# Effectiveness of the University Web Pages in Marketing Academic Programs and Attracting Students in Dubai

## Rubeena Cetin*

*Universities like other organizations are rushing to determine how they can use information technology profitably and understand what and how technologies can enhance their business strategies. The present study investigates into how information technology in the form of active web pages is used as a marketing strategy in attracting potential students, creating more value to customers (potential students/students), differentiation and e-communications. Correspondingly, 14 University WEB pages of Dubai are evaluated on criteria and sub criteria that total up to 45 criteria to understand the effectiveness of e-marketing. The analysis of this study contribute to the fact that University WEB pages are of not similar in nature and have different strategies in corresponding and attracting potential students. The study also highlights the aims of University WEB marketing sophisticated marketing strategies related to positioning and branding can be seen in fewer Universities. The study concludes in drawing a conceptual framework that propagates a system wherein, information technology and the WEB page can be fruitfully utilized in not only attracting potential students and stakeholders but also can be effective in transforming students to University brand ambassadors.*

**Key words:** Marketing for Higher Education, E-marketing for Universities, Branding in Higher Educational Institutions

## 1. Introduction

The current study concentrates on the analysis of the University Web pages to provide insights into the effective and efficient manner through which University Web pages can achieve the goals of attracting potential students,' provide rich and accurate information of the Universities policies, procedures and offerings. Henceforth, the focus of the study is to investigate as to how Universities through their Web pages and information technology utilize to its fullest to realize marketing goals.The various activities of the Web pages is derived from the Web design, content availability and the way the Universities utilize the Web pages to market and express themselves for the students, investors, government officials, suppliers, community and the general public at large.

*Dr. Rubeena Cetin, Department of Marketing, Ajman University of Science Technology, UAE.
Email: jrac.rubeena.c@ajman.ac.ae

Such a study is different from other studies as it will enable University Web marketers better understand the basis for the development of more target group-focused, value-enhanced Web sites. This is of a vital issue as much of the design & assessment models are concentrating on e-commerce, e-business and e-marketing that are for transacting purely on the Web like Web shopping etc. Other available information present for the profit and the service industries that are available are for e-banking type of activities etc. Hence this study will fill the dearth of information that is unavailable for University Web page design model, assessment techniques, and effective IT guidelines that Universities can utilize and follow IT techniques appropriately.

The Pew research center in its process of research entitled *Internet and the American Life,* Com Score Media matrix, Nielsen/Net Ratings, etc it can be concluded that people (delete use) utilize the Internet to connect, create, enjoy, learn and trade. The present study makes analysis in the lines of the benefit that it can provide to the potential (deletestudents) and the present students who are the primary target of the University services offerings and the public at large who also can benefit directly or indirectly by the University Web pages. Further, the Web pages immediately materialize internationalization of Universities. Internationalization of Universities is a key word as Universities are marketing for overseas students, and the mobility of faculty and staff has increased tremendously over the years. (Delete And) Universities are now more conscious of not only rankings and their reputation nationally but it is of equal significance even internationally. There is a great interest in research in the field of internationalization of higher education (Kehm, 2003; Bok, 2003; Huisman&Wende, 2005; Toyoshima, 2007).

The objective of the current research is to analyze University Web pages to investigate whether these University pages are meeting all the given criteria of a successful Web page in marketing academic programs and attracting potential students. Further, the study also investigates in the utilizing of the University Web pages and IT technology in meeting all the functions of potential students and stakeholders. After reviewing the literature it is found that many researches are made to investigate the effectiveness of for-profit organizations and when it concerns Universities, there is a dearth in recommending and published information for the Universities to utilize IT technology and features.

The University Web pages are evaluated for its feasibility and the appropriateness as of more efficient and comprehensive in adding numerous products and services to provide more value for the stakeholders. The E-Business models are evaluated that evolve the University Web marketing for tapping strategic opportunities, commitment of the Universities and the activities that can avail to function and provide through the E-marketing. These are presented as the level of commitment to E-Business and the E-model classification. The practical significance of the study is it recommends as how the

Web page can be a continuous help guide and a valuable partner for the students from when they made their first visit to achieve information and then continue to follow it for course registration, course offerings, course contents, transcripts, platform for communication and continue to avail the Web pages even after becoming an alumni and for continuous education process.

