

# Formulating an E-commerce Strategy

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**Category: Optimistic View (VG) and Socioeconomic breakthrough (NSB)**

## Abstract

The drivers for electronic commerce are both technological (under the tremendous pressure of innovation) and business oriented. This paper will highlight some guidelines for companies who are entering into E-commerce to create an E-commerce strategy or who already have an E-commerce presence to revise their existing strategy.

E-Commerce is now seen as a reality for many businesses and a normal part of a business plan. The immediate benefits, in terms of cost savings, efficiencies and enhanced profitability are clear at every stage in the supply chain. Adopting e-business is no longer a competitive advantage, but a normal business process, without which an enterprise is unlikely to survive in the New economy [1]. Year 2000 saw many Dot-com companies built up and many companies going into E-commerce however now it is a different story, more and more companies are failing, and investors are becoming cautious to invest money into Internet ventures. There is more cash needed than was expected. Some of them had to get on the bandwagon as everybody else were and didn't want to be left behind, and now that the bubble has burst they are facing the consequences. This paper will aim to help companies to realize what they need to follow to have a successful business if they plan well and have a good strategy.

This paper also identifies that implementing an E-commerce strategy is neither straightforward nor cheap, for example it comprises a complete rethink of traditional modes of behavior, the need and importance to involve internal staff and external suppliers and customers right from the conceptual stage, need to re-evaluate company's core competences, and requires substantial investment in IT.

Executives of successful E-commerce companies need to be strategic thinkers focusing on customers, markets, and competitive positioning, as well as on internal operations. Determination of a suitable E-commerce strategy begins with identification of the opportunities and risks. The task of tracking the changing environments, understanding customer groups, requires formulating strategies and planning their implementation.

The paper follows a structure of exploring ideas of having an online presence, going onto defining the business aims, looking at the feasibility of the project, where the industry environment and competitor analysis will be looked at moving on to the planning and design phase, and finally implementing and assessment which needs to be done continually as an iterative process to learn from mistakes, improve and further meet new aims. Throughout the various stages set of questions have been included that needs to be asked and answered by the organization.

## Introduction

Many companies approach E-commerce with no clear idea of where they are going, often they view the industry leaders' accomplishments superficially and try to imitate the front-runners. What they fail to consider is the level of commitment and organizational redefinition that must occur behind the scenes. Currently fewer than 15% of the UK top 100 companies have a formal E-business strategy in place for 2001 [2]. Many UK manufacturers lack an E-business strategy or are investing in e-business without having a strategy in place, according to an E-Manufacturing survey by Benchmark Research [3]. Of the 700 UK senior-manufacturing executives 42% did not have an e-business strategy and 13% have or intend to invest without a strategy in place.

Bicknell [4] states, "For many organizations, what they really need is the right information to help them, there are too many suppliers out there with lot of information". The set of guidelines and model suggested in this paper is aimed to help those organizations.

The proposed strategy in the paper should provide a guideline for companies to develop their E-commerce strategy. The suggested model has been compiled by the author's training and experience of both management and technical issues. Currently this set of guidelines has been developed into a decision pack and has been distributed to XXX local companies for use as a guide for producing a well defined strategy.

### Step 1: Making The Initial Decision to Offer E-Commerce

Any company planning to offer E-commerce should have a long-term vision and an objective of transforming itself into an E-business to provide business value to the corporation and its shareholders.

Why does a company need strategic planning for E-commerce and what are the available options?

A company may decide:

- 1) not to go for E-commerce at least for the time being.
- 2) to use the web just as a means of advertising- this option is popular as it involves low cost, no cost of security, payment, web hosting etc.
- 3) to open online stores to complement existing stores, such as Tesco's "e-tailing" initiative.
- 4) to establish a separate online division within the company.
- 5) to dissolve their regular business and go for a full online business operation such as Egg's online banking.

The choice depends not only on the nature of the business the company conducts but also on the environment it operates in, internal resources available and the company's position and initiatives. Before starting a strategic plan there is a need to identify which out of the five options described is best suited to the overall company vision.

The first step to becoming an E-commerce business is to define a dynamic business strategy based on opportunities to provide value. Developing that strategy requires a revaluation of the existing model and identifying internal issues.

