Evaluation of Interactive Journalistic Design in the Egyptian Daily Online Newspapers

Sameh Mostafa Hassaan

Department of printing publishing and packaging, Faculty of Applied Arts, Helwan University Cairo, Egypt

Abstract

Nowadays, the Interactive Journalistic design in the Egyptian daily online newspapers has become as a general reality. The Egyptian online newspapers utilize different types of Interactive features, but not on a regular basis. This study examined top three of local online newspapers, according to top Alexa rank and more visitor's number, also according to the specific fields of interested readers, like one that specialized in breaking news, other that are focused on the reports and articles, and finally that interested to present specific topics such as sports, aims through characterizing front pages of them, and the types of Interactive Journalistic design used, regardless the content elements.This paper shows that they still lag behind in the use of data visualization and do not utilize all types of interactive features. They mainly outsource services for data visualization packages or illustration-based graphics. They do not have separate or specialized departments for digital data visualization. They utilize of interactive features such as mouse-over, clicking on, hyperlinks, static and dynamic visualization only as images without any used the modern globally data visualization styles, and sharing to social medias, but do not combine data visualization with news stories. Type-based graphics are more frequently used than charts and illustration-based graphics. also, it can be seen data visualization as separately to the text and not an essential part of the journalism content.

Keywords: Information design, data visualization, online newspapers, interactive feature.

1. Introduction

Readers can be considered as aimed main clients of online newspapers. not only when the topic catches their attention but also combined with the layout and journalistic design style. perhaps that is being why journalistic designers try to explore current modern styles, which attract the audience to online newspapers.

Nowadays, there are most of 110 of Egyptian newspapers edited through the internet as online newspapers (Alexa rank, 2107). Naturally, there are differences of journalistic design between the traditional printed newspapers and others that edited through the internet (Trench, and Quinn, 2003).

The aim of journalistic design and interactive features of any online newspapers will get someone to stop and look at the topic by navigating or browsing.

1.1. Research problem:

Weak level of interactive journalistic design of Egyptian online newspapers, comparing to current latest trends.

1.2. The Research Aims:

The evaluation of Egyptian online newspapers by measuring to what degree of existence the interactive features of them as the main aim of this research paper according to the data visualizations and journalistic design in the current situation.

1.3. Research Methodology:

The research was achieved by analysis motivated an interpretive approach methodology, the aim was to evaluate the Egyptian online newspapers according to interactive journalistic design.

Despite widespread use interactive journalistic design types in the Egyptian online newspapers and the growing competition, it is unclear how they use information graphics in presenting their news and information, or whether they provide specific or varied types of interactive features.

Drawing on the theoretical survey and field study of online newspapers, the following inquiries were studied to test the current used interactive journalistic design in Egyptian online newspapers.

- What are the most used types of interactive journalistic design in the Egyptian online newspapers and main properties of them?
- What are the main characteristics of the Egyptian online newspapers regarding used types of interactive features?

1.4. Study Delimitations:

1.4.1. Spatial border: Ten of Egyptian online newspapers, by the Arabic language.

1.4.2. Temporal border: July 2016 – July 2017 as a current time of implementing this research paper.

1.4.3. Substantive border: it is limited to the research study on Egyptian online newspapers to evaluate the

interactive journalistic design.

2. Literature Review

This part of the paper will be compared between the type of data visualization tools and information graphic types.

2.1. Analytic journalism

It is a field of journalism that seeks to make sense of complex reality in order to create audience understanding. It combines aspects of investigative journalism and explanatory reporting (Wikipedia, 2017).It can be described likewise to create evidence-based interpretations of reality, often confronting dominant ways of understanding a specific subject (Ross, 2005).

On the other hand, analytical journalism aspires to collect different data and make connections that are not immediately apparent. Effectiveness is often in the analysis of the facts rather than the facts themselves and is critically engaged with other arguments and explanations (Johnson, and Ross, 2001; Schudson, 2008). In this way, analytic journalists attempt to give a deeper understanding of an issue.

As an additional definition, the Institute of Analytic Journalism employs a rather general definition and positions it within a critical approach: "critical thinking and analysis using a variety of intellectual tools and methods to understand multiple phenomena and to communicate the results of those insights to multiple audiences in a variety of ways (Friendly, 2009).

A more pragmatic definition, suggested by Johnson, points out the necessary variables of analytic thinking: "Frame the appropriate question, find and retrieve appropriate data, use appropriate analytic tools, show what you know with story-appropriate media (Johnson, 2006).

Finally, news organizations today are competing for attention in an ever-more competitive and constantly changing media environment. No one can take their audience for granted. the battle for attention is a central challenge for journalism because its public role is premised on connecting with an audience – as is the business model of private news media and the legitimacy of public service media (Cherubini, and Nielsen, 2016).

2.2. Journalistic Design

It combines words, drawing, and images to present concepts and information in paths that cannot be achieved by text or illustrations alone, and it assists audiences to understand the information. by giving insights into the subject, and it opens up the possibility that audiences will find meanings and interpretations beyond those purposed by the journalists (Stovall, 2004).

2.3. Data visualization

It is the graphical presentation of information, with the objective of providing the audience with a qualitative understanding of the information meanings. It is also the process of converting subjects, concepts, and numbers into a form that is visual to the audience eyes, data visualization is all about understanding ratios and relationships among numbers. Not about understanding individual numbers, but about understanding the patterns, trends, and relationships that exist in groups of numbers. It is to provide techniques for converting (abstract) information, in form of textual description into visual representations facilitating the perception and handling of hidden structures from underlying datasets (*Tarawneh, et.al. 2011*).

Digital data visualization has paved the way to be one of the basic components of contemporary analytical journalism. The recent design revolution, which brought modular design, including added value of news, data visualization, and increased color, has made today's analytical journalism more attractive, more navigable and easier to comprehend than ever before (*Dragomir, and Thompson, 2014*).

