**Project Security and Risk Management**

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**ABSTRACT**

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All enterprises worldwide need to develop the most excellent information security and risk programs as the first step for enterprise security and risk operations. The information security and project risk program will protect the enterprise's valuable resources like computer hardware, software, and data. The information security and project risk program will also help safeguard enterprise physical and financial resources, legal position, employees, and reputation. The enterprise needs to create the most excellent policies, standards, and controls to reduce all the business risks to get the highest revenues.

*Keywords:* Project Security and Risk Management

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**Project Security and Risk Management**

All enterprises worldwide need to develop the most excellent information security and risk programs as the first step for enterprise security and risk operations. The information security and project risk program will protect the enterprise's valuable resources like computer hardware, software, and data. The information security and project risk program will also help safeguard enterprise physical and financial resources, legal position, employees, and reputation. The enterprise needs to create the most excellent policies, standards, and controls to reduce all the business risks to get the highest revenues like Walmart (Peltier, 2013, p. xi-xvi of 377).

**Roles and Responsibilities**

Chief Information Security Officer (CISO) needs to direct the enterprise's day-to-day project security and risk assets management. The security administrator will need to report directly to the Chief Information Officer (CIO) for the daily administration of the information security and project risk program. The roles and responsibilities of the CISO will include systems operations and all personnel design and operate the computer systems. The CISO will be responsible for implementing technical security on the methods and telecommunications like data, voice, video, and wireless.

Additionally, CISO needs to create global information security and project risk design and strategy practices to address the security needs of its clients. CISO needs to develop the information security and project risk strategy, and design will complement security and network services to their global practice areas. The security framework will provide for the most excellent secure operation of computing platforms, networks, and operating systems, both data and voice, to ensure the integrity of the clients' information assets.

Furthermore, CISO needs to create the highest quality security services to ensure that the enterprise will have the best practices for all information security programs and risk management to get the highest revenues (Peltier, 2013, p. xvii-xxiv of 377).

**Information Systems Development History**

Computer history started with Bell Laboratories after 1936 and Hewlett-Packard after 1938 ("Timeline of Computer History," 2019, para. 1-35).  After 1943, IBM invented the first massive automatic digital calculator ever built in the United States (IBM, 2021, para. 1-12).  After 1963, IBM created a mainframe System/360, and it was an expensive system.  It had built-in network communications.  It could handle commercial and scientific works (IBM, 2021, para. 1-8).  In the 1970s, IBM invented System/370 model 145 with the large-scale integration mainframe, and then, after 1983, the IBM 3081 processor mainframe had provided the most excellent three-dimensional networks linking thousands of devices (IBM, 2021, para. 1-11).

Additionally, the integrated circuit (IC) was invented by Jack Kilby.  After 1999, Jack won the Nobel Prize in Physics as part of his IC invention.  President Bill Clinton wrote Jack Kilby a quote to congratulate him, "You can take pride in the knowledge that your work will help to improve lives for generations to come" (Wancho, n.d., para. 1-7).  After 2018, AMD Epyc Rome was released, and it had over 39 billion transistors in the chip.  The earliest microprocessor had thousands of transistors in the chip, but the microprocessor has increased to billions of transistors in the present (Cadence Design Systems, Inc., 2021, para. 1-17).  Please review a YouTube video that counts numbers 1 to 1 Millinillion.  Hopefully, that one day, a microprocessor can have more than one millinilion components in a chip.  Please review - Numbers 1 to 1 Millinillion at the YouTube video link (https://youtu.be/sSnhzXKMTnM) (Jem,

2018). Fairly, that someday everyone in the world will have 1 Millinillion US dollars in their bank account all the time.

Furthermore, the Internet of Everything (IoE) helps people have the most excellent use of the Internet today. All people in the world can use the Internet to get many things done very fast and easily. The IoE is a technology of the future. The IoE is the most superlative advanced technology. It works like magic to help people use the Internet as e-commerce websites, education websites, auction websites, online shopping websites, online grocery websites, social media websites, and intelligent cars, smartphones, and so forth. The Internet improved people's lives by creating the most exceptional economy globally (Ambrose, 2015, para. 1-8). Moreover, the IoE creates many physical devices connected to the Internet like mainframes, desktop and laptop computers, and smartphones. Furthermore, the devices have been defined as the Internet of Things (IoT). As a suggestion, the IoT profit will increase to more than $18 trillion and more than 49 billion devices before 2021 (Sunday Business Post, 2015, para. 1-28).

**Security Policy Management**

Deriving a project security and risk policy is difficult because the CISO needs to understand human behavior and computer and network facilities. The CISO needs to understand an organization to relate network and computer security and project risk to human behavior and assess information value. The CISO needs to understand which aspects of protection are most important for business security and risk management. Thus, the CISO will create the most excellent business security and network risk policy for the corporation to get the highest revenue (Comer, 2015, p. 511).

Additionally, the CISO needs to understand the eight basic security techniques: Hashing, Encryption, Digital Signatures, Digital Certificates, Firewalls, Intrusion Detection Systems,

Content Scanning & Deep Packet Inspection, and Virtual Private Networks (VPNs) (Comer, 2015, p. 513). The explanation about eight basic security techniques of Hashing, Encryption, Digital Signatures, Digital Certificates, Firewalls, Intrusion Detection Systems, Content Scanning & Deep Packet Inspection, and Virtual Private Networks (VPNs) is as follow:

**Hashing** - Used for data integrity. Cryptographic hashing mechanisms will take inputs as variable lengths and return outputs of a fixed size. For data security, hashing scheme will rely on a secret key known only by the sender and receiver. An attacker does not have a secret key, can not access the message (Comer, 2015, p. 513).

**Encryption –** Used for data privacy. Encryption will guarantee data confidentiality, and it defined privacy, data integrity, and message authenticity can protect from replay attacks. A sender sends an encryption message that allows only the recipient can unscramble them. An attacker who intercepts an encrypted message will not be able to access data. Moreover, an attacker cannot truncate the message without being discovered (Comer, 2015, p. 515).

**Digital Signatures –** Used for message authentication. An encryption mechanism can send a message defined as a digital signature, and the recipient will decrypt the message using the inverse function. A sender will use his or her private key to encrypt the message for a public key system. A receiver will look up the sender's public key to verify the signature (Comer, 2015, p. 516).

**Digital Certificates –** Used for sender authentication. Digital certificates are electronic credentials to identify a pair of electronic encryption keys certificate owners (one public and private) that can encrypt and sign information digitally between sender and receiver (Comer, 2015, p. 517).

**Firewalls –** Used for site integrity.  Internet firewall is a second technology that helps to protect the business and personal users' computers and networks from harmful and unwanted Internet traffic.  A firewall can monitor incoming and outgoing network traffic and block specific traffic or allow specific traffic so that users can set the security rules (Comer, 2015, p. 519).

**Intrusion Detection Systems** - It uses for site integrity.  An Intrusion Detection System (IDS*)* will monitor all packets arriving at a site and will notify the site administrator if a security violation is detected.  An IDS has an extra security awareness layer — even if a firewall can protect against an attack, an IDS can let the site administrator know that the site has an attack (Comer, 2015, p. 522).

**Content Scanning & Deep Packet Inspection –** Used for site integrity.  Norton 360 Premium I can help users do the most excellent file scanning to prevent the computer data risks over the network for a low price with VPN up to 10 devices (NortonLifelock Inc., 2021, para. 1-10).

Additionally, Deep Packet Inspection (DPI) will inspect the detail the data will send on the Internet, and it may take actions like blocking, alerting, logging, or re-routing it accordingly. Deep packet inspection uses to analyze network usage, troubleshoot network performance, check for malicious code, ensure that data will have the correct format, and eavesdrop (Comer, 2015, p. 522).

**Virtual Private Networks (VPNs) –** It uses for data confidentiality.  Virtual Private Network (VPN) is a unique encryption security technology.  VPN will secure access to an organization's intranet from a remote site using standard protocols over the standard (unsecured) Internet.  VPN was initially designed to provide a low-cost interconnection with multiple geographic locations of a corporation. (Comer, 2015, p. 523).