## 2. Literature Review

The following Exhibit 1 illustrates the level of commitment to E-Business. The higher the firm travels up the pyramid, the greater its level of commitment to e-business; the more its strategies are integrated with information technology.
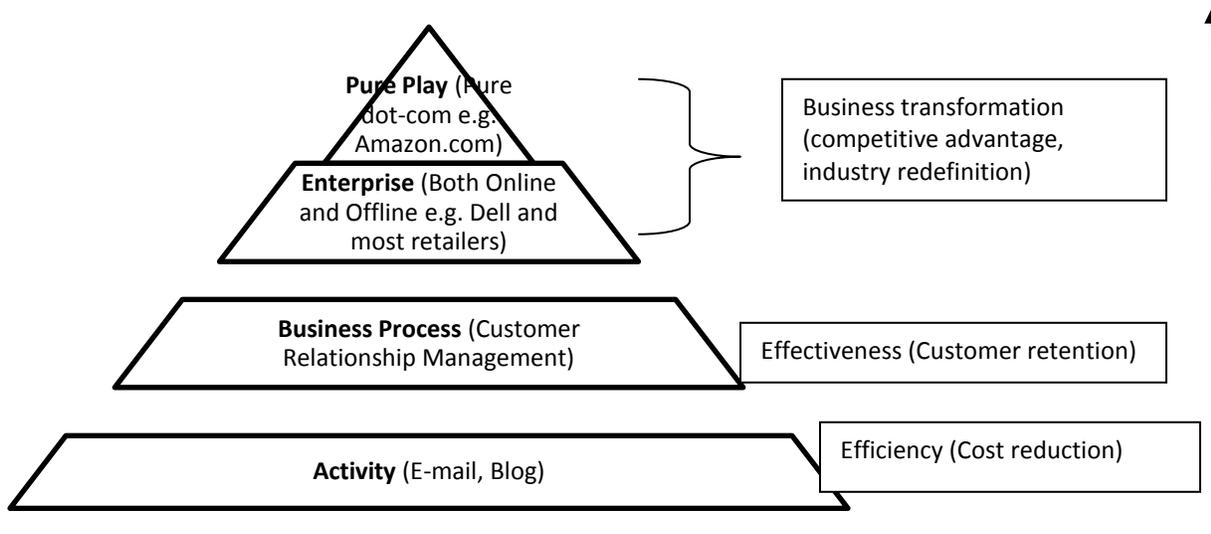


**Exhibit 1 Level of commitment to E-Business. Source: Adapted from www.mohansawhney.com.**

Further, the Exhibit 2 (Strauss & Frost, 2009) categorizes the most commonly used models based on the firm's level of commitment. To comprehend a clear picture as Universities being in the service sector can benefit the most by defining at enterprise level the activities it can adapt to provide more value to the stakeholders and utilize information technology for differentiation, competitive advantage, brand management, lifelong connector to students rather than just utilizing IT for cutting costs.

| Activity Level | Business Process Level | Enterprise Level |
|---|---|---|
| Order Processing<br>Online purchasing<br>E-mail<br>Content Publishing<br>Business Intelligence<br>Online advertising & PR<br>Online sales promotion<br>Dynamic pricing strategies online | Customer Relationship Management (CRM)<br>Knowledge management (KM)<br>Supply Chain Management (SCM)<br>Community Building online<br>Database marketing<br>Enterprise Resource Planning (ERP)<br>Mass Customization | E-commerce, direct selling, content sponsorship.<br>Portal<br>Social networking<br>Broker models: Online exchange, hub, Online auction<br>Agent models: Manufacturer's/selling agents, shopping agent, reverse auction. |

**The Exhibit 2 (Strauss & Frost, 2009) categorizes the most commonly used models based on the firm's level of commitment.**

The above classifications contributes to the activities and functions that Universities can utilize in order to develop Information technology to its fullest to provide value, cut costs and maintain different kinds of databases necessary for Universities. Correspondingly it is noted that the University Web pages usually are not of pure play i.e.Universityas services that have existed/begun only through the web/online. Hence the Universities included in this study are physical institutions that are located in the UAE especially in Dubai. The following review of literature not only pin points the functioning and the operating of businesses and organizations utilizing web pages and information technology but also contributes to the formation of the necessary business models that Universities can adopt to provide stake holder value.

This study draws from the wide literature prevalent in the e-commerce, e-business and e-marketing in support of, referring to frame works and drawing conclusions for the analysis of University Web marketing strategies. The University Web pages are prevalent for providing services like any other service organizations. The WEB is being utilized by many organizations for multitude of purposes and there has been multifold increase in the usage of the WEB by organizations. Universities are also following the trend of utilizing WEB page that in the present days it seems mandatory for Universities to utilize WEB pages. However, non-profit organizations are effectively utilizing the information technology for the purposes of information, education, communication and entertainment. Electronic commerce has changed the business operations and products and services like that of telephone, TV, fax etc. Like the presence of TV, fax machines or photocopying machines are essential for organizations to function so is the presence of WEB pages, IT etc. Table 1 describes the benefits of electronic commerce (Wen, Chen and Hwang, 2001). There are many more advantages of electronic commerce other than those cited below.

| Benefit | Description |
|---|---|
| Product promotion | Through a direct, information-rich and interactive contact with customers, EC enhances the promotion of product. Electronic medium also allows interactivity and customization for advertising content, based on the customer profile or input. EC thus offers an opportunity for new promotion strategies, enhancing the branding of products. |
| Cost saving | By using a public shared infrastructure such as the internet and digitally transmitting and reusing information, EC systems lower the cost of delivering information to customers, including personnel, phone, postage, and printing costs. |
| Timely information | Due to their instantaneous nature, EC systems allow a reduction of the cycle time required to produce and deliver information and services. |
| Shortened remittance time | With electronic funds transfer (EFT), customers send their remittances electronically to the company's bank. This arrangement eliminates the time delay associated with the remittance in the mail system. |
| Information consistency | EC ensures the consistency and accuracy of information through sharing of information and use of electronic forms of doing business. |
| Better customer service | The ability to provide on-line answers to problems through resolution guides, archives of commonly encountered problems and electronic mail interaction 24 hours a day, 365 days a year, builds customer confidence and retention. |
| Better Customer Relationships | EC enables the learning about customers due to its ability to record every event in which a customer asks for information about a product, buys one, requests customer service etc. Through these interactions, the needs of the customer are identified and will feed future marketing efforts. |
| Customizations of products | The information based nature of the EC process allows for new products to be created or existing products to be customized based on customers' exact needs. |
| Competitive advantages | EC enables a company to achieve competitive advantages of: cost saving based on reduced advertising /promotion costs; product differentiation by customizing products and timely response to market; customer focus though better customer relationships and better customer services. |
| Convenience of doing business | There is no limit on time and location to conduct a business with related parties. The information delivered to manufacturers, suppliers and warehouses is almost real time. |

