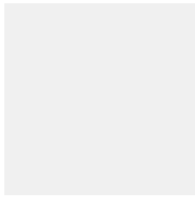


Question 1

Incorrect

Mark 0.00 out of 1.00



Flag question

Question text

All of the following are technologies used to analyze and manage big data except

Select one:



a.

in-memory computing.



b.

analytic platforms.



c.

cloud computing.



d.

noSQL.



e.

Hadoop.

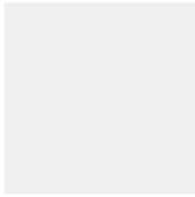
Feedback

The correct answer is: cloud computing.

Question 2

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Question 5

When a firm buys on the marketplace what it cannot make itself, the costs incurred are referred to as

Select one:



a.

Sales costs.



b.

Transaction costs.



c.

Network costs.



d.

Agency costs.



e.

Switching costs.

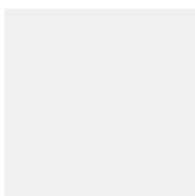
Feedback

The correct answer is: Transaction costs.

Question 3

Incorrect

Mark 0.00 out of 1.00



Flag question

Question text

The moral dimension of _____ can be described as the obligations that individuals and organizations have concerning rights to intellectual property.

Select one:

☐

a.

property rights and obligations

☐

b.

quality of life

☐

c.

accountability and control

☒

d.

information rights and obligations

☐

e.

system quality

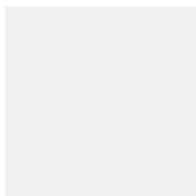
Feedback

The correct answer is: property rights and obligations

Question 4

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Which of the following features enables a DBMS to reduce data redundancy and inconsistency?

Select one:

☐

a.

couples program and data

☐

b.

enforces referential integrity

☐

c.

data dictionary

☐

d.

two-dimensional tables

☒

e.

minimizes isolated files with repeated data

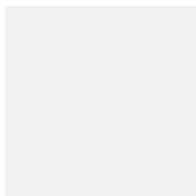
Feedback

The correct answer is: minimizes isolated files with repeated data

Question 5

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Question 17

What is meant by the statement "knowledge is sticky"?

Select one:

☐

a.

Knowledge is difficult to replace.



b.

Knowledge is hard to move.



c.

Knowledge is universally applicable.



d.

Knowledge works only in certain situations.



e.

Knowledge is intangible.

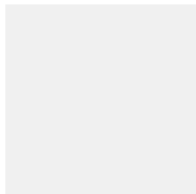
Feedback

The correct answer is: Knowledge is hard to move.

Question 6

Incorrect

Mark 0.00 out of 1.00



Flag question

Question text

The interaction between information systems and organizations is influenced

Select one:



a.

by two main microeconomic forces: capital and labor.



b.

by management decisions.



c.

by the development of new information technologies.



d.

by many factors, including structure, politics, culture, and environment.



e.

primarily by the decision making of middle and senior managers.

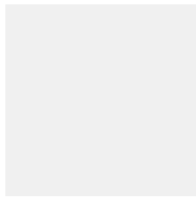
Feedback

The correct answer is: by the development of new information technologies.

Question 7

Correct

Mark 1.00 out of 1.00



Flag question

Question text

The four major enterprise applications are

Select one:



a.

enterprise systems, SCMs, CRMs, and KMSs.



b.

TPSs, MISs, DSSs, and ESSs.



c.

enterprise systems, SCMs, DSSs, and CRMs.



d.

SCMs, CRMs, ESSs, and KMSs.



e.

SCMs, CRMs, DSSs, and KMSs.

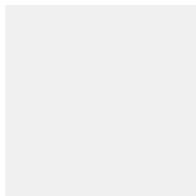
Feedback

The correct answer is: enterprise systems, SCMs, CRMs, and KMSs.

Question 8

Correct

Mark 1.00 out of 1.00



Flag question

Question text

All of the following are considered disruptive technologies except

Select one:



a.

Voice Over IP (VOIP).



b.

Instant messaging.



c.

Smartphones.



d.

3D Printers.



e.

PCs.

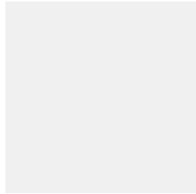
Feedback

The correct answer is: Instant messaging.

Question 9

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Digital goods are goods that are

Select one:



a.

