Q2 (a)   **Discuss in brief the advantages and disadvantages of e-commerce.**

Answer

Answer: **ADVANTAGES AND DISADVANTAGES OF ECOMMERCE**

The invention of faster internet connectivity and powerful online tools has resulted in a new commerce arena – Ecommerce. Ecommerce offered many advantages to companies and customers but it also caused many problems.

ADVANTAGES OF ECOMMERCE

- Faster buying/selling procedure, as well as easy to find products.
- Buying/selling 24/7.
- More reach to customers, there is no theoretical geographic limitations.
- Low operational costs and better quality of services.
- No need of physical company set-ups.
- Easy to start and manage a business.
- Customers can easily select products from different providers without moving around physically.

DISADVANTAGES OF ECOMMERCE

- Any one, good or bad, can easily start a business. And there are many bad sites which eat up customers' money.
- There is no guarantee of product quality.
- Mechanical failures can cause unpredictable effects on the total processes.
- As there is minimum chance of direct customer to company interactions, customer loyalty is always on a check.
- There are many hackers who look for opportunities, and thus an ecommerce site, service, payment gateways, all are always prone to attack.

Q2 (b)   **Discuss e-business model based on the relationship of transaction parties?**

Answer

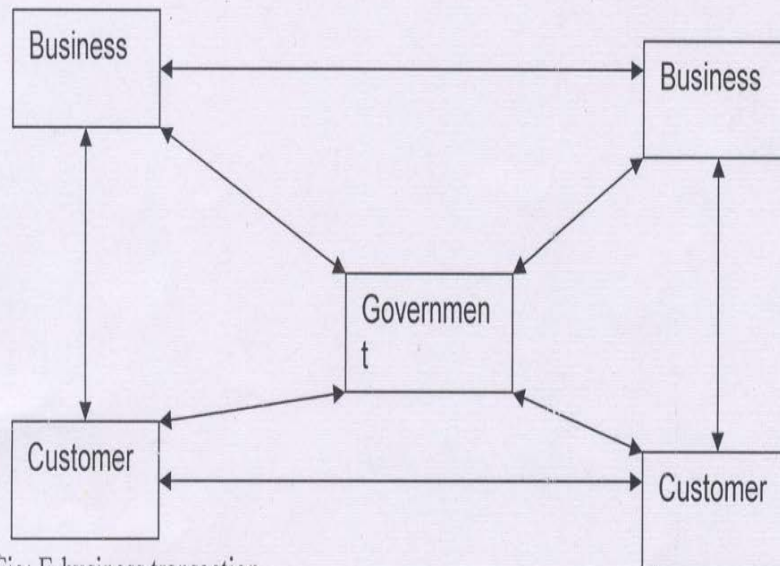**Answer:** E- business Model based on the relationship of transaction parties

Fig: E-business transaction

- B2C : Sells products or services directly to customers, eg amazon.com
- B2B : Sells products or services to other business, or brings multiple buyers and sellers together in a central market place, eg. Chemdex.com
- B2G: Business selling to local, state and federal agencies, eg. iGov.com
- C2C : Consumers sell directly to other consumers, eg ebay.com
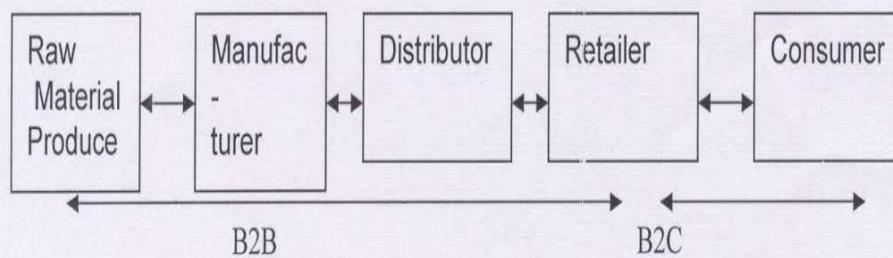- C2B : Consumers fix price on their own, which business accept or decline. Eg Priceline.com

Fig: Relation between B2B and B2C

Q3 (a)   Describe the role of broadband technology in e-commerce.

