Suggested a usable navigation websites Design:
A case study for Egyptian Benha University

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Abstract:

Websites are considered one of the most important e-marketing tools. In this era, marketing for universities is becoming vitally important. Thus, universities are interested in their websites. This research is concerning with improving these websites design as an e-marketing communication tool, by giving attention to the navigation design as one of the web design elements and as a major factor in usability as a mean of quality.

This study aims to answer the following questions to redesign/design a website: Is it important to give attention to design a usable navigation website? What are the considered factors to evaluate a usable navigation(UN) website as an improving step of the design? What is the essential approach to achieve to it? All of that will make new challenges to the designer. Therefore, this research followed a descriptive study to answer these questions and provide the designer with evaluation checklist factors of UN of the website and a common approach to design/redesign it.

This research applied this evaluation on Benha University (BU) as a case study (it's one of Egyptian government universities). This evaluation showed the weakness of attention toward this aspect of BU website design. Thus, this research suggested a new usable web navigation system for BU based on strong Information Architecture(IA) as an essential approach by means of Exploring Data and Affinity Diagramming methods as common IA methods for navigation websites design. It suggested a wireframe model based on coherent IA structure that should lead to good design.

This research wishes to contribute to the improvement of marketing Egyptian higher education through improving website design by highlighting the importance of design UN in website as one of the important elements, and design a feature that precede visual design phase directly.It also wishes that the designer will use a style of evaluation and the suggested UN system as a starting point for design/redesign good Egyptian universities websites.

1- Introduction

Higher education institutions are adopting the marketing orientation which involves a distribution and communication to inform (Hanover 2014). On the internet age, websites are considered as an important e-marketing tool that play effective roles in communications with customers, and considered as the single best advertisement on the internet (Po, F.Y.Li. 2006).

Nowadays, website design is accomplished through a process that depends on a key feature such as navigability. Navigation is one of the website design crucial elements. It's the element which Layout revolves around and lacking of its design is the main interface problem (Patrick, & Horton, 2011).Thus designers should give attention to navigation. Especially, this is a launching preceding step as threshold of the visual design step which makes websites more credible and trustworthy, and makes the user more relaxed. Design navigation system is one of the designer's tasks, which has been appeared by Jennifer Fleming In 1998. Website navigation system is like a road map to the information contained within the website (Kalbach 2007) which plays a major role in shaping our experiences on the web. That leads to usability as a mean of quality factor in the web design. It is a major factor in usability (Dr Fisher &others 2004). Therefore designing/redesigning usable web navigation should be considered by the designer to prevent losing the web users which leads to block the communication between the website and its customers.

Navigation refers to the methods of the design that

let people move around the information(Štefkoa & Others 2014)(which is one of designer new challenges). Web navigation provides the access to information in a way that reflects the brand, enhances understanding, and lends to overall credibility of a site.

Marketing universities on the websites are based on available information and clarity of the website. Universities websites introduce a lot of information, so failing to find these information leads to users loose. Therefore, findability is an important factor of the usability of websites and navigation is at the heart of good findability (Kalbach 2007) .Universities need to utilize better and easier navigable websites (Schimmel & Others 2010).

Therefore, the researcher was evoked to help web designers in achieving easier navigable websites as one of the web design elements by providing him with a comprehensive vision of all what is linked to UN as a victory that can be measured. Then, the researcher applied these evaluation factors in (BU) as one of the Egyptian Universities websites. This university occupies an advanced world rank in spite of its modernity as described in their website (http:\\bu.edu.eg). So the Research's Problem is to demonstrate the following questions:

- Is it important to design usable navigation websites in university websites?
- What is the essential approach that the designer should follow to design UN system?
- What is the usable navigation checklist that should be considered and reviewed by the designer as an evaluation step that leads to improvement?
- To what extent the usability of navigation in our as a case study (Benha University)?

While, trying to answer Research questions, we should state that this research aims to urge the Egyptian Universities to give more attention in designing UN website to improve its marketing, and facilitate the web designer work by giving a specific checklist to evaluate UN system as a mean of improving website design/redesign *through these objectives*:

- Highlight the importance of design UN system in website design process (as a construction step before visual design step).
- Providing a collected checklist factor to help the web designer in achieving design UN.
- Redesign a suggested UN in our case study through a common approach.