**Intrusion Detection Systems**

Intrusion detection systems are the tools used to protect physical security activity on the boundaries of an enterprise.  Intrusion detection systems will physically protect the staff work and the enterprise data processing equipment as the guard patrols.  The intrusion detection systems will use video cameras and alarms to monitor the enterprise locations (Peltier, 2013, p. 142-221).

Additionally, the CISO also needs to understand that a protocol analyzer is a packet analyzer – The Wireshark analyzer is the most use by network managers to statistics about packets or captures and displays packets (Comer, 2015, p. 536).  Gerald Combs invented Wireshark in 1997, it is the world's most outstanding network protocol analyzer, and it has been used by many users globally (ACM, Inc., 2021, para. 1-9).  The flow analysis tool is a NetFlow analyzer, and it will help CISO spots the network traffic trends and the changes in specific network types of traffic like VoIP traffic has an increase (Comer, 2015, p. 536).  NetFlow analyzer created by Cisco, as they used to collect and record all input/ output IP Traffics of their Cisco routers or switches, allowing the Cisco IT administrators or Network engineers to analyze the further traffics (Parker, 2020, para. 1-25).

**Disaster Recovery vs. Business Continuity**

All enterprises worldwide need to understand the difference between Disaster Recovery (DR) and Business Continuity (BC) plans, strategies, and infrastructures as the first step of their business operation to prevent their enterprises from natural disaster unexpected risk events as a part of the enterprise security and risk management plans so that they can get the highest revenues like Walmart.  Business Continuity (BC) or Continuity of operations planning (CoOP) will ensure regular business operations during a disaster.  By contrast, DR will

minimize business downtime and focuses on getting business operations back to normal as quickly as possible (Bobran, 2021, para. 1-40).

Additionally, a Chief Information Security Officer (CISO) needs to process the CoOP with the most excellent standards and safeguards of Confidentiality, Integrity, and Availability (CIA) will be maintained business operating during a disaster. CISO needs to prepare water, air, food, and sleep shelter for the CoOP emergency response plan. CISO also needs to prepare daily business operations during a disaster like electrical power, media, and backup copies of data files. CISO needs to prepare the most excellent CoOP for relocating to an excellent global facility without a disaster occur so that the CoOP will be safe and back as a regular business operation.

Furthermore, CISO needs to make sure that all business IT departments have the most excellent DR and BC or CoOP plans, and CISO need to train DR and BC or CoOP teams to understand the Facilitated Risk Analysis and Assessment Process (FRAAP) and effective security awareness program. CISO will need to report directly to the Chief Information Officer (CIO) about the most excellent DR and BC or CoOP plans, strategies, and infrastructures in place.

Moreover, CISO needs to create the most excellent Business Continuity Contingency Policy to ensure that CISO can recover as quickly as possible if a disaster occurs. CISO needs to complete a business impact analysis (BIA) before an event, so CISO can clearly understand how to restore and maintain adequate business operation. A Business Continuity Contingency Policy needs to get approved by senior enterprise management. The DR and BC or CoOP plans, strategies, and infrastructures need to meet the National Institute of Standards in Technology (NIST) of the Special Publication (SP) 800-34.

Finally, Tulane University and many corporations in New Orleans did not have DR and BC or CoOP plans on how to recover from Katrina.  It took a long time for more than 25,000 students in Louisiana and more than 8,000 students in the state of Mississippi to return to their schools from the aftermath of Katrina (Peltier, 2013, p. 145-217).

**Travelers Risk Control's Disaster Recovery & Business Continuity**

The CISO needs to create the DR and BC, or CoOP plans to recovery the companies from natural disasters unexpected risks.  The CISO needs to have excellent DR and BC or CoOP plan documents in advance.  The CISO needs to train their employees to follow DR and BC or CoOP plan documents and ensure their employees understand the safety and timely recovery from natural disaster unexpected risks.  After 2011, more than $76 billion in insured losses around the world.  The DR and BC or CoOP plan will help the corporation recover from natural disasters unexpected business risks such as property damage, financial loss, and life loss from a natural disaster or human-made event.  The CISO needs to develop and maintain the DR and BC or CoOP plan for the most effective business recovery plan.  The DR and BC or CoOP plan will help the corporation return to normal, significantly faster from the natural disaster unexpected risks (Travelers Risk Control, 2020, para. 1-14).

Additionally, the CISO needs to understand cybercrime, natural disaster, fire, thief, and unpredictable data risks.  The CISO needs to create the most excellent data risks with a contingency budget plan for data risks and equipment protections, such as computer systems securities, cyber-attacks, and many more.  The CISO needs to research the best methods to prevent the equipment and data risks for online and offline data protection.  The CISO needs to buy all insurances for cybercrime, natural disasters, fire, thieves, and unpredictable data risk

protection ("*A guide to the project management body of knowledge (pmbok® guide).,*" 2017, p. 395-458).

## Cryptology

Today, cryptology has used the most advanced technology to protect sensitive data and preserve government communications, trade secrets, or military strategies.  Cryptology has been used in today's cyber society for everyday online shopping, digital media, banking, and ATM usage.  All cryptologies require encryption protection to avoid excessively using illegal data substances or misuse legal data or data abuse, and cryptology is the most excellent novel concept that has existed since the beginning of sensitive information communication.  Many global data systems lack appropriate information protection such as passwords and authentication through encryption or encrypted databases.  Cryptology will be the most outstanding in protecting sensitive information vulnerable to prying eyes unauthorized.

Additionally, cryptology has known as "the science of keeping secrets secret" by Delfs and Knebl in 2007.  Cryptology has been invented as the art of encrypting algorithms that created and solved such algorithms.  It has been composed of cryptography and cryptanalysis. The cryptography name originates from the Greek Kryptos (meaning "hidden" and graphic), protecting sensitive data or unauthorized access.  Cryptography has four primary methods such as (1) confidentiality, (2) authentication, (3) integrity, and (4) nonrepudiation.  Confidentiality will protect data from unauthorized use, and authentication will corroborate an entity's identity through initial identification between communicators.  Integrity will use to assure that the message will not transmit transmission illegitimately during storage and retrieval. Nonrepudiation will guarantee that the sender will not deny previous commitments or actions unless they admit the cryptographic signing key has been compromised.  The most common use

of cryptography is for the safe transfer of data across communication systems.   A message will begin with the plaintext, which is then encrypted.

Furthermore, the cryptography process will have a private or secret key encryption, and it has referred to as an asymmetric key that uses to encrypt or decrypt messages.  The symmetric key will confidential information used when the parties will communicate with one another.  The cryptography process will also have public-key encryption that will use two separate keys to encrypt and decrypt.  The public key encryption will also reference as asymmetric encryption.  Unlike private key encryption, public-key encryption will use one key to encrypt and another to decrypt, and so forth (Peltier, 2013, p. 20-41).

## IBM's Cryptology

The Chairman of the International Business Machines Corporation (IBM), Thomas Watson Jr., created a cryptography research group in the 1960s at the Yorktown Heights, NY, laboratory, project leader Horst Feistel.  They invented an encryption method for Lloyds Bank in the United Kingdom and named it "Lucifer" to protect the cash-dispensing system data for Lloyds Bank in the United Kingdom.  Lloyds Bank bought the Lucifer code from IBM in 1971, and then IBM worked hard on the Lucifer code and turned Lucifer code into a commercial product.

Additionally, after 1967, the US National Bureau of Standards (NBS) started an interoperable data encryption standard, and then after 1972, the NBS published the encryption algorithms.  The encryption algorithms got the most work credit from IBM's refined version of Lucifer code.  After 1976, the NBS made IBM's cryptographic algorithm became the first-ever Data Encryption Standard (DES) for the United States and international countries globally would soon follow (IBM, 2021, para. 1-10).

