

# Are eCommerce Learning Programs durable market products? Six Case Studies from Hong Kong SAR

**Elsie S.K. Chan**

Deakin University, Australia  
elsie.chan@deakin.edu.au

**Paula M.C. Swatman**

University of Koblenz-Landau, Germany  
paula.swatman@uni-koblenz.de

## Abstract

Electronic Commerce (eCommerce) academic programs are the fundamental tools for developing eCommerce professionals for society. When the question “Is E-Commerce dead, past its prime, or just resting?” is under discussion, it is useful to see what universities are doing in terms of providing eCommerce education. Our long-term study of universities in the Asia-Pacific region found that degree programs tended to use the terms Electronic Commerce and eCommerce for their masters degrees from the early-to-mid 1990s. New degrees offered towards the end of the 1990s, by contrast, tended to use the names eBusiness and Internet Marketing. As the initial surge of interest in commercial eCommerce activities falls away, following the slump in the NASDAQ index, are eCommerce degree programs also likely to be so negatively affected? A number of educators in the United States, for example, believe that eCommerce academic programs will no longer be being offered within a few years. In this paper, which focuses on the apparent counter-trend in Hong Kong-based eCommerce educational programs, we examine: (i) why eCommerce degree programs suddenly emerged in Hong Kong SAR; and (ii) how long eCommerce programs will last in Hong Kong.

## Introduction

Hong Kong, which was a British colony for over 150 years, became a special administrative region (SAR) of China on the 1<sup>st</sup> of July 1997 and has maintained its reputation as a major commercial centre. Hong Kong University of Science and Technology (HKUST) offered the first eCommerce subjects in this area. A report from a local newspaper in April 2000, with the very attractive title: *"To Become a Hot Cake in the Human Resources Market, Study eCommerce / eBusiness Courses in Prestige Universities"*, contained an interview with Prof. Christopher Westland from HKUST, who noted that Electronic Commerce subjects, although not a full degree program, were first offered in Hong Kong in 1996 by HKUST. At that time the enrolment rate was very low, which may have been due to a lack of familiarity with the term ‘Electronic Commerce’ in Hong Kong at the time - but enrolment rates in subsequent years gradually increased. It is interesting to note Loo’s (1998) comment that eCommerce consulting practices did not have many clients in 1995, because Hong Kong was still learning about eCommerce. Between 1999 and 2000, eCommerce degree programs suddenly emerged

and six out of eight universities started to offer this program (Kwok 2000). Masters programs are now in great demand in Hong Kong (Singtao 2000), and supply an active commercial graduate market.

Yet while Hong Kong is quickly gaining momentum in promoting eCommerce academic programs, a counter-trend is emerging in the United States. In January 2001, Prof. Saloner of Stanford University said, "*E-Commerce is not a distinct subject, not a discipline ... in the short term we will run specialised elective courses but our goal is to make them obsolete in three to five years.*" (Financial Times 2001). The E-Commerce Times reported in June 2001: "*In fact, in a campus trend that reflects what is happening in the business world, many colleges plan to absorb their e-commerce courses into overall business education programs, showing that e-commerce has not gone away, but rather has become part of the whole.*" (Regan 2001).

In this paper, we examine the possible reasons why Hong Kong is running counter to the US trend by means of two questions: (i) why did eCommerce degree programs suddenly emerge in Hong Kong SAR – a competitive society? (ii) how long will eCommerce programs last in Hong Kong SAR?

## **Research Methodology**

This paper forms part of the first author's wider research project into the development of eCommerce education programs in the Asia Pacific region. To understand Hong Kong's experience, survey questionnaires were sent to Heads of Schools within Hong Kong SAR universities, asking them whether their schools or departments offered (or planned to offer) eCommerce degree programs. Details of these programs can be found on the research project's web page (Chan 2001).