Answer

> **Answer**: Following are benefits using E-commerce –
>
> 1. The delay associated with making documents is eliminated.
> 2. Since data is not repeatedly keyed, the chances of error are reduced.
> 3. time required to re-enter data is saved.
> 4. As data is not entered at each step in the process, labour cost can be reduced.
> 5. Because time delays are reduced, there is more certainly in information flow.
>
> As we move to multimedia-based e-commerce application, traditional packet switching techniques may be adequate to meet the new transmission and switching needs. So, e-commerce application tend to differ greatly in the areas of traffic volume and required bandwidth, nature of the information, degree of business, need for error controls and real-times sensitivity for transmittal as in the case for voice. Thus, above all solution provide by broadband technology. these are like offering better methods for high speed data transport. Providing support for pricing priority and multi casting services or the ability to handle the group broadcastes to permit delivery of the same data to multiple recipients. reducing the number of transport networks for various services i.e. voice data, video and image by providing better integration services.It is clear that the emerging broadband networks for electric commerce services will be based on fast packet switching which combines the best of LAN's and WAN's to transmit voice and data

Q3 (b) What is an Internet Service Provider? Describe any two ISP players in India.

Answer

> **Answer:** An Internet Service Provider (also known as an ISP or even as an IAP, internet access provider) is a firm that offers subscribers access to the internet. This internet service provider maintains large runs of cabling and maintains network services in order to transfer and deliver web content to those paying the subscription fee. Typically, these internet service providers focus on DSL, Cable modem, wireless, and more recently, dedicated high-speed interconnects such as T1 or fiber optic service (typically abbreviated Fios). While far less common, ISPs still offer dial up internet service, which is gradually become a phased out. All in all, there are many different types of Internet Service Providers, and within each and every internet service provider there are often varying levels of service, coverage, as well as personal customer service that comes attached with it. An Internet Service Provider is a complete package of services, which should be researched and considered before an Internet Service Provider is selected.
>
> For most users, the most important qualification (beyond the ever present price point) is the speed of the connection. Depending on the intended use, there are a myriad of different internet services, and even varying levels of coverage within each and every service. The slowest of these is dial-up internet service. Modern dial-up transfers web content at a

maximum rate of 56.6 kilobits per second. In the early days of internet service, this was typically sufficient, as websites were designed with a lean mentality, with very little imagery and a heavy emphasis on text, and text based linking. As time has progressed however, most websites assume that the user is on a high speed connection, and have therefore loaded their website with visual flair and high file size images. What was once acceptable no longer is for most web users, who opt to selecting a faster service.

Mid-Range services available for home include Cable Internet or Digital Subscriber Line (DSL) service. While DSL is available as slow as 128 Kilobits per second (just slightly more than twice the speed of dial-up service) most of these providers have since upgraded their capacity and provide service as fast as 3000 Kilobits per second. For most people, this is sufficient however there are currently faster services available to those who either desire them, or require them to operate their business.

For those simply not interested in paying for internet access, there are a very small number of Free ISPs available. These providers provide internet service free of charge, typically funded through advertising revenue (much like television broadcasts on most stations). Unfortunately, this variety of ISP is gradually falling by the wayside. Netzero, one the earliest example of this service no longer provides an ad supported internet service, and instead focuses on low priced services such as dial up.

All in all, an Internet Service Provider has the very complicated job of setting up and maintaining a network to connect its users to the internet. The inner workings of an ISP vary significantly from company to company, and much of their inner workings are company secret. It's difficult to understand just how internet service providers operate, however from the buyer's perspective the process of using an ISP are incredibly simple. Once a level of connectivity is decided upon, it's simply up to the buyer to research their alternatives, and determine the best solution for their budget and needs.

Q3 (c)   What is XML?   Explain where it is used and how it is different from HTML.

Answer Page number 154-157 of Text Book

Q4 (a)   Explain the difference between e-commerce and traditional commerce.

Answer

Answer: 1. Direct interaction is present in traditional commerce.

2. E-commerce proves to be feasible for the standard products,low-value products , intangible products and digital products.

3. In traditional commerce customer can verify the identity of the seller and their physical location, whereas in e-commerce customers feel insecure because they cannot identify the seller and are unaware about many things

4. Traditional commerce is the best when it comes to convincing the customers on certain products.

5. E-commerce uses e-cash, credit cards , debit cards and etc,.

6. E-commerce is developing a highway system called the information super highway as we have the interstate highway system for traditional e-commerce.

