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Web content and design - a review of eCommerce/ eBusiness program sites

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Web Content And Design: a review of e-Commerce/ e-Business program sites

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Abstract

Websites promote or provide information about products, and are the portals through which most electronic transactions are conducted (Singh and Dalal, 1999; Kowtha and Choon, 2001). Nowadays many universities offer e-Commerce/e-Business degree programs (Swatman and Chan, 2001), with information embodied in associated websites. It is less clear whether e-Commerce techniques are utilised by universities at these sites for selling their educational "products" – degree programs. In this paper we apply Ho's framework for evaluation of websites (Ho, 1997) to review e-Commerce/ e-Business program websites in Australia and Hong Kong SAR[1], and suggest ways in which universities could make better use of e-Commerce techniques for their own portals.

Keywords

Electronic commerce, electronic business, web content, web design

INTRODUCTION

The number of university degree programs in e-Commerce/e-Business increased dramatically between 1998 and 2000 (Chan and Swatman, 2000; 2001) in the Asia Pacific region. Despite the dotcom crash in early 2000 (Buckman, 2000), many universities continue to develop and offer e-Commerce and e-Business degree programs – for example, in 2002, 27 out of 38 (71%) Australian universities and 6 out of 8 (75%) universities in Hong Kong SAR were offering e-Commerce/ e-Business degree programs at the undergraduate and masters levels (Chan, 2002a; 2002b).

All the information relating to these degree programs is available through the universities' websites. In some universities, indeed, special websites have been developed solely for these degree programs and many of them are offered (at least partially) by distance education as well as by face-to-face teaching, necessitating further use of web facilities. In Hong Kong SAR, students of the Hong Kong Polytechnic University can register for the programs online and even pay fees through Internet banking. It is clear that the universities themselves are, at least to a limited extent, engaging in e-Commerce activities in terms of offering their new degrees.

This Internet-friendliness is particularly important today, as students become increasingly e-Commerce literate and make increasing demands for Internet access to materials and administrative services. Most prospective students of the e-Commerce/e-Business degree programs are 16 or older. A survey undertaken by NOIE (Australia's National Office for the Information Economy) in 2002 found that, as at September 2001, a substantial proportion

[1] Hong Kong, which was a British colony for over 150 years, became a special administrative region (SAR) of China on the 1st of July 1997.

(72%) of the Australian population aged 16 years and over had access to the Internet from any site, placing Australia 5th out of the countries benchmarked[2].

These e-Commerce/e-Business degree programs can readily be shown to be "educational service products" (Chan and Swatman, 2000a; 2002; Swatman and Chan, 2001). While it may appear curious that we are using the term "products" for educational offerings, universities around the globe are increasingly applying market-oriented approaches to attract students and the development of degree programs (as a cursory survey of any English-language university's web page will make clear). Indeed, the increase in marketing staff within universities alone provides an indicator of this trend. Although universities are delivering e-Commerce/ e-Business programs electronically and Internet access is quite common to the group of age 16 or above, it is less clear whether universities are really applying e-Commerce techniques for selling their educational "products" – degree programs. This raises the question of whether or not these universities are also using e-Commerce techniques to support their product diversification and/ or new product development.

As a component of a longer-term study into the development of e-Commerce/e-Business education in the Asia-Pacific region, we have investigated a number of university degree program websites to see how they are being used to support the new degree initiatives. Two regions within the Asia-Pacific area were chosen for this purpose – Australia and Hong Kong SAR – because both experienced a common phenomenon: a significant proportion of the universities located in both these places suddenly started to offer e-Commerce/ e-Business degrees in 2000 (Swatman and Chan, 2001). For the purposes of this review, we studied 30 Australia and 6 Hong Kong SAR e-Commerce/ e-Business degree program websites. There are, of course, significant cultural and socio-economic differences between Australia and Hong Kong, which has implications for the discussion of our findings and which we discuss in more detail later in the paper.

