

A CASE STUDY FOR EVALUATING FACEBOOK PAGES WITH RESPECT TO ARAB MAINSTREAM NEWS MEDIA

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ABSTRACT

In this paper, we propose a framework to analyze and evaluate social networking pages based on usage data with respect to Arab mainstream news media. The paper introduces new metrics such as: Page Penetration and Ranking Index, as well as new evaluation methods. The framework considers the twenty-two Arab countries in addition to seven Facebook pages that belong to seven prominent Arab satellite channels. The proposed framework is used to evaluate countries for their Internet and Facebook penetration rates, as well as consumption of news through those pages. Results reveal that Arabs highly credit natively Arabic news media rather than news media that only speak Arabic. Furthermore, 65% of the Arab countries have more than 50% Facebook users who are news consumers via Facebook. Additionally, Arab countries that suffered unrest, civil war or political crises in the recent years show higher page penetration rates, such as Yemen, Syria, Egypt and Libya.

KEYWORDS

Internet, Facebook, Social networking sites, Social media, Social network analysis.

1. INTRODUCTION

Social Networking Sites (SNS) have recently become an important part in almost everybody's life. SNS are web-based services that enable their users to: (1) create accounts (profiles), (2) connect to friends, relatives, colleagues, fans, ...etc. in addition to following these connections and others' connections and (3) exchange messages [1]-[2]. Facebook, Twitter, LinkedIn, Google+, Pinterest, YouTube and Instagram are examples of SNS.

Social Media (SM) are defined as a set of Internet-based applications that exploits web technologies and aims to exchange user-generated content (UGC) between participating entities [2]. SM became a ubiquitous Internet service by leveraging the widespread of SNS [3]-[4].

More than a billion users worldwide use SNS which form nearly 82% of Internet users aged 15 and older [5]. Those use SNS to: (1) establish connections, (2) exchange messages [6] and (3) share content of different types [7], such as: video, audio, UGC [5], personal or private information [8] and blogs [2]. Recently, SNS moved to the mobile computing arena introducing Mobile Social Networks [9]. The ubiquity of mobile devices helped accelerating the diffusion of social networking [10]. SNS are essential, not only for individuals, but also to businesses, educational institutions, mainstream news media, governments, ...etc. that access SNS to interact with their customers (clients). However, Facebook has the greatest number of users amongst SNS in terms of number of users [6]-[11].

Nowadays, SM has become a trend in the field of news media technologies which started to penetrate newsrooms in the 1990s using websites, e-mails and mobile technologies [12]. Almost all mainstream news media today utilize SM to increase their reachability and content distribution [13], in addition to gaining a foothold in the competition [14]. Actually, mainstream media use SM to increase their audience, reach and influence [15]-[16]. Mainstream news media can reach more audience using SNS features, such as page recommendation; i.e., profiles of mainstream media may appear to users suggesting liking them [17], which in turn contributes to increasing the number of fans of those pages.

News consumers are highly affected by SM; their way of perceiving news has changed. Now, they can interact with the news that are shared using SM within a few minutes [18]-[19]. Consequently, users are

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not only receiving the news; they additionally can choose what to read and can comment and enter discussions with other audience or media.

In this paper, we collect usage data for 7 Facebook pages that pertain to Arab mainstream news media, these are namely: (1) Al Jazeera Channel, (2) Al Arabiyya, (3) Sky News Arabia, (4) BBC Arabic, (5) CNN Arabic, (6) France 24 Arabic and (7) Russia Today Arabic. All of those mainstream news media are satellite channels that broadcast news in Arabic. Similarly, their Facebook pages share Arabic content in different formats and are oriented to Arab countries; i.e., the 22 Arab countries of the Middle East and North Africa (MENA). The study focuses on page penetration rates and countries' news consumption via Facebook.

We use Netvizz as a tool to: (1) collect data about pages and groups on Facebook [20], (2) retrieve page posts, likes, shares and comments [21]-[22] and (3) export the collected data in standard formats [23].

The importance of this research is that we are proposing a framework that can be applied to extract usage data of Facebook pages that disseminate and share any content type which pertains to different domains, like: universities, celebrities, bloggers, SM activists, ...etc.

The remainder of this paper is organized as follows: in section 2, we review some of the related work. The methodology is described in section 3. Then, the problem is formulated in section 4. In section 5, we present our experimental results. Finally, conclusion and future work are highlighted in section 6.

2. RELATED WORK

Sharing Tunisian and Egyptian revolutions' news using Twitter was discussed by G. Lotan et al. [15]. They focused on classifying users who share revolution-related content into categories. They concluded that Twitter is an important tool for spreading information. In our research, we are widening the domain of the study to include more Arab countries, some of which had revolutions during the past few years and others had not. We are different from G. Lotan et al. in that we are not interested in analyzing what users share. Rather, we are interested in how much Facebook users from the selected set of countries use Facebook to consume news and what pages they prefer.

S. Hille and P. Bakker [24] studied Facebook usage and participation of Dutch media. They discussed and studied the use of Facebook by media, users' interaction with the posts and journalists' interaction with users. They concluded that Dutch media on Facebook had very few followers compared to the popularity of traditional media and their websites. On the other hand, media were growing with a very low number of likes and comments on posts. In our paper, emphasis is on the penetration rates of Arabic mainstream news media Facebook pages. Thus, we studied how much the audience trust news shared through SNS in Arab countries and which pages have much credibility.

The impact of SM on news consumption was studied by A. Hermida et al. [13] by means of an online survey of 1600 Canadians. Their results show that social networks are important sources of news for Canadians. Differently, we followed an empirical approach. Instead of depending on user opinions that are collected by surveys, we collected real usage data by means of well-known tools. Using real usage data is more accurate than surveys, since surveys may not reflect actual attitudes due to either possible biased answers by participants or subjective options, weights and questions by the one who prepared the questionnaire. Also, the sample size used may not reflect the whole society, which was small to be able to decide in the work of A. Hermida et al. However, in our work, we used actual usage data which are obtained from credible sources. The data, also, represent all the society of users of the Internet, Facebook and the selected pages.

The association between social media and political change in Chile was investigated by S. Valenzuela et al. [25]. Authors studied the use of Facebook for news and socializing rather than using it for self-expression. In that context, authors found a strong relationship between Facebook and protest activity in the country of study. Similarly, some Arab countries witnessed revolutions, protests, unrest and sometimes regime change. It is thought that social media played an important role in those revolutions in the context of spreading information. Our study contains more countries, some of which witnessed revolutions and others did not. We try to analyze our results on this basis to show the impact of social media on the countries that had revolutions and the countries that didn't have revolutions and to show where Facebook was more influential. S. Valenzuela et al. collected their data by means of surveys of

people aging between 18 and 29 years living in the three largest urban areas in Chile.