## Step 2: Identifying the Business Aims for E-Commerce

The aims behind an E-commerce strategy should include some or all of the following;

- To improve customer service and interaction.
- To increase brand awareness and awareness of the company.
- To expand geographic reach.
- To expand into new markets.
- To increase revenue and market share.
- To reduced operating costs
- To be seen as an innovative and progressive company through being an E-commerce leader.
- To compete with bigger rivals on more even terms (such as Egg's competition with traditional banks).

The company should focus its reengineering into areas where it gives more return on investment. This requires clear well-defined objectives [5] such as: -

- To sell more goods and services by using the web.
- To provide customer "e-care", ie. online support.
- To support its business partners over the web: e-care for partners.
- To improve communication within the company: e-care for employees.
- To work more closely with customers and suppliers to improve the tendering process and better administer huge number of transactions involved e-procurement.

### The Role of the Company Web Site in E-Commerce

The company may or may not already have its own web site. An examination of aims needs to take into account how this web site will be developed into an e-commerce facility. If the company does not have a web site or its web site is very simple, then developing a web site can be a simple way of exploring ideas for a more ambitious full e-commerce implementation later. The company needs to consider what role it requires for the web site:

- Is it for image? Do you need to be seen to keep up with technology and competitors?
- Is it purely for information? For example to supply addresses and contact numbers.
- Is it purely for internal use or for use by partner companies?
- Is it to advertise products? In which case are existing customers the target or is the objective to reach new customers?
- Is it to supply services? Could the site be used to provide a helpline or other backup service?
- Is it for delivery? Can your products be delivered through your web site?

The company must also consider the external viewpoint:

- Are customers happy with existing services are do they require more?

- Are customers interested in buying on-line?
- Will supplier companies be willing to interact on-line?

These questions can only be answered by market research. However, even if there is a detectable demand for greater online services does the company want to go as far as selling online, and if so, what products and services is the company willing to offer? Experiences from the initial web site can help the company determine whether it wishes to further develop the facility and whether to take the step of buying and selling over the Internet.

When considering to what extent you wish to utilize the Internet it is necessary to understand how it matches the existing company businesses. It is important to establish how the Web can be incorporated into existing lines of business, supply and channels of distribution? In addition it is necessary to determine targets for the use of the new web facility. Targets need to be determined for the number of visitors to the web site and the transactions that result in order to make the move into e-commerce worthwhile. For this a feasibility analysis must be carried out.

### **Step 3: Analyzing the Feasibility of the E-Commerce Initiative**

Once the business aims and objectives for E-commerce are clear, the company needs to carry out a feasibility study and analyze whether it is possible for the organization to offer online services with the resources available. A detailed feasibility study should be carried out to identify critical success factors. This will involve examining human as well as technology aspects, looking at the benefits E-commerce and analyzing the risks and pitfalls.

Some of the early questions to consider when developing an E-commerce strategy include:

- How can the Internet further my business objectives? To answer this question the company has to accurately articulate at the strategic level the linkage between the current business objectives and the objectives in the market place.
- What products and services will I offer and deliver on the Internet? Does the business have a product, or can it develop a product, which can be sold online?
- How do I incorporate the Web into existing lines of business, supply and existing channels of distribution?
- How can I improve customer service and satisfaction?
- How can I be sure that my data, and that of my customers, suppliers and partners will be secure?

In addition it is necessary to determine the e-commerce activities of competitors.

Ghosh [6] identified the following additional question:

- Will I be at a significant disadvantage if my competitors provide these capabilities to customers before I do?

An important aspect of e-commerce introduction is the transformation required of core business processes. This requires a thorough understanding of the existing business. The company needs to carry out a full SWOT analysis (Strengths, Weaknesses, Opportunities and Threats). By giving executives a tool that is familiar, such as SWOT, and yet targeted to the fast changing environment, companies can quickly react to changes in their own environments[7].

From the SWOT analysis you can find, for example, an opportunity to sell E-commerce software developed for internal purposes to others or an opportunity to add new products. Threats may come from competitors. Strengths can be from internal operations and sound logistics and weaknesses may involve a lack of skilled personnel. By mapping out the weaknesses and opportunities, risks can be identified and action planned to reduce the risks so that advantage can be taken of the opportunities.

Industry and competitive analysis for E-commerce involves monitoring, evaluating and disseminating information from external and internal environments. The goal is to identify the critical factors that will determine the success of the E-commerce project in the competitive marketplace.