**Table 1: Advantages and benefits of electronic commerce (Wen, Chen and Hwang, 2001).**

Even though there are many advantages of e-marketing and e-commerce some of the inhibitors that are listed are as following: high costs of acquiring computers, internet connection, many of the countries having poor internet infrastructure and training required to be able to utilize computers and IT gadgets and structures. Further huge investments needed to establish IT infrastructure in the organizations, lack of personal approach, dependability on technology, security, privacy issues, maintenance costs due to a constantly evolving environment, worldwide competition through globalization.

## 3. E-Commerce and E-Business Models

According to Strauss & Frost (2009), what makes a business model an e-business model is the use of information technology. At the enterprise level of the pyramid the firm automates many business processes in a unified system – demonstrating a significant commitment to e-business. Many of the business future rely heavily on these models.

a) Content sponsorship:  illustrate this model as companies create Web sites, attract a lot of traffic and sell advertising. Some firms use a niche strategy and draw a special interest audience (e.g. iVillage.com for women) and others draw a general audience (e.g. CNN.com). Web properties using the content sponsorship model include all the major portals: Google, Yahoo!, MSN etc.  Many online newspapers and magazines also use this model; however, much content on the Net is ad supported.

b) Direct distribution model: The manufacturer sells directly to the consumer or business customer.

c) Intermediary models: There are three main intermediary models common in the internet: brokerage models, agent models, and online retailing.

> Brokerage models: The broker creates a market in which buyers and sellers negotiate and complete transactions (Rappa, 2000). Through online exchanges like E*trade, Guru.com etc and online auction like priceline.com, ebay.com etc.
>
> Agent Models: Agents do represent either the buyer or the seller depending on who pays their fees.
>
> Online Retailing: A huge part of e-commerce, merchants set up online storefronts and sell to business and consumers.

There are numerous Web design models prevalent on the Internet and new models are increasing however, the  Figure 1 is summarized by Wen, Chen & Hwang (2001) after drawing conclusions from  visiting many Web sites, a total of 12 Web site design models were found.
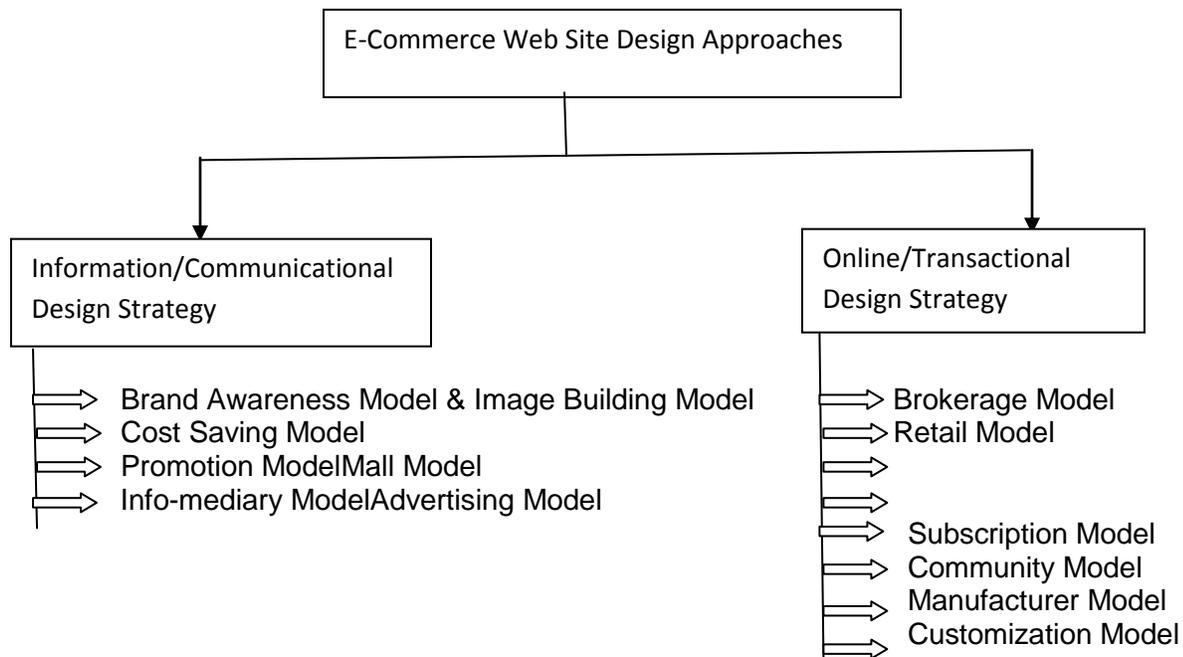
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                    ┌─────────────────────────────────────┐
                    │  E-Commerce Web Site Design Approaches │
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**Information/Communicational Design Strategy**

⇨ Brand Awareness Model & Image Building Model
⇨ Cost Saving Model
⇨ Promotion ModelMall Model
⇨ Info-mediary ModelAdvertising Model

**Online/Transactional Design Strategy**

⇨ Brokerage Model
⇨ Retail Model
⇨
⇨
⇨ Subscription Model
⇨ Community Model
⇨ Manufacturer Model
⇨ Customization Model

**Figure 1, Emerging models of E-commerce Web site design**

Although Universities and many large companies are involved in utilizing the Web to introduce themselves in the world arena, they are mostly concentrating on the Web page as an advertising tool to build awareness and also to provide information. However, there are many organizations that are active online to make profit. Correspondingly, organizations also use more than one model to accomplish very many e-commerce goals.

