

**ECO-ENA: Economics & ECO-Engineering Associate, Inc., Canada**



**The Annual Conference of Economic Forum of Entrepreneurship &  
International Business  
ACEFEIB**

The Fifth Annual Conference of the Economic Forum of Entrepreneurship &  
International Business

January 29<sup>th</sup> – January 30<sup>th</sup> 2015

**Venue:** Joseph B. Martin Conference Center, Harvard Medical School, Boston, MA,  
USA.

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## The Fifth Annual Conference of Economic Forum of Entrepreneurship & International Business

### SELECTED ACCEPTED PAPERS

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Dear Reader,

We are very pleased to present the proceedings of ECO-ENA: Economic & ECO-Engineering Associate, Inc.'s Fifth Annual Conference of the Economic Forum of Entrepreneurship & International Business held at the Joseph B. Martin Conference Center, Harvard Medical School Boston, MA, from January 29<sup>th</sup> to January 30<sup>th</sup> 2015.

The aims of the conference were to provide a forum open to academics, managers and professionals to discuss all areas of business, economics and the pursuit of equitable and sustainable economic development; to provide an audience for high quality research papers relating these areas; and to provide a forum for young researchers to present their own research and to learn from research presentations by researchers at a more advanced stage in their careers.

The conference included papers on financial risk analysis, business leadership, the world economic outlook, cultural economics, migration and business education. The second day of the conference was devoted to the ECO-ENA Second Annual Conference of Agricultural Economics and Agribusiness, which included papers on local agricultural produce markets, crop prices, irrigation and farmers' wellbeing at work.

Nino Pailodze, Anzor Abzalava, Rusudan Kutateladze, Olga Khutsishvili, Giorgi Sulashvili and Alexander Kekenadze, all from the Georgian Technical University in Tbilisi, presented a paper on the causes of the economic crisis and aspects of its development.

Anthony Howell from Peking University presented a paper (which has been accepted for publication in Research Policy and is therefore not reproduced here) on the relationship between innovation and new firm survival in China, with empirical evidence to show that, provided that a certain threshold is reached, subsidized innovation improves firm efficiency and profitability but can reduce efficiency below this threshold. Global competition also reduces the benefit of innovation to the firm but firms facing low global competition can increase their chances of survival through innovation. The relationship between innovation and firm survival is a significant topic for any emerging firm and therefore the factors which affect the ability of the firm to benefit from innovation must be studied carefully by managers and policy makers. A further paper on innovation and entrepreneurship was presented by Talaat Asaad Abdel Hamid and Ahmed Samir Roushdy, who discussed the impact of social networks on the generation of ideas by Egyptian entrepreneurs and found that new entrepreneurs who used online social networks generated more new ideas than those who did not. A paper by Samra Chaudary, Sana Azar, Amina Talat and Imran Sajjad from the Lahore School of Economics found that innovation was not a driver of entrepreneurial success in Pakistan and that entrepreneurial motivation mattered far more.

On the related subject of the development of future professional employees, we were also privileged to be able to hear a contribution from Kaustav Misra from Saginaw Valley State University (which we are also unable to reproduce here because of future publication plans), addressing student's experience of short-term study abroad as part of their university courses and the effects on their development as professional people.

Dai Yun and Morrison Handley-Schachler presented a paper on the subject of auditing and conspiracies, which is not produced here, as it will shortly be published in Procedia. This theoretical paper deals with the problems faced by auditors in the event of misrepresentations being introduced into financial statements in unusual circumstances, especially in the event of a

conspiracy to defraud. The conduct of an audit on the assumption that collusive frauds, forgeries and impersonations do not normally occur is likely to lead to audit failures and therefore a system must be developed for the assessment of risks arising directly from the possibility of such frauds having been perpetrated.

We were also delighted to be able to hear presentations from and Dr Murshid Chodry and Adel AlFeraih on ongoing research, on financial deepening, remittances and economic growth and on talent turnover respectively and from Zaid Alaskar on the development of new research on the feasibility of the small business market in Saudi Arabia.

We are also extremely privileged to be able to hear Prof Akbar Manoussi of Carleton University deliver a highly informative and engaging keynote speech on the future of the world economy and the outlook for oil dependent economies and exporters.

In addition to those named above, we are very grateful to Dr Ghada Mohamed for her efforts in organizing the conference and for leading the panel session on macro-economic indicators, to Dr Daniel May for the organization of the The 2nd Annual Conference of Agricultural Economics & Agribusiness which took place on January 30<sup>th</sup> and to Moshood Oladao, Kaustav Misra, Charles Grant, Daniel Simonet, R.V.Ramanamurthy and Emmadi Naveen Kumar who presented papers at the conference. We were unfortunately unable to hear a presentation from Mr. Joseph Da Costa and Mr. Christophe B. Bakilan, who were prevented from attending by inclement weather conditions.

We would also like to extend our thanks to Hillel Basch, Donkor Joseph, Obaa Akua Konadu and William Ahenkora Agyei for their attendance at the conference and for their contributions and insights.

We hope that you will appreciate the contributions made in the papers presented in this volume and that you will continue to follow our work at future conferences and events.

Yours Sincerely,



**Dr. Morrison Handley-Schachler**  
**The Chair of the Conference**  
**ECO-ENA, Inc.® Vice President of Research & Policy Analysis**



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President; ECO-ENA: Economics & ECO-Engineering Associate, Inc.®  
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## **The Fifth Annual Conference of Economic Forum of Entrepreneurship & International Business - (FACEFEIB)**

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**The Fifth Annual Conference of Economic Forum of Entrepreneurship &  
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(FACEFEIB)**

**Conference Programme**

**8:30 am – 9:00 am: Reception & Morning Refreshments**

**9:00 am – 9:40 pm  
Keynote speech**

**Dr. Morrison Handley-Schachler**  
**ECO-ENA, Inc.**  
*Is Economic Growth Natural?*

**9:40 am – 10:00 pm**

**Open Discussion**

**10:00 am – 12:00  
Session 1**

**Three Papers on Micro and Macro Dimensions of Financial and Risk Analysis**

Paper 1

**Nino Pailodze, Anzor Abzalava, Rusudan Kutateladze, Olga Khutsishvili, Giorgi Sulashvili  
and Alexander Kekenadze (Georgian Technical University, Tbilisi)**  
*The causes of economic crisis and the aspects of its development.*

Paper 2

**Anthony Howell (Peking University)**  
*'Indigenous' innovation and new firm survival in a transitioning Chinese economy with  
heterogeneous risk.*

Paper 3

**Dai Yun (Xi'an Jiaotong Liverpool University) and Morrison Handley-Schachler**  
*A fundamental weakness in auditing: The need for a conspiracy theory.*