In this paper, we initially discuss the issues of website content and design, before explaining the methodology we used for our study in more detail. We then discuss the results of the website analysis and finally draw some conclusions about the application of e-Commerce techniques to the university websites used to support e-Commerce/e-Business degree programs in these two regions. We also make some suggestions for possible future research activities in this area.

BACKGROUND

Nowadays web content design and strategies have been widely discussed (Fleming, 1998; Nielsen, 1998; Dalal, Quible and Wyatt, 2000; Love, 2000; Sellitto and Wenn, 2000; Sherman, 2001; Meehen, 2001; Tilley and Huang, 2001; Ranganathan and Ganapathy, 2002). West, Huff and Turocy (2000) suggest that a good web content management implementation delivers highly personalised content, facilitates customer self-service, and boosts satisfaction and loyalty. Vidgen, Goodwin and Barnes (2001) present a framework for web content management in which a number of themes are identified, including content lifecycle management, repository and data/ metadata management, and an awareness of the impacts of organisational change. Ding *et al.* (2002) summarise the ongoing research on semantic web technology that will improve the mechanisation for finding, extracting, interpreting and processing information tasks. Ivory, Sinha and Hearst (2001) provide a set of important metrics; including page composition, page formatting, and overall page characteristics for website design guidelines. Huizingh (2000) develops a research framework for distinguishing between the content and design aspects. Benbunan-Fich (2001) develops a methodical evaluation of the usability of commercial websites. Ahuja and Webster (2001) suggest that the measurement of disorientation should be a key issue to consider when developing commercial websites. Robbins and Stylianou (2002) present a conceptual model which differentiates website content from design, using a framework adapted from Huizingh's. The National Office for the Information Economy (2000) makes some suggestions to Australian SMEs for developing their e-Business websites:

[2] Following Australia were South Korea (with 71% of persons 16 years and over having Internet access); Hong Kong SAR (69%); Ireland (66%); Singapore (65%); Taiwan (64%); the UK (61%); Germany (54%); France (48%); and Italy (46%).

> *A website can fulfil a number of objectives ranging from a place to pass on information about your products; improving your operational efficiency through better communications with your customers, suppliers and government; to building your revenue through online sales. You must also decide who is the target audience for your website. You may wish to target new customers or provide additional service to your existing customers. You should also decide the area for your potential market, it could be global, limited to Australia or a particular town or city.*

Creating an online presence is not just a matter of putting a site together and sitting back waiting for the revenues to flow in. It is essentially like opening a new business and requires the same level of planning, control, monitoring and maintenance. The e-business channel must become fully integrated into the organization (Coleman, 1998). Department of Industry and Technology (2002) suggests six steps for developing an e-Business website to ensure a successful venture into the online world.

Ho (1997) classified the business purposes of a commercial website into three categories: *Promotion of product and services*, *Provision of data and information* and *Processing of business transactions*. Four types of value creation are identified: *Timely*, *Custom*, *Logistic* and *Sensational*. Ho's framework is illustrated in Table 1, below. Features were defined by starting with a set of conceptual guidelines, followed by the consideration of numerous cases that led to an iterative process of refinement. Typical examples of website features which fitted each of the purpose-value combinations are listed.

Value / Purpose	**Promotion**	**Provision**	**Processing**
Timely	• items on sale • special offers • product announcements	• stock quotes • employment opportunities • press releases	• on-line auctions • interactive brokering
Custom	• product/ service database search • customized product/ service report	• general database search • customized news report	• custom orders • interactive consulting
Logistic	• rates and fare quotes • facilities locator	• financial reports • research data • comparative, benchmark, and survey results	• on-line customer service • delivery or job status tracking
Sensational	• contests • sweepstakes, giveaways • outstanding web design	• freeware • games • puzzles • downloadable multimedia	• "surprise" discounts and bonuses • instant winners

Table 1: Ho's valuation framework for commercial websites (Ho, 1997)

We made use of Ho's framework in this paper for evaluating a range of e-Commerce/ e-Business degree program websites, because of its widespread use and general applicability in such cases. This framework has been used in many studies: for example, in a review of 1,000 North American commercial websites (Ho, 1996); a comparative study of 1800 websites from USA, Australia, Taiwan, Singapore, Hong Kong, United Kingdom, Germany, France and Italy (Ho, 1997); in a review of 60 New Zealand and world-wide tourism sites (Rachman, 1999) and for a comparison of web-based business practices in Japan and the U.S. (Sakaguchi *et al*., 2001).

