Cyber Security and Laws in Information Technology Era : Challenges and Implications

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CYBER SECURITY: AN OVERVIEW

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ABSTRACT

Cyber security refers to a collection of technologies, processes, and practices designed to protect networks, devices, programs, and data from attacks, destruction, or unauthorized access. Cyber security can also be called information security. Cyber security is a complex issue in various fields and calls for Multi-dimensional and multi-layer plans and responses. It has provided a challenge For the government, because different regions usually applied in the form of a silo ministries and departments. In this chapter, we focus on cyber security evolution, Importance, challenges, management, authorization and authentication, threats of cyber security tools and solutions to prevent cyber security.

Keywords: Cyber security, Information security, threats, authorization and authentication.

INTRODUCTION

Cyber security or information security is a protection of computer system, programs, data and networks from information leakage, hardware, software or electronic data being stolen or damaged, and the services provided by them are protected from interference or wrong direction. Cyber security is a good and ideal protection for organizations to formulate strategic plans to obtain more profits and

increase the productivity of goods and services. Cyber security is essential to the security, economy, and general well-being of any country. Cyber security has become a common concern for all citizens, professionals, politicians and all decision makers. Due to the increased dependence on computer systems, the internet and wireless network standards (such as Bluetooth and Wi-Fi) and the growth of "smart" devices (such as mobile phones, smart phones and smart TVs) this field has become more and more popular. Due to its political and technological complexity, network security is also one of the biggest challenges in the contemporary world. It has also become a serious problem for companies that need to protect themselves from cyber security attacks through preventive and passive measures (including extensive surveillance). These companies should maintain freedom and avoid routine surveillance.

EVOLUTION Of CYBER SECURITY

Cyber security is a rapidly changing industries, and it affects all of us. Cyber security is began in 1972 in the form of research project of ARPANET (Advanced Research Project Agency Network), a precursor to the Internet. In the ARPANET era in 1971, a small number of internet users were shocked when the following phrase was displayed on the screen: "I am a creeper, catch me if you can." A worm is a type of worm, and a computer virus that can replicate itself and spread to other systems. It is created by Bold, Beranek and Newman. Unlike today's malicious viruses, Creeper only displays messages.

On September 20, 1983, the MIT was awarded the first network security patent in the United States. At that time, the patent was awarded the U.S. Patent 4,405,829 for "Cryptographic Communication System and Method." This patent introduces the RSA (Rivest-Shamir-Adleman) algorithm, which is one of the earliest public key encryption systems. Cryptography is the foundation of modern cyber security.

The first DEF CON conference is a popular cyber security technology conferences in the world. It was founded by Jeff Moss on June 9, 1993, opened in Las Vegas, and has approximately 100 employees. Today, a large number of cyber security professionals from in all the world attended the conference.

Netscape released, Secure Sockets Layer (SSL) 2.0, In February 1995, which became the core of the safe use of Web language,