### Timing of E-commerce Entry

Although E-commerce is a relatively recent phenomenon, those companies that are seizing the opportunities it offers can establish a lead over their competitors. However, the effort required to implement E-commerce successfully has to be sustained. In a world which is increasingly competitive and where organizations are required to undertake greater levels of risk in order to compete, those companies that fail to act now may find they have left it too late if E-commerce becomes a dominant way of doing business in their sector. By contrast, companies that have vision, a strategy, and a long-term outlook will find that by embracing E-commerce now, they will reinforce their market position. Tesco, for example, have built a substantial lead over their rivals by their early entry into the e-commerce marketplace. However, the timing can be critical and there are many examples of companies trying to establish themselves before the market was ready and have failed as a result. For example E-Bay were probably trying to sell clothing too early for the public to use e-commerce for this purpose in sufficient numbers for the company to be viable.

### Cost Benefit Analysis

After identifying the opportunities the next objective is identifying the costs of introducing and operating an e-commerce project. This will involve reviewing what is present at the moment in terms of skilled staff, technology and resources, and estimating costs of building, implementing, and supporting the hardware, software and human resources needed. Regretably the excitement of entering a new and innovative technological market seems to give managers an over optimistic view of their position. However, as the recent fall in the technological stock market shows this view is not necessarily justified. In many e-commerce projects costs have been underestimated and benefits overestimated so companies entering this field should exercise some caution.

Care must be taken, however, not to view everything in simple financial terms. Amazon.com outlined a number of key measurements that it tracks. "We first measure ourselves in terms of the metrics most indicative of our market leadership: customer and revenue growth, the degree to which our customers continue to purchase from us on a repeat basis, and the strength of our brand." It is interesting to note that only one of these four measurements is directly financial in nature, reflecting the fact that current financial performance is not the only consideration. [8]

The potential financial benefits of the Internet to consider include:

- It adds tremendous marketing power to any type of business for a fraction of the cost of traditional advertising and marketing methods.
- It opens up a global marketplace that would normally be unattainable for most companies.
- It is available to potential customers 24 hours a day, 365 days a year without the uneconomical overheads that would be incurred by using any other method.
- It can reduce administration costs, as all communications are electronic. This, in turn, can lead to faster processing of orders, reduced turn round time and the consequential saving of administration costs.
- It can reduce costs and processing time when working with supplier organisations if they too are using e-commerce. The business to business harmonisation of the supply chain can reduce costs even if a company does not itself sell its products through the Internet.
- It is a low cost alternative to a traditional physical retail outlets.

#### **Step 4: Planning and Design of E-commerce**

Strategy formulation should depend on the development of strengths and opportunities. It includes examining the corporate or project mission by specifying achievable objectives. An organizations mission states the purpose for its existence. Based on its E-commerce mission a company can formulate the objective of E-commerce. An E-commerce objective is the measurable goal that the company wants to achieve with E-commerce.

A first step is to establish a web site. Initial experiences from this can help determine future directions of development. A longer term E-commerce strategy must then be put in place based on the business aims and objectives within the constraints of feasibility.

#### Process of formulating E-commerce strategy

Organizations should develop a sound strategy to meet its goals and the following processes have been employed by successful e-commerce companies to develop their strategy:

- Company should consider creating an independent E-commerce division or department with employees having specialist skills. A mixture of skills are needed. As well as the technical skills to implement the hardware and software required for e-commerce transactions, there will be a need for specialists in sales and marketing, purchasing, human resources, training, finance and business process re-engineering.
- Companies should introduce E-commerce as a corporate culture as a top down led management initiative. This may require education and training of managers in the first instance so they understand the benefits (and risks) associated with e-commerce introduction.
- The SWOT analysis should have identified the company's strengths. An e-commerce initiative needs to build on these strengths. The cost benefit analysis should enable managers to set targets and prioritize e-commerce

activities to give the greatest opportunities for the earliest financial return with the minimum risk.

- Companies should not underestimate the amount of business re-organization required to introduce e-commerce. These changes should, therefore, be harmonized with any other change initiatives the company is undertaking. The changes need to be seen as part of the company development and not as an add-on extra.
- Companies need to consider whether they can carry out the development work themselves or whether they should subcontract part or all of this work. Who, for example, is going to design the web site? How will the content be maintained and updated? Who will administer and control the system after it is installed? The company must consider whether it has the appropriate development resources and experience to build e-commerce systems or whether there are existing products that could provide the foundation of a new system.

During the planning stage you need to identify requirements for an Internet presence and should ask the below stated questions.

