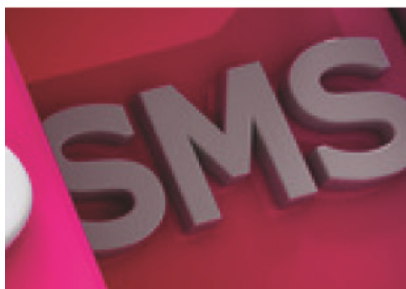




Module 5

E-COMMERCE

6 hours classroom training and 6 hours e-learning



Erasmus+

Project website: www.smartwomenproject.eu

Strategic Partnerships for vocational education and training

SmartWomen

Project ID: 2016-1-MT01-KA202-015202

Strategic Partnerships for Vocational Education and Training

Smart Women

Project ID: 2016-1-MT01-KA202-015202

In the framework of the Smart Women project, seven partners from European countries have created an innovative European Training Model, focused on women, aiming for **encouraging entrepreneurship** and putting business ideas into practice.

The Smart Women Model combines online learning using online learning platforms and face to face training based on project collaboration, peer-learning, guidance, coaching and counselling.

Project Partners: MCA (Malta), LIKTA (Latvia), Dedalo Fundacion (Spain), EOS (Romania), Cyprus Computer Society (Cyprus) and ALL DIGITAL (Belgium).

DISCLAIMER

The European Commission support for the production of this handbook does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

E-COMMERCE

E-commerce is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur either as business –to-business, business to consumer, consumer to consumer, consumer to business and government- to consumer. E commerce is conducted using a variety of applications, and it can be made by different types of payments. In order to regulate all of these things, a legal regulation of e commerce and consumer rights exist.



LEARNING OBJECTIVES




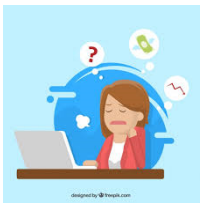

Having completed this module you will be able to:

- Understand principles and types of ecommerce
- Understand the main building elements of ecommerce website or mobile application
- Understand the main payment methods for e-commerce
- Be able to evaluate and select among existing e-commerce platforms
- Understand the legal regulations of e-commerce
- Be able to understand how to develop simple e-commerce solutions for his/her business



ANNOTATIONS

The following icons are used in the text with the meaning indicated.

Icon	Used as
	Concepts & Theory
 Resources & Links	Resources & links the student can use for further reading
	Review Exercise
	Tasks to be performed by student individually
	Tasks to be performed by students in groups

MODULE OUTLINE

The course is implemented using a blended-learning approach and includes 6 hours of classroom and 6 hours of e-learning

- **Introduction to e-commerce, main types of e-commerce participants and modules**

- Understand and learn the principles and types of ecommerce
- Identify the suitable platform that could give them the best solution for their particular case

- **Requirements of a successful e-commerce website**

- Be able to understand how to develop simple e-commerce solution for his/her business
- Know the most important issues to take in consideration for the creation of successful e-commerce website

- **Introduction to e-commerce mobile applications**

- Understand the main building elements of e-commerce website or mobile application
- Browse successful e-commerce mobile applications

- **Introduction to some common online platforms offering e-commerce solutions**

- Be able to evaluate and select among existing e-commerce platforms
- Create the main structure of an ecommerce site

- **Payment methods**

- Understand and know the main payment methods for e-commerce

- **Legal regulation of e-commerce and consumers rights**

- Understand and know the legal regulation of e-commerce

E-commerce

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LESSON 1

INTRODUCTION TO E-COMMERCE, MAIN TYPES OF E-COMMERCE PARTICIPANTS AND MODULES

After complementing this lesson, you should be able to:

- Understand basic principles and benefits of e-commerce
- Learn about the types of e-commerce
- Understand the different e-commerce platforms
- Identify the b
- est e-commerce solution for his/her business idea

1.1. INTRODUCTION TO E-COMMERCE, MAIN TYPES OF E-COMMERCE PARTICIPANTS AND MODULES



Concepts

E-commerce is a transaction of buying or selling online. Electronic commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. Modern electronic commerce typically uses the World Wide Web for at least one part of the transaction's life cycle although it may also use other technologies such as e-mail.

Typical e-commerce transactions include the purchase of online books (such as Amazon) and music purchases (music download in the form of digital distribution such as iTunes Store), and to a less extent, customized/personalized online liquor store inventory services.

E-commerce businesses may employ some or all of the followings:

- Online shopping web sites for retail sales direct to consumers
- Providing or participating in online marketplaces, which process third-party business-to-consumer or consumer-to-consumer sales
- Business-to-business buying and selling;
- Gathering and using demographic data through web contacts and social media
- Business-to-business (B2B) electronic data interchange
- Marketing to prospective and established customers by e-mail or fax (for example, with newsletters)
- Engaging in retail for launching new products and services
- Online financial exchanges for currency exchanges or trading purposes.

1.2. BENEFITS AND PRE-CONDITIONS FOR E-COMMERCE

Various applications of e-commerce are continually affecting trends and prospects for business over the Internet, including e-banking, e-tailing and online publishing/online retailing.

A more developed and mature e-banking environment plays an important role in e-commerce by encouraging a shift from traditional modes of payment (i.e., cash, checks or any form of paper-based legal tender) to electronic alternatives (such as e-payment systems), thereby closing the e-commerce loop.

a) Benefits of e-Commerce

- Expanded Geographical Reach
- Expanded Customer Base
- Increase Visibility through Search Engine Marketing
- Provide Customers valuable information about your business
- Available 24/7/365 - Never Close
- Build Customer Loyalty
- Reduction of Marketing and Advertising Costs
- Collection of Customer Data

b) Basic Benefits of e-Business e-Commerce

- Increase sales - this is the first thing that people consider when dealing with e-commerce
 - Decreasing costs
 - Increase profits
 - Understanding that profits is not the same as sales
 - Expands the size of the market from regional to national or national to international
 - Contract the market
 - Reach a narrow market
 - Target market segmentation allows you to focus on a more select group of customers
 - And therefore have a competitive advantages in satisfying them

E-commerce - Five preconditions

Broadband

It is more common for Internet users with broadband access at home to buy online, compared with those who have dial-up Internet access. Only three per cent of Internet users emphasized that they were not interested in broadband. The most common reasons given were that it is too expensive, or that there is a risk of it becoming so in the future, and also that there are no broadband operators in the home area. Increased accessibility to broadband may increase e-commerce. What the State can do is to stimulate the development of broadband and create the conditions for competition on equal terms for the actors in the market. The State can also stimulate demand for broadband by offering valuable services.

Security infrastructure

Security infrastructure is an important precondition for many applications, among other things, e-commerce. Fraud on the Internet is increasing and there is a great need to be able to verify the other party's identity. Today, electronic certification (e-identity) is only used to a limited extent and the actors in the sector are hesitant. It is considered that the market is rather immature and potential users do not appreciate the benefits. The technology is difficult to understand and the user interfaces are poorly designed. Means for the State to stimulate development are to provide information about user areas, that the authorities use e-identity and to encourage the development of good interfaces.

Payment services

The dominant payment method for Internet trade is cash on delivery and invoice, which is used for 84 per cent of all payments in connection with Internet commerce. In order to simplify e-commerce, secure and easily used payment services are required.

Physical delivery

A partial change in customer behavior from major purchases to small, more frequent purchases, many customers' keener price awareness in connection with e-commerce than with shop purchases, and also that the cost of carriage has increased, constitute special preconditions for e-commerce. Distance trading businesses consider that they are not able to pass on the entire cost of carriage directly to the customer.

Confidence and security awareness

The confidence and security awareness of users is important for the development of e-commerce. Those who buy online have greater needs of releasing personal data via the Internet. The study shows that almost one-fourth of those who have bought online have provided credit or cash card numbers via e-mail or web sites.

1.3. E-COMMERCE TYPES AND PARTICIPANTS (B2B, B2C, C2C, C2B, G2C)

Various types of e-commerce platforms fall into several industry classifications based upon their licensing model, sales scenario and data exchange.

On-premises e-commerce

On-premises e-commerce software usually requires initial one time purchase investment in terms of licensing fees. Also, it implies extra costs related to hardware and installation services as well as data migration and on-going maintenance fees that are usually charged on a yearly basis for software updates and support. Some examples of typical on premises E-commerce platforms are Oracle Web Commerce (formerly ATG) Hybris (company), Intershop Communications, Sana Commerce., and IBM WebSphere.

Advantages:

Easily customizable; Data security; High performance;

Disadvantages:

Large initial investment; Self-maintenance; Technical knowledge

Software as a service (SaaS) E-commerce

Software as a Service (SaaS)- is a cloud based delivery model in which applications are hosted and managed in a service provider's datacenter, paid for on a subscription basis and accessed via a browser over an internet connection. Two examples of typical SaaS E-commerce solutions are Shopify and Demand ware.

Advantages:

Affordable low-cost solution; Hosted/upgraded by E-commerce provider; easily scalable; High availability

Disadvantages:

Limited integration with back-end systems; Limited control over the system

Fully Managed (FM) E-commerce

Fully Managed (FM) E-commerce - is the next step of Platform as a Service (PaaS). As a basis, PaaS consists of e-commerce software and hardware hosting. In addition to this, fully managed e-commerce solutions provide services like product picture taking, image editing, data management, customer support, marketing consulting. FM E-Commerce is offered to brick-and-mortar stores as a B2B solution to help them start selling online quickly and at low cost. The licensing model is usually based on the sales volume.

Open source E-commerce

Open source e-Commerce is a free of charge platform that doesn't imply licenses fee. Furthermore, open source users are also responsible for installing, maintaining, securing and configuring the software on their own servers. In

order to set up an open source platform, basic technical expertise is required in the areas of web design and development. Software products that are distributed as open source are generally free, and users can access and modify the source code.

Advantages:

Free of charge system; Wide variety of available add-ons/plugins/extensions; Better flexibility with a customizable source code;

Disadvantages:

More technical knowledge required; Performance depends on hosting costs; No standard integration with back-end system;

There are several types of ecommerce:

- **Business-to-Consumer (B2C):** In a Business-to-Consumer ecommerce environment, companies sell their online goods directly to consumers: the end users of their products or services. Usually, B2C ecommerce web shops have an open access for any visitor, meaning that there is no need for a person to login in order to make any product related enquiry.
- **B2B e-commerce** (also written as e-Commerce, eCommerce or similar variants), short for business-to-business, electronic commerce, is selling products or services between businesses through the internet via an online sales portal. In general, it is used to improve efficiency for companies. Instead of processing orders manually – by telephone or e-mail – with e-commerce orders can be processed digitally.
- **Consumer-to-business (C2B)** is a business model in which consumers (individuals) create value and businesses consume that value. For example, when a consumer writes reviews or when a consumer gives a useful idea for new product development then that consumer is creating value for the business if the business adopts the input. Excepted concepts are crowd sourcing and co-creation.
- **Customer to customer (C2C)** markets provides an innovative way to allow customers to interact with each other. Traditional markets require business to customer relationships, in which a customer goes to the business in order to purchase a product or service. In customer to customer markets, the business facilitates an environment where customers can sell goods or services to each other. Other types of markets include business to business (B2B) and business to customer (B2C).
- **Government-to-Consumer (G2C):** The goal of government-to-customer (G2C) e-governance is to offer a variety of ICT services to citizens in an efficient and economical manner, and to strengthen the relationship between government and citizens using technology. There are several methods of government-to-customer e-governance. Two-way communication allows citizens to instant message directly with public administrators, and cast remote electronic votes (electronic voting) and instant opinion voting. Transactions such as payment of services, such

as city utilities, can be completed online or over the phone. Mundane services such as name or address changes, applying for services or grants, or transferring existing services are more convenient and no longer have to be completed face to face.