1- 1- The importance of universities websites as an e- marketing tool:

As universities find the need to appeal to an ever-increasing and diverse student base,

successful branding and marketing have become increasingly important activities for these universities. Universities must now go to greater lengths to differentiate themselves from competitor's institutions (Hanover Academy 2014). As using of the internet is increasing rapidly and that supports accessing the potential high education students (81% of them) at home (Allison 2002). These lead us to the importance of the university website as a mean of e-marketing.

E-Marketing involves getting close to customers, understanding them better and maintaining a dialogue with them. In addition, it supports increasing loyalty, transforming user experience and helping to form the image (Štefkoa & Others 2014). Focusing on university website as a marketing tool reveals that the university website is the most important source of information (Hanover Academy 2014). In addition, it is the most important tool for social and online marketing. University website represents the main e-marketing tool (Štefkoa, R. & Others 2014), which is one of the university evaluated ranked method (as reputation and quality factors). Effective universities websites can increase conversions, strengthen institutional credibility, brand, improve user satisfaction, and save time and money (Sherwin 2016). It also should possess overall ease of use, informative content and smoother user interactivity in term of the quality of user's experience (Allison 2002). All the previous, enforce Supreme Council of Egyptian Universities to give attention to develop Universities Websites and their quality as an e-gate of universities.

1-2 website usability as a critical approach in university website design:

Nowadays, Universities and colleges are becoming increasingly aware of the huge competitive advantage offered by the desirable and well-designed technology, such as websites. Understanding the usability is one of the keys to achieve this success (involves clarity of design and coherence of information architecture) (Allison 2002). First, website with high usability can stimulate a healthy dialogue between the university and its stakeholders. This dialogue lies at the hearth of communication and plays a central role in communication. Thus, the usability of the website plays a central role in establishing a healthy communication between the university and its stakeholders (Po, F.Y.Li. 2006).

The university website tends to be more complicated, with some difficulties in defining a common vision for a communication with a lack of knowledge in usability(Maish,2006).).

Therefore, this research highlights the usability factor in one of the website design elements due to its importance. Usability is a quality attribute that assesses how easy user interfaces are. It refers to methods for improving ease-of-use during the design process (Peacock,*2010*). It enhances the processes, in attempting to improve user interface design. Consequently, usability is about ease of use, it enables the user to achieve their specified goals with satisfaction, efficiency and effectiveness. Users will cultivate confidence and trust in the website when they achieve their goals efficiently and effectively (Britsios, [n.d.]).

Many studies have demonstrated website usability, some of them conducted usability benchmark to assess websites against their competitors to develop a better one (Hassan,2005). Others use usability as a quality of websites (Bevan,1995) (Dale,2002). Websites usability could be studied and evaluated as a quantitative study (Nagpurkar,2014). or a qualitative one. It is found that usability instrument -both quantitative and qualitative- could be applied to evaluate websites (Dr Fisher, &others 2004). Usable websites are user-friendly websites (Dale,2002). These studies evaluate how users are using these websites.

In all of these previous studies, the researcher has found that Navigation factors were the common denominator which should be considered because if you have a bad navigation system, you will lose your users. In the context of a Higher Education website, Usability chiefly involves clarity of design and coherence of information architecture (Allison 2002).

1-3- Web navigation as an important Design factor of web usability:

Design navigation system has been seemed as one of the most important design features across many website domains (Nagpurkar, 2014). Navigation system is a basic element of website design, it's the core of layout, and the framework for building websites. It should be easy to identify and easy to use (Cousins, 2013) (Patrick, & Horton, 2011). Website navigation is defined as all of the links, labels, and other elements that provide access to pages, and help people to orient themselves while interacting with a given website (Kalbach 2007).

From a marketing perspective, website **navigation** is often what stands between the user and the user's goal. That distance should be as short as possible (Cousins, 2013). That's why the designers need to ensure that website navigation offers a positive experience from a usability perspective. Navigation is a major factor in website usability. Simply, a website should be easy to navigate which leads to ease-of-use, which supports a

greater credibility of the website and it can be achieved by paying attention to design navigation (menus and other web navigation tools)(Fisher,&others2004). The ease of navigation refers to user's clear understanding of the web portal structure. It allows users to move easily from one section to another.