Produced digitally.



b.

Used with digital equipment.



c.

Sold over digital networks.



d.

Delivered digitally.



e.

Created with software.

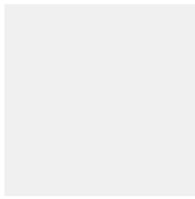
Feedback

The correct answer is: Delivered digitally.

Question 10

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Which type of decision is calculating gross pay for hourly workers?

Select one:

☐

a.

unstructured

☐

b.

semistructured

☒

c.

structured

☐

d.

ad hoc

☐

e.

procedural

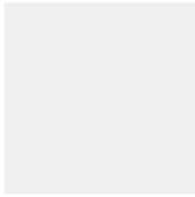
Feedback

The correct answer is: structured

Question **11**

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Behavioral models of management sees managers as being _____ than does the classical model.

Select one:

☐

a.

less reactive

☐

b.

more systematic

☒

c.

more informal

☐

d.

more well organized

☐

e.

more reflective

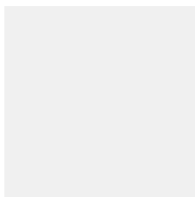
Feedback

The correct answer is: more informal

Question 12

Correct

Mark 1.00 out of 1.00



Flag question

Question text

You have been hired as a security consultant for a law firm. Which of the following constitutes the greatest source for network security breaches to the firm?

Select one:

☐

a.

Software quality

☐

b.

Wireless network

☐

c.

Lack of data encryption

☒

d.

Employees

☐

e.

Authentication procedures

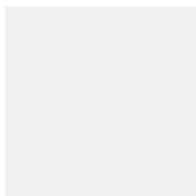
Feedback

The correct answer is: Employees

Question 13

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Question 3

The use of information systems because of necessity describes the business objective of

Select one:

☐

a.

improved flexibility.

☐

b.

competitive advantage.

☐

c.

improved business practices.

☒

d.

survival.

☐

e.

operational excellence.

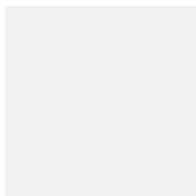
Feedback

The correct answer is: survival.

Question 14

Correct

Mark 1.00 out of 1.00



Flag question

Question text

The last step in the knowledge management value chain is

Select one:

☐

a.

store.

☐

b.

acquire.

☐

c.

disseminate.

☐

d.

feedback.

☒

e.

apply.

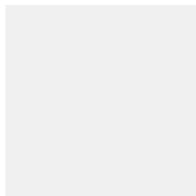
Feedback

The correct answer is: apply.

Question 15

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Which of the following best describes how new information systems result in legal gray areas?

Select one:

☐

a.

They are implemented by technicians rather than managers.

☐

b.

They work with networked, electronic data, which are more difficult to control than information stored manually.

☐

c.

They are little understood by politicians or lawyers.

☐

d.

They are created from sets of logical and technological rules rather than social or organizational mores.

☒

e.

They result in new situations that are not covered by old laws.

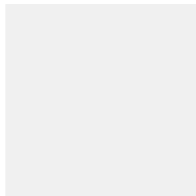
Feedback

The correct answer is: They result in new situations that are not covered by old laws.

Question 16

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Which of the following represents the three goals of information security?

Select one:

☒

a.

Confidentiality, integrity, and availability

☐

b.

People controls, process controls, and technology controls

☐

c.

Network security, PC security, and mainframe security

☐

d.

Prevention, detection, and response

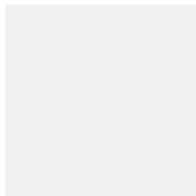
Feedback

The correct answer is: Confidentiality, integrity, and availability

Question 17

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Which of the following statements is **not** an accurate description of the importance of knowledge to a firm?

Select one:



a.

Knowledge should be seen as an intangible key asset.



b.

Much of the firm's value relies on being able to create knowledge.



c.

Knowledge experiences network effects as more people share it.



d.

Knowledge is unconditional.



e.

Knowledge enables firms to become more efficient in their use of scarce resources.

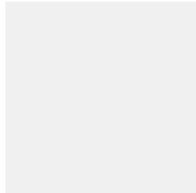
Feedback

The correct answer is: Knowledge is unconditional.

Question 18

Correct

Mark 1.00 out of 1.00



Flag question

Question text

The _____ function is responsible for identifying customers.