The methodology selected was a multiple case design, with multiple units of analysis for each case (Yin 1994:39). Meta-matrices were used as tools to analyse the data (Miles & Huberman 1994:178). The aim of using multiple cases is *to see processes and outcomes across many cases, to understand how they are qualified by local conditions, and thus to develop more sophisticated descriptions and more powerful explanations* (Miles & Huberman 1994:172). Each eCommerce / eBusiness program web site, the objectives of the program, and other support documents were examined; and face-to-face interviews were conducted with eleven eCommerce program leaders, developers and administrators from these 6 universities in April, 2001. The interviews for most cases were conducted in English, although some interviews were in Cantonese with English, and Putunghua with English was also used in one interview.

### ***Scope of the case studies and research questions***

In Hong Kong, the term 'Electronic Commerce' first appeared as a subject name in early 1996. From the interviews with the program leaders it appears that, although there are differences in general between the meanings of Electronic Commerce and Electronic

Business, both terms can be used to refer to degree titles. Since Electronic Commerce was the term first used, we define eCommerce degree programs in this paper as:

*Bachelor or masters degrees with titles including the terms Electronic Commerce (eCommerce, E-Commerce) or Electronic Business (eBusiness, E-Business) in universities in Hong Kong, SAR.*

Educational programs can, to a large extent, be seen as ‘service products’ (Chan and Swatman 2000; Swatman and Chan 2001) and educational marketers typically have a marketing mix of seven tools – the so-called ‘7 Ps’: program, price, place (delivery system), promotion, processes, physical facilities, and people (Kotler & Fox 1995: 276). In this paper we focus on processes (how the program can be developed rapidly); on ‘place’ (the delivery system); and on the ‘price’ of the programs and fit these into our research questions.

### *Research Question 1*

Why did eCommerce / eBusiness academic programs in Hong Kong SAR suddenly emerge over a single year?

Questions asked in the interviews included:

- What were the driving forces in your university to offer the program?
- How were these programs developed (*processes*) in order to cope with the need for a rapid entry into the education market?

### *Research Question 2*

How long will eCommerce/ eBusiness programs last in Hong Kong SAR?

Questions asked in the interviews included:

- What is the price of the degree programs; and to what extent could this affect the potential survival of the program?
- How is the program delivered (place) and does the method of delivery affect the length of the program’s life?
- Do the eCommerce / eBusiness program leaders and developers believe that these programs will have a long life cycle?

The description of six case studies can be found in Appendix 1.

## **The Cases – a Discussion of the Findings**

The sudden emergence of eCommerce programs in Hong Kong, SAR over the period 1999 to 2000 can be explained by a combination of the following factors:

Firstly, the ‘Internet wave’ theory. An Australian government publication (Commonwealth of Australia 1999) notes that the spread of the Internet around the globe occurred in four ‘waves’. The USA, Canada and the Nordic countries comprised the first wave. Hong Kong, Australia, New Zealand, Singapore and a number of other countries

are included in the second wave. These countries took up the Internet enthusiastically in the 1990s and some are now virtually indistinguishable from the Internet pioneers in Wave One countries. The Internet started to become popular for Hong Kong residents, either at home or at work, around the period 1997/98.

Secondly, Government initiatives. In 1997 the Chief Executive of Hong Kong SAR, Mr Tung Chee Hwa, set a vision for Hong Kong to be “*a leader and not a follower in the information world of tomorrow*”, as well as to use information technology (IT) to retain its competitive edge and to drive overall economic expansion (Hong Kong Digital 21 Strategy 2001:4). In November 1998 the Government initiated the development of Hong Kong as a leading digital city (Digital 21 1999<sup>1</sup>). Demand increased as the Hong Kong Government began to provide encouragement for eCommerce activities. (See Daily Information Bulletin 1998<sup>2</sup>; Daily Information Bulletin 1998a<sup>3</sup> and Hong Kong Special Administration Region Government Release 1999<sup>4</sup>);