**12:00 – 1:00 pm  
Lunch Break**

**1:00 pm – 3:00 pm  
Session 2**

**Three Papers on Entrepreneurship and Leadership and Business in General with Case  
Studies from Different Countries.**

Paper 4

**Ahmed Samir Roushdy (Sadat Academy For Management Sciences) and Talaat Asaad Abdel  
Hamid (Mansoura University)**  
*The impact of online social networks on the generation of entrepreneurial ideas in Egypt.*

Paper 5

**Samra Chaudary, Sana Azar, Amina Talat and Imran Sajjad (Lahore School of Economics)**  
*The effects of internet and e-commerce on entrepreneurship and SMEs in Pakistan.*

**Keynote Speech**

**Professor Akbar Manoussi, Carleton University, Director of the Canadian International Council, Ottawa, ON, Canada**

*World Economy outlook and Global Oil Diplomacy*

**3:00 pm – 3:30: pm**  
**Coffee Break**

Panel Discussion led by

**Ghada Mohamed,**  
**ECO-ENA, Inc.**

*Macroeconomics: Misleading Indicators*

**3:30 am – 4:00 pm**

**Panel Discussion on Entrepreneurship, Risk and Growth**

**4:00 pm – 5:00 pm**

**Four Papers on Cultural Economics: Immigration Matters and Human Resources Management**

Paper 6

**Adel AlFeraih (Swansea University)**

*Understanding Factors Responsible for Talent's Turnover Intentions: The Case of the Public Education Sector in Saudi Arabia*

Paper 7

**Kaustav Misra (Saginaw State Valley University)**

*The effect of short-term study abroad experiences on students' academic and professional development.*

Paper 8

**Murshid Chodhry (Algoma University)**

*Financial Deepening, Remittances and Economic Growth: Evidence from Dynamic Panel Estimation*

Paper 9

**Shala al-Abiyad (University of Tripoli) and Morrison Handley-Schachler (ECO-ENA)**

*Accounting education in Libya and the requirement for development to keep up with the course of the time.*

Paper 10

**Zaid Alaskar, (Wolverhampton University)**

*Feasibility Study of Saudi Market for Small Business*

Paper 11

**Mohammad Mahasneh (Tafilah Technical University)**

*Applicable laws and procedures in international commercial arbitration in Jordanian courts.*

**5:00 pm: Close**

The 2nd Annual Conference of Agricultural Economics & Agribusiness followed on January 30<sup>th</sup>.  
2015.

# Acknowledgements

ECO-ENA, Inc. would like to thank all staff at the Joseph B. Martin Conference Center, Harvard Medical School, for their great hospitality during the conference.

ECO-ENA, Inc. would like to thank all participants at the conference.

*ECO-ENA, Inc. Organizing team*

**Our regards;**



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**SELECTED PAPERS**

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## THE CAUSES OF THE ECONOMIC CRISIS AND ASPECTS OF ITS DEVELOPMENT

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**Anzor Abzalava, Rusudan Kutateladze, Nino Pailodze,  
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**Abstract** - Political and Financial state of the modern world is rather worrying and it probably does not matter how many discussions we hold over this case, the consequences might be just so crucial, we can never envision. This is why it could be very important to understand the real roots to the problem in order to find an applicable solution. Hopefully the quick walkthrough the problems and its' consequences could give some idea of how to carry on in the future.

**Keywords:** National Market, Strategies for National Economy, International Market

### 1. Introduction

There have been a vast number of hurdles of various types throughout the history of humanity, including the financial ones of course. Large numbers of explanations and solutions to the crisis are usually being suggested by orthodox or unorthodox economic studies but most of the time a single one of them cannot be a real solution to the problem. It can make a big difference if we try to look at the bigger picture and try not to get directed solely by a single suggestion but gain a rather holistic view, which can note only be a guide to the real roots to the crisis but also lead to the solution for the post-crisis challenges and development (Institute for Post-Crisis Development/Институт Посткризисного Мира 2010).

One thing though is crystal clear – transformations of the modern world are not entirely down to the economic factors. Social, political or cultural crises are equally acute these days. And all of them together provoke the critical conflicts in a number of different countries or regions. You can say it is a paradox but, in fact, thanks to the process of globalization, the modern world has become a lot stronger but dangerously exposed to risks at the same time.

The strong ties between the political and economic affairs are more inevitable these days. The crisis and conflicts have started to have a direct effect on the national and global political and economic processes and that is exactly why the world political forums are paying greater attention to the potential strategies of economic progress on the one hand and aspects of better understanding of crisis and conflict regulations on the other.

Three major lessons have been learned from modern crises:

- Government should stimulate national markets.
- Government should establish the strategies for the national economy.
- Government should act as a regulator and architect of national and international markets.

Several economic experts from all around the world (including Nobel Prize winner Professor Paul Krugman) believe that new financial fluctuations are yet to come as a result of the economic injustice amongst the different countries around the world. It would have been fairer if the “rich” were to be “responsible” for the “irresponsible” economic policies; however it is the “poor” who are paying the price for the economic and monetary “wars”.

One good item of evidence for the new swirl of the global monetary “war” could be the pegging of the Swiss Franc against the Euro as the most radical measure to keep the Euro strong. This has caused a sharp drop of the Swiss Franc against the Euro and against the United States Dollar as well. However the decision of the Swiss National Bank regarding its currency pegging (which has not been used in respect of the Franc for over 30 years) could be in vain and the decision might retain only formal status if the global economic problems remain long unsolved. The Euro itself has been put under a question mark. And many people are actually concerned that failure of the European currency could lead to the default in the whole of Europe as well. In fact nations with similar Currency units usually never get into conflicts with each-other and therefore saving the Euro has a great political importance for saving the European Union itself. As for the tremendous amounts of debt of some of the European countries, they are the result of a long lasting wrong economic strategy. And unfortunately the remedial measures are usually delayed.

The United Nations Conference on Trade and Development has strongly criticized the actions of some of the European Countries’ austerity measures aimed at cutting budget deficits, warning that they increase the risk of stagnation or even reversing economic recovery, and these could potentially lead to a world economic catastrophe, so that cutting budget deficits is unlikely to do any good. The United States has a better chance to survive, whilst the risk of failure for Europe is much greater.

Establishing a healthy attitude towards economic problems is one of the major ones amongst many remedial actions. When people do not want to acknowledge the upcoming financial hardship it is like burying their heads in the sand. If we believe that the day before yesterday was all right and yesterday was not bad at all, then what is coming tomorrow?

Some make biased jokes that there are two super powers in the modern World – the United States of America and Moody’s. The first one can destroy you politically by using the armed forces and the second economically by decreasing your rating.

Morgan Stanley has decreased the predictions of economic growth for 2011-2012, saying that USA and European Zone are very close to the process of recession, blaming the legislative assemblies of those countries.