In addition, there are usability guidelines which should be respected and considered by web designers who allow themselves a lot of creative freedom when creating a website. Hence, if a designer would make a site which has an interesting concept, but is hard to navigate and difficult to understand, then the whole project is almost useless because it will be left, then you lose your user (Sandu, [n.d]). But if the site is designed in a way that makes sense, takes a short time to download and is easy to navigate, then users will continue to use the site (Fisher, 2004).

Users spend more time at the site if it is effectively designed. Specifically, effective and coherent navigation design should have attributed as clear labels, adapted your website to match user needs, and been consistent throughout the website. The main navigation links kept together and reduced clutter by grouping links into sections (Kalbach 2007). Navigation system is a basic element of an effective web site. Effective navigation contributes to improved users' satisfaction and credibility. Universities will need to utilize better and easier navigable websites. In fact, the most important element in website design is the ease of finding information (Nagpurkar, 2014). Therefore, you need to design a good coherent navigation system to keep your website visitors, and to enable the user to move smoothly from one place to another.

1-4 IA as an approach to Design/Redesign UN system:

Navigation systems are one of the Information Architecture (IA) combination (Morville, 2007) which is the art and science of shaping information and experiences to support usability and findability (Spencer, 2010). The universities websites are the most important source of information. They have a lot of information to organize (Hanover, 2014). Thus, Strong IA is important especially for these large websites. These sites need navigation systems and organizational schemes that feature the information which people need to know. The intangible qualities of this type of site are the organization navigational ease. Information Architecture is perfect to create or improve an existing navigation system, and contributing in increasing user satisfaction (Morville,2007).

Web designer should care with IA due to its value

in Brand (the value to reduce spending time with website reconstruction). IA plays a very important role in any website design because it ultimately defines the navigation experience for users, and also determines the information flow. It also will describe how the main parts of the site relate to one another: Groups and sub-groups, labeling, and the overall structure (or shape) of the site (Morville,2007). It ensures that the information is organized in a consistent and predictable way on each page. It involves steps such as: assessing an existing and needed content, organizing the pages, providing clues to help in using the site efficiently, and developing navigational structure. This affects directly in how things are easy to use(Spencer,2010). In addition, there is a relation between IA and usability. Good IA leads to users' satisfaction which is the core of web design (Morville,2007) .

2- evaluation:

Evaluation is an important part of the overall user interface design which consists of iterative cycles of designing, prototyping, and evaluating. When relaunching or enhancing a web site design (Kalbach, 2007), Evaluating (Testing) websites is a necessary task. It's imperative to first determine the problems of the old one (Fisher, 2004). Therefore at the beginning, we should evaluate the current site navigation (Kalbach,2007). Using checklist evaluation is more similar to heuristic evaluation and its conclusions can be subjective (Nielsen,2001). It's inexpensive and quick to conduct. The researcher has conducted it on the home page of (BU)website because a common structure of the university is showed in university homepage(Maish,2006), and it reflects the individual's vision and the core work value. Website navigation is a central component of the overall site architecture which all contents can flow from. The homepage is the most valuable real estate of your website, one of the home page functions is delivering the uniqueness and the importance of the university (Morville,2007).

This evaluation checklist is derived from rigorous analysis of the literature and expert verification. The groupings are also refined based on comments and recommendation from experts. Only the key generic checklist factors are used. So it should be adopted or applicable to all kinds of websites. Furthermore, only objective criteria are used for navigation usability as a framework. This is qualitative evaluation framework focused only on the usability of navigation towards more eases of use of the university website. This process should deliver more ease of use checklists that support the

visual design efforts, and help the web user interface designer to get steps into usability philosophy.

This evaluation of UN was excerpted from designing navigation book (Kalbach,2007), Jakob Nielsen (Nielsen,2001), Dr. David Travis(Travis,2014),and Donna Spencer (Spencer, 2010). This evaluation of UN checklist consists of 74 items. Each item is given a rank value (0 or 0.5 or1). These values Interpret as: 0 for item that doesn't realize, 0.5 for item that does not fully realize, and 1 for item that is fully realized. Figure [1] declares all these checklist factors.

These factors are carefully selected to present navigation items, and what is connected with. They reflect usability of navigation system from the designer's point of view. These items are divided into 6 sections including: Home Page, Orientation, Navigation, label, Visual Design, and Browser. They are shown in figure [1]. This evaluation is conducted by the researcher, and it was conducted through three weeks to repeat the evaluation two times so as to review the results. The last assessment was conducted in May, 9th 2016 at 3 o'clock.

