

Information Technology Systems

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Unit 1: Information Technology Systems

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Submission date: 27.06.2023

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| Assessor Name: | Zubayda Temirova |
| BTEC Programme Title: | Pearson BTEC Level 3 Information Technology Systems |
| Unit or Component Number and Title: | UNIT 1: Information Technology Systems |
| Assignment Title: | Set Assignment |
| Date Assignment Submitted: | 27.06.2023 |

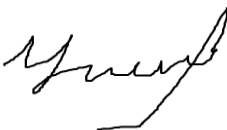
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1.0. INTRODUCTION

Nowadays IT infrastructure is the most important thing for all growing companies. Siftens Fitness is also a growing fitness center. I must build IT infrastructure for your company. First of all, I would like to thank you for entrusting me with such a responsible job. Firstly, we have to understand the IT infrastructure's meaning. Infrastructure is the basic physical and managing system of a region, business, or nation and also the production. Transportation systems, water, and school communication networks can be examples of the infrastructure. The Information and Technology infrastructure is the digital way for your data to travel. IT infrastructure management includes hardware, software, and networks. My report provides data about all needed things which can meet the needs of the company and organization. What kind of software and hardware need for organization and their stakeholders? Which data connection and networks can meet the needs of the company? Which information is used by the company, internal or external? Which ways? What are internal and external threats to data? Mr. Jim, you can find full answers to these kinds of questions during my report. I attempt to offer you the best. Because I understand your and the company's purpose You will provide a healthy lifestyle. I am also in favor of this. In short, this paper will discuss the various components of an IT infrastructure that can be implemented in a fitness center.

2. ACTIVITY 1

SOFTWARE

A computer consists of software and hardware. Software is the intangible part of the device. Software is a collection of instructions, documentation, and procedures that give a chance to do

different tasks on a computer system. The software works on the thought of guideline programs in computer language for execution. They tell the device what to perform and how to do it using a set of instructions. System software and Application software are two main types of software. **System software** programs are designed to run the computer's application programs and hardware. System software includes Operating systems. An operating system is a system that controls computers' hardware and software resources.

Application software is the most generality kind of software. Application software performs a specific function for users or another application. There have three types of application software desktop, web, and mobile app. The desktop application is stored on a computer. The web application is stored on a web server. You can access it through a browser. The mobile app is an application you download from a mobile device's app store or any other location. Software applications are divided into some types according to their purpose, such as programming software, multimedia software, enterprise software, and others.

I will attempt to offer you the best software, based on your company's needs.

Software for organization

1. You can use **1C** as an owner to manage the company's budget
2. **Paycom, SentricHR, and EPAY systems.** You might use this software to manage the company's payroll systems.
3. **TERAMIND, and bambooHR.** You may use this software to check and monitor the work of all staff.
4. I suggest **Microsoft Excel** for organizing trainers' schedules for reception staff.
5. Membership management software for reception staff is **GymMaster.**
6. **SimplyBook. I** is an online booking and scheduling software for reception staff.

7. **WellnessLiving, Glofox, and Everfit** are personal training software
8. I suggest **TeamUp**. It is GYM management software that includes analytics and reporting, marketing automation, and member engagement tools.

HARDWARE

Hardware is the tangible part of the device. Hardware includes the physical and visible components of the computer. The client may not be able to see all the hardware devices since they are inner to the computer's casing. An illustration of this would be capacity drives. Most hardware devices have a portion of the motherboard that's mindful of controlling the computer.

I will attempt to offer you the best hardware, based on your company's needs.

Hardware for an organization:

1. One Laptop for the owner because it is useful for the owner to manage the company
2. 6x PC with 6x mouse and keyboard for reception staff to observe booking, payment, and memberships.
3. The tablets for every seven trainers to check the attendance of all members.
4. Smartwatch for every seven trainers to improve the effectiveness of every training exercise.
5. Sound systems: Fitness centers require high-quality sound frameworks with effective speakers that can play music to keep individuals propelled and energized during their workouts.
6. Fitness facilities generally contain TVs, monitors, and projectors so that they may show visual content and stream classes live.
7. Sanitation and disinfection device
8. Security hardware such as card access or fob, full-height turnstiles, and other

9. Control of temperature and humidity is essential in fitness facilities since patrons frequently breathe deeply and their comfort levels can be greatly impacted by the quality of the air.
10. Lighting: Especially during early morning or late night workouts, members must be able to view the equipment and facilities.
11. Of course Fitness equipment such as Treadmills, stationary bikes, elliptical machines, rowing machines, weightlifting machines, and free weights because these are also hardware.
12. 2 modems for Wi-Fi connection.
13. Three printers for publishing documentation
14. USB hub

DATA CONNECTION AND NETWORK

The use of data connections and networks can meet the needs of the fitness organization and its stakeholders in many ways. A network consists of two or more computers that may communicate (share resources) with one another by established protocols. A network's computer connections can be wired or wireless.

