

# 2011

*Improving the Online Search of Arabic Content*

*Part II*

## New Arabic Large-scale Search Engine Feasibility Study

*Submitted to*

*Arab Centre for eContent Development  
&  
United Nations Development Programme  
Kingdom of Bahrain*

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October 2011

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**Search is a science that will develop and advance over hundreds of years. Think of it like biology and physics in the 1500s or 1600s: it's a new science where we make big and exciting breakthroughs all the time. However, it could be a hundred years or more before we have microscopes and an understanding of the proverbial molecules and atoms of search. Just like biology and physics several hundred years ago, the biggest advances are yet to come. That's what makes the field of Internet search so exciting.**

**Marissa Mayer - Google  
Vice President, Search Products & User Experience**

# 1 EXECUTIVE SUMMARY

International search engines, spearheaded by Google, have long dominated the Arab world large-scale search market. This domination has a negative effect on the cultural, scientific, and economic level, as well as on the security of Arab nations and users alike.

Search engines are designed to dig up anything published on the web; from text, pictures, and videos. The search results are then indexed and archived through the engine's server. The engine also stores all electronic mail (Google's Gmail, for example) which is also indexed and archived. Moreover, search engines retain key search words and phrases entered by users, which are also subsequently indexed and archived.

The importance of search engines lies in their usage of extremely sophisticated programming to dissect the texts published on the internet (language), their content (brain), and information exchanged between users (secrets), as well as personal key words entered by users. The quantity and quality of information collected by search engines makes them threatening endeavors with economic, scientific, and cultural implications, as well as posing a threat to national security.

**The cultural and scientific implication** of search engine giants like Google storing everything that has been published on the web onto their servers lies in the problem that by doing so, they place themselves in perfect position to analyze the Arabic language and the Arabic mind, as well as the Arab user personalities.

**The economic implications** are simpler but also detrimental; search engine giants are making a tremendous amount of money from Arab region, consistently growing with the rise of the number of internet users in the Arab world. It is estimated that within a few years search engine giants **will be making well over 500 million dollars per year from Arab region**; that is unless a local Arab search engine is developed to share in these profits.

**Moreover, serious national security implications** also arise. Nations and users enter a risky territory by allowing the international search engines to store and analyze personal emails. This has led countries like Turkey to work on developing a national search engine and giving each citizen a lifetime email address, as a policy put in place to protect national security by stopping international search engines from storing Turkish citizens' personal information.

Several national level initiatives have demonstrated that countries can be successful at building a local search engine capable of surpassing Google, which has been unable to compete against some powerful localized initiatives. China, Russia, and South Korea can serve as extremely well-known and successful examples. Moreover, the Czech Republic, a country of only 10 million people, has been successful in creating a search engine that surpassed Google in popularity on the national level, generating 90 million dollars in profit each year.

The initiative to create a new and improved Arabic search engine has become a necessity for the Arab world, and is certain to economically benefit the Arab party spearheading it.

## 1-1 Two-Phase Project

This feasibility study assumes the Project Setup will commence in May 2012 and the first of the two phases of the Project will kick off in September 2012. The two phases are:

**Phase I:** This will take 15 months to complete, and will produce “The Arab Multimedia News Portal (Aggregation+)” which is a Medium-scale Arabic Web Search Engine dedicated for news (See Annexure I).

### Phase I Objectives

**Phase one** will create unique news aggregation portal that meet the Arabic user’s needs and shorten the time between expenditure and revenue generation, while addressing all Arabic search engine issues such as indexing, page ranking and providing the best Arabic language and culture support.

The news aggregation portal will increase the size of advertising inventory and consequently the revenue.

By the completion of phase one, we will also be able to prove that the News Aggregation Portal we developed has many advantages over Google News.

**Phase II:** This will take another 8 months (two years total), and will produce a large-scale Arabic web search engine.

**Table (1): Project Milestones – Cost in Millions of US Dollar**

Milestones	Due Date	Personnel	Servers, Storages & Services	Offices Rent, Consumables & Equip.	Software	Marketing	Travel, Communications & Hardware Maintenance	External Expenses	Advisory Board & Other Expenses	Cash Flow Needed
Project Setup	May to Aug-12	100,000								100,000
Project Kickoff	Sep-12	592,650	41,400	120,692	550,000	20,000	39,333	91,667	120,000	1,575,742
Prototype (News)	Mar-13	1,030,250	34,000	112,292	550,000	60,000	55,000	95,000	120,000	2,056,542
Beta Launch (News)	Sep-13	734,979	207,000	62,538	125,000	30,000	27,500	47,500	60,000	1,294,517
Official Launch (News)	Dec-13	1,642,427	191,000	199,888	125,000	90,000	62,500	85,833	100,000	2,496,648
Beta Launch (Full)	May-14	1,660,383	201,000	176,792	125,000	80,000	53,333	70,000	80,000	2,446,508
Official Launch (Full)	Sep-14	1,470,567	306,000	124,088	75,000	60,000	40,000	52,500	60,000	2,188,155
<b>Total *</b>		<b>7,231,256</b>	<b>980,400</b>	<b>796,288</b>	<b>1,550,000</b>	<b>340,000</b>	<b>277,667</b>	<b>442,500</b>	<b>540,000</b>	<b>12,158,110</b>

\*The project will generate revenue starting from January 2014

The result is a knowledge-creating company with a large research-based software development department. The company will be unique in the Arab world; it will contribute towards building a knowledge economy in this region, and is expected to lead to several patents.

The company will create approximately 326 jobs, and produce software (to be used internally) worth up to 17.5 million US Dollar in 7 years, with a high potential of eventually selling its components.

## 1-2 Positive Market Size Indicators

The number of internet users in the Arab world reached the 70 million mark at the end of 2010, and is expected to rise to 138 million users by 2017.

Arab World Internet Advertising Market registered 142 million US dollar in 2010 and is forecast to reach 842 million in 2017.

The number of Arabic web pages has crossed half billion pages representing 1% of the total Internet web pages and growing at 30 percent per annum.

The following table summarizes the Arab region Internet market size:

<b>Table (2): Major Arab Region Market Size Indicators (2009-2017)</b>									
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Arab World Internet Users (million)*	61.81	69.59	76.73	84.59	93.26	102.82	113.36	124.98	137.79
Arab World Internet Advertising Market (million)*	94.50	141.80	212.60	276.40	359.30	449.20	561.50	701.80	842.20
Search Engines Revenues from the Arab Region (Million \$)*	28.35	56.72	85.04	110.56	161.69	202.14	252.68	315.81	421.10
Number of Websites Worldwide (million)**	206.96	248.35	298.02	357.62	429.15	493.52	567.54	624.30	686.73
Number of Web Pages Worldwide (Million) ***	56,499	67,799	81,359	97,631	117,157	134,730	154,940	170,434	187,477
Number of Arabic Websites in Million (One Percent of the World total)*	2.07	2.48	2.98	3.58	4.29	4.94	5.68	6.24	6.87
No. Arabic Web Pages (Million)*	564.99	734.49	954.84	1,241.29	1,613.67	2,097.78	2,727.11	3,545.24	4,608.81
Size of Arabic Web Pages (Terabyte)*	169.50	220.35	286.45	372.39	484.10	629.33	818.13	1,063.57	1,382.64
* Source: Madar Research									
** Source: Netcraft for 2009, Madar Research for annual growth estimation									
*** Source: Based on Yahoo and Netcraft, there are around 273 pages per website									

As part of its reach-out strategy the new Arabic search engine will, through its branches, have dedicated teams in major Arabic regions covering the Arab countries; this will enable the company to meet the requirements of the advertisers as well as the internet users. Moreover, this will provide the company with the flexibility to react to the dynamic changes of the business environment.

Based on a conservative scenario, the proposed Arabic Internet Search Engine Company is expected to obtain 5.5% market share of the Arab World Search Engines' advertisement revenue in 2015. The market share is expected to grow to 10%, in 2016, and 15% in 2019.

<b>Table (3): The New Arabic Search Engine Revenue 2014-2019 (Conservative Scenario)</b>			
<b>Year</b>	<b>Search Engines Revenues from the Region (in US\$ millions)</b>	<b>The New Arabic Search Engine Share</b>	<b>The New Arabic Search Engines Revenue (in US\$ millions)</b>
2011	85.04	-	-
2012	110.56	-	-
2013	161.685	-	-
2014	202.14	1.00%	2.02
2015	252.68	5.50%	13.90
2016	315.81	10.00%	31.58
2017	421.10	13.00%	54.74
2018	505.3	14.00%	70.74
2019	606.36	15.00%	90.95
Source: Madar Research			

### 1-3 Promising Financial Results

Financial results from the feasibility study appear very promising. The net present value of the project is estimated at US \$ 31,782,740, while the internal rate of return is estimated at 41%. The Company is expected to generate profits starting from 2015, and the net profits are expected to grow rapidly. The return on the initial investment is expected to be paid back in 2016.

The following table summarizes the project details and financial results of the “Proposed Arabic Internet Search Engine Company”:

<b>Table (4): Project Summary – Major Financial Indicators</b>								
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>Capital &amp; Reserves</b>	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000	13,000,000
<b>Tangible Fixed Assets</b>	87,493	391,181	934,556	1,263,868	1,341,792	1,645,000	1,994,215	2,148,382
<b>Intangible Assets</b>	544,375	1,239,583	1,293,750	1,327,917	1,342,083	1,336,250	1,310,417	1,264,583
<b>Preoperative Expenses</b>	1,283,038	4,278,913						
<b>Working Capital</b>			2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000
<b>Cash Surplus</b>	11,756,963	7,598,050	253,578	4,060,243	22,845,041	61,553,142	113,113,998	181,809,598
<b>Revenue</b>	0	0	2,021,400	13,897,125	31,581,000	54,743,000	70,742,000	90,954,000
<b>Direct Costs &amp; Operating Expenses</b>	611,169	3,160,017	6,568,331	9,726,980	12,704,112	15,737,525	18,857,761	22,150,067
<b>Net Profit / (Loss)</b>	-611,169	-3,160,017	-4,546,931	4,170,145	18,876,888	39,005,475	51,884,239	68,803,933
<b>Retained Earnings</b>	-611,169	-3,771,186	-8,318,117	-4,147,972	14,728,916	53,734,392	105,618,630	174,422,563
<b>Break Even Point (% of Revenue)</b>				48.78%	21.80%	14.58%	13.49%	12.23%
<b>Net Present Value (NPV)</b>	<b>31,782,740</b>							
<b>Internal Rate of Return (IRR)</b>	<b>41%</b>							
<b>Pay Back Period</b>	<b>3 Years 6 Months</b>							

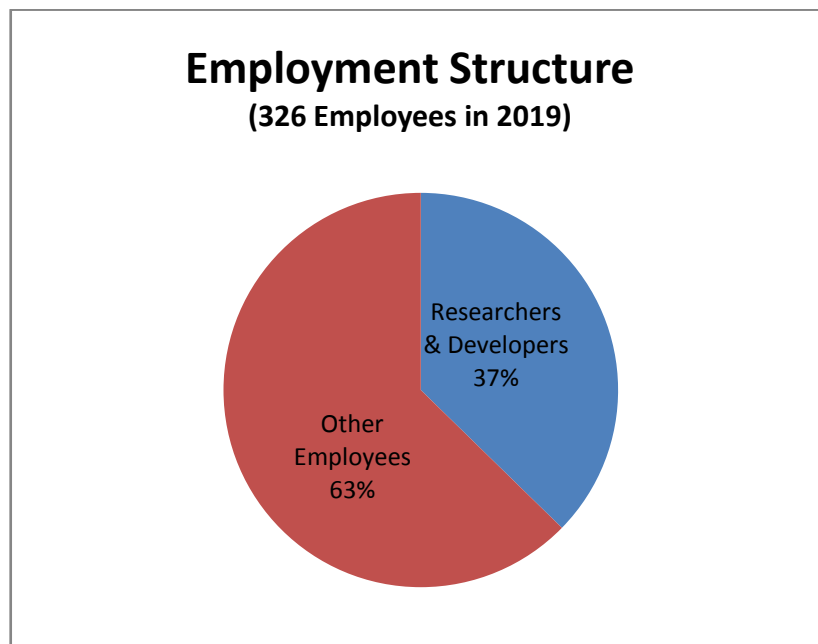


#### 1-4 A Knowledge-Creating Project

The mission of the new Arabic search engine company is to have the capability to create new knowledge, disseminate it throughout the organization, and embody it in products, services, and systems.