Q4 (b) What is e-branding? Describe few parameters to be considered for online business when determining e-branding.

Answer

Answer: e-Branding is an essential part of any online business strategy and should be considered just as carefully as your off-line branding activities. With the massive growth in online business transactions and larger opportunities online, it is even more important that your online business be designed to promote business and not hinder it.

Consistency is essential, and when you are considering e-Branding ensuring your image can extend across several mediums to maximize its exposure and compliment them all, An true integrated marketing approach.

Your online business website may prove that you're knowledgeable on the latest technology but on the reverse side, it can damage your business image if your site does not provide a good user experience and is difficult to load or navigate around.

Few things to consider for your online business when determining your e-Branding are

- How quickly your customers can load your website,
- How easy it is to navigate around and understand your website,
- How easily they can purchase or contact you,
- How effective are your e-letters,
- where else they found your website links, etc.

Q4 (c) Explain Brand-Leveraging marketing strategies.

Answer Page Number 210 of Text Book

Q5 (a) Explain about digital based electronic payment systems.

Answer

Answer: The digital token based payment system is a new form of electronic payment system which is based on electronic tokens rather than e-cheque or e-cash. The electronic tokens are generated by the bank or some financial institutions. Hence we can say that the electronic tokens are equivalent to the cash which are to be made by the bank.

Categories of Electronic Tokens:-
I. Cash or Real Time:-In this mode of electronic tokens transactions takes place via the exchange of electronic currency (e-cash).
2. Debit or Prepaid:- In this electronic payment system the prepaid facilities are provided. It means that for transactions of information user pay in advance. This technology are used in smart card, electronic purses etc.
3. Credit or Postpaid;- These types of electronic token based on the identity of customers which issue a card, their authentication and verification by a third party. In this system the server authenticate the customers and then verify their identity through the bank. After all these processing the transaction take place. Example is E-Cheques.

The Digital Token based system have following issues for which they are established:-

1. Nature of transaction for which instrument is designed:-
In this category, the design issues of token take place. It may be designed to handle micro payments. It may be designed for conventional products. Some tokens are designed specifically and other generally. The design issue involve involvement of parties, purchase interaction and average amount.

2. Means of Settlement:- The Digital Tokens are used when their format must be in cash, credit, electronic bill payments etc. Most transaction settlement methods use credit cards while other used proxies for values.

3. Approach to Security, Anonymity and Authentication:- Since the electronic token are vary from system to system when the business transaction take place. So it is necessary to secure it by intruders and hackers. For this purpose various security features are provided with electronic tokens such as the method of encryption. The encryption method use the digital signatures of the customers for verification and authentication.

4. Risk Factors:-The electronic tokens may be worthless and if the customer have currency on token than nobody will accept it, If the transaction has long time between delivery of products and payments to merchants then merchant exposes to the risk. so it is important to analysis risk factor in electronic payment system.

Q5 (b)   Discuss the properties of e-cash.

Answer

Answer:

1. Financial Infrastructure: There is a big di?erence between bits and atoms. People have used atoms, gold, bills, etc. as money. Behind the bits in E-cash, there must be financial infrastructure that the money represented by the instructions in the bits from one account to another. A transaction is an instruction to move money from a consumer's account to a merchant's account.

2. No Double-Spending and Non-forgeability: Bits can be easily duplicated but atoms cannot. So copies of cash should not be spendable. Nor should one be able to forge or create e-cash and spend it.

3. Security: Account information should be kept secure. Transfers should be kept secure.

4. Immediate Verifiability that Payment is OK Online vs. O?ine systems: Every time you receive a payment, you could instantly relay it to the bank to verify it. Or there could be an intrinsic property that lets you know the money is good if a bank is not readily available.

5. Persistence: Atoms stick around better than bits do. If your computer crashes, you should not be bankrupted. A backup of your wallet to record your wealth should not be spendable.

6.   Exclusive   Ownership

7. Anonymity: There are di?erent types of anonymity, payer, payee, and even bank anonymity. The merchant may accept money without knowing who the payer is. Also you should be able to deposit money without the bank knowing where the transaction comes from. There are issues of money laundering. People can transfer money without the bank knowing.