Thirdly, market expectations for rapid eCommerce course development. The first eCommerce academic program was offered in 1999 (see Case 2, Appendix 1). In 2000, as a result of market expectations, four universities began to offer eCommerce programs. The time required to develop these programs *ab initio* ranged from a minimum of less than six months (Case 6) to a maximum of three years (Case 5), with an average development time of about one year. Case 5’s two-to-three year development period resulted from the university’s belief in 1997/98 that eCommerce was not ‘stable’, so that the developers found it difficult to identify the curriculum and to create names for subjects. The processes can be classified into three models, all of which enable rapid development of new degree programs and have varying strengths and weaknesses (the difficulties encountered by the universities when developing these programs are listed in Appendix 1):

1. *Internal Conception and Development: External Delivery* – one to two internal staff members set the framework of the program. The courses are then developed either by internal university members (who are the experts in that subject) or experts in that particular area are invited from overseas to design and deliver the courses, so that what is taught to students is heavily dependent on continued access to the expert instructors;

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#### Footnotes

<sup>1</sup> To realise the Chief Executive's Information Technology (IT) vision, the Information Technology and Broadcasting Bureau of the Hong Kong Special Administrative Region Government commissioned the 1998 Digital 21 Strategy in November 1998. The strategy focused on building Hong Kong's information infrastructure and putting in place the right environment for e-business to prosper.

<sup>2</sup> In April, 98, Mr Donald Tsang, the then Financial Secretary, stated that the market conditions for mass market E-commerce would ripen progressively over the coming years and during this time governments would have some precious breathing space in which to address the relevant issues which are appropriately their responsibilities in the promotion and facilitation of E-commerce.

<sup>3</sup> In June, 98, Mr Tak Hay Chau, the then Secretary for Trade and Industry, at the meeting of the Asia-Pacific Economic Co-operation (APEC), announced a work programme developed by the APEC Task Force on Electronic Commerce.

<sup>4</sup> In Feb., 99, Mr K C Kwong, the then Secretary for Information Technology and Broadcasting, when addressing members of the business associations of Germany, Australia, Austria, France, Singapore and Hong Kong, said, "Our aim is not only to provide more efficient and better quality public services to the community, but also to encourage the community to accept electronic commerce as an integral part of daily living."

2. *Internal Conception, Development and Delivery* - the framework of the program is designed by a team of staff members (3-5 people, depending on the university). After the framework is set, a team of internal staff members assists in developing the courses, which contain either material reused from existing courses in other programs, or are developed for the new degree program. Internal staff members update or write the contents of these subjects. External dependence is lower, but material may not be very new or original;
3. *Internal Conception, Phased External Development and Delivery* – the framework of the program is designed internally, the courses are outsourced for external ‘experts’ to write and internal staff members deliver the material to students. The writing of course material takes place in parallel with running the program, so that programs are offered a year at a time with courses for later years being written while earlier years are already being taught. This model leads to even greater dependency on external expertise than with model 1.

In addition to their rapid conception and development, these programs could be marketed so quickly because they were all funded by the universities themselves, rather than being government-funded – which reduced the time needed to satisfy the various approvals processes considerably. The exception is Case 4, where one masters degree was originally government-funded (even in this case, however, the degree became self-funding from September 2001).

Real-world experience was provided to students by inviting industrial practitioners as guest speakers. All the program leaders believe that their eCommerce programs do not necessarily provide hands-on experience to students but, since almost all students are already working in industry or even in eCommerce-related firms, this is not seen as a major problem.

Fourthly, the driving forces from the public and from the universities themselves. Hong Kong has been a recognised centre for banking and commerce for a very long time; and people are motivated to maintain their position in the field, which has led to a demand to be at the forefront of development in electronic aspects of the market. The qualification levels of the students in the master’s degrees are very high. Most of them (40-70% of students, depending on the university) have at least one master’s degree already, while some even have PhDs (and some come from that other bastion of the status quo – medicine). They attend the eCommerce master programs mainly because they want to acquire eCommerce knowledge to apply to their day-to-day business environment. The major driving forces for offering the eCommerce degree programs are found primarily in external competitive pressure from other universities, pressure from industry, from social needs, and from internal pressure within the universities themselves.

“How long will eCommerce/ eBusiness programs last within Hong Kong SAR?” We look at 'price', 'place' and the opinions of eCommerce / eBusiness leaders.

