

E-Commerce White Paper

E-Commerce: A Post Dotcom Retrospect

In the post dotcom era, E-commerce has suffered from somewhat a bad name. It must however be noted that the primary failure lay not with the concept of web-based selling itself, but rather with the way portals were implemented.

E-commerce portals can be a great boost for companies seeking to add value to their existing brick-and-mortar sales facilities. It can also be effective for a firm seeking to look for a unique selling model, or one that is looking to expand its client base through the use of the Internet. The point that has to be noted is that although it could be used by a disparaging spectrum of companies, the modes and models in implementation can be vastly different. The kind of portal would have to be specific to the needs and wants of the particular business and market segment targeted.

The following document seeks to provide the client with a panoramic view of the processes, complications and implications of setting up an e-commerce site, and take him through the various decisions that he would have to make in the process of setting up an E-commerce portal for the business.

Making E-Commerce work

The end-goal of E-Commerce is the same as that of traditional selling – Attract and retain customers, sell goods and make money! The processes to be followed whilst setting up a good portal include:

- Step 1: Focussing on Strategy
- Step 2: Mapping the Requirements
- Step 3: Deciding on Build vs. Borrow and Outsource vs. In-house Development Paradigms
- Step 4: Implementation
- Step 5: Setting up Infrastructure
- Step 6: Testing and Going Live
- Step 7: Maintenance and Administration

Getting Started by Focusing on Strategy

One of the primary fallacies of traditional e-commerce initiatives has been the lack of a clear and concise strategy. A firm wishing to make use of a web-based sales system has to first get its ideals and strategy correct. The firm has got to make out its reason and vision for the e-commerce approach, clearly specify its objectives and determine the correct positioning.

A few vital questions need to be answered. It is essential to decide how the e-commerce initiative is to fit into the scheme of things with respect to the firm's business. For some businesses, online selling is to serve as a competitive advantage while for others it is to serve as a value-addition.

- Customer Research
- Target Segments Identification
- Product Lines
- Pricing
- Existing Internet Brand awareness
- Action plan for evangelism

- **Customer Research:** To learn about the client-segment's Receptiveness, Net-savvy, Adaptability. Not all kinds of customers would be fast-movers to adapting to an online sales model. Are your customers traditionally net savvy? Is the product that you are trying to sell, one that is usually easily sold on the net?
- **Deciphering which Target Segments to focus upon:** Your site may have to be built in such a way so as to specifically focus on certain target segments to provide for greatest results.
- **Product Lines:** Not all your product lines may go up for sale on the Internet, at least not for a start.
- **Pricing for the Online Model:** A Net-centric sales team may be under-cutting retail-competitors, while a standard-business may find it better to maintain the same pricing as on the shelves while using the online model to appeal to new customers or existing customers in a new way.
- **Existing Internet Brand Awareness:** If you had had a good presence on the Net in terms of Customer Service and so on, then it may be easier to attract people to your sales-site.
- **Action plan for evangelism:** How do you intend to take your website to the customers? What's the plan to attract new and existing clients to the site? Will there be some kind of promotional period?

Mapping the Requirements

Mapping requirements can be a pretty daunting task for most, but is an absolute essentiality for any good e-commerce site to materialize. This phase usually calls for various branches of the organization to sit together through several brainstorming sessions

- Listing Features and Requirements for the site
- Detailing the features and sub-features
- Prioritizing each feature by cost and need.
- Creating a Requirements Document

Your website is like any store. It needs to be adequately primed so that customers would enjoy the experience, feel motivated to buy and be consumed by what they find. The site needs to be suit the people you are trying to target. You need to list down all features that you could probably want on your site – features that are absolutely essential, features that could help attract the audience, features that could help retain the customers and get them to come back once again, features that would serve as specific value additions etc. It would be ofcourse impossible to try and implement all of them at the first go owing to cost and size concerns. You would therefore need to break the list down by prioritizing each feature. The absolute essentials will get implemented first.

Build vs. Borrow and In-house vs. Outsourcing

Build vs. Borrow

Not all e-commerce portals need to be built from scratch. If your needs and requirements are generic, then you'd probably be much better off just using an already available e-commerce facility. The sale of books, CDs, FMCGs and the like usually do not demand a very specific architecture as long as volumes are low. Hence in these cases it may be best to Borrow from an existing architecture.

- Is your site, or product very specific?
- Are the volumes or traffic high?
- Is brand recognition a major part of the bargain?
- Do the requirements call for a unique framework?
- Is there a need to frequently upgrade?