A. Ju et al. [26] studied how much Facebook and Twitter are effective as news platforms. They collected data about printed newspaper circulation and web traffic of each newspaper. Their study did not include all the newspapers in the US; it only included the largest ones. A good practice that A. Ju et al. did in their work was the outlier removal. Because New York Times had a very large number of Facebook and Twitter followers compared to the remaining newspapers, it was considered a statistical outlier and removed from any further analysis. There is a great difference between the methods used to collect SNS figures in our paper and those used by A. Ju et al. We used the NetVizz application to collect statistics about the selected Facebook pages. On the other hand, they used a very simple method for finding out the number of SNS users, either on Facebook or Twitter, for the selected newspapers; A. Ju et al. used to open the website of each newspaper, visit the link of the SNS account mentioned by each newspaper, and manually record the number of "likes" and "followers" for each Facebook and Twitter account, respectively. There is a criticism about the method in which they collected their SNS usage data. The authors didn't use an automated tool, such as NetVizz, which gives them detailed statistics about each page, the interactions with the pages, which countries the subscribers are from and the numbers of fans from each country. As a conclusion, the research found a positive correlation between Facebook and Twitter users, web traffic and print readership, although SM users are still the least among web and print readers.

The role of SM in newsrooms is studied by S. Lysak et al. [27] by conducting an online survey to find out which types of SM are used in newsrooms and how they are used. They concluded that SM is used as a means of raising the newsrooms' profile in the community. They also found out that news staff use SM to collect their news although those news must be verified for reliability.

3. METHODOLOGY

The problem is first formulated and the analysis and evaluation metrics are defined. We setup our study on Arab countries only; these are only 22 countries that speak the Arabic language and are in the MENA region. The targeted Facebook pages pertain to Arab mainstream media and have a high level of credibility between Arabs. NetVizz is used as a tool to collect usage data for these pages. Internet and Facebook statistics are collected from well-known worldwide sources. Datasets are created by importing the collected data into a database. Finally, calculations and analysis are made to obtain the desired results.

4. PROBLEM FORMULATION

Assuming that we have n countries and m pages, we define C as a closed set of countries, such that $C = \{c_1, c_2, \dots, c_n\}$. A country $c_i \in C$ is a tuple $c_i < Id, L, I, FB >$ such that $L, I, FB \in \mathbb{N}$, Id is the country code, L is the population, I is the number of Internet users and FB is the number of Facebook users. Similarly, Let P be a closed set of Facebook pages, such that $P = \{p_1, p_2, \dots, p_m\}$. A page $p_i \in P$ is a tuple $p_i < Id, F >$ such that $Id, F \in \mathbb{N}$, Id is the page identifier and F is the number of fans for that page.

Internet Penetration Rate (IPen) is defined as the ratio of Internet users in a specific country to its population [25]. Let I_{c_i} be the number of Internet users in country c_i and L_{c_i} the population of the same country c_i , then:

$$IPen(c_i) = \frac{I_{c_i}}{L_{c_i}}$$

Similarly, Facebook Penetration Rate (FBPen) is defined as the ratio of Facebook users in a specific country to its population [25]. Let FB_{c_i} be the number of Facebook users in country c_i and L_{c_i} the population of the same country c_i , then:

$$FBPen(c_i) = \frac{FB_{c_i}}{L_{c_i}}$$

In order to rank the pages, we propose a new metric called Page Penetration Rate (PgPen). It is the ratio of number of page fans per country to the number of Facebook users in that country. Let $f(c_i, p_j)$ be the number of page fans per country and FB_{c_i} the number of Facebook users in country c_i , then

$$PgPen(c_i, p_j) = \frac{f(c_i, p_j)}{FB_{c_i}}$$

It might be feasible to group our set of countries that have similar properties into groups; for example, the grouping could be based on the geographical location. The grouping might be necessary when the number of countries is large and could be ignored when the number of countries is small. Formally, a group G_i is a subset of the country set C ; that is $G_i \subset C$ such that $i > 1$.

In this paper, we propose the Ranking Matrix (R) as a means of organizing results of page penetration rates and weighting them. Mathematically, R is a $k \times k$ matrix $R(k, k)$, such that for a given group G_x , the number of rows and columns k is given by: $k = |G_x|$. Rows in R represent the countries of group G_x and columns are the ranks (r) obtained by page penetration rates, such that $0 < r_i \leq k$. Each rank is given a weight $w_i = k - i + 1$. A cell R_{ij} represents the number of times a country $c_i \in G_x$ achieved the rank j in terms of page penetration rate.

After the results are organized in the ranking matrix, we propose a metric to sort the countries in order of PgPen. The proposed metric is called the Ranking Index (Rx) and is calculated for each row in R separately by summing the products of each cell by its corresponding weight, then dividing the sum by k^2 , such that k is the number of countries in the group.

$$Rx_{c_i} = \frac{\sum_{j=1}^k R_{ij} \times w_j}{k^2}$$

Finally, our objective is to sort countries in order of Internet, Facebook and page penetration rates.

5. EXPERIMENTAL RESULTS

As long Population, Internet and Facebook users and page fans have a rapidly changing nature, the data in this research represent the first three quarters of the year 2016, starting from Jan. 1st to Sep. 30th. Firstly, Table 1 contains our list of the 22 Arab countries.

Table 1. List of Arab countries.

Id	Country	Population (L)	Internet Users (I)	Facebook Users (FB)
AE	United Arab Emirates	9,156,963	8,515,420	7,700,000
BH	Bahrain	1,377,237	1,278,752	800,000
DJ	Djibouti	887,861	150,000	150,000
DZ	Algeria	39,666,519	15,000,000	15,000,000
EG	Egypt	91,508,084	34,800,000	32,000,000
IQ	Iraq	36,423,395	14,000,000	14,000,000
JO	Jordan	7,594,547	5,700,000	4,800,000
KM	Comoros	788,474	60,000	60,000
KW	Kuwait	3,892,115	3,202,110	2,300,000
LB	Lebanon	5,850,743	4,545,007	3,100,000
LY	Libya	6,278,438	2,800,000	2,800,000
MA	Morocco	34,377,511	20,207,154	12,000,000
MR	Mauritania	4,067,564	714,132	370,000
OM	Oman	4,490,541	3,310,260	1,500,000
PS	Palestine	4,422,143	3,007,869	1,700,000
QA	Qatar	2,235,355	2,200,000	2,200,000
SA	Saudi Arabia	31,540,372	20,813,695	14,000,000
SD	Sudan	40,234,882	10,886,813	10,886,813
SO	Somalia	10,787,104	660,000	660,000
SY	Syria	18,502,413	5,502,250	5,502,250
TN	Tunisia	11,107,800	5,800,000	5,800,000
YE	Yemen	26,832,215	6,773,228	1,800,000

Country codes in Table 1 are represented in ISO Alpha-2 codes [28]; these are international standard codes that comprise two letters and are used as a general-purpose code [29]. Internet and Facebook users are collected from Internet World Stats website [30] and population data is collected from the World-Bank datasets [31].