To achieve this mission, the company will employ 122 engineers/developers and researchers (about 37% of total employees) led by 10 top professional directors.

The new Arabic search engine is expected to employ 12 employees in 2012 which is expected to increase to 326 employees by the end of the projection period.



The company will work closely with academic sectors in Arab countries to create a new Arabic Language Search Science (ALSS). This cooperation will include further development of the following Arabic & Search technologies:

- The Search Algorithm
- The Ranking Algorithm
- Automatic Classifier of Arabic pages
- Arabic Text to Speech
- Arabic Voice Recognition
- English to Arabic (and vice versa) Machine Translation
- Arabic Semantic Web

A knowledge transfer program will be implemented in the following areas:

- Formal Presentations/Training
- Query-Response System
- Development program

- Patents program
- Shadowing day-to-day activities

There will be three ways the technology transfer will take place:

- 1- From global search technology experts to the new company and Arab academic sector. The new company will use proven open source search engine technology currently used by Facebook, Amazon and Yahoo and will employ international experts to implement these technologies.
- 2- From our company to the academic sector
- 3- From the academic sector to our company

## 1-5 The New Arabic Search Engine – Vs - Google

Only a few Arab companies have developed web search engines for Arabic use, but they are still very limited in their capabilities and generally have poor performance and very small market share. The main competition will come from the international search engines, especially Google.

There is no doubt that a search engine such as Google is providing very useful services for Arabic users. Nevertheless, there are other requirements that an Arabic search engine could meet in a more sophisticated manner. The following are four areas of improvements:

- The level of Arabic support provided by international search engines including Google is very limited. We are able to provide significantly better processing/analysis of Arabic language, which could lead to a better understanding and response to the Arabic search queries.
- The linguistic differences between Arabic and English are huge, so we need to build a different indexing structure to get better results for searches.
- The Arabic news aggregation services provided by international search engines are very poor. We can have a vast competitive advantage over common news aggregation services, such as **Google News**, in terms of coverage (**with more than 500 percent increase in the number of sources covered**) and services targeting Arab natives and global Arabic news seekers (see Annexure I)
- Dozens of cultural, religious, and linguistic services can be built around a powerful Arabic search engine which today are beyond the international search engines strategies

## 1-6 New Marketing / Branding Strategy

### **First: Research Based Press Releases**

By establishing a research center for Internet use in the Arab world, and publishing an important study every two weeks. We will follow this up with press releases in Arab and international newspapers and magazines, in both Arabic and English. The press releases will be published for free, due to the lack of similar research in the area.

### **Second: Utilizing the Social Networks**

In today's world, regular advertising just doesn't cut it anymore. In order to showcase our new portal to a wide cross section, we must rely on the ever growing avenue of social media. This can be done through paid and non-paid creative advertising.

In addition to the creation of an Arabic search with searching capabilities that compete with giant search engines, the concept of an Arabic search engine is expected to generate a wide interest among the Arab League, Governmental and educational entities, the press, and other opinion formers, which will lead to several positive results including a quick acceptance among the users, increasing the client base, and maintaining the marketing costs at a moderate level.

## **1-7 Company Location**

The software development office which is the core of the company, as well as the new Arabic search engine data center will be established in a GCC country. The business office will be in Bahrain or the United Arab Emirates. Regional offices covering the Arab Countries will be established later on.

## **2 OBJECTIVES, SCOPE OF WORK & METHODOLOGY**

The feasibility study contemplates facts and conditions existing as of the study date. Events and conditions occurring after that date have not been considered, and we have no obligation to update our report for such events and conditions.

### **2-1 Objectives**

The main objective of this feasibility study is to investigate the feasibility of establishing a new Arabic Internet Large-Scale Search Engine.

### **2-2 Scope of Work**

The scope of work for the study is summarized as follows:

#### **Market Study**

- Analyze market information in order to understand the market structure. It shall be noted that the market research information has been provided by Madar Research.
- Gather and review information related to the Arabic Internet Search Engine market, as well as the Internet Search Engine market as a whole.
- Estimate potential revenues for the proposed Arabic Internet Search Engine based on the information received.

#### **Technical Study**

- Review the proposed Arabic Internet Search Engine's operating methodology.
- Assess the technical information and translate it into cost factors to be used in the financial analysis.

#### **Financial Study**

- Estimate revenues and profitability.
- Prepare the projected financial statements.
- Project financial performance ratios for the proposed Arabic Internet Search Engine.

## **2-3 Methodology**

In order to assess the feasibility, the approach adopted in preparing the study is as follows:

- Researching available information on the Internet Search Engine.
- Researching available Arabic Internet Search Engine statistics.
- Desk research for information through reviewing available statistics and studies.
- Identify all potential sources of revenue.
- Estimating revenues based on market assumptions agreed upon with the founders.
- Analyzing and assessing technical requirements for the project and the corresponding investment and running costs.
- Compilation of data gathered through market and technical studies into a financial module in order to assess the project's feasibility and other factors affecting its success.

## **3 INTRODUCTION**

### **3-1 Introduction to the Search Engine Industry**

#### **3-1-1 About Internet Search Engines**

Internet search engines are special portals on the web; these portals are found on the websites of the search engines, internet service providers, media providers, universities, etc.

The search engines are designed to help internet users to find information stored in Internet websites. In order to make the information available for users, the search engine has to perform three principle steps: collecting the content of all web pages (crawling), building an index with terms and metadata found, and presenting results with links to Internet web pages to the users' query based on intelligent ranking algorithms.

The quality of the search engine depends on the number of web pages crawled and indexed, as well as the suppression of unwanted content, like commercial spam, pornography and culturally offending content. Further on intelligent ranking and classification algorithms are required to present the expected results in a list of potentially million results under the first 10 to 20 positions.

Search engines derive their revenues from online advertisement. Placing advertisements adjacent to search results of the search engines became a considerable method adopted by companies to promote their products and services. The links separately indicated in the search engine results list to promote the business are called Sponsored Links. Once the internet user clicks on a sponsored link, revenue is generated. The revenue model of the search engine is illustrated in the "Revenue Model" section.

#### **3-1-2 Business Partners**

Search engines do co-operate in general with two types of partners. These are:

- Portal Operators: these are organizations like ISPs (Internet Service Providers), as well as content providers, like TV-stations, publishers of news or magazines and others. Portal operators have invested in building up a community and providing services and content. They are interested in offering new services, like search within their own content and/or the internet and are looking for new sources to generate additional revenues to finance their services. A search engine is an ideal partner as it can provide attractive search services and generate ad revenues from sponsored links. Revenues from sponsored links are shared between the search engine and the portal operators.
- Promotion, Advertising, and Online Agencies. The search engine offers an attractive opportunity for online advertisers to advertise goods and services via

sponsored links. The success of the search engine will depend on good and direct relations with leading online agencies.

### **3-1-3 Sources of Revenue**

The revenues of the new Arabic search engine will come from two main sources; sponsored links and banner advertising & sponsorship. These sources will be indirectly supported by the public service activities of the search engine offered to portal operators and focuses on particular niches and attractive conditions. (The offered services are discussed in the Company Overview Chapter).

#### **1- Sponsored Links**

This involves placing relevant advertisements adjacent to search results. With an attractive placement, users are motivated to click on the links to the advertisers' sites. Sponsored links can be placed on:

- The search portals of the new search engine in different Arab countries as well as the news aggregation portals.
- Major Arabic portals with high numbers of visitors.

#### **2- Banner Advertising and Sponsorship**

According to Madar Research, banner advertising and site sponsorship are still the dominant forms of online advertising in the Middle East. The new Arabic search engine envisages using appropriate banner advertising and sponsorship on its portal sites, alongside its sponsored links.

### **3-1-4 Revenue Model**

The revenue of the search engine is generated through two markets; the B2C market and the B2B market. The type of market depends on the website from which the user's query is generated (search engine websites or business partners' websites). Accordingly, the two markets could be defined by the following:

- B2C Market: users are searching on the new Arabic search engine's portals. Revenues are generated by selecting sponsored links and displaying banners and sponsorships.
- B2B Market: users are visiting portals of the new Arabic search engine's partners, using search services provided by the new search engine and selecting sponsored links. Revenues generated from sponsored links are shared between the new search engine and the portal base on separate business agreements.

The share of the new Search Engine Company from the revenue generated through the revenue channels is discussed in the financial study.



## 4 MARKET STUDY

### 4-1 Arab Internet Population Overview

Over the last decade, the Internet has consolidated itself to become a powerful communication platform and a significant source of information that has changed the way of conducting business of all kinds all over the world.

The number of internet users in the Arab world reached 70 million at the end of 2010, and is expected to rise to 140 million users by 2017.

