# What Do Pigs And Chickens Have To Do With eCommerce?

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#### ABSTRACT

In a world where more organisations are embracing eCommerce or eBusiness or eSomethingelse, there are an increasing number of eFailures as well.

This paper looks at what it means to be successful in eCommerce and in particular the management skills that are needed for eCommerce organisations to be innovative and successful.

The findings are based on a review of literature and the interview of a senior manager in an eCommerce organisation in New Zealand, and will be able to be used as the basis for a questionnaire to be distributed to a wider sample of organisations.

The paper concludes by drawing a parallel between our understanding of the nature of pigs and chickens, and the characteristics of successful eCommerce organisations.

#### 1. INTRODUCTION

A review of a number of pieces of literature point to eCommerce being multidisciplinary as opposed to being a single discipline in itself, with most writers, including Turban, Lee, King and Chung (2000) and Chan and Swatman (2000), reaching the point that the underlying disciplines fall into the three categories of business, technology and social sciences.

A small number of researchers are starting to look more closely at the business disciplines, (in particular the management skills), that are needed in eCommerce organisations for them to be successful. Davis and Hajnal (1998), in looking at the management skill requirements for eCommerce identified a wide range of management skills that would be needed in the industry.

The intention of this paper is to start exploring which are the most significant of these skills for the success of eCommerce organisations. To do this will also require an understanding of what success actually means for eCommerce organisations, the steps needed to be successful and the management issues that result.

#### 2. METHOD

Existing literature was reviewed to draw up a list of management skills that have been identified as being important for the industry.

An interview was conducted with a senior manager in an eCommerce organisation in New Zealand to explore:

- what constitutes success in eCommerce
- the steps and processes needed for success to be reached
- · the management issues that arise as a result
- the relative importance of a range of management skills.

The organisation is referred to as Organisation X to preserve anonymity.

Due to only one organisation being involved in the research, it is not possible to make generalisations about the population of eCommerce organisations in New Zealand.

## 3. THE MULTIDISCIPLINARY NATURE OF ECOMMERCE

Turban, Lee, King and Chung (2000) identify nine disciplines that they describe as making up the multidisciplinary nature of eCommerce:

- Marketing
- Computer Sciences
- Conumer Behaviour and Psychology
- Finance
- Economics
- · Management Information Systems
- Accounting and Auditing
- Management
- Business Law and Ethics.

Chan and Swatman (2000) in looking at what is taking place in the employment market-place attempt to identify what makes the eCommerce

professional unique. The model developed includes three aspects:

- Electronics the electronic technologies that support the applications
- Commerce/Business the business processes and marketing and other techniques
- People the degree of adoption of eCommerce by people.

It would be possible to take the disciplines that have been identified by Turban, Lee, King and Chung (2000), and classify them into the three aspects that Chan and Swatman (2000) identified as being part of the role of the eCommerce professional.

### SUCCESS FOR ECOMMERCE ORGANISATIONS

Given that eCommerce is seen as being multidisciplinary in nature, it would follow that success in each of these disciplines would be necessary for organisations to be successful in eCommerce.

Schneider and Perry (2000), in setting out the process for planning an eCommerce venture, stress the importance of having specific objectives to measure performance against, and implicit in this is that the achievement of those objectives would imply that the venture had been successful. They go on to identify a number of objectives that could be set. These objectives, which will differ according to the exact nature of the venture, include:

- Building Brands
- Enhancing Existing Brands
- Selling Products and Services
- Selling Advertising
- Improving After-Sale Service and Support
- Purchasing Products and Services
- Managing Supply Chains
- · Operating Auctions
- Creating Virtual Communities and Web Portals.

Based on this it would appear that "success in eCommerce" is not the same for every organisation. Instead it will depend on the nature of the eCommerce venture that is being embraced.

During the interviews with the senior manager in Organisation X, they were asked how they would know if an eCommerce organisation had been successful.

The interviewee described a number of features that can point towards an eCommerce organisation being successful.

The first feature being that the suppliers and/or customers end up being inside the organisation instead of being at arms-length. This includes the computer systems of the organisation interacting with the computer systems of their customers and/or suppliers. An example described was "can your supplier see into your inventory system, identify that you are short of product ABC and automatically send you some more?"

Other features being the lowering of costs through better management of supply chains, the introduction of new products and the start up of a self-service component for customers.

There was also the realisation that there are different types and levels of success for different types of organisations. The embracing of eCommerce might be more appropriate for some organisations than for others (for example products that can be supplied electronically, , as opposed to the provision of professional services where face to face contact may be needed).

#### STEPS/PROCESSES NEEDED

If you think "being in eBusiness" means suturing on an eCommerce appendage to your body corporate, then think again. We promise you that won't work. You've got to be prepared to let that eBusiness commitment ripple through and shake up that body corporate. And like an 8.0 earthquake, you must be prepared for the rearrangement that will eventually occur.

Patel and McCarthy (2000) make the above statement early on in their work to point to idea that for an organisation to be successful at eCommerce or eBusiness, the commitment made must be a total commitment that will change the fabric of existence

of the organisation.