**Customer Relationship Management:** One of the major areas that can be accomplished through Web pages and IT is customer relationship management. The four marketing activities that comprises of CRM involves: customer selection, customer acquisition, customer retention and customer extension/development. This is widely studied and illustrated in the e-commerce literature. According to S. Sirinivasan (2002), Customization, contact interactivity, care, community, convenience, cultivation, choice and character influence customer loyalty. Convenience, merchandising, site design and financial security are related to customer satisfaction (D. M. Szymanski, R.T. Hise, 2000).

## 4. Methodology

The study concentrates on the qualitative analysis of the University Web pages in the UAE that are providing higher education through physical structures. For choosing the Universities that has to be included in the sample; the web site of the Ministry of Higher Education was approached. Wherein, are available a list of the Universities that are accredited by the Ministry of Higher Education. From this list were chosen the

Universities that are accredited and that are physically located in Dubai. There are 69 universities in UAE that are accredited from ministry of higher education, in which 14 universities are located in Dubai. 14 Universities of Dubai are chosen instead of all the emirates as Dubai seems to be an appropriate representative of UAE. These Web pages are analyzed according to the systematic manner of data display including charts, graphs, matrices and networks (Miles and Huberman, 1984). A test for effective design for usability is according to Bevan (1999) dependent on three areas: Effectiveness-can users complete their tasks correctly and completely? Productivity (efficiency) is tasks completed in an acceptable length of time? Satisfaction: Are users satisfied with the interaction? The study is a case study type of an in depth qualitative research pertaining document analysis.

The list is as following:

| University | Web Page |
|---|---|
| Al Ghurair University (AGU) | www.agu.ae/ |
| American University in Dubai (AUD) | www.aud.edu/ |
| Boston University (BU) | www.budubai.ae/ |
| British University in Dubai (BUiD) | www.buid.ac.ae/ |
| Canadian University of Dubai (CUD) | www.cud.ac.ae/ |
| College of Islamic and Arabic Studies (I&ASC) | www.islamic-college.ae/ |
| Dubai Medical College (DMCG) | www.dmcg.edu/ |
| Emirates Academy of Hospitality Management (EAOHM) | www.jumeirah.com/en/jumeirah-group/The-Emirates-Academy/ |
| Emirates Aviation College (EAC) | www.emiratesaviationcollege.com/ |
| Higher Colleges of Technology (HCT) | www.hct.ac.ae/ |
| Institute of Management Technology, Dubai (IMT) | www.imtdubai.ac.ae/ |
| University of Dubai (UoD) | www.ud.ac.ae/ |
| University of Wollongong in Dubai (UOWD) | www.uowdubai.ac.ae/ |
| Zayed University (ZU) | www.zu.ac.ae/ |

**Table 2.The List of the 14 University web pages included in the study.**

As document analysis of web pages is tedious and time consuming the Web pages totals upto 14 Universities out of the 69 Universities listed as the accredited Universities by The Ministry if Higher Education, UAE. The following criteria of evaluating the Web page against the dimensions emerged after a thorough review of literature related to best Web page marketing practices, e-marketing, effective Web design and how to generate Web traffic and the effective utilization of information technology. Assessing Web pages through key indicators/criteria in research is a common practice like suitability, credibility, believability, design and the nature of the Web page. It can be referred to the Stanford Web Credibility Research which is a part of the Stanford Persuasive Technology Lab in their series of research proposed guidelines to organizations and people who want to develop highly credible Web pages. Wherein, each of the guidelines has elements that enhance the experience. These are: design Web sites that convey the real life experience, make Web site easy to use, include

markers of expertise, include markers of trustworthiness, tailor the user experience, avoid overly commercial elements on the Web site and avoid the pitfalls of amateurism (B. J. Fogg, et al., 2001).Fulfillment/reliability, Website design, privacy/security, customer service, is related to quality enhancers of the Web pages (M. Wolfinbarger, M.C. Gilly, 2003). According to (B. Yoo,N. Donthu, 2001 ) overall site quality, attitude toward site, online purchase intentions, site loyalty, site equity is enhanced by ease of use, design, speed, security of the Web page. The various guidelines that are prevalent in the Web design and web marketing literature are for the many organizations that exist internationally. However, the criterion that are mentioned below are adapted that are appropriate for a University Web page. Therefore, the literature review is analyzed and the models presented for profit organizations are evaluated to formulate a model that can be successfully adapted to the Universities Web pages that is incremental and required for Universities so that they can utilize IT more effectively and fruitfully.

