

E-Commerce – What you Need to Know

E-commerce just refers to the now common practise of taking payment for goods or services via the internet. Typically the visitor to an **e-commerce - enabled** website **chooses a product / products**, adding them to a **shopping cart**, and then **checks out** – which leads them to a form where **personal details** are given, the **method of payment** is specified and **payment is authorised**. The **vendor is alerted** that an online transaction has taken place and then **processes the order**.

From the perspective of a potential internet merchant (someone who wants to take payment via the internet) this process needs to be examined more closely, identifying the components and costs so that

1. The upfront and ongoing costs of an e-commerce venture can be ascertained
2. The process of setting up e-commerce can be understood and a “to do” list can be constructed
3. The ongoing process of managing online orders / payments can be understood so that customers expectations are always met
4. The decision can be made whether it will be beneficial to set up e-commerce in the first place

Let’s take the process described above and focus on the highlighted terms:

E-commerce – enabled website

In order to use e-commerce from your website you need to decide:

- Exactly what products and services you will be selling and at what price (unless you are taking donations – a slightly different situation). If you are selling only one product or service at a fixed price it may be possible to set up e-commerce without the support of a product database. In most cases it is necessary to have functionality added to your site where you can specify the products that you are selling, the price you are selling at and any other information you will require to get the right product to the customer (e.g. which colours are available for a given product) – this information can be changed and lives in a database on the server where your website is hosted.
- Whether you are going to take payment directly (in which case you need to have an internet merchant account) or via a third party, which anyone can do.
 - An Internet Merchant Account is available from your bank, via a rather arduous application process, as an extension of a regular merchant account (one that allows you to take credit card transactions at point of sale). Your service provider (us) will not be able to assist you much in this process except for filling in the technical parts of the application forms – the banks are very picky about the business owner driving this process due to FICA considerations etc.
 - Using a third party to take payment involves entering into an agreement where your customers pay into a third party account and you get paid from that account every month

The pros and cons of these two options are shown in the table below. In general we would advise a client who believes they will qualify for an internet merchant account to bite the bureaucratic bullet and go with that option.

Internet Merchant Account	Third Party Solution
PROS	CONS
Slightly cheaper transaction cost – depending on your bank (see ‘transaction costs’ below)	Slightly higher transaction cost
No delay between client payment and merchant receipt	Delay of between 14 days and 28 days
Full transaction value upfront	10% of each transaction retained for up to 6 months to cover possible credit card reversals

CONS	PROS
Slightly difficult application process	Easy application
Not all clients qualify	All clients qualify

Allowing your client to choose a product / products

Having decided what products you will have available online and the exact parameters that are required to specify the purchase of each product (i.e. exactly what choices the customer has to make in each case) the next concern is to ensure that the products on offer are actually available when the client selects them for purchase. This comes down to keeping track of your stock. There are a number of different approaches to this – from building an online stock-tracking system that integrates with any point of sale you may have in your physical store/s to setting stock aside for online purchases and letting the online shop keep track of those levels – removing a product from the online store (or labelling it as 'out of stock') when its stock level reaches zero.

The Shopping Cart

Items that a client has selected for purchase are added to their shopping cart – a temporary record of what they wish to purchase. If the client has purchased from your online shop before then they may be recognised (see *Personal Details* below) in which case the contents of their shopping cart will be remembered if they leave your site and return later. If the client is anonymous then the contents of the cart are only remembered while the client is on your site. If stock levels are critical to your business (for example in an art gallery with unique works or limited editions) then you need to decide how to manage the possibility of more customer orders existing in un-'Checked out' shopping carts than you have stock to cover. One possibility is to remove the item from the shop as soon as the last available item is added to a shopping cart. In this case it is necessary to have a policy as to how long that item remains reserved if the shopping cart isn't checked out.

Usually shopping cart items can be changed (e.g. quantities) and/or deleted before checking out.

The Checkout Process

Once the client has items in their shopping cart they can choose to confirm the order by paying for the items – this process is called "checkout". In order to check out, the online shop obviously needs to know who is placing the order – the correct shipping address, contact details etc. This registration information is then stored and in future the customer can simply log in using their email address (the easiest way to uniquely identify a customer) and a password that they specify during registration. Using "cookies" (small files that live on the customer's computer that allow the website to identify them) you can log a returning customer in automatically when they visit the site – for technical reasons it is a bad idea to assume that returning customers will be able to be identified using cookies – a log in option should always be available.

The checkout process also determines the total cost of the order. It is normal to include VAT in the item costs but it needs to be shown separately in the order summary. The shipping cost also needs to be determined if a physical product is to be delivered. Determining the shipping cost can be as simple as applying a flat rate (even zero) in a case where you are only selling to South African customers or as complicated as using shipping cost calculators to determine the cost to ship the specific order to the country of origin of the customer.

Note that banking regulations limit South Africans to offering their products in ZAR. That doesn't mean that a client can't pay in USD but they will still be billed in ZAR and the conversion will be done when they pay using the prevailing FX rate. To assist foreign customers it is a good idea to place a convenient link to a currency converter on your site but you must clarify that the FX rate is subject to fluctuation.

Methods of Payment

The e-commerce solutions offered by Insite Solutions support most credit cards. If you have customers who do not wish to divulge their credit card details online (which is actually absolutely safe due to the use of encryption during the payment process) you can give the customer your account details and manually verify a deposit into your account. This manual verification of payment will then need to be supported by your administration site (see below).

Note that the popular method of protected payment, PayPal, is supported in South Africa for *buyers* but that currently South African's cannot use PayPal to receive payments.