NetVizz v1.41 is used to collect Facebook usage data for the specified pages from different Facebook sections and supports different formats [32].

5.1 Internet and Facebook Penetration

Internet and Facebook penetration rates are calculated and shown in Figure 1 and Figure 2, respectively.

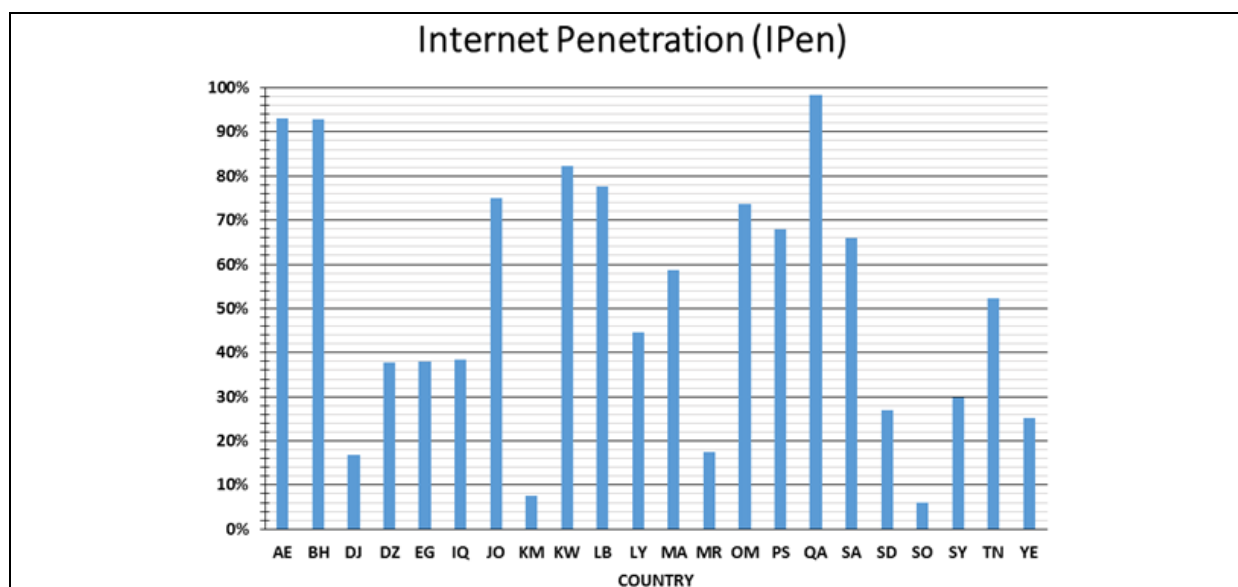


Figure 1. Internet Penetration (IPen).

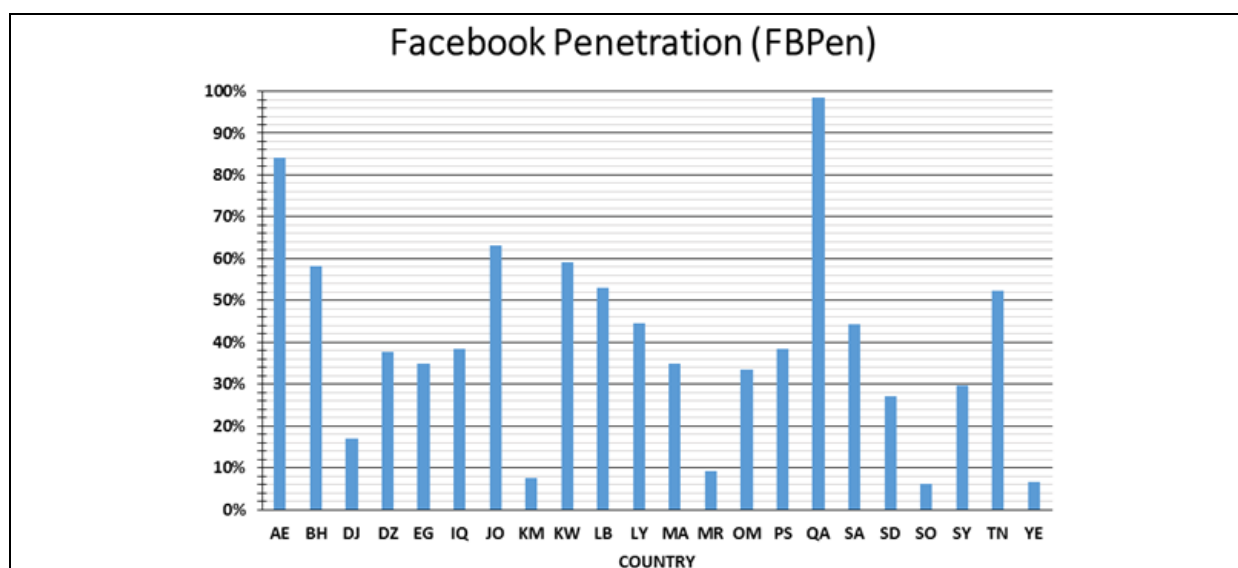


Figure 2. Facebook Penetration (FBPen).

Both results of IPen and FBPen converge; according to IPen, the first four countries were QA, AE, BH and KW, while FBPen shows QA, AE, JO and KW in the first four places. This reveals that countries with the highest Internet penetrations are almost similar to the countries with the highest Facebook penetration, which means that Facebook occupies a large amount of Internet usage, which conforms to the numbers that say that Facebook has the largest number of users amongst other SNS.

5.2 Page Penetration and Ranking

The page set contains the 7 Arab mainstream news media pages that are listed in Table 2. The same data is represented in Figure 3.