# Cetin

| Source (0--3) | Accuracy (0--4) | |
|---|---|---|
| 1.1 More than 10 years | 7.1 College Affiliated with well-known universities | |
| 1.2 Awards | 7.2 Testimonials for students | |
| 1.3 Vision Mission and goals | 7.3 Government | |
| **Layout (0--2)** | 7.4 Author of Website | |
| 2.1 Center, left and right | **Appropriate level of detail (0--4)** | |
| 2.2 Sequence based on importance | 8.1 level of details for availability of Info. | |
| **Accessibility (0--4)** | 8.2 Course offered | |
| 3.1 Highest hit at search engine | 8.3 Credit transfer | |
| 3.2 No error outage | 8.4 Course fees | |
| 3.3 Affiliate partner, newspaper and govt. Sponsor | **Current information (0--5)** | |
| 3.4 Contrasting background + text color | 9.1 Regular update | |
| **Speed (0--2)** | 9.2 Reliable link | |
| 4.1 Website size (bytes) | 9.3 Event dates | |
| 4.2 Download time (less than 10 seconds) | 9.4 Semester calendar | |
| **Navigability (0--3)** | 9.5 Copyright | |
| 5.1 Number of clicks ( less than 3) | **Appearance (0--5)** | |
| 5.2 Site map | 10.1 Good spelling | |
| 5.3 Less than a 1 minute to find information | 10.2 Grammar | |
| **Content (0--3)** | 10.3 Font | |
| 6.1 Admissions | 10.4 Look professional | |
| 6.2 Academic Programs | 10.5 News Flash | |
| 6.3 Faculty, Staff, Students, Alumni | | |
| 6.4 Student financial assistance | **Total possible score:  45** | |
| 6.5 Welcome note from Chair or program director | **Percent Score:    %** | |
| 6.6 News and Announcement | | |
| 6.7 Cost of Admission | | |
| 6.8  FAQs | | |
| 6.9 Foreign Students FAQs | | |
| 6.10 International Student corner | | |
| 6.11Sign in/Request Information | | |
| 6.12 Contact us | | |
| 6.13 Other language Availability in web besides English | | |

**Table 3. The 10 criteria along with their sub-criteria utilized for the analysis of the Web pages.**

Further, the University Web page is evaluated on "real world feel" according to the items that are adapted to higher educational institutions. Because the concept of "real world feel' gives a reflection of a physical Universitythat makes stakeholders feel more credibility/confident to continue browsing the University Web for more information like University services, facilities, activities etc.

| Real World Feel |
| --- |
| 1.1 The site has facilities to provide quick response to the student/stakeholders service queries. |
| 1.2 The site lists the University's physical address of the each of the faculties, administration and services. |
| 1.3 The site gives a contact phone number of all the academic, administration and services. |
| 1.4 The site gives email addresses of each of the academic, administration and services. |
| 1.5 Shows pictures of the physical infrastructure: like buildings, classrooms, facilities and the faculty members & staff. |
| 1.6 Virtual tour |
| 1.7 Separate area for giving information to parents and community. |
| **Total possible score: 7** |
| **Percent Score:    %** |

**Table 4. The University Web pages assessed for the "real world feel."**

## 5. Website Indicators for evaluation

The website evaluation criteria are designed based on two sections. First section consists of 10 criteria with their respective components. Criteria are scaled depending on a number of sub-components. However, Criteria at second section are rated with yes or No. For example, the first criterion in the first section has three sub-criteria located at second section. From the evaluation, if it only has one "yes", the first section will have a score of "1". If there is no "yes" rating, then the first section scores "0".

## 6. Results

Primarily after the analysis of the 14 University Web pages across the criteria presented in Table 3 and 4 it has been illustrated following Table 5.

| | HCT | ZU | DM CG | AGU | AUD | BU | CUD | UOWD | IMT | EAHM | EAC | BUID | UOD | I&ASC | T | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.Source (0--3) | 3 | 3 | 3 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 27 | 64.28 |
| 2.Layout (0--2) | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 0 | 2 | 1 | 2 | 2 | 2 | 1 | 23 | 82.14 |
| 3.Accessibility (0--4) | 2 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 2 | 3 | 4 | 4 | 4 | 0 | 45 | 80.35 |
| 4.Speed (0--2) | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 11 | 39.28 |
| 5.Navigability (0--3) | 3 | 3 | 1 | 0 | 2 | 1 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 1 | 30 | 71.42 |
| 6.Content (0--13) | 9 | 13 | 7 | 10 | 10 | 7 | 9 | 11 | 7 | 8 | 7 | 11 | 10 | 7 | 126 | 69.23 |
| 7.Accuracy (0--4) | 2 | 3 | 1 | 2 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 1 | 34 | 60.71 |
| 8.Appropriate level of detail (0-4 | 2 | 4 | 3 | 4 | 3 | 3 | 4 | 4 | 2 | 2 | 3 | 4 | 3 | 0 | 41 | 73.21 |
| 9.Current information (0--5) | 4 | 5 | 2 | 4 | 5 | 3 | 4 | 3 | 2 | 1 | 5 | 5 | 1 | 1 | 45 | 64.28 |
| 10.Appearance (0--5) | 3 | 5 | 3 | 3 | 5 | 2 | 4 | 3 | 3 | 3 | 4 | 4 | 3 | 2 | 47 | 67.14 |
| Total Possible score out o 45 | 30 | 43 | 27 | 30 | 38 | 25 | 35 | 32 | 26 | 25 | 34 | 36 | 32 | 16 | 429 | |
| Percentage score % | 66.66 | 95.55 | 60 | 66.66 | 84.44 | 55.55 | 77.77 | 71.11 | 57.77 | 55.55 | 75.55 | 80 | 71.11 | 35.33 | | |