### Designing the system

There are a number of considerations that must be taken into account at the earliest possible design stage.

- How can an existing web site be developed to maintain customer loyalty? The design should take into account the values the company wishes to promote, the image it wished to build and maintain, as well as the customer requirements of convenience and ease of use. There are both the long term goals to be considered and the short term stages needed to work towards the goals in a logical progression.
- Who will process the credit card orders? Will e-commerce be employed to transmit credit card orders to the company's merchant account provider? The extent of e-commerce introduction can also depend on the company's partner organizations.
- How will you get your order and fulfillment information into your accounting system? It is important to remember that a sale continues beyond the point of order. The e-commerce system needs to be able to handle the whole process.
- How can you be sure that your data and that of your customers, suppliers and partners will be secure? This is an important technical issue that needs to be addressed from the outset. Without secure transactions, there will not be the customer confidence for the e-commerce system to succeed.

### Some Pitfalls to Avoid During Planning

Companies need to ensure they do not

- neglect planning for customer service both before and after a sale.
- fail to integrate their e-commerce with their traditional business.

- fail to prepare for success and the volume of business it may generate, e.g. avoiding network traffic jams.
- underestimate the need to advertize the web site and e-commerce facility.
- assume that the web site interaction is the only aspect that will make the company different to its competitors - the underlying systems are equally important and must be developed from the outset to avoid failure.
- make hasty (and costly) decisions because of the pressure to get into the market as quickly as possible. It is important to react quickly but it cannot be done without a minimum of thought.
- neglect issues of scalability. If the company is successful it may have to grow its e-commerce business very quickly. It is important that the e-commerce system does not itself impose limits on growth.

## **Step 5: Implementation**

Ideas, plans, and strategies are one thing - implementation is something entirely different, Jeff Bezos, of Amazon.com, claims that nothing Amazon.com does is very original - it just executes better than anyone else [9]. In other words, strategy is nothing without implementation.

Many E-commerce implementations fail because they promise long term gain but no immediate benefits. Amazon.com, for example, has been trading for seven years and has still not made a profit though it's projections are to do so in the future. It is, therefore, important to keep in sight the business transformation as well as the long-term aim. Whenever possible, E-business projects should be divided into three to six month modules so that immediate benefit can be delivered with flexibility in the overall plan.

E-Commerce is not an end state. It is a new business platform that will grow and evolve. To sustainable E-Commerce success is to think and plan not just in terms of overall architecture, but act in incremental steps. For example, to manage risk, a company's very first E-Commerce initiative might well be a simple "paper replacement" project to demonstrate the proof-of-concept in a well-controlled, internal environment. Processes are relatively untouched, with only the user interface being modified. In later increments the scope of the project can be expanded to include easily managed process changes.

### Organizational and cultural issues

In order to have a successful E-commerce development it is necessary to have board level commitment, and support from all departments, people involved and stakeholders. Projects have been known to fail without such commitment [10]. To put this "e-commerce culture" in place some education and training will need to be implemented before any further development is attempted.

As well as education on the benefits of e-commerce it will be necessary to introduce training on the business and technical issues of creating an e-commerce system. No one person can do everything, separate training will be required for the different disciplines of hardware, software, networks, marketing, finance, human resources and



process reengineering in order to build the necessary competence team. Where necessary new staff will be required.

Once the staff are trained or hired the technical staff and operational managers can be involved in the decision process. To maintain the e-commerce culture this should continue throughout the development and operational life cycle.

Many of the advantages of e-commerce will be lost if it is implemented in isolation. It is important to involve suppliers and distributors. This involves spreading the e-commerce culture beyond the company boundary. However, if partner companies are willing it may be possible to cooperate in development work and training. It can be constructive to review current distribution and supply chain models used. It is necessary to examine the potential effect E-commerce will have on your current logistics. It is likely to be possible to increase the number of electronic connections, and as a consequence simplify inter-organizational processes with financial advantages for all concerned. The relationship with partner companies will need to be continually reviewed as other companies make and follow their own initiatives.

The SWOT analysis will have identified strengths within the company that may be usable in the e-commerce project. For example, if a company already has a good distribution network this may be the foundation for developing the e-commerce distribution.