8. Transferability: A can pass money to B and then to C easily and anonymously.

9. Amounts: It would be nice to support a variety of "coin sizes".

10. Traceable to issuer: We should know who backs each bit of money. E.g., We can tell by inspection that U.S. money is issued by the U.S. treasury.

Q5 (c)   Discuss the advantages and disadvantages of digital signature.

Answer

Answer: Advantages of Digital Signatures

The following are the main benefits of using digital signatures:

Speed: Businesses no longer have to wait for paper documents to be sent by courier. Contracts are easily written, completed, and signed by all concerned parties in a little amount of time no matter how far the parties are geographically.

Costs: Using postal or courier services for paper documents is much more expensive compared to using digital signatures on electronic documents.

Security: The use of digital signatures and electronic documents reduces risks of documents being intercepted, read, destroyed, or altered while in transit.

Authenticity: An electronic document signed with a digital signature can stand up in court just as well as any other signed paper document.

Tracking: A digitally signed document can easily be tracked and located in a short amount of time.

Disadvantages of Digital Signatures

Just like all other electronic products, digital signatures have some disadvantages that go with them. These include:

Expiry: Digital signatures, like all technological products, are highly dependent on the technology it is based on. In this era of fast technological advancements, many of these tech products have a short shelf life.

Certificates: In order to effectively use digital signatures, both senders and recipients may have to buy digital certificates at a cost from trusted certification authorities.

Software: To work with digital certificates, senders and recipients have to buy verification software at a cost.

Law: In some states and countries, laws regarding cyber and technology-based issues are weak or even non-existent. Trading in such jurisdictions becomes very risky for those who use digitally signed electronic documents.

Q6 (a)   What is CRM? How CRM is used in today's scenario?

Answer

Answer: CRM is the abbreviation for *customer relationship management*. It entails all aspects of interaction that a company has with its customer, whether it is sales or service-related. CRM is often thought of as a business strategy that enables businesses to:

- Understand the customer
- Retain customers through better customer experience
- Attract new customer
- Win new clients and contracts
- Increase profitably
- Decrease customer management costs

How CRM is Used Today

While the phrase *customer relationship management* is most commonly used to describe a business-customer relationship, CRM systems are used in the same way to manage business contacts, clients, contract wins and sales leads.

Customer relationship management solutions provide you with the customer business data to help you provide services or products that your customers want, provide better customer service, cross-sell and up sell more effectively, close deals, retain current customers and understand who the customer is.

Q6 (b) What is e-supply chain management? Discuss the features of supply chain management.

Answer

Answer: When the co-ordination for managing the supply chain takes place by using Internet technologies it is known as e-supply chain management.Inter-enterprise integration is a major focus of e-supply chain management.

- Supply chain management is identified by the following features:
- 1. Material flow.
- 2. Financial flow.
- 3. Information flow.

1. Material flow. It is in the direction from supplier to customer through the chain. It involves procurement of the materials, transformation of these materials into finished products and distribution of these finished products to the customers.

2. Financial flow. It involves payment options, credit card information, credit terms, payment schedule etc. It is in the direction from customer to supplier as payment for products or services originates from customer and end at supplier.

3.   Information flow. In today's e- supply chain management flow of information is considered to be as significant as the flow of material and finance. It involves product information, demand forecasts, order status report, delivery report, customers' communication, etc. Information is always two-way, particularly in e-business.

Q7 (a)   Discuss the seven dimensions of e-commerce strategies in detail.

Answer

Answer: Seven revenue-growth strategies to consider.

1. Acquiring new customers.
2. Targeting new markets.
3. Sell more to existing customers.
4. Increase your average order size.
5. Expand your product lines.
6. Increase prices.
7. Cross-channel marketing.

Some of these strategies are quick and inexpensive to implement — remarketing to your existing customer base, for example. Others are more expensive and time consuming. When evaluating strategies, remember the big picture. Though more expensive and time consuming, investing in a new store serving a new market may double your business, versus the incremental bump you may receive from another idea.

Acquiring New Customers
Every ecommerce business presumably seeks new customers. But, are you really focused in that effort? Here are some ideas.