RESEARCH METHODOLOGY

The most effective method of analysing websites is content analysis. A number of authors have analysed web-based data content from a variety of perspectives (see, for example, Neuendorf, 2002 for a broad-scale coverage of web-analysis tools; or Woodruff *et al.,* 1996, which provides a structural analysis of 2.6 million HTML documents from the data base of

the *Inktomi* search engine[3]). There are, of course, many different ways of analysing content, ranging from statistically to semantically oriented approaches and from software-based to entirely manual approaches. Huizingh's (2000) research framework, for example, distinguishes between web content and design, although it (almost by definition) makes use of very subjective measures. When the researchers analysed a website they almost always visited that particular site for the first time. It is, however, possible that a site is really aimed at regular customers and that subjective measures provided by repeat visitors would be different from those provided by first-time visitors. In this paper, Ho's evaluation framework for commercial websites was chosen to overcome the limitations of Huizingh's approach.

The research questions with which we were concerned in our analysis of university websites were:

1. What features should degree program websites contain?
2. Do the e-Commerce/ e-Business degree program website features investigated really reflect the use of e-Commerce strategies in terms of web content and design?

Chan (2002a; 2002b) identified those universities in Australia and Hong Kong SAR that offered e-Commerce/ e-Business undergraduate and masters degrees. Twenty-seven Australian universities and 6 universities in Hong Kong SAR were found having met these criteria. Among these 27 Australian universities, 3 offered the degrees through two different schools/ departments. We decided to review both of them and thus found ourselves with 30 Australia websites. All 6 Hong Kong SAR e-Commerce/ e-Business websites are included in this review.

We found that we were able to apply Ho's (1997) framework directly to our two research questions, with only a very small amount of additional explanation in terms of headings required in the interests of clarity. In order to answer the first research question, we conducted interviews with university students, web developers and universities academic staff members in order to identify the features needed for the framework. The features for evaluation of degree program websites also considered Ho and Rachman's features in their frameworks. Twenty-two features were identified and listed in Table 2. The 'logistical' value was renamed 'general' after discussions with the interviewees. It should be noted, however, that the list is by no means either exhaustive or definitive.

Value/ Purpose	**Promotion** (products & services)	**Provision** (data & information)	**Processing** (business transactions)
Timely	1. Individual website 2. Identification of the offering department 3. Program objectives 4. Program structure 5. Subjects description	12. Employment opportunities 13. Presses release	18. On-line enquiry form
Custom	6. Recognition of the professional bodies	14. Database search	19. Advanced standing
General	7. Entry requirement 8. Fee of the program 9. Scholarship or other financial support 10. Duration of the program	15. Contact information 16. Bench marking	20. On-line application 21. Payment method
Sensational	11.Outstanding web design	17. Catchy information display	22. Surprise discounts/ bonuses

Table 2: Evaluation framework for the review of e-Commerce/ e-Business degree program websites

[3] *Inktomi* is a global provider of information-retrieval solutions; including enterprise search and categorization software, and Web search services, < http://www.inktomi.com/>.

DISCUSSION OF FINDINGS

The review examines whether the twenty-two features listed in Table 2 are present in the e-Commerce/ e-Business program websites – and provides an answer to the first of our two research questions. A separate review for feature 11, *outstanding web design*, was undertaken using an automatic tool available at *NetMechanic*[4] to determine whether a website has an outstanding design. Since we have considered the content of the website to be more important than the design issue, only five design areas are investigated. Appendix 1 explains the measure of the web design and shows the result of the *outstanding web design* of each web. Appendix 2 shows the result of the features identified in Australia and Hong Kong SAR e-Commerce/ e-Business program websites.