Firstly, price. The price of the program in each university can be found in Appendix 1. The cost for an eCommerce master degree ranges from HK\$62,000 – HK\$140,000

(US\$8,000 to US\$18,000). In some cases, the students' employers paid their tuition fees so that the cost of the program was not a major issue. All the students, however, are working adults and time is a more important issue for them than money. It appeared, therefore, that price was not a significant factor for the survival of the programs at the time the interviews were undertaken (April 2001). Of course, we cannot predict whether this factor will affect the life of program in the future, particularly if the global economic recession continues to expand as it has done over the past year. Even in this case, however, it may well be that people finding it difficult to obtain suitable jobs will choose to take a year or so off to obtain further qualifications which might improve their employment opportunities later on.

Secondly, place (delivery mode). Except in Case 3 (where the degrees are offered by distance learning) the delivery mode of all programs is primarily face-to-face, with study materials such as lecture and tutorial notes being available via a web-server. In Case 4, some subjects are delivered face-to-face and others are delivered on-line, with the instructors deciding which mode they prefer. The program leaders in Case 4 said that the delivery mode has tended to move from face-to-face to on-line over time. Program leaders in Cases 1, 2, 5 and 6 believed that they would continue to deliver their programs face-to-face. On-line mode and web servers are merely seen as tools for downloading study materials or as a virtual forum for students to share their experiences. Some program leaders also mentioned that they required more technical staff to support the infrastructure of eCommerce programs, because of the dependence such degrees have on the web and email.

We also found that eCommerce programs are offered in two streams: business and technology. Where a single university offers more than one stream, the approach tends to be complementary, rather than competitive – and in Cases 4, 5 and 6 staff from both Schools worked together to design the programs. Universities tend to see two separate niche markets: business people, and those having a technical/computer science or engineering background.

As long as the resource support, such as staff and infrastructure, from the university is sufficient place (delivery mode) seems unlikely to affect the life of the program.

Thirdly, interviewees' options about the length of lives of eCommerce programs. Responses to this question from the program leaders are reported in Appendix 1. Some respondents believed that as the components changed over time, programs would eventually be integrated more into general business or technology degrees, although one respondent argued that issues of eCommerce such as technology and business models could not be integrated into other subjects because of their uniqueness. Nonetheless, some program leaders admitted that, while they were offering eCommerce programs during 2001, they were already starting to plan new offerings for the coming year. All interviewees believed that eCommerce program will not 'die' immediately and that these degrees will last for at least five years, or possibly even for as long as ten years.

The following issues noted in the Marketing literature may cast further light on the duration of eCommerce programs in Hong Kong:

- the launch of a new program must occur at a suitable time (e.g. HKUST's introduction of eCommerce subjects in 1996 and also Case 5). Servi (1990:64) stated that *successes and failures are often a function of timing more than other factors. Many products were introduced prematurely; and the market was not ready to accept them as yet;*
- Buggie (1981:33) stated that *any firm, in any industry, needs a flow of new products to survive. The starting point should not be new concepts themselves, but a definition of the attributes of the ideal new product for your company.* So universities must develop new products to survive and compete. Developing new education programs is similar to developing a new service product (see Swatman and Chan 2001) and some existing subjects (components) can be 'borrowed' by the new program, as Cases 3 to 6 illustrate.

## **Conclusion**

eCommerce /eBusiness programs demonstrate many of the characteristics of a service-product and Hong Kong's experience provides a particularly clear example of this phenomenon – the responses to the Hong Kong case study showed that there was a strong commercial impetus for the development of the degree programs. This suggests that these programs will evolve, die or be absorbed at some point in time – but when that will be is not an easy question to answer. Why Hong Kong's experience is running counter to that of the US can be attributed most readily, we believe, to the fact that Hong Kong has taken up eCommerce several years later than the US. We therefore anticipate that the eCommerce / eBusiness degrees which have emerged so recently will be refocused by their offering universities over the next few years.