Some wonder if the new anti-crisis measures offered by Germany and France are going to be effective or not? It is hard to comprehend whether the solution could be embedded in the step changes offered: 1. legally establish the austerity measures aiming to cut budget deficits and gain control over it; 2. unify the fees on financial operations throughout the Euro Zone; 3. set up a centralized financial government body, formed by the leaders of the seventeen nations of the European Union.

Two members of the Union – Greece and Germany might be considering exiting the Euro Zone. It is neither convenient for Greece to be constantly cutting the budget deficit and nor is it for Germany to be bailing them out all the time.

We can confidently declare that we are not leaving the age of changes; the entire age is changing in front of us and is being replaced with a new one, which is characterized with very serious crisis (for example: food, water, energy), and the crisis are more likely to become lot more harsh in the future than they currently appear. All of these circumstances cause a natural reaction of confusion and sense of vulnerability in human beings. Therefore, taking into account all of the above, the

politicians and economist should abandon their *idée fixes* and take the measures appropriate for the new epoch.

It might sound as a bit of a paradox, but the modern economic-political circumstances are to be breaking through the frames of orthodox economics and looking for the roots of the crisis within political, geopolitical, social and other areas. This will help to gain the thorough understanding of the ongoing changes, the ideas of the transformations, and of course the shapes of the future. We should cease arguing about the end date of the current economic crisis and try to identify the trajectory of the future progress. We should have taken into consideration that yet another global crisis was going to take place sooner or later. The causes for the hardship are however different this time. If the crisis has arisen from the area of finance in the past (no doubt that there had been other factors to that – it has been provoked by the moral aspects and demolition of traditional moral values, we should be taking a special care against the greedy appetite for the corruption by highly ranked officials), the future global crisis is most likely to be arising from the civilized geo-economic zones, the areas of influence might change, and the leading powers may remain with the United States and China.

The forthcoming problems of financial, political, and social nature are most likely to become the characteristics of the new epoch in the following areas: management and regulations, geopolitics, existing social values, and prospects for growth.

The currently existing disproportions between the economies can lead to the new twirl of the monetary crisis. Not only the companies and financial institutions will face the risk of default, but number of countries as well. The aspects of protectionism is most likely to become stronger and the management and planning – weaker at the same time.

The welfare of the countries and nations are mostly assured and secured by their leaders and accordingly the leadership factors and skills are heavily sought after these days. Being equipped with new high technologies and being a big exporter can no longer be a guarantee of the welfare. It is also not clear if the new leading recourses are going to be the human capital, technologies of the new standard, systems of new ideology or even something else.

It is clear the optimal way of the development could lead through the following:

- Development of national markets
- Long term and complex state planning
- Strengthening of government and inter-governmental regulations

Industrialization (in terms of supporting real sector) and accurate industry policies as some of the factors of fighting against the crisis, are sitting in the background for some reason. I believe this is one of the weaknesses and needs to be resolved by the leadership as soon as possible.

Neoliberalism, as the opportunity to balance the government and markets, is no doubt going to be the main tendency for the future social-economic progress of the countries. Despite of which, the paternalism of some kind (e.g. corporate paternalism, also known as “socialist” way) will still remain. And era of ‘new socialism’ distribution of wealth within and between the nations is not going to be a surprise either.

## **2. Conclusion**

And in conclusion, we should all be asking ourselves the most important question – *what could be the formula of success in the future?* As we have already witnessed, expansion of the private business, national culture and religion, and the effectiveness of corporate management cannot

possibly become barriers to the crisis. Effectiveness of the national management, good macroeconomic index, and large number of population, successful external policy and strong armed forces could turn out to be a guarantee of the national and international success. The global image of the country, very balanced position in the international politics and good relationship with the world centers of the power along with the ones mentioned above are also very important in being triumphant.

### **References**

Institute for Post-Crisis Development/Институт Посткризисного Мира (2010), *Модели посткризисного Развития: Глобальная Война Или Новый Консенсус, Международное Исследование* 2009-2010, Postcrisisworld.org, [HTTP://WWW.POSTCRISISWORLD.ORG/PUBLICATIONS/981](http://www.postcrisisworld.org/publications/981)

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**THE IMPACT OF ONLINE SOCIAL NETWORKS ON THE GENERATION OF ENTREPRENEURIAL IDEAS  
IN EGYPT**

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**Abstract:** The aim of this research is to evaluate the impact of online social networks on the generation of entrepreneurial ideas and to determine whether the use of “online” social networks affects the idea generation process differently than traditional “offline” social networks in Egypt. A structured questionnaire was used to collect data from two separate nascent entrepreneurial populations via email.

The first population studied is the undergraduate students in American University in Cairo (AUC), and the second population studied is intended to capture a broader age range of adults with a variety of interests and backgrounds, those taking continuing education classes at business studies division, school of Continuing Education- American University in Cairo (AUC). The reasons behind choosing these populations are that the business studies division tends to attract individuals seeking skills and knowledge associated with starting a business, and the current position of the researcher provided the opportunity to obtain good response rate from the sample populations.

The researchers used systematic sample. Descriptive statistics, test of means, t-test, regression, and correlation were used for data analysis. The findings showed that commencing nascent entrepreneurs using online social network websites identify more entrepreneurial ideas than others who do not use online social network websites. The practical and theoretical implications are discussed and future research directions are presented.

## **1. Introduction**

Online social networks are internet sites that host and support a network of entrepreneurs’ profile, where ideas can be exchanged, created and consumed between registered users (Taylor, C, 2010). They are web-based services that allow entrepreneurs to construct a public or semi-public profile within a specific system, build a list of other users with whom they share a connection, and view their list of connections and those made by others within the system (Boyd and Ellison, 2008). Nascent entrepreneurs could achieve the maximum use of the information related to the growing trends, common user complaints/needs, and ultimately, identify opportunities which exchanged through these online social networks (Sayed & Murph, 2010).

In addition, nascent entrepreneurs will be able to obtain and generate business ideas and to get advice and resources to launch a business (Greve and Salaff, 2003). Davidson and Honig (2003)

argued that entrepreneurs will have the ability to develop faster and promote their network capabilities if they have more advanced communication technologies.

The current research is structured as follows: The next section provides a brief historical background of online social networks. A brief literature review of opportunity recognition, idea identification, traditional social relations and communication methods, and the relation between online social networks and social capital theory will be included in section 2. Our data and empirical analysis are explained in section 3. The results of the research provided in section 4. Section 5 finally provides a further discussion of our results giving some managerial implications, along with limitation and some suggestions for future research directions.