As the details of websites can change rapidly, we choose not to refer to any specific URL or university by name. In our review we discuss three findings: the percentage of features present on the evaluation framework, Ho's β index (Ho, 1997), and the top five features present.

The Percentage of Features Present in the Evaluation Framework

Table 3 shows the percentage of features present in the evaluation framework (see Appendices 1 and 2 for details).

	Australia			Hong Kong SAR		
	Promotion	**Provision**	**Processing**	**Promotion**	**Provision**	**Processing**
Timely	100	47	10	100	33	33
Custom	23	70	13	17	100	17
General	100	97	20	100	100	100
Sensational	63	20	0	83	50	0

Table 3: The percentage of features present in the evaluation framework

The tables show that all sites (100%) have a feature in *timely* and *general-promotion*. With the exception of *timely-provision* and *custom-promotion,* all Hong Kong SAR categories have an equal or higher percentage of features present than those found in Australian websites. The Australian *processing* categories have very few features present. Neither the Australian nor Hong Kong SAR websites have any *sensational-processing* features present. These results show that in the current situation, most e-Commerce/ e-Business program websites are merely providing information to prospective students – in other words, these are so-called "brochure-ware" websites (Clarke, 1999), although a small number of universities can make use of their websites for online processing for such activities as online applications, online payment of program fees and online advanced standing processing. The figures also show that Hong Kong SAR websites generally include more features than those in Australia. This distinction is difficult to explain, as universities in both Australia and Hong Kong SAR are equally dependent on student fees – and are therefore equally likely to develop attractive websites as an added inducement to students. Further research on socio-economic and contextual differences between Australia and Hong Kong SAR is clearly needed in this area. For the moment, we hypothesise that the Hong Kong SAR universities may be more entrepreneurially inclined than their Australian counterparts.

Ho's β Index

Ho's β index is a crude coverage measure within the evaluation framework. The measure is the number of categories in the framework; i.e. the maximum β is 12 as there are 12 categories in the framework. Based on the total percentage found in this study, Ho's β index for Australia is 5.63 and for Hong Kong SAR is 7.33, i.e. Hong Kong SAR e-Commerce/ e-

4 NetMechanic founded in 1996 by a team of Web professionals and is a provider of Web site tools, <http://netmechanic.com/toolbox/html-code.htm>.

Business websites have more features than Australia websites of the same type. This index can be used as an indicator for comparison when similar studies are carried out in the future.

Top Five Features

The top 5 features present in the evaluation framework are listed in Appendix 3. For Hong Kong SAR, all these 5 features are in the *promotion* category. For Australia, 4 features are in the *promotion* category, whereas only one is to be found in the *provision* category. This suggests that more emphasis has been put on "content driven" websites and that there is less concern about online processing/ transaction in the design of e-Commerce/ e-Business program websites.

These results provide the answer to research question 2. The features of e-Commerce/ e-Business program websites do not really reflect e-Commerce strategies for web content and design issues. One of the major e-Commerce goals is doing business online. The results of the study suggest, however, that most of the processing features needed for doing business were not available on the websites. E-Commerce concepts have not really been applied to the current e-Commerce/ e-Business degree program websites.

Other Issues

The Web Content Accessibility Guidelines Working Group (W3C, 2002) drafted guidelines for web content developers and developers of authoring tools on how to make web content accessible to people with disabilities. Owens and Keller (2000) described the innovative browser design features that were developed in response to the Internet accessibility needs of Australian consumers with disabilities. Slatin (2001) also attempted to persuade web developers to make provision for people with disabilities. Many governments (including those of Australia and the U.S.) require official government websites to make allowance for citizens with disabilities. They provide guidelines for developing websites for people with disabilities, for example, the Government of the Hong Kong Special Administrative Region (2001). In the present study, however, we found that none of the websites we studied provided alternatives for people with disabilities – an interesting issue, since many universities are, in fact, government funded institutions. Changes in the way websites are designed may be necessary to enable all prospective students to take part and make full use of the technology.