Results:

Results are showed in figure [2]. The whole proportion for navigation checklist was 63.5%. T*he check list items rates proportion were:*
Orientation has got 62.5% [2.5 from 4], Home Page Usability evaluation has got 68.75% [16.5 from 24], Navigation system usability evaluation has got 46.50% [14.5 from 29], Labeling system has got 65% [6.5 from 10], Visual Design has got 66.6% [4 from 6],and Browser has got 75% [3 from 4]. These results could be interpreted as: there are low attention to the usability of navigation design system which rates 46.50% (it is the least proportion).
By reviewing the links in the home page, the researcher has found more than 60 links (20+42),and these are a lot of links. There are differentiations between English and Arabic version (i.e. staff link, research label in English version which can't be found in the Arabic version and Centers label that is explained in details in Arabic version in contrary to English version).
This evaluation reveals the need for individuals and organizations who are involved in BU website design to put extra efforts in raising the usability level of their website navigation system. BU website still suffers from some sever UN flaws that need to be tackled.

Test statement

1 Orientation
1. The scope of the products and service is visible from the home page
2. The function of main navigation mechanisms is clear at a glance
3. Location within the site is shown on each page
4. Global navigation appears consistently throughout the site

2 Home Page Usability
1. The items on the homepage are clearly focused on user's key tasks
2. Useful content is presented on the homepage or within one click of the homepage
3. All corporate information is grouped in one distinct area (e.g. "About Us").
4. There is a short list of items recently featured on the homepage, supplemented with a link to archival content.
5. The value proposition is clearly stated on the home page
6. The home page contains meaningful graphics, not clip art or pictures of models
7. Navigation choices are ordered in the most logical or task-oriented manner (with the less important corporate information at the bottom)
8. The title of the home page will provide good visibility in search engines like Google
10. Users will understand the value proposition
11. By just looking at the home page, the first time user will understand where to start
12. The home page shows all the major option
13. The home page of the site has a memorable URL
14. By just looking at the home page, the first time user will understand where to start
15. The home page shows all the major options
17. Navigation links behave consistently and predictably
18. Useful content is presented on the homepage or within one click of the homepage
19. There is a short list of items recently featured on the homepage, supplemented with a link to archival content.
20. The home page looks like a home page; pages lower in the site will not be confused with it.
21. An exit point appears on every page
22. Further navigation suggestions on every page apart from a global
23. Related information is linked together
24. Navigation links behave consistently and predictably

3 Navigating
1. All major parts of the site are accessible from the home page
2. Critical content is located high in the structure of the site
3. Content is within three clicks of the home page
4. Alternative navigation mechanisms are available
5. An exit point appears on every page
6. Further navigation suggestions on every page apart from a global
7. Related information is linked together
8. Navigation links behave consistently and predictably
9. There is a convenient and obvious way to move between related pages and sections and it is easy to return to the home page
10. The information that users are most likely to need is easy to navigate to from most pages
11. Navigation choices are ordered in the most logical or task-oriented manner
12. The navigation system is broad and shallow (many items on a menu) rather than deep (many menu levels)
14. The major sections of the site are available from every page (persistent navigation) and there are no dead ends
15. Navigation tabs are located at the top of the page, and look like clickable versions of real-world tabs
16. There is a site map that provides an overview of the site's content
17. The site map is linked to from every page
18. The site map provides a concise overview of the site, not a rehash of the main navigation or a list of every single topic
19. Good navigational feedback is provided (e.g. showing where you are in the site)
20. The terms used for navigation items and hypertext links are unambiguous and jargon-free.
22. There is a visible change when the mouse points at something clickable (excluding cursor changes).
23. Important content can be accessed from more than one link (different users may require different link labels).
24. Navigation-only pages (such as the home page) can be viewed without scrolling.
25. Hypertext links that invoke actions (e.g downloads, new windows) are clearly distinguished from hypertext links that load another page.
26. The site allows the user to control the pace and sequence of the interaction.

27. The site does not disable the browser's "Back" button and the "Back" button appears on the browser toolbar on every page.
28. Clicking the back button always takes the user back to the page the user came from.