## **2. Historical Background of Online Social Networks**

In 1994, the first social networking site was created, Geocities. Geocities allowed the users to create and customize their own web sites, grouping them into different ‘cities’ based on the site’s content. The following year, TheGlobe.com was launched to public, giving users the ability to interact with people who have the same hobbies and interests, and to publish their own content (Shepherd, C. 2011). A few years later, AOL Instant Messenger and SixDegrees.com were following in 1997. Instant messaging was born, giving users the freedom to create a profile and chat with friends. AOL was probably the true precursor to today’s social networking sites.

The profiles were searchable so people could look your profile up. It was the most innovative feature at that time. The first modern social networking site that we define today is Friendster.com, which was launched in 2003 followed by linkedin.com (Which took more professional and business approach to social networking), and MySpace in the same year (Shu, W. and Chuang, Y.-H., 2011). Facebook came into the social networking scene a little bit later. It was launched in 2004, and the primary intent was to connect US college students.

Facebook first began with Mark Zuckerberg’s alma mater Harvard. At first it was exclusive, and you could only join in if you had been invited by a member of Facebook. Two years later, the campus-only networking site became open to the public. In 2008, Facebook surpassed MySpace and Friendster.com as the leading social networking site by over 150 million members around the globe (Simonds, D., 2011), Today, in 2014 Facebook has 2500 million active users worldwide.

## **3. Literature Review**

### **Opportunity Recognition**

To be a successful entrepreneur, you need to be aware of three main points, all at the same time, the ability to identify or recognize opportunity, the ability to review or assess opportunity, and last but not least, the ability to successfully execute and realize opportunity (Lumpkin, G.T., Lichtenstein, B.B., 2005). Opportunity recognition means proactively brainstorming a new business venture or expansion idea. Small-business owners typically engage in opportunity recognition at the point where they realize they have an idea, strength or capability that matches well with a particular target market. Entrepreneurial business owners constantly seek new revenue streams, which tend to be profitable (Sanz-Velasco, S., 2006).

Individuals who search for new opportunities either by self or through the combination of their social networks were more likely to recognize the new entrepreneurial opportunities than those who do not go for any search process (Im, S. and Workman, J.P., 2004). The opportunity recognition process is a critical aspect of the entrepreneurial process and can be considered as a key to unlocking the possibilities of a new venture (Lee, J.H. & Venkataraman, S., 2006 and Wen Gong et.al, 2014). One of the most critical factors which affect the opportunity recognition process is the

information search process by individuals. Individuals may recognize opportunities through their search process rather than the accidental discovery of opportunities (Seerat Fatima, 2011).

Long and McMullan (1984) argue that there are a variety of factors, some are controllable (such as job selection, lifestyle, and alertness) and others are uncontrollable (such as social influences, economic forces, culture, and personality) which affect the ability of the entrepreneur to recognize, better evaluate, and maximize the profit of the potential ideas.

Opportunity recognition process can be summarized in four steps: the pre-recognition stage, the previous experience stage, the development of the idea stage, and the decision to proceed (Gaglio, C.M., & Taub, R.P., 1992). While others argued that the process of opportunity recognition has five steps which are knowledge recognition (brings together information useful for the proposed business, helps to translate this knowledge for business use, and can include information about technology, products, customer, the industry, regulatory requirements, finance, and so forth), competitive scanning (involves actively scanning the competitive landscape and leveraging this knowledge to develop a competitive strategy to take advantage of opportunities), proactive searching (helps the entrepreneur to better understand future trends, which are understood through the competitive scanning stage), innovative behavior, and collective action (Puhakka, V., 2006)

Opportunities tend to arise out of environmental changes that occur where an entrepreneur operates and these opportunities tend to be of three types: technological, political and regulatory, and/or social and demographic (Schumpeter, 1934). Baron and Ensley (2006) argued that experience plays an important role in the opportunity recognition process by providing a basis through which the entrepreneur can “connect the dots” between seemingly unrelated events. They tested this by comparing the business opportunity prototypes of first-time and experienced entrepreneurs and found support for their belief which says that if an experienced entrepreneur and a nascent entrepreneur were placed in identical situations where multiple opportunities were present, the experienced entrepreneur should identify more of these opportunities, or at least the better ones.

In the light of the previous researches related to the opportunity recognition we can conclude that information playing a critical role in idea generation and online social networks can enable nascent entrepreneurs to develop and foster relations with more individuals, more quickly, allowing them to share and be exposed to more information and ideas than they otherwise could be aware of, or exploit. According to Shane (2003) an individual may recognize an opportunity before others because they have better information and/or they are able to put the information to better use. He identifies three primary ways of getting better information; through life experiences, social networks, and search processes (Casson, 2005). Shane (2003), identified the linkage of entrepreneurship and social networks as an area in need of more study, especially in gaining a better understanding of how entrepreneurs use social networks to gather information and then leverage those networks.

### **Idea identification**

One of the main characteristics of the entrepreneurial behavior is human creativity which is closely related to the process of the identification of opportunities (Ko & Butler, 2007). Creativity characteristic differentiates one entrepreneur from another and explains why entrepreneurs can identify different opportunities from the same source (Shane, 2000). Some researches proved that there is a correlation between creativity and idea identification (Lumpkin, Hills, & Shrader, 2004; Ward, 2004), but in the same time entrepreneurial creativity still not fully understood (Ko & Butler, 2007).

Opportunity recognition process can be categorized into five sub-processes, with idea identification happening in the fourth of those sub-processes, innovative behavior (Puhakka 2006). Online social networks are the most important part of the idea identification process and an important source for

business ideas (Brown & Butler, 1995). Results of other researches showing that individuals can identify opportunities through the combination of information processing, searching techniques, and scanning behavior through different networks (Shaver & Scott 1991, Singh, 2000, Singh, Hills, Hybels, & Lumpkin, 1999, Arenius & de Clercq, 2005).

In addition, prior experience plays an important part in recognizing ideas (Shane, 2000). The combination of prior experience and ongoing scanning for information can lead to an effective idea generation (Ko & Butler, 2007). Previous researches suggests that differences in knowledge and experience can influence the way information is processed and can impact opportunity identification and these researches proved that one gains access to ideas and information through interaction with others, who have access to other individuals, and these various interactions make-up one's network, a network with characteristics that influence the availability, quality, and timing informational access (Shane, 2000, Arenius & de Clercq, 2005 and Sheau & Christina, 2014).

The current research concentrating on the benefits of online social networks in helping nascent entrepreneurs identify ideas. So we can conclude that the combination of larger numbers of social network members, greater frequency of communication with those members, and the availability of pattern recognition software at these sites will lead to increase a nascent entrepreneur's ability to identify patterns needed for increasing their likelihood of recognizing ideas.

### **Online Social Networks**

The increasing adoption of the Internet and online social networks greatly expanded the opportunities for collaboration among individuals by facilitating the sharing of information and experiences across geographical boundaries (Peltier, J.W., Schibrowsky, J.A. and Zhao, Y. 2012). However, since 2004, the expansion of broadband Internet access and increase in online social network use has shifted from the creation, control, and distribution of content to the individual user (Parameswaran & Whinston, 2007).