## Quantum Cryptography

The further cryptology advanced technique currently in development is quantum cryptography.  Now, quantum cryptography is the most excellent theoretically unbreakable. Quantum cryptography has gained with modern computers speed with emerging technologies, as the computer computation is based on bits, represented by "0" or "1."  Data is stored in bytes, equivalent to eight bits.  This two-state system is known as binary.  Binary systems will base two rather than base ten using the decimal system (Peltier, 2013, p. 38-41).

Additionally, quantum cryptography is an advanced technology that has gained with modern computers speed with emerging technologies that use quantum physics to secure the distribution of symmetric encryption keys, called Quantum Key Distribution (QKD).  QKD will transmit light quantum particle photons that use the keys to encrypt 100 Gb/s large amounts of information across an optical link.

Furthermore, thanks very much for the fast development of QKD solutions; many global enterprises used the QKD appliances with Ethernet and Fiber Channel with link bandwidth up to 100Gbps.  The European Telecommunication Standards Institute (ETSI) has been made a standard QKD interface for Optical Transport Network (OTN) vendors (ID Quantique, 2021, para. 1-42).  PacketLight Networks has developed the fast to effectively 400G Dense Wavelength-Division Multiplexing ( DWDM)/OTN solutions fiber-optic network capacity bandwidth per wavelength.  DWDM/OTN will improve to reduce cost per bit in Data Center Interconnect (DCI), metro, and long-haul applications.  DWDM/OTN can quickly increase capacity, and DWDM/OTN significantly reduces power consumption, support, and maintenance (PacketLight Networks, 2021, para. 1-8).

**Physical Access Control Security**

Access control is a fundamental everyday practice to protect physical spaces, areas, and data within an information system.  For example, people need to lock their doors when they leave their homes, and employees need to use their badges to access their workplaces.  People need to use PINs to access ATMs and more.  Thus, all global enterprises need to have the most excellent access control methods, issues, and best practices to protect their business information securities and business risks to have the most successful businesses and get the highest revenues like Walmart.

Additionally, the most excellent Chief Information Security Officers (CISOs) need to create unique access control systems to ensure that authorized employees can only access their business information.  The access control systems can help CISOs mitigate data risk and reduce the potential for information loss.  The CISOs need to create the most excellent administrative controls that will include policies and procedures, background checks, vacation history review, and awareness training so that the CISOs will have the most excellent supervision for their businesses.  The CISOs also need to create the most excellent physical controls security guard to secure their business places and server rooms with security cameras, and so forth, to protect their business risks (Peltier, 2013, p. 132-221).

Furthermore, the CISOs need to make the most excellent technical and logical controls like access control lists (ACL), encryption, smart cards, software packages, biometrics, and transmission protocols.  The CISOs need to have technical, physical, and administrative access controls to defend their security risk in-depth.  There are three most crucial access control models such as mandatory access control (MAC), role-based access control (R-BAC), and discretionary access control (DAC).  MAC is the most potent and complex model, and it is

mainly found in highly secure government that classification levels for top-secret, secret, confidential, unclassified, and sensitive but unclassified (SBU).  Most private sector businesses have used either DAC or R-BAC.

Moreover, DAC is the most common business access control model.  The DAC will allow business owners to have the owners, and access permissions will grant by the owners for all objects of their businesses.  R-BAC will be a type of access control for employees will assign by business owners to access controls based on their job description.  R-BAC will work well for companies with formal job structures for their employees' roles and job responsibilities.  Each employee in the enterprise will get assigned a role or multiple roles that will require them to do their job, and so forth.

Finally, the CISOs need to train their employees to operate access control systems with appropriate access control methods such as their policies, business objectives, and the sensitivity of the information on the systems.  The CISO needs to train their employees to understand user registration, password, and network access management to ensure authorized employees have appropriate access to their systems and prevent unauthorized system accesses to improve their business network security.  The CISO also needs to train their employees to understand teleworking.  All employees need to understand teleworking policies.  Teleworking can be one of the most remarkable things for global enterprises to have the best employees (Peltier, 2013, p. 203-221).

## Mitigate to Cloud Computing

Many global enterprises consider mitigating their business data to cloud platforms to save money and reduce information risks.  They will process and store so much data to the cloud

provider or rent usage from the cloud platform and pay for only what they need to use on-demand.  All their business data will be secured by cloud providers (Peltier, 2013, p. 203-221).

Additionally, Amazon Web Services (AWS) offers three different types of cloud computing available depending on the product they will use.  AWS will provide 12-months with Free service to new AWS customers and are available for 12 months following the AWS sign-up date, and after that, users pay standard, pay-as-you-go service rates.  AWS will Always offer Free service.  Always Free service will not expire after 12 months, and it will be available to both existing and new AWS customers indefinitely.  AWS will offer Free Trails service for short-term trial offers, and once the trial expires, the user pays standard, pay-as-you-go service rates (Amazon Web Services, Inc., 2021, para. 1-20).

Furthermore, IBM is now offering the most excellent advanced technology quantum-safe cryptography with key management and application transactions in IBM Cloud, and IBM's quantum-safe cryptography has been recommended as the world's most outstanding for data security today.  IBM's quantum-safe cryptography can solve complex data problems as it can quickly break encryption algorithms and access sensitive data.  IBM's quantum-safe cryptography has developed with the most excellent strategic plan to help protect customers for the long-term security of IBM platforms and services.  IBM's quantum-safe cryptography has developed the standardization of core quantum-safe cryptography algorithms such as CRYSTALS and OpenQuantumSafe tools to support IBM clients for their data security from today and the future (IBM, 2021, para. 1-18).

## Incident Management

Incident management will make the Incident Response (IR) to the computer security or natural disaster events.  Some helpful documents have been developed to help enterprises for the

IR management like the 'Privacy Incident Handling Guide' from the Department of Homeland Security's (DHS), the 'Computer Security Incident Handling Guide' from the National Institute of Standards and Technology's (NIST) 800-61 and the Computer Emergency Readiness Team's (US-CERT) publications of the United States.

Additionally, the 2002 Federation Information Security Management Act required each federal civilian agency to create a point of contact (POC) with US-CERT (a primary and secondary) to report all computer security incidents or natural disaster impact events.  Each federal civilian agency must be responsible for the NIST 800-53 standard requirements to fulfill the Office of Management and Budget Circular A-130.  A CISO needs to have the most excellent incident management to fix future business problems.  CISO needs to prepare water, air, food, and sleep shelter for the CoOP emergency response or IR plan.  CISO also needs to prepare daily business operations during a disaster like electrical power, Internet, media, and backup copies of data files.  CISO needs to design the most excellent CoOP for relocating to an excellent global facility without a disaster occur so that the CoOP will be safe and back as a regular business operation.

Furthermore, CISO needs to make sure that all business IT departments have the most excellent IR of DR and BC or CoOP plans, and CISO need to train IR of DR and BC teams or IR of CoOP teams to understand the Facilitated Risk Analysis and Assessment Process (FRAAP). CISO will need to report directly to the Chief Information Officer (CIO) about the most excellent IR of DR and BC or CoOP plans, strategies, and infrastructures in place.  CISO needs to create the most excellent IR of Business Continuity Contingency Policy to ensure that CISO can recover as quickly as possible if a disaster occurs.  CISO needs to complete an IR of business impact analysis (BIA) before an event, so CISO can clearly understand how to restore and

maintain adequate business operation.  An IR of Business Continuity Contingency Policy needs

to get approved by senior enterprise management.  The IR of DR and **BC or IR of CoOP** plans,

strategies, and infrastructures need to meet the NIST of the Special Publication (SP) 800-34

(Peltier, 2013, p. 145-280).

Moreover, the CISO needs to understand cybercrime, natural disaster, fire, thief, and

unpredictable data risks.  The CISO needs to create the most excellent IR for data risks with a

contingency budget plan for data risks and equipment protections, such as computer systems

securities, cyber-attacks, and many more.  The CISO needs to research the best methods to

prevent the equipment and data risks for online and offline data protection.  The CISO needs to

buy all insurances for cybercrime, natural disasters, fire, thieves, and unpredictable data risk

protection ("*A guide to the project management body of knowledge (pmbok® guide).,*" 2017, p.

