Operational Security, Safe Quantum,Space Communications and Data Privacy Cyber Security

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ABSTRACT

recent years the internet has become an important part of daily life for people around the world. 18 On the other hand, the effectiveness of the internet increases, cybercrimes also increase. Over the last 15 years, cybersecurity has emerged as a way to accelerate the pace of change in cyberspace. Cybersecurity refers to the procedures a country or organization can use to protect its assets and information in cyberspace. Twenty years ago the term "cybersecurity" was little known to the public [1].

Cybersecurity affects not only people but also organizations and governments. In recent years, everything has been going well and it has used many technologies such as cybernetics, cloud computing, smartphones, and Internet of Things technology. Cyber attacks raise concerns about privacy, security, and financial security. Cybersecurity is a set of technologies, processes, and practices designed to prevent attacks, damage, and unauthorized access to networks, computers, operations, and machines. The main purpose of this article is to provide detailed information about types of cybersecurity, why cybersecurity is important, cybersecurity frameworks, cybersecurity tools, and problem points of cybersecurity [2].

Key words: Cyber security, Cyber-attack, Phishing, Cyber-crime, Cyber security, Internet of Things (IoT) security, Cyber security framework, Malware

INTRODUCTION

Cybersecurity ensures the protection and integrity of computing assets or data connected to an organization's network to protect assets from threats throughout the cyber-attack lifecycle. Currently, most economic, business, cultural, social, and government activities and interventions at all levels of government, including the interaction between people and organizations, if the government, government, and government institutions do not exist in cyberspace. Recently, many private companies and government institutions around the world have been facing cyber-attacks and poor communication. In today's technology world, protecting this data from cyber-attacks is a difficult problem. The purpose of the cyber-attack is to cause financial damage to the company[3].

In other cases, cyber-attacks may have a military or political purpose. Some of these damages include computer viruses, intellectual property damage, data services (DDS), and other attacks. For this purpose, organizations use various solutions to avoid being damaged by cyber-attacks. Cybersecurity monitors information in IT data updates in real time. So far, scientists around the world have proposed many ways to prevent or reduce the damage caused by cyber-attacks[3].

Some of these processes are in the operational phase, and some are in the research phase. The purpose of this study is to investigate and monitor the success of this model in the cybersecurity sector and examine current problems, weaknesses, and strengths of the program. Many new puppy attacks are discussed in detail. We discuss security standards and the history of early cybersecurity technologies. It also covers emerging trends and recent developments in cybersecurity, as well as security threats and challenges [12]. For IT and cybersecurity researchers, general audits are expected to be helpful. Keywords: cyber security, cyber-attack, phishing, cybercrime, cyber security, internet of things (IoT) security, cyber security framework, malware. The Internet is one of the most important inventions of the 21st century and has affected our lives. Today, the Internet has broken down all barriers and transformed the way we communicate, entertain, work, shop, make friends, listen to music, watch movies, order food, pay bills, and greet friends on birthdays and anniversaries. Our world is powered by digital information that supports critical services and infrastructure. Countries, organizations, and end users are concerned about threats to the privacy, integrity, and