There are advantages to presenting data visually rather than as a set of flat statistics. Proper data visualization facilitates the recognition of patterns and relationships to communicate a message in a more clearly may provide just the information that's needed to truly understand the data (*Archambault, et.al. 2015 and SAS, 2014*).

2.4. Static and dynamic visualizations are two very different types of representation for time-based data.

2.4.1.   Static visualizations

Static visualization of time-based data approaches gives a better overview of the time-series dataset. Apart from scalability restrictions, a viewer can get excellent insights in the time-dependent datasets and can easily detect trends or patterns at first sight, even without interaction techniques, whereas the viewer is responsible for himself where he looks at in the view (*Robertson, et. al.2008*).

Static visualizations have long been used to support storytelling, usually in the form of diagrams and charts embedded in a larger body of text. In this format, the text conveys the story, and the image typically provides supporting evidence or related details. An emerging class of visualizations attempts to combine narratives with

interactive graphics. Storytellers, especially online journalists, are increasingly integrating complex visualizations into their narratives (*Segel, and Heer, 2010*).

2.4.2. Dynamic Visualization

It can be defined as a continuously incoming text documents, which are visually presented to users in a dynamic 2D display driven by the force-directed model. The development of the visual framework and labels exposes the semantic evolution of the text flow being appeared (*Kraak,   and Ormeling, 2010*). Dynamic, interactive visualizations can empower people to explore the data for themselves. (*Shneiderman, 1996*).

An interactive visualization that offers an overview of the data alongside tools for "drilling down" into the details may successfully perform many roles at once, addressing the another concern of different audiences, from those new to the subject matter to those already deeply familiar with the information. Consequently, dynamic data visualization can be a great medium for engaging an audience who might not otherwise care about the topic or data at hand (*Murray, 2013*).

The most important effect that digitization has had on news consumption in Egypt and the Arab world is to open up a whole new world of alternative media through which users can obtain, as well as contribute to content. With more than 33 percent of Egyptian internet users reading news online (Fahad, 2010).

3. Results and Discussion

3.1. Data Collection

To have the current samples, the author analyzed a month's worth of Egyptian online newspapers, for Arabic editions, spanning to the current time, according to the top of both a number of visitors over the last 30 days and Alexa rank parameters.

The sample only included interactive journalistic design but did not discriminate in terms of categories, topics, or article length. In the selection of the items to evaluate, I included every article that obtained any type of interactive journalistic design. Representations that allowed users to use the interactive features – like navigating, sharing within a scale, or allowing to put comments in different contexts – were also included.
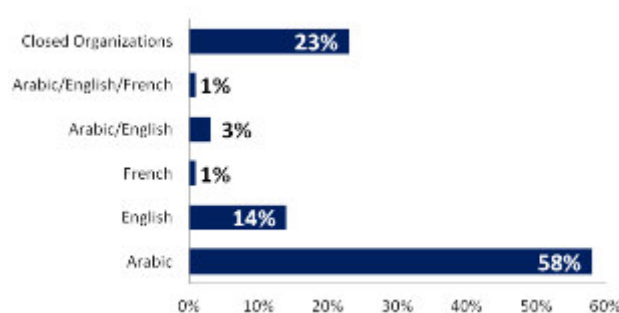
3.1.1. Select of Egyptian online newspapers

In this research selected samples depends on two main parameters;

- Visitor's Number
- Alexa rank

To select Egyptian online newspapers impacting in our society, to can assess them in this paper, there are three main steps to carry it;

a) *Step 1:* It has illustrated totally news websites number as among the leading of Arabic or foreign language, graph (1) illustrates the statistical of Egyptian news websites ratio, according to language editions.


Graph 1: Percentage of Egyptian online newspapers

As shown in the graph. 1, it can be indicated that 58% of websites news is the Arabic language, and 19% by foreign languages, but 23% remaining as closed organizations, due to political and economic reasons.
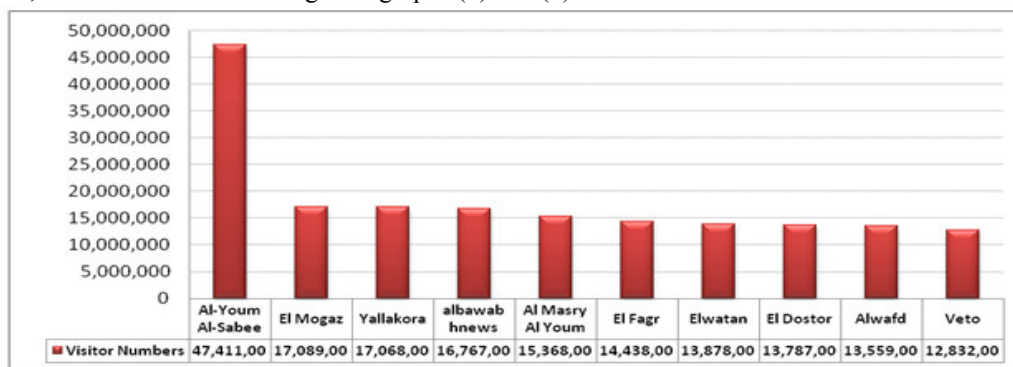
After that, to select the suitable samples to achieve this paper, it can be analyzed more of effective sectors according to traffic visitors and Alexa rank.