In-house vs. Outsourcing

As is the trend today, most companies would choose to outsource their technology requirements. The reasons for outsourcing are many. It is usually cheaper and far more effective when the needs are handled by a Technology Consultancy House. Such a company usually also brings with it vast knowledge and domain experience in such and related areas that can help you jump several steps in the cycle.

- Do you have a technically skilled workforce?
- Are the business processes enormously complicated?
- Are there any specific trade secrets involved?
- Is technology your core business? Or is a Technology Department part of your operations?

The Implementation

As mentioned in the pages before, it is best when there is a phased approach to implementation. A phased approach always lowers the net cost and increases the stability of the end product. It also provides for an exit route from the online venture as a whole.

MERITS OF A PHASED APPROACH

- Lower Cost
- Greater Stability of the product
- Planned Implementation
- Ability to tailor rest of the implementation based on feedback
- Phased ROI
- Gradual and Phased Market penetration
- Exit Route

Implementation Phases

Phase 1

Basic nuts and bolts of the e-commerce portal: Product showcase, Shopping cart, Invoice generation, and Payment gateway, Authentication, Authorization and Subscription Management

Phase 2

Enlarge the product to include the many Sub features, Value adds, Advertisement Panels, Promotion Panels, Discount and Gift Coupons, Newsletters, Search Engines and so on.

Phase 3

Personalized Sales, CRM, Business Intelligence and Data mining.

Phase 4

Full Integrated Linking up to internal processes and systems – Warehouse Management, Supply Chain, Inventory Control, Distribution, Franchising,

Technology Matters

Choosing the Technology

Design and Conceptualization

It is essential that adequate thought be put into making sure that the design is structured so that implementation and maintenance becomes easy.

System Interoperability

It should be possible to bring in third party applications and integrate with the existing architecture. The end-product should work seamlessly. For this the portal architecture should adhere to some basic standards.

Upgradability

Is the system designed in a way so that you can uproot an existing function or feature and plug in a new one? Often, a feature is found to be wanting or redundant and replacing it shouldn't be a gargantuan task.

Database Back-ends and Data Back-ups

Which Database is most suited for your needs? What sort of back up of data are you going to provide for? E-commerce data is extremely mission-critical, and cannot be lost or stolen at any cost!

Authentication, Validation, and Transaction Clearing

How much authentication do you want to force upon the user? Extensive authentication lowers your risk but decreases the ease with which customers can conduct transactions, possibly leading to lost sales. What will be your policy? What level of risk from potential fraud are you comfortable with? Will you want to check card numbers against card algorithms? Do you want to authorize cards and transaction amounts with a bank, and then reserve funds, before issuing order numbers?

Setting up the Infrastructure

Setting up the Infrastructure in-house is another big investment decision. Usually firms would prefer to outsource their hosting to some service provider. Purchase of hardware could be done at a later date when the volumes and traffic have been built up.

- Traffic
- Sensitivity of Data
- Computational Requirements
- Architecture
- Maintenance and Administration Requirements

Testing, Going-Live, Maintenance and Administration

Another oft evaded topic is this one. It is always better that the product is a simple one that is bug-free rather than a complicated one which is unstable. Testing to make the portal bug free is of paramount importance and can run into months. This is especially acute if there are Payment and Shipping Gateways and other third party applications involved. All scenarios have to be pre-thought of and looked into.

When the portal is live, it is essential to have full-time staff managing it and handling customer queries. Maintenance and administration can be very critical tasks and need the attention of experienced personnel who understand the system. Often firms ignore the fact that the portal would be of no use if it fails to serve the web-surfer's needs in real-time. Portal downtime can also play havoc with the firm's image.

Summary Checklist of Features Involved

Primary
Product Showcase
Customer Profile
Member Area Management
Site Administration
Shopping Cart
Shipping Gateways (not needed for digital products/software)
Payment Gateway
Search Engine
Site Metrics
Site Maps
Reports
Automated Recommendations
Banners and Advertisement Space
Configurability of Product Space
Real-Time Customer Support
Support for Multiple Languages
Support for Multiple Currencies
Data Mining
Customer Grouping
Psychographics
Toolbars

Secondary
Data mining suites
Business Intelligence suite
CRM suites
Sales Integration suites
Accounts and Inventory Management suites
Warehousing, Shipping and Delivery Management
Franchise Management