Uses Of Networking Essay, Research Paper

Contents

Contents 1

The uses of Networking and communications in today s business environment 2

LAN 2

Advantages and disadvantages of networks 3

Sharing 3

Communication 3

Allows 3

Allows 3

Resource Sharing 4

Automated Stock Control 4

E-Mail 4

Video Conferencing 5

The Internet in Business 6

E-commerce 6

Globalization and The New Economic order 7

Use of links in Marketing & Portal web sites 7

Security 8

Hardware Security 9

Software Security 9

Protecting confidential information 10

Hackers 11

Viruses 11

Data protection ACT 12

Possible future legislation The Cyber Police 12

Summary 13

Example of PowerPoint drawing 13

Bibliography 15

The uses of Networking and communications in today s business environment

LAN

Local Area Network diagram

Fig 1

LANs are used to connect a number of computers together so they can share software and hardware, they are also able to send and receive data through the network.

-Resource Sharing -Advantages & Disadvantages of networks

Advantages and disadvantages of networks

Some advantages of networks

Sharing Communication

Data E-Mail

Programs Bulletin boards

Storage Tele-computer-conferencing

Printer Information

Scanner Fax

Electronic diaries

Allows Allows

Fast information exchange Electronic funds transfer

Real time database s Electronic data interchange

Distributed databases Electronic point of sale

Electronic links Business links

Some dis-advantages of networks

Insecurity Data corruption

Hacking Garbled transmission

Data theft Lost transmission

Commercial espionage

Cost Frustration

Can be expensive to install Leads to time wasting

Need to train staff to operate Anti social

-Resource sharing -Automated stock control -E-mail

Resource Sharing

Resource sharing is the most efficient way to use peripherals, one printer is able to serve a number of users, and it allows the sharing of hardware and software.

Automated Stock Control

The purpose of stock control is to ensure stock is ready and available at all times and to make sure there is not too much working capital tied up in stock. This can be achieved through an automated stock control system.

E-Mail

E-mail is used to send text, audio and video directly from one computer to another, if the recipient is not at their computer it is stored until read by user.

- Video conferencing

Video Conferencing

Videoconferencing is a way to connect people regardless of geographical boundaries, meeting can be between long distances saving money on travel expenses.

-The Internet in business -E-commerce

The Internet in Business

E-commerce

E-commerce represents nothing less than a new economic order, large High street retail outlets are now marketing there goods over the internet, there is nothing that cannot be bought in the High street that cannot be bought over the internet from the comfort of your own home by the click of a button. Internet sales also means cost savings, a companies overheads are dramatically reduced selling over the internet, recently we have seen banks shutting 1000 s of branches and Tesco delivering shopping to your door. Car companies are looking into cars specifically designed to your choices, you could choose which functions/extras wanted, color, size, shape and then at the click of a button order to be delivered. It is believed this will be the next revolution in Internet sales.

-Globalization and the new economy -Links in marketing

Globalization and The New Economic order

Every business in the world large or small now has access to a global market, the potential for this is unlimited, along with this comes greater competition and price wars, it is because of this companies are starting to create world beating merges, more companies are thinking on a global level. Security in the new economy is an issue companies are taking very seriously.

Use of links in Marketing & Portal web sites

A network television company s earns money from advertising, the more popular their programs are the more money they get from advertising. The internet works much the same, if a company advertisers on your website you will get paid for every person who visits that link, thus the web site wants to be your portal to the internet. There are even some company s that will pay you to browse the Internet looking at adverts; the Internet is a new marketing toy for business. As well as links company s use banners, these automatically open up a small screen or video advertising a product, there is new software which offers banner free surfing, however there is some debate as to whether or not these should be allowed, it is because the internet is used for advertising it is free.

e.g. of types of links used

-Security

Security

Security is now an issue many world leaders take very seriously, stock exchanges, production lines and the Internet can be tampered with causing billions of pounds worth of damage. There are some simple steps that can be taken to ensure private information can be kept secure. Important records should be backed up everyday, checksum is a good way to compare current files with backup to determine whether any information has changed. Any software security faults should be immediately fixed. Hardware security- all hardware should be in a secure room. Governments around the world have made new laws to combat security, in the U.K the Data Protection Act states customers have the right to privacy and to see any information on file about them.