Web usability research is also recommended as Murray and Costanzo (1999) stated that the key to website usability was ensuring that the site was both useful and usable for the intended audience. Usable websites can be assessed by the criteria: ease of learning, retention of learning over time, speed of task completion, error rate and subjective user satisfaction (Levi and Conrad, 2001). With the increasing use of the Internet as a marketing and e-Commerce tool business owners need to be more aware of the implications of poor design. Understanding the audience and how to design websites to meet the needs of that audience is an important factor to online success (Fisher *et al*., 2000). In addition to the usability of a particular website, it may be important to measure the impression users pick up from different website designs and look at the extent to which you can compare user expectations to owner priorities (Procter and Symonds, 2000).

All these issues need to be investigated for their relevance to degree program websites – both by web developers and by degree program leaders. At present very little such investigation appears to be being undertaken, but as universities continue to take a marketing-oriented approach to the dissemination of their degree programs, they will increasingly need to approach their websites from these perspectives.

CONCLUSION

In the paper, we have made use of Ho's framework for evaluating e-Commerce/ e-Business degree program websites. Our numerical analysis suggests that these websites do not truly reflect e-Commerce strategies, but are rather information provision, for the most part. While we appreciate that the current figures and the derived results of the survey were not too important, as websites are regularly being updated, the deduced phenomena behind such findings are valuable and worth exploring. In this section we make the following recommendations for more effective use of university promotional websites:

Firstly, as a prime objective, universities should make full use of degree program websites for the promotion of degree programs and for user-friendly online transaction in order to trim down the overhead administrative costs. Certainly, the move to online administration and, particularly, to user-based data entry and update of the sort which almost all banks are using today is a logical step for universities anxious to cut costs. Online fee payment, student entry/ update of contact information, advanced standing and enrolment changes are obvious starting points for such cost-cutting, efficiency-enhancing activities.

Secondly, when web developers develop websites, they may well wish to consider accessibility for that portion of the web audience with disabilities. Not only would this be very much in line with government policy, but it would mesh well with universities' generally strong interest in providing support to students less able to access material in the normal way. An additional benefit of such an approach is that universities providing such access might well attract fee-paying students with disabilities who prefer to study online, an increasingly attractive alternative for those with less than full mobility.

Finally, as many new degree programs emerge, program websites should be studied for improvement to meet the increasing demand and expectations of the market – i.e. increasing universities will promote their products through websites. The opportunities for entrepreneurial universities are significant and, as yet, few institutions appear to have realised the chances that are available. A study covering only Australia and Hong Kong SAR can, of course, provide only indicative evidence of the behaviour of universities around the world. A more widespread survey could offer a fascinating opportunity for comparison.

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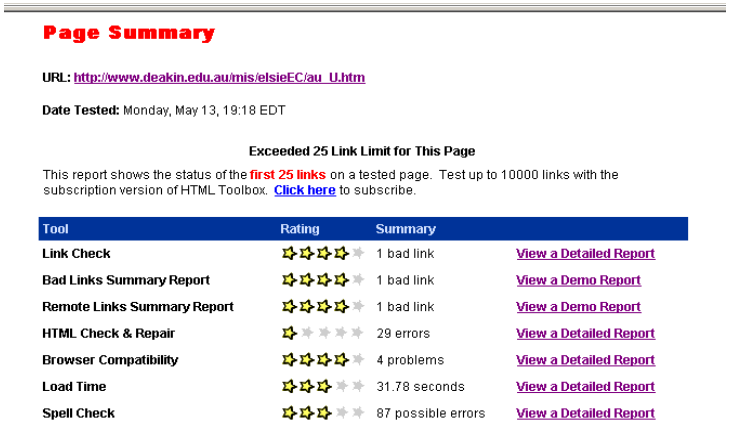
APPENDIX 1

Explanations of the Measures of Web Design

NetMechanic (http://netmechanic.com/toolbox/html-code.htm)

Five NetMechanic's tools are used to test the performance of each web site. They are: link check, HTML check & repair, browser compatibility, load time and spell check. The following figure shows a sample of result.