**Table 5.Scores of the University Web pages according to the 45 criteria.**

Following the total possible scores, the University Web pages can be put in a ranking order in the following table 6 from the first to the 14th.

| Web Page | % Score |
|---|---|
| www.zu.ac.ae/ | 95.55% |
| www.aud.edu/ | 84.44% |
| www.buid.ac.ae/ | 80% |
| www.cud.ac.ae/ | 77.77% |
| www.emiratesaviationcollege.com/ | 75.55% |
| www.uowdubai.ac.ae/ | 71.11% |
| www.ud.ac.ae/ | 71.11% |
| www.hct.ac.ae/ | 66.66% |
| www.agu.ae/ | 66.66% |
| www.dmcg.edu/ | 60.00% |
| www.imtdubai.ac.ae/ | 57.77% |
| www.budubai.ae/ | 55.55% |
| www.jumeirah.com/en/jumeirah-group/The-Emirates-Academy/ | 55.55% |
| www.islamic-college.ae/ | 35.55% |

**Table 6.Ranking of the University Web pages according to the criteria.**

Certainly the above Web pages are professionally designed & extremely informative but to be able to comply with 45 criteria can be a challenge. Further, the rankings also exhibit the design of the Web page according to the financial resources, largeness of the University, number of students, number of faculties, activities and the size& nature of the facilities. It can be justified for the first place of Zayed University is that it is a national public University, a well-funded University with world class facilities and numerous offerings. However the Universities were not very active in providing information about international branches, offices and educational agents present in the GCC countries and internationally.

| | HCT | ZU | DMCG | AGU | AUD | BU | CUD | UOWD | IMT | EAHM | EAC | BUID | UOD | I&ASC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Real World Feel (0-7))** | 3 | 6 | 2 | 7 | 2 | 1 | 4 | 6 | 4 | 5 | 4 | 4 | 3 | 2 |
| **Percentage score %** | 42.85 | 85.71 | 28.57 | 100 | 28.57 | 14.28 | 57.14 | 85.71 | 57.14 | 71.42 | 57.14 | 57.14 | 42.85 | 28.57 |

**Table 7: Scores of the University Web pages based on the criteria and sub criteria related to "Real World Feel"**

| | Real World Feel % Rankings |
|---|---|
| **AGU** | 100 |
| **ZU** | 85.71 |
| **UOWD** | 85.71 |
| **EAHM** | 71.42 |
| **CUD** | 57.14 |
| **IMT** | 57.14 |
| **EAC** | 57.14 |
| **BUID** | 57.14 |
| **HCT** | 42.85 |
| **UOD** | 42.85 |
| **DMCG** | 28.57 |
| **AUD** | 28.57 |
| **I&ASC** | 28.57 |
| **BU** | 14.28 |

**Table 8. Rankings of the University Web page according to the criteria "real world feel" and it sub criteria.**

It can be noticed from the Table 8 the rankings in relation to the "real world feel" is varying significantly, it conveys the fact that the sample Universities are not taking into account in developing the Web page to give a real feel that could enhance the credibility & believability of the University faster. This could satisfy the potential student, staff, faculty, researchers, suppliers and stakeholders to be more confident in exchanging information & making decisions faster. The "reel world feel" criteria and its sub criteria transform and enhance the visitors' virtual experience to a physical one. This can further be beneficial to the visitor to locate easily when they visit the physical location.

## 7. Conclusions

The Web analysis conducted for the Universities in the UAE provided numerous insights into numerous targets that can be fulfilled by Universities through web pages. An enterprise model is proposed for University Web pages to establish profitable Web experiences and deliver value to stakeholders.

**University Web page model:**

Through understanding the various models proposed in the literature review, University Web pages can also deliver monetary transactions like paying the admission fees/registration fees online, tuition fees,   services fees for dorm etcthat can save parents from standing in queues and makingbank transfers that are expensive and time consuming. Other processes can also be handled online like submission of student applications for faculties and also for other services.  Because University experiences are not of one time transaction related, a bond should be facilitated by the University page with the students to transform them into lifelong users and also brand ambassadors.