**Table (5): Internet Users, Distribution and Growth in Middle East and North Africa, 2010-2015**

Country	2010 Population	2010 Internet Users	Penetration (end 2010)	Country Share of Sub-Total (2010)	2009 Internet Users	2009-10 Growth	CAGR, 2010-15**	2015 Internet Users
<b>Gulf Co-operation Council Countries</b>								
Bahrain	1,303,713	541,567	41.54%	2.94%	488,094	10.96%	11%	912,572
Kuwait	3,647,993	1,511,162	41.42%	8.21%	1,399,427	7.98%	8%	2,220,392
Oman	2,694,094	702,722	26.08%	3.82%	619,138	13.50%	13%	1,294,719
Qatar	1,637,443	734,583	44.86%	3.99%	665,715	10.34%	10%	1,183,053
Saudi Arabia	27,498,803	11,015,185	40.06%	59.87%	9,778,238	12.65%	12%	19,412,520
UAE	8,328,144	3,893,815	46.75%	21.16%	3,650,992	6.65%	7%	5,461,277
<b>Sub-Total</b>	<b>45,110,190</b>	<b>18,399,034</b>	<b>40.79%</b>	<b>100.00%</b>	<b>16,601,604</b>	<b>10.83%</b>	<b>10.23%</b>	<b>29,942,913</b>
<b>Levant</b>								
Egypt	78,929,246	16,670,308	21.12%	56.57%	14,890,851	11.95%	8%	24,494,151
Iraq	33,237,000	4,516,849	13.59%	15.33%	3,797,267	18.95%	17%	9,902,957
Jordan	6,114,550	1,814,599	29.68%	6.16%	1,612,486	12.53%	9%	2,791,986
Lebanon	4,174,000	1,435,521	34.39%	4.87%	1,300,940	10.34%	7%	2,013,393
Palestine	4,106,610	786,781	19.16%	2.67%	698,430	12.65%	13%	1,449,594
Syria	20,866,000	4,244,791	20.34%	14.40%	3,836,232	10.65%	9%	6,531,137
<b>Sub-Total</b>	<b>147,427,406</b>	<b>29,468,850</b>	<b>19.99%</b>	<b>100.00%</b>	<b>26,136,206</b>	<b>12.75%</b>	<b>9.81%</b>	<b>47,051,410</b>
<b>North Africa</b>								
Algeria	36,300,000	5,548,315	15.28%	36.96%	4,664,409	18.95%	11%	9,349,233
Libya	6,678,500	1,232,542	18.46%	8.21%	1,130,935	8.98%	8%	1,811,008
Morocco	32,026,000	5,491,338	17.15%	36.58%	4,836,724	13.53%	13%	10,117,435
Tunisia	10,603,850	2,737,805	25.82%	18.24%	2,353,077	16.35%	10%	4,409,262
<b>Sub-Total</b>	<b>85,608,350</b>	<b>15,010,000</b>	<b>17.53%</b>	<b>100.00%</b>	<b>12,985,145</b>	<b>15.59%</b>	<b>11.20%</b>	<b>25,521,408</b>
<b>Other Arab</b>								
Sudan	41,622,300	4,639,678	11.15%	69.05%	4,181,566	10.96%	11%	7,818,127
Yemen	23,507,690	2,079,724	8.85%	30.95%	1,908,354	8.98%	8%	3,055,797
<b>Sub-Total</b>	<b>65,129,990</b>	<b>6,719,402</b>	<b>10.32%</b>	<b>100.00%</b>	<b>6,089,920</b>	<b>10.34%</b>	<b>10%</b>	<b>10,821,664</b>
<b>Total</b>	<b>343,275,936</b>	<b>69,597,285</b>	<b>20.27%</b>		<b>61,812,875</b>	<b>12.59%</b>	<b>10.25%</b>	<b>113,366,644</b>

Source: Arab Ministries of Planning, Telecommunications companies/ISPs and Madar Research

#### 4-1-1 Arabic Search Community

There were a total of 75 million Arabic speaking Internet users around the world by end 2010, as detailed in the tables below. Of these, 58.5 million were accessing the Internet from the 22 Arab League member countries, while the rest consist of Arabic Internet users who are located in other regions of the world including North America, Latin America, European Union countries and others.

The number of Arab Internet users among Arab expatriate communities is estimated based on Internet penetration level in each non-Arab country. Madar Research estimates that about 50% of Arab Internet users accessing the Internet from outside the Arab world carry out Internet search in the Arabic language among other languages. The ratio for Arab users carrying out Internet search in Arabic language within the Arab world is estimated at 90% (for GCC) and 93% (in Arab non-GCC). Applying these ratios leads to an estimated 54 million users using Arabic language search inside the Arab world and 8.3 million outside the Arab world, bringing the total number of Internet users searching in the Arabic language to 61.3 million.

<b>Table(6): Arabic Speakers Outside Arab Countries (millions) – End 2010</b>					
	North America	Latin America	Europe	Others	Total
Arabic Speakers	4.8	17.0	7.5	4.2	33.5
Arab Internet Users	3.4	6.0	6.0	1.3	16.7
Searching in Arabic	1.7	3.0	3.0	0.6	8.3
<i>Sources: Zogby International (<a href="http://www.zogby.com">www.zogby.com</a>), Arab Federation of Latin America and Madar Research</i>					

<b>Table(7): Arabic Language Speakers, Internet and Search Users within Arab World (millions), 2009-10</b>						
	GCC		Non GCC		Total	
	2009	2010	2009	2010	2009	2010
Population	42.50	45.10	291.50	298.20	334.00	343.30
Arabic Speakers	27.63	30.67	256.47	262.42	284.10	293.08
Internet Users	16.60	18.40	45.20	51.20	61.80	69.60
Arab Internet Users	10.96	12.88	39.78	45.57	50.74	58.45
Internet Users Searching in Arabic	9.53	11.59	36.81	42.38	46.35	53.97
<i>Source: Madar Research</i>						

The number of Arab users searching the Internet in Arabic is expected to surge to 100 million people by the end of 2015, propelled by high growth of total Internet users in the Arab world where current penetration rates are low (compared to already high Internet penetration rates in most of the countries which host large Arab communities). While in 2010 Arabic Internet searchers outside the Arab world constituted 13.5% of all Arab

Internet searchers (8.3 million out of 61.3 million), they are forecast to make up only 10% of the total in 2015 (10 million out of 100 million).

<b>Table (8): Searching in Arabic (million) – End 2010</b>		
Outside Arab World	Inside Arab World	Total
8.3	54	61.3
<i>Source: Madar Research</i>		

<b>Table (9): Searching in Arabic (million) – End 2015</b>		
Outside Arab World	Inside Arab World	Total
10	90	100
<i>Source: Madar Research</i>		

## 4-2 Internet Search Requests

Madar Research estimates 1.2 search requests (in Arabic) per day per user for Arabic language searchers. Accordingly, Madar Research estimates that around 2.21 billion search requests were made per month in 2010, or around 26.5 billion per year. This figure is expected to rise to approximately 4.8 billion search requests per month or 58 billion per year in 2018.

Madar Research estimates the market share of the new search engine to start with 1% of total search request in 2014 and to reach 14% by the end of 2018 and to register 5.5%, 10%, 13% in 2015, 2016 and 2017 respectively as presented in Table (10).

<b>Table ( 10 ): Projections of Internet Search Requests 2010 – 2018</b>									
Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
Monthly Arabic Search requests from Arab users (Billion)	2.2070	2.4332	2.6826	2.9576	3.2607	3.5950	3.9634	4.3697	4.8176
The new Arab Search Engine Share from total searches (Billion)	-	-	-	-	0.0326	0.1977	0.3963	0.5681	0.6745
Percentage	-	-	-	-	1	5.5	10	13	14
<i>Source: Madar Research</i>									

Search requests are forecasted to estimate the hardware requirements, technical infrastructure costs, software maintenance, and service costs as explained in the financial part of this study.

### 4-3 Arabic Online Content

Arabic web pages constitute about 1 percent of total Web pages, although Arabic speakers represent about five percent of world population. This humble Arab presence is even far from matching the rate of Arabic speakers among total world Internet users, which stands at 3%.

This picture, however, has started to change, however slowly. During the last three years (2007-2009) total Web content, including both Arabic and English Web pages, produced in GCC-Levant has been growing by an annual average of 50 percent.

<b>Table (11): Number of Arabic WebPages in Millions</b>									
	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Number of Arabic WebPages</b>	565	735	955	1,241	1,614	2,098	2,727	3,545	4,609
Source: Madar Research Using Google, Yahoo and Netcraft									

Interestingly, more than 60% of all Web pages published in the region (under the top level domain (TLD) names) are in Arabic.

In 2009, Madar Research undertook a study to estimate the language distribution of websites in the Arab countries. Global search engines available on the Internet (Yahoo and Google) were used to estimate the language distribution on websites carrying top level domain (TLD) names of the Arab countries. Arab-owned websites registered under generic TLDs, such as dot-com and dot-org were not included in the language survey. Thus, the survey – in spite of a higher than average margin of error due to the exclusion of generic TLDs – still paints a very reasonable assessment on the usage of Arabic content on the Internet in the Arab region. The results of the survey were as follows:

- Saudi Arabia accounted for the largest content posted on the Internet in the Arab region (25.14 percent). UAE came second in the total number of Internet pages (20.95 percent).
- Egypt came third among the Arab countries in total content posted on the Internet, with a 10.04 percent share. However, Egypt is responsible for only 8.84 percent of all Arabic Web pages posted in the Arab Countries.
- Syria came first in featuring the largest share of Arabic content from the total number of pages it developed in both English and Arabic languages. Syria, however, is responsible for only 3.54 percent of all content developed in the Arab countries. Meanwhile, Lebanon has the smallest share of Arabic content compared to total number of pages in both languages.

<b>Table(12): Arab Countries Ranked According to Arabic Language Use on the Internet (Q4/2009)</b>	
<b>Country</b>	<b>Share of Arabic Web Pages from a Country's Total English-Arabic Pages</b>
Syria	96.39%
Iraq	86.08%
Algeria	82.97%
Saudi Arabia	81.69%
Kuwait	80.53%
Palestine	72.89%
Yemen	68.13%
Morocco	65.56%
Jordan	60.02%
Sudan	57.89%
Oman	56.75%
Tunisia	54.31%
Qatar	52.54%
Egypt	50.64%
Bahrain	41.25%
Libya	39.68%
UAE	37.79%
Lebanon	24.47%
<b>Average</b>	<b>60.09%</b>

*Source: Madar Research*

<b>Table (13): Arab Countries Ranked Per Contribution to Total Internet Arabic Content (Q4/2009)</b>	
<b>Country</b>	<b>Share of Arabic Web Pages from Total Arabic Pages in Arab Countries</b>
Saudi Arabia	34.17%
UAE	13.18%
Kuwait	11.78%
Egypt	8.46%
Palestine	6.86%
Syria	5.68%
Morocco	4.12%
Jordan	3.95%
Lebanon	3.54%
Qatar	1.89%
Bahrain	1.49%
Tunisia	1.25%
Oman	0.99%
Libya	0.79%
Algeria	0.71%
Iraq	0.41%
Sudan	0.39%
Yemen	0.35%

*Source: Madar Research*

Table (14): Ranking of Arab Countries Per Share of Web Pages – Q4 2009	
Country	Share of Arabic & English Web Pages from Total Arabic & English Pages in Arab Countries
Saudi Arabia	25.14%
UAE	20.95%
Egypt	10.04%
Kuwait	8.79%
Lebanon	8.69%
Palestine	5.65%
Jordan	3.95%
Morocco	3.78%
Syria	3.54%
Bahrain	2.17%
Qatar	2.16%
Tunisia	1.38%
Libya	1.20%
Oman	1.05%
Algeria	0.51%
Sudan	0.40%
Yemen	0.31%
Iraq	0.29%
Source: Madar Research	
* Lebanon, Tunisia, Algeria and Morocco shares in Web pages developed in the region would be higher if content in French was included	

## 4-4 Online Advertising

The Internet advertising expenditure continues to grow globally at the fastest rate of any medium, at an average of 14.2% a year between 2010 and 2013.

<b>Table (15): Global Internet Advertising Spend Vs. Total Advertising Spend</b>					
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>Global Ad spend (US\$ millions)</b>	<b>421,161</b>	<b>447,541</b>	<b>465,724</b>	<b>492,910</b>	<b>519,857</b>
Growth Rate		6.26%	4.06%	5.84%	5.47%
<b>Internet Ad Spend (US\$ millions)</b>	<b>54,700</b>	<b>63,690</b>	<b>72,176</b>	<b>82,818</b>	<b>94,967</b>
Growth Rate		16.44%	13.32%	14.74%	14.67%
<b>Internet's Share of Total Ad Spend</b>	<b>12.99%</b>	<b>14.23%</b>	<b>15.50%</b>	<b>16.80%</b>	<b>18.27%</b>

Source: ZenithOptimedia & Madar Research

As shown in the table above, global ad spending is estimated at \$448 billion in 2010 (Source: ZenithOptimedia) and online ad spending constituted 14.23 percent of the total. Applying this ratio to the Arab world (11 billion in total ad spending) would bring online ad spending to over \$1.5 Billion – or 11 times the actual spending. In other words, online ad spending in the Arab world constitutes only 9 percent of what it should be, according to this ratio.