- *Referral sales.* Set up a referral program to leverage your existing customers. Give them an incentive to refer your to their friends through social media, email or other venues.
- *Increase advertising.* Pay-per-click ads, remarketing ads, content ads, print ads targeting new customers, keywords, or products.
- *Social media buzz* Run a sweepstakes or contest in Facebook to get new email subscribers, blog a lot, Tweet about your specials and new products, expand your followers and fans.
- *New positioning.* Create a new marketing campaign with a fresh look and feel that will appeal to a different market segment, refresh your website with a more modern look, get some media exposure and create buzz about something you do differently than your competition.

If you want to increase your sales by 20 percent, you need to acquire 20 percent more customers. It's possible that your new customers will not buy quite as much initially as your current ones, so factor that into your plans.

Targeting New Markets
By "new markets," I'm referring to entirely new consumers that don't know your store exists.

In some cases new markets may be reached through a new store. In other cases, such as targeting an overseas market, it may require translating your website into the local language.

- *Overseas markets.* Consider localizing your website for various languages and target those countries through ads, social media and other marketing efforts. In the case of English-speaking countries, it may be as simple as creating new landing pages to reassure customers that you are committed to serving their country and understand shipping, customs processes, and local habits.
- *Niche market.* You can expand your offerings in a niche market and open a new store to just service it. We did that in my previous ecommerce business by opening a store that focused on jewelry, instead of beads and pendants.
- *Broader market.* If you have a niche store, consider expanding your offerings to a broader market.
- *Wholesale or retail?* There are many stores that start out either wholesale or retail and find that by simply modifying their pricing strategies they are able to serve the other market. Be clear about the differences — there are many. But it is a viable alternative for many ecommerce businesses.
- *Mobile.* More and more people shop on their smartphones. You will lose sales if you do not serve this market.
- *Sell in a new channel.* Expand your product offerings to marketplaces like Amazon, Buy.com, Overstock.com, Sears.com, or eBay. In many cases, these are different consumers than your existing ones. When we added an Amazon store in 2010, for example, we found a great new market for products we had previously sold mostly wholesale. It turned out to be a high-volume and high-margin marketplace for some very obscure gemstone pendants that were not selling well in our original target market.

The advantage to targeting new markets as a strategy is the impact can be huge versus incremental. The disadvantages are that the investment can be substantial and the risk higher.

Sell More to Existing Customers

I like this strategy for most businesses. Merchants sometimes get lost in trying to get new customers and forget about the thousands of customers who buy from them already. There are many ways to get more revenue from your existing customers. Most of them require little investment.

- *More remarketing.* Email newsletters are a tremendous way to do remarketing. You can email promotions for abandoned shopping carts, send transactional email promotions with all orders and shipping confirmations. You can target promotions to the most likely buyers for the products you sell.
- *Aggressive promotions.* Target your email subscribers, Facebook fans, and Twitter followers with aggressive promotions on a limited number of items. Offer them deals only on the products you know they like and try to up-sell and cross sell other products with higher margins. People like a deal. We found that customers will also spend money on other impulse buys at the same time.
- *Loyalty programs.* This is a no brainer to me. Offer your most loyal customers an enticement. It can be as simple as free or same day shipping. In our case, we offered customers who spent over a certain threshold an additional annual discount. That kept them loyal to us and decreased the likelihood they would shop around for a better price.
- *Daily deals.* Offer a daily deal to keep people looking at your store and keep your brand front and center. It will increase the likelihood of purchasing from your store, even if they don't respond to the deal of the day

Increase Average Order Size

Many companies overlook this strategy. Here are a few specific ideas.

- *More aggressive up-sells.* Make sure your website is displaying up-sell items on the product detail pages and within your shopping cart. We found that by presenting customers with 3 or 5 similar choices, they almost always chose a product in the mid-to-higher range. If you don't present those choices, you may sell the least expensive or have them leave your site if they think you only offer a more expensive alternative.
- *Cross-product selling.* Present relevant related products on your product detail pages and within your shopping cart. Some carts are highly automated to present items that are frequently sold together. But we found that by adding specific complementary items ourselves, we increased selling them together.
- *Volume promotions.* If your shopping cart will support it, offer a volume discount. If your average order size is $50, offer a 10 percent discount at $75 and a 15 percent discount at $150. Have a pop-up to remind customers they are only a certain dollar amount away from a discount, and present some items in that price range for them to choose from.

Increasing the average order size as a strategy can be elusive in the long run, as your order size probably fluctuates seasonally and over time. But, if you choose it as a strategy and execute a plan to make it successful, you will likely find success.