Page Summary

URL: http://www.deakin.edu.au/mis/elsieEC/au_U.htm

Date Tested: Monday, May 13, 19:18 EDT

Exceeded 25 Link Limit for This Page

This report shows the status of the **first 25 links** on a tested page. Test up to 10000 links with the subscription version of HTML Toolbox. **Click here** to subscribe.

Tool	Rating	Summary	
Link Check	★★★★☆	1 bad link	View a Detailed Report
Bad Links Summary Report	★★★★☆	1 bad link	View a Demo Report
Remote Links Summary Report	★★★★☆	1 bad link	View a Demo Report
HTML Check & Repair	★☆☆☆☆	29 errors	View a Detailed Report
Browser Compatibility	★★★★☆	4 problems	View a Detailed Report
Load Time	★★★☆☆	31.78 seconds	View a Detailed Report
Spell Check	★★★☆☆	87 possible errors	View a Detailed Report

The followings are the explanations of the rating.

Link Check Rating

Your page rating is based on the number of bad links on your page.
Ratings:
5 stars equal to 0 bad links
4 stars equal to 1 bad link
3 stars equal to 2 bad links
2 stars equal to 3 bad links
1 star has greater than 3 bad links

Load Time Rating

Your rating is based on the time required to load your page using a 28.8 modem. A 2 second connection time penalty is added for every Web server that must be accessed to load your page and its graphics.
Ratings:
5 stars - loads in less than or equal to 13 seconds
4 stars - loads in less than or equal to 24 seconds
3 stars - loads in less than or equal to 35 seconds
2 stars - loads in less than or equal to 46 seconds
1 star - loads in greater than 46 seconds
In addition, your rating will be lowered by 1 star if you have HTML problems on your page that affect load time.
To get a 5 star score, keep the size of your page and all its graphics below 40k, only connect to one Web server, and keep your page free of HTML errors.

HTML Check & Repair Rating

Your rating is based on the number of HTML errors found on the page.
Ratings:
5 stars equal to no errors
4 stars less than or equal to 6 errors
3 stars less than or equal to 12 errors
2 stars less than or equal to 18 errors
1 star greater than 18 errors

Browser Compatibility Rating

Your rating is based on the number of compatibility problems affecting more than 10% of your visitors.
Ratings:
5 stars equal to no compatibility problems
4 stars less than or equal to 4 problems
3 stars less than or equal to 8 problems
2 stars less than or equal to 12 problems
1 star greater than 12 problems

Spell Check Rating

Your rating is based on the percentage of suspected misspellings on your page.
Ratings:
5 stars equal to no misspellings
4 stars less than or equal to 5% misspellings
3 stars less than or equal to 10% misspellings
2 stars less than or equal to 15% misspellings
1 star greater than 15% misspellings
Note: since the tool does not cope with some new specific words, e.g. e-Commerce, it provides a list of misspelling words and in fact they are not. Therefore we investigate the output result and identify whether those mentioned words are misspelling or not. The rating returned from the audit result of a web site is from 1 to 5 (1=poor and 5 = excellent) for each criterion and for overall rating. If the overall rating is 4 or above then Feature 11, *outstanding web design* is considered to be present.

The following tables show the results of the web design of each site.

Australian web sites	au1	au2	au3	au4	au5	au6	au7	au8	au9	au10	au11	au12	au13	au14	au15

Link Check	3	4	4	5	5	5	5	4	5	5	5	5	5	5	5
HTML Check and Repair	1	4	4	3	4	1	5	4	4	0	5	1	4	1	4
Browser Compatibility	1	4	5	2	4	4	5	4	3	3	5	2	4	4	5
Load Time	5	4	4	3	5	5	4	4	5	1	5	2	5	4	4
Spell Check	4	5	5	5	5	5	5	4	5	4	5	5	5	5	5
Average	2.8	4.2	4.4	3.6	4.6	4	4.8	4	4.4	2.6	5	3	4.6	3.8	4.6