<b>Table (16): Arab World Internet Advertising Spend Vs. Total Advertising Spend</b>					
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>Arab Word Ad spend (US\$ millions)</b>	<b>10,000</b>	<b>11,000</b>	<b>12,000</b>	<b>13,000</b>	<b>14,000</b>
Growth Rate		10.00%	9.09%	8.33%	7.69%
<b>Internet Ad Spend (US\$ millions)</b>	<b>95</b>	<b>142</b>	<b>213</b>	<b>276</b>	<b>359</b>
Growth Rate		50.05%	49.93%	30.01%	29.99%
<b>Internet's Share of Total Ad Spend</b>	<b>0.95%</b>	<b>1.29%</b>	<b>1.77%</b>	<b>2.13%</b>	<b>2.57%</b>

Source: Madar Research

Nevertheless, the dismal view presented by this comparison bears good news for the future of online advertising in the Arab world as it underlines the great value of the achievable potential, as well as it indicates that spending on online ads is bound to approach global levels in next few years.

**Table (17): Arab World Internet Ad Spending 2010-2018**

Year	Total Market Size	Search Engines Share (%)	Search Engines Revenues
2011	212.6	40%	85.04
2012	276.4	40%	110.56
2013	359.3	45%	161.69
2014	449.2	45%	202.14
2015	561.5	45%	252.68
2016	701.8	45%	315.81
2017	842.2	50%	421.10
2018	1,010.6	50%	505.30
2019	1,212.7	50%	606.36

Source: Madar Research

**Table (18): The New Arabic Search Engine Revenue 2014-2018 Conservative Scenario**

Year	Search Engines Revenues from the Region	The New Arabic Search Engine Share	The New Arabic Search Engines Revenue
2011	85.04	-	-
2012	110.56	-	-
2013	161.685	-	-
2014	202.14	1.00%	2.02
2015	252.68	5.50%	13.90
2016	315.81	10.00%	31.58
2017	421.10	13.00%	54.74
2018	505.3	14.00%	70.74
2019	606.36	15.00%	90.95

Source: Madar Research

Based on a study conducted by Madar Research, online advertising expenditure in the Arab world registered 50% percent growth in 2010 to reach about US\$141.8 million.

Search engine giants are making a tremendous amount of money from the Arab region, consistently growing with the rise of the number of internet users in the Arab world. It is estimated that within a few years search engine giants will be making well over 500 million dollars per year from Arab region; that is unless a local Arab search engine is developed to share in these profits and

#### 4-4-1 Growth Forecast

Based on the study, the region's online advertising expenditure is estimated at 50 percent growth in 2010. The succeeding years, - 2011, 2012 and 2013 - will likely grow by an average of about 50%, 30% and 30%, respectively. Thus, the compounded average growth rate per year from 2010 to 2013 is forecast at 36%.

Besides the potential growth in online ad budgets of major marketers such as those found in the travel/hospitality, finance, automotive and IT/Electronics sectors, the future growth of online ad expenditure will be aided by the ubiquitous keyword search advertising tools on websites like Google and social networks like Facebook, YouTube and Twitter. Indeed these platforms enable small and mid-sized companies to directly place ads online, with as little as a \$1,000 advertising budget.

#### 4-4-2 Online Advertising Spend by Ad Format

Paid search constitutes the largest part of Internet advertising worldwide.

<b>Table (19): Internet advertising by type</b>					
<b>Share</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Display	33.51%	34.23%	35.02%	35.66%	36.22%
Classified	18.17%	16.90%	16.37%	15.52%	14.70%
<b>Paid search</b>	<b>48.32%</b>	<b>48.87%</b>	<b>48.61%</b>	<b>48.83%</b>	<b>49.08%</b>
Total	100.00%	100.00%	100.00%	100.00%	100.00%
Source: ZenithOptimedia					

In terms of online ad formats in the Arab region, display banner ads accounted for the majority (56%), of online ad spending in the Arab region, whereas it only accounted for 34 percent of the online ad spend globally in 2010.

<b>Table(20): Ad Formats</b>	<b>World</b>	<b>Arab World</b>
Search	48.87%	43%
Classified	16.90%	1%
Display Related Ads	34.23%	56%
Source: Madar Research		



## 4-5 Arabic Search Engine Market Players

Many websites in the Arab world claim to offer proprietary web search engine services, but only few pass the test. Most of these search engines merely offer search within their directories, such as [www.awse.com](http://www.awse.com) or [www.raddadi.com](http://www.raddadi.com), or they provide meta-search services (by directing search queries to existing global search engines - [www.yamli.com](http://www.yamli.com) and [www.imhalal.com](http://www.imhalal.com) are two examples).

In addition to international web search engines that support the Arabic language (such as Google, Yahoo! And Bing), a few Arab companies have developed true web search engines for Arabic use, but they are still very limited in their capabilities and generally have poor performance. Two Arabic web search engines are worth to be mentioned:

**Ayna** ([www.ayna.com](http://www.ayna.com)) was founded in 1997 as a division of EGS Inc., a developer of Arabic-specific applications which enable users to search and locate Arabic-language resources. Ayna's services consist of a search engine and free e-mail. Ayna has indexed only several millions of web pages. Ayna provides limited support for Arabic morphological search, such as diacritics or the kashida. Though this support is useful, it can also create problems if it is not precisely implemented. From the Arabic language usage point of view, Ayna search engine is insufficient and poor in performance.

**ATA Software** has developed an Arabic search engine (Alhoodhood) that offers one of the best Arabic morphology analyzer currently available on the Web. ([www.alhoodhood.com](http://www.alhoodhood.com)). Unfortunately, Alhoodhood has so far indexed only a small fraction of existing Arabic web pages. It looks more like a shwocase for the Arabic software developed by the company.

## 4-6 Local Search Engines in Non-Arab World

Many top levels local Search Engines such as Yandex (Russia), Baidu (China) and Naver (Korea) beat Google in their countries.

### 1. YANDEX ([www.yandex.ru](http://www.yandex.ru))

Russian-based search engine / news aggregator Yandex is an exemplary case study on how a local search engine can outperform its global counterparts in a specific language. This obviously is achieved by deeper levels of linguistics knowledge. In contrast to western search engines that are built on English language building blocks, Yandex is primarily built around the Russian language. Its particular strength lies in its ability to recognize keywords in search queries in spite of the complexity of the language due to its morphology and inflected language.

Yandex has succeeded in beating Google in the Russian Market and maintain its current market share of 64% in Russia.

<b>Table (21) Russian Market</b>	<b>2010</b>
Yandex	64%
Google	22%
Others	24%
<i>Source: Liveinternet.ru</i>	

## 2. BAIDU ([www.baidu.com](http://www.baidu.com))

Another example of non-English language search engine / news aggregator that has been a regional success is Beijing-based Baidu, it now dominates about 75% of the Chinese market.

<b>Table (22) Chinese Market</b>	<b>2010</b>
Baidu	75%
Google	20%
Others	5%
<i>Source: Analysis International</i>	

Baidu's success is directly related to its understanding of the local market and strong government support.

## 3. NAVER ([www.naver.com](http://www.naver.com))

Another market where local players are more dominant than international brands in the search engine / news aggregation arena is South Korea. According to comScore qSearch, NHN Corporation which includes Naver.com ranked as the top search engine / news aggregator with 77% of the market share in 2010. Daum also a local player ranked second place with 20% share followed by Google with 7% of share.

<b>Table (23): Top Search Properties in South Korea by Query Volume - 2010</b>	
	<b>Share of Searches</b>
Naver - NHN Corporation	77%
Daum	12%
Google	2%
Others	9%
<i>Source: comScore qSearch</i>	

## 4. SEZNAM ([www.seznam.cz](http://www.seznam.cz))

Seznam is the leading search engine in Czech Republic with 54% market share. Google market share is only 41%.

The following table lists the major local search engines that beat Google in their countries along with their annual revenues and market shares compared to Google (end 2010):

**Table (24):**

Country	Population Million	Search Engine	Languages	Number of Employees	Revenue Million \$	Market Share %	Google Market Share %
Russia	141	Yandex	Russian, Ukrainian, English	2,500	440	64	22
China	1,330	Baidu	Chinese, Japanese	10,887	1,200	75	20
South Korea	49	Naver	Korean	2,000+	1,000	77	2
Czech Republic	10	Seznam	Czech	700	90	54	41

The following table shows the market value of local search engines that beat Google in their countries (end 2010):

**Table (25):**

Country	Search Engine	Market Value (\$ billion)
Russia	Yandex	13
China	Baidu	46
South Korea	Naver	8
Czech Republic	Seznam	1.1

#### **4-7 The Need for a New Arabic Internet Search Engine**

The profile of the Arab Internet user has shifted over the past decade from being mainly that of a university-trained male executive with English language proficiency and academics, to a much wider profile that has started to border on the layman, grouping students, housewives, as well as the bulk of the business community. The Internet user community in the Arab world, therefore, is becoming more heterogeneous, resembling other Internet communities around the world. Meanwhile, an emerging market revolving around this community started to cater for its varied interests, focusing mainly on the youth, which today constitute the largest portion of the region's Internet users.

As the Internet community began to expand to various social strata, the number of users incapable of thoroughly benefiting from Internet content unless provided in the Arabic language started to increase, which is estimated by Madar Research to constitute 78 percent of all Internet users in the Arab world.

<b>Table (26): Arab Internet Users Incapable of Thoroughly Benefiting from Web Content Unless Provided in Arabic</b>	
<b>Year</b>	<b>% of Users</b>
1995	1%
1996	3%
1997	6%
1998	10%
1999	15%
2000	20%
2001	28%
2002	37%
2003	46%
2004	52%
2005	56%
2006	60%
2007	65%
2008	70%
2009	74%
2010	78%
<i>Source: Madar Research</i>	

As is the case with the global market, the Arab world web search market is dominated by Google, followed by Yahoo! and Bing. Other International search engines, such as Alltheweb and Altavista, are also used, but on a very limited scale.

The main recommended features for a new Arabic Internet search engine are as follows:

- a. Indexing all Arabic web pages created within and outside Arab countries, and non-Arabic pages created in Arab countries.
- b. Responding to the unique features of the Arabic language and the challenges of Arabic grammar and the meanings of Arabic words – their morphological analysis - to produce relevant search results.
- c. Providing dozens of unique search related Arabic/Islamic services.
- d. Filtering out inappropriate content, but not legitimate alternative viewpoints and knowledge.
- e. Searching the contents of university archives, libraries and publishers.
- f. Providing an in-depth local news gathering service.

#### **4-8 The failure of local large-scale Arabic search engines**

Designing and building a large-scale Arabic search engine could prove a very complex task, even for organizations that may have the expertise to build such programs in other languages, due to the unique attributes of written Arabic. As such the success of an Arabic search engine project would rely primarily on allocating sufficient capital

investment and hiring a team of professionals and highly skilled experts in the field of search technology and Arabic language. Tens of cultural, religious, linguistic and local services should be built around a powerful local Arabic search engine which today is beyond the international search engines strategies.

Without these three elements, failure would be likely.

The three true local large-scale Arabic search engines in the past decade are: araby.com, onkosh.com and ayna.com. Both araby.com and onkosh.com shut down their operations in 2009 and 2010 respectively. Ayna.com is the only one which is still operating.

**araby** (www.araby.com) was launched by Maktoob in 2006. The overall performance of araby.com in term of index size, level of Arabic language support and cultural/local services was disappointing.