Payment Authorisation

The last step of the checkout process involves sending the transaction to the client's banking institution for authorisation. If the transaction is authorised then the order is confirmed and the process continues as below. If it is not authorised then the customer is sent to a page that shows the reason for the transaction being declined. The items remain in the shopping cart (again, if stock levels are critical to the business you may choose to empty the shopping cart at this point).

Alerting the Vendor and Processing Orders

When a transaction is authorised you are alerted via email with the details of the order. Typically a confirmation email is also sent to the customer containing an invoice for the purchase and details as to when they can expect delivery etc. The order is also captured on a database and linked to the customer's registration information. Note that you do not keep the customers' credit card information. There is a special part of your website that you access with a user name and password, called the Administration Site, where you can see all the orders that have been made. The orders are typically given a status so that you can track your progress in processing them –

- **Open** – means that there are items in the cart but they haven't been checked out yet
- **Checked out** – this is the same as paid unless you allow customers to pay by direct deposit in which case you will manually update the status to "Paid" when payment hits your account.
- **Paid** – means that the order has been checked out and payment has been authorised
- **Shipped** – means that you have packaged and dispatched the order
- **Received** – means that the customer has acknowledged receipt

There may be other status levels depending on how you process your transactions.

Setup Costs

In order to determine the cost of setting up your e-store you will need to answer the following questions that emerged in the process analysis above:

1. Exactly what products and services you will be selling?
2. Will you need to add/remove products over time?
3. What needs to be specified about each product / service to define an order (e.g. colour, size etc) and what are the options in each case?
4. How will you manage stock – do you require a system that integrates sales from a physical store / stores with online sales or will you have stock specifically set aside for the online store?
5. Do you intend to take payment directly (with an internet merchant account) or via a third party – if the former is the case then which bank are you with? (some banks charge a setup fee for an internet merchant account – see table under 'ongoing costs' below)
6. Are stock levels are critical to your business – if so what will be your policy regarding items in the shopping cart that are not checked out?
7. Are you prepared to sell to international customers – if so is there a specific subset of countries that qualify?

8. How do you intend calculating shipping costs? Do you need a system that determines actual shipping costs for you based on volume and destination?
9. Do you wish to support manual payment (via EFT or direct deposit)?
10. Do you have any special requirements for the order process (e.g. integration with external invoicing software, courier order tracking etc.)?

A store with a simple stock management system based on stock set aside for the e-store, no internet merchant account setup costs (i.e. internet merchant account solution with all banks except ABSA or a third party solution), a flat shipping rate to exclusively South African clients and support for credit card payment only might cost as little as R5,000.00. This assumes that there is already a domain in place and doesn't include design. It includes capturing up to about 10 products (more if they are available for import from an electronic source like a spreadsheet) and the ability to update those products, change prices and pictures and add new products.

ECOMMERCE COSTS – THE SETUP COSTS

There are three flavours of website that are ecommerce-enabled:

- osCommerce (or similar) sites with a template design
- osCommerce (or similar) sites with a custom design
- Completely customised ecommerce sites

The setup costs for the three possibilities are summarised below.

osCommerce sites with a template design

osCommerce is a massively popular ecommerce engine, used by thousands of online stores worldwide. You can buy a template site to match your category of business. Other may use the same template and therefore have a similar design.

TYPICAL COST TO SETUP = R8,500

osCommerce sites with a custom design

osCommerce is a massively popular ecommerce engine, used by thousands of online stores worldwide. You can have a custom design for your business. The design will be unique.

TYPICAL COST TO SETUP = R9,999

Completely customised ecommerce sites

You can have a site that looks and behaves exactly the way you want it to.

TYPICAL COST TO SETUP = R15,000

ECOMMERCE COSTS – THE RUNNING COSTS

There are two flavours of ecommerce transactions:

- Internet Merchant Accounts
- Third Party Solutions

Why not PayPal? PayPal can be used in South Africa to make payments, but SARS does not allow South Africans to receive PayPal payments.

The costs for the two possibilities are summarised below.

INTERNET MERCHANT ACCOUNTS

Ecommerce incurs a hosting fee of R250 per month, besides the setup and transaction costs listed below.

If an internet merchant account is used then the costs are twofold:

- Ecommerce service provider fees (VCS, for example)
- Your bank fees

Ecommerce service provider fees

Item	Fee
Setup	Nil
Minimum Period	Three Months
Authorizations	R0.50 cents
Settlement	R0.50 cents plus 0.5% of the value of each transaction
Monthly	Minimum of R125.00 excluding V.A.T.
Volume Discounts	We are willing to negotiate discounts based on transaction processing history.

Bank fees for new Internet Merchant applications

Absa	
Setup	R2000.00
Commission	5%
Minimum Monthly	R500.00
3 D Secure	not charging yet
Administration	Nil
First National Bank	
Setup	R350.00
Commission	5%-7%
Minimum Monthly	R300.00
3 D Secure	not charging yet
Administration	nil
Nedbank	
Setup	Nil
Commission	6%
Minimum Monthly	R300.00
3 D Secure	R100.00 per month plus R1.00 per transaction
Administration	nil
Standard Bank	
Setup	R380.00
Commission	6%
Minimum Monthly	R150.00
3 D Secure	not charging yet
Administration	nil

THIRD PARTY SOLUTIONS

Ecommerce incurs a hosting fee of R250 per month, besides the setup and transaction costs listed below.

If payments are taken via a third party (VCS or NetCash, for example) then the costs are:

Setup	R450
Commission	6%
Minimum Monthly	R120
Retention (up to 10 days to cover reversals)	10%
Administration	Nil

In determining the viability of an online business you should also take into account the personnel costs associated with keeping the e-store updated and managing and processing online orders.

Insite Solutions will happily assist with break-even analysis if required.