		From: Supplier of content/service		
		Consumer or citizen	Business (organisation)	Government
To: Consumer of content/service	Consumer or citizen	Consumer-to-Consumer (C2C) <ul style="list-style-type: none"> eBay Peer-to-Peer (Skype) Blogs and communities Product recommendations Social networks: MySpace, Bebo 	Business-to-Consumer (B2C) <ul style="list-style-type: none"> Transactional: Amazon Relationship-building: BP Brand-building: Unilever Media owner – News Corp Comparison intermediary: Kelkoo, Pricerunner 	Government-to-Consumer (G2C) <ul style="list-style-type: none"> National government transactional: Tax – inland revenue National government information Local government services
	Business (organisation)	Consumer-to-Business (C2B) <ul style="list-style-type: none"> Priceline Consumer-feedback, communities or campaigns 	Business-to-Business (B2B) <ul style="list-style-type: none"> Transactional: Eurooffice Relationship-building: BP Media Owned: Emap business publications B2B marketplaces: EC21 	Government-to-Business (G2B) <ul style="list-style-type: none"> Government services and transactions: tax Legal regulations
	Government	Consumer-to-Government (C2G) <ul style="list-style-type: none"> Feedback to government through pressure group or individual sites 	Business-to-Government (B2G) <ul style="list-style-type: none"> Feedback to government businesses and non-governmental organisations 	Government-to-Government (G2G) <ul style="list-style-type: none"> Inter-government services Exchange of information

Source: Dave Chaffey, Digital Business & E-Commerce Management 6th edition, December 2014, Chapter 1.

1.4. DEVELOPING OWN E-COMMERCE SITE AND SELLING GOODS VIA COMMON PLATFORMS (AMAZON, EBAY, ETC....)

Where to sell your product online?

Firstly, there is no shortage of places to sell your product. The difficulty is choosing which ones suit your brand and will enhance the offering you may or may not already have. When choosing a physical shop presence, your first thought would be to find the location best for attracting potential customers. The same is true for online. Here is one of the top tier levels to consider before you begin looking at the many platforms available:

Hosted vs self-hosted ecommerce solutions

If you want to set up a full website where people can come to view your products and your products only (as opposed to a marketplace such as Amazon or eBay), then you'll need to choose between a hosted or self-hosted ecommerce platform

Some examples of shopping carts including creator, software license and framework, and updates are (Wikipedia):

Name	Creator	First release date	Latest stable version	Latest release date	License	Language	Web application framework	CMS extension
Big commerce	Big commerce Inc	?	Continuous SaaS	Continuous SaaS	Proprietary	PHP		
Drupal Commerce	Drupal Commerce	2011	1.13	2016-04-06	GPL	PHP		Drupal
Magento	Varien	2007	2.1.6	2017-04-11	OSL 3.0	PHP	Zend Framework	
OpenCart	OpenCart Ltd.	1999	2.3.0.2	2016-08-01	GPL	PHP		
OsCommerce	osCommerce	2000	2.3.4	2014-06-05	GNU GPL	PHP		
PrestaShop	PrestaShop SA	2007	1.7	2017-04-20	OSL 3.0	PHP	Model-View-Controller	
Shopify	Shopify	2006	Continuous/SAAS	Continuous/SaaS	Proprietary	Ruby	Ruby on Rails	
VirtueMart	Max Milbers and Team	?	3.2.2	2017-05-17	GPL	PHP		Mambo or Joomla!
WooCommerce	WooThemes	2011	3.0.7	2017-05-16	GPL	PHP		WordPress

Cloud-hosted ecommerce platforms examples:

- Shopify
- Big Commerce
- Volusion
- Wix

Self-hosted ecommerce platforms examples:

- WooCommerce
- Magento
- Zen Cart
- OsCommerce

Selling through online marketplaces:

An **online marketplace** (or **online e-commerce marketplace**) is a type of e-commerce site where product or service information is provided by multiple third parties, whereas transactions are processed by the marketplace operator. Online marketplaces are the primary type of multichannel ecommerce and can be a way to streamline the production process.

The sharing economy

Many sharing economy platforms are in fact peer to peer marketplaces. Also called "switch" marketplaces, sharing economy platforms' users will characteristically switch between buying and selling services or goods, such as on Airbnb.

Seeing that the sharing economy in large part originates from the open source movement it is only fitting that there are now two open source initiatives to provide a free and collaboratively built solution to build marketplaces (Cocorico & Sharetribe).

Online marketing intermediaries

The intermediaries in online environment marketing that offer customers a destination site about connecting online customer with product information, for example, some search engines, like Google, Facebook and MSN. This method is easier for customer to gather information, and have a preview about the product. Such as the price and the product detail information. Online intermediaries enable customer and online seller maximizes the efficiency and effectiveness. The information would be exchanged through Internet, B2B and B2C are both benefit from online intermediaries. In addition, online intermediaries sometimes provide support for online social networks, which create a social community for supplier and customer in order to directly connecting each other, such as the dramatically increase trend about e-commerce development, online site allow supplier and customer to do business at digital environment.

It is different with the traditional method, online shopping intermediaries offer third-party sellers the opportunities to freedom to choose sale prices, and they only charge a percentage of referral fees from the final price. Though the online environment sellers become more efficient, comparing with conventional sells channel, in-store sales, online shopping and intermediaries enable company save from without involve physical store. And also it bring convenience for customer, in other words, online shopping intermediary's level of search help decrease the level of differentiation in the product category. Customer may have a clear classification to search what they are seeking.

As well as your own hosted and non-hosted website shop, there is also the option of an online marketplace. These are a good choice if your interest is to solely sell products, as opposed to start a business or develop a well-known brand. This is because marketplaces such as Amazon, Etsy and Ebay allow you to quickly add a catalogue of products and sell at low-cost with minimal support or background knowledge needed. They also give you access to their wide search database and customer flow, giving you steady trade without you having to spend time or money marketing your products. Let's take a look at what some of the platforms have to offer:



Selling products on [eBay](#)

eBay is a multinational e-commerce corporation, facilitating online consumer-to-consumer and business-to-consumer sales. It is headquartered in San Jose, California. eBay was founded by Pierre Omidyar in 1995, and became a notable success story of the dot-com bubble. Today eBay is a multibillion-dollar business with operations in about 30 countries.

The company manages eBay.com, an online auction and shopping website in which people and businesses buy and sell a broad variety of goods and services worldwide. In addition to its auction-style sales, the website has since expanded to include "Buy It Now" shopping; shopping by UPC, ISBN, or other kind of SKU number (via Half.com); online classified advertisements (via Kijiji or eBay Classifieds); online event ticket trading (via StubHub); and other services. It previously offered online money transfers (via PayPal, which was a wholly owned subsidiary of eBay from 2002 until 2015). The website is free to use for buyers, but sellers are charged fees for listing items after a limited number of free listings, and again when those items are sold.



Using [Amazon](#) as your online marketplace

Amazon.com, Inc. is an American electronic commerce and cloud computing company based in Seattle, Washington that was founded by Jeff Bezos on July 5, 1994. The tech giant is the largest Internet-based retailer in the world by total sales and market capitalization. Amazon.com started as an online bookstore and later diversified to sell DVDs, Blu-rays, CDs, video downloads/streaming, MP3 downloads/streaming, audiobook downloads/streaming, software, video

games, electronics, apparel, furniture, food, toys, and jewelry. The company also produces consumer electronics—notably, Kindle e-readers, Fire tablets, Fire TV, and Echo—and is the world's largest provider of cloud infrastructure services (IaaS and PaaS). Amazon also sells certain low-end products like USB cables under its in-house brand Amazon Basics.



Selling products on [Etsy](#)

Etsy is a peer-to-peer (P2P) e-commerce website focused on handmade or vintage items and supplies, as well as unique factory-manufactured items. These items cover a wide range, including art, photography, clothing, jewelry, food, bath and beauty products, quilts, knick-knacks, and toys. Many sellers also sell craft supplies such as beads, wire and jewelry-making tools. All vintage items must be at least 20 years old. The site follows in the tradition of open craft fairs, giving sellers personal storefronts where they list their goods for a fee of US\$0.20 per item.

Other marketplace options:

There are various other marketplaces and stockiest websites which can help your product to be seen. Regardless of what you are selling, there is likely to be a niche marketplace or stockiest out there to suit and can lead to more success than selling on Amazon or eBay alone. This includes [ASOS Marketplace](#) for those selling fashion, [Feel Unique](#) and [Cult Beauty](#) for skincare products and [Not on the Highstreet](#) and [Handpicked Collection](#) for unique items, often sold as gifts.

The difference with niche marketplaces is the cost to sell, which is generally much higher than more established online shops and also the selection process to have your offering approved. With access to such a large, targeted customer base, these sites are keen to retain their authority with that audience and therefore will often make you apply or adhere to a strict selection process before you even begin to have a chance to sell.

When it comes to selling your product online, the choices are endless. The real detail is in making a choice that suits you, your offering and your customer and then building it from the ground up into an online shop front that you'll be proud to call your own.

1.5. ADDITIONAL RESOURCES

You may explore the following learning resources to enrich and upgrade your knowledge and skills



- https://en.wikipedia.org/wiki/Comparison_of_shopping_cart_software
- <https://www.ebay.com>
- <https://www.amazon.com/>
- <https://www.etsy.com>

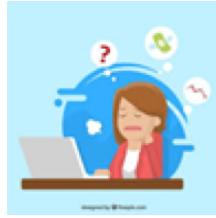
1.6. REVIEW EXERCISE



To ensure that you have mastered the concepts presented in this lesson, you may attempt the following review exercise. Read the instructions carefully before you answer

- List six benefits of E-commerce:
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____
 6. _____
- Which are the most important preconditions to considerer in e-commerce? Explain them.
- Define these concepts: E-bay; online marketplace; Business-to-Consumer (B2C).

1.7. LEARNING ACTIVITIES AND TASKS



Task 1. In base of different e-commerce platforms, students have to reflect about their own business idea and identity the suitable platform that could give them the best solution for their particular case. Once students have chosen one, they also have to check different e-commerce sites developed in this kind of platform/marketplace.

Finally, they should share and justify with their classmates their decision

LESSON 2

REQUIREMENTS OF A SUCCESSFUL E-COMMERCE WEBSITE

After completing this lesson, you should be able to:

- Understand the principles for the creation of a successful e-commerce website
- Know some successful e-commerce existing platforms

2.1. REQUIREMENTS OF SUCCESSFUL E-COMMERCE WEBSITE



Concepts

E-commerce plan

Having an e-commerce plan is as important as your original business plan. The first step in writing an e-business plan is to decide what kind of experience you want your clients to have online. Not only must we think about the present, but also about the future.