Wired network connection method

A wired connection network is also referred to as wireline communication. Examples include cable television or internet access, telephone networks, and fiber-optic communication. Examples of wired system connection methods are ethernet cable, fiber-optic cable, Video Graphics Arrays (VGA) cable, HDMI cable, and USB. Our computer is physically connected to a router or modem by Ethernet cables, which are wires. Fibre optic cable is a new technology. Most people would like to use it. Mostly it uses telephones, internet cable, television, computer networking, and so on.

There have cables that can be used to connect devices. The First Video Graphics array (VGA) cable is an analog connection that uses for video display. It is relatively old but still use it. Next, we have an HDMI cable. The HDMI cable can transmit video and audio differently than a VGA cable. Eventually, we came to Universal Series Bus (USB) cable. Some of the most common cable kinds are USB cable assemblies, which are primarily used to link computers to peripheral devices like cameras, camcorders, printers, scanners, and more. We have to choose from some of them to meet the Siftens fitness company's needs. My suggestion is listed below.

Selected Wired connection cables for the organization

1. The six HDMI cables for connecting the receptionists' PC's case and monitor.
2. The three HDMI cables for connecting three printers and PCs.
3. The twelve USB cables for PCs mice and keyboards.
4. The six USB cables for connecting the USB hub and PCs to exchange information with each other.
5. The three coaxial cables (RF) for the TVs. The seven USB charger cables for trainers to charge their tablets.

Wireless network connection method

Next, we have a Wireless system connection network. A computer network is referred to as a wireless network if radio frequency (RF) links are used to connect network nodes. A common solution for households, companies, and telecommunications networks is wireless networking. Examples of the wireless system connection network are WI-FI, NFC (near field communications), Bluetooth, Mobile networks, Microwave lasers, and Wi-Fi Direct. The wireless networking technology known as Wi-Fi enables computer-based devices to connect to the Internet. Second,

we have NFC (near-field communications). Close-range radio signals are used by NFC (near-field communications) to send data between two NFC-enabled devices. Wi-fi is the most popular wireless connection network. The second most popular one is Bluetooth. We can connect device to device not device to network through Bluetooth. Microwave Laser is also called Microwave radio communication. We can transmit large quantity data through Microwave Laser. Microwave communication is the radio wave-based transmission of signals using a range of radio frequencies with modest centimeter-scale measurements. A piece of technology called a microwave radio system is used for transmissions in telecommunications and broadcasting. Next, the Mobile network is a telecommunication system that illustrates services through radio signals. It is a physical device. We can bring it anywhere and also we can use it. Last we have a Wi-Fi Direct connection. The Wi-Fi Direct empowers Wi-Fi gadgets to put through specifically to each other, making it straightforward and helpful to print, share, adjust, play recreations, and show substance to another gadget.

Selected Wireless connection method for organization

Among these, we choose Wi-Fi and mobile network to meet the needs of Siftens Fitness Center. We have to do contracts with the Uzbek mobile network operators to organize unlimited network connection Wi-Fi with 2 modems. In addition, We also have to talk with them about private mobile networks for trainers' tablets.

Analyse and Justify aspects of Wired and Wireless Network methods

As you can see, we have chosen wireless network technology Wi-Fi instead of wired Ethernet cables to connect the enterprise to the network. Both wired and wireless network connections have advantages and disadvantages. The advantages of wireless connection are accessibility, flexibility, easy installation, and cost-effectiveness. Of course, we cannot avoid its shortcomings. The

disadvantages of wireless connection are security, speed, limited bandwidth (Bandwith is the most data that can be sent through an internet connection in a specific amount of time), and others. The wired connection also has disadvantages such as a minor problem caused by too many cables, needing more time to install, and being uncomfortable because of lack of movement. The advantages of the Wired connection are its better security, reliability, stability, and high connectivity. I chose Wireless because of its convenience and flexibility. It also offers internet access to fitness center members, so I chose that.