Table 2. Selected pages with number of fans for each page.

Id	Page	Fans (F)
JSC	Al Jazeera	17,360,261
ARB	Arabia	16,358,487
SKY	Sky News Arabia	8,996,886
BBC	BBC Arabic	7,248,563
F24	France 24 Arabic	5,960,249
CNN	CNN Arabic	1,798,623
RTA	RTA Arabic	9,669,311

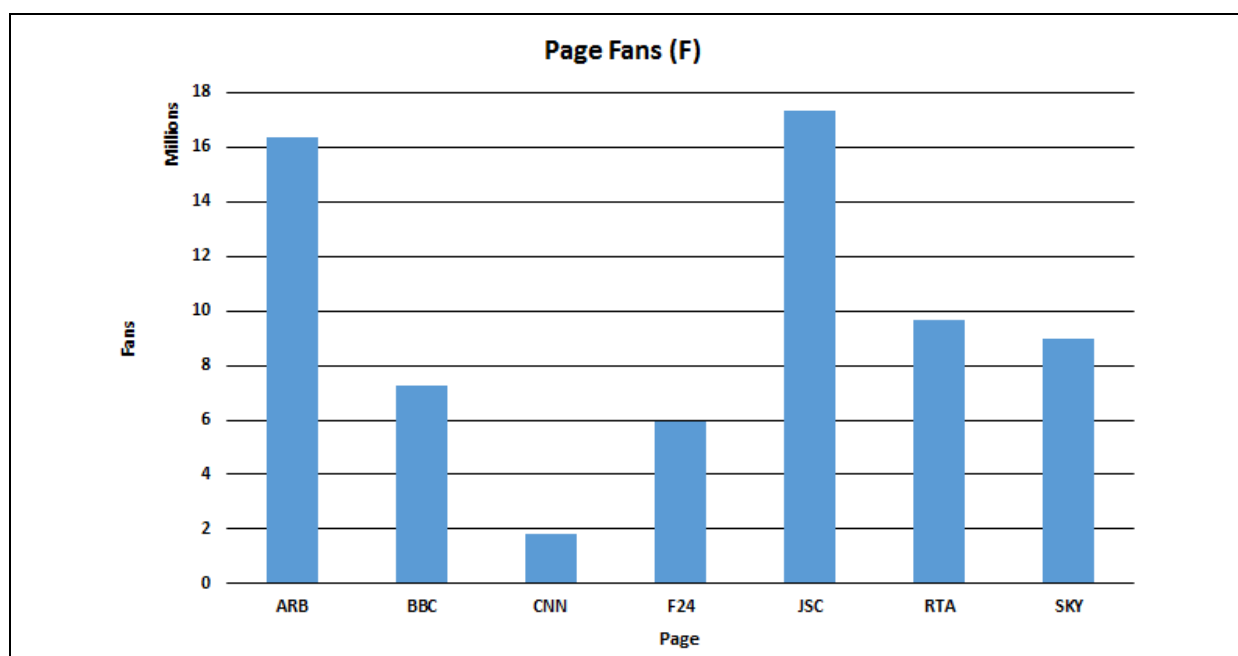


Figure 3. Page fans.

JSC comes in the first place in terms of number of fans, followed by ARB, RTA, SKY, BBC, F24 and finally CNN. Keeping in mind that both JSC and ARB were the first two Arab satellite channels, this gives an explanation to the occupation of these two pages of the first ranks in page fan percentages.

Now, we need to calculate the page penetration rate (PgPen). So, we divide the set of countries into four groups according to their geographical location.

Table 3 lists the four groups and the members of each group. It is noteworthy that both DJ and KM are not grouped, because page statistics for both countries are not available by Facebook. The figures of both countries are considered statistical outliers. Thus, they will not appear in our analysis. Consequently, we only have 20 countries.

Table 3. Countries divided into four groups.

Group	Member Countries
Arab Peninsula	AE, BH, KW, OM, QA, SA, YE
Levant	IQ, JO, LB, PS, SY
North-East Africa	EG, SD, SO
Arab Maghreb	DZ, LY, MA, MR, TN

Henceforth, we need to compute the page penetration rates (PgPen). This is computed for each page and for each country and measures the influence of a certain page in a given country. Because we divided the countries into groups as shown in Table 3, PgPen will be computed for each group separately and the results will be gathered again in one group after the Ranking Index (Rx) is calculated for each country.

Figure 4 shows the page penetration rates for the Arab Peninsula group. The group comprises 7 countries as illustrated in Table 3.