Expand Products

Of all the strategies listed here, this may be the most effective. It also may carry a hefty price tag if you need to make a substantial investment in inventory and manpower to get the products in your store and promoted to your customer base.

It is straightforward: Know your customers and add the products they are likely to buy. Troll your competitors and figure out what's selling well. Talk to your suppliers and see what other stores are selling. Ask your customers what they want.

- *Add new product lines.* In this case, I'm talking about products that are loosely related to your current product lines. You may get the benefit of additional sales to existing customers and you may also be able to target customers who were not likely to visit your stores before you sold them.
- *Expand selection of existing lines.* In our ecommerce sites, we added "known" sellers first, whenever possible. Over time, we would add other colors, styles, sizes, and so forth. This is a very low risk investment and a logical way to grow your store over time.

Adding a new product line may require learning about a new market and developing a different way of merchandising it. It may also require more resources to display online or fulfill the orders. Make sure you consider the impact on the rest of your business before you proceed.

Increase Prices

Here's an old concept that still works. Increase your prices by a very small percentage. You don't have to do it on everything. It does not have to be a huge amount. If you increase your prices across the board by 5 percent, your revenues go up by 5 percent. The risk of losing

sales exists, but it's pretty small. A 15 percent increase will be noticed, but not 1 to 5 percent, typically.

- *Mark up prices across the board.* Try a small increase and see if anyone notices.
- *Mark up prices for select items,* You may have certain items that do not have much price elasticity. Increasing the price on those items would raise a stir with your customers. In that case, leave those prices intact and only raise the prices on more niche or less popular items.
- *Charge for shipping.* In this era of free shipping, this is a different approach. But, give it a try. Charge for shipping on smaller orders. Charge a small handling fee on all orders. Shipping costs go up every year — usually two or three times per year. Why pay that on an ongoing basis? It's reducing your profits. If you ship 500 small orders per month and recover $3.00 per order, that's $1,500 in revenue.

Cross-channel Marketing

For those of you with both a physical and online presence, coordinate those efforts. Here are some cross-channel marketing ideas that many larger retailers use.

Q7 (b) Describe the virtual value chain in e-commerce.

Answer

Sol: The virtual value chain, created by John Sviokla and Jeffrey Rayport, is a business model for the information services industry. This value chain begins with the content supplied by the provider, which is then distributed and supported by the information infrastructure, and then the context provider supplies actual customer interaction. It differs from the physical value chain of manufacturing/sales of traditional companies.

To illustrate the distinction between the two value chains consider the following: "when consumers use answering machines to leave a message, they are using an object that is both made and sold in the physical world, however when they buy electronic answering services from the phone company they are using the marketspace—a virtual realm where products and services are digital information and are delivered through information-based channels." (Rayport et al. 1996) There are many businesses that employ both value chains including banks which provide services to customers in the physical world at their branch offices and virtually online. The value chain is separated into two separate chains because both the marketplace (physical) and the marketspace (virtual) need to be managed in different ways to be effective and efficient (Samuelson 1981).

Q8 (a) Explain the differences between e-commerce and m-commerce.

Answer

Answer: M-commerce vs E-commerce

M-commerce and E-commerce refer to the field of marketing —buying, selling, distributing and servicing different products through commercial transactions on theIinternet with the use of specific devices or computers.

M-commerce stands for Mobile Commerce wherein commercial transactions are done using cellular or mobile phones that have access to the Internet. Before there was no M-commerce because phones with Internet capability were not yet available; however, when mobile phones with Internet capability were invented, marketing has expanded more. Not only are business transactions done outside and through the Internet, but also through mobile phones has sky rocketed. Today, many phones have access to the Internet. With the rise of such technology, M-commerce is becoming more popular.

E-commerce stands for Electronic Commerce wherein business transactions are done over the Internet. Usually transactions are done using a computer or a laptop. This has become very popular now because computers with Internet capability have become very accessible to people.

M-commerce is very portable because mobile phones are very easy to carry. You can do your business transactions anywhere you go as long as you can access the Internet on your phone. Unlike E-commerce, you have to do your transactions on the computer. Laptops are also portable but not as light as mobile phones. Then you still have to look for a place to do your transactions because it would be uncomfortable using your laptop anywhere or while you are standing.