Hardware security Software security

Hardware Security

1. Lock up offices

2. Hard disks should be secure against access, tampering or removal.

Secure software- computers containing confidential information should have extra

Protection: -

a) Boot lock to stop computer from booting up

b) Power supply can be locked, to stop computer being powered up

c) Lock to prevent access to interior of computer

d) Floppy disks containing confidential information should be locked away

4. Store critical information in fireproof vaults

Software Security

1) Use software security which include passwords so only authorized users have access

2) Password criteria: -

a) Use a password at least eight characters long

b) Try not to use words used in the dictionary, and include at least one numeric character

c) Do not use passwords easily guessed by friend s family e.g. mother s maiden name, birthday, pets etc

d) Never write passwords down, unless disguised in telephone number or encrypted

e) Change passwords regularly

f) Never send a password in E-Mail

3) Use password controls included in database management packages

4) Regularly review overall access control

5) Keep records up to date, employees who have left etc

- Protecting confidential information

Protecting confidential information

1) Encrypting programs can be used to disguise information so it is useless without proper passwords.

2) Secure printers used to print sensitive information

3) Overwrite deleted information, when data is deleted the information is still on hard disk until new data is written over it, always overwrite files after deleting

Hackers Viruses

Hackers

The computer misuse act is aimed specifically at hackers; it covers unauthorized access to data and systems, hacking via remote systems. It has little effect as there are not many prosecutions and the penalties are small.

Viruses

Viruses are a major threat to security of modern computers, a Trojan horse is used to insert damaging instructions into the computer program, this causes the virus/worm to spread and infect any computer it comes into contact with. Viruses can destroy data, software and even hardware as well as using up memory and processor power. Viruses can be particularly troublesome in networked and shared resource environments as the virus can spread quicker. There are a few simple steps, which can be taken to protect against viruses: -

1) Check all software before installing

2) Use software to detect and remove viruses

3) Immediately isolate any computers on network with viruses

4) Secure master disks

5) Check all disks brought in by employees

Data protection act Future legislation

Data protection ACT

The Data protection Act states that you have the right to view any data held on you, you also have a right to correct any errors on your file. However not just anybody can ring up a company and access your personal information, by law companies have to keep your file secure. The data protection act does not stop companies selling information on about you to other companies or prevent data being held on file/paper.

Possible future legislation The Cyber Police

In Dubai recently the Gulf states held a seminar on cyber crime Prof. Mohammed Murad Abdullah (Director of Dubai police research) said there were new trends in cyber crime the cyber crimes discussed will include the unauthorized copying of programs, deliberate distortion of information systems, illegal withdrawals from ATM with forged cards and blackmailing others with information stored on computer .

The seminar was headed by Maj. Gen. Dhahi Khalfan Tamim (Chief of police) said Police officers who go to the seminar will learn more about these kinds of crimes, although cyber crime is not common in Dubai, a single incident may affect an entire industry and cause great financial damage .

Now we go to Japan were there cyber police have taken to the beat for the first time, IT crime is growing fast in this area as there are not any laws to stop people looking at information, the law is only broken when information is destroyed or sold, this effectively gives hackers the right to break into networks, Japans officials concede that the problem has to be addressed, but this could be the future were police control the internet, there are already volunteer who patrol and have powers to kick people off but they offer little protection against hackers.

Summary

The Internet and the use of networking are changing the face of business and marketing. The uses of communications in business include e-mail, automated stock control, video conferencing and e-commerce. Networking is also a very important part of business communications and allows the use of resource sharing. Many people see the internet as unsecured and are told never to use a credit card online, the truth is that buying over the internet is safer than buying in shops, if you pay for goods in a shop with a credit card the cashier could easily make a note of your number, more has been done on the internet to improve security and improve public confidence. Protecting confidential information on computers involves taking a few simple steps, such as, locking disks away, keeping computer hardware in secure room, careful selection of passwords and regular password changes. Hackers are a big threat to business; the data protection states no unauthorized people should have access to your personal information on file. One possible way to increase security in the future would be to have cyber police patrol the Internet.

Example of PowerPoint drawing

Bibliography

H.L. Capron, 1996, Tools for an information age, Sixth edition, Benjamins/Cummings publishing co., California U.S.A.

G.Knott, N.Waites, P.Callaghan, J.Ellison, 1993, Computer Studies For BTEC, Business Education Publishers, Tyne & Wear U.K.

T.Corbitt, 1994, Information Technology & Its Applications, Longman Group, Harlow Essex U.K.

Harley Hahn & Rick Stout, 1994, The Internet Complete Reference, Osborne McGraw-Hill, California U.S.A.

Internet references

www.//ciac.illnl.gov

www.info-sec.com/internet/99/internet\_10299b\_j-s

www.college.harvard.edu

www.harvard.edu

www.pace.edu

Picture References

H.L. Capron, 1996, Tools for an information age, Sixth edition, Benjamin s/Cummings publishing co., California U.S.A

www.creative.com

www.NTLworld.com

www.ministry.com