

# An Insight to Build an E-Commerce Website with OSCommerce

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## Abstract

For many people who use computers in their day to day life to conduct their business, don't have time or spend good time to develop clear idea or to leverage the latest internet applications or technologies, to promote their products and services to generate more revenue.

We all know Dell, Amazon, eBay and many others are the most successful enterprises which have grown worldwide and conduct their billion dollar businesses successfully now-a-days.

It's my intention to analyze the critical success factors for building an ecommerce website for all business people which is easy to understand and start working on it by creating a global presence in WWW.

This paper is all about electronic commerce framework, business models, payment systems, security and promoting a web site by using popular open source OSCommerce.

**Keywords:** *E-Commerce, e-tailing, Electronic commerce, Online store, retail, e business*

## 1. Introduction

**Electronic Commerce**, too many is defined as buying and selling of products and services over the internet; however, there are many more aspects as we shall see. From its inception, electronic commerce has included the handling of purchase transactions and fund transfers over computer networks. It has grown now to include buying and selling of commodities such as electronic information. Before we define e-commerce, let us take a look at traditional commerce.

To meet the needs of the market place, businesses design, procure machineries, raw materials and manufacture new

products, market their products, distribute them and provide customer support, generating revenue for them along the way.

Customers first have to identify a need for something, whether it is a physical product, a service or information. Then they must look for information about that product or service, find places that sell it, and compare the options they have found (Prices, service, reputation, and so on) before they actually purchase the product.

Making a sale might also involve negotiating the price, quantity, terms of delivery, and may be even some legal issues. And the sales cycle does not end with the delivery of the product or service, either. Customer support adds more steps while working to the benefit of both parties – customers get what they need to keep their products performing well and suppliers learn more about their market needs. Meanwhile banks and other financial institutions handle the transfer of funds between buyers and sellers, whether they are individual consumers or large multi-national corporations.

Once we realize how many tasks and processes are involved in traditional commerce, you discard the simplistic definition of commerce as just buying and selling of products. You should also discard the equally simplistic definition of electronic commerce as merely the conducting of business transactions over electronic networks instead of paper, telephones, couriers, trucks, planes and other means of moving products and information.

Electronic commerce is a system that includes not only those transactions that center buying and selling goods and services to directly generate revenue, but also those transactions that support revenue generation, such as generating demand for those goods and services, offering sales support and customer

service, or facilitating communications between business partners.

## 1. Ecommerce Business Models

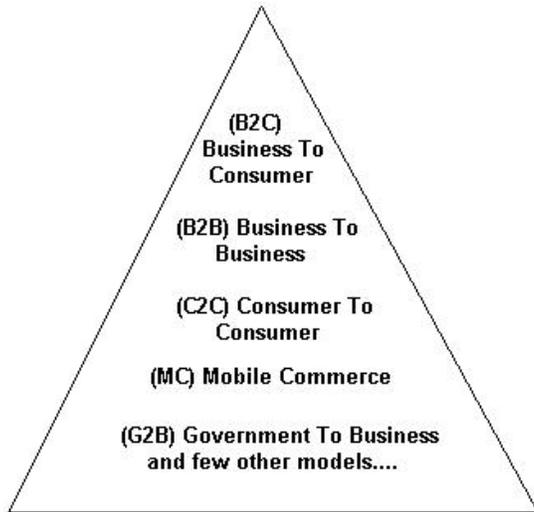


Fig. 1. E-Commerce Business Models

E-Commerce is a huge domain on conducting business over internet. When we discuss Internet enabled commercial transactions between organizations and individuals using latest web technologies as per the policies of the Organization it takes the form of e-business.

Nowadays, 'e' is gaining momentum and most of the things if not everything is getting digitally enabled. Thus, it becomes very important to clearly understand different types of commerce or business commonly called as e-Commerce.

There are mainly five types of e-commerce models:

1. Business to Consumer (B2C) – this model involves organizations as business houses and consumers and customers. This is the most common model in e-commerce. In this model, online businesses sell to individual consumers. When B2C started, it had a small share in the market but after 1995 its growth was exponential. In this business model the business house will have an e-commerce website which will list all their product categories with detailed information about their products with photographs, flash animation and comparing similar products etc., for quick decision making over the web. E.g. An online Music portal selling CD's / DVD's and streaming Audio on the web e.g. www.imusti.com

2. Business to Business (B2B) - It is the largest form of e-commerce involving business of trillions of dollars. In this form, the buyers and sellers are both business entities and do not involve an individual consumer. It is like the manufacturer

supplying goods to the retailer or wholesaler. E.g. www.indiaplaza.in is an online store, which sells popular branded products to consumer, where its supply chain network is directly linked to the Manufacturer. Hence Business to business model

3. Consumer to Consumer (C2C) – E-Bay is an excellent example for this model an auction site where a consumer can sell their antique or old used items at discounted price to others, rest of the consumers who are all interested in those items will bid for that. This auction will happen for a time period and ends; now the highest bidder will make payment and buy the product. Here e-bay plays a role of having / facilitating a platform to make consumer to consumer transactions.

