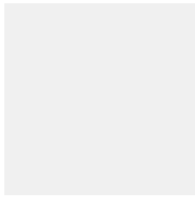


### Question 1

Not answered

Marked out of 1.00



Flag question

Question text

Which of the following systems digitizes, indexes, and tags documents according to a coherent framework?

Select one:

☐

a.

KMS

☐

b.

CAD

☐

c.

LMS

☐

d.

document management

☐

e.

wikis

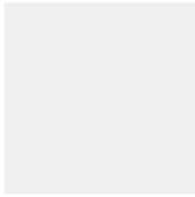
Feedback

The correct answer is: document management

### Question 2

Not answered

Marked out of 1.00



Flag question

Question text

Question 14

The effort required to locate a suitable product is called

Select one:



a.

Price discrimination.



b.

Shopping costs.



c.

Menu costs.



d.

Location costs.



e.

Search costs.

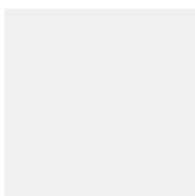
Feedback

The correct answer is: Search costs.

Question 3

Not answered

Marked out of 1.00



Flag question

Question text

Question 6

All of the following are considered disruptive technologies except

Select one:

☐

a.

Voice Over IP (VOIP).

☐

b.

3D Printers.

☐

c.

Personal Computers.

☐

d.

Smartphones.

☐

e.

Flat-screen Monitors.

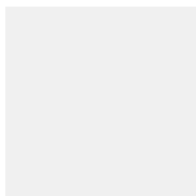
Feedback

The correct answer is: Flat-screen Monitors.

Question 4

Not answered

Marked out of 1.00



Flag question

Question text

Question 13

A salesperson clicks repeatedly on the online ads of a competitor's in order to drive the competitor's advertising costs up. This is an example of

Select one:

☐

a.

Evil twins.

☐

b.

Phishing.

☐

c.

Pharming.

☐

d.

Click fraud.

☐

e.

Spoofing.

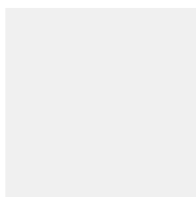
Feedback

The correct answer is: Click fraud.

Question 5

Not answered

Marked out of 1.00



Flag question

Question text

The interaction between information systems and organizations is influenced

Select one:

☐

a.

by the development of new information technologies.

☐

b.

primarily by the decision making of middle and senior managers.

☐

c.

by two main microeconomic forces: capital and labor.

☐

d.

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

☐

e.

by management decisions.

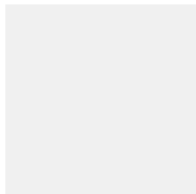
Feedback

The correct answer is: by many factors, including structure, politics, culture, and environment.

Question 6

Not answered

Marked out of 1.00



Flag question

Question text

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

Select one:

☐

a.

survival.

☐

b.

improved flexibility.

☐

c.

competitive advantage.

☐

d.

improved business practices.

☐

e.

operational excellence.

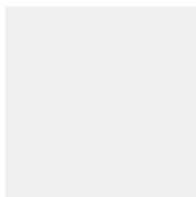
Feedback

The correct answer is: survival.

Question 7

Not answered

Marked out of 1.00



Flag question

Question text

Question 8

Which of the following is not a characteristic of packet switching?

Select one:

☐

a.

Packets are reassembled into the original message when they reach their destinations.

☐

b.

Packets travel independently of each other.

☐

c.

Packets include data for checking transmission errors.

☐

d.

Packets are routed through many different paths.

☐

e.

Packet switching requires point-to-point circuits.

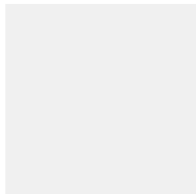
Feedback

The correct answer is: Packet switching requires point-to-point circuits.

Question 8

Not answered

Marked out of 1.00



Flag question

Question text

Compared to traditional goods, digital goods incur

Select one:

☐

a.

Similar inventory costs.

☐

b.

Less disintermediation.