4 Labeling System
1. Links are labeled accurately with mutually exclusive terms
2. The language used is simple and in terms that site visitors can understand
3. The meaning of navigation options is useful
4. The meaning of navigation options is consistent,
5. The meaning of navigation options is clear,
6. The destination of navigation links is predictable
7. Abbreviations are not used; or, when used they are clear and obvious to target audiences
8. Each page has a browser title that is coordinated with the navigation and page title
9. Each page has a clear page title related to other labels around it
10. If the site supports multiple languages, the navigation is flexible to accommodate translations

5 Visual Design
1. Navigation options are clear and visible
2. Navigation options are readable and quickly scannable
3. There is a clear visual hierarchy of options, labels, and headers on each page
4. The navigation mechanisms are pleasing and attractive
5. The layout is clear with a sufficient amount of white space
6. Colors are used effectively to prioritize and organize navigation

6 Browser
1. Back buttons and other assumed browser functions are operable
2. Each page has a human-readable URL
3. The URL is related to the name of the company and shows a predictable structure within the site via its directory structure
4. There are no broken navigation links

Figure [1] contains criteria checklist for UN design system which were used to conduct navigation evaluation of BU website, and should be considered by web interface designer.

3. The research method:

In this section, the researcher redesigned a new navigation system as a suggestion for BU website based on a new IA structure -s*tructuring the site is a critical step before starting visual design– toward an effective content to your intended audience*(Spencer,2010).

This research adopted navigation definition as the following: Navigation is more than just a way of getting people around a site (Morville,2007). It can also help people to find information they didn't know about. Navigation is one of IA component(Spencer,2010), and IA is responsible for determining how information across a website is displayed and accessed, what the user expects to see, as well as what content the organization wants to connect (Morville, 2007). Section 3.1.is the first step of our approach. It briefly explains the IA common methods. Section 3.2.presents the implementation for this case study to deliver the suggested homepage wireframe that explore the structure of suggested UN.

Section 3.1: The Essential Approach to design/redesign UN:

The universities websites were the most important source of information. They have a lot of information to organize (Hanover Academy 2014). Thus, Strong *IA* is important especially for these large websites (Morville, 2007). Designers, who have much Information, focus on helping people to find information or complete tasks efficiently and effectively hoping to avoid wasted time, money, and frustration(Spencer,2010). The researcher found it a usability scope.

Navigation is the way people will get around the site. It is absolutely dependent on the IA (Krug, 2014). IA approach in this research starts with website goals and anything will influence in the design. Secondly gathering information and analyzing, this step presents IA collecting information methods through depending on the user's research. Many methods have been proposed for the user's research such as: Interviews, Focus Groups, Observation, Card sorting task, or activity analysis (Spencer,2010).

This research is going to probe existing data by exploring the data method as the user's research method because we already have the site information that is going to be reorganized. Exploring data method as an indirect method gives a feeling of the type of information we have, the very high-level patterns, useful as a source of terms for navigation labels. Each user's research method has advantages. Therefore, it is recommended to follow more than one method. The researcher used Affinity Diagramming method as a second method (Courage, 2005). An Affinity Diagramming is probably the most frequently used method for analyzing qualitative data. Similar findings or concepts are grouped together to identify themes or trend in the data.
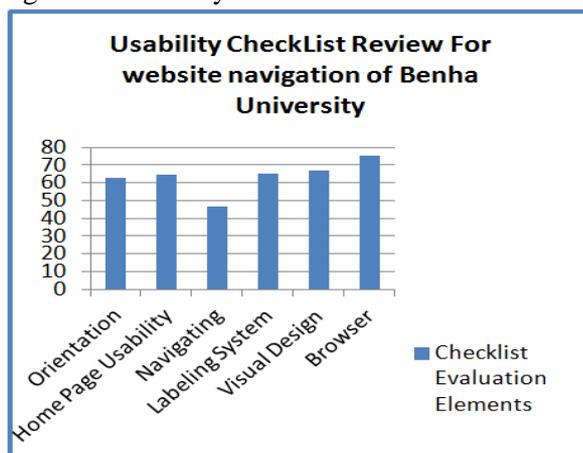

Figure [2] graphic info represent the results of evaluation checklist according to usability of designed navigation system in percentage

Section 3.2: The implementation of navigation for Benah University (our case study):

1- We start to configure out the objective of this site. We reviewed the university mission and the strategic plane to explore the navigation system that explores the university objective (e.g. excellence in education, research and community service).After reviewing Benah University strategy from their website (Spencer,2010), the extracted suggested goal for our IA redesign of this website at this level *was helping users to find information that explore Excellency on education, research, and the services which are introduced through the university including the local community*

2- Defining the user groups to identify the information/services that should be presented to each group as (staff/student - undergraduate and postgraduate - community). Each group contains subgroups to define the key navigational elements and site architecture based on the role of the user (this research should deliver just the first level of entry points).