Araby.com was shut down immediately after selling Maktoob community portal to Yahoo in 2009.

**Onkosh** (www.onkosh.com) was an Egyptian search portal for the Arabic web, developed by Orascom Telecom. Onkosh was launched in September 2007 and closed down in 2010

**Ayna** (www.ayna.com) was founded in 1997 as a division of EGS Inc., a developer of Arabic-specific applications which enable users to search and locate Arabic-language resources. Ayna's services consist of a search engine and free e-mail. Ayna Mail can be used in Arabic, English, German and Spanish. Ayna has indexed only several millions of Arabic web pages (less than 2 percent of the Arabic web pages indexed by Google). Ayna provides limited support for Arabic morphological search. From Arabic language usage point of view, Ayna search engine is insufficient and poor in performance. Despite of the above mentioned weakness, Ayna.com has become marginally profitable a few years ago.

The following are the main reasons for failure in building a successful local Arabic search engine:

#### **Small fund**

The initial capital investments allocated by the local Arabic search engines were insufficient (Less than 2 million US dollar) while such a project requires a minimum of 10 million US dollars.

#### **Small index**

The most critical requirement that a local Arabic search engine should meet is the volume of Arabic web pages it has indexed. The size of the index has direct correlation to the success of the search engine. That is why the most successful Arabic search engine on the Internet is Google, which has indexed the largest number of Arabic web pages among all engines. Unfortunately, the size of the largest index of Arabic web pages offered by a local Arabic search engine was only 10 percent of the Arabic web pages indexed by Google.

### Lack of professionalism and innovation

A successful Arabic search engine project requires a team of professionals and highly skilled experts in the field of search technology and Arabic language. Unfortunately, none of the local Arabic search engine projects has been managed by such a team. The result was weak Arabic language support and poor local/cultural services.

### Low Internet ad spending

The two largest local Arabic search engines namely Araby.com and onkosh.com shut down their operations in 2009 and 2010 respectively when the regional Internet advertising market size was relatively small. The following table shows the growth of Internet advertising market between 2006 and 2017.

Arab World Internet Advertising Market (million US\$) 2006-2017											
2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
15.7	28.2	50.8	94.50	141.80	212.60	276.40	359.30	449.20	561.50	701.80	842.20

Please note that the market size is growing rapidly and it can now financially support such a project with a small market share of 2 percent only.

## **4-9 Go-To-Market Approach**

### **4-9-1 Products/Services**

The new search engine will generate revenue from selling sponsored links (based on keyword search), sponsorships, and online banners advertisement services.

### **4-9-2 Price**

The new search engine will offer competitive prices for all types of ads.

#### **Banner Ads**

CPM (cost per one thousand impressions) – the standard selling unit for Internet ads – for a standard banner ad ranges from \$20 to \$50 across the Arab world's major portals. Banner ads are normally the horizontal ads that appear on the heading of a web page. Economies of scale are achieved as unit impressions increase, which means a portal like AMEInfo might charge \$40 per CPM for orders between 40,000 and 100,000 impressions but will only charge \$25 per CPM for orders upwards of 500,000 impressions.

#### **Sponsorship**

Premium prices are likewise offered for special banner ads (e.g. monster, front-page, etc.) A front page banner ad with AMEInfo costs about \$3,500 per day, while a sponsorship banner ad with the Arabic page of Al Jazeera costs \$20,000 per month

#### **Sponsored links**

Sponsored links type of online advertising services uses bid-based model. Google AdWords, Yahoo! Search Marketing, and Microsoft adCenter are the three largest network operators, and all three operate under a bid-based model. Cost per click (CPC) varies depending on the search engine and the level of competition for a particular keyword.

### **4-9-3 Channels**

Four distribution channels should be considered. These are the follows:

**1- Direct Sales (Traditional):** The new search engine will hire very large sales team distributed in several countries. The number of sales employees is planned to exceed 800 employees in 2017. The main reason for hiring such a large sales team is to make direct contacts with potential clients which are much needed in the first five years of operation.

**2- Direct Sales (Online):** The new search engine will develop in-house auction application needed to sell the sponsored links advertisement services directly through the search portal.

**3- Regional Advertising Agencies:** The role of ad agencies is prominent throughout the region. Ad agencies currently control about 80 percent of all ads placed or broadcast in the GCC. Working closely with ad agencies is important to increase the new search engine's market share of advertising revenue.

**4- International Online Advertising Networks:** The new search engine will work with one or more international player/s in this field to connect advertisers to the new search engine's portal on revenue sharing basis.

#### **4-9-4 Promotions - New marketing / branding strategy**

Marketing requires promoting The Search Portal's name in the traditional media; newspapers, magazines and television, and also on websites. Traditionally, this is done by launching an aggressive advertising campaign that will cost approximately 2 million dollars annually; maybe even more for a large portal like the new search engine. What can we do?

##### **First: Research Based Press Releases**

We need to come up with a new marketing strategy that will address the issue in a non-traditional fashion, giving us greater effectiveness at a lower cost. How can this be done?

By establishing a research centre for Internet use in the Arab world, and publishing an important study every two weeks. We follow this up with press releases in Arab and international newspapers and magazines, in both Arabic and English. The press releases will be published for free, due to the lack of similar research in the area. We will also prepare content for television programs, choosing two or more broadcasting stations to work with. These programs would be sponsored by The Search Portal, in return for taking part in the content preparation. We will also organize distinguished events and contests on our site, and negotiate with major companies to sponsor them, whereby we will use a part of the sponsorship money to fund the advertising necessary to announce these events. We will also produce exciting press reports that will be published for free in the media.

The Benefits of Such a Strategy:

- Reducing the marketing budget.
- Building a strong name for The Search Portal, both in the Arab world and globally, and publicizing it everywhere.
- Establishing specialized functions, like the research centre and the centre for the production of television content. These will entice many large companies to enter into partnerships with The Search Portal.
- Gaining experience in television broadcasting.
- Backing IT and other channels with unique multimedia content.



- Creating a new channel of revenue

#### Requirements:

- Experience in market research: Abdul Kader Kamli has a very high level experience in the market research related to the ICT.
- We have already allocated salaries for market researches in our business plan.
- The nature of The Search Portal will help us in achieving a high level of market intelligence tasks.

### **Second: Utilizing the Social Networks**

In today's world, regular advertising just doesn't cut it anymore. In order to showcase our new portal to a wide cross section, we must rely on the ever growing avenue of social media. This can be done through paid and non-paid creative advertising.

#### Paid Advertising:

Websites like Facebook offer advertising space highly focused to reach certain demographics. With Facebook enrolment reaching tens of millions in the Arab world, we can be certain that placing an ad on Facebook is sure to reach a wide audience. The advertisements are placed according to the subscriber's language, gender, and other relevant preferences. A strategically placed advertisement is sure to garner the desired effect.

#### Non-Paid Advertising:

**Facebook-** This is perhaps the most cost-effective way of reaching a wide audience. On Facebook alone, we can create buzz by simply creating a Facebook account, making friends, and then posting links to the portal directly on to friends' walls. The links are sure to be viewed by other people and once deemed worthy can even be reposted by others on their own accord. As an alternative, we can simply share the links with family and friends without creating an account, hoping that they will then repost on their friends' walls. We can also, perhaps most effectively, create a group on Facebook with updates about the new portal. The group can highlight new and exciting developments and launch times for new phases.

**Twitter-** By utilizing twitter, we can keep our audience updated with new developments on the portal project. We can post links to interesting sections of the portal and update statuses to reflect what's happening with the project. Twitter functions like a diary where a person posts new updates on any specific personal or business oriented topic. Many different businesses are now on twitter and utilizing it successfully by creating links to their website and even organizing competitions to win different kinds of promotional products.

**Groups** -Many websites such as Google or Yahoo have social groups that bring together people interested in everything from technology to shoes. We can create groups on a few of these websites promoting our new portal.

## **5 TECHNICAL STUDY**

### **5-1 Company Overview**

#### **5-1-1 Core Functions**

Seven core functions are required to launch the Company and cater to the day to day operations professionally. These functions could be summarized by the following:

1. Product Management
2. Business Development
3. Technology & Engineering
4. Research & Development
5. Marketing & Sales
6. Finance & Administration
7. Human Resource Management

These activities will be implemented by engaging Arabic-based know how and expertise in the domain of Marketing, Software Development, Technology, Finance, Linguistics and Arabic searching algorithms.

Two of the core functions, i.e. Product Management and Content & News will be carried out under the umbrella of one combined department - Product Management.

#### **5-1-2 Top Management - Short Description**

The management team should represent some of the most experienced technology professionals / business in the Arab Wold.

The following are the top managers and their functions:

##### **Executive Chairman of the Board**

The Executive Chairman will be responsible for ensuring that the new search engine's board is effective in setting and implementing the Arabic Search Engine's direction and strategy, and will act as the Company's leading representative.

##### **President and Chief Executive Officer**

Will provide leadership and direction and coordinate all activities of the company in accordance with the goals and objectives of the organization to safeguard and grow the assets of the organization for future generations, while providing sound returns to the owners.

Along with the chairman, the president/CEO will oversee the company's technical and business strategy.

**Vice President, Product Management**

Will lead the company's product management efforts (including design and innovation) on search products – web search, images, videos, news, books, products, labs and more.

**Vice President, Research and Special Initiatives**

Will be responsible for research and special initiatives and helping the company connect to the university research community.

**Vice President, Technology and Engineering**

Is responsible for identifying new enabling technologies and applications on the Internet and other platforms for the company. He will also be responsible for all engineering and product development activities including the company's advertising, crawling, indexing and query serving systems, along with the distributed computing infrastructure.

**Vice President, Finance and Chief Accountant**

Is responsible for external reporting, technical accounting, the worldwide general ledger and consolidations, and internal audit.

He is also responsible for the finance business partnerships with all functions and regions, as well as leading the company's forecasting, management reporting and financial analysis efforts.

**Vice President, Marketing & Sales**

Will be responsible for the company's marketing efforts globally with special focus on the go-to-market strategy and adoption of the company's new products, from consumer offerings to business services.

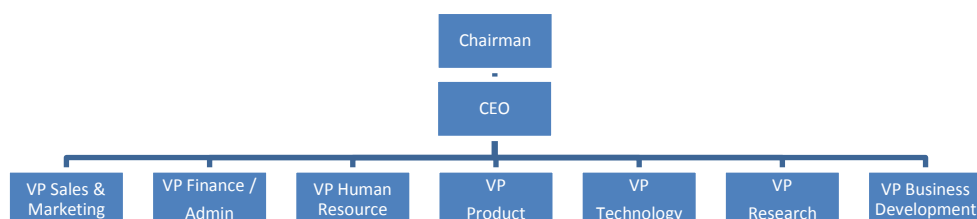
He will also be responsible for global sales operations whether traditional or online.

**Vice President, Business Development**

He will build and manage a business development team. He will oversee teams that manage early-stage partnerships, explorations and technology licensing. He also will guide strategy and develop new partnerships and internal projects with the new search engine's engineering and product teams.

**Vice President, Human Resource**

Will plan, direct, and coordinate human resource management activities of the new search engine to maximize the strategic use of human resources and maintain functions such as employee compensation, recruitment, personnel policies, and regulatory compliance.



**The New Search Engine Company Organization Chart (Top Level)**

### **5-1-3 The new search engine Advisory Board**

The new search engine will establish an advisory board comprised of highly regarded leaders from business, government, and academia.