The model extracts some information from Chernatony (2001) who suggested that delivering the online experience promised by a brand requires delivering rational values, emotional values and promised experiences. The model also highlights the importance of delivering service quality online, as has been indicated by Trocchia and Janda (2003). Consumer retention is a very important in E-commerce literature wherein attributes that are important to online retail experience.
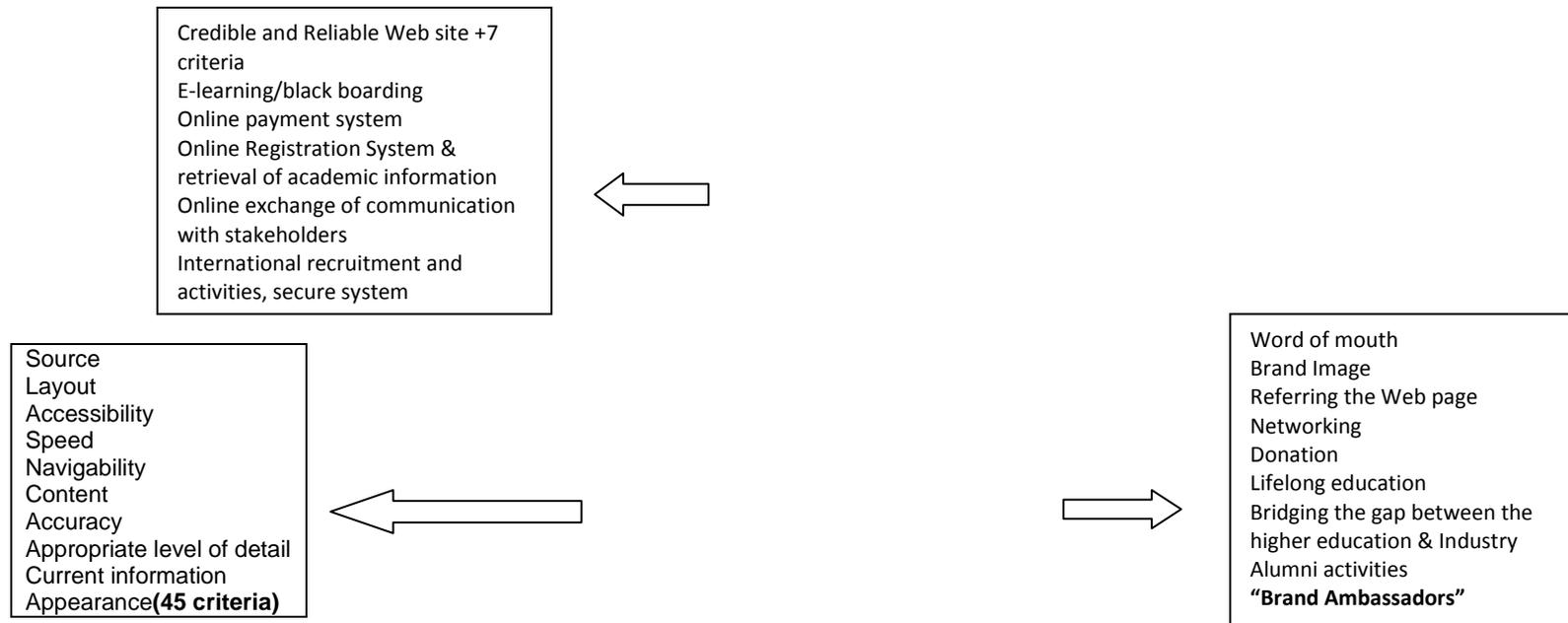
Credible and Reliable Web site +7 criteria
E-learning/black boarding
Online payment system
Online Registration System &
retrieval of academic information
Online exchange of communication
with stakeholders
International recruitment and
activities, secure system

Source
Layout
Accessibility
Speed
Navigability
Content
Accuracy
Appropriate level of detail
Current information
Appearance**(45 criteria)**

Word of mouth
Brand Image
Referring the Web page
Networking
Donation
Lifelong education
Bridging the gap between the
higher education & Industry
Alumni activities
**"Brand Ambassadors"**

**Figure 3.E-commerce model for Higher Educational Institutions for Web page design & the effective use of Information Technology.**

The above E-commerce model that can be adapted for the higher educational Institution is focused to convert the potential students for whom the Web page was one of the first windows about the University to 'brand ambassadors' of the University and an alumni who can take part in collecting or arranging activities with the University through information technology. The advantage of the alumni becoming into a "brand ambassador" not only is an extension and propagation of the University brand but also an ambassador who can build bridges between the academia and the industry and recommending/convincing other individuals to join the University.