Your e-commerce plans begin with the objectives of the website. Who are your target customers? What do you need? Are they only receiving information or can they buy products on your site? These key questions asked and answered in advance will determine how much time and money you will need to develop and maintain an online presence.

Think over your product or service

Decide what products or services you will offer. How will you position and show them? Will you offer purchases both online and offline? How will you handle shipping and returns?

Also, do not overlook the customer's need to communicate with individuals. We can show a phone number so customers can call at any time and have a person answer their questions.

Shopping cart

If you decide to sell online, you will need a shopping cart component, which is a means to handle credit card processing, and an organized order fulfillment process.

Promotional strategy

Although we have a very good website, we should not assume that people will find it on their own. If you want to develop a constant flow of traffic to your site, it is essential that you plan and maintain a continuous and multifaceted promotional strategy that is carefully targeted and intended for your audience.

Domain name and registration

If we have decided to have a website, the first step will be registering a domain with an attractive name that identifies our company or business very well (and that is free).

Once you have registered your domain name and have established a plan for what you want to offer to potential and existing customers online, the next big challenge is to design and build your real website and your online presence.

The website

What makes a good website? A well-thought-out site outline includes:

- **Content:** The key to a good website is the content. Offer site visitors lots of interesting information, incentives to visit and buy, and ways to contact them. Once your site is up and running, update and continually add new content for people to come back.
- **Structure:** Decide how many pages you will have and how they will link to each other. Choose graphics and icons that improve the content.
- **Design:** With the content and structure in place, the site design comes later. Whether you are using an external designer or do it yourself, focus on simplicity, readability and consistency.
- **Navigation:** Our users and customers should navigate easily and smoothly through our website. For example, do not use more than two or three links to major areas and never leave visitors in a dead end.
- **Credibility:** This is a topic that should not be lost on a website. Your site should reach each visitor, telling that person why they should buy your product or service. He must look professional and give confidence, as if he were face to face with us.

Contact information

Remind visitors that you do not exist alone in cyberspace. The complete contact information of your company (company name, full address, telephone, fax and email) must appear on all or most of your individual web pages and appear prominently on the home page of your site.

E-commerce recommendation

The contemporary e-commerce trend recommends companies to shift the traditional business model where focus on “standardized products, homogeneous market and long product life cycle” to the new business model where focus on “varied and customized products”. E-commerce requires the company to have the ability to satisfy multiple needs of different customers and provide them with wider range of products. With more choices of products, the information of products for customers to select and meet their needs become crucial. In order to address the mass customization principle to the company, the use of recommender system is suggested. This system helps recommend the proper products to the customers and helps customers make the decision during the purchasing process. The recommender system could be operated through the top sellers on the website, the demographics of customers or the consumers’ buying behavior. However, there are 3 main ways of recommendations: recommending products to customers directly, providing detailed products’ information and showing other buyers’ opinions or critiques. It is benefit for consumer experience without physical shopping. In general,

recommender system is used to contact customers online and assist finding the right products they want effectively and directly.

Other recommendations to have a successful e-commerce website

- **Show the advantages of your products**

A list of product **categories** or a **grid** of them can be the perfect thing to help your online store. **Special deals** and **new arrivals** are also good to coax the common web surfers to buy.

- **Make Your Online Shop Sell**

There are many stores which are designed without a thought on making a sale. They look cool but they are absolutely useless when it concerns shopping. Something important is to have a good design, but more important still to have a good usability.

- **Make Your Website Visitors Trust You**

People watch what they spend on; so it's only natural to expect that they want to know everything there is to know about the product they're going to buy, the purchase process, payment methods, the delivery service, warranties etc. that will help them secure a decision and commit to a transaction.

- **Deals, Freebies and free shipping**

People usually decide very quickly whether they like a website or not, that's why you should grab their interest in a matter of seconds upon their entry to the site; otherwise they will just find some other shop with a more attractive home page.

- **Latest news and most popular products**

When there are news, a sales period or upcoming events that buyers should know about the product, the home page is the best place to house them.

- **Shopping Cart, Login Box and Search Box**

The shopping cart, login box and search box features are usually placed together at every eCommerce site. It's almost impossible to imagine a store without a shopping-cart function included.

- **Trustmarks**

Trustmarks are small images or logos that show a security guarantee by an external party indicating that it is safe to shop on the site. Some of these trustmarks come from Network solutions, McAfee, Verisign, BBB, TRUSTe, GeoTrust, etc.

- **Phone numbers and online chats**

With online shopping, buyers interact with sellers via computer networks making transactions that are no longer geographically bound. When there is a problem however, customers would more likely prefer to have someone they can talk with.

- **Social Media Links**

It's said that almost 20% of online purchases are accomplished after surfing through social media sites.

- **Payment Systems Icons**

eCommerce websites deal with many customers from all over the world and they each have their own preferred payment system. Moreover, there may be technical limitations to a payment method or option, and that's why it would be better to clarify payment options in advance.

2.2. ADDITIONAL RESOURCES

You may explore the following learning resources to enrich and upgrade your knowledge and skills



<https://www.youtube.com/watch?v=paWVquu9mcg> VIDEO

2.3. REVIEW EXERCISE



To ensure that you have mastered the concepts presented in this lesson, you may attempt the following review exercise. Read the instructions carefully before you answer

- Why is important `contact information`?
- What makes a good website? Explain with your words.
- Complete:

“_____ are small images or _____ that show a security guarantee by an external party indicating that it is safe to shop on the site. Some of these trust marks come from _____, _____, _____, _____”

2.4. LEARNING ACTIVITIES AND TASK



Task 1. Students have to comment and discuss the most important issues to take in consideration for the creation of a successful e-commerce website, then the trainer will show a couple of successful e-commerce sites (eg. mothercare, etsy)

Task 2. Watch the video “WooCommerce vs Magento- What’s better for your business?”

LESSON 3

INTRODUCTION TO E-COMMERCE MOBILE APPLICATIONS

After completing this lesson, you should be able to:

- Understand the principles of mobile commerce
- Know some examples of e-commerce mobile platforms
- Understand the principles of mobile APPs
- Understand the basics of mobile payments

3.1. INTRODUCTION TO E-COMMERCE MOBILE APPLICATIONS



Concepts

M-commerce (mobile commerce) is the buying and selling of goods and services through wireless handheld devices such as cellular telephone and personal digital assistants (PDAs). Known as next-generation e-commerce, m-commerce enables users to access the Internet without needing to find a place to plug in. The emerging technology behind m-commerce, which is based on the Wireless Application Protocol (WAP), has made far greater strides in Europe, where mobile devices equipped with Web-ready micro-browsers are much more common than in the United States.

The phrase **mobile commerce** was originally coined in 1997 by Kevin Duffey at the launch of the Global Mobile Commerce Forum, to mean "the delivery of electronic commerce capabilities directly into the consumer's hand, anywhere, via wireless technology." Many choose to think of Mobile Commerce as meaning "a retail outlet in your customer's pocket."

Mobile commerce is worth US\$230 billion, with Asia representing almost half of the market, and has been forecast to reach US\$700 billion in 2017. According to BI Intelligence in January 2013, 29% of mobile users have now made a purchase with their phones. Walmart estimated that 40% of all visits to their internet shopping site in December 2012 was from a mobile device. Bank of America predicts \$67.1 billion in purchases will be made from mobile devices by European and U.S. shoppers in 2015. m-Commerce made up 11.6 per cent of total e-commerce spending in 2014, and is forecast to increase to 45 per cent by 2020, according to BI Intelligence. ComScore reported in February 2017 that mobile commerce had grown 45% in year to December 2016.

The Next Big Thing

Mobile commerce is a natural way to think about the businesses of the future.

Customers already want to engage more and more with their mobile devices and the number of transactions – not only traffic – will grow with mobile apps.

If you already have an e-commerce site and see a vast amount of traffic coming from mobile – don't hesitate! Monetize those searchers with mobile commerce.

3.2. PRINCIPLES OF APPLICATION DEVELOPMENT

Mobile app development is a term used to denote the act or process by which a mobile app is developed for mobile devices, such as personal digital assistants, enterprise digital assistants or mobile phones. These applications can be pre-installed on phones during manufacturing platforms, or delivered as web applications using server-side or client-side processing (e.g., JavaScript) to provide an "application-like" experience within a Web browser. Application software developers also must consider a long array of screen sizes, hardware specifications, and configurations because of intense competition in mobile software and changes within each of the platforms. Mobile app development has been steadily growing, in revenues and jobs created. A 2016 analyst report estimates there are 1.64 million *app economy* jobs within the EU 28 members, the double as 3 years ago, a sign of a growing and vital tech sector.

As part of the development process, mobile User Interface (UI) design is also essential in the creation of mobile apps. Mobile UI considers constraints, contexts, screen, input, and mobility as outlines for design. The user is often the focus of interaction with their device, and the interface entails components of both hardware and software. User input allows for the users to manipulate a system, and device's output allows the system to indicate the effects of the users' manipulation. Mobile UI design constraints include limited attention and form factors, such as a mobile device's screen size for a user's hand(s). Mobile UI contexts signal cues from user activity, such as location and scheduling that can be shown from user interactions within a mobile app. Overall, mobile UI design's goal is mainly for an understandable, user-friendly interface. The UI of mobile apps should: consider users' limited attention, minimize keystrokes, and be task-oriented with a minimum set of functions. This functionality is supported by mobile enterprise application platforms or integrated development environments (IDEs).

Mobile UIs, or front-ends, rely on mobile back-ends to support access to enterprise systems. The mobile back-end facilitates data routing, security, authentication, authorization, working off-line, and service orchestration. This functionality is supported by a mix of middleware components including mobile app server, mobile backend as a service (MBaaS), and service-oriented architecture (SOA) infrastructure.

The Platform

The platform organizations needed to develop, deploy and manage mobile apps are made from many components and tools which allow a developer to write, test and deploy applications into the target platform environment.

Front-end development tools

Front-end development tools are focused on the user interface and user experience (UI-UX) and provide the following abilities:

- UI design tools
- SDKs to access device features
- Cross-platform accommodations/support

Back-end servers

Back-end tools pick up where the front-end tools leave off, and provide a set of reusable services that are centrally managed and controlled and provide the following abilities:

- Integration with back-end systems
- User authentication-authorization
- Data services
- Reusable business logic

Security add-on layers

With bring your own device (BYOD) becoming the norm within more enterprises, IT departments often need stop-gap, tactical solutions that layer atop existing apps, phones, and platform component. Features include

- App wrapping for security
- Data encryption
- Client actions
- Reporting and statistics

System software

A criterion for selecting a development platform usually contains the target mobile platforms, existing infrastructure and development skills. When targeting more than one platform with cross-platform development it is also important to consider the impact of the tool on the user experience. Performance is another important criterion, as research on mobile apps indicates a strong correlation between application performance and user satisfaction. Along with performance and other criteria, the availability of the technology and the project's requirement may drive the development between native and cross-platform environments. To aid the choice between native and cross-platform environments, some guidelines and benchmarks have been published. Typically, cross-platform environments are reusable across multiple platforms, leveraging a native container while using HTML, CSS, and JavaScript for the user interface. In contrast, native environments are targeted at one platform for each of those environments. For example, Android development occurs in the Eclipse IDE using Android Developer Tools (ADT) plugins, Apple iOS development occurs using Xcode IDE with Objective-C and/or Swift, Windows and BlackBerry each have their own development environments.