4. M-Commerce – Now a day's all business executives were busy and want to do financial transaction without going physically to bank. Example: Consumer want to pay their utility payments viz., Insurance premium, Telephone bills, Income taxes etc., Transfer money to anybody in this world via mobile banking (e.g. ICICI Bank iMobile) opens up the new technology of ecommerce as Mobile commerce. Further the regular online stores were also optimizing their site user interface design in order to make consumers shop from their mobile devices viz., iPad, iPhone, Android enabled phones, and Microsoft windows mobile 6.x enabled devices.

There are other types of e-commerce business models too like Business to Employee (B2E), Government to Business (G2B) and Government to Citizen (G2C) but in essence they are similar to the above mentioned types. Moreover, it is not necessary that these models are dedicatedly followed in all the online business types. It may be the case that a business is using all the models or only one of them or some of them as per its needs.

Let us take a look at how the traditional business entity is formed i.e. a Basic guideline for Business Plan

## 2. Traditional Business entities Business Plan

Let us take a look at how the traditional business entity Business Plan is formulated

A business plan is a report by which an entrepreneur conveys his unique product and service ideas by which a business entity is started, breaks even financially grows periodically and ultimately as an enterprise. This is endless.....

**Business Plan Outline:** A brief 100 words introduction about the business and its plans

**Table of Contents:** Complete business plan TOC

**Executive Summary:** A positive note / key note by management team to attract investors or creditors

**Management Team:** Profile listing of all Partners / Directors, their past employment history or business experience and highlighting the relevant experience to the new business plan.

1. The Business

- A. Description of the Business
- B. Product or Service
- C. Business Location
- D. Operating Procedures
- E. Personnel Policy
- F. Market Analysis
- G. Competitors
- H. The Marketing Plan

2. Financial Statements

- A. Start-Up Expenses
- B. Operating Expenses
- C. Income Projections
- D. Cash Flow Projections
- E. Balance Sheet

3. Supporting Documents

- A. Market Studies
- B. Tax Returns
- C. Personal Financial Statement
- D. Franchise Documents
- E. Building Lease or Purchase Agreement
- F. Licenses and Permits
- G. Letters of Intent
- H. Other Legal Documents

With the above business plan, the entrepreneur starts his venture with confidence and March towards his plans and targets. When having a vision about plans, one can approach investors or bankers for generating funds required and start the business.

### 3. E-Commerce business Plan

Now we know how a traditional business plan is created and used, similarly it's very significant to create a business plan for e-commerce web site initiative. The organization which has a plan will know how to make their ecommerce initiative into a successful model.

- A Business Plan:

Is the product or services we are going to sell is rare and unique? if we have a unique idea and lead the business it will be an ultimate success, or if we plan to sell the products which are available online, we need to think twice before starting a ecommerce site based upon that.

This is what the business plan will talk about, and on how the products and services is going to be promoted in the ecommerce website i.e. a brief outline on how the website will be designed, how the products and services will be listed, how

the user will be navigating around the site to find information and to order / pay for products and services.

The plan will also have the revenue generation, payment gateways, shipping and after sales support / service.

- Good Domain Name:

Is a name easy to remember i.e. a keyword in the domain name, short; easy to type in browser address, without any special characters and always first choice is .com as all browsers default to .com

When we try to register our domain, usually all organizations want to have their organization name for their website and not a product name, this may be ok for an enterprise. For a startup ecommerce site it's always suggested to have a keyword in the website name to have better search results e.g. a coffee plantation company can take domain name as [www.coffeetoday.com](http://www.coffeetoday.com)

- Reliable Web Host Server:

Once we are ready for the starting our e-commerce website business, upon deciding the software solution provider, finalize the E-Commerce software that we are going to use, we need to finalize a **web host**.

Once we decide and when the site is up, we start generating revenue and attract more visitors at this point of time, if you are stuck up because of web host server. You will have a great problem in your business. So it's wise and critical to evaluate the below parameters to select your web host

There are different web host models available in the industry

**Our Own Web Host:** This option is for big companies who are having good IT infrastructure and very good communication back bone. For this model the Hardware and software cost will be high and will be invested by the company itself. By having a static IP for the server, a Network admin can very well make a server as a web server with required security and fulfill all requirements.

**Co-Location Servers:** Are placed in a third party data center where it's equipped with all necessary advanced infrastructure for communications, security and Fault tolerance etc.,

**Dedicated Hosting:** is a server dedicated to a company in which, the company may host one or more websites or sub domain websites e.g. <http://career.wbcsoftwarelab.com>

**Wikipedia Definition:** A dedicated hosting service, dedicated server, or managed hosting service is a type of Internet hosting in which the client leases an entire server not shared with

anyone. This is more flexible than shared hosting, as organizations have full control over the server(s), including choice of operating system, hardware, etc. Server administration can usually be provided by the hosting company as an add-on service.