b) *Secondly*, for more analysis, according to visitor traffic for last month. Graph 2 represents a number of Egyptian online newspapers by the Arabic language.
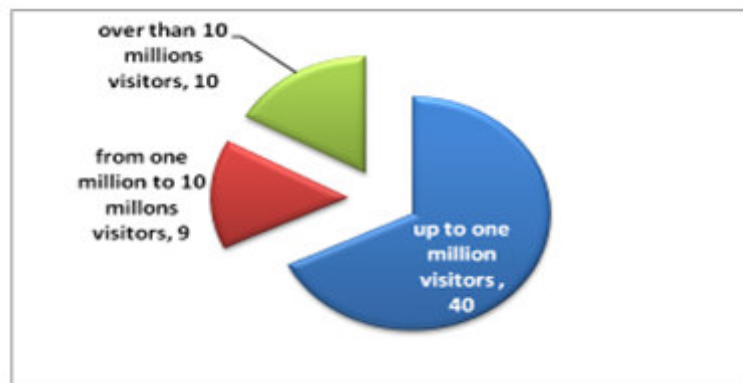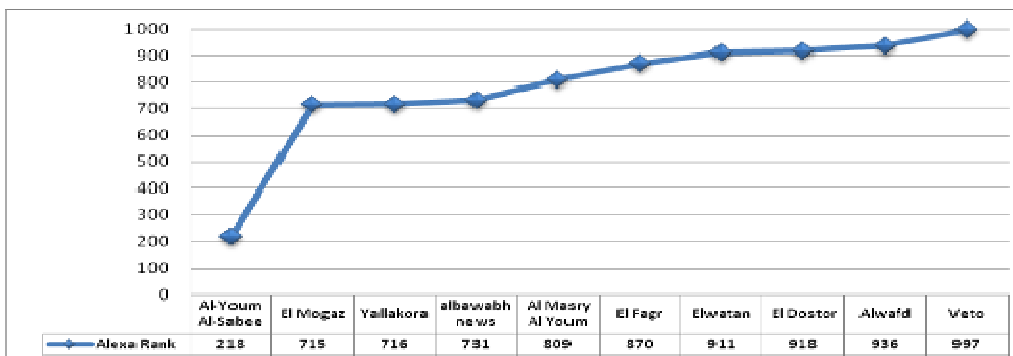
Graph 2: Visitor's numbers for Egyptian Arabic news sites (December 2016)

On the other hand, it can be concluded the name of top ten Arabic languages and number of visitors also by Alexa rank, as shown in the following both graphs (3) and (4).

	Al-Youm Al-Sabee	El Mogaz	Yallakora	albawabh hnews	Al Masry Al Youm	El Fagr	Elwatan	El Dostor	Alwafd	Veto
Visitor Numbers	47,411,00	17,089,00	17,068,00	16,767,00	15,368,00	14,438,00	13,878,00	13,787,00	13,559,00	12,832,00

Graph 3: Top Ten of Visitor's numbers for Egyptian Arabic news sites (December 2016)

	Al-Youm Al-Sabeh	El Mogaz	Yallakora	albawabh news	Al Masry Al Youm	El Fagr	Elwatan	El Dostor	Alwafd	Veto
Alexa Rank	218	715	716	731	809	870	911	918	936	997

Graph 4: Top Ten of Alexa Rank for Egyptian Arabic news sites (December 2016)

c) *Primary evaluation of the Egyptian daily Online newspapers*

Of course, all of the Egyptian daily Online newspapers had included the same sections, but with the more evaluated regarding the character of them. It can be classified according to the specific area of interested readers to three main categories; Firstly, which they interested to present breaking news as an essential general character, such as Al-Youm Al-Sabeh. Secondly, which focus on the reports and articles besides on breaking news, such as Albawabhnews, Al Masry Al Youm, Elwatan, El Dostor, and Alwafad. Finally that interested to present specific topics including sports, religious, crime, or scandals....etc., such as Yallakora. Consequently, It has been selected three samples of online newspapers, according to the previous result, Alexa rank, and top of visitor's numbers, that can be represented the other of the Egyptian online newspapers as follows: Al-Youm Al-Sabeh, Albawabhnews, and Yallakora.

Note: in the current research paper, it will be coding the selected samples as follows; (a) = Al-Youm Al-Sabeh, (b) = Albawabhnews, and (c) = Yallakora.

3.2. Results

3.2.1. Fully Front Page

The journalistic front page design of each sample that shown in the table (1) has a special taste about others, with

the consideration that Arabian audience read from right to left and not vice versa, so the elements on the right fall into eye earlier than on the left. Also, Online newspapers are sharing huge of information, and they need to be reachable for the audience.