Select one:



a.

sales and marketing



b.

human resources



c.

manufacturing and production



d.

finance and accounting



e.

distribution and logistics

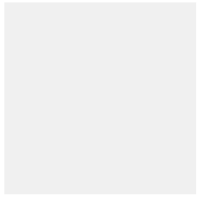
Feedback

The correct answer is: sales and marketing

Question 19

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Expertise of organizational members that has not been formally documented best describes

Select one:



a.
experience.



b.
tacit knowledge.



c.
wisdom.



d.
information.



e.
data.

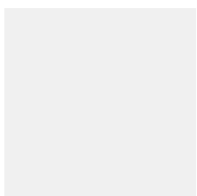
Feedback

The correct answer is: tacit knowledge.

Question **20**

Correct

Mark 1.00 out of 1.00



Flag question

Question text

Question 19

What is the greatest barrier to successful business process change?

Select one:

☐

a.

Selecting the correct process to change

☐

b.

Usability of implemented solution

☐

c.

Poor choice of technology

☐

d.

Ineffective project management

☒

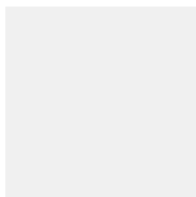
e.

Organizational change

Feedback

The correct answer is: Organizational change

Information



Flag question

Information text

Part B:

5 Short Answer Questions

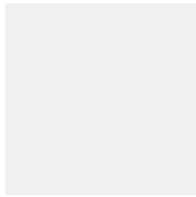
Attempt every question

4 Marks Each | Total 20 Marks.

Question 21

Complete

Marked out of 4.00



Flag question

Question text

SHORT ANSWER SECTION / 4 Marks for each question

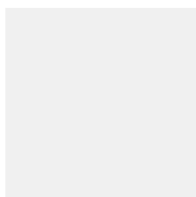
Identify the five moral dimensions that are involved in political, social, and ethical issues and briefly describe each. (2 Marks)

Of these, which do you think is the most difficult for society to deal with? Support your opinion with an example. (2 Marks)

Question 22

Complete

Marked out of 4.00



Flag question

Question text

SHORT ANSWER SECTION / 4 Marks for each question

You are starting a small bike messenger company. Given your type of services (hand-delivering packages within a small geographical area), could your firm be a digital firm?

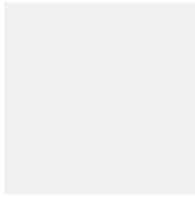
If so, what would make this a digital firm?

Explain your answer using examples. (4 Marks)

Question 23

Complete

Marked out of 4.00



Flag question

Question text

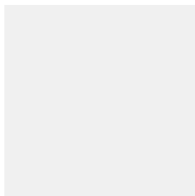
SHORT ANSWER SECTION / 4 Marks for each question

Briefly outline the Knowledge Management Value Chain (KMVC) as it might apply to the online catalog system of a public library. (4 Marks)

Question **24**

Complete

Marked out of 4.00



Flag question

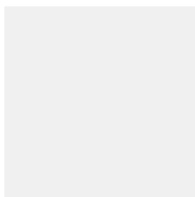
Question text

SHORT ANSWER SECTION / 4 Marks for each question

Question **25**

Complete

Marked out of 4.00



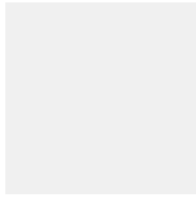
Flag question

Question text

SHORT ANSWER SECTION / 4 Marks for each question

- a. What are Knowledge Workers and why are knowledge workers so important to the digital firm? (1 Mark)
- b. What are their functions and which of these do you feel is most critical to the success of the firm? (2 Mark)
- c. What are two (2) examples of Knowledge Work Systems? (1 Mark)

Information



Flag question

Information text

Part C:

4 Extended Response Questions

Answer THREE (3) Questions from the FOUR (4) Questions provided .

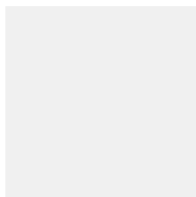
20 Marks Each | Total 60 Marks

NB. If you choose to answer all four questions, then your grade for this section will comprise the highest three marks.