Taking a purely market-oriented view, academic programs are what universities sell to their customers. As the best-selling introductory marketing text by Kotler and Fox (1995:287) points out: *“the program's weakness can create consumer misgivings and cast a shadow on the institution's image. The biggest cost may lie in the future. When not eliminated at the proper time, these programs delay the aggressive search for replacements that offer more to students and other constituents. They create a lopsided program mix, and they depress current cash and weaken the institution's foothold on the future”*. eCommerce / eBusiness programs are no exception. It is clear that Hong Kong's universities will need to regularly revisit their new eCommerce offerings to ensure continued market acceptance.

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## References

Buggie, F. D. 1981, *New Product Development Strategies*, AMACOM, New York, p.33.

Chan, E. S. K. & Swatman, P.M.C. 2000, 'B2C new service products in the 'e' age: eCommerce/eBusiness degree programs', *Proceedings of the Fifth COLLECTeR Conference on Electronic Commerce*, December 13-14, Brisbane, Australia. <<http://www.deakin.edu.au/mis/elsieEC/pdf/2000-2.pdf>>, (Accessed 8 Feb 2002).

Chan E.S.K. 2001, *Universities which offer / are planning to offer eCommerce Course/Program in Hong Kong*, <[http://www.deakin.edu.au/mis/elsieEC/hk\\_U.htm](http://www.deakin.edu.au/mis/elsieEC/hk_U.htm)>, (Accessed 8 Feb 2002).

Commonwealth of Australia 1999, *Driving Forces on the New Silk Road*, Green Advertising, Canberra, Australia, p. xxii. <<http://www.dfat.gov.au/nsr/clearway.pdf>>, (Accessed 8 Feb 2002).

Daily Information Bulletin 1998, *a speech by the Financial Secretary, Mr Donald Tsang, at the APEC Business Advisory Council Roundtable on Electronic Commerce*, April 28, <<http://www.info.gov.hk/gia/general/199804/28/0428069.htm>>, (Accessed 8 Feb 2002).

Daily Information Bulletin 1998a, *Hong Kong Welcomes Outcome of APEC Trade Ministers Meeting*, June 23, <<http://www.info.gov.hk/gia/general/199806/23/0623211.htm>>, (Accessed 8 Feb 2002).

Digital 21 1999, *Welcome to the "Digital 21" web site!*, created in June 1999 and last updated 11 May 2001, <<http://www.info.gov.hk/digital21/eng/aboutus.html>>, (Accessed 8 Feb 2002).

Hong Kong Digital 21 Strategy 2001, *Hong Kong Connecting the World*, May, <<http://www.info.gov.hk/digital21/eng/download/download/2001digital21e.pdf>>, (Accessed 8 Feb 2002).

Financial Times 2001, *Putting e-business in Its Places*, 15 January, <<http://globalarchive.ft.com/globalarchive/articles.html?id=010115004672>>, (Accessed 8 Feb 2002).

Hong Kong Special Administration Region Government Release 1999, *Government pledges to promote E-commerce*, February 26, <<http://www.info.gov.hk/gia/general/199902/26/0226143.htm>>, (Accessed 8 Feb 2002).

- Kotler, P. & Fox, K. F. A. 1995, *Strategic Marketing for Educational Institutions*, Prentice-Hall, New Jersey.
- Kwok, P. 2000, "Artificial Intelligence for Ecommerce", *Open Link*, The Open University of Hong Kong, 9(2), p.11, April.
- Loo, G. 1998, "Andersen launches Hong Kong e-commerce center", *Computer World Hong Kong*, Posted: 3:22pm Wednesday, March 11, <<http://www.cw.com.hk/Analysis/a980311003.htm>>, (Accessed 8 Feb 2002).
- Miles, M. B. & Huberman, A. M. 1994, *Qualitative Data Analysis*, Sage Publications, London, pp. 172-205.
- Regan, K. 2001, "School's Not Out Yet for E-Commerce", *E-Commerce Times*, June 5, <<http://www.ecommercetimes.com/perl/story/?id=10249>>, (Accessed 8 Feb 2002).
- Servi, I. S. 1990, *New Product Development and Marketing*, Praeger Publishers, New York.
- Singtao Newspaper 2000, "To Become a Hot Cake in the Human Resources Market, Study eCommerce / eBusiness Courses in Prestige Universities", *Computer News Section*, in Chinese, p.1 10 April.
- Swatman, P.M.C. & Chan, E.S.K. 2001, "eCommerce / eBusiness Education: Pedagogy or New Product Development?" in Werthner H. and Bichler M. ed., *Readings in E-Commerce*, Springer-Verlag, <<http://www.deakin.edu.au/mis/elsieEC/pdf/2001-1.pdf>>, (Accessed 8 Feb 2002).
- Yin, R. K. 1994, *Case Study Research Design and Methods*, Sage Publications, 2<sup>nd</sup> edition.