Table 1. Complete front page

(a)   (b)   (c)
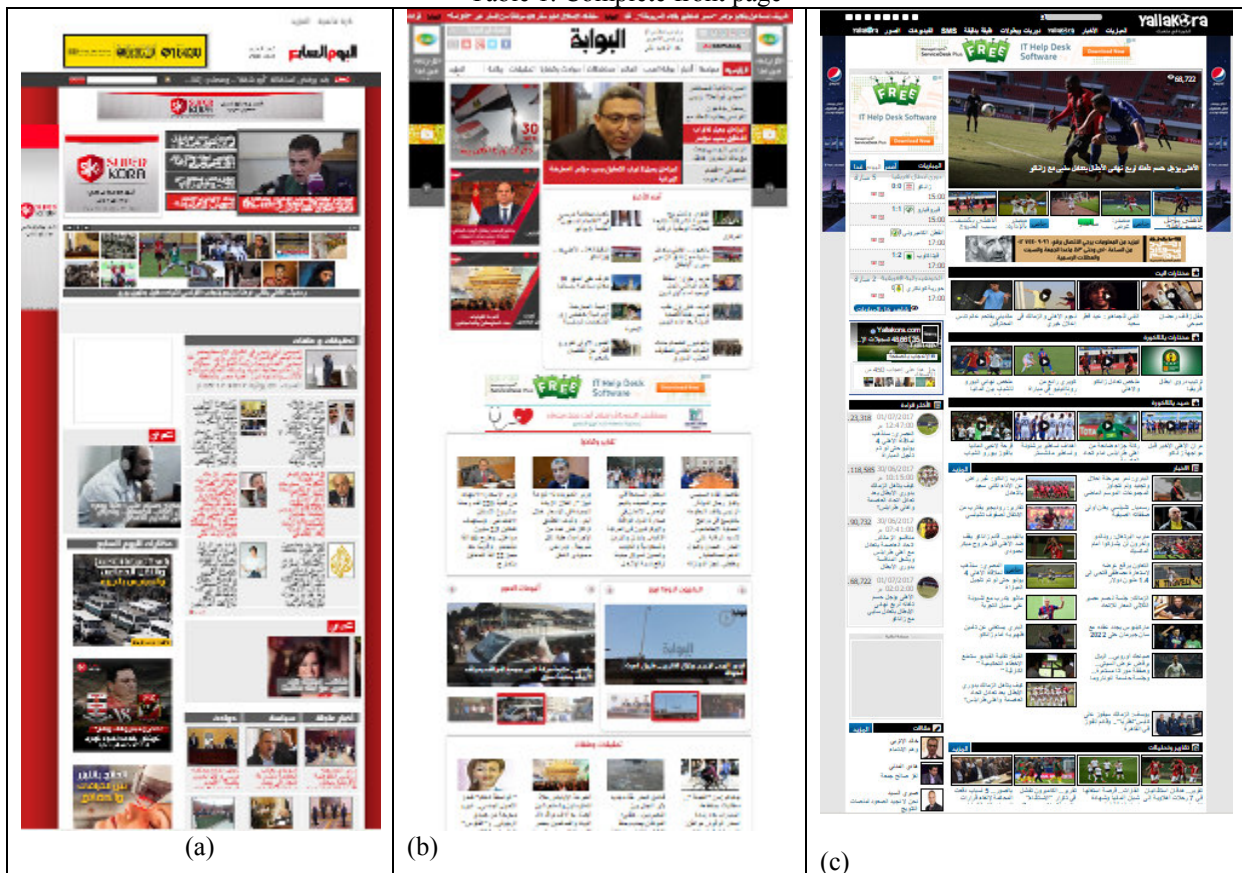
 The three samples share some key points, as mentioned below;
- The basic layout of displayed samples depends on the vertical extension and autofit to the window to can display all items by scrolling mouse on the page, and also according to grid-based design and multi-column layout.
- All selected samples have constructed as white or light gray background and the text is contrast color as black, blue or red. This composition may be perfect for readers' eyes, which facilitates the readability and that is why this color scheme is the most suitable for online newspaper style, which is usually stuffed with much content, as shown in the previous table. On the other hand, it can be turned over the regular color choice making the background black or dark gray and the text white or light gray.
- White space is considered an essential component for a newspaper style design to be a section where nothing is typed. There is a more narrow meaning: white space is between text lines and letters, around content elements. It is everything that makes the online newspapers more readable and simple, even though it is filled with an excessive number of content items.
- Online newspapers layout are ideally organized structure, which comes to be the first aim. Both of grid and columns are the most types of content arrangement. The grid-based layout allows to break the content into comprehensive blocks; thereby engage the audience to read the newspaper.
  Related but not as the same is the multi-column layout. These should be a few columns of a right height, but the wider the columns are, the more readable the text is. Two columns can make a great look but three is definitely better. The columns, as a grid, help to differentiate the content, make it easier for readers to find the interesting sections for theirs.
- As a rule, The position of the newspaper name was recorded based on horizontal position in the top location of a page. The horizontal position of the Egyptian newspapers name was divided into two categories: middle, and right, as shown in the previous table, may be depended on the type of language, the language of all selected samples are Arabic.
- All headlines come in the located top section, which it should be shown completely on the computer monitor, without any transition scrolling mouse.
- All image is designed in the square or rectangular shape, which frame by black or gray color.

- All of the Egyptian online newspapers are considered as cost-free for the audience. Consequently, they depended on the advertisements to cover the publishing cost. Although there are a large number of ads, the journalistic designer has been able to overcome them to show the news.
- The journalistic design depended on the static and dynamic visualization, but in all cases, used dynamic visualization in many places, in some cases besides or on top of each other resulting in randoms in visualization.

The new addition of journalistic design that looks like as an infinite cylindrical as shown in the sample (c), which the readers can transfer to other main themes by mouse clicking on the arrow, as shown in figure 1.
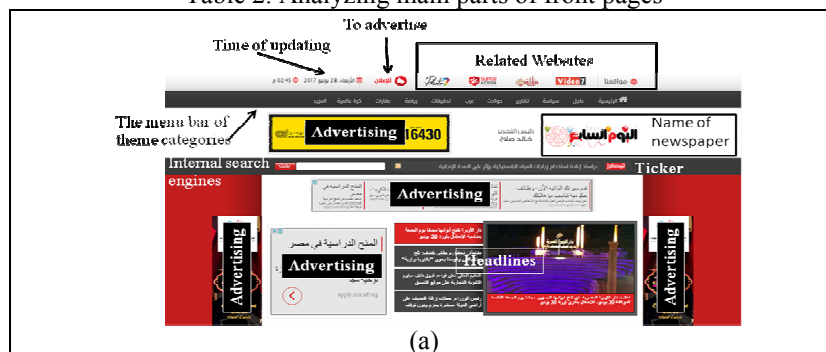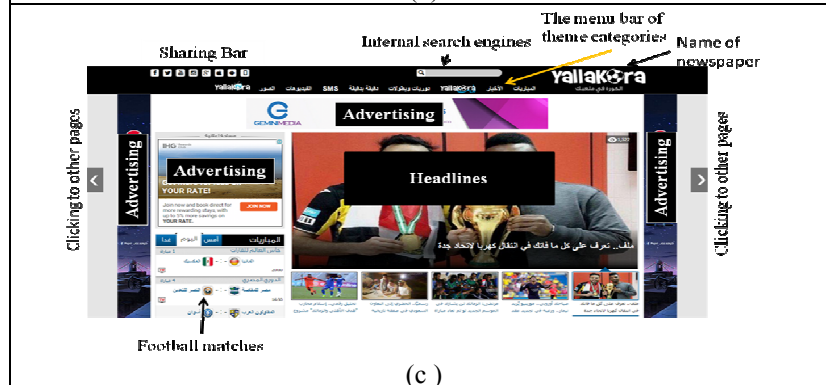
Fig.1. Clicking arrow to browse another main theme

Consequently, the readers have twin possibilities of browsing to the main themes, one by the main theme bar that located in the above of page and other by clicking on the arrow in the center right or left of the main front page. The designer saved the same journalistic design template of the front page to present other main themes.