Mobile app testing

Mobile application are first tested within the development environment using emulators and later subjected to field testing. Emulators provide an inexpensive way to test applications on mobile phones to which developers may not have physical access. The following are examples of tools used for testing application across the most popular mobile operating systems.

- **Google Android Emulator** - an Android emulator that is patched to run on a Windows PC as a standalone app, without having to download and install the complete and complex Android SDK. It can be installed and Android compatible apps can be tested on it.
- **The official Android SDK Emulator** - a mobile device emulator which mimics all of the hardware and software features of a typical mobile device (without the calls).
- **MobiOne Developer** - a mobile Web integrated development environment (IDE) for Windows that helps developers to code, test, debug, package and deploy mobile Web applications to devices such as iPhone, BlackBerry, Android, and the Palm Pre. MobiOne Developer was officially declared End of Life by the end of 2014.
- **TestiPhone** - a web browser-based simulator for quickly testing iPhone web applications. This tool has been tested and works using Internet Explorer 7, Firefox 2 and Safari 3.
- **iPhoney** - gives a pixel-accurate web browsing environment and it is powered by Safari. It can be used while developing web sites for the iPhone. It is not an iPhone simulator but instead is designed for web

developers who want to create 320 by 480 (or 480 by 320) websites for use with iPhone. iPhone will only run on OS X 10.4.7 or later.

- **BlackBerry Simulator** - There are a variety of official BlackBerry simulators available to emulate the functionality of actual BlackBerry products and test how the device software, screen, keyboard and trackwheel will work with application.
- **Windows UI Automation** - To test applications that use the Microsoft UI Automation technology, it requires Windows Automation API 3.0. It is pre-installed on Windows 7, Windows Server 2008 R2 and later versions of Windows. On other operating systems, you can install using Windows Update or download it from the Microsoft Web site.

App design

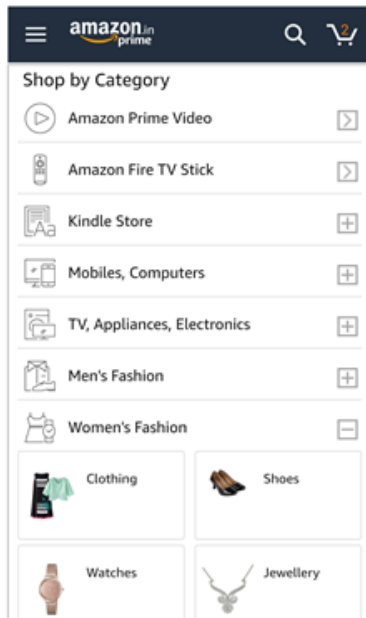
Interaction design and *User Experience Design* has been at the core of the m-commerce experience from its conception, producing apps and mobile web pages that create highly usable interactions for users. However, much debate has occurred as to the focus that should be given to the apps. In recent research, Parker and Wang demonstrated that within fashion m-Commerce apps, the degree that the app helps the user shop (increasing convenience) was the most prominent function. They also showed that shopping for others was a motivator for engaging in m-commerce apps with great preference for close integration with social media.

App commerce

The popularity of apps has given rise to the latest iteration of mobile commerce: app commerce. This refers to retail transactions that take place on a native mobile app. App commerce is said to perform better than both desktop and mobile web when it comes to browsing duration and interactions. Average order value is reportedly greater with retail apps than traditional ecommerce, and conversion rates on apps are twice that of mobile websites.

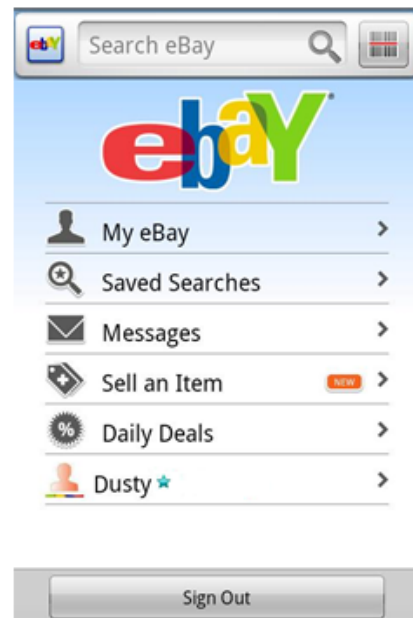
E-commerce successful APPs

Amazon



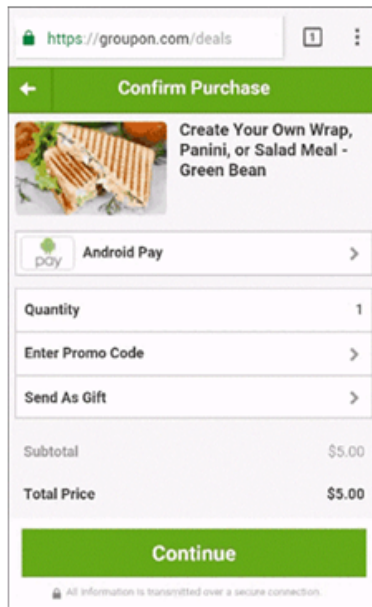
Amazon, the leading Marketplace, provides an excellent shopping experience to their users. The app is lighter and faster, and allows you to search and filter a wide range of products on various parameters with just a couple of clicks. It provides multiple payment gateways for easy checkouts and you get up-to-the-minute updates about your order status. With the localization of the app, users can also avail the offers from the nearby local businesses

eBay



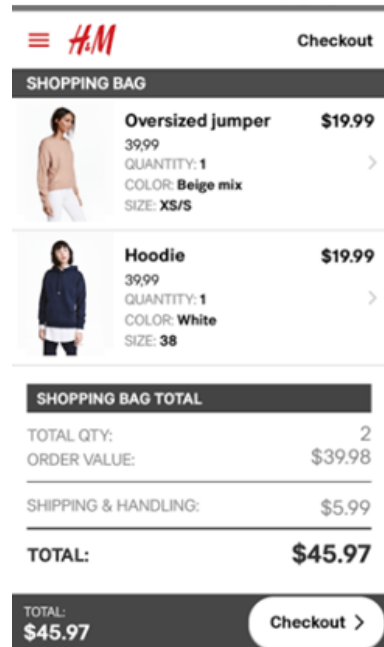
eBay mobile app has enabled the users to bid whenever they want. The search options are streamlined to enhance both the buying and selling experience. The app features include barcode scanning for price comparisons, autocomplete searches, guest checkouts, linking of PayPal accounts with eBay accounts for quicker transactions. With the eBay alerts, you get the updates about the latest auctions, or whether an auction is closing soon or if you were outbid.

Groupon



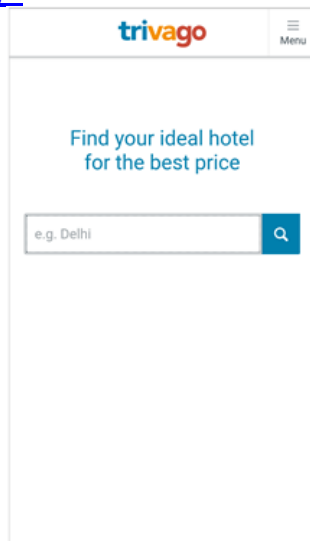
Groupon app provides 'deal of the day' recommendation services for their customers. Users are lured to avail great offers on a variety of things they need in general (such as eating out at a restaurant or shopping at a fashion store or even a tropical getaway). The app sends promo codes or savings alerts for the deals near you, that you can redeem instantly or share with your family/ friends – using the mobile device.

H&M



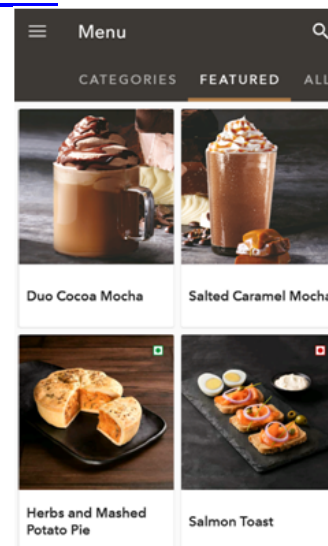
H&M – one of the world's leading fashion companies provides an incredible app for both android and iOS users. It is beautifully designed with intuitive screen graphics and book style product menu. The users can easily scan items using the barcode scanner and share them on social media or with friends. The app also allows them to get timely sales alerts, or search for physical stores near their location.

Trivago



Trivago is an online hotel searching site that displays the name, price, availability, images and the reviews of hotels in a particular place. When the users make their selection, they are redirected to the hotel portal to complete the booking. In addition to the hotel searches, the app also provides interactive maps and displays accommodation in close proximity to a user's current location.

Starbucks



Starbucks app was created primarily for payments and rewards through the mobile devices. Users can add funds into their loyalty card and use their smartphones to buy drinks at the store, tip baristas and earn loyalty points on the go. The app can also be used to download free music and games or to locate the nearby stores. Accumulating enough Gold stars can even fetch you free refills and free food.

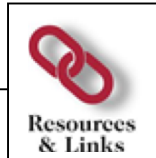
3.3. PRINCIPLES OF PAYMENT IN M-COMMERCE

Consumers can use many forms of payment in mobile commerce, including:

- Contactless payment for in-person transactions through a mobile phone (such as Apple Pay or Android Pay). In a system like EMV, these are interoperable with contactless credit and debit cards.
- Premium-rate telephone numbers, which apply charges to the consumer's long-distance bill
- Mobile-Operator Billing allows charges to be added to the consumer's mobile telephone bill, including deductions to pre-paid calling plans
- Credit cards and debit cards
 - Some providers allow credit cards to be stored in a phone's SIM card or secure element
 - Some providers are starting to use host card emulation, or HCE (e.g. Google Wallet and Softcard)
 - Some providers store credit card or debit card information in the cloud; usually in tokenized. With tokenization, payment verification, authentication, and authorization are still required, but payment card numbers don't need to be stored, entered, or transmitted from the mobile device
- Micropayment services
- Stored-value cards, often used with mobile-device application stores or music stores (e.g. iTunes)

3.4. ADDITIONAL RESOURCES

You may explore the following learning resources to enrich and upgrade your knowledge and skills



- https://en.wikipedia.org/wiki/Mobile_app_development
- https://en.wikipedia.org/wiki/Mobile_application_testing
- <https://developer.android.com/studio/run/emulator.html?hl=es-419>
- <https://www.amazon.es/>

3.5. REVIEW EXERCISE



To ensure that you have mastered the concepts presented in this lesson, you may attempt the following review exercise. Read the instructions carefully before you answer

- List four forms of payment in mobile commerce
 1. _____
 2. _____
 3. _____
 4. _____
- Difference between App Design and App Commerce
- What are the principles of application development?