Online social networks are web-based services that allow individuals to create a profile within a bounded system, articulate a list of other users with whom they share a connection, and view their list of connections and those made by others within the system (Boyd and Ellison, 2007). While Coyle and Vaughn (2008) argued that online social network encourage communication with others by providing directories of relevant user populations, opportunities for self-description and content uploads, and recommender.

Online social network enable users to articulate and make visible their social networks, which means that users cannot only see a graphic representation of their social network, but gain better understanding of how the various nodes within the network are related (Boyd & Ellison, 2007). Online social networks are social networks with strong, intermediate, and weak ties between members and with the graphical representations now available, nascent entrepreneurs who are using online social networks may be able to make better strategic use of the network contacts available since they can better understand how they relate to one another (Wellman, Salaff, Dimitrova, Garton, Gulia, and Haythornthwaite, 1996).

Tools provided by online social networks allow more frequent contact and information exchange with individuals than could take place using traditional methods, these online networks of individuals allow for multiple types of information exchange (James et.al. 2014). They facilitate one-to-many exchanges through the posting of information like personal profiles, pictures, music, or a blog that others can access concurrently, facilitate one-to-one and one-to-a-few exchanges through text messaging and restricted access levels of security, attempting to limit who can access and view certain things, and facilitate off-line communication (Molina, X.F. and Martínez, T.A., 2010)

Ellison, Steinfield, and Lampe (2007) found that online social networks are larger than traditional offline networks and undergraduates used Facebook to stay in touch with people that they used to be more closely involved with. While Coyle and Vaughn (2007) found that 41% of their survey respondents used social network sites to “keep in touch with friends” and most undergraduates have at least two different social network accounts and that they log onto them three times daily on average.

### **Strong and Weak Ties**

Strong tie is defined as the tie between ego and alter that is characterized by high levels of intimacy and intensity together with a large amount of interaction and reciprocity, These ties are typically represented by family relationships, spouse, or very close friends while weak ties are people who are less similar to us than strong ties (Granovetter, 1973)

There are various types of interpersonal relations which can be categorized into three types, strong ties, weak ties, and absent ties (Ganovetter, 1973). Strong and weak tie can be analyzed through two levels, a relational meaning at the communication level and a structural meaning at the population level, the relational meaning refers to the tie’s strength as a channel of information and structural meaning is the ability of a tie to facilitate the integration across a social network by linking individuals who would otherwise not be connected (Centola & Macy 2007).Despite of the weakness of the weak ties on the relational level, they are strong on the structural level because they provide shortcuts across a social network and helping individuals to obtain information and resources that they would otherwise have difficulty locating (Granovetter, 1973).

A major strength of the weak ties is that they are long, connecting help to extending and connecting one’s network by linking individuals in socially distant locations through interface exchanges, which means that they serve as long ties (Watts & Strogatz, 1998& Terry et.al., 2014). Most of new information is delivered through these weak long ties exchanges and It is assumed that these information transmissions are simple and not complex, which means that the social contact necessary for transmission is not costly, risky, or requires independent reinforcement from multiple sources (Granovetter, 2004).It is important that the information and idea exchanges that take place within online social network are simple transmissions because they can be studied on a random network, which facilitates analytic treatment and mathematical approximation (Watts, 2002).

We can conclude that nascent entrepreneurs can gain many advantages from connecting each other through online social networks such as having more frequent communication and access to a larger number of social contacts than those using traditional communication methods in addition they can use both simple and complex information exchanges with their weak ties.

Nascent entrepreneurs will get ideas and information through exchanges with weak ties, but when an action requires confirmation from multiple sources, it is expected that strong ties will be contacted and these contacts may not reside within the online social network (Centola & Macy, 2007).

### **Social Capital Theory**

The concept of “social capital”, refers to “community participation” (Hanifan, 1916), or more recently “citizen engagement” (Putnam et al., 1993). Putnam (1994) describes social capital as “features of social life-networks, norms, and trust, that enable participants to act together more effectively to pursue shared objectives”. This description leads to better diffusion of information making behavior more foreseeable causing an uncertainty education, and an increase in trust-based relations reducing the average cost of transactions, just as an increase in physical capital reduces the average cost of production (Paldam and Svendsen, 2000; Routledge and von Amsberg, 2003; Torsvik, 2000; Zak and Knack,2001).Social capital focuses on the members of communities who interact directly, frequently, in multi-faceted ways, generating opportunities and potential for

members of a group, who gain a competitive advantage in pursuing their ends (Bowles and Gintis, 2002).

Social capital theory can be defined as the ability of individuals to gain benefits from their social connections, networks and memberships and can occur at both the individual and organizational level (Lin, Ensel, & Vaughn, 1981; Portes, 1998). Social networks can be extended by relationships with family, organizations, or communities and can provide an entrepreneur's with education, experience, and financial resources (Bourdieu, 1983; Coleman, 1988, 1990; Loury, 1987).

Social capital networks can facilitate the discovery of opportunities and help with identification, collection and allocation of scarce resources, which means that these networks represent the meeting point between entrepreneurs and the owners of resources where information is likely to come from both strong and weak ties (Birley, 1985; Greene & Brown, 1997; Uzzi, 1999, Shane & Venkataraman, 2000). Social capital theory helps in explaining motives for participating in online social network where individuals can gain many benefits which can take many forms, from tangible or intangible, economic or social, to psychological or emotional (Lin, 2001 & Cross, 2004).

Social capital can help to enhance internal organizational trust and provide resources through bonding of actors and by bridging external networks (Adler & Kwon, 2002; Putnam, 2000). Bridging social capital concerned with how the social capital is used for a given individual's, allowing that individual to use the resources derived from their contacts and connections for their private benefit and personal gain (De Carolis & Saporito, 2006).

Puhakka (2006) viewed social capital as the social interaction that brought "information, resources, support, and ideas to entrepreneurs and finds that there is apposite relationship between the amount of social interaction (which is the structural dimension of social capital), knowledge acquisition, proactive searching, and collective action, in addition he finds that the closeness of relationships positively influenced the entrepreneur in their knowledge acquisition and competitive scanning and the latest information tends to be shared by those closer to the entrepreneur. These results support three main issues related to the positive impact of online social networks on nascent entrepreneurs: first, relationships is main source to get new information; second, individuals must have an active conversation with others in order to have future developments; and finally, the more social relationships individuals have, the more they will discuss venture creation with them.