NETWORK TYPES

The tools of connection to the network are more important things for the organization. At the same time, the type of network the organization uses is also important. Here in this picture, you can see the types of networks:

- LAN (Local Area Network)
- PAN (Private Area Network)
- WAN (Wide Area Network)
- AN (Private Area Network)
- **A local area network** is a collection of interconnected computers in a constrained space, like an office or building.
- **A personal area network** is a network set up inside of a single person, often within a 10-meter radius.

Here we have two types of PAN. These are Wireless personal area networks and Wired personal area networks. The Wireless personal area network is created by Wi-Fi and Bluetooth. In general, through wireless technology. The Wired personal area network is developed by using the USB.

- **A metropolitan area network** connects various LANs to create a larger network that serves a greater geographic area.
- **A wide-area network** spans a lot of land, such as many states or entire nations

Selected Network types for an organization

Firstly, We use Wireless Private Area Networks and Wired Private Area Networks. The Wireless Private Area Network connects computers to Wi-Fi and Bluetooth. In the organization, we use a wired private network to connect any devices owned by the Siftens organization to each other. That's not all, we also use LAN to meet the network needs of the organization. The Siftens Fitness's receptionists have six PCs and the company also have a USB hub. That's why LAN is also a convenient network for connecting PCs. I have suggested these network connection types and tools that are most convenient based on the needs of the organization.

ANALYSE THE IMPACT OF IT INFRASTRUCTURE

IT infrastructure has a significant impact on the organization and its employees. Whether these effects are positive or negative is questionable. The positive effect will affect exactly which aspects of the business. These are user experience, user needs, cost of product, and security. In my opinion, these four business elements will change with the adaptation of the IT infrastructure to the enterprise. I want to say that these elements have either a positive or a negative effect. User experience improves with the implementation of infrastructure. Because now the organization can quickly learn the needs of users through the infrastructure and offer them solutions. User needs are just like that. The price of the service provided by the campaign increases by itself. Because now the company has IT. Convenient for users, they will be willing to pay more. This will also be a requirement because campaign costs are high now. On the one hand, the campaign cannot serve

all classes of customers. Because of the increase in prices. Old customers may also be lost. Security is very important to the organization and its employees. The presence of IT ensures that the enterprise is more secure. The good thing about this is that now the company will attract more employees. Because the security of himself and his personal information is important for any employee.

EVALUATE THE IMPACT OF IT INFRASTRUCTURE

Organizations can automate and streamline processes with the help of a strong IT infrastructure, which lowers the need for manual labor and increases operational effectiveness. It promotes departmental integration and smooth information flow, enhancing teamwork and removing bottlenecks. Websites, mobile apps, and customer relationship management (CRM) solutions are examples of systems that support customers. Improved service delivery and customer satisfaction result from these technologies being responsive, accessible, and secure thanks to a solid infrastructure.

Solution 1

In my opinion, increasing the types of courses in the fitness center will ensure that old customers are not lost and more customers will come. I mean the changes in course teaching style (from offline classes to online: prerecorded classes). Then we will cover middle-class customers as well. Raising the salaries of campaign workers is not without benefits. Helps to attract more employees. As an IT specialist creating mobile apps will be one good solution for attracting more customers. At the moment there is only a website.

Solution 2

I have a suggestion to increase the effectiveness of the campaign and the work of the employees, which is to create a separate social network group for each fitness group in the campaign using social networks like Telegram and WhatsApp. A receptionist, trainer, and owner have to join each social network group. This allows members to get direct answers to their questions and certainly helps the campaign staff and owner to discuss customer fitness needs and find solutions.

Solution 3

The last solution for organizations is AI assistance. I recommend putting responsive artificial intelligence into your organization's website. I think it will be beneficial for the organization. It also makes the work of some employees easier. Customers who want to sign up for fitness receive answers to their questions with the help of artificial intelligence. It also saves staff time

3. ACTIVITY 2

DATA

The important things for developing an organization are too. One of them is what data the organization uses and in what way. First of all, we have to know what is data.