395-458).

Finally, the CISO needs to update the IR policy and procedures all the time.  The CISO

needs to build the reviews into the policy and keep them updated all the time as possible.  **The**

**CISO needs to u**pdate the US and global team members' communication all the time.  **The CISO**

**needs to u**pdate team members' communication hourly as possible.  The CISO needs to have the

most excellent IR 24-7 team to backup if people get sick, take a vacation, and have personal

problems.  The CISO needs to make sure that all projects will have the most excellent security

and risk management result all the time so that the enterprise with getting the highest revenue

like Walmart as possible (Peltier, 2013, p. 145-280).

## Information Security Policy

Information security policies can define as the companies' policies.  The companies'

policies are the rules for workers will follow to work under the companies' policies.  All

enterprises globally will have their own policies, and all policies need to meet the standards required by laws to be enforced.  Chief Information Security Officer (CISO) needs to create the most excellent standard for all projects and enterprise security and risk management policies. The information security policy needs to have the most standards, procedures, guidelines, Facilitated Risk Analysis and Assessment Process (FRAAP), Confidentiality Integrity Availability (CIA), and an effective security awareness program to have the risk-free enterprise result.  Thus, the enterprise will have a successful business and the highest revenue.  The main goals of all enterprises globally are to make the highest revenues like Walmart as possible.

Additionally, a CISO needs to have the most excellent incident management to fix future business problem policies.  CISO needs to prepare water, air, food, and sleep shelter for the Continuity of Operations (CoOP) by Presidential Policy Directive 40 (PPD-40) of the USA emergency response or Incident Response (IR) policy plan.  CISO also needs to prepare daily business operations during a disaster like electrical power, Internet, media, and backup copies of data files.  CISO needs to design the most excellent CoOP to relocate to an excellent global facility without a disaster. The CoOP will be safe back as a regular business operation.  CISO needs to create the most excellent IR of Business Continuity Contingency Policy to ensure that CISO can recover as quickly as possible if a disaster occurs.  CISO needs to complete an IR of business impact analysis (BIA) before an event, so CISO can clearly understand how to restore and maintain adequate business operation.  An IR of Business Continuity Contingency Policy needs to get approved by senior enterprise management.  The IR of Disaster Recovery (DR) and Business Continuity (BC) or IR of CoOP plans, strategies, and infrastructures need to meet the National Institute of Standards in Technology (NIST) of the Special Publication (SP) 800-34 and all regulatory requirements.

Furthermore, the CISO needs to update the IR policy and procedures all the time. The CISO needs to build the reviews into the policy and keep them updated all the time as possible. The CISO needs to update the US and global team members' communication all the time. The CISO needs to update team members' communication hourly as possible. The CISO needs to have the most excellent IR 24-7 team to backup if people get sick, take a vacation, and have personal problem policies. The CISO needs to make sure that all projects will have the most excellent security and risk management result all the time so that the enterprise with getting the highest revenue like Walmart as possible (Peltier, 2013, p. 145-355).

Moreover, the CISO needs to understand cybercrime, natural disaster, fire, thief, and unpredictable data risk policies. The CISO needs to create the most excellent data risks with a contingency budget plan for data risks and equipment protections, such as computer systems securities, cyber-attacks, and many more. The CISO needs to research the best methods to prevent the equipment and data risks for online and offline data protection. The CISO needs to buy all insurances for cybercrime, natural disasters, fire, thieves, and unpredictable data risk protection ("*A guide to the project management body of knowledge (pmbok® guide).*," 2017, p. 395-458).

## Design Security Architecture Policies

All enterprises worldwide need to develop the most excellent security architecture policy plans as the first step of their business operation to prevent all enterprises risks as a part of the enterprise security and risk management plans so that they can get the highest revenues like Walmart (Angelo, 2001, p. 1-17). A Chief Information Security Officer (CISO) needs to ensure that all business IT departments have the most excellent security architecture policy plans. A CISO needs to train team members to understand the security architecture model policies,

standards, procedures, guidelines, Facilitated Risk Analysis and Assessment Process (FRAAP),

Confidentiality Integrity Availability (CIA), and effective security awareness program.  The

CISO will need to report directly to the Chief Information Officer (CIO) all excellent security

architecture policy plans, strategies, and infrastructures in place, and they need to meet the

standards with the National Institute of Standards in Technology (NIST) of the Special

Publication (SP) 800-34 and all regulatory requirements.

Additionally, all global CISOs need to create the most outstanding effective information

security architecture policies with the most excellent well-written policy statement such as all

directives, standards, procedures, guidelines policy supporting documents.  The CSIO needs to

create the most excellent internal and external policies all the time.  The internal portion will tell

employees how their work duties will be performed.  The external part will say to the world that

the enterprise has the most significant responsibility.  An enterprise must have policies in place

to support their outstanding business practice to the world that this organization has vital to the

most excellent execution of its mission.  Moreover, the term policy can refer to some security

rules like Resource Access Control Facility (RACF) permits and Access Control Facility 2

(ACF2) rule sets, or intrusion detection system policies.  A term policy can refer to different

matters, like Internet/social media usage policy or an enterprise's e-mail privacy policy.

Furthermore, a CISO needs to create the most excellent policy key elements to meet the

needs of an organization, and an excellent policy needs to be easy to understand and meet the

audience requirements.  The policy material needs to be written at the average reading and

comprehension level in a sixth-grader (a 12-year-old).  An excellent policy needs to meet

business objectives, and it needs to have the politically correct way to say things all the time

(Peltier, 2013, p. 32-152).

**Literature Review**

The role of the CISO professional has changed more than 24 years and at present. It will change again and again with audit requirements so that the enterprise will have the most excellent project security and risk program in the world. To meet this end, the CISO professional will need to work with the CEO and users to find an appropriate level of control and understand the needs of the business or the organization's mission. Then, CISO will make the most excellent project information security and risk management update program to support those goals and objectives so that the enterprise will get the most outstanding revenue (Peltier, 2013, p. xi-xvi of 377).

Additionally, the most outstanding CISO project leadership needs to have the highest transformational team value for project security and risk management to get the most remarkable accomplishment result. The most outstanding CISO project leadership needs to have the highest transformational team value for project security and risk management mind like Walmart. Walmart is the most significant project security and risk management teamwork eCommerce and retail championship in the world. Walmart is ranking number one on Fortune 500 and Global 500 from 2015 to the present. Thus, all new CISO project managers in the world need to learn about Walmart's e-commerce team building for project security and risk management championship very well. Walmart proves to all eCommerce businesses as Walmart is one of the most eCommerce exceptional championships in world history (Fortune Media IP Limited, 2020, para. 1-7).

**Significance of the Research**

*Significant #1*

Walmart created the most excellent project security and risk management strategy teamwork that Walmart wanted all buyers in the world to save money to live better. After 1991, Walmart received the Presidential Medal of Freedom award from President George H. W. Bush. Walmart had the most excellent project security and risk management team building supply chain strategy that its regional distribution centers located in places that have the lowest transportation and labor costs. Walmart tried to lower its operating costs so that Walmart could pay its teamwork better rates, and Walmart has the most excellent teamwork to deliver high-quality products and services to all customers around the world.

Moreover, Walmart uses an extensive and comprehensive project security and risk database to improve teamwork inventory management and meet all buyers in the world's expectations. Walmart believed their teamwork would play essential roles in their retail and eCommerce businesses. Walmart creates a system that allows teamwork to share in the company's earnings and profits. Walmart is one of the most successful e-business team building for project security and risk management strategies globally for all new project managers who need to learn. Walmart started small and grew very fast in 50 years. Today, Walmart becomes the largest retailer store and eCommerce website globally (Keller, n.d., para. 1-25).