It is necessary to identify and understand what your customers and partners expect from the Internet and from e-commerce. It is necessary to know how many customers are able and willing to interface over the electronic networks and conduct electronic transactions. This may require surveys and interviews to learn of customer attitudes. Once the customer base is identified the company can build a close-knit community with its customers, encouraging customers to find out more about their products and services through message boards and emails. This builds the company's image. Also the more that can be found out about the customers, the more the products can be tailored the customer, the less likely they will be to switch to another supplier. For example Tesco built its online image on products and services they offer. However, this will need to be an on-going activity throughout the development and operation of the system as customers needs and wants are changing as rapidly as the technology advances.

To take advantage of the on-line customer community a web centric marketing strategy needs to develop alongside the technical developments. Even if the current marketing strategy has taken the Internet into account, it is necessary to develop a marketing strategy that clearly targets the Internet as a primary marketing channel.

The technical issues of e-commerce implementation will also need to be continually reviewed throughout the system life cycle. The technology is moving at such a pace that it is likely that advantage can be taken of developments worldwide of technology and standards that were not available at the start of the project. It is advisable to build scalability and flexibility into the solution and to standardize wherever possible. Security is a particular areas of concern it is critical to ensure that the company's systems keep up to date with expected standards of security, both within the organization and across all trading partners. It is also important to keep testing and re-testing the e-commerce web site to ensure it remains compatible with the latest

developments in Internet browsers on all common hardware and operating system platforms.

### **Step 6: Strategy Assessment**

Like any other project, E-commerce projects need to be assessed during and after implementation. The objectives of strategic reassessment are: -

- To find out if the E-commerce system is delivering what it was supposed to deliver. A common pitfall is to think that selling over the web means the company must be making money over the web. This is not necessarily the case as Amazon has illustrated. A lack of profit in the beginning need not be a problem if it was part of the overall strategy. Amazon, for example, though they are not making money they do have a sound business plan.
- To learn from both the successes and failures of the system reviewed. Whether the system is living up to expectations or not it should be possible to learn from mistakes and improve future planning. E-commerce is a continually changing environment so initiatives that work in the first instance may cease to be cost effective at a later stage.
- To identify failing projects as soon as possible and determine the reasons for failures. There may be fundamental flaws in the original assumptions or outside changes may have completely altered the online market. There is no point in continuing with a project if it can't be saved. It is better to learn from the mistakes to avoid the same problems on subsequent systems.

Feedback and corrective actions to give a policy of continual improvement are needed for any development including E-commerce. For companies implementing an E-commerce strategy, a set of questions are given below which can be used as a checklist by the review team:

- 1) What were the aims and objectives for e-commerce? Were they met?
- 2) What were the expectations? Were they realistic?
- 3) What products and services did the company want to offer? Is the system delivering them? Can the proportion of offered services be quantified?
- 4) Have unanticipated problems occurred? If so, what proportion were handled successfully?
- 5) What costs did the company hope to reduce? What cost reductions were actually achieved?
- 6) Did other costs increase unexpectedly? If so, why? What extra costs were incurred?
- 7) What were the sales objectives were they realistic? How well were they obtained?
- 8) Did web and Internet communications reduce traditional communication costs, if so, by how much?
- 9) Did you improve customer relations? What evidence is there for this? If not what went wrong?

- 10) Have your suppliers provided adequate services? If not, what cost was incurred?
- 11) What internal issues have arisen? For example, has it had an effect on employees' resistance to change, cultural change etc? Can any problems be quantified?
- 12) Is your site making the best use of available technologies? How will you stay on top of online developments in your field? Are all appropriate staff involved and if not who else should be involved?
- 13) Does your web site effectively convey the image and message the company needs? Are there new media or public relations outlets that you could tap for further promotion?
- 14) What information has been gained from customer surveys, monitoring the use of the company web pages and sales made through e-commerce. Does this point to further opportunities for e-commerce expansion?
- 15) Does your business offer other services or customer support functions that you could provide online? If so what are the projected sales?
- 16) Are there further efficiencies that you could achieve by more effective electronic communication? If so what is the projected saving?
- 17) Could the company's database of electronic contacts be further extended and used more effectively for marketing? Note however, that care must be taken over privacy. The company should ensure it follows a clear privacy and ethical policy in all its use of customer data.

Many of the above questions involve quantification of answers. This helps identify the significance of the information revealed and this will then help prioritize future initiatives.