The Latin word "datum," which roughly translates to "something given," is where the term "data" etymologically stems. Data is used in several contexts but is unstructured, unorganized, unanalyzed, interrupted, and unconnected. If we look, there have too many sources of data. Now we will focus on the main ones. Two main sources of data have been in gathering data. These are Primary data and Secondary data.

Sources of data:

- Primary sources of data in data collection provide a first-hand account of the event.

Examples:

- Interviews
- Speeches
- Birth certificates
- Journal and articles

Types of Primary Data:

- Qualitative data
- Quantitative data

- Secondary sources include the interpretation of analysis synthesis or evaluation of primary sources

Examples:

- Criticism
- Commentaries
- Editorials
- Textbooks

Types of Primary Data:

- Internal data
- External data

Types of data

Qualitative data are categorical data that cannot be counted or easily represented using numbers.

Quantitative data are numerical data that can be counted or measured in numerical Values.

Here you can see examples of both Qualitative and Quantitative data:

I gave the source of this photo at the end of the report.

Data in the organization and its storage

In the Siftens fitness center organization, we use both quantitative and qualitative data to save customers, employees, suppliers, and financial data. Online systems help in keeping them. The online system has cloud storage and cloud computing to store the company's data.

Cloud storage uses data centers with massive computer services that physically store the data and make it available online for users by the web.

Cloud computing is where you can get some work done. Cloud computing is the delivery of different services through the Internet including data storage servers databases networking so on and so forth.

Types of cloud computing:

➤ Based on deployment

- Private
- Public
- Hybrid

➤ Based on a services model

- Infrastructure as a service (IaaS)
- Platform as a service (PaaS)
- Software as a service (SaaS)

Data manipulation in an organization

Sometimes there is a need to change, update, or delete data in the organization, that is, to manipulate them. Data manipulation is the process of modifying data to improve its readability and organization. Data manipulation demands to use of database languages. They are called data

manipulation languages (DML). There have so many data manipulation languages. I think using PostgreSQL is enough for our organization.

Online communities

Of course, any organization needs to increase the number of customers and be able to be competitive. Online communities also play a role in this. The online communities' methods of communicating. They are social media, blogs, podcasts, wikis so on and so forth. Social media defines websites and applications that enable users to create and share content or to participate in social networking. We know the examples like Facebook, Instagram, Telegram, and others. Some people use it for personal and some people use it for special purposes. Social media is now an individual you can use it for communication and as a company you can use it to communicate with customers and also use it for marketing and advertising. I know Mr. Jim, you planned to open the organization's website. It is a really good idea to improve the company's profitability. For this, we need the help of developers and a web server. Your computer or mobile device can request webpages from the web server, which is a computer.

INFORMATION

The organization has its place, both general information and internal and external information.

- **Information** is data that is analyzed, structured, and given context to it useful.
 - **Internal information** is unique facts and figures that originate directly from the systems of the business in the issue.
 - Information that comes from outside the company and is easily accessible to the general public is referred to as **external information**.

Requirements of information are divided into three levels of organization based on their characteristics and features

➤ **Strategic Level**

For example:

- Changing markets
- National and Global Trends

➤ **Management level**

- Customer personal information
- Employee personal information
- Suppliers information
- Income and outcome records

➤ **Operational level**

- Customer numbers
- Accessible sources
- Cash flow

Information transmission, reception and work on them, as I said above, is carried out through online communities and information manipulation languages.

ANALYSIS OF THE IMPACT USE OF DATA AND INFORMATION

Above we saw information and data types. I hope we have chosen the best option to save them. Another important aspect of the organization is how to use internal and external information. I think it is important to pay attention to its accuracy and source when using information. Because numbers talk in business.

Data and information must be checked whether it is useful for the campaign or not. Care should also be taken when using internal information. But in this case, the filter should not be the same

as checking the external data. Because the information came from within the campaign. In conclusion, it is necessary to pay attention to the truth, accuracy, and usefulness of any information for the organization, and from what source it is obtained. It is necessary to prevent the loss of information about the organization through the ways I suggested above. Internal and external information or information workers have the same effect. Because employees are the organization itself. Employees have the same influence, they are given a lot of responsibility in sorting the information and delivering it to the management. This is their duty.