Walmart's project security and risk management history started after the year 1961. After 1961, Sam Walton created the first Walmart store with the most excellent project security and risk management team-building strategy in the world that Walmart wanted to sell products to the customer at the lowest price at any time and anywhere. After 1966, Walton owned more than 23 stores had more than $12 million in revenue. After the year 1968, the Walmart store has

incorporated.  Then, Walmart became a free trade Incorporation with the first stock sold more

than $16 per share after 1969.  After 1970, Walmart had the most excellent project security and

risk management team-building strategy for its first distribution center.  After 1971, Walmart

was listed on the New York Stock Exchange with more than 50 stores, and Walmart had a

revenue of more than $77 million.  Sam Walton inspired Korean manufacturing and introduced

the Walmart cheer after 1974.  After 1978, the Walmart Foundation was created.  After 1979,

Walmart had $1 billion in revenue, more than 275 stores, and more than 20,000 teamwork

associates.  After 1982, Walmart opened the first Sam's Club and replaced cash registers with

computerized point-of-sale systems so that Walmart can have the fastest teamwork and final

checkout for the customers.

Additionally, after 1986, Walmart established the most excellent team building for a

private satellite communication system in the US so that Walmart can operate through voice,

data, and video communication.  After 1987, Walmart opened the first full-scale Walmart

Supercenter to provide one-stop shopping convenience to customers.  After 1990, Walmart

partnered with Cifra (a Mexican retail Company).  Walmart opened Sam's Club in Mexico City.

Walmart bought more than 121 Woolco stores in Canada after 1993.  Then, Walmart opened its

first store in China after 1995.  After 1996, Walmart reached $100 billion in revenue.  After

1997, Walmart bought Asda.com in the United Kingdom and more (Walmart, Inc., 2021, para. 1-

38).

Furthermore, in 2015, Walmart had more than $485 billion in revenue, and its net profit

was more than $16 billion.  In 2016, Walmart had more than $482 billion and a net profit of

more than $14 billion, and in 2017, Walmart had more than $485 billion and a net profit of more

than $13 billion.  In 2018, Walmart had more than $500 billion and a net profit of more than $9.8

billion.  In 2019, Walmart had more than $514 billion and a net profit of more than $6.6 billion.

As of August 10, 2020, Walmart had more than $523 billion in revenue, and its net profit was

more than $14 billion (Fortune Media IP Limited, 2020, para. 1-7).

In 2015, Walmart created the most excellent project security and risk management team

building to focus on customer service.  Walmart pays higher wages to its teamwork associates

so that Walmart's teamwork associates will work hard and provide excellent customer services to

all Walmart customers worldwide.  Walmart increased the level of health-consciousness of

consumers as Walmart sells the freshest produce groceries.  Walmart creates the most excellent

team building to use the most superlative advanced technology for Walmart stores and

eCommerce websites by actively integrating with m-commerce like smartphone and tablet apps

to all Walmart customers worldwide to give them the most exceptional digital shopping

experiences.  Walmart's competitive advantage is that Walmart can buy for less and operate for

less.  Walmart can buy low price products from China so that Walmart can gain and sustain its

cost advantages (Dudovskiy, 2016, para. 1-8).

Furthermore, with the COVID-19 pandemic crisis, Walmart is still an e-commerce

champion.  Walmart's US eCommerce sales increased more than 39% in 2018, and Walmart

increased more than 36% growth in eCommerce sales than Amazon experienced in the same

year.  In 2019, Walmart got more sales than Apple.  Amazon and Apple are two major

competitors for Walmart (McKinnon, 2019, para. 1-5).  As of August 11, 2020, Walmart

partnered with Instacart to compete with Amazon.  Instacart can help Walmart offer its

customers the same-day delivery option at Walmart's four locations: San Francisco, Los Angeles,

Tulsa, and San Diego (O'Brien, 2020, para. 1-5).

Walmart has the highest successful project security and risk management team building

e-business management globally for all new project managers who need to learn.  Walmart

started small and grew very fast in 50 years.  Then, Walmart becomes the largest retailer in the

world.  Walmart has 11,500 stores and eCommerce websites around the world.  Walmart has

over 2.2 million teamwork employees worldwide (Walmart, Inc., 2021, para. 1).

*Significant #2*

Amazon has more than 37% revenue growth in 2020 and ranks the top #2 of the Fortune

500 for their project security and risk management.  Amazon earned more than $21.0 billion in

profit on more than $385 billion in annual sales. As the pandemic forced everybody online,

Amazon won big (Fortune Media IP Limited, 2020, para. 1-10).

*Significant #3*

Top 10 biggest diamond mines – Project security and risk management as follow**s:** Alrosa

Russian teamwork group has project security and risk management team building to the perfect

world most prominent mining companies.  Their teamwork produced a third rough diamond

production of the world.  After 1960, Alrosa's teamwork started as an open pit on the world's

biggest diamond mine, Aikhal.  They produced more than 1.2 million carats annually production.

They had a diamond reserve of more than 39/50 million carats.  De Beers teamwork group is the

second most excellent Diamond mine project security and risk management team building to

work on Jwaneng is the richest diamond mine in the South of Botswana.  Jwaneng is owned by

De Beers teamwork group as they partner with the Botswana government.  De Beers teamwork

group produces more than 34% of rough diamond production in the world.

Additionally, the third global richest diamond mine in Udachny is owned by the most

excellent diamond mine project security and risk management team building Alrosa Russian

teamwork group.  Alrosa produces more than 4.9 million carats annually.  Nyurba is the fourth

global richest diamond mine globally, and the Alrosa Russian teamwork group also owns it.

Alrosa produces around 0.7 to 2 million carats annually.  Orapa is the fifth global richest

diamond mine, and it owns by the most excellent project security and risk management team

building De Beers teamwork group.  It has a production of more than 10.9 million carats

annually.  Catoca is the sixth global richest diamond mine, and it owns by some of the most

excellent diamond mine project security and risk management team building joint

ventures such as the Alrosa, Endiama, China Sonangol, and Odebrecht Mining.  It has a

production of more than 1.9 million carats annually.

Furthermore, Ekati is the seventh global richest diamond mine, and it owns by the most

excellent diamond mine project security and risk management team building

Washington Companies.  It has a production of more than 7.4 million carats annually.  Venetia

is the eighth global richest diamond mine, and it owns by the De Beers teamwork group.  It has

a production of more than 3.9 million carats annually.  Lomonosov is the ninth global richest

diamond mine, and it owns by the Alrosa Russian teamwork group.  It has a production of more

than 1.9 million carats annually.  Mir is the tenth global richest diamond mine, and it owns by

the Alrosa Russian teamwork group.  It has produced more than 2.9 million carats annually

(Frank, 2020, para. 1-15).

*Significant #4*

Top 10 most significant oil and gas companies – Project security and risk management as

follow**:** Sinopec is the world's number one most considerable China project security and risk

management of Petroleum & Chemical Corporation.  They had a revenue of more than $406

billion in 2019.  They are the most outstanding petroleum and chemical products project security

and risk management team building leadership as they produce the most significant oil and

natural gas in the world. China National Petroleum is the world's number two most giant China

Petroleum & Chemical Corporation. They had a revenue of more than $395 billion in 2019.

They are the second most outstanding petroleum and chemical products project security and risk

management team building leadership as they produce the most significant oil and natural gas in

the world. PetroChina is the world's number three biggest China Petroleum & Chemical

Company. They had a revenue of more than $359 billion in 2019. They are the third most

outstanding petroleum and chemical products project security and risk management team

building leadership as they produce the most significant oil and natural gas in the world.

Additionally, Royal Dutch Shell is the world's number four biggest Petroleum &

Chemical Company. They had a revenue of more than $344 billion in 2019. They are the fourth

most outstanding petroleum and chemical products project security and risk management team

building leadership as they produce the most significant oil and natural gas in the world. Saudi

Aramco is the world's number five most giant Petroleum & Chemical Corporation. They had a

revenue of more than $329 billion in 2019. They are the fifth most outstanding petroleum and

chemical products project security and risk management team building leadership as they

produce the most significant oil and natural gas in the world. British Petroleum is the world's

number six biggest Petroleum & Chemical Company. They had a revenue of more than $277

billion in 2019. They are the sixth most outstanding petroleum and chemical products project

security and risk management team building leadership as they produce the most significant oil

and natural gas in the world.

