition between telecommunication companies. This is because of one of the nature of human being that they love to communicate. More the popular entity, more it will have communication links. Thus more are the chances to generate revenue by focusing only the communication characteristic.

Last two decades were technology grooming years. Once it was even not considered in dreams about such a huge change in telecom industry will almost reshape the world. This has redefined the equipment in more demand which was never imagined and now is considered most important and necessary.

2. Literature Review

Telecommunication has relocated from traditional database management systems, computer communications, and simple telecommunication systems to advance smart systems. There are telecommunication generations that, at every level has refined the telecommunication means and modes into human-computer interaction sophisticated systems. Such systems are called the Internet of Things IoT [1]. From these application based systems, more refined RFID [2] systems make a simple appearance and complicate functionality of computerized security systems. Smart homing [3] for automated, protected, least human involvement, error free and well managed, planning based applications are developed and still under development in many areas. This is enhancing computerized systems to make human life easy [4], [5]. From 1G till 5G, processing units are compact on-chip systems which are more efficient than ever before. Technology-based systems were earlier only for academic, management or technical supporting systems [6] are now associated with revenue generating systems. This technology is applied in the medical field by improving diagnostic techniques. [7], [8], [9] throws many techniques and schemes. High-speed internet, wifi, Bluetooth and similar techniques are well considered under SDN which target on a huge number of devices, heterogeneous network, and different platforms. The devices themselves have a lot number of smart applications.

3. Smart Technology

Now a day the telecommunication devices are so innovative and work accurately. Most of them are automated and complete their tasks. One can not only talk to others but also can play games, get news alerts, business awareness, even it is reshaping future. There is complete science in a smartphone. There is a lot of research and implementation of smart technology around the world. The developed countries are working more on smart cars, smart homes, smartwatch and even the smart cities. These automated systems are being developed keeping in view of the needs and lavish lifestyles. This redefines the meaning of technology from simple communications towards most human ease. This artificial life is overcoming the natural life with very high probability. In the future, it is a serious threat to job replacements by robotics and human life dependency on manmade technology.

Earlier this was only an approach followed by the developing countries but now it has been observed that under developing countries are also showing a great interest. Just like a restaurant in Pakistan offers waiter services to the customers using robots, the robotic surgery is also experimental applied field. e-Health systems, automatic traffic management systems, smart image processing schemes all are a few areas currently heavily implementing IT-based revenue generating systems.

The old telephone and mobile sets are about to vanish. Many notable companies like Apple, Nokia, and Samsung are booming the market. Fig1 indicates the IoT is extended from simple mobile applications towards new services that are helpful for mankind. Its scope is extended exponentially. There are multiple areas where the smart systems are popular like smart homing systems including apps for daily life, entertainment, security, and health systems. In transport system applied in logistics, highways, emergency and traffic systems. At regional levels, defense, utility management, infrastructure management and remote monitoring systems are well applicable by IoT devices.