M-commerce is usually charged through the caller's premium rates, charging the user's bill, or reducing the caller's credit, and also through mobile banking. E-commerce is charged through the use of swipe machines where you swipe your credit card. You can also transfer money through online banking and pay for products you have bought on the Internet using your   credit card   number.

M-commerce is available anywhere you go even if there is no Internet because the Internet is available in your mobile phone, while for E-commerce it is not available everywhere because not all places have an Internet connection.

In conclusion, M-commerce means doing business transactions on the Internet through the use of mobile devices, while E-commerce means doing business transactions on the Internet using computers or laptops.

Summary:

1. M-commerce and E-commerce are business transactions done online.
2. M-commerce stands for Mobile Commerce while E-commerce stands for Electronic Commerce.
3. M-commerce uses mobile devices for commercial transactions while E-commerce uses computers.
3. M-commerce is available anyplace you go, even if there is no Internet. For E-commerce, you still need to go to a place where there is Internet to access your online transactions.
4. M-commerce is very handy and easy to carry while E-commerce you cannot always bring with you your computer or laptop anywhere.
5. M-commerce is charged through the caller's rate, deduction of user's credit, and mobile banking. E-commerce is charged through the use of credit cards that are swiped in credit card machines.
6. In conclusion, M-commerce uses mobile devices for business transactions while E-commerce uses computers or laptops for business transactions.

Q8 (b) What is WAP? Why WAP is important?

Answer

Answer: WAP stands for **W**ireless **A**pplication **P**rotocol. Per the dictionary definition for each of these words, we have:

- **Wireless:** Lacking or not requiring a wire or wires: pertaining to radio transmission.
- **Application:** A computer program or piece of computer software that is designed to do a specific task.
- **Protocol:** A set of technical rules about how information should be transmitted and received using computers.

WAP is the set of rules governing the transmission and reception of data by computer applications on, or via, wireless devices like mobile phones. WAP allows wireless devices to view specifically designed pages from the Internet, using only plain text and very simple black-and-white pictures.

WAP is a standardized technology for cross-platform, distributed computing, very similar to the Internet's combination of Hypertext Markup Language (HTML) and Hypertext Transfer Protocol (HTTP), except that it is optimized for:

- low-display capability
- low-memory
- low-bandwidth devices, such as personal digital assistants (PDAs), wireless phones, and pagers.

WAP is designed to scale across a broad range of wireless networks, like GSM, IS-95, IS-136 and PDC.

Until the first WAP devices emerged, the Internet was the Internet and a mobile phone was a mobile phone. You could surf the Net, do serious research, or be entertained on the Internet using your computer. But this was limited to your computer.

Now with the appearance of WAP, the scene is that we have the massive information, communication, and data resources of the Internet becoming more easily available to anyone with a mobile phone or communications device.

WAP, being open and secure, is well suited for many different applications, including but not limited to stock market information, weather forecasts, enterprise data and games.

Despite the common misconception, developing WAP applications requires only a few modifications to existing web applications. The current set of web application development tools will easily support WAP development, and in the future more development tools will be announced.

Q9 (a)   Elaborate five points of effective web designing.

Answer

Answer:

1.. **Use an effective marketing principle**

In order to sell a product or a service you need to be able to effectively **inititate the dialogue** with random visitors of your site. Since your visitors have actually come to your site, they are willing to hear to you and learn what you have to offer. So how do you approach this potential clientele to maximize your earning at the end of the month?

Suggested by Strong in 1925, **AIDA** is the effective marketing model which describes a common list of events that are very often undergone when a person is selling a product or service:

- A - Attention (Awareness): attract the attention of the customer.

- I - Interest: raise customer interest by demonstrating features, advantages, and benefits.

- D - Desire: convince customers that they want and desire the product or service and that it will satisfy their needs.

- A - Action: lead customers towards taking action and/or purchasing.

- Nowadays some have added another letter to form AIDA(S): S - Satisfaction - satisfy the customer so they become a repeat customer and give referrals to a product.

In this context customers should notice that AIDA is usually the way how potential buyers are tricked into buying products or services they actually don't need. To gain users' trust designers need to make sure that the site provides **genuine** information and there is no hidden context in which the content can be understood in a different way.

It's also more effective to offer visitors concrete arguments, situations and ideas of how a product or a service can be used instead of bombarding them with loud and empty ad-slogans.