In some cases a dedicated server can offer less overhead and a larger return on investment. Dedicated servers are most often housed in data centers, similar to co-location facilities, providing redundant power sources and HVAC systems. In contrast to co-location, the server hardware is owned by the provider and in some cases they will provide support for your operating system or applications.

**Share Hosting:** A single web server with a Unique IP address will be used by all the websites i.e. a single server they will have more than one website hosted. All resources will be used by all the websites.

Further as per Wikipedia definition: A shared web hosting service or virtual hosting service or derive host refers to a web hosting service where many websites reside on one web server connected to the Internet. Each site "sits" on its own partition, or section/place on the server, to keep it separate from other sites. This is generally the most economical option for hosting, as many people share the overall cost of server maintenance.

Based on the above options, an organization based on its business scope and budget can choose appropriate hosting server. Upon choosing a hosting server below are the basic guidelines to engage with in their services.

**Operating system:** Linux / Windows

**Uptime of a web server:** almost all web host servers claim 99% uptime, and announce server maintenance well in advance, if for any mess-up they also offer additional freebies for the same.

**Bandwidth:** How much data can in / out flow from the web host server network, how much traffic it can handle, does it has load balancing facility....

**Disk space:** How much space they will offer, what happens if we exceed the space, is there any good plans for expansion etc., normally several dedicated and share webhosting viz., from IXWEB and Host monster offers unlimited disk space.

**Open source Installation services:** Few web host service providers will be having scripts installed and made available to us via control panel by which we can install popular Content management systems, E-Commerce applications, Customer relationship management modules and many others. We can install these scripts in single click and in few minutes without any difficulties.

**Traffic Statistics:** The web hosting service provider will give us a web analytics software service to us, from which we can check how many visitors hit our site, which page they have visited, from which browser they viewed our site and many more... This information is very critical for the business development and internet marketing team to generate more visitors in order to increase online sales.

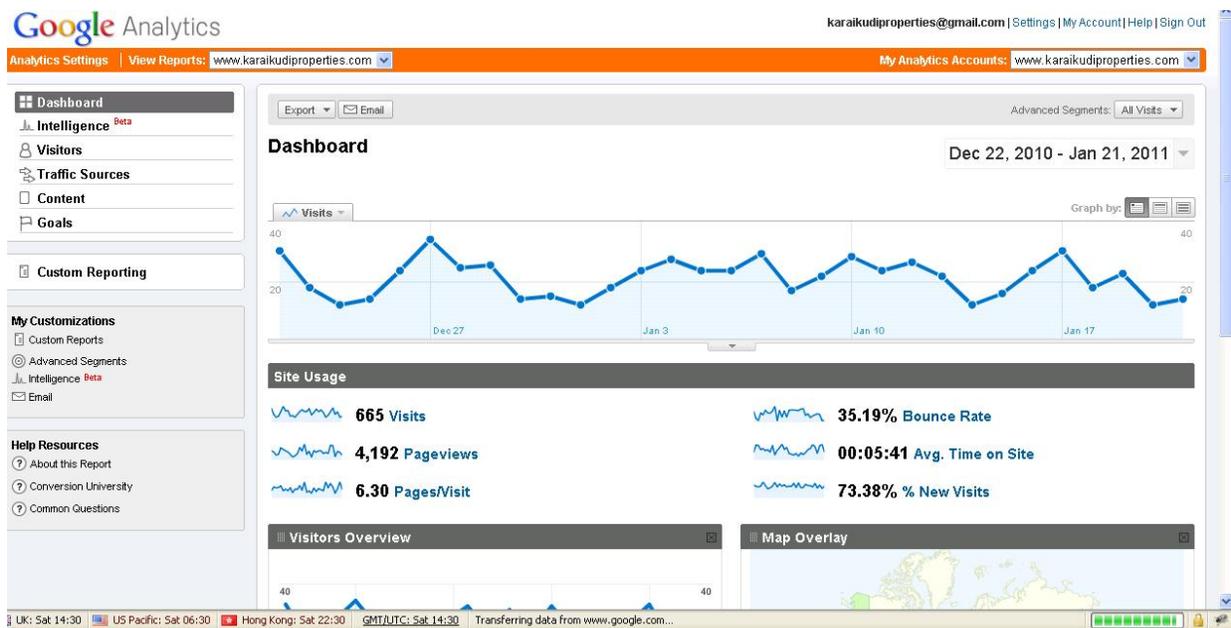


Figure 2 Google Analytics, web site traffic Analysis

**Web server Security:** We need to check and ensure how the web server we are going to host our website is secured, does it has a fire wall, what antivirus applications they are using, Are they updating security patches regularly, Are they monitoring our server 24x7 for uptime, do they have backup systems configured, do they have standard security policies being applied,

**Support Popular Databases:** The web host should give us SQL Server, MySQL, Postgres SQL and many others as choice to use.