3.2.2. Analyzing front page

Egyptian daily online newspapers have been analyzed from a design perspective. Regardless of the content, they all face the challenge of view crowd of information on the front page, leading to create functional of layout, to the possibility of used and browsed. The aim of this part is to analyze the front pages of online newspapers to extract the results that can be valuable for designers, as shown in Table 2.

Table 2. Analyzing main parts of front pages

(a)

(b)

(c)

Generally, all selected online newspapers and also all Egyptian online newspapers are cost-free for reading and browsing. Consequently, the monetization is an important factor of the newspaper websites, and interesting

to see how they integrate ads into the design. perhaps in the cases of (b) and (c), the ads are parasitic to some extent or excessive, but most newspaper websites are able to use the ads without turning audience away, partly because of content available.

a) Color scheme of the menu bar of theme categories

▪ Sample (a) has used the light gray for text on gray black as background to create a contrast situation, which changes the color state of text to red color by passing the mouse over to indicate the selected item.

▪ Sample (b) has utilized black color text on a white background as the inversely status of a sample (a), which changed to the gray background by passing the mouse over to show the chosen theme.

▪ On the other hand, sample (c) has handled the menu bar of theme categories by another sight, it used the white color for text on dark black as background to generate a contrast condition, which changes the color state for text to blue color on light gray in limited rectangular to save the demanded contrast by passing the mouse over to designate the selected theme, as obvious in Table 3.

Table 3. Change color by passing mouseover

Original	By passing the mouse over
حوادث تقارير سياسة عاجل الرئيسية	الرئيسية عاجل سياسة تقارير حوادث عرب تحقيقات رياضة عقارات كرة عالمية المزيد
◇	(a) ◇
تحقيقات حوادث وقضايا محافظات العالم بوابة العرب	تحقيقات حوادث وقضايا محافظات العالم بوابة العرب
◇	(b) ◇
لوريات وبطولات yallakora الأخبار مباريات	دوريات وبطولات yallakora الأخبار المباريات
◇	(c) ◇

As a result of previously presented situations, it can be stated that all of them succeeded as a journalistic design to indicate the interactive feature to select the desired theme by readers before mouse by clicking on them for browsing.

3.2.3. Interactive Features

In this section, it will be illustrated the results of the interactive features on the front page and within the topics, as follows.

3.2.3.1. Mouseover's Effect

To discuss the interactive features as mouse over effect, it is obvious that is limited to mouse over to select the theme or the heading, which the color is changed to distinguish the selected heading and possibility to clicking on the activated text or image to browse within the topic as shown in Table 4.

Table 4: Mouseover's Effect

(a)

(b)

(c)

According to the previous table, it is found the evident effect of mouseover, but every sample has special graphical effects, which clarifies in the next paragraphs.

a) As shown in the sample (a) that used two different separated colored texts, one as a red and another black color on the light gray background. when mouseover on the text, the color is not changed but convert the text from normal to underline style and turn the background to the darker gray color.

b) Elbawabah news that represented it the sample (b), all news topics are represented by black text on the white background that converts to red color text on the light gray background. On the other hand, only the hyperlinks to another web pages that represented as a special services for their readers, it appears as a blue colored text, when passing mouse over on them, the colored text has not changed but converted to the underline style and the background to the light gray color, also the URL has appeared in the narrow rectangular framed shape.

c) the last sample (c) has fixed the only blue color of hypertext on white background, but passing mouseover on the text, there are two cases, one changed the background to light blue, and others that convert the blue text to back and make background by the light gray.

3.2.3.2. Mouse Clicking-on's Effect

Mouse clicking on's effect has considered as the second act of interactive feature after mouse over to browse within the online newspapers. In the sample (a) and (b), this feature can be found only on the front pages, but the sample (c) that represented yallakora newspaper, which depended on the hypertext on the front pages and both of hyperlinks by text and icons in the browsing within the newspaper as shown in figure 2.
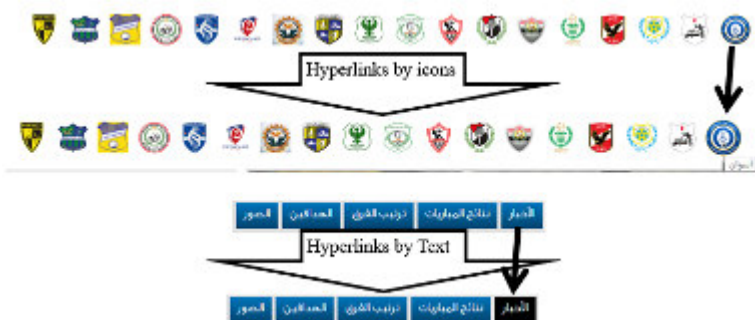

Fig. 2. Hyperlinks by Icons and Text

As an obvious in fig.2, it has apparent that changed icon size with little zooming more than the original to distinguish it, when passing the mouse over and indicate the title of the icon by displaying the title or name of the Football team under them, also changing the color state of hypertext but not like the same case of front page from the graphical design side as mentioned in the previous.

3.2.3.3. Dynamic Image Visualization Effect

According to selected samples, it can be classified the dynamic image visualization effect into three categories: Basic Headings, Excerpts, and advertisements, and according to the objective of the current research paper, it will focus on the first two categories regardless the third type.

  1. *Basic Headings*

Basic headings that presented in the three selected samples in the table (5), which depended on the dynamic visualization between the text of individual headline and the related image, which always finding synchronized movement between text and image, also changed condition according to assess in the next points.