## Appendix 1

### Case 1

This university started offering Electronic Commerce subjects in 1996. At that time the enrolment rate was particularly low, although later, the enrolment rate improved and by 1999, the eCommerce degree was greatly in demand. The master degree with an Electronic Commerce major was first offered in September 2000. In summer 2001, a new (and more ambitious masters degree program in Electronic Commerce Management was offered, where applicants were required to already have earned an MBA degree. There are 40 places per year for the two degree programs and the course fee is about HK\$115,500. Both masters degree programs are self-funded.

The major driving force for offering this program was external competitive pressure from other universities. The development time for the program was about 1 year and all subjects in the program were developed by internal staff members. The most difficult part of the program development was setting the framework for the program.

The program leader believed that “eCommerce degrees will die in 5 or so years. The University has to operate in a modern marketing environment. The technologies change, people change, and business changes, the person who delivers the materials needs to be up to date.”

### ***Case 2***

This university started to offer an eCommerce master degree in September 1999. This was the first eCommerce masters degree offered in Hong Kong SAR. The number of applicants in 1999, 2000 and 2001 were 850, 1685 and about 600 respectively for the 100 or so places per year available. The tuition fees are HK\$100,800 (8 subjects + project) or HK\$129,600 (12 subjects). Course fees are not a problem for students, as most of them are sponsored by their employers. The university needs confirmation from the student's company to show that the employer supports the employee's studies - the employer will release the employee to attend classes after office hours and not request the employee to work overtime.

The major driving force for offering this program was pressure from industry and development time was less than six months. The subjects in the program were totally new and were developed by local and overseas instructors. It is anticipated that subjects may well be modified over time from those originally delivered by instructors flying in from overseas.

The most difficult part of developing the program was the need to continue modifying the curriculum to meet the expectations of the changing market-place. The interviewee believed that “EC/EB enables concepts to develop non-stop, e.g. the virtual office, virtual organisations, online business strategies can develop continually. We use this infrastructure as a platform to change the business. Technology will always be a part of strategy. Technology will always be a part of business. These possibilities will also be part of your business. Whether it is still called ‘e’, then I don’t know. I don’t think anyone will sell eCommerce as a unique thing.”

### ***Case 3***

This university started to offer a bachelors degree and an honours bachelors degree in April 2000; and a masters degree in October 2000. The tuition fees for bachelors, honours and masters degrees are HK\$120,000, HK\$160,000 and HK\$60,000 respectively. The university considered that the degrees would come under the umbrella of the Master of Business Administration (MBA). However they also considered that some prospective students who already had MBAs would not take this degree, but would still want to study some eCommerce topics. Finally the University decided to adopt the name ‘Master of

Electronic Commerce'. There were 586 and 284 students enrolled in the bachelors and masters degrees respectively in 2001.

Both the degree programs took about a year to develop. Developing the bachelors program was easy because existing subjects were adapted, although two new subjects were developed by internal staff members. For the masters degree program, four out of the six subjects offered were newly developed. One of these new subjects was outsourced for development, while the other three subjects were developed by internal staff members. But the program was launched while the subjects were still being developed.