**Customer Support:** 24x7x365 via telephone, email and online chat

**Good word of mouth:** we should research through web and known friends and service providers about the best Web

hosting companies around and check their features offered and finally decide upon it.

**Support for popular programming languages:** Should support, CGI, Perl, Python, PHP, .Net latest frameworks.

**Unlimited Email Accounts:** should allow us to create required email accounts without any restrictions or additional costs being incurred.

**Control Panel:** Whenever we book a web host, they will give us an exclusive control panel, to host our website, secure it, manage files, create email accounts, create FTP accounts to upload files, images, create databases, and to take regular backups and many more administrative tasks.

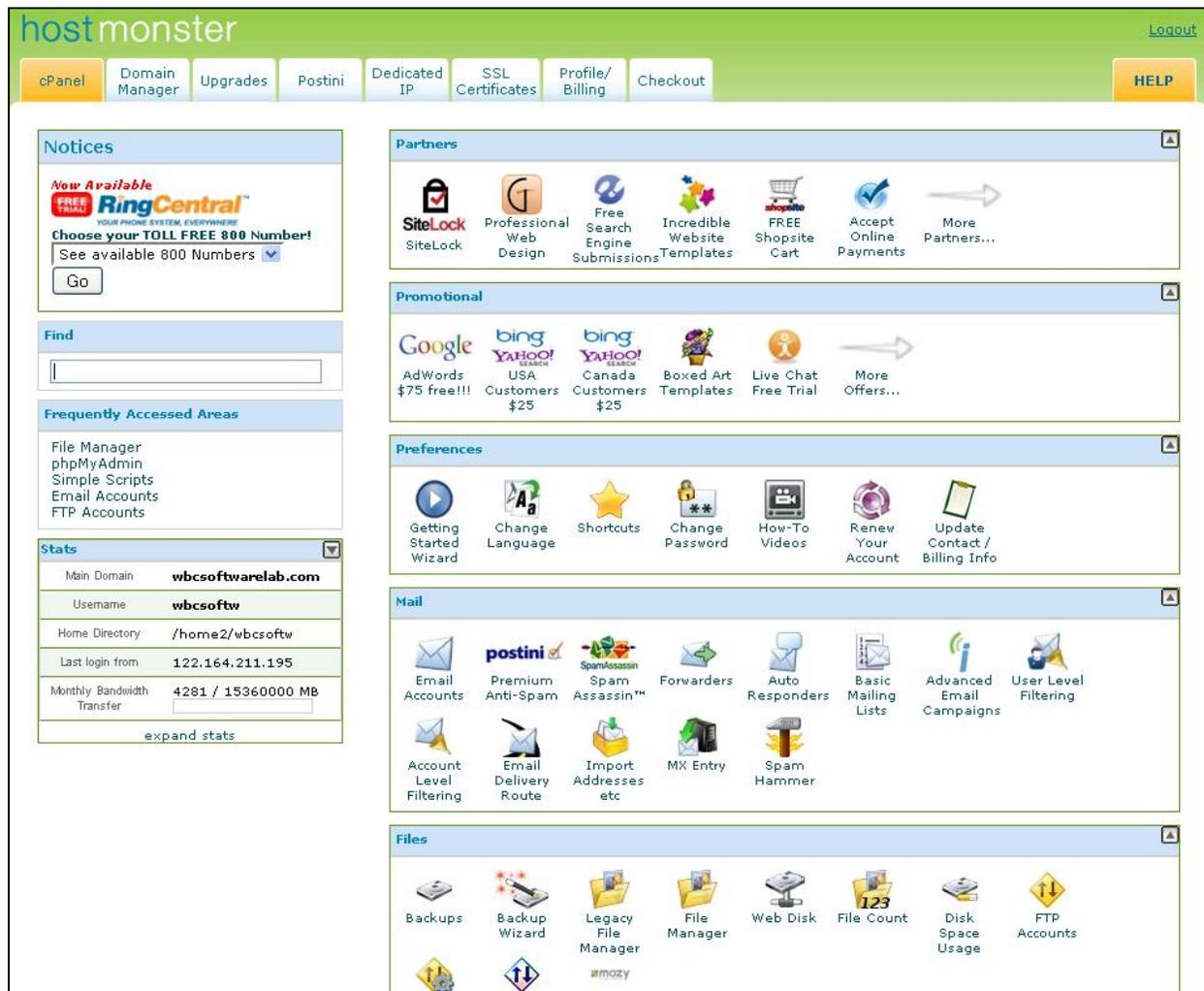


Figure 3 Shared Web hosting Control Panel Sample View of Host Monster

**Pricing:** Attractive / economical pricing and affordable for further upgrades.

**Future Scalability / upgrading possibility:** It's very important that whenever the technologies rapidly change; the web host service provider also should support / upgrade and adapt the technology.