The following Figure 4 illustrates how though the Web page a potential student can be converted to a "brand ambassador." Consumer-brand relationships can be enhanced by personalized Websites, customer communities and consumer Internet experience (H. Thorbjornsen, et al. 2002).
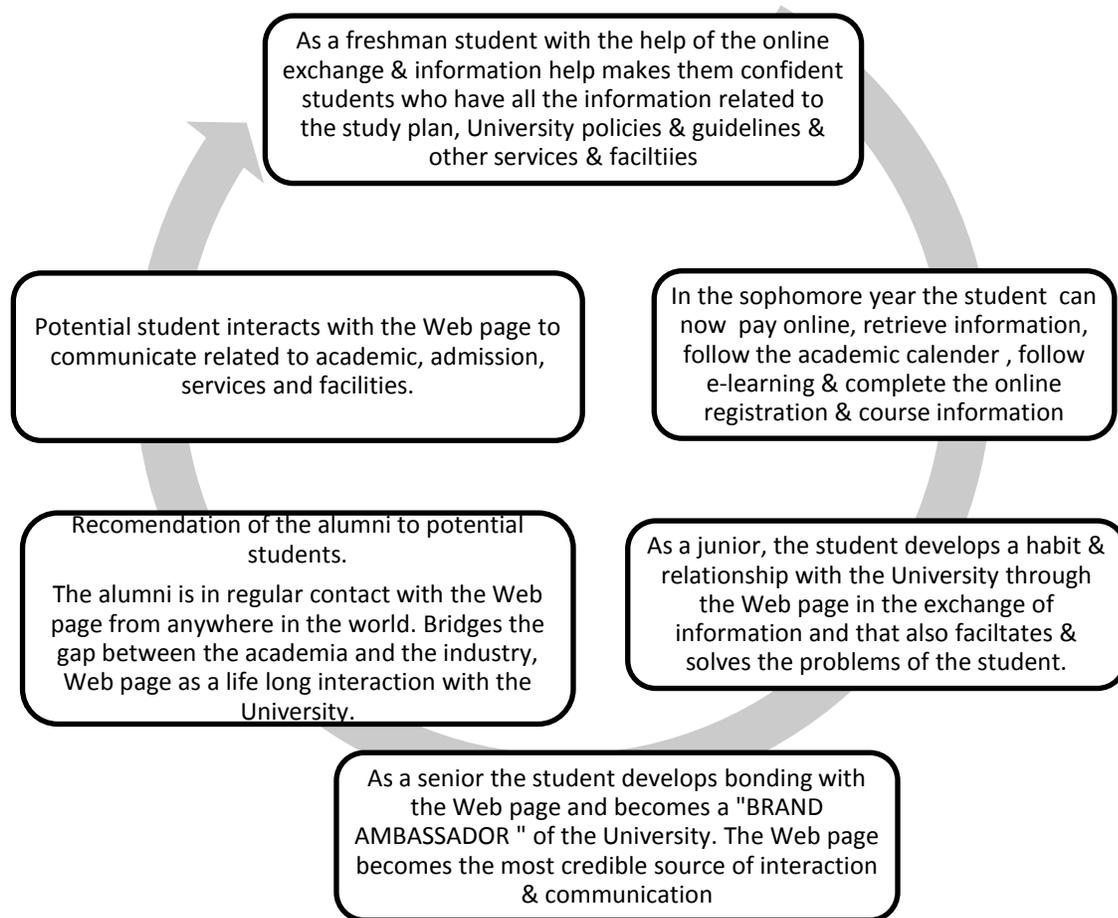
As a freshman student with the help of the online exchange & information help makes them confident students who have all the information related to the study plan, University policies & guidelines & other services & faciltiies

Potential student interacts with the Web page to communicate related to academic, admission, services and facilities.

In the sophomore year the student can now pay online, retrieve information, follow the academic calender , follow e-learning & complete the online registration & course information

Recomendation of the alumni to potential students.
The alumni is in regular contact with the Web page from anywhere in the world. Bridges the gap between the academia and the industry, Web page as a life long interaction with the University.

As a junior, the student develops a habit & relationship with the University through the Web page in the exchange of information and that also faciltates & solves the problems of the student.

As a senior the student develops bonding with the Web page and becomes a "BRAND AMBASSADOR " of the University. The Web page becomes the most credible source of interaction & communication

Figure 4.Illustrates how though the Web page a potential student can be converted to a "brand ambassador."

The above Figure 4can also be extended to as the Web page being a continuous contact between the University and graduate students, faculty members, staff, researchers and stakeholders.

**Promised Experience**: Illustrates the important information, interaction and e-experience that a University Web page is expected to consist.  This includes the 7 criteria of the "real life experience" for new comers and potential stakeholders. Other tangible required services are illustrated in Figure 3. This not only enhance the physical evidence of the Web page but also presents University's important services that are provided through the Web page for the smooth academic functioning of students, staff and academics.

**Rational Values**: Consists of the criteria necessary for the easy navigation and collection of relevant information necessary for potential stakeholders. This domain includes the 10 criteria and sub criteria totaling to 45 criteria.

**Emotional values:** Are necessary to enhance bonding between the students, staff, faculty and stakeholders which is performed through symbolic and value enhancers that motivate the alumni and other stakeholders to utilize the Web page as a lifelong source of information & interaction.

**Life Long Service Quality**: According to Chaffey (2009) customer relationship management (CRM) is an approach to building and sustaining long term business with customers. Therefore, the following Figures 3 and 4 culminate the proposed model for University Web pages wherein Web pages and information technology can be utilized by Universities to build interaction, information provider, a valuable source of retrieval of content information by the student & academia, brand enhancers towards a lifelong source of information provider.

Further to be able to gauge the efficiency and functionality of the University Web pages the Universities can evaluate them as follows:

a) As the Web page is one of the first windows of acquaintance for the potential students, faculty, staff or researcher. The Universities can utilize an evaluation technique as proposed as the promised experience, rational values and emotional values to evaluate the Web page design.In terms of marketing as how to promote the University Web page as a results based, informative and user friendly.

b) The Universities should continuously research, feedback and usability testing to continue to monitor and evolve the customer experience online.

c) Be aware of the competing University's offerings in terms of design look, information design structure, usefulness of   information functionality of site etc. Further, Web page masters to be on the vigil to update the Web page regularly in content especially the ones not navigated into to be removed and added with new

features. As the University's Web pages primary target group is potential students, who are generally young, Web pages being colorful and trendy would encourage continuous usage by them.

The limitations of the study is that further research can be performed for assessing and evaluation of the needs of the potential students as to what they seek as information the most as potential students. Research into graduates and other stakeholders can be approached in finding their usage of University Web pages and the critical/important information they seek through Web pages. The dispersion of information through Web pages are both inexpensive and fast, therefore more avenues to disperse different information to achieve fruitful objectives for universities can be searched and evaluated continuously.

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