2. Experiment with few colors

Dark body copy on white background and light body copy on black background are passive. **Vibrant** colors can help to highlight some specific elements of the site which you'd like to point users' attention to.

However, you don't need to use a vibrant palette to create an effective web design. Sometimes it's useful to pick a **moderate number of colors** and use them efficiently. Thus

your visitors will immediately see what's more important. It will also be easier for you to focus their attention on the most important areas of the site.

Sidebarecreative.com uses only one dominant vibrant color — blue color stands for links, buttons and clickable elements. White stands for important information which summarizes the content of the current page. The rest is the content of the site with some light blueish hover effects. Excellent, modest and expressive use of colors. That's effective.

Wilson Miner uses green, blue and pink. The dominating green color looks fresh and comforting. Blue stands for the links and pink for the hover effect. Notice the structure of the site. Although only few colors are actually used, one can immediately recognize clickable areas and detect the different sections of the site.

3. Strive for Balance

In web design balance is important because it provides users with some **sense of closure** and gives the feeling of permanence and stability. Balanced designs are easier to digest and to understand, because they create a visual hierarchy which clearly displays what is more important on the web-site and what is less important.

4. Strive for Clarity

Independently of the design approach, the clarity of both layout and presented information should be given one of the highest priorities in the design process. If there is any chance of misunderstandings and ambiguious titles make sure to get rid of them or specifiy explicitly what is meant. Being **more specific** is usually better than being less specific.

To achieve clarity you don't need to make use of "standard" design layouts or basic templates. Risk design experiments if you want to, but keep the clear visual hierarchy and structure of the site's content in mind. The more organized your categories are, the easier it will be for your visitors to find their path through your site.

Hovie.com displays an unusual yet very clear design solution. The site consists of five blocks; the first one stands for the main menu which appears when the site is loaded. Sub-menu appears when some section in the main menu is selected.

The current position is displayed by arrows next to the selected option in the navigation menu. In the content area a brief description and the caption of the images displayed above is presented. The design is consistent throughout all pages. Is there any possibilty to somehow misunderstand the design? Not really. That's **simple, clear and effective**.

5. Address your users' needs

As web-developer you have the primary task to **comfort your visitors**, addressing their needs and providing them with sufficient clues for seamless and intuitive navigation. However, to achieve this you need more than just considering an average profile of your users and stick to the decision he/she will be happy with.

To maximize your exposure you have to consider various types and profiles of your visitors. You need to identify major groups and offer each group the functionality its members would be comfortable with. That doesn't mean that you need to create multiple versions of your web-site; it rather means that you can **integrate multiple levels of user interaction** in one single design layout.

Q9 (b) Discuss key factors to identify cyber stalking.

Answer

Answer: A number of key factors have been identified:

- **False accusations**. Many cyberstalkers try to damage the reputation of their victim and turn other people against them. They post false information about them on websites. They may set up their own websites, blogs or user pages for this purpose. They post allegations about the victim to newsgroups, chat rooms, or other sites that allow public contributions such as Wikipedia or Amazon.com.[7]
- **Attempts to gather information about the victim**. Cyberstalkers may approach their victim's friends, family, and work colleagues to obtain personal information. They may advertise for information on the Internet, or hire a private detective.
- **Monitoring their target's online activities** and attempting to trace their IP address in an effort to gather more information about their victims. [8]
- **Encouraging others to harass the victim**. Many cyberstalkers try to involve third parties in the harassment. They may claim the victim has harmed the stalker or his/her family in some way, or may post the victim's name and telephone number in order to encourage others to join the pursuit.
- **False victimization**. The cyberstalker will claim that the victim is harassing him/her. Bocij writes that this phenomenon has been noted in a number of well-known cases.
- **Attacks on data and equipment**. They may try to damage the victim's computer by sending viruses.
- **Ordering goods and services**. They order items or subscribe to magazines in the victim's name. These often involve subscriptions to pornography or ordering sex toys then having them delivered to the victim's workplace.
- **Arranging to meet**. Young people face a particularly high risk of having cyberstalkers try to set up meetings between them.

Cyberstalking is a form of cyberbullying.

Text Book

E-Commerce - An Indian Perspective, P.T. Joseph, S.J., II Edition, PHI, 2007