☐

c.

Equivalent copying costs.

☐

d.

Lower distribution costs.

☐

e.

Higher marginal costs per unit.

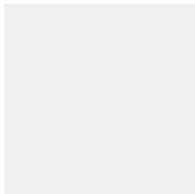
Feedback

The correct answer is: Lower distribution costs.

Question 9

Not answered

Marked out of 1.00



Flag question

Question text

The method of slicing digital messages into parcels, transmitting them along different communication paths, and reassembling them at their destinations is called

Select one:



a.

ATM.



b.

packet routing.



c.

packet switching.



d.

multiplexing.



e.

packet shifting.

Feedback

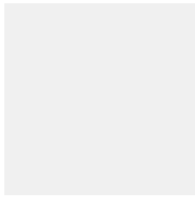
The correct answer is: packet switching.



**Question 10**

Not answered

Marked out of 1.00



Flag question

Question text

Which of the following is not one of the current key technology trends that raises ethical issues?

Select one:

☐

a.

increase in use of mobile devices

☐

b.

data analysis advancements

☐

c.

increase in multimedia quality

☐

d.

advances in networking technology

☐

e.

data storage improvements

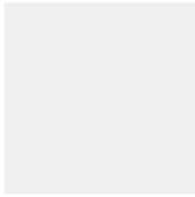
Feedback

The correct answer is: increase in multimedia quality

**Question 11**

Not answered

Marked out of 1.00



Flag question

Question text

The organization's rules for sharing, disseminating, acquiring, standardizing, classifying, and inventorying information is called a(n)

Select one:

☐

a.

data quality audit.

☐

b.

data definition file.

☐

c.

data policy.

☐

d.

data governance policy.

☐

e.

information policy.

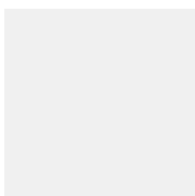
Feedback

The correct answer is: information policy.

Question **12**

Not answered

Marked out of 1.00



Flag question

Question text

A salesperson clicks repeatedly on the online ads of a competitor's in order to drive the competitor's advertising costs up. This is an example of

Select one:

☐

a.

Phishing.

☐

b.

Spoofing.

☐

c.

Evil twins.

☐

d.

Pharming.

☐

e.

Click fraud.

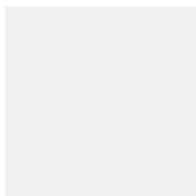
Feedback

The correct answer is: Click fraud.

Question **13**

Not answered

Marked out of 1.00



Flag question

Question text

Under Mintzberg's classification of organizational structure, the knowledge-based organization where goods and services depend on the expertise and knowledge of professionals falls under the category of

Select one:

☐

a.

machine bureaucracies.

☐

b.

professional bureaucracies.

☐

c.

adhocracies.

☐

d.

divisionalized bureaucracies.

☐

e.

entrepreneurial structures.

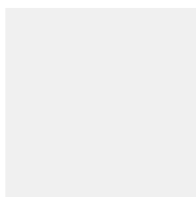
Feedback

The correct answer is: professional bureaucracies.

Question 14

Not answered

Marked out of 1.00



Flag question

Question text

Question 20

Which method is used to assign weights to various features of a system?

Select one:

☐

a.

real options model



b.

weighted scoring model



c.

portfolio analysis



d.

information systems plan



e.

Total Cost of Ownership (TCO)

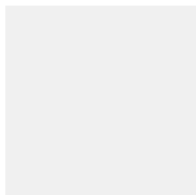
Feedback

The correct answer is: weighted scoring model

Question 15

Not answered

Marked out of 1.00



Flag question

Question text

A SAN is a \_\_\_\_\_ network.

Select one:



a.

service-oriented architecture



b.

scalable architecture

☐

c.

server area

☐

d.

storage area

☐

e.

software arrangement

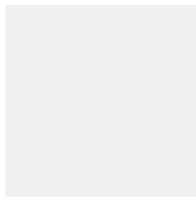
Feedback

The correct answer is: storage area

Question 16

Not answered

Marked out of 1.00



Flag question

Question text

Question 4

The \_\_\_\_\_ function is responsible for identifying customers.