3.6. LEARNING ACTIVITIES AND TASK



Task 1. Students will browse in the Internet two successful e-commerce mobile applications cases.

LESSON 4

INTRODUCTION TO SOME COMMON ONLINE PLATFORMS OFFERING E-COMMERCE SOLUTIONS

After completing this lesson, you should be able to:

- Identify the main e-commerce online platforms
- Understand what to take into consideration to select an e-commerce platform
- Know the benefits of each e-commerce platform
- Understand how to develop a simple e-commerce solution for his/her business

4.1. INTRODUCTION TO SOME COMMON ONLINE PLATFORMS OFFERING E-COMMERCE SOLUTIONS



Concepts

An ecommerce platform is a software application that allows online businesses to manage their website, sales and operations.

Ecommerce platforms offer the powerful features needed to run a business, while also integrating with common business tools — enabling businesses to centralize their operations and run their business their way.

Why use an ecommerce platform?

Whether you're expanding a brick-and-mortar store, looking to switch solutions, or even starting a business from scratch, your choice of ecommerce platform has a huge impact on the profitability and stability of your business.

The only real alternatives to using an ecommerce platform are

- **Building one from scratch**, which is out of the question for most businesses — and only justifiable for multimillion (or multibillion) dollar companies.
- **Using a plugin**, which isn't an option if you're looking to build and grow a legitimate business – even a small one.

What options are there?

There are many ways to classify or break down the different types of ecommerce platforms, but let's start with two easy distinctions:

- **Self-hosted ecommerce platforms** require online store owners to find hosting, deal with installations, and oftentimes perform updates to the software. Running an ecommerce website using self-hosted ecommerce requires developers to maintain and update the website, which can get quite costly.
- **Hosted, or SaaS, ecommerce platforms** remove much of the complexity from running an online business because instead of managing the software yourself, you essentially "rent" it.

How will it benefit my business?

In addition to scalability and protection of your data safely, ecommerce platforms, whether hosted on premise or in the cloud, offer a handful of operational benefits and business tools. These include:

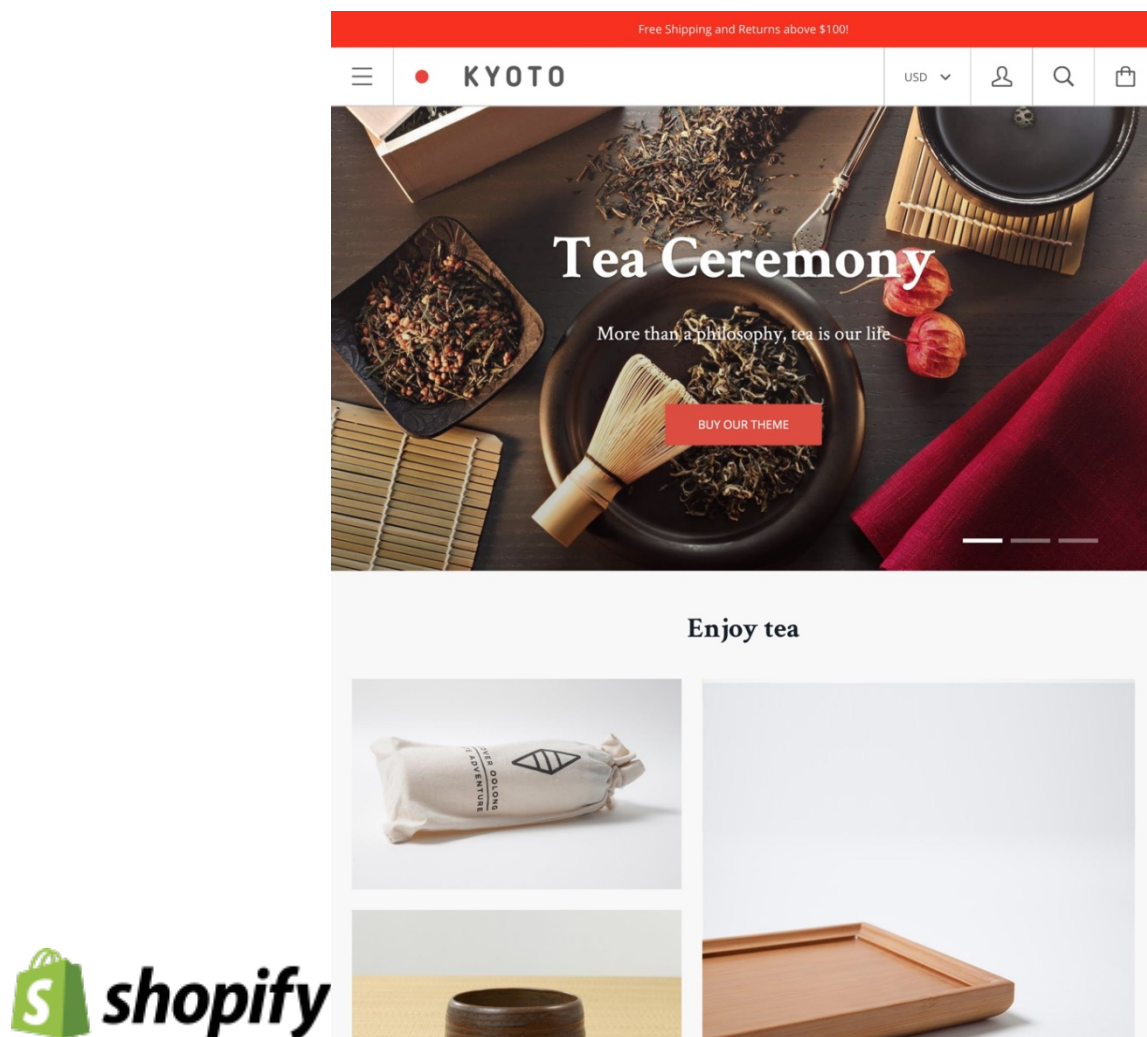
- A product management suite
- Merchandising
- Pricing
- Promotions
- Search capabilities
- The ability to personalize sales and services to your liking

Ecommerce platforms offer businesses the ability to customize product information and how it's solicited to best fit their own online retail needs, which can be a mutual benefit for both the business and its customers.

E-Commerce Platforms

Due to increasing competition and the growing demands of customers for ultra-convenience, ecommerce companies continue to innovate and deliver increasingly powerful features of their platforms.

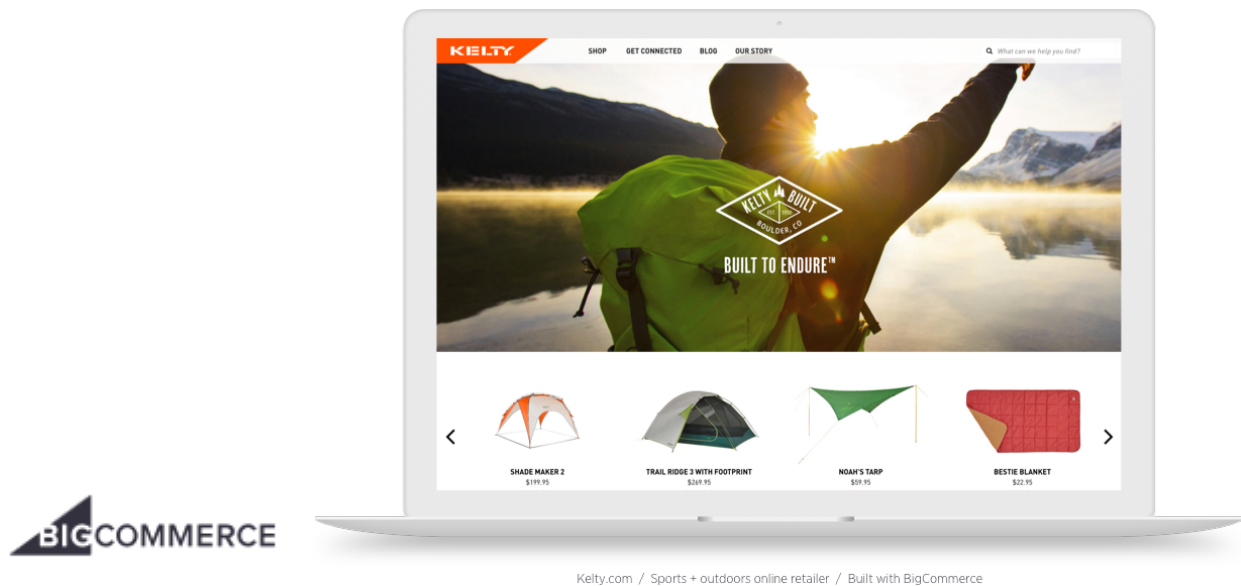
SHOPIFY



Shopify is both a Canadian e-commerce company headquartered in Ottawa, Ontario and the name of its computer software platform for online stores and retail point-of-sale systems.

The Shopify Company was founded in 2004, and its software platform was initially based on earlier software written by its founders for their online snowboard store. The company reports that it has more than 500,000 merchants using its platform, with total gross merchandise volume exceeding \$40 billion.

BIG COMMERCE



Big Commerce is a privately held technology company that develops e-commerce software for businesses. The company was founded in 2009 and has 370 employees with headquarters in Austin, Texas and additional offices in San Francisco, California and Sydney, Australia.

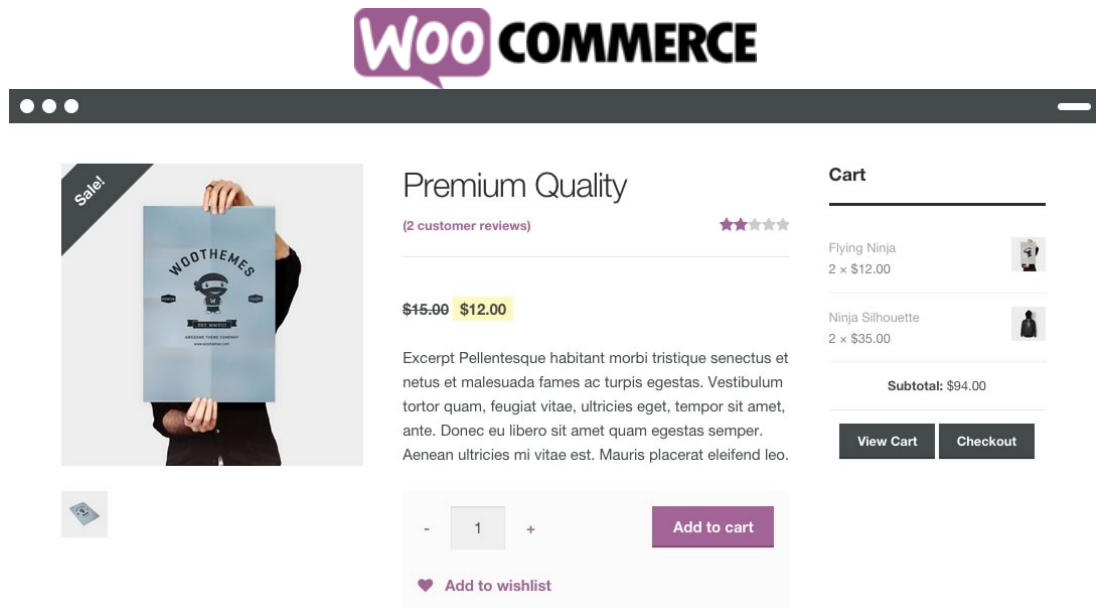
The company reports that \$8 billion in total sales have been processed by the BigCommerce platform.