Question **26**

Complete

Marked out of 20.00



Flag question

Question text

EXTENDED RESPONSE SECTION | 20 Marks for each question | ANSWER ONLY 3 QUESTIONS FROM THIS SECTION

Information Security

- a. Outline three (3) of the security challenges faced by wireless networks giving an example of each. (8 Marks)
- b. In the field of information security, what is the CIA Triad? Explain each of these principles and how they combine to affect the design of an information system using examples. You may use either information system or non-information system examples. (8 Marks)
- c. How is the security of a firm's information system and data affected by its people, organization, and technology? Is the contribution of one of these dimensions any more important than the other? Why? (6 Marks)

Feedback

- a. Wireless networks are vulnerable because radio frequency bands are easy to scan. Both Bluetooth and Wi-Fi networks are susceptible to hacking by eavesdroppers. Local area networks (LANs) using the 802.11 standard can be easily penetrated by outsiders armed with laptops, wireless cards, external antennae, and hacking software. Hackers use these tools to

detect unprotected networks, monitor network traffic, and, in some cases, gain access to the Internet or to corporate networks. Wi-Fi transmission technology was designed to make it easy for stations to find and hear one another.

The *service set identifiers (SSIDs)* identifying the access points in a Wi-Fi network are broadcast multiple times and can be picked up fairly easily by intruders' sniffer programs. Wireless networks in many locations do not have basic protections against war-driving, in which eavesdroppers drive by buildings or park outside and try to intercept wireless network traffic. A hacker can employ an 802.11 analysis tool to identify the SSID. An intruder that has associated with an access point by using the correct SSID is capable of accessing other resources on the network, using the Windows operating system to determine which other users are connected to the network, access their computer hard drives, and open or copy their files.

Intruders also use the information they have gleaned to set up rogue access points on a different radio channel in physical locations close to users to force a user's radio NIC to associate with the rogue access point. Once this association occurs, hackers using the rogue access point can capture the names and passwords of unsuspecting users.

- b. The CIA Triad is a simple but widely-applicable security model addressing the importance of Confidentiality, Integrity and Availability in the design of a secure system.

Confidentiality—The concept of keeping private information away from individuals who should not have access. Any time there is an unintentional release of information, confidentiality is lost. As an example, if a hacker can intercept an email between the CEO and the CIO and learn their latest plans, confidentiality has been broken and there is a lapse of security. Other attacks on confidentiality include sniffing, keystroke monitoring, and shoulder surfing.

Integrity—The concept of integrity means that data is consistent and that it hasn't been modified. This modification can result from access by an authorized or unauthorized individual or process. Integrity must also prevent modification of data while in storage or in transit. For example, if I could access my bank account and change the bank balance by adding a few zeroes then integrity would be lost.

Availability—The concept of availability covers that systems should provide reliable and timely access to the data and resources users are authorized to use. A good example of a loss of availability is a Denial of Service (DoS) attack: a perpetrator is not granted access, but their actions do prevent legitimate users from using the resource.

In a system, CIA should combine to protect leakage of the information (confidentiality), ensure it remains untampered with (integrity) and available for the legitimate use of authorised users (accessibility).

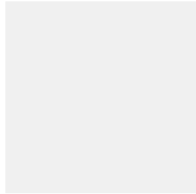
- c. There are various technological essentials to protecting an information system: firewalls, authentication, encryption, anti-virus protection etc. Without technology implemented correctly, there is no security. A firm's employees are its greatest threat, in terms of embezzlement and insider fraud, errors, and lax enforcement of security policies. Probably the most important dimension is organization, because this is what determines a firm's business processes and policies.

The firm's information policies can most enhance security by stressing intelligent design of security systems, appropriate use of security technology, and the usability of its security processes. Specifically, these systems need to govern the 'CIA Triad' or the Confidentiality, Integrity, and Authenticity of the information they contain.

Question 27

Complete

Marked out of 20.00



Flag question

Question text

EXTENDED RESPONSE SECTION | 20 Marks for each question | ANSWER ONLY 3 QUESTIONS FROM THIS SECTION

Information Security

a. How can a firm's security policies contribute and relate to the following six main business objectives? :

- Operational Excellence
- New Products, Services, Business Models
- Customer and Supplier Intimacy
- Improved Decision Making
- Competitive Advantage
- Survival (12 Marks)

b. Give an example of each. (6 Marks)

c. Select one of your examples and explain way it is the most important business objective for the firm to focus on. (2 Marks)

Feedback

1. Operational excellence:

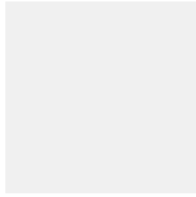
Security policies are essential to operational excellence. A firm's daily transactions can be severely disrupted by cybercrime such as hackers. A firm's efficiency relies on accurate data. In addition, information assets have tremendous value, and the repercussions can be devastating if they are lost, destroyed, or placed in the wrong hands.

