



LO3:Be able to design e-Commerce solutions(Payment Systems)

Unit 1 Business Skills for e-Commerce
HND in Computing and Systems Development

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LO3: Be able to design e-Commerce solutions

- **Objectives:** business idea e.g.. Unique selling proposition, business-to-business opportunities, business to consumer markets, domain name
- **Market research:** purpose of research e.g.. Identifying information sources, online and offline competition, types of research e.g.. Primary and secondary
- **Target markets:** market analysis e.g.. size, characteristics, dynamics, competitors, historical background, emerging trends, market share, market segmentation
- **Key processes:** technology requirements e.g.. Hardware, software, security, maintenance, back end systems, supply sources, distribution channels
- **e-Commerce:** payment systems e.g.. Electronic cheque, PayPal, NoChex, credit or debit cards, start-up capital, working capital, funding sources
- **Security:** key areas e.g.. Prevention of hacking, viruses, identity theft, firewall, impact on site performance, Secure Sockets Layer(SSL), Secure HTTP(HTTPS), digital certificates, strong passwords, alternative authentication methods
- **Legislation:** relevant legislation eg. Data Protection Act 1998, Computer Misuse Act 1990, Consumer Credit Act 1974, Trading Standards, Freedom of Information Act 2000, copyright legislation



Payment systems

- Electronic cheques
- PayPal
- NoChex
- Credit or debit cards



Electronic cheques

- In June 2014 a Daily Telegraph article¹ said:
 - New legislation was expected to allow banks to accept images of cheques
 - These could be shared electronically
 - Accepted at branches or by smartphone app
 - Reduces 6 day clearing cycle
 - Avoids sending real cheques around banks
- What is the current situation?
 - Research <http://www.chequeandcredit.co.uk/>



PayPal

- 3-click checkout to customers paying online, on mobiles or in apps
- Integration is easy, start accepting more payments in minutes
- No set-up charges, monthly fees, or cancellation fees
- PayPal charges UK sellers a fee of between 1.4% and 3.4% of the total sale plus 20p per transaction. The more you sell, the less you pay



Increased business claim

- 31% of UK buyers surveyed said that they would not have made the purchase if PayPal had not been offered as a payment method.
- The results of individual retailers ranged from 22% to 41%. Survey conducted by Northstar Research Partners, Q4 2012. Based on retailer-level data for 5 large online retailers representing 443 buyers



Issues with PayPal

- PayPal is not a bank
 - PayPal doesn't need to follow any US Federal or State, or International, banking regulations.
- Accounts can be frozen (unable to add or withdraw funds) for 180 days during investigations
- Some users claim that PayPal has simply seized their funds and never returned them



Nochex

- **Nochex online payment services**
 - online payment solution for micro, small and medium size businesses
 - receives online payments made from all major credit and debit cards
 - UK Trader Account for micro businesses
 - a low-cost account
 - outstanding fraud-protection
 - No monthly or annual fees
 - 2.9% plus 20p per transaction



Nochex issues

- do not offer face-to-face payments
- subsidise their low cost services by including advertising on their payment pages
- can keep a small holding amount, usually less than £100 to cover chargebacks
- customers complain of:
 - almost non-existent service and that Nochex are difficult to contact.
 - accounts being closed for no reason, money being held for several months at a time, and also problems with their system software and website



Merchant accounts

- Merchant Accounts are special bank accounts used to collect debit/credit card payments
- Nine banks in the UK offer merchant services
- Information required to open an account:
 - Current or projected turnover
 - Average transaction value
 - Frequency of transactions
 - The type of product or service you are selling
 - The percentage of transactions taken by card
- Set up fee and transaction charges apply



Chargebacks

- Dissatisfied customers can claim their money back from the card company if in dispute with the supplier
- Money deducted from merchant account if customer is in the right
- Also the case if fraud is involved



Fraud

- Characteristics of fraudulent transactions
- Inconsistent Delivery Address.
 - only deliver the goods to the address where the payment card is registered.
- Inconsistent Card Verification Code.
 - Fraudsters but credit card numbers biut can't access the CVC code
- A lack of concern when spending money
- Quick delivery required
- High risk countries.
 - Indonesia, Malaysia, Nigeria, Pakistan, Israel and Egypt.



PCI

- The Payment Card Industry Data Security Standard (PCI DSS) is a set of requirements designed to ensure that ALL companies that process, store or transmit credit card information maintain a secure environment
- 4 levels depending on volume of transaction
- Rigorous compliance process
- Self assessment and qualified assessors



Start-up capital

- The money required to start a new business
 - Premises
 - Permits and licenses
 - Inventory
 - Development
 - Manufacturing
 - Marketing
- Also known as seed money



Source of start up capital

- a business loan from a bank
 - the business will be expected to make monthly payments to pay down the debt plus any interest and/or fees
- an investor, group of investors, or venture capitalist(s).
 - start up capital provided in exchange for a certain stake in the company
- the company founders' personal assets or from friends and family
 - often obtained in exchange for an equity stake in the business



Examples

- Apple
 - Wozniack and Jobs, both penniless at the time, went to a local computer parts supplier and ordered the parts on credit for the first 50 Apple computers
- Dell
 - Michael Dell founded the company with \$1,000 and ran it from his dormitory room at university investment.
- Starbucks
 - In 1971, three academics each invested \$1350 of their own money into the first Starbucks located in downtown Seattle
- eBay
 - Pierre Omidyar finished the code for the website in the living room of his Silicon Valley home
- Virgin
 - “£300 from my mum” – Sir Richard Branson



Working capital

- Working Capital = Current assets – current liabilities
 - Needs to be positive to maintain the business
 - Assets are resources, equipment, inventory, cash
 - Liabilities are payments, debt, salaries, interest
- Cash management: to meet day to day expenses
- Inventory management: allows for uninterrupted production but reduces the investment in raw materials
- Debtors management: payment terms to reduce impact on cash flows
- Short term financing: bank loans or overdrafts



Funding sources - equity

- Equity finance involves selling part of the business ('shares') to an investor who will take a share of any profits or losses
- Advantages
 - investors can bring new skills and opportunities no interest, or loans
 - shared risks
- Disadvantages
 - demanding, expensive and time-consuming
 - own a smaller share of your business
 - you may have to consult investors
 - only limited companies can sell shares



Funding sources - crowdfunding

- A number of people each investing, lending or contributing smaller amounts of money to reach a target
- Advantages
 - alternative to funding from conventional means
 - raise finance relatively quickly
 - can raise awareness of a new business
- Disadvantages
 - ideas could be copied if not protected
 - Money must be returned if target not met
 - crowdfunding is mostly unregulated



Funding sources - loans

- A loan is credit, usually in the form of cash, that you borrow and repay over an agreed length of time
- Advantages
 - guaranteed the money for the whole term
 - lender does not get a percentage of profits or shares
- Disadvantages
 - inflexible – early repayment charges
 - must meet monthly payments
 - could lose property or assets (eg your home)



Funding sources - overdrafts

- Not a long-term source of finance
- Advantages:
 - flexible
 - quick to arrange
 - no early repayment fees
- Disadvantages
 - a charge to extend an overdraft
 - charged if exceeding an overdraft limit
 - can be asked for the money back at any time
 - only available from the bank with the business current account



Activity

- Propose a financial system for MWS and justify your decisions
 - Discuss the advantages and disadvantages of payment systems
 - Costs
 - Simplicity
 - Customer satisfaction
 - Fraud protection
 - Seed capital is being provided by MSW and MJ, but what continuing sources of funding do you propose?
 - Your work must be fully referenced