- **E-Commerce Web Site Security:**

Often we hear whenever a website is being hacked; it may be a government website or a e-commerce website. Once we start our website, we can't tolerate these situations which will create a huge loss for our online business. In order to avoid it we need to take certain precautions and work along with the web server administrator, and take their guidelines.

To start with we should have a standard check list for securing our website and our software partner should ensure that review should be done at regular intervals

A most commonly used web server security vulnerabilities scanner named NIKTO is available. It works on Unix / Linux and windows servers. Nikto is an open source Web server scanner that performs comprehensive tests against Web servers for multiple items, including over 3,200 potentially dangerous files/CGIs, versions on over 625 servers and version-specific problems on over 230 servers.

This can be downloaded from <http://www.cirt.net/nikto2>, when we install and run this software it will check the web server and give us a detailed report on any security threats to be fixed and with few suggestions.

### Other Common Threats to protect ourselves

Protect our web site application directories by giving Read / Write permission

Any data submitted to our website should be validated via secured connections

Often change all User names and passwords (Strong passwords are recommended)

Protection from SQL Injection

Protecting confidential data and files by encryption strategies

Protection from Java script Injection

Protection from placing a new file in our website and redirecting users

- **Knowledge of SEO:**

Search engine optimization is in short SEO, which is all about optimizing a web page and entire pages readable by search engines and indexed in appropriate categories.

It's always better we design our website SEO compatible right from the beginning of development, several open source CMS and e-commerce sites has built in capability to support the SEO activities.

- Domain name
- Web page Title
- Meta Tags viz., description, keywords etc.,
- Page content headings h1, h2 tags
- Hyperlinks
- Images
- Unique content relevant to keywords
- Site map
- Inbound / Outbound link management

- **Good Marketing Plan:**

Apart from SEO activities in the business there are several other activities to be adapted for promoting a web site.

Print the e-commerce website address in all visiting cards, brochures, documents, communication letter heads, and emails and in all media advertisements.

Further place a signup option in the website to collect visitors email address, for which at regular intervals, we can send promotional new letters on various products and services and discounts to attract more visitors.

Write articles in blogs in Type pad or blogger

Publish your press release in PR Web

Search for your keyword; update your web site URL in all Forums and directories in appropriate categories.

Join a web ring – [www.webring.com](http://www.webring.com)

List your site in Froogle is Google's free comparison shopping search engine [www.froogle.google.com](http://www.froogle.google.com)

Viral marketing / bookmarking in 1000's of social networking for all the products / services of our website

- **Competitor Awareness:**

When planning and gathering information for a e-Commerce site, search for your competitors regionally, nationally and across the globe.

Usually some of you may know when they are in neighborhood, or by press, but you can see the complete list only when you Google search it.

On finding the competitor web site list, visit all websites find what is unique with all of them and for common features compare with yours. Further we also need to find their page ranking and keywords being used.

Based on which we need to plan for good quality SEO and Keywords by which our site can gain good page ranking.

We also need to make sure that we build our site to be made Unique which is different from others with very easy user interface and navigation facilities. I.e. the visitor should feel easy to find and order products from our site.

#### ● **Reliable Software Solution and Service Partner**

When choosing a software solution provider, we need to contact them. Have an introductory discussion about their existence, products and services, expertise in building and maintaining e-commerce sites, their client lists. We can also call their clients and get to know their experience about the service provider.

Then we inform about our business plans and ask for their solution and cost. Similar to this we may get it from 2 or more service providers, after careful scrutiny we decide upon the service provider. Below are the few frequently asked questions to service providers.

Do they provide tech support, by telephone, email, online chat, and direct visit if required 24/7.

From data collection, design website, populating products / services in e-commerce site, upload it in a test server, and then finally launch the web site. How do they manage their project processes.

Who will be the single point of contact with us?

- Choosing Suitable Technology
- Choosing a suitable technology and ecommerce application is a very big challenge. Below are the few questions in choosing the technology and application
- Site building Questions-
- What other important tools are included? Web analytics. Hosting. Accounting package.
- Does the platform help with cross-selling and up-selling
- Does the platform have built-in site search? If so, what kind of tools will I have to enable me to influence search results
- From the page the shopper chooses an item on, what is the total amount of pages they must click through to complete the purchase? A higher number

of page results in a higher percentage of abandoned shopping carts.

- E-Commerce application platform requirements
- Marketing and CRM facilities available in the e-commerce application.
- SEO relation Questions.
- Merchant administration tool details
- Database / Inventory questions
- Payment gateway questions
- E-Commerce application future support

#### ● **Third party Payment Gateway / Merchant**

There are several third party payment gateway solutions found in different countries. In Singapore *e NETS is the most popular*, In India ICICI, CC Avenue are few of them.

Apart from this internationally PayPal is a well renowned and easy to start without setup fees and lowest transaction fees and they also offer services in INDIA.

Google Checkout is becoming popular and its open only in USA as of now.

Evaluating a third party payment gateway can be based upon the below parameters

How secured is the payment gateway and their privacy policy.

How easy for it to integrate our application.