Table 5: Differentiation between displayed headings styles

(a)

(b)

(c)

a) Regarding a sample (a) in the previous table, the headings have designed as a vertical extension of limited shaped rectangular, which depended on the left sidebar contained the abstract of headlines. On the other side, the image that located right the sidebar, which contains the journalistic photo and the complete title of a headline under the photo. As a result, the Arabic reader has the optical center is always located from right to left, so the journalistic designer has focused more on the image as a head element by viewing the image with full title, and then the reader can be transferred their eyes to the left vertical sidebar as a secondary element that shows the published titles map. It is also noted that the headings are limited to only four headings.

b) As indicated in a sample (b), the headlines have designed as the same condition of sample (a), but with the inverse location in the image and sidebar. As an analysis of this situation, perhaps the journalistic designer has focused more on the title before transferred his eyes to the image, as an evidence of my analysis that the headings are perfectly in the sidebar and only by abstracting under the image, but to make a balance between two the essential two elements, he has increased size of the image when comparing it with sample (a), possibly this journalistic design is allowed to put five main headings, by means increased one heading more than the previous sample according to increased the image size.

c) As an obvious in the sample (c), the headlines have designed as a horizontal extension of limited

formed rectangular, which depended on the bottom sidebar contained the abstract of headlines within the small image. On the above site, the image has located above the sidebar, which contains the journalistic photo that described as a kinetic move and the complete title of a headline by white letters on the shadow part of the photo. Consequently, the journalist photographers take into consideration presence shadow part to create a contrast with heading text.

Also, It is worth mentioning that the image has a larger size than previous samples, due to the importance of the image to the reader, when presenting the sporting online newspaper. This journalistic design allows presenting the image as the main element of heading.

2. Excerpts

Excerpts are short descriptions of the text articles. These are always done to raise readers' interest and give them an understanding of a long text in a few sentences.

Each group of the excerpted content block needs to a title that to be a bigger and differentiated font, typed in bold or highlighted with a different color, as an analysis of the selected samples, it can be classified excerpts types into three classes: Static, Dynamic, and Hybrid styles.

i. Static Style

This style depends on the fixed title of the excerpts from each online newspapers, which depends on the grid design style, as shown in Table 6.

Table 6. Static Style of Excerpts

(a)

(b)

(c)

Sample (a) has depended on the grid style that constructed on three columns, as a vertical extensional design. On the top of it has found the headline that carried out by white colored text on the rectangular dark black background, differentiated of the font and size and lengthened during three columns width. The first

excerpt comes in the equivalent width of the headline provided the photo as the first element and below appears the excerpted text. After that, the two excerpts come in the identical width of the grid in the same sizes of photo and text, which are beside each other, all the photos appear in the same size, with the same font and size but not as the same height of the excerpted paragraph, according to the information content. On the other hand, The text color changes between black and red to break the color stability in the design.

There is a difference between sample (a) and sample (b), since the latter depends on the excerpts come on grid that constructed on one column and half, with a headline to the top, and the main excerpt comes with a short paragraph on a dark silhouette on the same photo, sequences excerpts appear as an image in a conventional rectangle on the right side of the text and next to it comes the excerpted paragraph. It can be noted the fixing of black text on the white background.

On the other hand, sample (c) has differentiated with the samples (a) and (b), since it depends on the excerpts come on the grid that constructed on four contiguous columns, with fixed size of grid-based design (dimensions of width and length) as a horizontal extension. A headline put on the top as the same of previous cases but on the blackened background, and the individual excerpts appear as four different items with the same size of the short paragraph but by blue colored text on a white background and the photo sizes are exactly larger than the previous samples, all excerpts placed under of photos, by viewing as the same size.

The icon of more excerpts comes in the first two samples below the corner of excerpts items, but sample (c) comes in the beside left of headline rectangular shape as a bigger icon than others.

ii. Dynamic Style

The dynamic style is widely utilized in selected online newspapers, which appear especially on the front pages that can be analyzed into three main classes, as follow of items.
- Text Bar, which described the abstracted text of excerpts, that can be divided to the horizontal movement as shown in fig. 3 (a) and vertical movement in fig.3.(b).
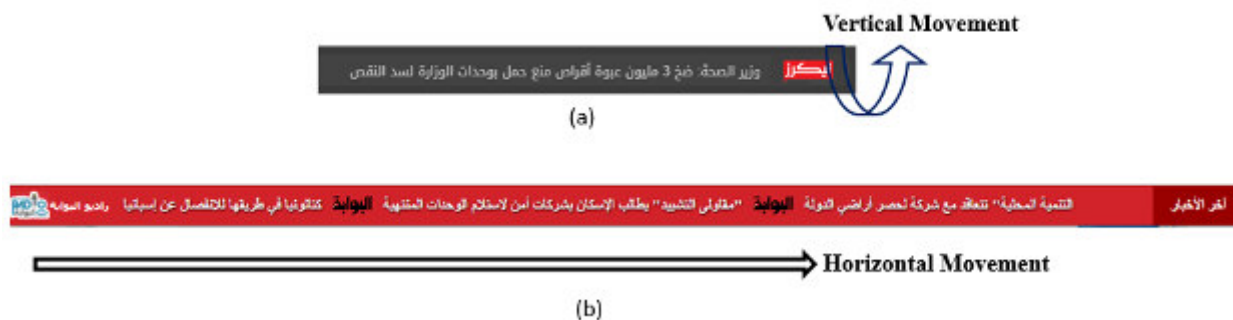

Fig. 3. Text Bar as dynamic styles

- Imaged sequences, which can be divided into three types, as following;
  o Framed Table; which can be described as the sixteen images within the framed table of fixed dimensions contained two rows and eight columns of images as an equal size, where successively sequence happened of each excerpt by enlarging one of the specific image that appear with the owned short paragraph as a sentence or two sentences in the under section of framed table that is occurred automatically without any intervention of the readers, which can be selected interested excerpt with possibility to click on it in order to browsing as shown in fig. 4.

Fig. 4. Screenshot of framed table (sample"a")

  o Framed Bar; which can be described as the five images with excerpt's paragraph that move together to appear as sequences of excerpts, it can be described as fixed dimensions of bar and images and the movement direction comes from left to right side, as shown in fig. 5.