Select one:

☐

a.

manufacturing and production

☐

b.

sales and marketing

☐

c.

finance and accounting

☐

d.

distribution and logistics

☐

e.

human resources

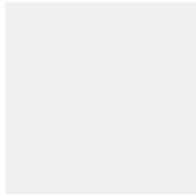
Feedback

The correct answer is: sales and marketing

Question 17

Not answered

Marked out of 1.00



Flag question

Question text

Question 16

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

Select one:

☐

a.

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

☐

b.

Knowledge experiences network effects as more people share it.

☐

c.

Knowledge is unconditional.

☐

d.

Knowledge should be seen as an intangible key asset.

☐

e.

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

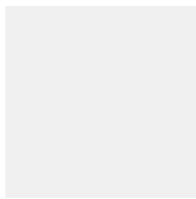
Feedback

The correct answer is: Knowledge is unconditional.

Question **18**

Not answered

Marked out of 1.00



Flag question

Question text

Question 18

If you can follow a definite procedure to make a business decision, you are making a(n) \_\_\_\_\_ decision.

Select one:

☐

a.

Structured

☐

b.

Semi-structured

☐

c.

Straightforward

☐

d.

Ad-hoc

☐

e.

Unstructured



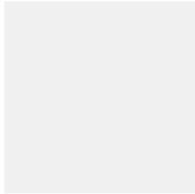
Feedback

The correct answer is: Structured

Question 19

Not answered

Marked out of 1.00



Flag question

Question text

A Trojan horse

Select one:



a.

Is a type of sniffer used to infiltrate corporate networks.



b.

Installs spyware on users' computers.



c.

Is malware named for a breed of fast-moving Near-Eastern horses.



d.

Is software that appears to be benign but does something other than expected.



e.

Is a virus that replicates quickly.

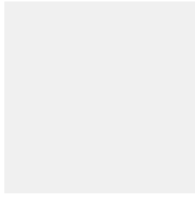
Feedback

The correct answer is: Is software that appears to be benign but does something other than expected.

Question 20

Not answered

Marked out of 1.00



Flag question

Question text

Which method is used to assign weights to various features of a system?

Select one:



a.

weighted scoring model



b.

real options model



c.

portfolio analysis



d.

Total Cost of Ownership (TCO)



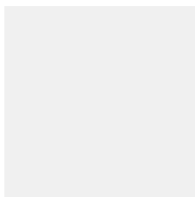
e.

information systems plan

Feedback

The correct answer is: weighted scoring model

Information



Flag question

Information text

**Part B:**

5 Short Answer Questions

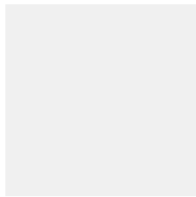
Attempt every question

4 Marks Each | Total 20 Marks.

**Question 21**

Not answered

Marked out of 4.00



Flag question

Question text

*SHORT ANSWER SECTION | 4 Marks for each question*

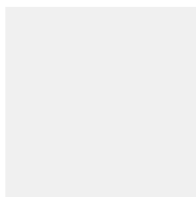
Identify the five moral dimensions that are involved in political, social, and ethical issues and briefly describe each. (2 Marks)

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

**Question 22**

Not answered

Marked out of 4.00



Flag question

Question text

*SHORT ANSWER SECTION | 4 Marks for each question*

Your aunt has asked you for your suggestions to make her business, a local sandwich shop, more efficient.