How competitive is their setup / transaction fees.

Is there an easy interface provided to add our credit card / bank accounts with proper verification.

How long they will take to transfer the funds, once we complete a delivery / transaction to our customer.

How superior is their technology and integration with other payment modes which are internationally available.

In our review, we have chosen **osCommerce Online Merchant v2.3.1** as a e-Commerce application which is getting updated constantly and customer will give us the latest version to cater the latest technology trends, the available Milestone releases are considered to be stable with the following features:

#### **General Functionality**

- Compatible with all PHP 4 versions
- All features are enabled by default for a complete out-of-the-box solution
- Object oriented backend (3.0)
- Completely multilingual with English, German, and Spanish and are provided by default

**Setup / Installation**

- Automatic web-browser based installation and upgrade procedure
- Design / Layout
- Template structure implementation to:
  - allow layout changes to be adaptive, easy, and quickly to be made (3.0)
  - allow easy integration into an existing site (3.0)
- Support for dynamic images
- Administration / Backend Functionality
- Supports unlimited products and categories
- Products-to-categories structure
- Categories-to-categories structure
- Add/Edit/Remove categories, products, manufacturers, customers, and reviews
- Support for physical (shippable) and virtual (downloadable) products
- Administration area secured with a username and password defined during installation
- Contact customers directly via email or newsletters
- Easily backup and restore facilities for the database
- Print invoices and packaging lists from the order screen
- Statistics for products and customers
- Multilingual support
- Multicurrency support
- Automatically update currency exchange rates
- Select what to display, and in what order, in the product listing page
- Support for static and dynamic banners with full statistics
- Customer / Frontend Functionality
  - All orders stored in the database for fast and efficient retrieval
  - Customers can view their order history and order statuses
  - Customers can maintain their accounts
  - Address book for multiple shipping and billing addresses
  - Temporary shopping cart for guests and permanent shopping cart for customers
  - Fast and friendly quick search and advanced search features
  - Product reviews for an interactive shopping experience
  - Foreseen checkout procedure
  - Secure transactions with SSL

- Number of products in each category can be shown or hidden
- Global and per-category bestseller lists
- Display what other customers have ordered with the current product shown
- Breadcrumb trail for easy site navigation
- Product Functionality
  - Dynamic product attributes relationship
  - HTML based product descriptions
  - Automated display of specials
  - Control if out of stock products can still be shown and are available for purchase
  - Customers can subscribe to products to receive related emails/newsletters
- Payment Functionality
  - Accept numerous offline payment processing (cheque, money orders, offline credit card processing..)
  - Accept numerous online payment processing (PayPal, 2Checkout, Authorize.net, iPayment, ..)
  - Disable certain payment services based on a zone basis
- Shipping Functionality
  - Weight, price, and destination based shipping modules
  - Real-time quotes available (UPS, USPS, FedEx, ..)
  - Free shipping based on amount and destination
  - Disable certain shipping services based on a zone basis
- Tax Functionality
  - Flexible tax implementation on a state and country basis
  - Set different tax rates for different products
  - Charge tax on shipping on a per shipping service basis

- **Reliable Product Source**

If our e-commerce site is about selling physical products, we should take necessary care to have enough stocks on hand, and also have plans to procure raw materials on time required for production.

Timely delivery with quality as per specifications will spread a good word of mouth for our website

Hence it's critical to have a very good production plan and inventory management in order to succeed.

• **Logistics Plan**

How we are going to ship / deliver our products to customers.

We need to find out the various ways to ship our products on Rail, Road, Air, Water and combination of any of these. Based up on the location we need to have good logistics operators who are best in timely delivery and who offer the best / competitive price.

For a best logistics plan, It's always advisable to collect shipping rates for all locations from different vendors and workout the overall product cost including shipping cost or work out shipping cost separately and publish in the website.

• **Accounting**

Right from the day one accounting is one of the critical parts for a successful business to know about the current financial position of a company.

Hence from the day one it's better to buy popular accounting software as a part of business investment and start entering all day to day transactions. Viz., Purchase, Sales, returns, Payments, Receipts, Banking entries, Contra, and Journal entries

Daily cash / stock checking is recommended. And also need to review accounting entries i.e. day book, Trial Balance, Trading account, Profit & Loss and Balance sheet every week.

• **Implementing a Web Analytics Software**

Usually there will be a web analytics software provided by the web hosting provider, we can use this statistics information and improve our content, SEO activities and change marketing plans.

Via Alexa tool we will be able to know our site ranking based on the traffic received. The highly recommended analytics application is Google Analytics which is free.

We need to register a account in email and use that email id, need to register in Google Analytics. Once registered, Google will give out a HTML code snippet; which we need to copy / paste in all the static pages of the website.

For dynamic pages we should ensure that there is provision for updating the code snippet.

The Google Analytics dashboard is more attractive to quickly see the traffic information for our website. We can also compare the traffic with the last month.