### **Research model**

In the light of the previous researches, we can conclude the factors which will be studied in the current research in the following figure

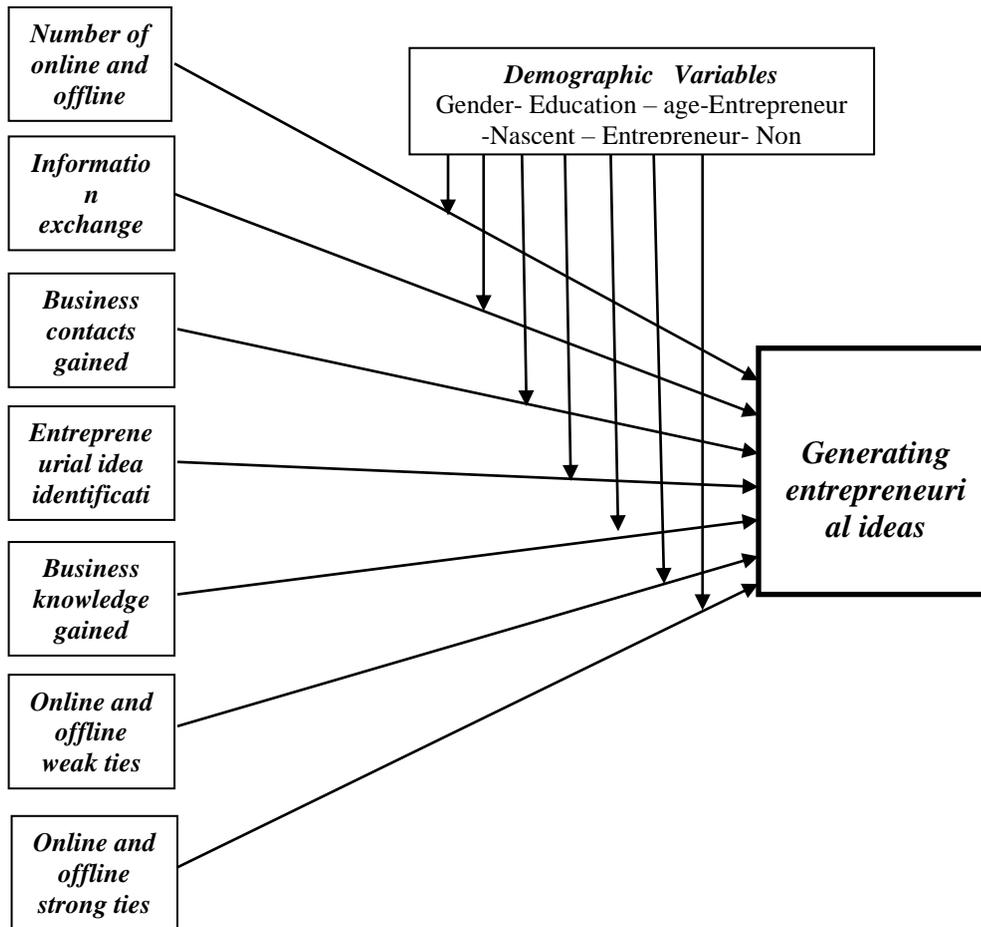


Figure (1) research model  
Source: prepared by the researchers

## 4. Methodology

### Hypotheses

This section identifies the hypotheses of the current research. These hypotheses deal with two main issues, the first issue is the differences in the way that nascent entrepreneurs interact with their online and offline networks, and the second issue is how the use and characteristics of these networks may impact the nascent entrepreneur. The following are the hypotheses of the current research which will be tested and discussed in the next section.

**Hypothesis 1a:** *There is no significant difference between online and offline nascent entrepreneurs considering the number of online and offline only contacts they are communicating.*

**Hypothesis 1b:** *There is no significant difference between online nascent entrepreneurs considering the number of online and offline only contacts they are communicating.*

**Hypothesis 2a:** *There is no significant difference between online and offline nascent entrepreneurs considering the amount of information they are exchanging.*

**Hypothesis 2b:** *There is no significant difference between online nascent entrepreneurs considering the amount of information they are exchanging with their online and offline only contacts.*

**Hypothesis 3a:** *There is no significant difference between online and offline nascent entrepreneurs considering the number of business contacts they gain.*

**Hypothesis 3b:** *There is no significant difference between online nascent entrepreneurs considering the number of business contacts they gain from their online and offline only contacts.*

**Hypothesis 3c:** *There is no significant difference between online and offline nascent entrepreneurs considering the number of entrepreneurial ideas they are identifying.*

**Hypothesis 3d:** *There is no significant difference between online nascent entrepreneurs considering the number of entrepreneurial ideas they are identifying from their online and offline only contacts.*

**Hypothesis 3e:** *There is no significant difference between online nascent entrepreneurs considering the business knowledge they gain.*

**Hypothesis 4a:** *There is no significant difference between online and offline nascent entrepreneurs considering the number of weak ties they possess.*

**Hypothesis 4b:** *There is no significant difference between online and offline nascent entrepreneurs considering the number of strong ties they possess.*

**Hypothesis 4c:** *There is no significant difference between online nascent entrepreneurs considering the amount of information they are exchanging with their online and offline only strong ties contacts.*

**Hypothesis 5:** *The number of contacts within a nascent entrepreneur’s online network is positively related to the number of entrepreneurial ideas they identify.*

The following table shows the hypotheses of the current research and the objective of each one.

<b>Hypothesis No.</b>	<b>Objective</b>
1a & 1b	Compare the number of online and offline contacts a nascent entrepreneur communicates with
2a & 2b	Focus on the information exchange differences between a nascent entrepreneur’s online and offline networks
3a & 3b	Concern with how nascent entrepreneurs use their online and offline social networks to gain business contacts to help with future ventures
3c & 3d	Deal with entrepreneurial idea identification differences between online and offline social networks
3e	Deals with whether the use of online social networks websites increases business knowledge.
4a	Compares the number of online and offline weak ties of the nascent entrepreneurs.
4b & 4c	Compares the number of online and offline strong ties of the nascent entrepreneurs.
5	Concern with the correlation between the numbers of contacts within an online network and the number of entrepreneurial ideas a nascent entrepreneur will identify.

For simplicity of the hypotheses in the current research, offline contacts are those members of one’s social network that are communicated with each other through two methods, face-to-face or telephone. Online contacts are those members of one’s social network that are communicated with each other through online social network and the tools provided by that network. In addition, online nascent entrepreneur are those nascent entrepreneurs that use an online social network while offline nascent are those nascent entrepreneurs who do not use an online social network.

**Research Populations and sample**

Two separate nascent entrepreneurial populations will be surveyed for this research. The first population is the target of much of the nascent entrepreneurial research, undergraduate students in American University in Cairo (AUC), and the second population studied is intended to capture a

broader age range of adults with a variety of interests and backgrounds, those taking continuing education classes at business studies division, school of Continuing Education- American University in Cairo (AUC).