MAGENTO

The screenshot displays a Magento e-commerce website theme. At the top, the Magento logo is centered, with the text "ELECTRONICS ONLINE" and "COMPUTERS AND ACCESSORIES" to its left. To the right of the logo, there are links for "FAST SHIPPING", "SECURE SHOPPING", and "CALL CENTER". A welcome message "Welcome, John Doe!" is on the far right. Below the header, a navigation bar contains categories: "COMPUTERS", "NOTEBOOKS & NETBOOKS", "DISPLAYS", "AUDIO & SPEAKERS", "NETWORKING", "ACCESSORIES", and "SOFTWARE". A search bar is located below the navigation bar. The main content area is divided into several sections: "My Account" (with links to Account Dashboard, Account Information, Address Book, My Orders, Billing Agreements, Recurring Profiles, My Product Reviews, My Tags, My Wishlist, My Applications, Newsletter Subscriptions, and My Downloadable Products), "My Wishlist" (showing a list of products with details and prices), "My Cart" (showing a single item in the cart with a subtotal of \$249.00), and "Compare Products" (showing no items to compare). The footer contains a newsletter sign-up form, social media links, and a grid of links for "CUSTOMER SERVICE", "ABOUT US", "NEW PRODUCTS", "POPULAR", and "MY ACCOUNT".

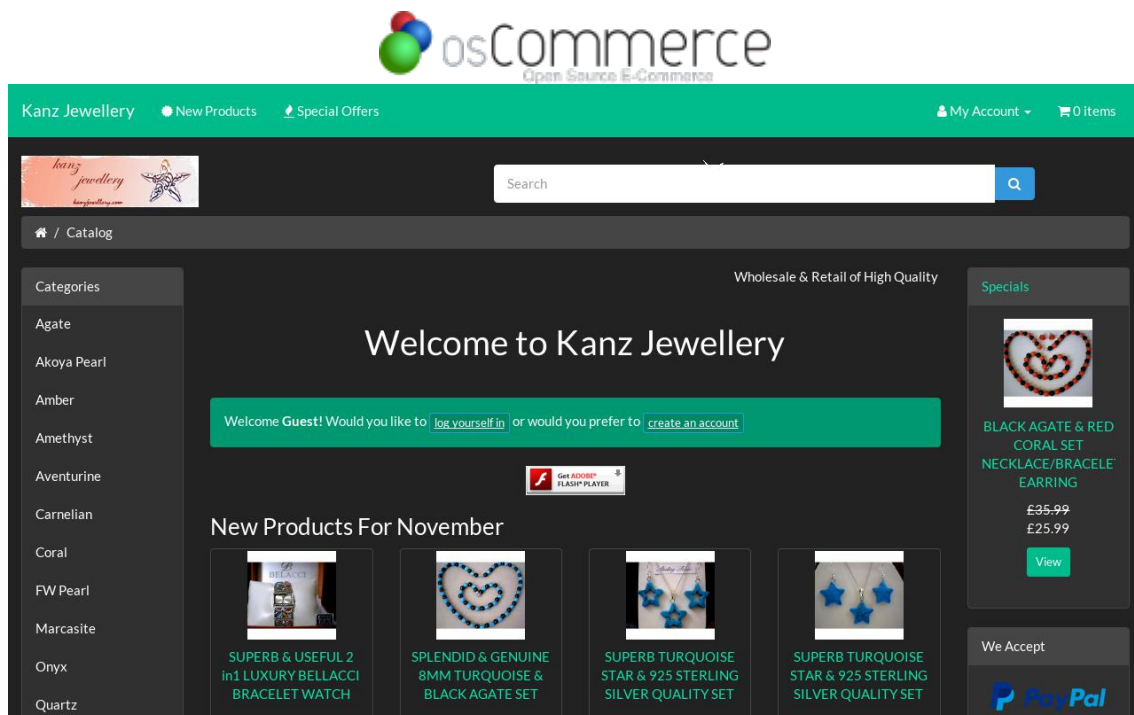
Magento is an open-source e-commerce platform written in PHP. The software was originally developed by Varien, Inc, a US private company headquartered in Culver City, California, with assistance from volunteers. Varien published the first general-availability release of the software on March 31, 2008. Roy Rubin, former CEO of Varien, later sold a substantial share of the company to eBay, which eventually completely acquired and then spun off the company.

WOOCOMMERCE



WooCommerce is an open source e-commerce plugin for WordPress. It is designed for small to large-sized online merchants using WordPress. Launched on September 27, 2011, the plugin quickly became popular for its simplicity to install and customize and free base product.

OSCOMMERCE



OsCommerce (styled "osCommerce" - "open source Commerce") is an e-commerce and online store-management software program. It can be used on any web server that has

PHP and MySQL installed. It is available as free software under the GNU General Public License.

YOKART



With its feature richness and smart pricing models, YoKart is built with a specific focus on helping startups build ecommerce ecosystem easily. Think of it as the one-stop solution for launching multi-vendor stores like eBay and Etsy. Although many other ecommerce platforms also provide their multi-vendor version, YoKart does this seamlessly.

BIG CARTEL



With the slogan 'We believe in the artist', Big Cartel targets artists & other small-scale home-based businesses run by individuals. The platform claims to have helped over a million artists in selling their creations online since it launched in 2005. This extremely simple to use hosted system is often regarded as the best ticket for artists and other creative people to enter the ecommerce arena.

4.2. ADDITIONAL RESOURCES

You may explore the following learning resources to enrich and upgrade your knowledge and skills



• https://www.youtube.com/watch?v=lakKkA_DWdQ VIDEO

• <http://wholesaled.com/go/shopify>). FREE 14 DAY SHOPIFY TRIAL

4.3. REVIEW EXERCISE.



To ensure that you have mastered the concepts presented in this lesson, you may attempt the following review exercise. Read the instructions carefully before you answer

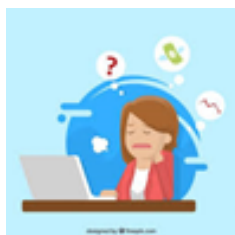
- Name one characteristic of the following platforms:

BIG CARTEL
OS COMMERCE
MAGENTO

- Define the following concepts:

1. Self-hosted ecommerce platforms
2. Hosted, or SaaS, ecommerce platforms

4.4. LEARNING ACTIVITIES AND TASK



Task 1. Students will browse in the internet two successful e-commerce platforms in their country

Task 2. Students have to think about the most suitable platform according their business idea, then; they have to complete a table with strengths and weakness of the selected platform.

Selected Platform :	
STRENGTHS	WEAKNESS

Finally, they have to explain in class the platform you have chosen and receive feedback from your mates

Task 3. Students have to try to create the main structure of an ecommerce site using a template provided in the FREE 14 day Shopify trial.

<http://wholesaled.com/go/shopify>)

LESSON 5

PAYMENT METHODS

After completing this lesson, you should be able to:

- Understand the main payment methods for e-commerce
- Understand how to create an e-commerce secure international platform

5.1. PAYMENT METHODS



Concepts

An **e-commerce payment system** facilitates the acceptance of electronic payment for online transactions. Also known as a sample of Electronic Data Interchange (EDI), e-commerce payment systems have become increasingly popular due to the widespread use of the internet-based shopping and banking.

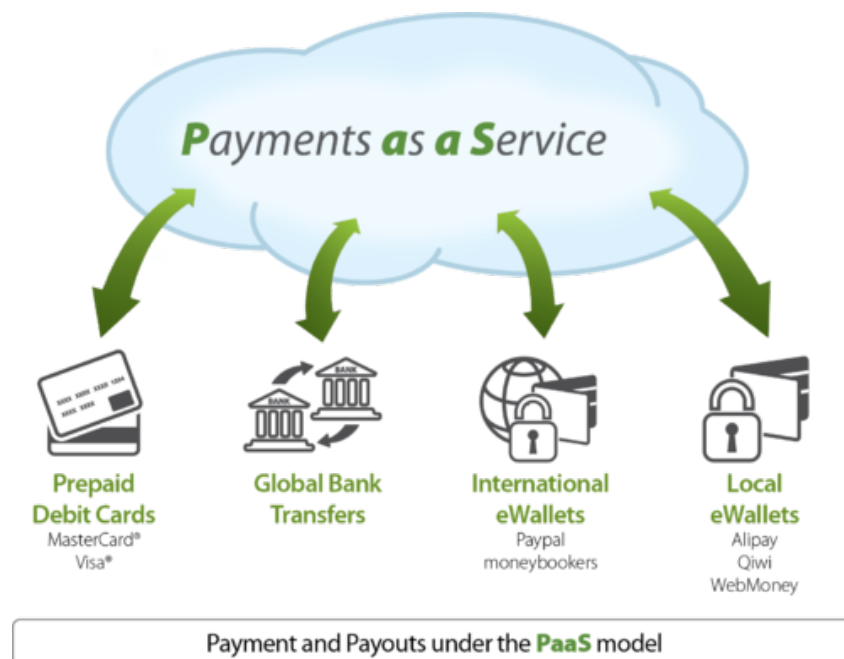


Image: Wikipedia

5.2. BANK TRANSFERS AND INTERNET BANKS

This is a system that does not involve any sort of physical card. It is used by customers who have accounts enabled with Internet banking. Instead of entering card details on the purchaser's site, in this system the payment gateway allows one to specify which bank they wish to pay from. Then the user is redirected to the bank's website, where one can authenticate oneself and then approve the payment. Typically there will also be some form of two-factor authentication. Some services, like Trustly, let merchants embed its iframe on their website so consumers can pay without being redirected away from the original site.

5.3. PAYMENT BY CREDIT CARDS

Over the years, credit cards have become one of the most common forms of payment for e-commerce transactions. It would be difficult for an online retailer to operate without supporting credit and debit cards due to their widespread use. Increased security measures include use of the card verification number (CVN) which detects fraud by comparing the verification number printed on the signature strip on the back of the card with the information on file with the cardholder's issuing bank.

Also online merchants have to comply with stringent rules stipulated by the credit and debit card issuers (Visa and MasterCard) this means that merchants must have security protocol and procedures in place to ensure transactions are more secure. This can also include having a certificate from an authorized certification authority (CA) who provides PKI (Public-Key infrastructure) for securing credit and debit card transactions.

5.4. PAYMENT BY SMS

SMS/USSD-based transactional payments

Premium SMS / Premium MMS

In the predominant model for SMS payments, the consumer sends a payment request via an SMS text message or an USSD to a short code and a premium charge is applied to their phone bill or their online wallet. The merchant involved is informed of the payment success and can then release the paid for goods.

Since a trusted physical delivery address has typically not been given, these goods are most frequently digital with the merchant replying using a Multimedia Messaging Service to deliver the purchased music, ringtones, wallpapers etc.

A Multimedia Messaging Service can also deliver barcodes which can then be scanned for confirmation of payment by a merchant. This is used as an electronic ticket for access to cinemas and events or to collect hard goods.