Sony was forced to suspend its PlayStation Network (PSN) for approximately a month following a data breach in 2011.

2. New products, services, business models.
 Security policies protect a company's ideas for new products and services, which could be stolen by competitors. Additionally, enhanced security could be seen by a customer as a way to differentiate your product.
 Website **macrumors.com** is one of several website publishing leaked and speculative data regarding Apple's products. Often, the value is in the assembled information – as was seen in Mac Rumor's predictions about iPhone 8 cases leading up to the phone's official release in September 2017.
3. Customer and supplier intimacy:
 Customers rely on your security if they enter personal data into your information system, for example, credit card information into your e-commerce site. The information you receive from customers and suppliers directly affects how able you are to customize your product, service, or communication with them.
 In 2013, **Adobe.com** was breached leaking millions of Adobe.com (and Creative Catalyst) accounts, including username, email, encrypted password and password hint.
4. Improved decision making:
 Secure systems make data accuracy a priority, and good decision making relies on accurate and timely data. Lost and inaccurate data would lead to compromised decision making.
Evian Water built a Water Testing System that relied on automated quality monitoring by checking for 'error flags' produced by a number of sub-systems. When an inline water purity testing sub-system failed, it was not able to generate and pass up an error message, causing a False-Positive in the Water Testing System. Unchecked bottles were sold assuming they had been checked. Evian had to recall the affected product.
5. Competitive advantage:
 The knowledge that your firm has superior security than another would, on an otherwise level playing field, make your firm more attractive to do business with. Also, improved decision-making, new products and services, which are also affected by security (see above), will contribute to a firm's competitive advantage. Strong security and control also increase employee productivity and lower operational costs.
Google mail servers (collectively Gmail) are marketed as a safe and secure alternative for a core business service. Google relies on market perception their services are more secure than competitors when selling G Suite (formally Google Apps) as a white-labelled service to businesses.
6. Survival:
 New laws and regulations make keeping your security system up to date a matter of survival. Inadequate security and control may result in serious legal liability. Firms have been destroyed by errors in security policies.
DigiNotar was a Dutch (InfoSec) certificate authority until a data breach in 2011 cause the fraudulent issuing of certificates. Shortly afterwards the Dutch Government took control of the company and filed for its bankruptcy within a month.

Complete

Marked out of 20.00



Flag question

Question text

EXTENDED RESPONSE SECTION | 20 Marks for each question | ANSWER ONLY 3 QUESTIONS FROM THIS SECTION

Operationalising Databases

Database technologies can be used to assist a firm to achieve various commercial strategies.

- a. Describe two different database technologies that could be used by an office stationery supply company to achieve low-cost leadership. (10 Marks)
- b. Describe two different database technologies that could be used by a toy manufacturer to achieve product differentiation. (10 Marks)

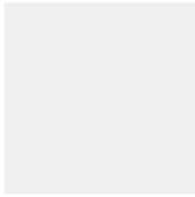
Feedback

- a. Sales databases could be used to make the supply chain more efficient and minimize warehousing and transportation costs. You can also use sales databases, as well as text mining and sentiment analysis, to determine what supplies are in demand by which customers and whether needs are different in different geographical areas. Business intelligence databases could be used to predict future trends in office supply needs, to help anticipate demand, and to determine the most efficient methods of transportation and delivery.
- b. Product databases could be made available to customers for greater convenience and ordering online. Databases could be used to track customer preferences and to help anticipate customer desires. Sales databases could also help clients such as toy stores anticipate when they would need to re-supply, providing an additional service. Data mining, Web mining, and sentiment analysis of big data could help anticipate trends in sales or other factors to help determine new services and products to sell to clients.