The reasons behind choosing these populations are that the business studies division tends to attract individuals seeking skills and knowledge associated with starting a business, and the current position of the researcher provided the opportunity to obtain good response rate from the sample populations. The researchers used systematic sample (Malhotra & Birks, 2006). A total sample of 282 students was taken during break times between classes in the week days in fall semester in 2013.

### Survey questionnaire

The researchers used a structured questionnaire to collect data via email from two separate nascent entrepreneurial populations. The current research adopted the questionnaire which tested and used in Davidson and Honig’s (2003) work concerning the importance of social networks and expanded it by including the impact of online social networks. In order to assess all the hypotheses in the current research, a variety of question types were used.

The questionnaire includes entrepreneurial idea identification and information exchange measures, demographic and socio-economic characteristics of the sample nascent entrepreneurs; and general questions about their Internet usage habits, business-founding expectations, and communications habits. Personal demographic questions about the non-nascent entrepreneur respondents and general questions about their online social network use were also included in the survey. SPSS (Statistical Package for the Social Sciences) version 15.0 was used to enter, code data, and analyze data.

## 5. Results

This section includes two parts, descriptive statistics and test results of each hypothesis.

### Descriptive Statistics

The research sample ages reflected the large number of undergraduate students included in the survey sample. Ages of the research sample distributed with approximately 45% between the ages of 18–23, 35% between the ages of 24–32, and 20% ranging from 33 to 45. The educational level of the research sample was fairly diversified. The results showed that 42% of the respondents had “Some College,” while 28% either an Associate’s or Bachelor’s degree. In addition, 30% of the respondents some sort of professional licensure or certification.

Use or non-use of online social networks and their self-identification as nascent entrepreneurs were the two key respondent characteristics for this research. Results in Table 1 and 2 provide a breakdown of the 282 respondents by these two characteristics, as well as those self-identifying as an entrepreneur.

**Table (1) Use of Online Social Networks**

Use online social networks	Frequency (N)	Percent (%)
Yes	196	70
No	86	30
<b>Total sample</b>	<b>282</b>	<b>100</b>

**Table (2) Entrepreneur Type**

Entrepreneur type	Frequency (N)	Percent (%)
Entrepreneur	64	22.7
Nascent Entrepreneur	120	42.6
Non Entrepreneur	98	34.8
<b>Total sample</b>	<b>282</b>	<b>100</b>

More than 64% of the total respondents self-identified as either an entrepreneur or nascent entrepreneur, with only 34.8% identifying as a non-entrepreneur. We can combine online social network use and entrepreneur type in Table 3 and we can derive that the numbers of nascent entrepreneurs that use an online social network site were similar to those that did not, with 64 and 56 respectively. In addition the results show that a majority of the respondents in each entrepreneur type category use online social network sites, which indicating that online social network use continues to expand and it is interesting to note that the largest percentage (by category) of non-online social network users is among the nascent entrepreneurial group.

**Table (3) Online Social Network Use by Entrepreneurial Type**

Online social networks use by type	Entrepreneur		Nascent entrepreneur		Non entrepreneur		Total	
	No	12	19%	56	47%	18	18%	86
Yes	52	81	64	53	80	82	196	70
<b>Total</b>	<b>64</b>	<b>100</b>	<b>120</b>	<b>100</b>	<b>98</b>	<b>100</b>	<b>282</b>	<b>100</b>

When examining the age (Table 4) breakdown of respondents in this sample, some interesting characteristics are visible. Although the 18–23 age categories contained the largest number of nascent entrepreneurs (49%), the other age categories showed a fairly consistent percentage of nascent entrepreneurs. The entrepreneurial respondents were more evenly distributed through all of the age categories than the nascent entrepreneur respondents. The non-entrepreneurs showed a distribution similar to the nascent entrepreneurs.

**Table (4) Age by Entrepreneur Type**

Age	Entrepreneur		Nascent Entrepreneur		Non Entrepreneur		total	
18-23	24	37.5%	59	49%	40	40.5%	123	43.6%
24-32	13	20.3	23	19	26	26.5	62	22
33-45	18	28.2	25	21	27	27.5	70	24.8
Unknown	9	14	13	11	5	5.5	27	9.6
<b>Total</b>	<b>64</b>	<b>100</b>	<b>120</b>	<b>100</b>	<b>98</b>	<b>100</b>	<b>282</b>	<b>100</b>

Table 5 shows respondent breakdown by gender. Men were a large majority of each group in the sample, representing 58% of the nascent entrepreneurs, 73% of the entrepreneurs and 74% of the non-entrepreneurs.

**Table (5) Gender by Entrepreneur Type**

Gender by type	Entrepreneur		Nascent Entrepreneur		Non Entrepreneur		total	
Male	47	73%	69	58%	73	74%	189	67%
Female	17	27	51	43	25	26	93	33
<b>Total</b>	<b>64</b>	<b>100</b>	<b>120</b>	<b>100</b>	<b>98</b>	<b>100</b>	<b>282</b>	<b>100</b>

Considering the educational level, Table 6 shows that the largest nascent entrepreneur category was “Some College” (51%), which is not surprising considering the number of undergraduates surveyed. Overall, nascent entrepreneurs with a graduate degree made-up 20% of the sample, but the same group represented 23.5% of the entrepreneurs.

**Table (6) Level of Education by Entrepreneur Type**

Education level by type	Entrepreneur		Nascent Entrepreneur		Non Entrepreneur		total	
Some college	33	51.5	61	51	50	51	144	51
Bachelor degree	15	23.5	24	20	20	20.5	59	21
Professional licensure or certification.	12	18.7	25	21	28	28.5	65	23
Unknown	4	6.3	10	8	0	0	14	5
<b>Total</b>	<b>64</b>	<b>100</b>	<b>120</b>	<b>100</b>	<b>98</b>	<b>100</b>	<b>282</b>	<b>100</b>

The number of entrepreneurial ideas identified in the last year was a main component of this research. Results presented in table 7 show that the nascent entrepreneur group had a higher mean than the entrepreneur group. This could be due to the fact that entrepreneurs focus more of their energies on current ventures instead of new ones. This finding led the researchers to also breakdown the number of entrepreneurial ideas by age category for each entrepreneur type in table 8.

**Table (7) Entrepreneurial Ideas by Entrepreneur Type**

Ideas by type	Mean ideas	Min ideas	Max ideas
Entrepreneur	3.9	0	20
Nascent Entrepreneur	4.9	0	30
Non Entrepreneur	1.7	0	20

**Table (8) Entrepreneurial Ideas by Age Group**

Type	Age group	Mean ideas	Min ideas	Max ideas
Entrepreneur	18-23	4.6	2	10
	24-32	4.6	0	15
	33-45	4.1	0	14
	Unknown	5.5	0	10
Nascent Entrepreneur	18-23	7	0	30
	24-32	4.5	0	20
	33-45	3.1	1	20
Non Entrepreneur	18-23	1.9	0	10
	24-32	3.2	0	20
	33-45	1.1	0	10
	Unknown	0.6	0	1

In addition results presented in table 9 shows that males generated, on average, almost twice as many ideas than females within the “Entrepreneur” type, while male and female nascent entrepreneurs were almost similar in the number of ideas they reported, 4.9 and 4.8 respectively.