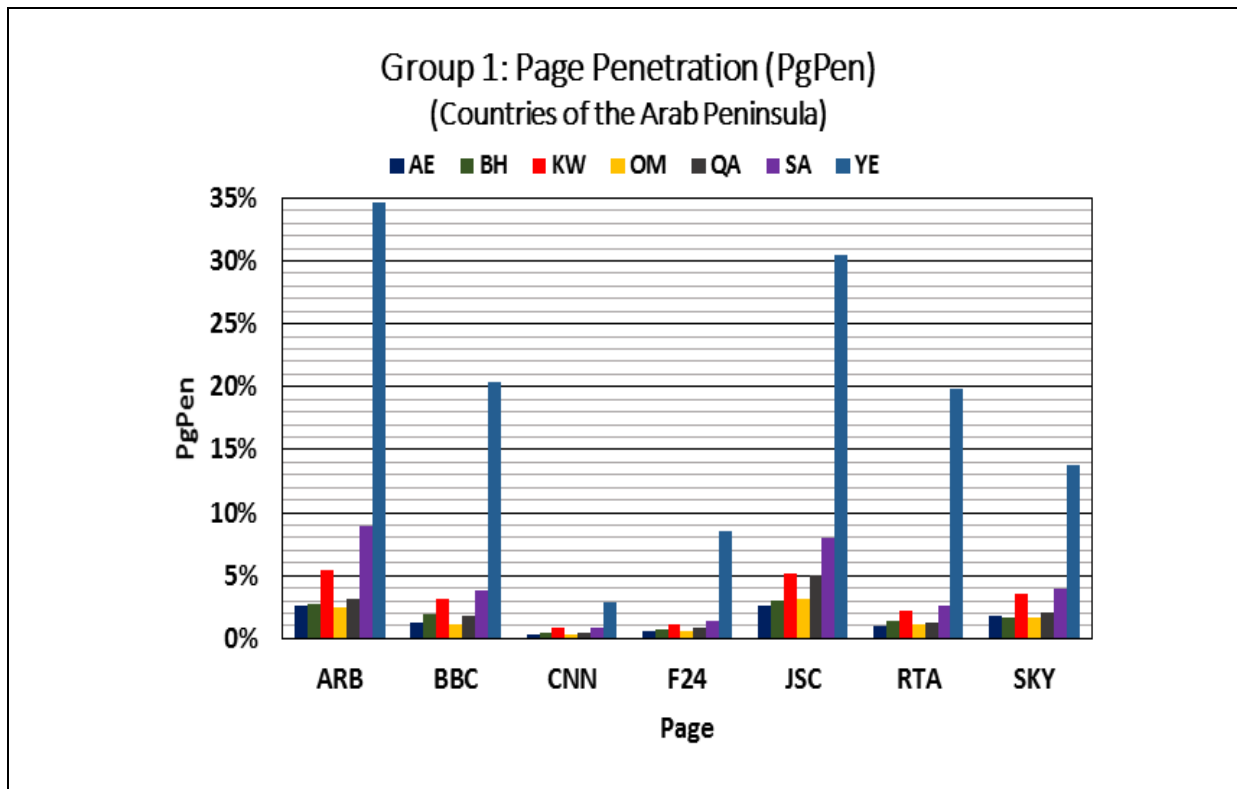


Figure 4. Page Penetration (PgPen) for the first group.

In order to rank the pages in the first group, we construct the ranking matrix as follows: we have 7 countries and thus 7 relevant ranks. Each rank is given a weight that is shown between parentheses in Table 4. We then multiply the number of times a country achieved a rank by the relevant weight of that rank and divide the total by the square of the number of countries in the group; i.e., 49 in the case of group 1. This results in the ranking index Rx for each country in the group.

Table 4. Ranking matrix of group 1.

Country	Rank (Weight)							Total	Rx (%)
	1 (7)	2 (6)	3 (5)	4 (4)	5 (3)	6 (2)	7 (1)		
AE	0	0	0	0	1	4	2	13	26.53
BH	0	0	0	2	3	2	0	21	42.86
KW	0	1	6	0	0	0	0	36	73.47
OM	0	0	0	0	1	1	5	10	20.41
QA	0	0	0	5	2	0	0	26	53.06
SA	0	6	1	0	0	0	0	41	83.67
YE	7	0	0	0	0	0	0	49	100

According to the ranking index (Rx) shown in Table 4, YE comes in the first place, followed by SA, KW, QA, BH, then both AE and OM are in the last two places. Results of the ranking matrix of group 1 are represented in the map shown in Figure 5.



Figure 5. Ranking of countries of group 1 represented in a map graph.

Figure 6 shows page penetration rates for the second group; Arab countries of Levant, and Table 5 shows the ranking matrix of group 2.

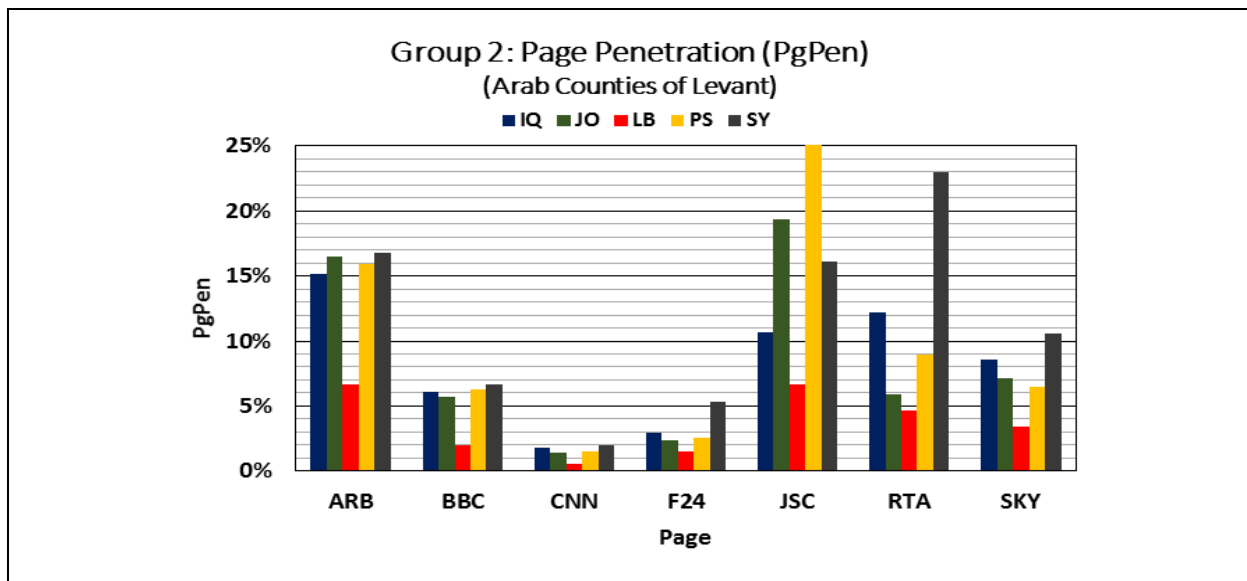


Figure 6. Page Penetration (PgPen) of group 2.

Table 5. Ranking matrix of group 2.

Country	Rank (Weight)					Total	Rx (%)
	1 (5)	2 (4)	3 (3)	4 (2)	5 (1)		
IQ	0	4	1	2	0	23	56.71
JO	0	2	1	4	0	19	54.29
LB	0	0	0	0	7	7	20
PS	1	1	4	1	0	23	65.71
SY	6	0	1	0	0	33	94.29

Based on the values of the ranking index (Rx) for the second group, SY comes in the first place, followed by both PS and IQ. JO comes in the third place and finally LB comes in the last place. These results are represented in the map shown in Figure 7.