Internal use of data and information

1. Reporting type

There are different types of internal data reporting. You can see some of them. **Operational reports** concentrate on the organization's regular activities and procedures. They deliver real-time or nearly real-time information regarding crucial operational KPIs, such as sales numbers, production outputs, inventory levels, and customer support tickets.

Financial reports, which include income statements, balance sheets, cash flow statements, and other financial measures, give an overview of an organization's financial performance.

2. Prediction type

Here are some common types of internal data prediction within an organization:

Sales forecasting: Organizations can forecast future sales and demand patterns by examining past sales data, market trends, consumer behavior, and other pertinent factors.

Financial forecasting: Businesses utilize internal data to make predictions about their future cash flow, profitability, and other financial outcomes like revenue and expenses. Budgeting, financial planning, and investment decision-making are all aided by financial forecasting.

3. Decision-making type

Market and Customer Data: Internal information about the industry, clients, and rivals might influence decision-making. Organizations can identify market possibilities, create targeted strategies, and adjust their offers to fit customer needs by studying data on customer demographics, preferences, behavior, market trends, and competitive intelligence.

Risk and Compliance Data:

Decision-makers are assisted in assessing and mitigating risks by internal data linked to risk management and compliance. Organizations can decide how to assure compliance, improve security, and reduce risks by carefully considering data on regulatory requirements, incidents, security breaches, and operational weaknesses.

External use of data and information

1. Marketing type

Market Research Data: In order to understand market trends, customer behavior, competitor analysis, and industry benchmarks, organizations rely on data from external market research. With the aid of this information, target markets can be identified, the customer wants and preferences can be understood, market size and development potential can be assessed, and marketing strategies can be tailored accordingly.

2. Partnership type

Market Research and Industry Reports: Industry reports and external market research offers useful information on market trends, the competitive environment, and industry benchmarks. Utilizing this information, businesses can find possible partners who share their strategic objectives, have comparable products or services, or are active in their

desired target markets. Data from market research is useful for evaluating market potential and the allure of potential joint venture opportunities.

3. Type of information about emerging technologies

External sources offer information on cutting-edge techniques, market trends, and emerging technology. Organizations can use this data to stay current on new developments, spot chances for innovation, and make tactical choices about using new technology or breaking into new industries.

EVALUATE THE IMPACT USE OF DATA AND INFORMATION

Smart use of data ensures good policy in a campaign. Ingesting data and analyzing its results in improved campaign decisions. The organization can identify trends in data and make better decisions accordingly. It also has an impact on improving the customer experience. As I said above, thanks to the new information or data, the organization can know the needs of its customers. This helps them to provide appropriate service. An organization can use the information to better connect customers, employees, and partners. The only aspect that needs attention is data management and its privacy. Compliance with ethical standards in the use of data is the most important. Data and information give firms insightful information and fact-based knowledge for making decisions. Organizations can identify trends, spot patterns, and forecast future results by analyzing and interpreting data. Better strategic planning, resource allocation, and risk management follow from this, which eventually improves the organization's general efficiency and effectiveness.

The impact of data and information on the organization

Data and information offer useful insights that help decision-making at all organizational levels be well-informed. Organizations can make data-driven decisions, spot patterns, trends, and correlations, and weigh numerous options before making strategic, operational, or tactical decisions by examining pertinent data. Decision-making processes become more effective and efficient as a result. Organizations gain a competitive edge through data and information that offers insights into market trends, consumer preferences, and rival plans. Organizations can find new opportunities, create cutting-edge goods or services, customize marketing strategies, and stand out in the market by studying this data. Effective data exploitation can keep businesses one step ahead of the competition.

The impact use of data and information on stakeholders

Employees can better fulfill their duties thanks to the insights and knowledge provided by data and information. Employees who have access to pertinent data are better able to make educated decisions, spot possibilities for process improvement, and increase productivity. Organizations can also use it to acknowledge employee contributions, put into place data-driven performance management systems, and promote a culture of ongoing learning and growth.

The impact of data and information on policy

The creation and design of policies heavily rely on data and information. They give policymakers the background information and comprehension of the relevant problems they need to formulate goals, specify objectives, and create winning strategies. Data is useful for evaluating the viability, economic efficiency, and probable results of various policy options, resulting in well-informed and fact-based policy designs.