#### **Vision**

To promote research and development in search science, linguistics, and other Internet related fields in the Arab world.

#### **Mission**

Exchanging information and expertise among Board Members to aid in determining the new search engine's research direction, as well as assisting Board Members and their public or private institutions in gaining a comprehensive understanding of the regional research and development activities and achievements in search science, linguistics, and other Internet related fields.

#### **Mandate, Functions and Benefits of the Advisory Board**

Exchanging information and expertise through e-mail, telephone and meetings. This exchange may also take place between the Board and outside parties, such as decision makers and government officials.

#### **e-Newsletter**

The new search engine will provide a quarterly electronic newsletter, covering regional Internet and linguistics research and development, as well as references to international research papers published on related issues.

#### **Annual Meeting**

The new search engine and the Advisory Board will hold an annual meeting, which may be expanded to include select individuals with considerable influence on the direction of research in the region. The meeting will act as a platform for exchanging views on the direction of the new search engine, its focus and agenda (as well as collaborations and associations), and its various activities and operations. The meeting will strive to uphold the Mission of the Board, optimize the benefits shared between Board Members (including the new search engine), as well as support the role of Research & Development in the region.

#### **Annual Leaders Report**

This landmark report combines the progress of Internet and linguistics research and development in the Arab world with recommendations for Arab government, university, and corporate leaders over a one-year period. The Report amalgamates research and information with opinions and consultancy input from all Board Members, thus providing a roadmap for each of the covered topics.

### **Consultancy**

Synergy between the new search engine team and Members of the Advisory Board will forge a strong force which can be employed to serve the consultancy needs of specific research and development projects in the Arab world.

#### **5-1-4 Organization Structure**

The Company will be established in the last quarter of 2012, having its software development office in a GCC country and business office in Bahrain or United Arab Emirates. Regional offices covering the Arab Countries will be established later on. The required manpower, salary structure, projected staff growth and personnel costs for all offices are clarified in the financial study.

#### **5-2 Company Services**

The Company will provide the following services:

- Internet Search Services with advanced Arabic linguistic capabilities.
- Dozens of new search related Arabic/Islamic services.
- Very powerful News Aggregation service with more than 500 percent increase in the number of local sources covered when compared to Google News and over 30 unique news related services targeting Arab natives and global Arabic news seekers. (see Annexure I)
- Professional services targeting enterprises/government agencies, such as automatic generation of a daily newsletter and custom reports.
- Yellow Pages: Providers of searches in the Yellow Pages or other data banks may significantly increase the quality of their service by offering results from the Internet in addition to their own data. This means that, for example, the search for restaurants in the Yellow Pages may be expanded to include current offers of the restaurants by incorporating the Internet sites of the restaurants themselves. This improves the quality of results for the searchers and provides new advertising opportunities for the operators of Yellow Pages data banks. The new search engine will benefit from additional revenue sources from advertising income.
- It shall be a target for the new Search Engine Company to offer special services for digitalisation of the inestimable wealth of historical and modern Arabic literature in libraries and publishing houses. Making available the wealth of Arabic literature for Internet research, with downloading of entire books or extracts from documents being a very significant, strategically important mid-term service from the new Search Engine Company. This service is to be established rapidly, in close co-operation with universities, libraries and

publishing houses. Availability of such service will encourage an increase in the creation of more Arabic content; thus increasing the demand on the search engine services.

- Mobile Services: Most services will also be available to mobile phones users through custom “apps” and mobile sites.
- Sponsored links and online banners advertisement Services

## 5-3 About Search Engine Technology

### 5-3-1 Technology Provider

The new search engine wishes to set up an independent Arabic internet search engine that will also support the development of Arabic internet content. This new Arabic search engine will combine specifically developed Arabic language support and search algorithms, with the proven open source search engine technology **currently used by Facebook, Amazon and Yahoo.**

Full Internet/enterprise search engine components with unique Arabic support and services will be developed.

The following is a list of main software components that will be licensed, acquired or developed by the in-house team:

- 1) The Web crawler: **Nutch will be used**
- 2) The Database: **Hadoop will be used (indexing will be developed in-house)**
- 3) The Search Algorithm: **In-house development**
- 4) The Ranking Algorithm: **In-house development**
- 5) Arabic Software Main Components
  - Common Errors processing: **In-house development**
  - Arabic Language Morphology Analyzer: **Alkhilil Morpho sys –Developed under supervision of ALESCO (Arab League Educational, Cultural and Scientific Organization)**
  - Automatic classifier of Arabic pages: **Several options are available**
  - Special processing of Arabic language in the Exact and non Exact Phrase Modes: **In-house development**
  - Special processing of Names, Months, Numbers and many others Software Requirements: **In-house development**
  - Arabic Dialect Dictionary: **In-house development**

#### 6) Additional Arabic Software Components

- Arabic Spell checker: **Several options are available**
- Arabic Text to Speech: **Several options are available**
- Arabic-Arabic Dictionary: **Several options are available**
- Arabic-English Dictionary: **Several options are available**

The above components will form a full search solution for both internet and Intranet.

**The estimated value of the above system/solution is between 15 and 20 million US Dollar**

**NB:** English to Arabic (and vice versa) machine translation will be considered in later stage.

### 5-3-2 Distinguished Search Engine Capabilities

A defined objective of the search engine to distinguish it from competitors is to maintain the quality of search results at a very high level. In addition to the unmatched quality results the search engine is foreseeing, the following distinctive features are planned to be added to the search engine:

- The level of Arabic support provided by international search engines including Google is very limited. We will provide significantly better processing/analysis of Arabic language, which should lead to a better understanding and response to the Arabic search queries.
- The linguistic differences between Arabic and English are huge, so we will build a different indexing structure to get better results for searches.
- The Arabic news aggregation services provided by international search engines are very poor. We will have a vastly competitive advantage over common news aggregation services, such as **Google News**, in terms of coverage (**with more than 500 percent increase in the number of sources covered**) and services targeting Arab natives and global Arabic news seekers (see Annexure I)
- Dozens of cultural, religious, and linguistic services will be built around the new Arabic search engine which today are beyond the international search engines strategies

### 5-3-3 Customized Web Pages and Services

Part of the approaches that will be adopted by the search engine in order to gain more popularity:

- Offering a search site adapted to meet the requirements of the respective country in which the search site is located.

- Providing databank search customized to the needs of libraries, universities, governments, etc.

## **6 FINANCIAL STUDY**

We have compiled the projection of 'Proposed Arabic Internet Search Engine Company as set out on the attached Excel File.

This projection has been prepared to estimate how the 'Proposed Arabic Internet Search Engine Company is expected to grow and finance its activities. As the Arabic Internet Search Engine project has not yet commenced, the projection has been prepared using a set of assumptions that include hypothetical assumptions about future events and management's actions that are not necessarily expected to occur.

Even if the events anticipated under the hypothetical assumptions described above occur, actual results are still likely to be different from the projection since other anticipated events frequently do not occur as expected and the variation may be material.

### **6-1 Summary of Significant Accounting Policies**

The accompanying projection has been prepared in accordance with International Financial Reporting Standards and International Accounting Standards promulgated and adopted respectively; by the International Accounting Standards Board and interpretations issued by the International Financial Reporting Interpretations Committee.

The following is a summary of the significant accounting policies adopted in the preparation of the projection:

#### **(a) Accounting Convention:**

The projections are prepared under the historical cost convention.

#### **(b) Working Capital:**

Working capital is estimated at average running cost i.e. direct costs and operating expenses (except depreciation) for four months.

#### **(c) Depreciation & Amortization:**

Tangible fixed assets and intangible assets are stated at cost less related accumulated depreciation / amortization. Depreciation / amortization are provided over the estimated useful lives of the related assets using the "straight line" method and assuming no salvage value. The estimated useful lives of various categories of assets are as follows:



### **Useful Lives**

Servers & Storages	3 years
Office Equipment	10 years
Office Computers	3 years
Software License	10 years

**(d) Revenue:**

Search advertising revenue is recognized on accrual basis upon each time a user clicks on one of the sponsored links that are displayed next to the search results on the websites.

Revenue from banner / sponsorship is recognized based on the fees charged to the advertisers in accordance with the contractual terms.

## **6-2 Assumptions Underlying the Projection**

The significant assumptions underlying the projection are as follows:

- (a) Initial required funds amounting to US \$ 13 million.
- (b) The management will be able to generate the revenue as projected under “Projected Profitability Statement” (Please refer to the Excel File).
- (c) The management will be able to recruit the required staff as projected under “Projected Personnel Costs” (Please refer to the Excel File).
- (d) Working capital estimated at average running cost for four months will be adequate.
- (e) The management will be able to either acquire or develop the Arabic Language Support Software.

### 6-3 Project Cost

Project cost or initial investment of the Arabic Internet Search Engine Project is estimated at US \$ 13 million which is the summation of tangible fixed assets and intangible assets required in the first 16 months, pre-operative expenses, working capital and contingencies to cover the initial cash flow deficit.

<b>Table (27): Project Cost in US Dollar</b>	
Tangible Fixed Assets (2012+2013)	<b>478,674</b>
Intangible Assets (2012+2013)	<b>1,783,958</b>
Preoperative Expenses	<b>5,561,950</b>
Working Capital	<b>2,200,000</b>
Contingencies	<b>2,000,000</b>
<b>Estimated Project Cost</b>	<b>12,024,582</b>
<b>Rounded Off</b>	<b>13,000,000</b>

### 6-4 Tangible Fixed Assets

Tangible fixed assets of the Arabic Internet Search Engine Project are estimated at US \$5,763,000 consisting of the following:

<b>Table (28): Tangible Fixed Assets</b>				
<b>Year</b>	<b>Servers and Storages US \$</b>	<b>Office Equipments &amp; PCs US \$</b>	<b>Office Furniture US \$</b>	<b>Total US \$</b>
2012	26,000	36,000	30,000	<b>92,000</b>
2013	228,000	69,000	57,500	<b>354,500</b>
2014	468,000	162,000	135,000	<b>765,000</b>
2015	518,000	144,000	120,000	<b>782,000</b>
2016	403,000	144,000	120,000	<b>667,000</b>
2017	699,000	144,000	120,000	<b>963,000</b>
2018	826,000	144,000	120,000	<b>1,090,000</b>
2019	802,000	135,000	112,500	<b>1,049,500</b>
<b>Total</b>	<b>3,970,000</b>	<b>978,000</b>	<b>815,000</b>	<b>5,763,000</b>

Number of servers and size of storages are projected based on estimated search requests and estimated web pages (index size & Cache).

Office equipment and office computers are estimated based on number of employees.

(Please refer to the Excel File).

## 6-5 Intangible Assets

Intangible assets of the Arabic Internet Search Engine Project are estimated at US \$23,250,000, of which the majority (\$20,700,000) will be created in-house, while the remaining part will be purchased or licensed.

<b>Table (29): Intangible Fixed Assets</b>			
<b>Year</b>	<b>Created In-House US \$</b>	<b>Purchased US \$</b>	<b>Total US \$</b>
2012	100,000	550,000	650,000
2013	800,000	800,000	1,600,000
2014	1,500,000	200,000	1,700,000
2015	2,500,000	200,000	2,700,000
2016	3,000,000	200,000	3,200,000
2017	3,600,000	200,000	3,800,000
2018	4,200,000	200,000	4,400,000
2019	5,000,000	200,000	5,200,000
<b>Total</b>	<b>20,700,000</b>	<b>2,550,000</b>	<b>23,250,000</b>

(Please refer to the Excel File).