• **Leadership Skills**

For starting a new business, the business owner should have enough courage to take risks and possess required technical knowledge to run the business and in General management knowledge is required to manage a team of people in various departments.

The only motive to drive him to earn more profits for the company is by his effective decisions; another important characteristic is the business owner and its teams operational efficiency, by which we can achieve high customer satisfaction which results in business growth.

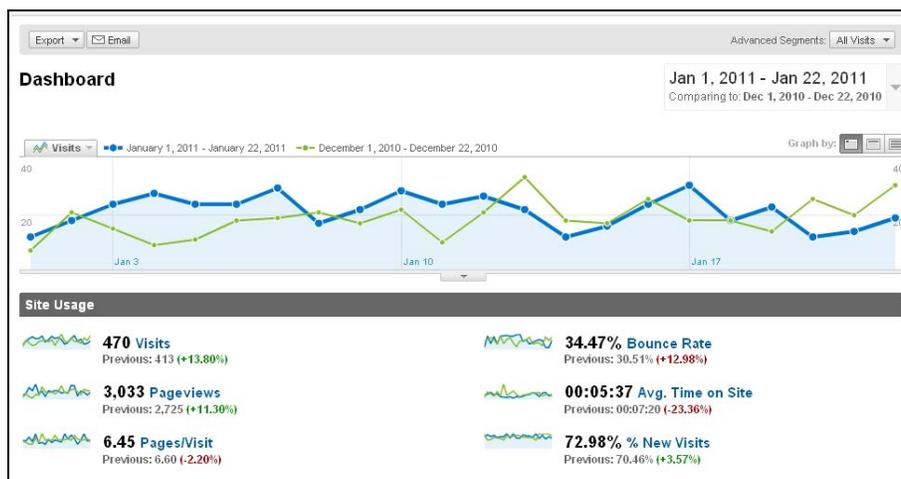


Figure 4 Google Analytics software Visitors traffic Dashboard.

#### 4. Installing and setting up OSCommerce website

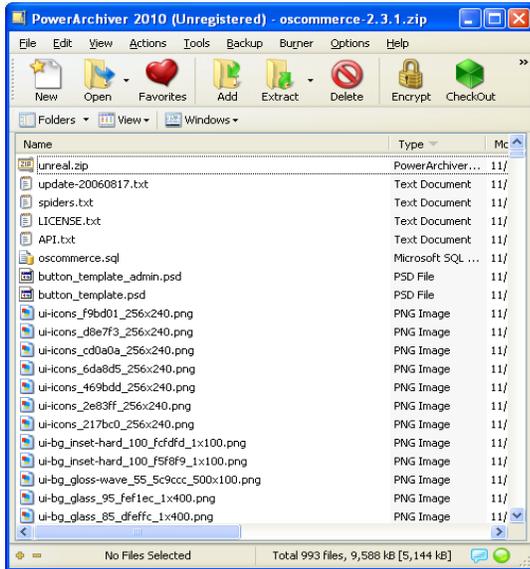


Figure 5 osCommerce file extraction

If no such facility is available in the web server hosting provider, we can download the latest version oscommerce from <http://www.oscommerce.com/solutions>, the file name is oscommerce-2.3.1.zip of 5 Mega byte size. Extract the downloaded file in a temp folder



Figure 7 Installation file checking log

If you have your web host account with Host monster / iXWeb hosting, they have simple scripts modules in software / services section, by which they list all popular CMS, including OSCommerce.