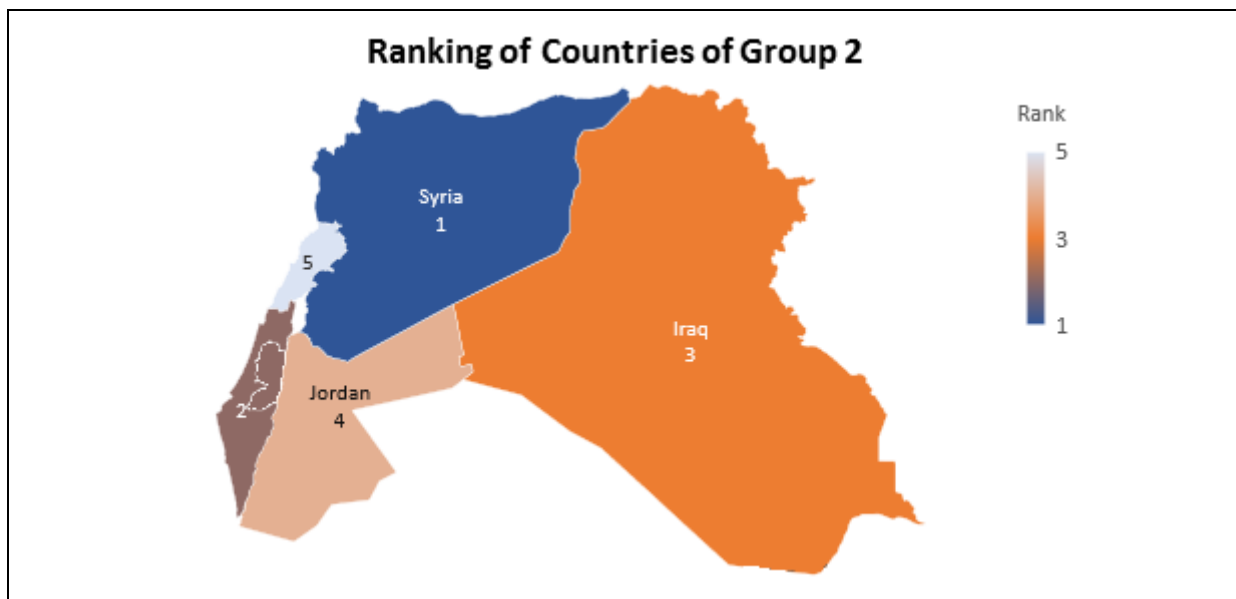


Figure 7. Ranking of countries of group 2.

In a similar way, page penetration rates of countries of the third group; North-East Africa, are shown in Figure 8.

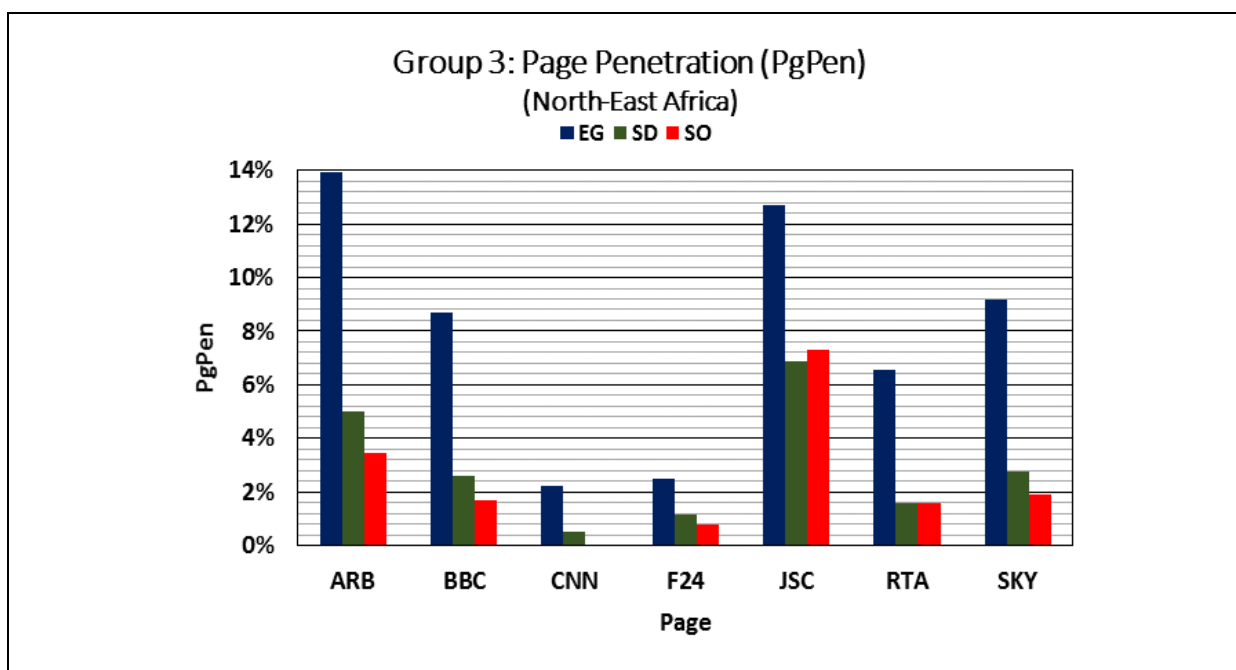


Figure 8. Page Penetration (PgPen) of group 3.

Table 6 is the ranking matrix of the countries of group 3; North-East African countries, comprising only 3 countries. According to the ranking index shown in Table 6, EG is ranked first, followed by SD and then by SO. The ranking is represented by the map graph shown in Figure 9.

Table 6. Ranking matrix of group 3.

Country	Rank (Weight)			Total	Rx (%)
	1 (3)	2 (2)	3 (1)		
EG	7	0	0	21	100
SD	0	5	2	12	57.14
SO	0	2	5	9	42.86



Figure 9. Ranking of countries of group 3.

Results of the last group; Arab Maghreb countries, comprising 5 countries, are shown in Figure 10.