Furthermore, Exxon Mobil is the world's number seven biggest Petroleum & Chemical

Company. They had a revenue of more than $264 billion in 2019. They are the seventh most

outstanding petroleum and chemical products project security and risk management team

building leadership as they produce the most significant oil and natural gas in the world. Total is

the world's number eight biggest Petroleum & Chemical Company. They had a revenue of more

than $199 billion in 2019. They are the eighth-most outstanding petroleum and chemical

products project security and risk management team building leadership as they produce the

most significant oil and natural gas to the world. Chevron is the world's number nine most giant

Petroleum & Chemical Corporation. They had a revenue of more than $145 billion in 2019.

They are the ninth most outstanding petroleum and chemical products project security and risk

management team building leadership as they produce the most significant oil and natural gas in

the world. Rosneft Oil is the world's number ten most giant Petroleum & Chemical Corporation.

They had a revenue of more than $139 billion in 2019. They are the tenth most outstanding

petroleum and chemical products project security and risk management team building leadership

as they produce the most significant oil and natural gas globally (Offshore Technology, 2020,

para. 1-55).

## Methodology

### Hypotheses

The two important research questions are: What are the project security and risk

management? What is the problem statement?

### What are project security and risk management?

Project security and risk management will have project security and risk management

planning to protect the project to be secure and risk-free. Project Risk Management plan needs

to create at the beginning of all global projects to ensure the project will have the highest

standard quality, security, budget, schedule, and time to finish the project before delivering to the customer.

Additionally, all projects will be extremely risky if CISO does not plan for project security and risk management at the beginning of the projects.  The project needs to have the highest standard quality, security, budget, schedule, and time to finish the project before it takes delivery to customers so that the enterprise will get the highest revenue like Walmart.  CISO needs to prevent all project security risks and project risks such as cybercrime, natural disaster, fire, thief, and other unpredictable risks.  The CISO needs to buy cybercrime, natural disaster, fire, thief insurances to protect business and unpredictable risks.  CISO needs to update project security and risk management all the time ("*A guide to the project management body of knowledge (pmbok® guide),*" 2017, p. 395-458).

<div align="center">**Advantages and Disadvantages**</div>

*Advantages*

The most crucial advantage of the project security and risk management plan is giving a project the most excellent product, service, and successful result.  CISO will have time to prepare the most excellent policy, tools, and techniques to meet the project requirements.  The project will be undertaken and meet all project objectives so that the enterprise will get the highest revenue ("*A guide to the project management body of knowledge (pmbok® guide),*" 2017, p. 395-458).

*Disadvantages*

All projects will have security risks and project risks such as cybercrime, natural disaster, fire, thief, and other unpredictable risks.  All projects will get significant risks if CISO does not plan for project security and risk management at the beginning of the projects.  The project needs

to have the highest standard quality, security, budget, schedule, and time to finish the project

before it takes delivery to customers so that the enterprise will get the highest revenue like

Walmart.  CISO needs to prevent all project security risks and project risks such as cybercrime,

natural disaster, fire, thief, and other unpredictable risks.  The CISO needs to buy cybercrime,

natural disaster, fire, thief insurances to protect business and unpredictable risks.  CISO needs to

update project security and risk management all the time ("*A guide to the project management

body of knowledge (pmbok® guide),*" 2017, p. 395-458).

## Problem Statement

The problem is that all projects will have security risks and project risks such as

cybercrime, natural disaster, fire, thief, and other unpredictable risks.  All projects will get

extremely risky if CISO does not plan for project security and risk management at the beginning

of the projects.  The project needs to have the highest standard quality, security, budget,

schedule, and time to finish the project before it takes delivery to customers so that the enterprise

will get the highest revenue like Walmart.  CISO needs to prevent all project security risks and

project risks such as cybercrime, natural disaster, fire, thief, and other unpredictable risks.  The

CISO needs to buy cybercrime, natural disaster, fire, thief insurances to protect business and

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guide to the project management body of knowledge (pmbok® guide),*" 2017, p. 395-458).

## Problem Solve Solutions

CISO needs to prevent all project security risks and project risks such as cybercrime,

natural disaster, fire, thief, and other unpredictable risks.  The CISO needs to buy cybercrime,

natural disaster, fire, thief insurances to protect business and unpredictable risks.  CISO needs to

update project security and risk management all the time ("*A guide to the project management body of knowledge (pmbok® guide),*" 2017, p. 395-458).

### Project Security and Risk Management Strategy

The most outstanding CISO project leadership needs to create the most significant project vision and strategy to encourage team members to work beyond project expectations to reduce all project risks.  The most remarkable CISO project leadership needs to update project team performance to eliminate all project risks to get the most excellent project accomplishment result.  Project team performance needs to be significantly positive to work beyond each team member's personality value.  The most outstanding CISO project leadership needs to lead the team members to finish the project beyond the project schedule and budget.

Moreover, the most outstanding CISO project leadership needs to update project team members' backgrounds to get tremendous success in project accomplishment.  The most outstanding CISO project leadership needs to create the most incredible vision, strategy, values, and characters for the team members to have personal and professional excellence on the working project to get the most outstanding team performance.  The most significant CISO project leadership needs to create the most excellent communication, regardless of their cultures, personal values, and experiences.  Miscommunication teamwork can lead the project to failure, such as being behind schedule and budget (Powell, 2004, para. 1-29).

Furthermore, the most outstanding CSIO project leadership needs to ensure the project teamwork will have the most significant budget performance and schedule performance to finish beyond time and budget.  The most significant CSIO project leadership needs to ensure the project teamwork will have the most excellent quality standard and meet all project expectations, including unexpected project risks like a storm, earthquake, thief, and cyber-attack.  The most

significant CISO project leadership needs to make sure the project teamwork will have the most

incredible face-to-face and virtual communication to meet all project expectations so that their

company will general the highest revenue, like Walmart and Amazon.  The most significant

CISO project leadership needs to ensure that teamwork will have the most generous bonus and

reward to motivate future performance on many projects.  The most significant CISO project

leadership needs to lead team members to understand customer behaviors and their personal

experiences to finish the project on time to match the market demand as a present and the future

to come.

The most significant CISO project leadership needs to make sure the project teamwork to

have the most significant transformational project self-efficacy to raise teamwork highest value

to perform the works on all projects that will help the enterprise to get the most significant

revenue like Walmart and Amazon (Fitzgerald & Schutte, 2010, para. 1-38).  The most

significant CISO project leadership needs to lead team members to work beyond their skills and

responsibilities for their jobs.  The most significant CISO project leadership needs to make the

transformation project plan ahead of time to the most remarkable accomplishment result.  The

most significant CISO project leadership needs to create a long-term building block for the

project team's successful performance.  The team members need to have a significantly winning

environment all the time.  The team members need to have exceptionally outstanding

performance all the time.  The team members need to have an excellent working environment all

the time (Lennox, 200, para. 1-12).

Additionally, the most outstanding CISO project leadership needs to train team members

to understand three critical elements of team performance: Content, Process, and Behavior by Dr.

Zachary Wong.  Dr. Wong created the three critical elements of team performance (Content,

Process, and Behavior) associated with the three space models (Organizational Space, Team Space, and Personal Space) to help the project manager to have tremendous success on the project management (Kingston, 2007, para. 1-10). In 2007, Dr. Zachary Wong was a manager for the Chevron Energy Technology company, and he was also a professor for the University of California at Berkeley Extension. Dr. Wong taught students about human factors and dynamic team works. Then he wrote the Human Factor in Project Management book based on his industrial and academic experiences (Business Wire, Inc., 2007, para. 1-5). Poor CISO project leadership will bring the project down. The excellent CISO project leader will need to do the task to meet customer expectations consistently. The excellent CISO project leader requires the most significant knowledge and skills in the management of human factors. The most significant CISO project leadership needs to understand the three critical elements of team performance (Content, Process, and Behavior) associated with the three space models (Organizational Space, Team Space, and Personal Space) or the Ten Models of Human Factors as well to have the tremendous success on the project management in the world (Zachary Wong, 2007, p. 323 – 342).