The driving force for the degrees was industry pressure. The program leader commented on the life cycle of the eCommerce program as "I don't believe up to this extreme. I don't believe daily life can cover the eCommerce concepts. Of course, we don't teach students how to use the Internet, but rather, from business technology and the industrial practitioner's point of view, how eCommerce integrates security and on the business side, how to operate eCommerce for strategic reasons. I don't believe [eCommerce] will disappear in three to five years. This discipline is changing. I don't believe it will disappear. I believe this discipline can be self-standing."

#### *Case 4*

Two masters degrees were offered in September 2000. They were run by different schools and aimed at different types of students: business and technology. The eBusiness master degree is a self-funded program, with a course fee of about HK\$90,000. The eCommerce masters degree (technology) is a government-funded program. There were over 1,000 applicants for about 30 places in 2000. From Sept 2001 this master degree changed to self-funded in order to cope with more students.

The driving force to develop the program was market demand. It took about 1-1.5 years to develop the program. Existing subjects were used at first, but later it was found that the materials were not relevant, so the subjects were changed or adapted. All subjects were developed internally. The most difficult part of developing the curriculum was to get approval from the University about which subjects should be included in the program. The program leader commented on the life of the eCommerce program "Yes, the Electronic Commerce program will die, but learning is life-long, developing new programs are then life-long. We don't know what the name of the new program will be."

Subject delivery is by means of both on-line and face-to-face modes, although there is a tendency to rely on on-line teaching rather than face-to-face teaching.

This university also recently offered a government funded eCommerce bachelors degree, but details of that degree were not available at the time of interview.

#### *Case 5*

This masters degree was first offered in September 2000 in two streams: business and technology. These two streams are run by two completely different faculties – the business and engineering faculties. The Vice-Chancellor (President) was responsible for coordinating the two faculties for the development of the programs, illustrating the importance of the programs to the University. Both streams are self-funded and the tuition fee is HK\$90,000.

The driving forces to develop the program were social need, external competitive pressure from other universities and pressure from industry. They took three years to develop the program. The most difficult part of developing the program was setting the content of the program, which needed a balance between theory and practice. If too practical, it was felt that it might become too software / industry oriented. During the interview, the program leader told me that they didn't need to take as long as 3 years, but at that time, the University thought that ECommerce was not mature. It was hard to set the framework of the curriculum and the market was not ready to take up this program.

“From an Electronic Commerce point of view, Electronic Commerce still has a demand. Technology and business are still in demand, ‘e’ will dissolve in marketing, ‘e’ is moving and ‘i’ is moving. Because of these, the hard part is to keep the subjects up-to-date. So every year we need to update the subjects. In the short term, there is still a demand for the Electronic Commerce degree program. However students’ expectation of Electronic Commerce will be different. Students should realise dot.com does not mean ‘digging gold’ any more. They should expect to learn more real applications in Electronic Commerce.”

### **Case 6**

eCommerce Masters in two streams - business and technology, were first offered in September 2000. Both of them are self-funded programs. The tuition fee is about HK\$8,1000 and HK\$90,000 for the technology and business streams and there were 270 and 220 applicants respectively in 2000 and 2001 for the 50 places per year which are available.

It took less than six months to develop the programs. The driving force for developing them was mainly from industry, internal pressure from the university itself, and competitive pressure from other universities. The programs used some existing subjects and tailored them a little to suit the eCommerce focus. Titles have remained unchanged, but the contents of subjects have been updated. All subjects are developed internally. The most difficult part in developing the program was to prepare the documentation for the universities to do the validation of the programs. This university joined with a private telecommunication sector provider and formed a ‘cyber university’. The course materials of both versions of the Master of eCommerce are almost the same, but the course fee of the cyber university is lower, HK\$20,000 less, and students do not need to attend face-to-face lectures for the on-line version of the degree program. After students have completed the course, the degrees will be granted by the University.

The eCommerce program leader commented on the life of the program as “In three-five years we will still need to offer an Electronic Commerce degree. At this stage I don’t think eCommerce has been fully integrated by industry or organisations. We still have a need to offer eCommerce. One day, eCommerce may have been fully integrated into all different areas. In business school, they integrate all the eCommerce components. For computer science, they have eCommerce components. Then probably we don’t need such a program.”