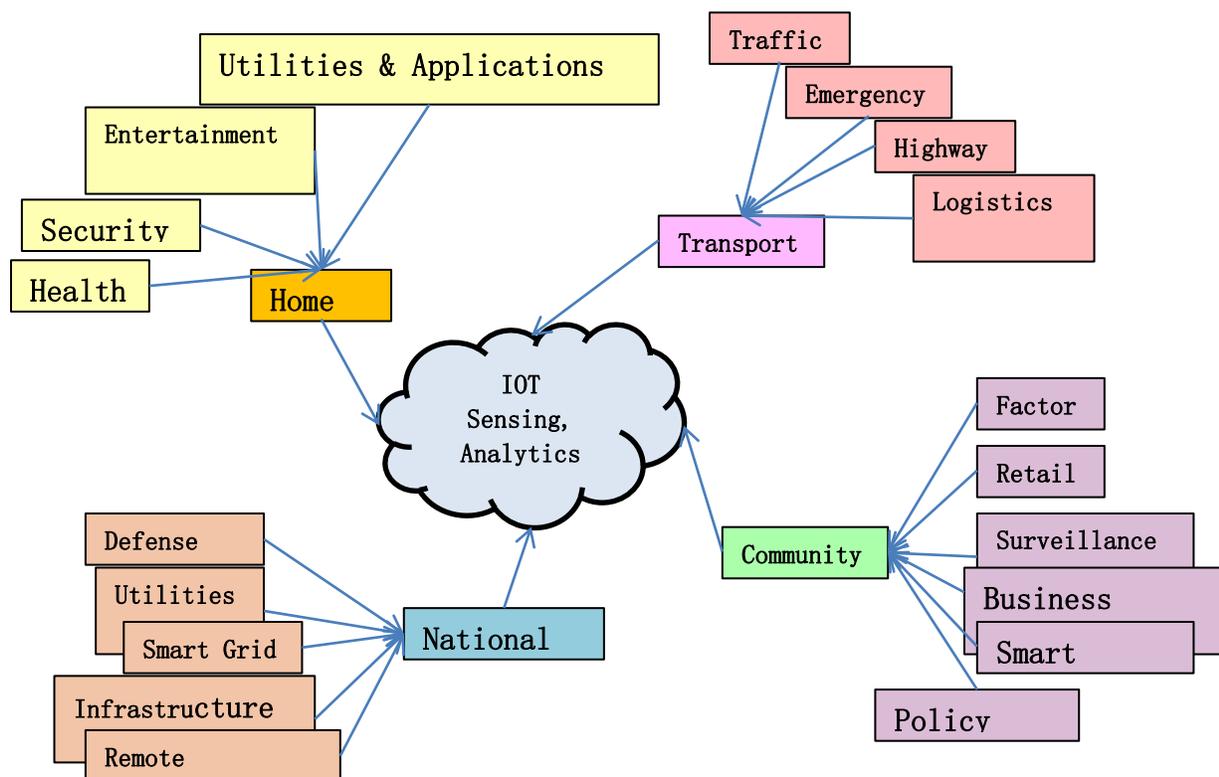


Fig 1: IoT semantic indicating users and data

Smart technology is considered due to its efficiency, reliability, quality, and accuracy. It is reducing human involvement and more and more work is focused to make it risk-free. Biometric systems, smart health care systems, national registration systems, sensitive financial transactions, natural disaster management systems are a few global level smart systems.

4. Demand and Supply

The power of supply and demand is best determined by “Ibne Taymiyyah” which means that if the desire for goods increases while its availability decreases, its price rises. But if the availability of the good increases and the desire for it decreases, the price comes down. The market level is checked when anything is in more demand, usually, the prices are increased for them for a certain time period. After some time, the prices are settled to normal. This continues for some products time and time.

Technology awareness was once specified for only well-educated people. Initially, the price of computers and cell phones were very high. It's not popularity and complexity made ordinary people fearful to attract and use it. That time, the traditional trading was the reason for national income and GDP. Good business relations were the source of financial progress. There was more supply of goods, hardware, and agriculture.

4.1 World of Smart tools

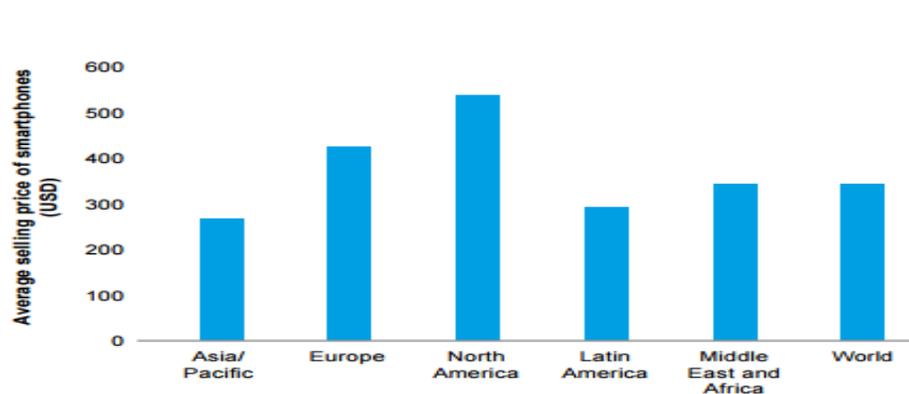


Fig: Average selling price of smartphones

With every passing day, a number of people are investing their time to make technology more and more effective, reliable and easy to use. The new technology emphasizes *Productivity, Persuasion, Engagement, Collaboration, Intimacy, Empathy, and Control*.

4.2 Population and Connections

Increase in the number of populations in last decades is also a reason to increase the GDP. The smart technology users like for example the 3G connections is a huge figure. This is one of the basic factors to increase more financial gains in less time. The telecom companies reshaped the new picture of business systems that are standing on the backbone of Information Communication Technology. In spite of internet security threats, many IT professionals are doing magnificent research to improve quality of service, reliability and time bounded electronic transmission. Things were never assumed like this long time ago.

5. Conclusion:

A lot of fields are now combined to gain more success, more pride and more revenue than ever before. Many subsystems of complete systems are collective components of different types. They integrated together to get some useful results. After the mobile phones were transformed into a smart technology and freeware and open source programming facilitated research-based inventions and innovations, almost every system was analyzed as revenue generation system. The major investments were reckoned for more output collection. Advanced business intelligence was further applied to overcome high risk and more benefits.

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