Furthermore, the most excellent project management team building needs to understand the US Agency for International Development (USAID). In 1993, the USAID was selected as a "test case" by the National Performance Review headed by Vice-President A1 Gore. The procurement process at USAID, drawn from the economic theory of procurement contracts. They had three types of agreements: Cost-plus, fixed-price, and incentive type contracts. The model suggests how the government can achieve optimal competitive business deals, manage the procurement process, and award its contracts. Government procurement contracting considers a massive business. The US government uses more than $199 billion annually in procurement

products and services, as the US government considers the largest consumer and customer for

procurement contract awards of the space exploration, defense, foreign aid, and private

contractors representing a large and growing business in the Washington, DC area.  They have

well-established corporations with many proposal writers, auditors, engineers, accountants,

economists, and lawyers, as procurement contracting has overgrown in the last 20 years (Berrios,

1998, p. 1-24).

        Moreover, the most excellent CISO project management team building needs to

understand the Monte Carlo Simulation theory.  Monte Carlo simulation is one of the most

significant project uncertainty risk methods globally, and it is an excellent computerized

mathematical technique for quantitative project analysis and decision making.  It uses many

professional fields such as project management, manufacturing, engineering, oil & gas,

transportation, environment, finance, energy, research and development, and insurance (Palisade,

2020, para. 1-17).  In 1856, Monaco Prince Charles III built luxuriously beautiful ocean scenery,

world rich resort, and casino.  Monte Carlo is northeast of Nice, France.  Monte Carlo is a

beautiful ocean scenery world rich resort and casino, and it is the most magnificent tourist

attraction like Las Vegas, Nevada (Lotha, 2019, para. 1).  The most excellent CISO project

management team building needs to understand that Deming, Juran, and Crosby are the most

outstanding project quality management globally.  Each of them provides many unique technics

for project quality management to succeed.  For example, Deming taught Japanese industries that

higher quality would get excellent productivity and lower cost.  However, American companies

did not understand Deming's ideas until the Japanese succeeded in their auto industries.  Then,

Ford Motor Company liked Deming's quality methods and significantly improved their car

quality and sales.  The Deming Prize is one of the greatest TQM (Total Quality Management)

awards in the world.  Deming helped Japan to build its foundation in statistical quality control

after World War II.  Japan's product quality recognizes as the highest in the world (Deming

Prize, 2006, para. 1-25).  Deming's 14 points of management like adopting the new philosophy

and driving out fear (Schwalbe, 2014, p. 336).  A strong CISO project management needs to

understand the cost of quality.  After 1944, Juran stated that leadership needs to be quality-

minded, the most crucial top management.  The lack of supervision will cause quality problems.

After 1978, Crosby noted that the cost of low quality would need unlimited amounts of money to

improve project quality (Schwalbe, 2014, p. 336-341).

**Summary**

All enterprises worldwide need to develop the most excellent information security and

risk programs as the first step for enterprise security and risk operations.  The information

security and project risk program will protect the enterprise's valuable resources like computer

hardware, software, and data.  The information security and project risk program will also help

safeguard enterprise physical and financial resources, legal position, employees, and reputation.

The enterprise needs to create the most excellent policies, standards, and controls to reduce all

the business risks to get the highest revenues like Walmart (Peltier, 2013, p. xi-xvi of 377).

Additionally, the Corporate (Chief) Information Security Officer (CISO) needs to direct

the enterprise's day-to-day project security and risk assets management.  The security

administrator will need to report directly to the Chief Information Officer (CIO) for the daily

administration of the information security and project risk program.  The roles and

responsibilities of the CISO will include systems operations and all personnel design and operate

the computer systems.  The CISO will be responsible for implementing technical security on the

methods and telecommunications like data, voice, video, and wireless.  CISO needs to create

global information security and project risk design and strategy practices to address the security

needs of its clients.  CISO needs to develop the information security and project risk strategy,

and design will complement security and network services to their global practice areas.  The

security framework will provide for the most excellent secure operation of computing platforms,

networks, and operating systems, both data and voice, to ensure the integrity of the clients'

information assets.  Moreover, CISO needs to create the highest quality security services to

ensure that the enterprise will have the best practices for all information security programs and

risk management to get the highest revenue (Peltier, 2013, p. xvii-xxiv of 377).

Furthermore, the most outstanding CISO project leadership needs to have the highest

transformational team value for project security and risk management to get the most remarkable

accomplishment result.  The most outstanding CISO project leadership needs to have the highest

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transportation and labor costs.  Walmart tried to lower its operating costs so that Walmart could

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after 1995.  After 1996, Walmart reached $100 billion in revenue.  After 1997, Walmart bought

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$16 billion.  In 2016, Walmart had more than $482 billion and a net profit of more than $14

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## Conclusion

The role of the CISO professional has changed more than 24 years and at present.  It will change again and again with audit requirements so that the enterprise will have the most excellent project security and risk management in the world.  To meet this end, the CISO

professional will need to work with the CEO and users to find an appropriate level of control and

understand the needs of the business or the organization's mission.  Then, CISO will make the

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and objectives so that the enterprise will get the most outstanding revenue.

**References**

*About Us*.  (2020).  Walmart.  Retrieved on July 17, 2021, from

    https://corporate.walmart.com/our-story

ACM, Inc. (2021).  Gerald Combs – ACM System Award.  Retrieved from

    https://awards.acm.org/award_winners/combs_0228059

Amazon Web Services, Inc. (2021).  *AWS Free Tier*.  Retrieved on July 15, 2021, from

    https://aws.amazon.com/free/?all-free-tier.sort-by=item.additionalFields.SortRank&all-

    free-tier.sort-

    order=asc&awsf.Free%20Tier%20Types=*all&awsf.Free%20Tier%20Categories=catego

    ries%23compute&trk=ps_a134p000004ew2xAAA&trkCampaign=acq_paid_search_bran

    d&sc_channel=PS&sc_campaign=acquisition_US&sc_publisher=Google&sc_category=

    Cloud%20Computing&sc_country=US&sc_geo=NAMER&sc_outcome=acq&sc_detail=

    amazon%20cloud%20hosting%20pricing&sc_content=Cloud%20Hosting_e&sc_matchty

    pe=e&sc_segment=463367500961&sc_medium=ACQ-P|PS-

    GO|Brand|Desktop|SU|Cloud%20Computing|Solution|US|EN|Text&s_kwcid=AL!4422!3

    !463367500961!e!!g!!amazon%20cloud%20hosting%20pricing&ef_id=Cj0KCQjwub-

    HBhCyARIsAPctr7zJAPGy5neq48eDLkEZ6mDLiG-QDLSvF6fO_J8kYZ-

    vszEIf0J9jaEaAmaoEALw_wcB:G:s&s_kwcid=AL!4422!3!463367500961!e!!g!!amazo

    n%20cloud%20hosting%20pricing

Ambrose, S., CA (SA). (2015).  TECH TALK THE INTERNET OF EVERYTHING AND

    EVERYTHING ON THE INTERNET. *Accountancy SA,* 52.  Retrieved from

    https://search-proquest-

    com.ezproxy1.apus.edu/docview/1637735643?accountid=8289

Angelo, S. M. (2001, November 27).  *Security Architecture Model Component Overview*.

   Retrieved August 5, 2021, from https://sansorg.egnyte.com/dl/y5E2pcroJ9/?

*A guide to the project management body of knowledge (pmbok® guide)*. (2017).  ProQuest

   Ebook Central https://ebookcentral.proquest.com

*A Guide to Project Management* (5th ed.). (2013).  Newtown Square, Pennsylvania: Project

   Management Institute, Inc, pp. 343-349.