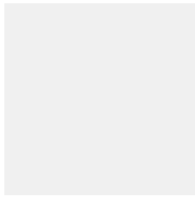
Describe three types of business processes a sandwich shop has. (3 Marks)

Describe how one of these business processes may be better coordinated through the use of information systems? (1 Mark)

**Question 23**

Not answered

Marked out of 4.00



Flag question

Question text

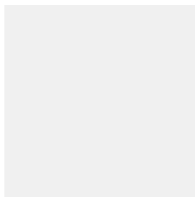
*SHORT ANSWER SECTION / 4 Marks for each question*

You have been hired by a national furniture leasing company to implement its first business intelligence systems and infrastructure. To prepare for your initial report, describe the types of data in their firm they can use to support business intelligence and the systems that you will implement to support both their power users and casual users, and explain how these systems or tools work together. (4 Marks)

**Question 24**

Not answered

Marked out of 4.00



Flag question

Question text

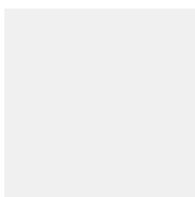
*SHORT ANSWER SECTION / 4 Marks for each question*

You have been hired by *Abacus Accounting Services*, whose current business processes are all manual, paper-based processes. How might a Customer Relationship Management (CRM) system benefit *Abacus Accounting Services*? (4 Marks)

**Question 25**

Not answered

Marked out of 4.00



Flag question

Question text

*SHORT ANSWER SECTION / 4 Marks for each question*

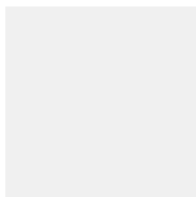
What is knowledge management?

Could a company like a taxi service benefit from knowledge management?

Which of the following knowledge systems would the taxi service use? Give an example.

- Enterprise-wide knowledge management systems,
- Knowledge work systems,
- Intelligent techniques? (4 Marks)

Information



Flag question

Information text

**Part C:**

4 Extended Response Questions

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

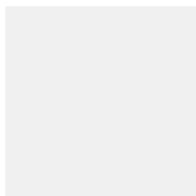
20 Marks Each | Total 60 Marks

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

Question **26**

Not answered

Marked out of 20.00



Flag question

Question text

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

**Business Strategy**

a. Define and describe a business ecosystem. (4 Marks)

Describe how Apple's App Store functions as a business ecosystem. (4 Marks)

- b. How is Internet technology useful from a network economics perspective? (2 Marks)  
Give two (2) detailed examples. (10 Marks)

Feedback

a. **Business Ecosystem**

A business ecosystem is a collection of loosely coupled but interdependent industries (suppliers, distributors, technology manufacturers, etc.) that provides related services and products. It is similar to a value web, except that cooperation takes place across many industries rather than many firms. Business ecosystems can be characterized as having one or a few keystone firms that dominate the ecosystem and create the platforms used by other niche firms. Keystone firms in the Microsoft ecosystem include Microsoft and technology producers such as Intel and IBM. Niche firms include thousands of software application firms, software developers, service firms, networking firms, and consulting firms that both support and rely on the Microsoft products.

Another example of a business ecosystem is the mobile Internet platform. In this ecosystem there are four industries: device makers (Apple iPhone, RIM BlackBerry, Motorola, LG, and others), wireless telecommunication firms (AT&T, Verizon, T-Mobile, Sprint, and others), independent software applications providers (generally small firms selling games, applications, and ring tones), and Internet service providers (who participate as providers of Internet service to the mobile platform).

b. **Network Economics**

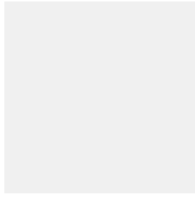
In network economics, the cost of adding a participant in the network is negligible, while the gain in value is relatively much larger. The Internet itself is an example of a successful implementation of network economics—the more people participate, the more valuable and essential a commodity it is.

When Microsoft provides a service through the Internet such as a project management application (Microsoft Project), the costs to the company of adding another user are small (as the software infrastructure or application is already built), and the more users are signed up, the more profit is made. In this case Microsoft aims to develop and deploy a core product offering Microsoft Project Standard and package this with other software, driving adoption and lowering distribution costs. As usage increases and the package matures, Microsoft continues to receive income for a software package that has already been developed and – largely – paid for. Microsoft can then allocate this revenue to other software projects or into developing MS Project into new MS Project Professional, etc...