3- This university already has its own website with a lot of information, so gathering website information will not be from scratch. The researcher focused on the home page which shows the university structure by using Exploring Data method -as an indirect method- (Morville, 2007) to put all information and our navigation types in spread sheet. The researcher explored the current navigation type in the spread sheet Figure[3] according to the main three types (global, local, context).

4- Studying the competitors: Studied/ analyzed navigation types of the four pioneer universities which have high rank according to this case study. This step is important to know the common labels in this field

(Spencer,2010), focusing on the first level of navigation. Figure[4] shows global navigation in each university.

5- The second method was Affinity Diagramming. The researcher used it as a brain storming method to recreate IA (Courage, 2005). In this step the teamwork was consisted of the researcher and the web developer. We used sticky notes cards in our discussion to identify issues and topics that are interesting and wrote them on sticky notes. The following steps were reorganizing data in groups and subgroups that go together or similar then move our sticky notes content to spread sheets to present the labels that should be common (Spencer,2010), and represent our goal. Figure [5] presents Affinity Diagramming template which contains the labels of first category in our IA. This template presents the main navigation Labels which we have chosen into Affinity groups

Figure [3] shows the Entry Points in the current navigation system of BU Home page. The result of data exploring method presented Global navigation, Local navigation, the context area and footer navigation

Massachusetts Institute of Tech. [http://web.mit.edu/]	Harvard University http://www.harvard.edu/	Oxford university http://www.ox.ac.uk/	Stanford University http://stanford.edu	Benha University http://www.bu.edu.eg/en/
about admission education research community life@MIT initiatives impact News/ Research/ Campus/ Press/Events	About Harvard Admissions & Aid Schools On Campus Staff / Alumni/ Give /Students / Parents/ Alumni / Visitors Media Faculty / Gazette News/ Apply / Events/ Faculty Students/ Harvard Campaigns/ Visitors	ADMISSIONS RESEARCH NEWS & EVENTS ABOUT Staff Oxford students Alumni Local community Search Box	About Admission Academics Research Campus Life Students Faculty / Staff Parents Alumni	Home About University Administration Faculties Centers E-Services Research Contact Post/ Graduate/ Community / Services/ Student/ Staff/ Office 365 Search

Figure [4] shows the Main current Entry Points as a global navigation system in each University Home Page (without context or Footer area)

6 - Choosing navigation entry points of the context navigation area was the current step. By reviewing the pioneer universities and considering our website goals, we focused in the university news and events that support Excellency and what is going on this university. By reviewing and comparing the footer area between our pioneer universities and our case of study, we suggested that these are entry points that support our goal as in Figure [6].

7- We tried to reorganized and redesign the much information that are introduced in the home page by choosing the important link (it is better to be reviewed by the stakeholders to put the important links in footer area).

		Affinity Diagramming for Suggested I A For the case study (B U WebSite)				
<Group Heading -2> *Academics*	**<Group Heading -3>** *Admissions*	**<Group Heading -4>** *Research*	**<Group Heading -5>** *Resources & Offices*	**<Group Heading -6>** *Community*	**<Group Heading -7>** *Campus Life*	
<Brief Description> **All Available Academic Programs and colleges for Undergraduate and continuing studies**	<Brief Description> **All Available admissions for undergraduate and graduate programs**	<Brief Description> **All Postgraduate Academic Programs and Everything can help researchers in their research, and support the co-operation between the faculty and the community**	<Brief Description> **Assets that help in teaching, service and research process and make it easier for dealers with the university in achieving the goals of the university**	<Brief Description> **proper and appropriate activities for university faculty and staff to take when relating to the broader community.**	<Brief Description> **Everythinng for experimenting with the university -- not-for-profit organisation responsible for facilitating and fostering a broad range of non-academic activities and offerings for students at B U**	
Faculties	undergraduate addmission	Postgraduate programs	Libraries	Local Community	Faculty Members Club	
Departments & Programs	graduate admission	Research programs	Digital Library	Community Services	athletics	
Departments A to Z	Forign Students	Conferences and magazines	centers and units	Local Co-operation Protocol	hosting	
Programs A to Z	Youth Care	Research projects	Projects	International Co-operation Protocol	Events	
Departments by School		Research scholarships	Offices	University Hospitals	Multimedia	
Interdisciplinary Programs		Research Facilities	E-services			