Berrios, R. (1998, April 27).  Development assistance under contract.  Retrieved from

   https://www.proquest.com/openview/4bcb966f2ca2ee084397e410f3058d1d/1?cbl=18750

   &diss=y&loginDisplay=true&pq-origsite=gscholar

Bobran, B. (2018, July 18).  *Business Continuity vs. Disaster Recovery: What's the Difference?*

   Retrieved August 6, 2021, from https://phoenixnap.com/blog/business-continuity-vs-

   disaster-recovery

Business Wire, Inc. (2007, July 4).  *Get a Summary of People-Based Management Skills and*

   *Techniques That Can Be Applied When Working in a Team Environment.*  Retrieved from

   https://www.businesswire.com/news/home/20070704005110/en/Get-a-Summary-of-

   People-Based-Management-Skills-and-Techniques-That-Can-Be-Applied-When-

   Working-in-a-Team-Environment

Cadence Design Systems, Inc. (2021).  *Microprocessor vs. Integrated Circuit--What's the*

   *Difference?* Retrieved August 8, 2021, from

   https://resources.pcb.cadence.com/blog/2020-microprocessor-vs-integrated-circuit-what-

   s-the-difference

Computer History Museum. (2021).  *Timeline of Computer History*.  Retrieved August 8, 2021,

   from https://www.computerhistory.org/timeline/computers/

Comer, D. (2015).  *Computer networks and Internets,* 6th Edition.  Boston, Massachusetts:

      Pearson.

Deming Prize. (2006).  The Deming Prize Guild.  SAFERPAK.  Retrieved from

      https://www.saferpak.com/deming_prize_art1.htm

Dudovskiy, J. (2016, March 28).  *Walmart Business Strategy and Competitive Advantage.*

      BRM.  Retrieved from https://research-methodology.net/walmart-business-strategy/

Frank. (2020, September 17).  Top 10 Biggest Diamond Mines.  Retrieved from

      https://www.costerdiamonds.com/blog/top-10-biggest-diamond-mines/

Fitzgerald, S., & Schutte, N. S. (2010).  Increasing transformational leadership by enhancing

      self-efficacy.  The Journal of Management Development, 29(5), 495-505.

      doi:http://dx.doi.org.ezproxy1.apus.edu/10.1108/02621711011039240

Fortune Media IP Limited. (2020).  *Global 500 – Walmart Rank 1.*  FORTUNE.  Retrieved

      from https://fortune.com/company/walmart/global500/

Fortune Media IP Limited. (2020).  *Fortune 500 – Amazon Rank 2.*  FORTUNE.  Retrieved on

      July 17, 2021, from https://fortune.com/company/amazon-com/fortune500/

IBM. (2021).  *Cryptography for a Connected World.*  Retrieved on July 22,

      2021, from https://www.ibm.com/ibm/history/ibm100/us/en/icons/cryptography/

IMB. (2021).  *Evolution of the mainframe*.  Retrieved August 8, 2021, from

      https://www.ibm.com/ibm/history/exhibits/mainframe/mainframe_intro.html

IMB. (2021).  *Mainframes introduction 2*.  Retrieved August 8, 2021, from

      https://www.ibm.com/ibm/history/exhibits/mainframe/mainframe_intro2.html

IMB. (2021).  *Mainframes introduction 3*.  Retrieved August 8, 2021, from

      https://www.ibm.com/ibm/history/exhibits/mainframe/mainframe_intro3.html

IBM. (2021). *IBM Cloud Delivers Quantum-Safe Cryptography and Hyper Protect Crypto*

    *Services to Help Protect Data in the Hybrid Era.* Retrieved on July 22, 2021, from

    https://newsroom.ibm.com/2020-11-30-IBM-Cloud-Delivers-Quantum-Safe-

    Cryptography-and-Hyper-Protect-Crypto-Services-to-Help-Protect-Data-in-the-Hybrid-

    Era

ID Quntique. (2021). *Quantum-Safe Security*. Retrieved July 14m 2021, from

    https://www.idquantique.com/quantum-safe-security/overview/quantum-key-

    distribution/#:~:text=Quantum%20cryptography%20is%20a%20technology,light%2C%2

    0across%20an%20optical%20link.

Jem, Y. (2018, September 7). Numbers 1 to 1 Millinillion [Video]. YouTube.

    https://youtu.be/sSnhzXKMTnM

Keller, C. R. (n.d.). *What is Walmart's Secret to Success?* Retrieved from

    https://profitworks.ca/small-business-sales-and-marketing-resources/blog/marketing-

    strategy/579-sam-walton-wal-mart-what-is-wal-mart-s-secret-to-success.html

Kingston, G. (2007). *Book Review: Human Factors in Project Management*. PDMA. Retrieved

    from https://www.pdma.org/page/review_human_factor

Lennox, J. M. (2001). Team-building for a better tomorrow. Journal of Property PROJECT

    MANAGEMENT: TEAM BUILDING 20 Management, 66(5), 10-11. Retrieved from

    https://search-proquestcom.ezproxy1.apus.edu/docview/216395763?accountid=8289

Lotha, G. (2019, January 30). *Monte-Carlo/ resort – Monaco*. Retrieved from

    https://www.britannica.com/place/Monte-Carlo-resort-Monaco

McKinnon, T. (2019, April 15). *eCommerce, Strategy & Growth*. INDIGO9DIGITAL.

Retrieved from https://www.indigo9digital.com/blog/4-secrets-to-walmarts-ecommerce-

success

NortonLifeLock Inc. (2021).  *Choose to be safer online - Opt-in to Cyber Safety.*  Retrieved from

https://us.norton.com/

O'Brien, S. A.  (2020, August 11).  *Instacart partners with Walmart to compete with Amazon*.

CNN Business.  Retrieved from https://www.cnn.com/2020/08/11/tech/walmart-instacart-

partner-whole-foods/index.html

Offshore Technology. (2020, October 30).  Top 10 oil and gas companies in 2020.  Retrieved

from https://www.offshore-technology.com/features/top-ten-oil-and-gas-companies-in-

2020/

PacketLight Networks. (2021).  *400G over Single DWDM Wavelength*.  Retrieved

July 14, 2021, From https://www.packetlight.com/technology/400g-dwdm-wavelength-

solution

Parker, J. (2020, January 15).  *What is Netflow?*  Retrieved from

https://www.pcwdld.com/what-is-netflow

Palisade. (2020).  Monte Carlo Simulation.  Retrieved from

https://www.palisade.com/risk/monte_carlo_simulation.asp

Peltier, T. R. (2013).  *Information security fundamentals*.  ProQuest Ebook

Central https://ebookcentral.proquest.com

Powell, S. (2004).  Team building and team working.  Team Performance Management, 10(1),

35- 38.  doi:http://dx.doi.org.ezproxy1.apus.edu/10.1108/13527590410527577

Purcell. D. E. (205, April).  *Global Technology Standards – a bridge to the future.*  Retrieved

August 15, 2021, from http://www.strategicstandards.com/files/FutureShock.pdf

Schwalbe, K. (2014).  *Information technology project management* (7th ed.).  Boston, MA:

      Cengage Learning.

Sunday Business Post. (2015, October 4).  *Internet of things: The Internet of everything*.

      Retrieved August 8, 2021, from https://search-proquest-

      com.ezproxy1.apus.edu/docview/1718794014?accountid=8289

Travelers Risk Control.  (2020).  *Why is Business Continuity Important?*  Travelers.  Retrieved

      From https://www.travelers.com/resources/business-continuity/why-is-business-

      continuity-

      important#:~:text=Business%20continuity%20is%20a%20proactive,for%20responding%

      20after%20an%20event.

Wancho, T. (n.d.). *TEXAS INSTRUMENTS INTEGRATED CIRCUIT*

      *The chip that Jack built*.  Retrieved August 8, 2021, from

      https://www.thestoryoftexas.com/discover/artifacts/integratedcircuit_spotlight_121214

Walmart, Inc. (2021).  *Our History*.  Retrieved from

      https://corporate.walmart.com/our-story/our-history

Walmart, Inc. (2021).  *About Us*.  Retrieved August 9, 2021, from

      https://corporate.walmart.com/our-story

Zachary Wong. (2007).  *Human Factors in Project Management: Concepts, Tools, and*

      *Techniques for Inspiring Teamwork and Motivation: Vol.* 1st ed. Jossey-Bass.