Abstract - It has been said that Internet of Things (IoT) is now one of the most important topics. The IoT market will be 4.3 trillion US$ by the year 2024, and the economic impact of IoT will be 11.1 trillion US$ by the year 2525. Another important topic is Digital 4.0 which has been developed as Digital 1.0, Digital 2.0, Digital 3.0, and Digital 4.0. It has been said that Digital 1.0 is about the development of the internet. Digital 2.0 is about Social Network. Digital 3.0 is about the Applications and Big Data. Digital 4.0 is about Machine to Machine. This paper will discuss IoT, Digital 1.0, Digital 2.0, Digital 3.0, and Digital 4.0.

Keywords - Internet of Things, IoT, Digital 1.0, Digital 2.0, Digital 3.0, and Digital 4.0.
I. INTRODUCTION

From Wikipedia [1], Internet of Things (IoT) is the network of all kinds of things embedded with sensors, electronics, software, and etc. connected to the Internet, based on the International Telecommunication Union's Global Standards Initiative" [2]. The term "IoT" was coined by Kevin Ashton in the year 1999, only about 20 years ago as of the year of writing this paper, i.e. the year 2019. Gartner forecasts that the number of IoT applications would reach 25 billion by the year 2020. By 2020, the connected kitchens will contribute to at least 15 percent savings in the food and beverage industry, while leveraging big data analytics [3]. Machina Research claimed on 27 April 2015 that IoT market will increase from 900 million US$ in the year 2014 to 4.3 trillion US$ in the year 2024 [4]. The McKinsey Global Institute (MGI) on 25 June 2015 published a report that by the year 2525 the economic impact of IoT will be 11.1 trillion US$ [5].

Supposed everythings concerning yourself have been equipped with sensors and connected to the Internet. Starting in the morning when you move yourself to get up from bed. The mattress notices your movement and recognize that you are getting up. So, the mattress send several messages, e.g. the first message to the bedroom lighting switches to turn the light on from the bedroom to the bathroom. The second message to the bathtub to prepare water at the temperature you like. The third message to the television set in the bathroom to turn TV on with the channel you usually watch in the morning. While you are in the bathtub, the fourth message is sent to the robot in the kitchen to prepare your breakfast. The Internet check your schedule at the office and compare it with the time you are in the bathroom. The Internet may display message on your TV screen that you will be late for the first appointment at the office and send message to your secretary to postpone the first meeting, and so on so fourth,

This paper will present Digital 1.0, Digital 2.0, Digital 3.0, and Digital 4.0, followed by implications of IoT with Digital 1.0, Digital 2.0, Digital 3.0, and Digital 4.0.

II. DIGITAL 1.0

Searching Google in December 2019 for Digital 1.0 [6], Digital 1.0 is the Internet including the use of the Internet especially email instead of mailing through the Postal Office. Email is send to be convenient and fast, and more or less made the Postal Office obsolete.

Another effect of Digital 1.0 is to use websites in stage of brochure and the use of websites is available 24 hours a day and 7 days a week, i.e. no holidays.
III. DIGITAL 2.0

Searching Google in December 2019 for Digital 2.0 [6], Digital 2.0 is the case of Social Media which is said to use Social Network as the main method of communication, especially thru mobile phones. With the widely availability and inexpensive cost of mobile phones, it is said that the power of negotiation is moved to customers and also the customers can create their own contents.

In case of brand names, Social Media becomes the tool to make the brand well-known to customers. It also makes the relationship between the merchants and customers more stable. The marketing contact service results in the success in the conclusion of sales.

IV. DIGITAL 3.0

Searching Google in December 2019 for Digital 3.0 [6], Digital 3.0 is the case of Big Data, Analytics, Cloud Computing, and Applications. Social Media can be used all over the world. Social Media provides large amount of Data. Every day, all kinds of platforms, such as Facebook, Google, Apple, banks, insurance, and so on. deal with all kinds of Data.

In Thailand nowadays all kinds of organizations realize the importance of Big Data, especially thru cloud computing which makes it possible to provide service thru mobile devices. In the era of Digital 3.0, mobile phones become the tool for communication and sale orders. As an example, Facebook has made available to stores the customer demand and comments. In addition, Facebook also provide other information such as when the customer want to send a Birthday wish, name of merchants will be shown so that other services from Facebook can be used.

V. DIGITAL 4.0

Searching Google in December 2019 for Digital 4.0 [6], Digital 4.0 is the case of “Machine-2-Machine” in the sense that all devices can communicate with each other automatically. As an example, your car may communicate with your house to turn on the light, to turn on the air conditioning system prior to the arrival of your car to your house, and so on.

VI. CONCLUDING REMARKS

It is generally agreed that Internet of Things (IoT) is now one of the most important topics as shown by the facts that the IoT market will be 4.3 trillion US$ by the year 2024, and that the economic impact of IoT will be 11.1 trillion US$ by
the year 2525. This paper presented IoT, Digital 1.0, Digital 2.0, Digital 3.0, and Digital 4.0. All parties should search Google regularly to follow new development of IoT, Digital 1.0, Digital 2.0, Digital 3.0, and Digital 4.0 for the benefits of himself, his organization, and his country.

REFERENCES
(Arranged in the order of citation in the same fashion as the case of Footnotes.)