Figure [5] shows the information reorganization by topics according to the main exist home page labels delivering the main entry points of the first and the second level of navigation(global).

http://web.mit.edu	http://www.harvard.edu	http://www.ox.ac.uk/	http://stanford.edu/	http://www.bu.edu.eg/en/
Jobs/ facts/ offices and services / contact/ about / the spotlight/ adress /follow us on Facebook, Twitter, Google Plus, YouTube/	Website Accessibility/ Sitemap/ Get in Touch with social media/ Contact Harvard/ Maps & Directions/ Jobs/ Social Media/ Security & Brand/ Privacy Statement/ Report Copyright Infringement/ Report Security Issue/ ©	connect with us(Social media connection) / information about Oxford(Strategic plan, Libraries, Sport at Oxford,...)/ information for university clients(Alumni, Current Oxford students,...)/ QUICK LINKS(Contact search, Jobs and vacancies, Term dates, Maps, Nexus webmail, Giving to Oxford, Oxford University Images/©	Schools/ Departments Research/ Health care /Online Learning About Stanford/ Admission / Resources / **SU Home/** Apply Maps & Directions Visit Campus/ Search Stanford/ Make a Gift/ Terms of Use/ Find a Job/ Emergency Info/ Contact Us/©	News Archive/ Staff Sites/ Student sites/ Staff publication/ Benha Books/ ICTP/ Centers and Units/ Important links / Links/ Visitors/ counter/ © In addition to some links as hospitals to reveal the value in society services

Figure [6] shows the entry points of Footer area of the pioneer universities and the suggested entry points in BU.

Thus, we suggested that these links according to our goals and to our users as the following: Benha at a glance(BU strategy, President Articles. Research Plane, BU news, Faculties News, connect with us (Social media connection), News Archive, Staff Sites, Student sites, Staff publication, ICTP projects, vacancies, Important Links, hospitals, etc.

8- The researcher applied these navigation entry points in the following wireframe in Figure [7]. This wireframe should be delivered as the step that precedes the visual design step.

Results:
Through the theoretical review, the researcher found that:
1. University website as an e-marketing & communication (Štefkoa,& Others 2014) tool which represents the university image should have more attention towards the usable design. Usable website design feature as a meaning of quality makes up the website more confident, trusted, effective and increasing users' satisfaction (Bevan,1995) (Dale,2002).
2. The essential approach to design a good and coherent usable navigation system is IA which is including navigation as a deliverable factor.
3. *Good web design requires a solid IA based on site goal and target audience.*
4. Designers who redesign that kind of websites should start with usable evaluation to know the weakness points and could enhance their design.
5. Navigation is the common denominator(major factor) in the website usability factors and it is the central part of the content design.

6. Usable Navigation as a mean of findability is an important feature in universities websites that have a lot of information.

7. Navigation as a major usable factor is independent factor by itself but it is expanded in other usability factors.
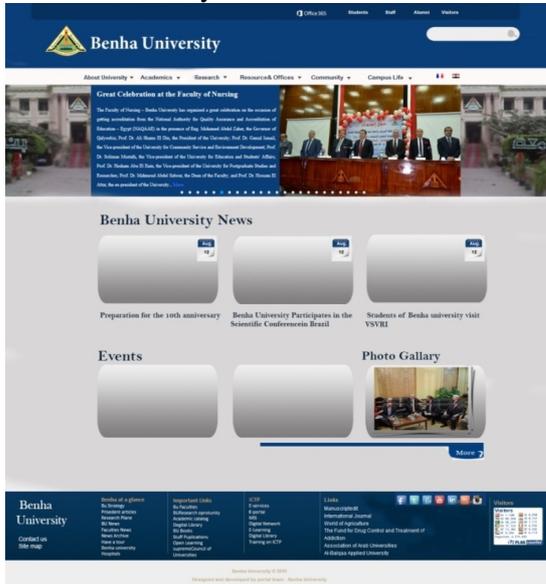

Figure [7] presents our wireframe that should precede visual design step.

8. Through reviewing the pioneer universities entry points, the researcher has found out that:

   – Although there is a common user for the universities websites, one of the designs Navigation differentiation is coming from the policies that are done to achieve university objectives.