Fig. 5. Screenshot of framed bar (sample "c")

- Window's excerpt, which the dynamical situation can appear as two sub-kinds, as following;
  o One image in a square window that is limited by the column dimensions, which one image appears in a single window for one of theirs, while remaining other three hidden sequentially individual excerpts that appearing synchronized by consecutive emergence, as shown in figure 6.

Fig. 6. Screenshot of one image excerpt style (sample "a")

  o One image in the conventional rectangular window, which constructed upon two columns width. In this state, some of them have designed as down bar that included three basic excerpts as under lighted images and above of them found the appearing image with sentences of the excerpt, as shown in fig. 7.
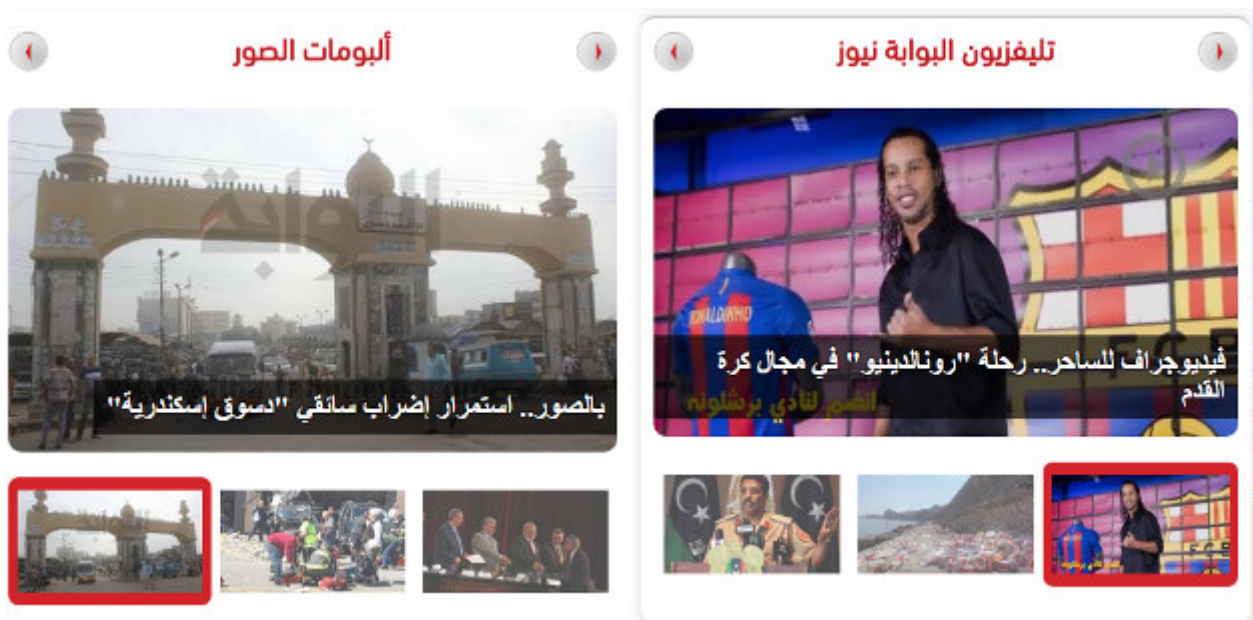

Fig. 7. Screenshot of one image within two columns

iii. Hybrid style, which includes static and dynamic visualization styles together. it is utilized in most cases an excerpt static image as a photo or illustration with the dynamic text or icon, as shown in fig.8., which can be analyzed the dynamically movements into two kinds.
  - Flash movement as following;
    - the title,
    - the head title, or
    - both title and head title
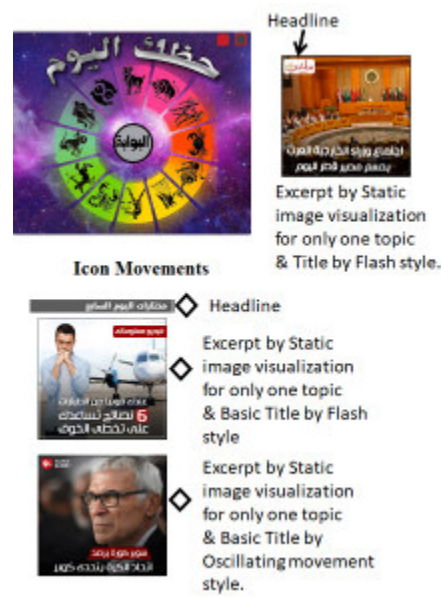 - Oscillated movement of the title.

Fig. 8. Screenshots of different hybrid styles

3.2.3.4. Sharing's Possibility

It is one of the interactive features, which can be found not only in the front pages but also in the all topics, when browsing in any selected online newspapers, and they depended on conventional icons that aware readers of its, in figure 9. shows the most icon that used in selected samples, which have carried out by black and white or colored icons.
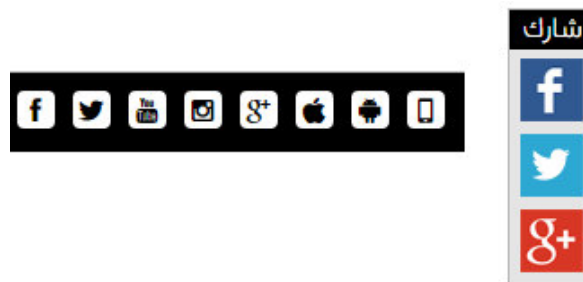

Fig. 9. Screenshot of sharing icons

3.2.3.5. Internal search engines

According to this study, it is found this type of engines in all selected online newspapers, especially at the top of all front pages. All of them have a rectangular window to write which reader's need, some of them has an icon to indicate of search engine and other achieved it by Arabic text of search, as shown in fig. 10.

Fig. 10. Screenshot of internal search engines for selected samples

3.2.3.6. Time of updating

It is found only in the sample (a) on the front page, but it is normally finding in all internal pages of all selected samples, and it is placed in all of them under the heading image.

3.2.3.7. Publish Comments of readers

In all selected samples, they have this type of feature only within the internal topics, and not found on the front pages.