4. ACTIVITY 3

DESCRIPTION OF INTERNAL AND EXTERNAL THREATS

External threats

One of the natural situations in an organization is threats to information. The threats are divided into two types internal and external. There have too many types of external cyber-attacks. For example:

➤ **Malware**

Malware, which includes spyware, ransomware, viruses, and worms, is harmful software. When a user clicks on a malicious link or attachment, harmful software is installed and malware is triggered.

Types of Malware:

- Spyware – steals your data;
- Trojans – sneak malware onto your PC
- Adware – spams you with ads
- Botnets – viruses, that turn your computer into a zombie

➤ **Daniel of Service (DoS)**

The Daniel of service is also a kind of cyber attack that floods a computer or network, making it unable to handle requests

➤ **Phishing**

Phishing attacks use phony correspondence, such as an email, to con the recipient into opening it and following the instructions contained therein, like entering a credit card number.

Internal threats

Sometimes an internal threat to data occurs in an organization. Due to human error, there may be data leakage in the organization.

A **data leak** is any internal incident that exposes private information to an unsecured setting without being a cyberattack. In addition to data leakage, a data breach is also possible.

A **data breach** is any incident where sensitive data is exposed as a result of criminal behavior online.

DESCRIPTION OF PROTECTING PROCEDURES

There are many ways we can protect the organization's data from such internal and external threats. We have some technologies that can provide the security of data and information.

Technologies of data security:

➤ Firewalls

Firewalls guard against software or firmware-based unwanted access to networks. The firewall examines and blocks both incoming and outgoing traffic using a set of rules.

Types of Firewalls

- Packet filtering
- Stateful inspection
- Next-generation firewall

➤ Authentication

A server is in charge of monitoring who accesses its data or website.

Types of Authentication

- Passwords
- Two-factor Authentication
- Biometric Authentication

➤ **Authorization**

This is also a server that can decide whether the client has the authority to access a resource

Techniques Used in Authorization

- Open Authorization
- Specifying user role to access data
- Permission:

Allowing access to the database

Read-Write access to files

➤ **Encryption**

Information is transformed into secret code through the process of encryption, which conceals the true meaning of the information.

Suggested protection technologies for the organization

Siftens uses a firewall, authentication, and authorization technologies to protect financial, employee identity, center member identity, supplier, and company owner's personal information.

DESCRIPTION OF ETHICAL, MORAL, AND LEGAL PROCEDURES

Acting ethically, morally, legally, and ethically is essential in any organization. What do we mean by moral and ethical issues?

- **Moral** is more around wanting to do the right thing or the wrong thing so you know what the right and wrong things are.
- **Ethics** is simply a set of rules which people follow.

Two types of ethics have:

- Code of ethics

A set of guidelines created to promote moral behavior in a workforce of professionals

- Code of conduct

A code of conduct is a set of rules that can be used to judge whether something is morally right or wrong or permitted.

- Code of practice

An explanation, suggestions for best practices, or allusions to Occupational Safety and Health Laws may be included in a code of practice.

➤ **Legal issues**

Legal matters are distinct from ethical and moral transgressions in that they are founded on written rules, whereas ethical and moral matters are predicated on arbitrary notions of right and wrong.

- Information and technology law

The law of information technology, such as computing and the internet, is addressed by information technology law, often known as cyber law.

4. ACTIVITY 4

ANALYSIS OF THE IMPACT OF THREATS AND MITIGATION

Any threat to the organization destroys it or causes it to develop further. A well-designed campaign policy can anticipate threats and prepare for the next threat. The general threats to the campaign are not as many as we said above. These include cyber attacks, power outages, economic crises, and competition. These threats have various effects on the organization. A cyber attack can cause **data corruption, loss, and financial loss**. Competitive threats can prompt campaign management to make quick and wrong decisions.

Potential losses due to threats:

Data corruption

Data degradation or alteration that renders data unusable, inaccurate, or unreadable is referred to as data corruption. It happens when flaws or modifications to the data jeopardize its consistency, reliability, or integrity.

Data loss

Data loss is the unintended or accidental loss of data that renders it permanently unavailable or temporarily destroyed. It happens when data is lost, altered, corrupted, or otherwise compromised, making it impossible to retrieve or use the information that was included in it.

Financial loss

Financial loss is the term used to describe the detrimental effect on a person, group, or entity's financial resources or assets. It symbolizes a decline in financial value, usually brought on by numerous things including costs, harm, liabilities, or lost chances.