Transactional payments by SMS have been popular in Asia and Europe and are now accompanied by other mobile payment methods such as mobile web payments (WAP), mobile payment client (Java ME, Android...) and Direct Mobile Billing.

Inhibiting factors of Premium SMS include:

- Poor reliability – transactional premium SMS payments can easily fail as messages get lost.
- Slow speed – sending messages can be slow and it can take hours for a merchant to get receipt of payment. Consumers do not want to be kept waiting more than a few seconds.
- Security – The SMS/USSD encryption ends in the radio interface, and then the message is a plaintext.
- High cost – There are many high costs associated with this method of payment. The cost of setting up short codes and paying for the delivery of media via a Multimedia Messaging Service and the resulting customer support costs to account for the number of messages that get lost or are delayed.
- Low payout rates – operators also see high costs in running and supporting transactional payments which results in payout rates to the merchant being as low as 30%. Usually around 50%
- Low follow-on sales – once the payment message has been sent and the goods received there is little else the consumer can do. It is difficult for them to remember where something was purchased or how to buy it again. This also makes it difficult to tell a friend.

Some mobile payment services accept "premium SMS payments." Here is the typical end user payment process:

- User sends SMS with keyword and unique number to a premium short code.
- User receives a PIN (User billed via the short code on receipt of the PIN)
- User uses PIN to access content or services.

Remote Payment by SMS and Credit Card Tokenization

Even as the volume of Premium SMS transactions have flattened, many cloud-based payment systems continue to use SMS for presentment, authorization, and authentication,[18] while the payment itself is processed through existing payment networks such as credit and debit card networks. These solutions combine the ubiquity of the SMS channel, with the security and reliability of existing payment infrastructure. Since SMS lacks end-to-end encryption, such solutions employ higher-level security strategies known as 'tokenization' and 'target removal' whereby payment occurs without transmitting any sensitive account details, username, password, or PIN.

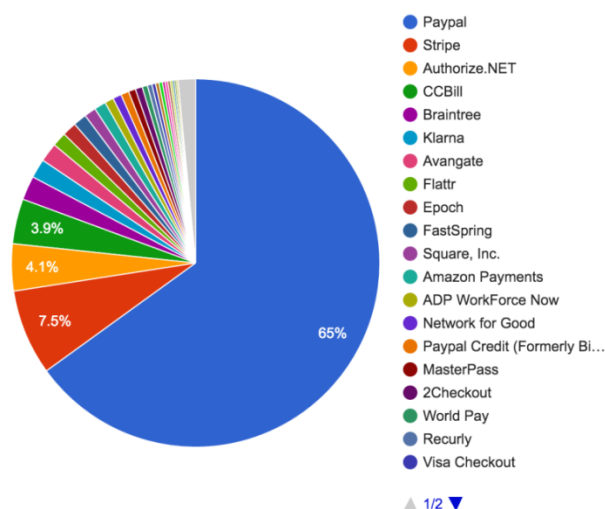
To date, point-of-sales mobile payment solutions have not relied on SMS-based authentication as a payment mechanism, but remote payments such as bill payments, seat upgrades on flights, and membership or subscription renewals are commonplace.

In comparison to premium short code programs which often exist in isolation, relationship marketing and payment systems are often integrated with CRM, ERP, marketing-automation platforms, and reservation systems. Many of the problems inherent with premium SMS have been addressed by solution providers. Remembering keywords is not

required since sessions are initiated by the enterprise to establish a transaction specific context. Reply messages are linked to the proper session and authenticated either synchronously through a very short expiry period (every reply is assumed to be to the last message sent) or by tracking session according to varying reply addresses and/or reply options.

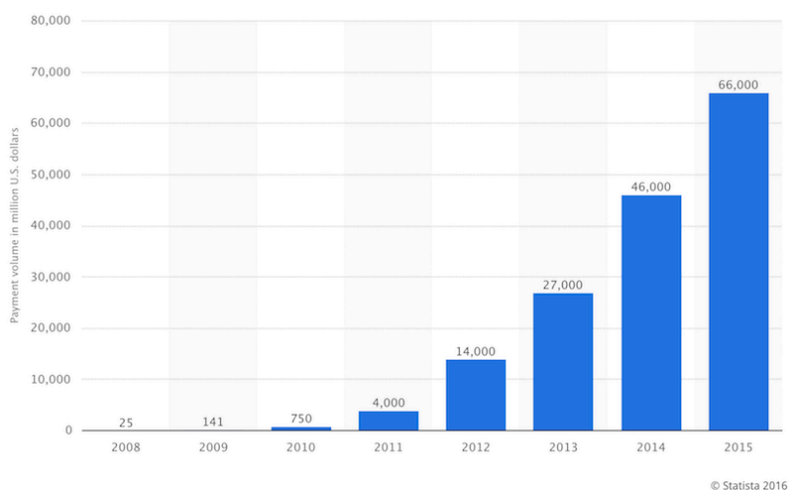
5.5. PAYPAL

Is the vastly dominant online payment technology. PayPal is a global e-commerce business allowing payments and money transfers to be made through the Internet. Online money transfers serve as electronic alternatives to paying with traditional paper methods, such as cheques and money orders. It is subject to the US economic sanction list and other rules and interventions required by US laws or government.



PayPal is an acquirer, a performing payment processing for online vendors, auction sites, and other commercial users, for which it charges a fee. It may also charge a fee for receiving money, proportional to the amount received. The fees depend on the currency used, the payment option used, the country of the sender, the country of the recipient, the amount sent and the recipient's account type. In addition, eBay purchases made by credit card through PayPal may incur extra fees if the buyer and seller use different currencies. On October 3, 2002, PayPal became a wholly owned subsidiary of eBay. Its corporate headquarters are in San Jose, California, United States at eBay's North First Street satellite office campus. The company also has significant operations in Omaha, Scottsdale, Charlotte and Austin in the United States; Chennai in India; Dublin in Ireland; Berlin in Germany; and Tel Aviv in Israel. From July 2007, PayPal has operated across the European Union as a Luxembourg-based bank.

PayPal's annual mobile payment volume rose to \$66 billion from 2008 to 2015 (in million U.S. dollars):



Statista 2017

5.6. ENSURING SECURE PAYMENTS

Increased security measures include use of the card verification number (CVN) which detects fraud by comparing the verification number printed on the signature strip on the back of the card with the information on file with the cardholder's issuing bank. Also online merchants have to comply with stringent rules stipulated by the credit and debit card issuers (Visa and MasterCard) this means that merchants must have security protocol and procedures in place to ensure transactions are more secure. This can also include having a certificate from an authorized certification authority (CA) who provides PKI (Public-Key infrastructure) for securing credit and debit card transactions.

Methods of online payment

Credit cards constitute a popular method of online payment but can be expensive for the merchant to accept because of transaction fees primarily. Debit cards constitute an excellent alternative with similar security but usually much cheaper charges. Besides card-based payments, alternative payment methods have emerged and sometimes even claimed market leadership. Wallets like PayPal and Alipay are playing major roles in the ecosystem. Bitcoin payment processors are a cheaper alternative for accepting payments online which also offer better protection from fraud.

Security payments

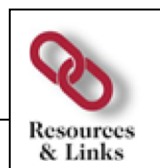
Some fundamental security measures for the proper functioning of any electronic commerce that wants to have secure payments over the Internet:

- Digital Signature
- Payment Card Industry (PCI) Compliance
- Secure Hypertext Transfer Protocol (S-HTTP)

- The Encryption Approach
- Secure Socket Layer (SSL)
- Secure Electronic Transaction (SET)
- Safe Login Screen

5.7. ADDITIONAL RESOURCES

You may explore the following learning resources to enrich and upgrade your knowledge and skills



- <https://www.paypal.com/>
- https://en.wikipedia.org/wiki/E-commerce_payment_system

5.8. REVIEW EXERCISE



To ensure that you have mastered the concepts presented in this lesson, you may attempt the following review exercise. Read the instructions carefully before you answer

- What are the main advantages of Paypal?
- Explain: Payment by credit cards and payment by SMS

LESSON 6

LEGAL REGULATION OF E-COMMERCE AND CONSUMER RIGHTS

After completing this lesson, you should be able to:

- Understand the legal regulation of e-commerce
- Learn more about national and international taxes
- Understand the consumer rights to return goods

6.1. LEGAL REGULATION OF E-COMMERCE AND CONSUMERS RIGHTS



Concepts

What is E-Commerce Law?

E-commerce uses a combination of Internet technology, mobile commerce, electronic funds transfers, escrowing services, electronic data interchange, supply chain management, inventory management systems, Internet marketing, data collection systems, and many other technologies and innovative business systems. Most, if not all, e-commerce transactions use the Internet for at least one point of the transaction.

E-Tailing

While e-commerce can take on many forms, one of the most common practices related to electronic commerce is the practice of "e-tailing." Also known as "virtual storefronts," this is the practice of listing products for sale in a catalog format on a website. Some e-tail sites (perhaps most notably Amazon.com) take this a step further and aggregate numerous smaller stores into a unified system like a "virtual mall."

Other Forms of E-Commerce

Other examples of e-commerce include subscription sites, mobile application sales, electronic book purchases, online auctions, and the procurement of various services via the web.

For more information on e-commerce, please review the materials below. Additionally, should you require legal assistance; you can visit our Law Firms page for a list of attorneys in your area.

Consumers Rights

As from June 13th 2014, the EU has **new, strengthened and harmonized Consumer protection rules.**

[The new Consumer Rights directive](#) applies the same way in all EU countries which means that consumer can always be sure which rules apply when cross-border purchases are made.


In the same way, traders and businesses in EU countries also know what they have to provide in terms of consumer rights.

What does the new directive bring in practice?

- It bans so called **hidden charges** and other cost traps on internet offers.
- Traders will have to offer consumers full transparency as to the **total cost** of a product or service they offer.

- **Pre-ticked boxes** on Internet pages are banned, adding transparency and full information to consumers.
- Consumers now enjoy a Europe-wide **right of withdrawal within 14 days**, doubling the previously foreseen 7 days. If a consumer is **not clearly informed** about this withdrawal period by the trader, the withdrawal period automatically is extended to one year.
- If a contract is cancelled by the consumer for any reason, a **full refund** shall be made within 14 days, including costs of delivery. To simplify for consumers, a special voluntary form for cancellations has been developed.
- **Extra charges** for payments with **credit cards** and increased fees for so called **hot-lines** provided by traders are banned.

The directives foresees also further rights for consumers and obligations for traders. To know the details about the European Directive you can access to the following links:

- [Directive](#)
- [Fact sheet](#) 

6.2. NATIONAL AND INTERNATIONAL TAXES

International taxes:

It's easier than ever for businesses to go global. International shipping infrastructure has expanded dramatically, while global-ready e-commerce platforms ease the pains of digital expansion.

One roadblock still trips up many growing businesses, both small and large: international tax compliance.

For U.S. companies, transactional tax in other countries can be a shock to the system. These businesses are used to sales and use tax regulations in the United States, but almost every other nation in the world uses a system of Value Added Tax, or VAT.