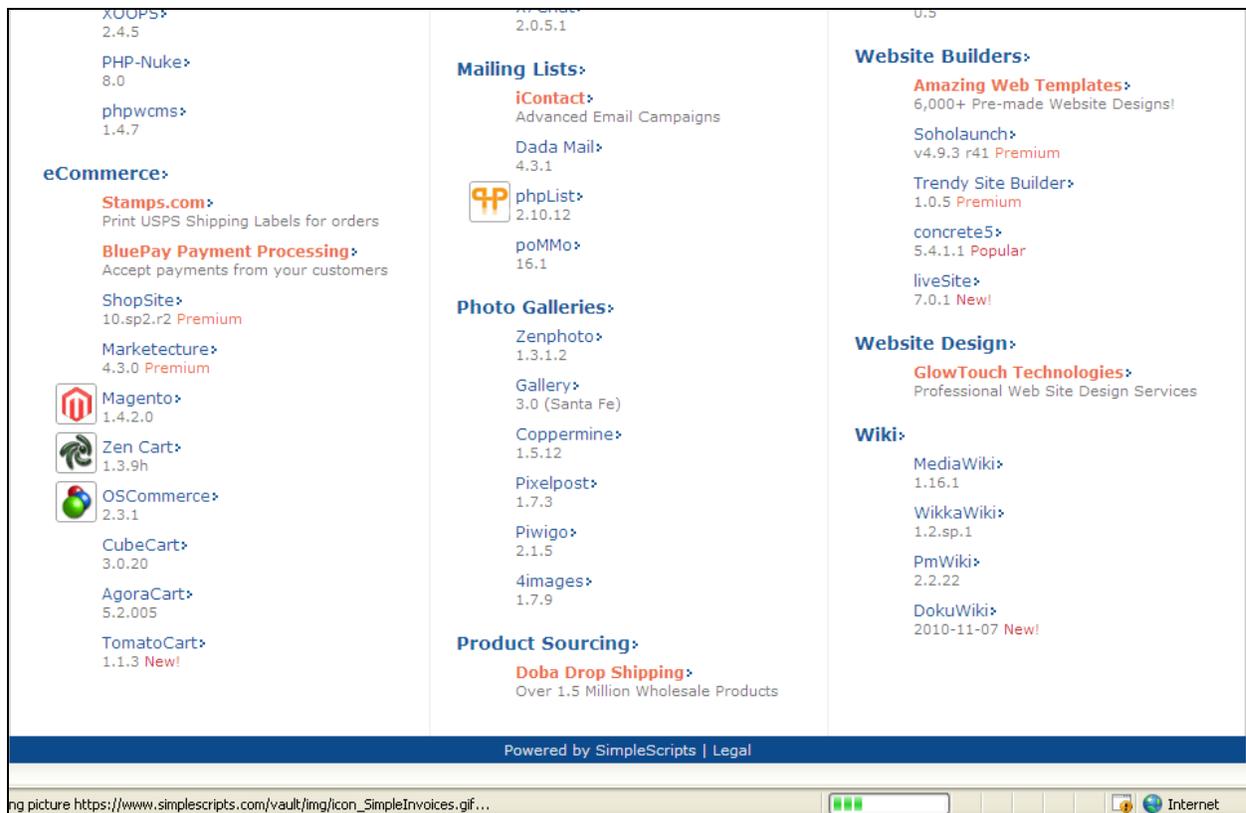


Figure 6 Host Monster Control panel showing OsCommerce, single click installation

Use any of the FTP software to upload all the files extracted to the web server, by using the connection information

Once all files are uploaded open your browser and access your website with the following URL <http://www.yourdomainname.com/install>.

This will **complete the installation**. Now the e-Commerce site shopping cart with product listing with the default template will be loaded.

For our own unique web site design, we can buy templates which are attractive or we can develop our own template by our software partner and make the site more colorful and attractive.

Now it's time to protect all web site folders and files, use the FTP software to set attributes as required. And for the file in "includes/configure.php" and "admin/includes/configure.php" we need to remove the write and full access control. This file should be a read only file.

Ensure the Catalog and admin tools are installed properly. And also the databases

Now it's the time to take a backup of all files and database with the configured information for safety.

Visit <http://www.autho-riety.info/2008/08/22/step-by-step-installation-guide-for-oscommerce/> for step by step installation of osCommerce in case of any doubts.

Now it's time to populate data into our e-commerce site.

1. Store / our Shopping cart Name and address information setting
2. PayPal account creation and update our local bank information
3. Create Product categories
4. Customize product features
5. Create products, upload images and update feats.
6. Now browse the site and check how the buying of products is working by setting PayPal to sandbox mode.
7. Once if everything is fine, then we are ready to launch the site.

Now it's the responsibility of marketing guys to take over and osCommerce back office team will be ready to serve the customers who are all shopping.

## 5. Maintenance and support of a e-Commerce website

The e-Commerce site maintenance is very much important. Here 3 teams has to be working seamlessly i.e. back office team, SEO / Internet marketing team and the software partner.

All of them are collectively responsible for the below tasks.

- Daily update product catalog for new items
- Check Orders vs. stock
- Banner Ad Management
- Sending Newsletter for product promotion
- Daily reports (Pages viewed, Products purchased and Customer Orders Total)
- Take database backup at regular intervals
- Check orders received
- Watch which product is getting more visitors
- Security review at regular intervals
- Review on Internet marketing and SEO activities

## 6. Conclusion and Future work

OSCommerce has a stable version now and lot of plug-in / add-in modules are available in the industry. We can choose the same based on our needs

- Product Attributes Implementation
- Dynamic Table Listings (Administration Tool)
- Live Search (Administration Tool)
- Administration Tool sections now self-contained Applications
- Error Logging; both PHP and MySQL errors and warnings now logged (forced runtime usage of PHP E\_ALL and MySQL STRICT\_ALL\_TABLES)
- Stabilized Framework
- Usage of JSON for RPC calls
- Inclusion of jQuery v1.3.2 and jQuery UI v1.6rc6

The above list will be understood only when we know more about osCommerce.

To put it simple, the osCommerce has to develop modules which will work on mobile devices based upon the request received it should automatically render content.

When a order is received, the shopping cart back office and related team should receive SMS or FAX as necessary in order to facilitate shoppers a delightful experience.

My next work on this review would be on exploring the details of populating data in the cart and configuring payment gateway, and on how to handle the government rules and regulations.

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