Phishing, DoS, and Malware threats listed above are bridges to campaign identity theft, leakage, or malicious data entry into an organization. Threats that include breaking rules, laws, or industry standards may be met with legal consequences, including fines and license loss. To mitigate these risks, the firm must follow all applicable laws and regulations, conduct routine audits, and put compliance frameworks in place. Ways to mitigate threats. I think the procedures that I have suggested are one of the good ways.

The impact of mitigated threat on organization and its stakeholders:

Threats can be reduced to assist the company and its stakeholders operate in a safer and more secure environment. Potential risks and dangers are reduced by putting in place the right security protections, which lessens the possibility of hurting or damaging people, property, and operations. As a result, all parties involved—including workers, clients, and partners—feel safer and more secure.

Threat mitigation can help firms save money. Organizations can prevent or reduce financial losses brought on by security breaches, legal challenges, operational disruptions, or reputational harm by proactively recognizing and managing risks. By preventing or lessening the effects of negative incidents, the investment in threat mitigation techniques can result in long-term cost savings

ANALYSIS OF THE IMPACT OF SUGGESTED PROCEDURES

I have suggested some security procedures for the campaign to protect against threats. These are Firewalls, authentication, and authorization information protection methods. They ensure the protection of the financial and intellectual property of the organization. Authentication and authorization data protection methods ensure that campaign data is accessed only by authorized persons. This prevents data loss and/or theft. A firewall is a data protection method that can act as

a shield against any attack coming through network paths. Being able to keep the information confidential will help attract more campaign partners. Procedures for data protection are essential for gaining and preserving the confidence of customers. Customers are more comfortable disclosing their personal information when businesses incorporate effective data protection measures, such as safe data storage, encryption, access controls, and privacy policies. This trust improves consumer loyalty, fosters customer connections, and promotes repeat business.

Positive effect of data protection procedures

Data protection practices help prevent unauthorized access, theft, and misuse of sensitive and personal information. Organizations may greatly lower the risk of data breaches and unauthorized disclosures by putting in place strong security measures including encryption, access controls, and user authentication.

Customers, partners, and workers can all have faith and confidence in effective data protection practices. People are more willing to interact with the organization and submit their data if they believe that their personal information is handled safely and in accordance with privacy standards.

Negative effect of data protection procedures

Investments in money are frequently needed to implement effective data protection practices. Resources may need to be set aside by organizations for staff training, access control systems, data storage solutions, and security technology. Budgetary issues might arise from these expenses, especially for smaller enterprises with little funding.

Multi-factor authentication and frequent security reminders are two examples of stringent data protection processes that may add extra steps or barriers for users. Although these procedures are intended to improve security, users may occasionally experience difficulty and annoyance as a

result. To guarantee that stakeholders, especially consumers, have a positive encounter with the company's services or platforms, it is crucial to strike the correct balance between data privacy and user experience.

ANALYSIS OF THE IMPACT OF WORKS IN LEGAL AND ETHICAL WAYS

Proper data management and/or actions taken in any enterprise will be ineffective if the rules, ethics, and laws in society are not followed within the enterprise. Because rules and regulations are important in business. The presence of internal rules ensures that employees of the organization approach their work more responsibly. Sir, this is very important even for the campaign owner. Internal order rules create the basis for the organization to work within the framework of the law of society. Organizations that exhibit integrity and ethical behavior are more likely to attract and retain customers, investors, employees, and partners. Strong brand value, customer attraction, and long-term stakeholder relationships are all facilitated by a positive reputation. For firms to avoid legal problems, fines, and reputational harm, compliance with applicable laws and regulations is essential.

Positive impact of legal and ethical performance of the organization

Building a solid reputation for the company by acting legally and ethically. An organization gains the confidence and trust of stakeholders when it conducts its business in a manner that conforms with laws and regulations and upholds ethical standards. This may result in a rise in client loyalty, improved ties with business associates, and a favorable image in the marketplace.

Top talent is attracted to and retained by companies with good legal and ethical performance. Job seekers are frequently drawn to businesses that place a high value on honesty, justice, and ethical conduct. When staff members believe their company upholds legal and ethical standards, they are

more likely to be engaged and dedicated to their work. This encourages a positive workplace culture and aids employers in hiring skilled and devoted employees.