3.2.3.8. Information Graphics

According to the current research study, it is found only the static information graphics, which achieved as an image file, only to read no interaction with them, table 7. shows some of the interactive graphics.

Table 7: Interactive Graphics

(a)	(b)

4.   Conclusion

As a conclusion of this research paper, it can be recorded the following items;

Most of the Egyptian audience have communication with the online newspapers that depended on breaking news more than other fields of journalism.

The interactive features had found more interested in presenting specific topics such as sports that utilized the navigation techniques more than other areas of electronic publishing of newspapers that used browsing processes only.

The difference between the global newspapers and the Egyptian online newspapers pages from the journalistic design view, with the consideration that Arabian audience read from right to left and not vice versa, was presented the focused main elements on the right more than left.

The basic layout of pages depended on the vertical extension, autofit to the window, grid-based design, and multi-column layout.

Image elements had constructed as white or light gray background and the text was contrasted color as black, blue or red, with multicolor photos in geometric frames as square and rectangular and sometimes as a circle.

Commonly, their names were located in the top part of the page either in the center or on the right side.

All of the journalistic design elements were apparent as contrast colors with the negative space, especially for hyperlinks. In some cases, the interactivity news had perceived as the level of lighting or darkening of the text, and background when mouse over them, underline of letters, or color change of headings or excerpts.

On the other hand, the iconographies of sharing interactivities had appeared by the traditional color of them in some online newspapers and as a black color in others to assure the visual identity of online newspapers.

All selected online newspapers depended on the dynamic of information visualization to present the main headings.

On the other hand, it could be classified the excerpt sections into two main classes to present it, one as a static style and dynamic style that classified into three main types, as follows;

Firstly, Static Style that depended on the grid design, as vertical or horizontal directions.

Secondly, Dynamic style, which could be subdivided into three types

1- text bar, which moved the excerpts into two individual directions, either horizontal or vertical movement

2- image sequences which could be classified into three main classes;

- Framed table that included sixteen images

- Framed bar that included five images

3- Window's excerpt, which could appear as two sub-kinds;

- One image in a square window with three images as a hidden situation.

- One image presented in the conventional rectangular window with appearance three images under them.

Thirdly, Hybrid style, which combined static and dynamic visualization styles together, where the image was considered as a static, whereas the excerpts presented as a dynamical movement that consists of two main kinds;

- Flash movement through excerpt's title, head title, or both of them.

- Oscillated movement of the title.

Up now there are not infographic style as conventional definitions, either static or dynamic style, only as an image file, which cannot be handled or interact with them.

5.   References

1. Archambault, S. G., Helouvry, J., Strohl, B. and Williams, G. (2015), Library Hi Tech News, Emerald Group Publishing Limited, V. 32 N. 2 March.

2. Cherubini, F. and Nielsen, R. K. (2016), Editorial Analytics: How News Media Are Developing and Using Audience Data and Metrics "Digital News Project", Oxford: Reuters Institute for the Study of Journalism, UK.

3. Dragomir, Marius and Thompson, Mark (2014), Mapping Digital Media Global Findings, A Report by the Open Society Foundations, USA.

4. Fahad, M. B. (2010), Nielsen Company Report, cited in PwC, Arab Media Outlook 2009–2013.

5. Friendly, M. (2009). Milestones in the history of thematic cartography, statistical graphics, and data visualization. http://www.math.yorku.ca/SCS/Gallery/milestone/milestone.pdf.

6. http://www.alexa.com/

7. https://en.wikipedia.org/wiki/Analytic_journalism (2017).

8. http://www.onlinenewspapers.com/egypt.htm.

9. Johnson, J.T., Ross, S. S. (2001) Institute for Analytic Journalism: Welcome to the IAJ, URL: https://www.bu.edu/iaj/Pubs/IAJProposal-20010327.PDF.

10. Johnson, Tom (2006). No, it is not "All about story" presentation in Durban, South Africa: page 68. Available at: http://www.slideshare.net/jtjohnson/no-it-is-not-all-about-story.

11. Kraak, M.-J., Ormeling, F. (2010), Cartography: Visualization of Spatial Data, Third Edition, Pearson Education Limited, USA.

12. Murray, S. (2013), Interactive Data Visualization for the Web, O'Reilly Media, Inc., pp. 2-3.

13. Robertson, G., Fernandez, R., Fisher, D., Lee, B., and Stasko, J. (2008), The Effectiveness of Animation in Trend Visualization. IEEE Transactions on Visualization and Computer Graphics, 14(6):1325-1332.

14. Ross, Steven S. (2005). "Teaching Computer-assisted Reporting in South India", New Delhi: Sage, pages 303-318.

15. SAS® Visual Analytics (2014), Data Visualization Techniques from Basics to Big Data, White paper, SAS Institute Inc, USA.

16. Schudson, Michael (2008), Why Democracies need an unlovable press, Cambridge: Polity Press: pages 16-17.

17. Segel, E. and Heer, J. (2010), Narrative Visualization: Telling Stories with Data, IEEE Trans. Visualization & Comp. Graphics.

18. Shneiderman, B. (1996), "Visual Information-Seeking Mantra": overview first, zoom and filter, then details-on-demand), University of Maryland.

19. Stovall, James Glen (2004). Web Journalism. Boston: Pearson, p:130.

20. Tarawneh, R. M., Keller, P., and Ebert, A. (2011), A General Introduction To Graph Visualization Techniques, Creative Commons License ND Proceedings of IRTG 1131, Christoph Garth, Ariane Middel, Hans Hagen; pp. 151–164.

21. Trench, B., Quinn, G. (2003), Online news and changing models of journalism, IRISH Communications Review, Vol 9.

Biography

Hassaan S. M. is Assistant Professor Doctor at the Faculty of Applied Arts of Helwan University, Cairo, Egypt. He was born in Cairo, 01 April 1965. He has Ph.D. for printing, publishing and packaging department at the Faculty of Applied Arts of Helwan University at 2000 in Graphic Design, His research focuses on the journalistic and magazines design.