#### Review your Web traffic analysis:

The electronic nature of a web site means that information can be collected much more easily and effectively than it is for other types of commerce. In particular, it enables the following questions to be asked:

- 1) Are there any obvious patterns in the Internet traffic, or the paths the company's visitors follow that may give insights into their preferences or provide opportunities for further e-commerce growth.
- 2) What are the common routes users take through the web site and what are the top exit points from your site? Are these appropriate? Can these be changed by better site design?
- 3) Which external sites link to you? Are these appropriate? How often are they used? Are you generating sufficient return on investment for paid for online advertising?
- 4) If you provide a web site search facility, what are the most common search phrases and do they give any ideas for new areas of business development?

Finally it is important to track competitors developments in the field. This can mean examining new competitors; in E-commerce it is not clear where your competition will come from as the nature of the Internet allows small companies and new companies to compete on level terms with larger, well established rivals. Because of

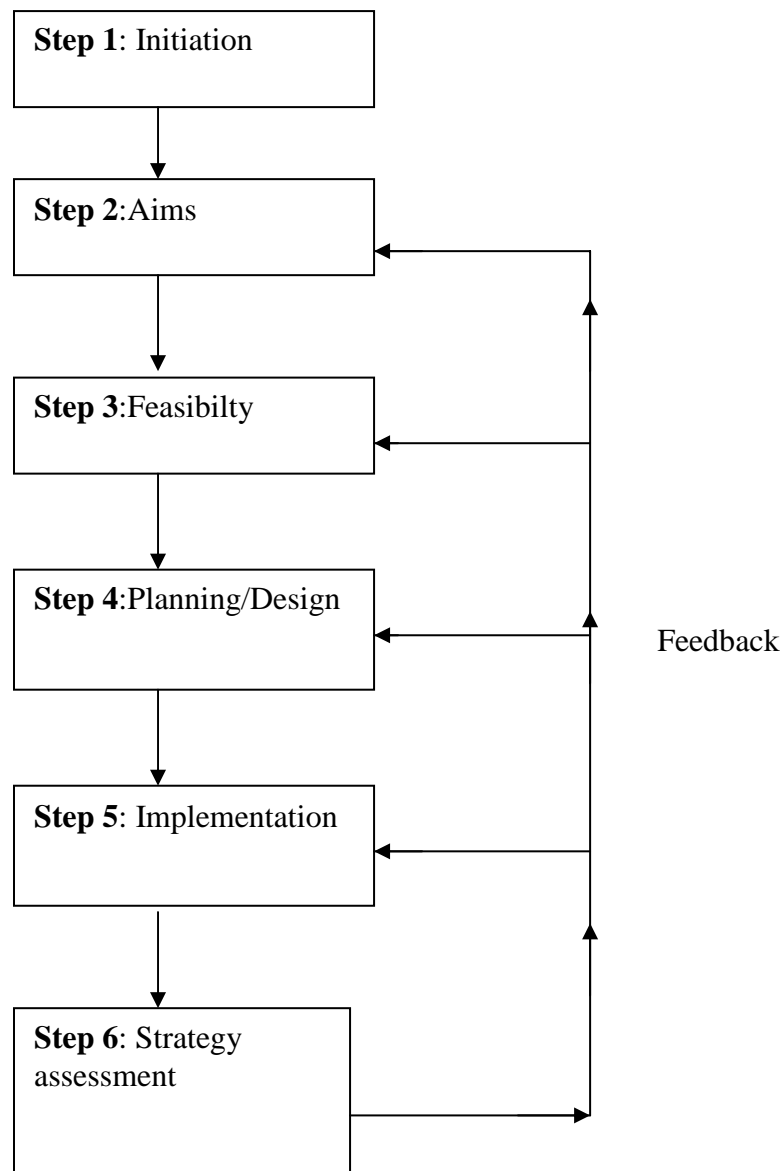
the volatility of the old value chains, new services can be introduced by totally unexpected parties that become a competitor overnight.

The review of the e-commerce projects will then feed back to change and update the strategy and approach as is illustrated in figure 1.

### Conclusions

Strategic planning clarifies what an E-commerce project should do or focus on, with respect to the company's mission and the given business environment. It is essential to have a well thought out strategy for E-commerce. It is important to identify the critical success factors, important to carry out a pilot study and carrying out Web assessment, to get feedback. Long-term winners on the web will be those who remember that the business fundamentals still apply.

*Figure 1: Showing steps used to formulate E-commerce Strategy*



*Figure 1: Showing steps used to formulate E-commerce Strategy*

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