Negative impact of legal and ethical performance of the organization

While an organization's performance in these areas generally has good benefits, there can also be some drawbacks. Frequently, additional funds and investments are needed to maintain legal and ethical standards. Regulation compliance, ethical practice adoption, personnel training, and monitoring systems can all cost a firm money. The profitability of the company may be impacted by these additional costs, particularly for smaller enterprises with tighter budgets.

Strict legal and ethical requirements may be seen as burdensome or restricting by employees, which can cause resistance or disengagement. Employees' job satisfaction and general morale may suffer if they believe that compliance rules hinder their capacity to make independent decisions or their ability to perform their jobs efficiently. This may hurt productivity, employee retention, and turnover rates.

JUSTIFY DECISION IN DEVELOPING POLICIES

The decisions to be made in the development of campaign policy are very important. Of course, development is fast. The roads leading to it are important. Now you have taken a big step towards this by implementing IT infrastructure in your company. There are effective ways to ensure continuous campaign development.

First solution for developing policy

In my opinion, a fitness center should have an open dialogue every month to exchange ideas with clients. This will then help them tell you what campaign issues are bothering them. Online or offline doesn't matter.

Second solution for developing policy

Or you can get the same result by distributing various questionnaires. A **questionnaire** is a type of research tool or instrument that consists of a list of questions intended to elicit data from people or groups. For example, the questionnaire can be about trainers. If the questionnaire's anonymity is ensured, customers can express their opinions openly.

Third solution for developing policy

Analysis - I think every 6 months the campaign system should be re-examined and updated if it needs to be updated. This is also very important in the development of the organization. Justifying policy choices aids in proving their legitimacy. It proves that laws are not made randomly or subjectively, but rather are founded on good logic, statutory requirements, and accepted business practices

Fourth solution for developing policy

Feedback from stakeholders and customers about the organization is very important. Through this, the organization can correct its shortcomings and add additions. **I suggest** collecting feedback from fitness center members and employees about how the campaign is working at every set period for the organization (for example, a month or after the end of the training course). In my opinion, this will help the development of the organization

Result

As a result, the company is better positioned to adhere to all applicable laws, rules, and standards. In conclusion, it is crucial to justify choices made while creating policies to provide accountability, transparency, legitimacy, stakeholder alignment, risk management, constant improvement, and ethical concerns.

5. CONCLUSION

In conclusion, an organization is most successful when the above elements, hardware, software, network system, data protection technologies, and internal and external rules based on campaign needs, work systematically. Sir, in this, of course, the biggest responsibility falls on you. Proper system management is critical to business IT automation. Best of luck to you and the staff at Siftens Fitness. Thank you!

6.1. RECOMMENDATION

I have given the advice I wanted to give throughout the report. I have no further advice for the organization. Thank you!

Word count:

REFERENCE LIST

Computer Science: Hardware and Software. (n.d.). GCFGlobal.org.

<https://edu.gcfglobal.org/en/computer-science/hardware-and-software/1/>

Concept of Hardware and Software - Tutorialspoint. (n.d.). Wwww.tutorialspoint.com.

https://www.tutorialspoint.com/computer_concepts/computer_concepts_hardware_software_concept.htm

What is a Data Connection? (n.d.). Docs.tibco.com. [https://docs.tibco.com/pub/sfire-](https://docs.tibco.com/pub/sfire-analyst/latest/doc/html/en-US/TIB_sfir)

[analyst/UsersGuide/connect/connect_what_is_a_data_connection.htm](https://docs.tibco.com/pub/sfire-analyst/latest/doc/html/en-US/TIB_sfir-analyst/UsersGuide/connect/connect_what_is_a_data_connection.htm)

(2023). Study.com. <https://homework.study.com/explanation/what-is-a-data-connection.html>

Isaac Computer Science. (n.d.). Isaac Computer Science.

https://isaacomputerscience.org/concepts/net_network_wired_wireless

Darah, D. (2022, April). *7 types of networks and their use cases.* SearchNetworking.

<https://www.techtarget.com/searchnetworking/feature/7-types-of-networks-and-their-use-cases>

Cloudian. (2022). *Data Protection and Privacy: Definitions, Differences, and Best Practices.*

Cloudian. <https://cloudian.com/guides/data-protection/data-protection-and-privacy-7-ways-to-protect-user-data/>