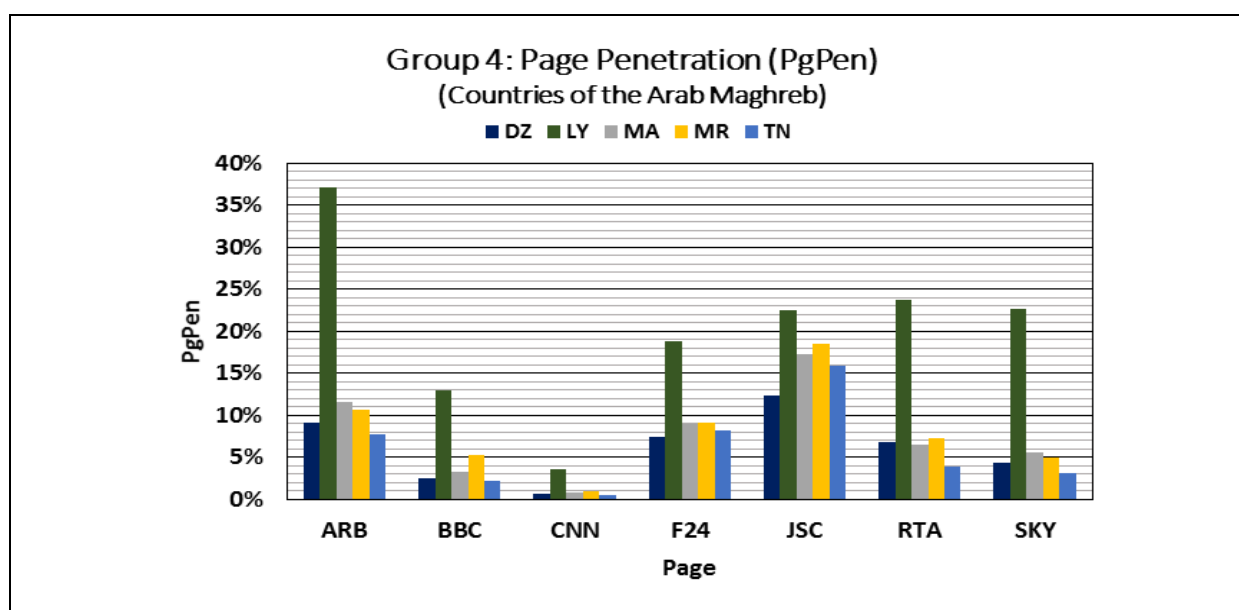


Figure 10. Page Penetration (PgPen) of group 4.

Table 7 shows the ranking matrix for this group and calculates the ranking index for each country.

Table 7. Ranking matrix of group 4.

Country	Rank (Weight)					Total	Rx (%)
	1 (5)	2 (4)	3 (3)	4 (2)	5 (1)		
DZ	0	0	1	4	2	13	37.14
LY	7	0	0	0	0	35	100
MA	0	2	4	1	0	22	62.86
MR	0	5	2	0	0	26	74.29
TN	0	0	0	1	6	8	22.86

According to Table 7, LY comes in the first place, followed by MR, then by MA and DZ. Finally comes TN. These results are represented in the map graph shown in Figure 11.

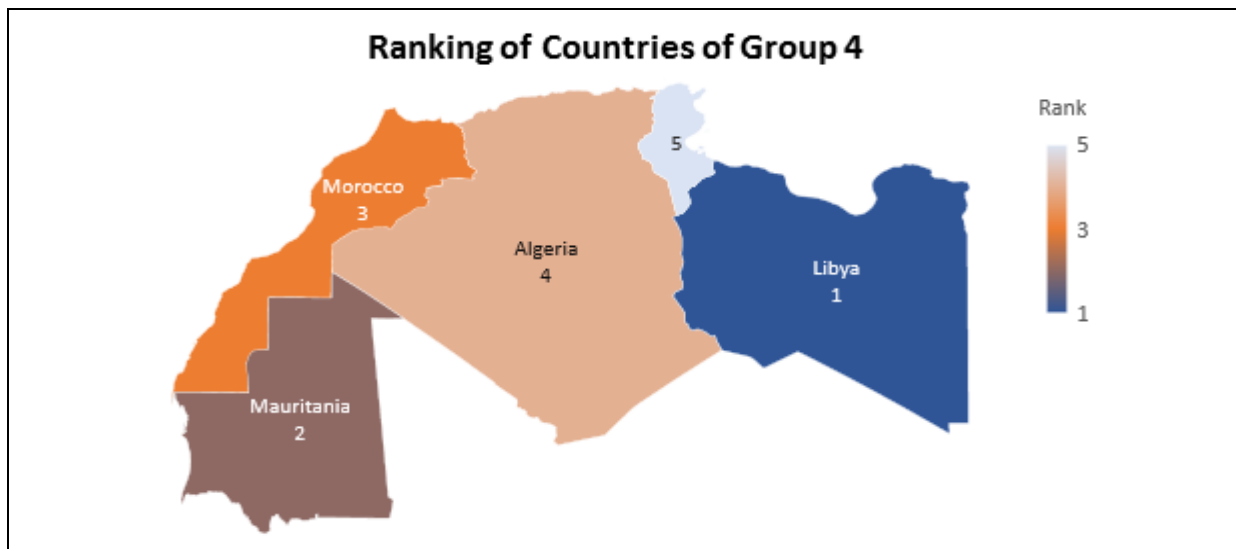


Figure 11. Ranking of countries of group 4.

Table 8 sorts all the 20 countries according to page penetration rate (PgPen) and ranking index (Rx). It contains no further calculations; it only summarizes the ranking results obtained by each ranking matrix of each group earlier.

Table 8. Sorting countries based on their Rx values.

Rank	Country	Rx (%)	Rank	Country	Rx (%)
1	YE	100	8	SD	57.14
	LY		9	JO	54.29
	EG		10	QA	53.06
2	SY	94.29	11	BH	42.86
3	SA	83.67		SO	
4	MR	74.29	12	DZ	37.14
5	KW	73.47	13	TN	22.86
6	PS	65.71	14	AE	20.41
	IQ	65.71		OM	
7	MA	62.86	15	LB	20

Finally, we represent the data listed in Table 8 in the map graph shown in Figure 12.

5.3 Discussion

Results of Internet and Facebook penetration rates shown in Figure 1 and Figure 2, respectively, show that 50% of the Arab countries achieved more than 50% Internet penetration rate, whereas nearly 32% achieved Facebook penetration rates higher than 50%. This shows a relatively high demand on Internet and its resources as suggested by A. Al-Shaikh et al. [33].

Regarding the number of fans listed in Table 2, both JSC and ARB came in the first two places. Our interpretation to these results pertains to history. JSC and ARB were the first two Arabic news satellite channels that made a debut. This gives an intuition that users believe in the maturity of these two channels, which is in turn reflected on the number of fans of their Facebook pages. Another interpretation that we can make is about the nationality of the channel; except JSC and ARB, the other channels are not originally Arab ones. They are either British, American, French or Russian, but they disseminate in Arabic. In conclusion, Arabs prefer to get their news from pages that are natively Arabic and not only Arabic-speaking.