Davis and Hajnal (1998) describe how successful exploitation of eCommerce will require making a creative link between and organisation's strategy and the technology that supports it. They go on to say that it also includes managing applications that change quickly and that are increasingly integrated and convergent, so as to enable flexible and adaptive behaviour on the part of the firm and its employees.

These two groups of writers are both pointing to the need for eCommerce ventures to be something that requires the total commitment of the organisation, and that it must be embedded in the organisation's strategy.

The interviewee in Organisation X was asked what they saw as being the steps and processes that were needed to reach that form of success, with three main areas being identified:

Firstly, from a strategic point of view, the most important process is to gather together a committed and knowledgeable management team, with a good understanding of internet based technologies.

Secondly, one of the changes that can take place in an organisation is that there is a shift of power from IT departments as the "gate keepers" of knowledge, through to customers and suppliers having the power. As part of this data, becomes a core asset, and value is gained from spreading data around.

Thirdly, there are also likely to be significant changes to the culture and fabric of operation of the organisation.

Siegel (1999) suggests that "asking your customers" is one of the best ways for an organisation to determine what it should do in its move into eBusiness/ eCommerce. This is consistent with the move of the power base to customers that was identified.

The changes to culture, power base and fabric of operation are also consistent with the total commitment described by Patel and McCarthy

(2000).

## 6. MANAGEMENT ISSUES THAT ARISE

The interviewee was asked to describe the management issues that arose when the steps and processes were being carried out.

The response was that the management team need to be willing to take risks, be prepared to make some wrong decisions and change some decisions: a concept that was described as being "informed risk taking".

This approach may serve to annoy and frustrate some people in the organisation, and can result in the loss of some jobs.

Crucial factors in this approach were seen as being vision, commitment and passion. The approach can also have an impact on:

- the egos and status of people within the organisation
- the ethos of the organisation
- the power base within the organisation
- the skills needed in the organisation.
- 7. THE MANAGEMENT SKILLS NEEDED

Davis and Hajnal (1998) identified a range of 22 management skills and competencies that are needed in eCommerce, which was largely based on research in North America. This list of competencies is shown in the first column of Table 1.

The interviewee in Organisation X was also asked to rate the skills identified by Davis and Hajnal (1998) from 1 to 5, where 1 is "vitally important" and 5 is "not important at all". The raw results of this are shown in the right hand column of Table 1.

The skills and competencies that were rated as vitally important were:

- Multiple project co-ordination
- General management education
- Knowledge of the industry
- · Strategic analysis
- · Open to change
- · A fast learner
- Able to use IT and telecommunications technologies
- A broad perspective on Electronic Commerce.

In addition to this, the interviewees were also asked if there were other skills or competencies that could be added to the list if it was to form the basis for a questionnaire to be sent to a wider sample of organisations. The skills identified by the interviewee in organisation X were:

- The ability to manage cultural change
- The ability/willingness to support informed risk taking.

In summary, the management skills identified as being vitally important include:

- Specialist management skills/competencies that are strategic in nature (strategic analysis, openness to change, fast learning, managing cultural change and risk taking).
- Generic skills in relation to general management and the use of technology.

#### 8. CONCLUSIONS

Based on the literature that was reviewed and the interview that was conducted, the patterns that appear to be emerging are:

- Organisations need to have a total commitment if they are to be successful in eCommerce.
- A number of different features can contribute to success in eCommerce
- That the embracing of eCommerce by an organisation has the potential to radically change the fabric and nature of the organisation
- That the management skills that are seen as being vital to success in eCommerce organisations are

Skill/Capability/Competency	Rating
Ability to interact in an IT/business work group	3
Ability to work with IT professionals, data processors	3
Multiple project co-ordination	1
Basic understanding of computers from a non-technical perspective	4
General management education	1
Knowledge of the industry	1
Marketing in a one-to-one environment	2
Human-computer interaction	3
Operational issues (such as product development)	3
Strategic analysis	1
An attitude appropriate for "business and people" management	2
A relationship builder	2
A marketer	2
Charismatic (a leader, enthusiasm generator, problem solver for others)	2
Comfortable interacting with government and regulatory bodies	4
Open to change	1
A fast learner	1
A non-technical person's understanding of technological security and	
perceptions surrounding security	4
Ability to contribute to standards of service to constituents	3
Able to use IT and telecommunications technologies	1
Traditional reporting skills	4
A broad perspective on Electronic Commerce	1

<sup>1 =</sup> Vitally Important, 5 = Not Important at all

#### Table 1

The Management Skills Needed in eCommerce as Identified by Davis and Hajnal (1998), and their ratings by the Interviewee in Organisation X

largely strategic in nature.

Although it is not possible to make generalisations about the total population or organisations involved in eCommerce, this does provide a starting point for a wider survey.

#### 9. PIGS AND CHICKENS?

A simple story shows how an understanding of pigs and chickens can provide a helpful insight into the patterns that are emerging:

One day the farmer went to see the pig and the chicken and said to them, "I would like to have bacon and eggs for breakfast in the morning". The chicken replied, "No problem for me, that can easily be fitted into my already busy schedule in the morning". However, the pig looked most concerned, and replied, "What you are asking requires a total commitment on my part, as it will radically change the fabric of my existence."

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