Another example is eBay, the giant online auction website. The value of eBay lies in the number of active members; the more people who offer products on eBay, the more valuable eBay.com – and its subsidiaries – become to all existing users, the more compelling it is as a platform for potential users, and the lower the unit-cost of providing the service becomes. Moreover, as usage increases, the increase in value to existing users becomes a form of 'lock in' where business strategies built around the supply of goods through eBay – at cost bases made possible by the large volume of sales – would not work at other sites.

Not answered

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.

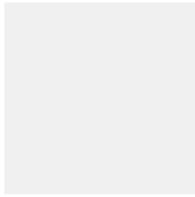
**DigiNotar** was a Dutch (InfoSec) certificate authority until a data breach in 2011 caused the fraudulent issuing of certificates. Shortly afterwards the Dutch Government took control of the company and filed for its bankruptcy within a month.

Question 28

Not answered

Marked out of 20.00





Flag question

Question text

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

### **Business Intelligence**

- a. Explain why even well-designed information systems do not always help improve a firm's decision making. (9 Marks)
- b. You are evaluating Business Intelligence (BI) software from a number of vendors. Using the following six elements in the BI environment, and your understanding of the importance of these elements to formulate six questions to ask the vendors in order to determine how their software will interplay with your needs.
- Data from the business environment
  - Business Intelligence Infrastructure
  - Business Analytics Toolset
  - Managerial and User Methods
  - Delivery Platform(s)
  - User Interface (6 Marks)
- c. You are an analyst for a firm that imports and distributes specialty oils and vinegars and your company wants you to evaluate their options for taking advantage of cutting edge business analytics. Which two strategies could you adopt? Which would you recommend? (5 Marks)

Feedback

- a. The three main reasons for information systems not always producing positive results:
1. information quality,
  2. management filters, and
  3. organizational inertia/politics.

A sample answer is:

There are three main reasons that implementing a well-designed information system might not result in better decisions. First, the information produced by a system may be incomplete and inaccurate. The quality of information will depend on the quality of data gathered, and may require a minimum amount of data to be gathered. Inaccurate data and incomplete data can degrade the quality of decision making. Second, management filters can also stymie good decision making—a manager who has a bias against some types of activities or solutions, or is overly optimistic or pessimistic will make decisions that are skewed towards their own perspective rather than actual

facts. Finally, organizational inertia and politics can hamper decision making. Information systems can require organizational change in roles and business processes that employees want to resist; or a system can produce information that suggests that a change is necessary but employees ignore in order to maintain the status quo in roles and responsibilities.

b. Six questions aligning to each of the elements are:

1. Data from the business environment. A question for a salesperson is: "How does your software integrate with our data?"
2. Business intelligence infrastructure. "What type of database system does your software use?"
3. Business analytics toolset. "What tools are included?"
4. Managerial users and methods. "Our management team uses these metrics. Does your software provide that?"
5. Delivery platform: "How does your software integrate with our platforms?"
6. User interface: "What are the elements of your user interface and what delivery methods are used—mobile, social media, web portal, etc."

c. There are two strategies for adopting BI and BA capabilities:

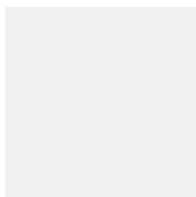
1. an integrated solution or
2. using multiple best-of-breed vendor software solutions.

The hardware firms want to sell you integrated hardware/software solutions that run on their hardware (the totally integrated solution). Software firms will want to sell you "best of breed" software that runs on any machine they want. In this strategy, you adopt the best database and data warehouse solution, and select the best business intelligence and analytics package from whatever vendor you believe is best. Student recommendations will vary: The first solution carries the risk that a single vendor provides your firm's total hardware and software solution, making your firm dependent on its pricing power, but it offers the advantage of dealing with a single vendor who can deliver on a global scale. The second solution offers greater flexibility and independence, but with the risk of potential difficulties integrating the software to the hardware platform, as well as to other software.

Question 29

Not answered

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 3<sup>rd</sup> 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