Australian web sites	au16	au17	au18	au19	au20	au21	au22	au23	au24	au25	au26	au27	au28	au29	au30
Link Check	5	3	5	4	3	5	5	5	3	5	5	4	5	5	5
HTML Check and Repair	3	4	2	4	4	1	2	1	1	4	5	1	4	5	4
Browser Compatibility	4	5	4	4	4	4	3	3	5	3	5	4	4	3	4
Load Time	3	5	4	5	5	4	5	4	5	4	5	4	4	4	4
Spell Check	4	4	5	5	5	5	4	5	5	5	5	5	5	5	5
Average	3.8	4.2	4	4.4	4.2	3.8	3.8	3.6	3.8	4.2	5	3.6	4.4	4.4	4.4

Hong Kong web sites	hk1	hk2	hk3	hk4	hk5	hk6
Link Check	5	5	5	5	5	5
HTML Check and Repair	4	4	5	2	5	4
Browser Compatibility	4	4	5	2	5	5
Load Time	4	4	5	2	4	3
Spell Check	5	5	5	5	4	5
Average	4.4	4.4	5	3.2	4.6	4.4

APPENDIX 2

No.	Features	Explanations of features	Au No.	HK No.	Au %	HK %
1	Individual web site	Individual web site showing exclusively information for the e-Commerce/ e-Business degree programs.	24	5	80.0	83.3
2	Identification of the offering department	The department which offers the e-Commerce/ e-Business can be identified by the web visitor.	25	6	83.3	100.0
3	Program objectives	The objectives of the degree programs are listed.	13	6	43.3	100.0
4	Program structure	The structures of the degree programs are listed.	27	6	90.0	100.0
5	Subject description	A brief description of the subjects which are required for the degree programs.	22	6	73.3	100.0
6	Recognition of professional bodies	A list of professional bodies which recognises the qualification of the degree programs.	7	1	23.3	16.7
7	Entry requirements	The entry requirement for admission.	15	5	50.0	83.3
8	Fee of the program	The fee for studying the degree program.	9	5	30.0	83.3
9	Scholarship or other financial support	Scholarship or financial support for students.	8	3	26.7	50.0
10	Duration of the program	The duration of the study of the program.	24	6	80.0	100.0
11	Outstanding web design	Details refer to Appendix 1.	19	5	63.3	83.3
12	Employment opportunities	List out employment opportunities for graduates.	11	0	36.7	0.0
13	Presses release	News related to e-Commerce or e-Business.	3	2	10.0	33.3
14	Database search	The URL of the degree program is shown by searching through key words " e-Commerce" or " e-Business" at the university home page, or that a pull down menu is available for visitors to select the program.	21	6	70.0	100.0

No.	Features	Explanations of features	Au No.	HK No.	Au %	HK %
15	Contact information	Photographs of staff, telephone numbers, fax numbers or email addresses are available.	23	6	76.7	100.0
16	Bench marking	Data or information to show that their degree programs are superior to others.	6	2	20.0	33.3
17	Catchy information display	Using Java Applets, video to introduce the program.	6	3	20.0	50.0
18	Online enquiry form	Online enquiry form for prospective students.	3	2	10.0	33.3
19	Advanced standing	Whether it lists out information on credits for work done elsewhere - ideally prospective students can check whether their previous qualification can match the present program.	4	1	13.3	16.7
20	Online application	Prospective students can apply for admission into the program online.	0	1	0.0	16.7
21	Payment method	The explanation of payment method of program fees is listed.	6	6	20.0	100.0
22	Surprise discounts/ bonuses	Any bonus or surprise when students have visited the web or finished the on-line application process.	0	0	0.0	0.0

Number and Percentage of Features Present from the Review of 36 Web Sites.

APPENDIX 3

Rank	No.	Features	% present
1	4	Program structure	90.0
2	2	Identification of the offering department	83.3
3	1	Individual web site	80.0
4	10	Duration of Program	80.0
5	15	Contact information	76.7

Australia

Rank	No.	Features	% present
1	2	Identification of the offering department	100.0
2	3	Program objectives	100.0
3	4	Program structure	100.0
4	5	Subject description	100.0
5	10	Duration of the program	100.0

Hong Kong

The Top 5 Features Present in the Evaluation Framework.

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