   – The pioneer universities that have been chosen in this research use the context area as a teaser area. There wasn't a clutter Navigation or much information in home page.

Discussion:

This research represents the designer's point of view. The researcher sees that:

- Good website design is depending on the good structure that is revealed in navigation entry points. Navigation is the core element in designing the ease of use and in the website design (Cousins, 2013). Towards more usable website, this study is discussing this design feature as a forward phase to visual design.

- The researcher has found that Navigation is a major factor in website usability (Dr Fisher , J. &others 2004). Usability -as a meaning of quality- (Dale,2002).gives web designs ease of use and helps users to cultivate confidence and trust in website (Britsios, [n.d.]). Therefore, usable navigation (UN) in designing/redesigning university websites -as an important e- marketing tool- should pay more attention. In addition, findability is the most important thing in designing this websites and navigation is essential in findability (Chaffey, 2008).

-This study introduces an evaluation checklist as a comprehensive vision of all what is linked to UN as a major factor in usability which faces the web designer. This checklist should help the designer to enhance his design towards more ease of use (Kalbach 2007). Conducting UN evaluation of BU website reveals that: there was a weakness of interest in usable navigation in design which causes some problems such as inconsistence navigation between the Arabic and English versions. In addition, the unneeded of hyperlinks in the home page like the homepage link when you are already in the home page, repeated entry points and deep entry points in horizontal navigation areas that could cause users' frustration (Nielsen 2001) and founding more than enough of local navigation and utility navigation. Trying to tackle these, the researcher suggests designing a new UN through applying IA methods as an essential Approach to redesign usable navigation system in BU.

- Applying Exploring data method -as an indirect method of IA- helped us to know the kind of information, hyperlinks, and the labels we have (Spencer,2010), and the very high-level patterns and navigation labels of our case study. This was accomplished by applying this method in four pioneer universities to know the common labels in this field and to allow the readers to be instantly familiar with the website (Dale, 2002).

- Affinity diagramming method -as a brain storming method- was the next method, then using it to be sure that our chosen labels are adapted with our university objectives, users and organization system. By these methods we get the labels in the first and second levels of the main entry points, introducing the users that should focus on according to their priority. The researcher found that IA methods reduced to more than enough entry points and information in the home page design by putting this clutter information into its logical place.

- In addition, the researcher found that the deliverable wireframe reduces using the teaser area to the present university events and the news that expresses the university Excellency and its campus life instead of a lot of links and repeated links that could be put in footer area. The result introduces more white spaces in the design which creates a lot of comfort. Using these methods should introduce solid structure

and coherent UN in Arabic and English versions towards good web design.

Conclusion:

After the theoretical study and evaluation process the researcher concluded that: universities websites are very important as an e-marketing communication tool. Web designers should understand how to design usable website -ease of use website- as a meaning of quality. Navigation is a major factor in usability. Thus, the website designer needs a clear usable background to be able to understand which factors should be considered and how to design UN in websites which have a lot of information such as universities because navigation is all about findability.

This research aims to improve marketing in universities through improving their designs, by highlighting a usable navigation design as an important element in designing website. This study delivers a usable navigation checklist which excerpted from many clutter references wishing to help web designers towards more ease of use designs therefore, conducted evaluation as a necessary step in enhancing designs. The low rate of this evaluation of BU as a case of study reveals the weakness in this aspect of web design. The researcher found that IA is the essential approach to design usable navigation and to define how the sites overall navigation should be structured. *A good web design requires solid site architecture based on the site goal and target audience. Thus, the researcher starts to redesign a solid IA of BU website by following the eight steps (that may vary in IA methods if you will design from scratch), and* introducing a wireframe that should enhance the designer work in the following design feature towards good design.

Recommendations:

1. Design usable websites is an iterative work. Thus, this suggestion of UN should represent and discuss the stake holders of BU to be sure that they are adapted with it.

2. Design usable navigation is the designer's task but in these kinds of websites which have a lot of information we should start with IA and this should be a teamwork task.

3. Evaluation reveals that usable navigation is essential in findability (Chaffey, 2008). Thus, designers shouldn't neglect the IA which delivers navigation, labels, metadata.

4. Website designer work is the pass way to communicate with the users so he/she have to consider with usability as a mean to achieve ease of use.

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