## 6-6 Depreciation and Amortization

Depreciation and amortization are computed based on estimated useful lives of the tangible fixed assets and intangible assets as discussed under 'c' of summary of significant accounting policies. Details of depreciation and amortization expenses for the projected 8 years are as follows:

<b>Table (30): Depreciation and Amortization (2012-2019)</b>	
<b>Year</b>	<b>(US \$)</b>
2012	10,132
2013	155,604
2014	367,458
2015	618,521
2016	774,910
2017	865,625
2018	966,618
2019	1,141,167
<b>Total</b>	<b>4,900,035</b>

(Please refer to the Excel File).

## 6-7 Pre-Operative Expenses

Pre-operative expenses which comprises of personnel costs, technical infrastructure, other infrastructure and running costs, external services and marketing is estimated at US \$ 5.56 million.

**Table (31): Pre-Operative Expenses**

Date	Servers, Storages & Services	Personnel	Offices Rent, Consumables & Equip.	Software	Marketing	Travel, Communications & Hardware Maintenance	External Expenses	Advisory Board & Others	Total
2012	34,000	445,133	92,904	550,000	-	21,000	60,000	80,000	1,283,038
2013	295,400	2,286,875	236,638	800,000	120,000	110,000	190,000	240,000	4,278,913
<b>Total</b>	<b>329,400</b>	<b>2,732,008</b>	<b>329,542</b>	<b>1,350,000</b>	<b>120,000</b>	<b>131,000</b>	<b>250,000</b>	<b>320,000</b>	<b>5,561,950</b>

(Please refer to the Excel File).

## 6-8 Working Capital

Working capital amounting to US \$ 2.2 million is estimated at average running cost i.e. direct costs and operating expenses for four months of the first year of operation (Year 2014).

(Please refer to the Excel File).

## 6-9 Source of Finance

The initial investment required is amounting to US \$ 13 million

Subsequent investments in the tangible and intangible fixed assets in the later years will be financed by the operating cash inflow.

(Please refer to the Excel File).

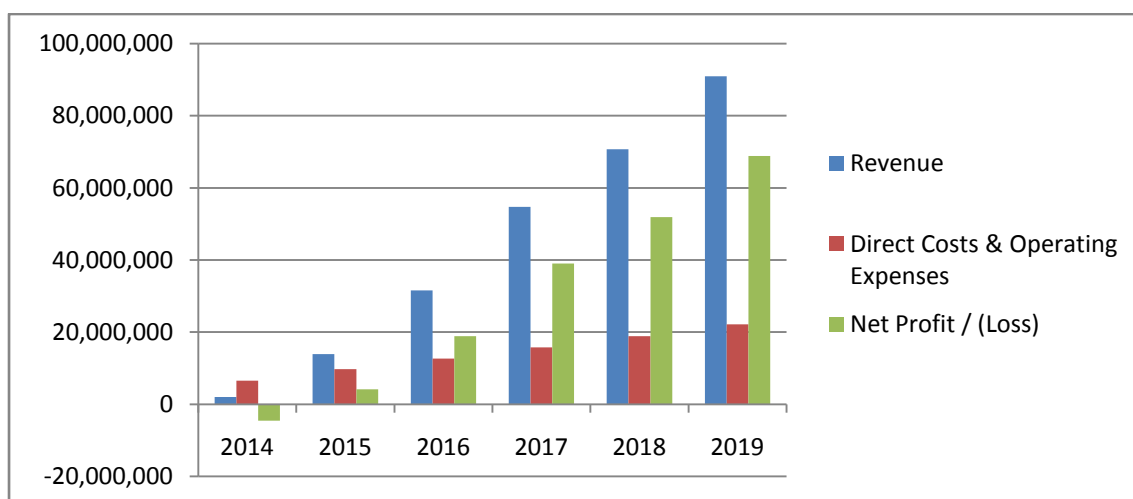
## 6-10 Projected Profitability

The project is expected to incur a net loss of US \$ 3,160,017 and \$ 4,546,931 in 2013 and 2014 respectively. The project is expected to make net profits from 2015. The net profit for 2015 is expected at US \$ 4,170,145 and is expected to increase to US \$ 68,803,933 in 2019, the last year of the projection period. Retained earnings at the end of the projection period are expected to reach US \$ 174,422,563

<b>Table (32): Projected Profitability</b>								
	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
<b>Revenue</b>	0	0	2,021,400	13,897,125	31,581,000	54,743,000	70,742,000	90,954,000
Fixed Expenses	228,192	1,248,229	2,657,099	3,970,821	5,261,909	6,655,858	8,088,080	9,585,602
Variable Expenses	382,978	1,911,788	3,911,232	5,756,159	7,442,202	9,081,666	10,769,681	12,564,465
<b>Total Expenses</b>	611,169	3,160,017	6,568,331	9,726,980	12,704,112	15,737,525	18,857,761	22,150,067
<b>Net Profit /(Loss)</b>	<b>-611,169</b>	<b>-3,160,017</b>	<b>-4,546,931</b>	<b>4,170,145</b>	<b>18,876,888</b>	<b>39,005,475</b>	<b>51,884,239</b>	<b>68,803,933</b>

(Please refer to the Excel File).

All amounts in the following graph are stated in US Dollars.



## 6-11 Projected Cash Flow

Cash inflows in 2012, will be US \$ -3,088,183 and it will increase to US \$ 54,350,171 in 2018, thereby resulting in a cumulative cash surplus of US \$ 64,071,102. (Please refer to the Excel File).

Details of cash inflows / outflows from the operating activities are as follows:

<b>Table (33): Cash Inflows / Outflows from the Operating Activities</b>			
<b>Year</b>	<b>Net Profit / (Loss) for the Year US \$</b>	<b>Depreciation &amp; Amortization US \$</b>	<b>Cash Inflows from Operating Activities US \$</b>
2012	-611,169	10,132	-601,038
2013	-3,160,017	155,604	-3,004,413
2014	-4,546,931	367,458	-4,179,472
2015	4,170,145	618,521	4,788,666
2016	18,876,888	774,910	19,651,798
2017	39,005,475	865,625	39,871,100
2018	51,884,239	966,618	52,850,857
2019	68,803,933	1,141,167	69,945,099

## 6-12 Revenue

### 6-12-1 Search Advertising Revenue

<b>Table (34): Search Advertising Revenue (from the Arab World)</b>			
Year	Total Market Size	Search Engines Share (%)	Search Engines Revenues
2011	212.6	40%	85.04
2012	276.4	40%	110.56
2013	359.3	45%	161.69
2014	449.2	45%	202.14
2015	561.5	45%	252.68
2016	701.8	45%	315.81
2017	842.2	50%	421.10
2018	1.010.6	50%	505.30
2019	1.212.7	50%	606.36

(Source: Madar Research)

### 6-12-2 The New Arabic Search Engine Revenue

<b>Table (35): The New Arabic Search Engine Revenue</b>			
Year	Search Engines Revenues from the Region	The New Arabic Search Engine Share	The New Arabic Search Engines Revenue
2011	85.04	-	-
2012	110.56	-	-
2013	161.685	-	-
2014	202.14	1.00%	2.02
2015	252.68	5.50%	13.90
2016	315.81	10.00%	31.58
2017	421.10	13.00%	54.74
2018	505.3	14.00%	70.74
2019	606.36	15.00%	90.95

(Source: Madar Research)

## 6-13 Direct Costs and Operating Expenses

Details of direct costs and operating expenses are as follows:

### 6-13-1 Personnel Costs

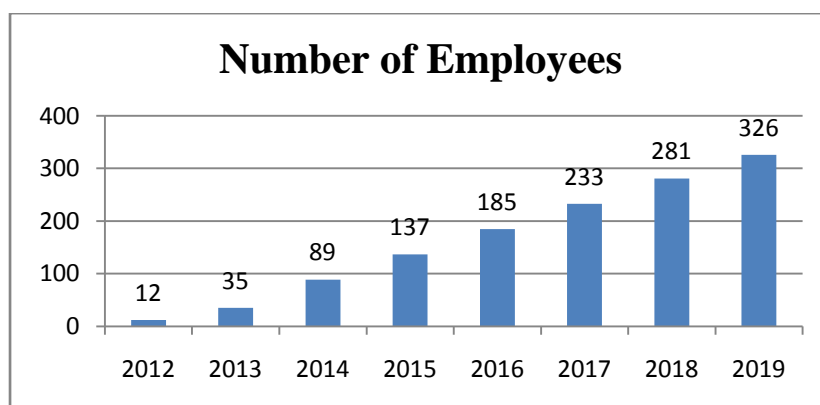
Summary of personnel costs and number of employees are as follows:

<b>Table (36): Personnel Costs</b>		
<b>Year</b>	<b>Number of Employees at the Year-end</b>	<b>Total Personnel Costs US \$</b>
2012	12	445,133
2013	35	2,286,875
2014	89	5,022,531
2015	137	7,609,976
2016	185	10,152,152
2017	233	12,900,050
2018	281	15,724,493
2019	326	18,679,538

A provision for annual staff increments @ 7% has been made for all eight years projections.

(Please refer to the Excel File)

Estimated development in Company's manpower is reproduced in following graph:





### **6-13-2 Technical Infrastructure**

Technical infrastructure costs represent the fee required for hardware hosting and communication, housing fee for initial data centre in US or GCC, and Disaster Recovery Site in GCC. These costs are projected based on estimated search requests and estimated web pages (index size).

(Please refer to the Excel File).

### **6-13-3 Other Infrastructure and Running Costs**

Other infrastructure and running costs represent hardware maintenance & service, office rentals, consumables, travel, entertainment and office communication. (Please refer to the Excel File).

### **6-13-4 External Services**

External services cost represents commission fee for advertising networks or license fee for advertising auction software, software maintenance & service costs which are projected based on estimated search requests, legal, consulting & accounting fees and commission.

(Please refer to the Excel File).

### **6-13-5 Marketing**

Marketing costs represent cost of public relation agency, campaigns & events and materials.

(Please refer to the Excel File).

### **6-14 Break Even Point**

The breakeven point in the year 2015 at which revenues equals costs will be 48.78% (of the expected revenues), and it will reach 12.23% in the year 2019.

(Please refer to the Excel File).

### **6-15 NPV, IRR & Pay Back Period**

Net present value (NPV) is a discounted cash flow method of calculating the expected net monetary gain or loss from a project by discounting all expected future cash inflows and outflows to the present point in time using the required rate of return (8% in this

case). Projects with higher net present values are preferred to projects with lower net present values; all factors equal; and projects with negative present value are considered unfeasible. The net present value for the proposed Arabic Internet Search Engine Project at a discount rate of 8% is US \$ 31,782,740 which is considered as a relatively high NPV compared to the investment of US \$ 13,000,000.