How is VAT different? Instead of only the end user paying tax, VAT requires tax payments to be remitted at every stage of the supply chain: wholesalers, manufacturers, and retailers are not exempt. Businesses also are entitled to seek refunds of the portion of VAT already contributed at another level of the supply chain.

Different nations have different VAT rates and rules, so the difficulty of maintaining compliance increases with each new country you ship to.

Once you understand VAT, you're one step closer to filling in the international tax compliance picture — but VAT is not the only tax charged to international sellers. Import duties and tariffs add an additional layer of complexity to figuring out the total cost of shipping a product from one country to another.

If your product catalog is diverse, rate determination gets trickier: each product needs to be assigned a different tariff code classification. Classification categories are very specific and even products as similar as rubber-soled flip-flops and leather-soled flip-flops can have different total import taxes and duties.

The process of determining and calculating these categories is time-consuming and requires international trade experience and know-how. When businesses rely on manual calculation or shipping companies to determine the total landed cost of a shipment, costly mistakes often follow, leaving dissatisfied customers in their wake.

Tax rate in Europe:

The "[Taxes in Europe" database](#) is the European Commission's on-line information tool covering the main taxes in force in the EU Member States. The system contains information on around 650 taxes, as provided to the European Commission by the Ministries of Finance of the EU Member States. Access is free for all users.

The information can be found quickly and easily using the [search tool](#).

The search engine for the taxes published before 2016 is available [here](#).

What type of information is available?

The "Taxes in Europe" database contains, for each individual tax, information on its legal basis, assessment base, main exemptions, applicable rate(s), economic and statistical classification, as well as the revenue generated by it.

The database is not meant to constitute a reference for legal purposes (see also [important legal notice](#)).

What types of taxes can be found?

The "Taxes in Europe" database covers the following types of taxes:

- **All main taxes in revenue terms.** These include notably **personal income taxes, corporate income taxes, value added taxes, EU harmonized excise duties**;
- The main **social security contributions**.
- Other important taxes yielding at least 0.1% of GDP.

The database does **NOT** cover information on:

- **Customs duties and tariffs.** This type of information can be found in the customs tariff [database TARIC](#).

Links to the websites of the [national Ministries of Finance](#).

6.3. CONSUMER RIGHTS TO RETURN GOODS

Guarantees and returns

Under EU rules, a **trader must repair, replace, reduce the price or give you a refund** if goods you bought turn out to be faulty or do not look or work as advertised.

If you bought a **good or a service online or outside of a shop** (by telephone, mail order, from a door-to-door salesperson), you also have the right to cancel and return your order within 14 days, for any reason and with no justification.

Find out specific conditions to invoke guarantees and withdraw from purchases:

- **Guarantees for faulty goods**
- **Free of charge, 2-year guarantee (legal guarantee) for all goods**

Under EU rules you **always have the right to a minimum 2-year guarantee** at no cost, regardless of whether you bought your goods online, in a shop or by mail order.

This 2-year guarantee is your minimum right. National rules in your country may give you extra protection: however, any deviation from EU rules must always be in the consumer's best interest.

If goods you bought anywhere in the EU turn out to be faulty or do not look or work as advertised, the seller must **repair or replace** them **free of charge** or give you a **price reduction or a full refund**.

As a general rule, you will only be able to ask for a partial or full refund when it is not possible to repair or replace the goods.

You might not be entitled to a refund if the problem is minor, such as a scratch on a CD case.

How to get goods repaired, replaced or refunded:

The 2-year guarantee period starts as soon as you receive your goods.

- In some EU countries you must **inform the seller within 2 months of discovering a fault**; otherwise you may lose your right to the guarantee.
- Within 6 months of receiving the goods, you need to show the trader that the goods are faulty or not as advertised.
- After 6 months, in most EU countries, you need to prove that the defect already existed on receipt of the goods - for example, by showing that it is due to the poor quality of the materials used.

The **trader always has to provide a solution**. In some EU countries you also have the right to request a remedy from the producer.

The [European Consumer Centre](#) in your country can help if you have a problem with goods you bought in or from another EU country.

Additional guarantees (commercial guarantees, warranties):

Shops or producers will often offer you an **additional commercial guarantee** (also referred to as a **warranty**), either included in the price of the product or at an extra cost.

This can give you better protection but can **never replace or reduce the minimum 2-year guarantee**, which you always have under EU rules.

Similarly, if a shop sells you a new product more cheaply on a 'no guarantee' basis, this only means that you don't have any additional protection. You **always have the right to a 2-year guarantee free of charge** if the product turns out to be faulty or not as advertised.

Second-hand goods:

Second-hand goods that you buy from a trader are also covered by the minimum 2-year guarantee. However, goods bought from private individuals or at public auctions are not covered.

In some EU countries, the buyer and seller can agree to a guarantee period of less than 2 years, but it **must be no shorter than 1 year**. This should be made clear at the time of purchase.

Cancel and return your order:

14 days to cancel and return purchases made outside shops (online, by phone or mail order)

In the EU you have the right to **return these purchases within 14 days for a full refund**. You can do so **for any reason** – even if you simply changed your mind.

The **14-day "cooling off" period does not apply**, among others, to:

- Plane and train tickets, as well as concert tickets, hotel bookings, car rental reservations and catering services for specific dates
- Goods and drinks delivered to you by regular delivery – for example delivery by a milkman.
- Goods made to order or clearly personalized – such as a tailor-made suit
- Sealed audio, video or computer software, such as DVDs, which you have unsealed upon receipt.
- Online digital content, if you have already started downloading or streaming it
- Goods bought from a private individual rather than a company
- Urgent repairs and maintenance contracts – if you call a plumber to repair a leaking shower, you can't cancel the work once you have agreed on the price of the service.

If you **buy goods in a shop on the high street**, you have no EU legal right to return the goods (for exchange or refund) unless the item is faulty. However, many shops voluntarily allow customers to return or exchange goods during a certain time period. Make sure you check the returns policy of the shop where you made your purchase.

The "cooling off" period expires 14 days after the day you received your goods. For service contracts, the "cooling off" period expires 14 days after the day you concluded the contract. If the cooling off period expires on a non-working day, your deadline is extended till the next working day.

How to cancel a purchase:

You must tell the trader that you want to cancel the purchase. It is not enough to just send the goods back. The trader must provide you with a [model withdrawal form](#) which you can use to tell them about your decision, but you don't have to use it.

You can inform the trader and send back the goods at the same time, for example, by adding a written statement with the goods that you are returning by post, or by sending a fax or e-mail.

You must **send the unused goods back within 14 days** of informing the trader.

Some traders may not charge you for returning the goods. However, the trader should inform you if you have to pay the costs of returning the goods. If they don't inform you that you must pay for your return, the trader will have to pay the cost of your return. **You don't have to pay any other charges that you were not informed of.**

For bulky goods (such as large household equipment), the trader must give you at least an estimation of the cost of returning them. Bulky goods bought from a door-to-door salesperson and delivered to you immediately must always, however, be collected by the trader at their own expense.

Refunds:

The trader must give you a **refund within 14 days of receipt of your cancellation**, but they can delay refunding you if they haven't received the goods or evidence that you've returned them.

This refund must **include any shipping charges you paid** when you made your purchase. However, the trader may charge you delivery costs if you specifically requested non-standard (express) delivery.

EU legislation

- [EU Directive on certain aspects of the sale of consumer goods and associated guarantees](#)
- [EU Directive on consumer rights](#)

6.4. INFORMATION ABOUT GOODS AND SERVICES ON WEBSITE

Wherever you buy a product or service in the EU **the trader must provide you with clear, correct and understandable information** about the product or service before you make the purchase.

This **contract information** should include:

- the main **product characteristics**
- the **total price inclusive of taxes and all charges**
- **delivery costs**, (if applicable) - and any other additional charges
- arrangements for **payment, delivery or performance**
- the **trader's identity**, address and telephone number
- the **duration** of the contract (if applicable)

Some of this information may not have to be provided explicitly, if it is apparent from the context - such as the characteristics of a product which are displayed on a shelf in the shop.

Moreover, **if you buy online, by telephone, by mail order catalogue or from a door-to-door salesperson**, the following more detailed information must also be provided before you make a purchase:

- e-mail address of the trader
- any delivery restrictions in certain countries
- the right to cancel your order within 14 days
- available after-sales services
- dispute resolution mechanisms
- trade register number of the trader
- professional title and VAT details of the trader (if applicable)
- professional association to which the trader belongs (if applicable)

For such purchases, you should bear in mind that **you do not have to pay any delivery costs** or other **charges of which you were not informed**.

Prior information forms part of the contract unless you and the trader jointly agree on changes to the terms given on, for example, the trader's website.

Contracts must be written in **plain and understandable language** and cannot contain unfair contract terms.

In some EU countries, the right to receive confirmation for your order, to cancel it and other legal requirements do not apply to door-to-door purchases of less than EUR 50.

Digital content

Specific information requirements apply when you buy digital content online, e.g. when downloading or streaming music or video. Before you make the purchase, you must also be **informed how the content operates with relevant hardware/software** (interoperability) and about its functionalities, including whether any geographical restrictions apply to the use of the content and if private copies are allowed.

Buying from non-EU online traders

Your consumer rights under EU rules normally also apply to purchases from non-EU online traders targeting consumers in the EU. However, you may have difficulties in asserting your rights with traders based outside the EU.

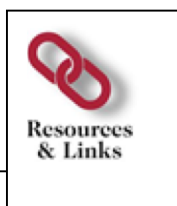
It's always good to **check where the trader is registered**. An internet address ending ".eu", ".ie", or ".co.uk", etc. does NOT guarantee that the trader is based – and registered – in the EU.

Purchase confirmation

Once you have made **a purchase online or from a door-to-door salesperson**, you must receive written confirmation of your transaction. The confirmation must be on paper or on another durable medium such as e-mail, fax or a message to your personal account on the trader's website – provided it is something you can store and which the trader cannot unilaterally change.

6.5. ADDITIONAL RESOURCES

You may explore the following learning resources to enrich and upgrade your knowledge and skills



- http://europa.eu/youreurope/citizens/consumers/shopping/index_en.htm
- <https://ec.europa.eu>

6.6. REVIEW EXERCISE



To ensure that you have mastered the concepts presented in this lesson, you may attempt the following review exercise. Read the instructions carefully before you answer.

- Explain the main idea about 'how to get goods repaired, replaced or refunded'
- Complete: "Wherever you buy a product or service in the EU **the trader must provide you with clear, correct and understandable information** about the product or service before you make the purchase."

This **contract information** should include:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

6.7. LEARNING ACTIVITIES AND TASK



Task 1. Take a look to the information provided by the European Union about the consumer rights when buying goods and services:

http://europa.eu/youreurope/citizens/consumers/shopping/index_en.htm

7. MODULE COMPLETION SECTION

Congratulations! You have reached the end of the E-commerce module.

You have learned about the key skills relating to Ecommerce, including:

- Understanding principles and types of ecommerce
- Understanding the main building elements of e-commerce website or mobile application
- Understanding the main payment methods for e-commerce
- Evaluating and selecting among existing e-commerce platforms
- Understanding the legal regulation of e-commerce
- Understanding how to develop simple e-commerce solution for his/her business