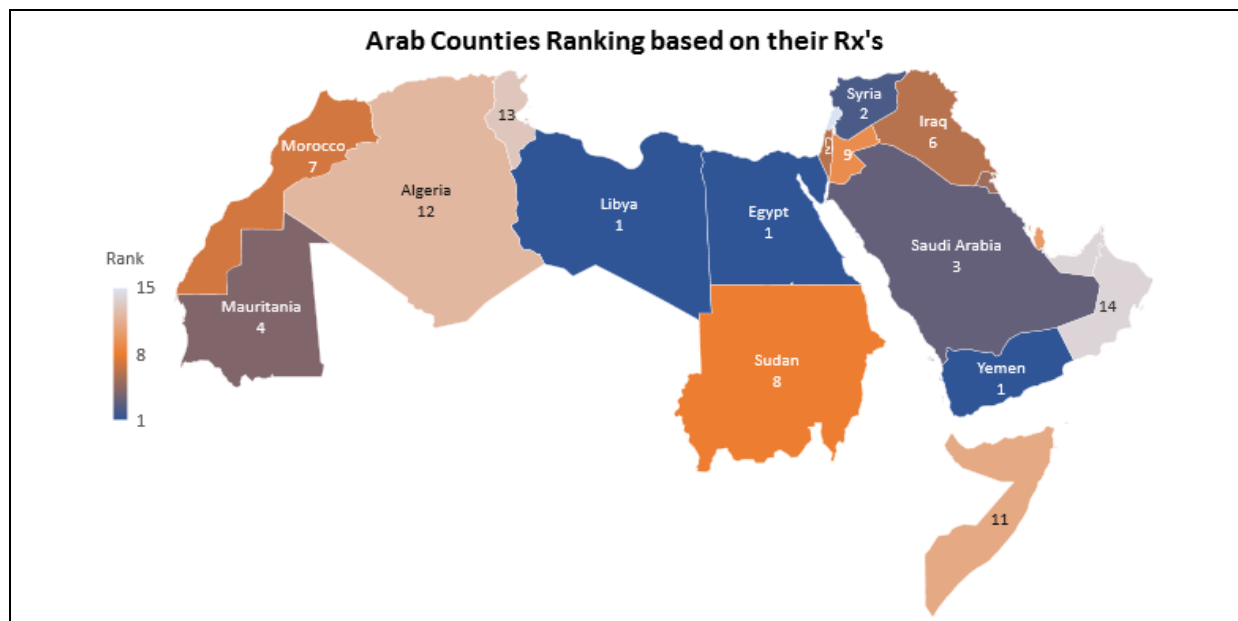


Figure 12. Ranking of countries in terms of their Ranking Indices (Rx).

According to Table 8, YE, LY and EG all share the first rank, followed by SY which came in the second rank. This leads to conclude that citizens of Arab countries that suffered political crises, coups or civil wars during the Arab uprising known by the Arab Spring are the top news consumers via Facebook.

The country that comes in the third place is SA. Despite of never witnessing any political crises, SA is leading a military coalition named the Firmness Storm against militants in YE. This is a good explanation of being in the first ranks of news consumption.

Obviously, 13 out of 20 Arab countries recorded a ranking index (Rx) higher than 50%. In other words, 65% of the Arab countries have more than half of their Facebook users follow mainstream news media on Facebook and consume their news from those pages. However, there are still other Arabic news media that have accounts on Facebook and did not take part in this study. This opens a new research area to investigate either more news media pages on Facebook or different SNS, such as Twitter, especially if we know that Tunisia was the country that ignited the spark of the Arab Spring. Nevertheless, Tunisia was of the least countries that use Facebook for news consumption with a ranking index (Rx) of 22.86%. This leads us to hypothesize that Tunisians might be using different SNS such as Twitter. This conforms to the results of G. Lotan et al. [15], who argued that Twitter was an important tool in spreading information in Egypt and Tunisia during their revolutions.

The same situation applies to Lebanon. Although it did not witness any unrest during the last years, the country is affected by the Syrian revolution which is only few kilometers away from its borders. Furthermore, Lebanon is a country known by its high levels of democracy and freedom of expression. However, being ranked in the last place in our study hypothesizes that either Lebanese are convinced by their local news agencies or they might be using different SNS, which in turn opens the door for a new research area.

It is worthwhile to mention that our findings contradict to those of S. Hille and P. Bakker [24]. We found that a relatively high percentage of Facebook users from the Arab world consume news through Facebook. This could be also due to the current situations and circumstances that some Arab countries are facing, stimulating Arabs to follow news on SM which constitutes a faster medium for spreading news, especially during those accelerating events.

6. CONCLUSION AND FUTURE WORK

In this paper, we proposed a framework to evaluate SNS. We used Internet and Facebook penetration rates and proposed some other metrics, such as: page penetration (PgPen) and ranking index (Rx). We also introduced techniques for ranking the pages and countries. We applied the proposed framework to

Facebook pages of some Arab mainstream news media. We concluded that the credibility of natively Arabic news media is higher than that of others that are non-natively Arabic from Arabs' perspective. Also, our findings revealed that users from countries that faced civil war, unrest, political crises, ...etc. are the top news consumers via Facebook. Moreover, 70% of the Arab countries have more than 50% of their Facebook users using it for news consumption. The importance of this study is that we established a framework that could be used for evaluating Facebook or any SNS pages from different domains. We can further analyze the contents of those pages or other pages to examine user trends. The same study can be applied to different SNS, like: LinkedIn, Twitter, Google+, among others.

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ملخص البحث:

نقترح في هذه الورقة إطاراً لتحليل صفحات شبكات التواصل الاجتماعي وتقييمها بناءً على بيانات الاستخدام المتعلقة بوسائل الإعلام الإخبارية العربية السائدة. وتقدم هذه الورقة مقاييس جديدة مثل: معدل النفاذ الى الصفحة، ومؤشر الترتيب، ناهيك عن طرق تقييم جديدة. ويأخذ الإطار المقترح بعين الاعتبار الدول العربية، وعددها 22، الى جانب 7 صفحات فيسبوك تنتمي الى 7 قنوات فضائية عربية مشهورة. وقد تم استخدام الإطار المقترح لتقييم الدول من حيث معدلات النفاذ الى الانترنت وفيسبوك، بالإضافة الى استهلاك الأخبار عبر تلك الصفحات.

وكشفت النتائج أن العرب يقدرون عالياً وسائل الإعلام الإخبارية عربية الأصل على نحو يفوق تقديرهم لوسائل الإعلام الإخبارية التي تتحدث العربية فقط. علاوة على ذلك، فإن 65% من الدول العربية تمتلك نسبةً تفوق 50% من مستخدمي فيسبوك من مستهلكي الأخبار عبر فيسبوك. من جهة أخرى، تُظهر الدول العربية التي عانت من القلاقل أو الحروب الأهلية أو الأزمات السياسية في السنوات الأخيرة معدلات نفاذ أعلى للصفحات، مثل اليمن وسورية ومصر وليبيا.



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