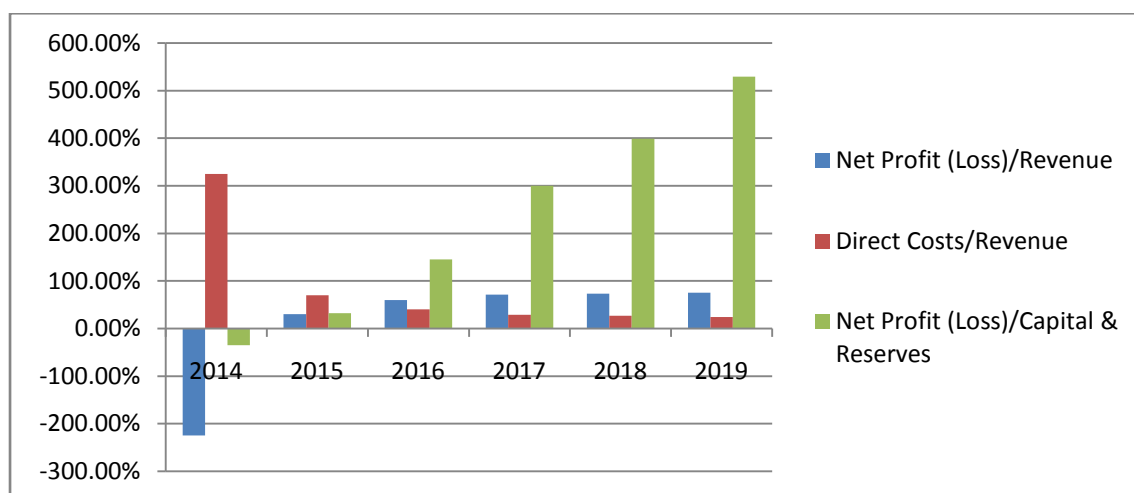
The internal rate of return (IRR) is the interest rate at which the present value of expected cash inflows from the proposed project equals the present value of expected cash outflows of the project. IRR is sometimes called the time-adjusted rate of return. The IRR for the proposed Arabic Internet Search Engine project based on cash flow over the study duration is estimated at 41%, which is considered as a high IRR compared to market prevailing interest rates.

The proposed Arabic Internet Search Engine project is expected to pay back the initial investment of US \$ 13,000,000 after 3 years and 6 months.

(Please refer to the Excel File).

## 6-16 Ratio Analysis

The following chart summarizes the proposed Arabic Internet Search Engine project's key financial ratios based on the financial analysis and assumptions presented in the financial study:



## 6-17 Recommendations

Based on the projected financial statements and the financial results of the feasibility study, and since the net present value of the financial projections is positive and the internal rate of return is high above the prevailing interest rates, the proposed project is deemed feasible.

## 7 ANNEXURE I: PHASE I OF THE PROJECT - NEWS PORTAL

Arab Multimedia News Portal (Aggregation+), a Medium-scale Arabic Web Search Engine)

### Introduction

A recent study into Internet usage trends in the Middle East and North Africa revealed that the Internet is now a main source of information, with 78% saying that they used the medium for reading news.

The study, which was conducted in cooperation with research firm YouGov Siraj, is based on survey responses of 13,847 people (aged 16+) from the UAE, KSA, Qatar, Oman, Kuwait, Bahrain, Syria, Jordan, Lebanon, Egypt, Morocco, Tunisia, Algeria and Pakistan collected online between 30th October and 22nd November 2009. **Based on this study, 87% of respondents had indicated that the Internet has replaced print news sources** to some extent

The above indicators strongly suggest that **a critical mass of online news readers has been reached in the Arab world**, where business models based on online advertising has become highly feasible.

### Project Description

The project idea is to develop a smart crawler-based Arab multimedia news aggregation portal with the widest, timely coverage of local published and “unpublished” news, with increased focus on local news. Additionally, the portal will deliver enhanced and new culturally-designed innovative services.

The new portal will have a vast competitive advantage over common news aggregation services, such as **Google News**, in terms of coverage (**with more than 500 percent increase in the number of sources covered**) and services targeting Arab natives and global Arabic news seekers.

The diverse business model primarily depends on revenue from online advertising through multiple platforms, **but also includes direct professional services**.

### Phase I Objectives

**Phase one** will create unique news aggregation portal that meet Arabic speaker needs and shorten the time between expenditure and revenue generation, while addressing all Arabic search engine issues such as indexing, page ranking and providing the best Arabic language and culture support.

The news aggregation portal will increase the size of advertising inventory and consequently the revenue.

By the completion of phase one, we will also be able to prove that the News Aggregation Portal we developed has many advantages over Google News.

## Local News Aggregation is the future

In June 2009, AOL bought local news aggregator Patch

In August 2009, MSNBC acquired local news aggregator EveryBlock

In 2009, CNN was part of a group of investors that invested \$7m in local news aggregator Outside.in

## Coverage

The depth of coverage of Arab countries would be gradually increased beyond the cities and highly populated regions to include news on the microcosmic level of towns, villages and city quarters

## Market need for an Arab multimedia News Portal

Google News is providing very useful services for Arabic users; nevertheless, a large gap exists between the services provided and the actual market requirements in the Arab region. The Arab Multimedia News Portal will be designed with Arab customers in mind, and will provide a large matrix of highly sophisticated services, unmatched by any provider today. The following are some of the main areas of improvements and unique features:

- **Coverage:** Google covers less than one fifth of all Arabic news sources. The new Arab multimedia news portal will monitor more than five times the number of Arabic news sources compared to Google.
- **Localization:** The new portal will aggregate a much larger portion of local news in the Arab countries inaccessible by Google News or similar services.
- **Native Arabic Support:** The level of Arabic support provided by leading news aggregation services today is limited. The new algorithm will provide native Arabic support, and significantly enhanced processing/analysis of the Arabic content, which would lead to intelligent response to Arabic news search queries.
- **Just Arabic (TM) Dialect Neutrality:** The system will be built on a custom indexing structure, specifically considering Arabic language varieties across the globe and deliver increasingly better search results, regardless of the queries.
- **Rich News Media:** The new portal will not be limited to regular text news aggregation, but it will also provide innovative new services by indexing

images and rich media such as news-related video clips, online TV streaming and broadcasts.

- **Cultural Mashups:** Potentially, numerous regional, cultural and religious news related services will be built around the powerful Arab multimedia news portal which are beyond the strategies of international news aggregators. For instance, immediate results (real-time results) of the Arab major league soccer will be provided by one click. Daily local events will also be provided. Complete list of these services will be provided later on.
- **User Generated News (UGN):** Multiple user generated channels will also be incorporated to provide unique user participation and deliver insightful news that have never been covered before.
- **News 2.0:** The indexing will cover Arabic Web 2.0 content, such as original news blogs and online social networking news channels.
- **Premium Services:** Professional services targeting enterprises/government agencies, such as automatic generation of a daily newsletter, custom reports, will be delivered.
- **Mobile Services:** Most services will also be available to mobile phones users through custom “apps” and mobile sites.

Aggressive services expansion with a list of 30 unique services planned

A new service will be added every two weeks during the first year of operation

# Competitor Analysis

## News aggregators in the Arab region

### Introduction

The Arab Multimedia News Portal (codenamed “Aggregation +”) is a unique project that differs from other Arabic news aggregators in terms of scope and sophistication. One of its main powerful features depends heavily on the concept of ‘glocalization’; offering deep local layers of search, individually customized for each Arab country; and focusing on local cities, towns, regions etc. For instance, the UAE will be divided into a minimum of 8 areas (Abu Dhabi, Dubai, Sharjah, Ajman, Al Ain, Fujairah, Ras Al Khaimah, Umm Al Quwain). **Saudi Arabia** will be divided into more than 12 areas (Riyadh, Jeddah, Makkah, Al-Madina, Tabuk, Dammam, Al Khobar, Al Dhahran, Jubail, Beesha. Jubail. Abha. Yanbu, etc).

Results -including news and a list of creative related services- will cover each of these geographic areas, potentially attracting **increasing number of local advertisers** in addition to the international and regional ones.

### Potential Competitors

Currently there are a handful of news aggregators targeting Arabic speakers. They are:

#### 1- Google News ([news.google.com](https://news.google.com))

##### Key Characteristics:

- US based, with small local representation in Dubai, focusing on sales.
- Google news is the most powerful Arabic news aggregator in existence so far.
- Coverage is still limited to country level.
- Does not sell ads with this service in the region.
- Gathers results from only few hundreds of news sources.

##### Competitive Advantage over Google News:

The Arabic news aggregator proposed would be much stronger than Google news in:

- Local level of coverage in each Arab country / region
- Superior Arabic language-focused search algorithm
- Customized services (over 30 new services not available from Google)
- News will be gathered from thousands of news sources not covered by Google News.
- Professional services targeting enterprises/government agencies, such as automatic generation of a daily newsletter/report, (not provided by Google).

## **2- Johaina ([johaina.sakhr.com](http://johaina.sakhr.com))**

### Key Characteristics:

- Owned by Sakhr Software
- Based in Kuwait, with development offices in Egypt
- Targets the whole Arab region
- Paid subscription-based business model (not free).
- Does not rely on advertising.
- No new development or services since its launch 9 years ago.

### Aggregation+ Competitive Advantage:

The competitive advantages of the Arabic news aggregator proposed are:

- Abdul Kader Kamli, the same person who developed the services and algorithm for Johaina nine years ago, will work on the Aggregation+ services and algorithms
- Local level of coverage in each Arab country / region
- Superior Arabic language-focused search algorithm
- Customized services (over 30 new services not available from Johaina)
- News will be gathered from thousands of news sources not covered by Johaina.

## **3- Al Zoa ([www.alzoa.com](http://www.alzoa.com))**

### Key Characteristics:

- Egypt based company
- Aggregates Arabic news from 170 Arabic sources
- Updates results on an hourly basis (sometimes longer).
- Uses a technically flawed automatic classifier, generating weak accuracy.
- Relies on selling ads through Google's AdSense platform.

### Aggregation+ Competitive Advantage:

The competitive advantages of the Arabic news aggregator proposed are:

- Local level of coverage in each Arab country / region
- Superior Arabic language-focused search algorithm
- Customized services
- News will be gathered from thousands of news sources not covered by Al Zoa.

## **4- Akhbarak ([www.akhbarak.net](http://www.akhbarak.net))**

### Key Characteristics:

- Egypt-based company
- Aggregates Arabic news exclusively from Egyptian sources.
- Like Al Zoa, relies on Google's ads network.
- It has no attractive services beyond focus on Egypt news.

## **5- Arab News Network ([www.arabnewsurls.com](http://www.arabnewsurls.com))**

### Key Characteristics:

- Egypt-based company
- Aggregates Arabic news from less than 100 Arabic sources.
- Relies on Google's ads network.
- Suffers from a technically weak news aggregation service.

## Local News Aggregators in US and UK

There are many local news aggregates in more developed markets; most of them are profitable despite their direct or indirect competition with Google, but just a few of them disclose full revenue figures:

For instance, **NewsNow** is a news aggregator service covering the UK only. It derives revenue from ads sales, delivering its feeds to third-party websites, as well as from its highly-acclaimed subscription news monitoring service.

**Newsnow** makes combined annual revenue of £10m (14.8 million US dollar).

Other news aggregators such as **Daylife**, **Everyblock**, **Outside.in**, and **Patch** got significant investments from large media companies.

In June 2009, AOL paid approximately \$7 million in cash to acquire a local news aggregator **Patch**. AOL has committed up to \$50 million to develop Patch this year.

In August 2009, MSNBC.com—a joint venture of Microsoft (MSFT) and GE (GE) unit NBC Universal—paid several million dollars to acquire a local news aggregator website; **EveryBlock**, which is up and running in 15 US cities, including New York, San Francisco, Seattle, Chicago and Boston.

In September 2009, **Daylife**; the news aggregation company, struck a “strategic partnership” with Getty Images, which includes the \$3.9 million third funding the company raised this summer.

In December 2009, CNN invested an undisclosed amount in a local news aggregator; **Outside.in**.

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