Question 29

Complete

Marked out of 20.00



Flag question

Question text

EXTENDED RESPONSE SECTION / 20 Marks for each question / ANSWER ONLY 3 QUESTIONS FROM THIS SECTION

Cloud Computing

- a. A small design agency you are consulting for will be creating client Web sites and wants to purchase a Web server so they can host the sites themselves. How will you advise them on this purchase? (4 Marks)
- b. Explain what IaaS, PaaS, or SaaS cloud computing models are and why each may be more beneficial for the design agency. Include a definition and two (2) advantages and one (1) disadvantage for each model. (12 Marks)
- c. Give an example of each of the four (4) computing models (on-premise, IaaS, PaaS, SaaS). (4 Marks)

Feedback

a. They need to understand total cost of ownership: the costs will go beyond the cost of the server, but they will also need to purchase the server software and any application software they will be using. They will also need someone in their IT department to manage and maintain the computers. They will also incur facilities costs for running the computer. They need to have a backup plan should the server fail. The design agency will need to add up all the potential costs and risks. Additionally, they need to prepare for their plan if they need more servers. Will they eventually have to run and maintain their own server farm? What if one of their clients' sites is more popular than anticipated and the server has difficulty handling the load? How quickly can they add servers or processing power? The company should look at colocation, Web hosting services, and ASPs to see if their needs will be better met this way.

b.

IaaS – Infrastructure as a Service is a cloud computing model where providers offer computing infrastructure – virtual machines and other resources – as a service to subscribers. Typically, hypervisors – such as VMWare or Hyper-V – manage the low-level system resources of each virtual machine or generic resource, enabling customers to scale their usage up or down and allocating costs accordingly.

Amazon Web Services (AWS) and Microsoft Azure are two examples of IaaS providers. Either provider allows users to 'rent' individual computing resources (eg. Storage, computing, networking, administrative utilities) – typically on a 'per hour' basis. The design agency would 'spin up' a computing instance (after configuring the specifications just like when purchasing a physical server) and attach different types of storage, networking and administration utilities to it. They would connect to their new 'instance' – just like connecting to their new physical server – and run operating systems and applications on it (just like a physical server).

Advantages include:

- Ability to flexible space – and match scaling costs with scaling revenue.
- Expand to include additional resources as capacity is exhausted.
- Easily differential hosting packages to clients (ie. charge more for faster servers, and less for slower servers)
- Virtualise their hardware provisioning, reducing disaster recovery and simplifying business continuity.
- Operating expense instead of Capital expense.

Disadvantages include:

- Outsourcing provision of a key resource to a third party.
- Pushing technology past where local tech resources may be comfortable maintaining.

PaaS – Platform as a Service is typically – but not always - used as a development environment for application developers. In the PaaS models, providers deliver a computing platform, typically including operating system, programming-language execution environment, database, and web server. The provider typically develops toolkits and standards for development and channels for distribution and payment.

cPanel is an example of a web host utility that web-hosters can deploy for clients. CPanel automatically segments each 'instance' for and provisions for direct access to each individual client to their website and associated assets (emails, files, etc...). It supports installation of third party apps including WordPress, Joomla, etc..

Advantages include:

- Proven and low-cost model that clients can access individually.
- Familiar environment for clients
- Scalable cost as demand (and revenue) grow.
- Operating expense instead of Capital expense.
- Don't need to worry about upgrading cPanel (or equivalent)

Disadvantages include:

- Reliance on 3rd party for provision for a core service.
- Lower margin available to Design Agency compared to a potential deployment of IaaS (as paying an extra supplier)

SaaS – Software as a Service is cloud computing model where providers give users access to application layers (typically software) and databases. Providers then manage the underlying infrastructure and platforms that run those applications. SaaS is sometimes referred to as "on-demand software" and like IaaS and PaaS – is usually priced on a pay-per-use basis or via a subscription fee.

Wordpress.com, Spotify and Squarespace are all examples of SaaS website design packages. Each have portals where web design agencies can attract new clients and manage existing clients' portfolios. Providers charge either the agency or the client directly for ongoing provision of services – which includes patching and ongoing infrastructural maintenance.

Advantage include:

- Highly abstracted product/service so the Design agency can focus on content creation and website design rather than infrastructural provision
- One-stop-shop for all problems – so all patches, infrastructural provisioning etc... is outsourced.
- Typically, a highly developed ecosystem of third party providers agencies can easily outsource portions of work to (either white-labelled or branded).

Disadvantages include:

- Increased vendor lock-in
- Reduced control over cost base