**Table (9) Entrepreneurial Ideas by Gender**

Entrepreneur type	Gender	Mean ideas	Min ideas	Max ideas
Entrepreneur	Male	5.8	0	20
	Female	3.2	0	14
Nascent Entrepreneur	Male	4.9	0	20
	Female	4.8	1	30
Non Entrepreneur	Male	3.3	0	20
	Female	1.2	0	10

Table 10 shows that those with some college education reported the highest mean number of ideas in each entrepreneur type.

**Table (10) Entrepreneurial Ideas by Type and Level of Education**

Type	Level of education	Mean ideas	Min ideas	Max ideas
Entrepreneur	Some college	9.0	4	14
	Bachelor degree	8	2	10
	Professional licensure or certification.	3.5	0	15
	Unknown	5.0	0	14
Nascent Entrepreneur	Some college	7.1	0	30
	Bachelor degree	5.1	0	20
	Professional licensure or certification.	4.9	1	12
	Unknown	4.6	1	20
Non Entrepreneur	Some college	2.7	0	10
	Bachelor degree	0.0	0	0
	Professional licensure or certification.	1.9	0	20

Table 11 shows that the mean number of entrepreneurial ideas identified for online nascent entrepreneurs is nearly double that of offline nascent entrepreneurs and the online nascent entrepreneur group reported both a mean and maximum number of ideas larger than the other groups.

**Table (11) Entrepreneurial Ideas by Type and Use of Online Social Network**

type	Use online social networks	Mean ideas	Min ideas	Max ideas
Entrepreneur	Yes	3.8	0	20
	No	4.0	0	14
Nascent Entrepreneur	Yes	6.2	0	30
	No	3.2	0	20
Non Entrepreneur	Yes	1.8	0	20
	No	1.3	0	12

### Hypotheses Test Results

*Hypothesis 1a: There is no significant difference between online and offline nascent entrepreneurs considering the number of contacts they are communicating.*

The t-test results in Table 12 show that the mean number of contacts communicated with for online nascent was more than 328.6, while for offline nascent it was more than 33.2. This difference was statistically significant at the  $p < .05$  level. The standard deviation for both is large, but they are consistent in relation to their respective means.

**Table (12) t-test for difference between online and offline nascent entrepreneurs considering The number of contacts they are communicating**

	Mean***	Std. deviation
<b>Online nascent total contacts</b>	328.61	285.06
<b>Offline nascent total contacts</b>	33.23	26.93

\*\*\*significant difference at  $p < .05$

Results show support for the difference in means which support for rejecting Hypothesis 1a.

*Hypothesis 1b: There is no significant difference between online nascent entrepreneurs considering the number of online and offline only contacts they are communicating.*

The t-test results in Table 13 show that the mean number of online contacts communicated with was 249 while offline contacts communicated with was 79.6. This difference was statistically significant at the  $p < .05$  level. The standard deviation for both was large, with the standard deviation for offline contacts larger in relation to its mean.

**Table (13) t-Test for the difference between online nascent entrepreneurs considering the number of online and offline only contacts they are communicating**

	Mean***	Std. deviation
Online nascent online contacts	249.02	230.39
Offline nascent offline contacts	79.59	96.10

\*\*\*significant difference at  $p < .05$

Results show support for the difference in means which support for rejecting Hypothesis 1b.

*Hypothesis 2a: There is no significant difference between online and offline nascent entrepreneurs considering the amount of information they are exchanging.*

The t-test results in Table 14 show that the online nascent entrepreneur information exchange mean was 191.1 compared to the offline nascent entrepreneur information exchange mean of 19.7. This difference was statistically significant at the  $p < .05$  level. The standard deviation for each was large, but they were in proportion to one another.

**Table (14) t-Test for the difference between online and offline nascent entrepreneurs considering the amount of information they are exchanging**

	Mean***	Std. deviation
Online nascent information exchange	191.11	188.83
Offline nascent information exchange	19.67	21.13

\*\*\*significant difference at  $p < .05$

Results show support for the difference in means which support for rejecting Hypothesis 2a.

*Hypothesis 2b: There is no significant difference between online nascent entrepreneurs considering the amount of information they are exchanging with their online and offline only contacts.*

The t-test results in Table 15 show that the online information exchange mean was 139.4 compared to the offline information exchange mean of 51.7. This difference was statistically significant at the  $p < .05$  level. The standard deviation for each was large, but they were in proportion to one another.

**Table (15) t-Test for the difference between online nascent entrepreneurs considering the amount of information they are exchanging with their online and offline only contacts**

	Mean***	Std. deviation
Online contacts information exchange	139.40	146.91
Offline contacts information exchange	51.72	69.78

\*\*\*significant difference at  $p < .05$

Results show support for the difference in means which support for rejecting Hypothesis 2b.

*Hypothesis 3a: There is no significant difference between online and offline nascent entrepreneurs considering the number of business contacts they gain.*

The t-test results in Table 16 show that the mean number of business contacts for online nascent entrepreneurs was 34.6 while offline business contact mean was 5.5. This difference was statistically significant at the  $p < .05$  level. The standard deviation for both items was quite large.

**Table (16) means testing for the difference between online and offline nascent entrepreneurs considering the number of business contacts they gain**

	Mean***	Std. deviation
Online nascent business contacts	34.63	53.96
Offline nascent business contacts	5.52	13.72

\*\*\*significant difference at  $p < .05$

Results show support for the difference in means which strongly support for rejecting Hypothesis 3a.

**Hypothesis 3b:** *There is no significant difference between online nascent entrepreneurs considering the number of business contacts they gain from their online and offline only contacts.*

The t-test results in Table 17 show that the mean number of online business contacts was 22.1 while offline business contact mean was 12.5. This difference was statistically significant at the  $p < .05$  level. The online business contact mean was larger and both had a large standard deviation in proportion to each other's mean.

**Table (17) t-Test for the difference between online nascent entrepreneurs considering the number of business contacts they gain from their online and offline only contacts**

	Mean***	Std. deviation
Online business contacts	22.14	42.71
Offline business contacts	12.48	21.17

\*\*\*significant difference at  $p < .05$

Results show support for the difference in means which statistically support for rejecting Hypothesis 3b.

**Hypothesis 3c:** *There is no significant difference between online and offline nascent entrepreneurs considering the number of entrepreneurial ideas they are identifying.*

The t-test results in Table 18 show that the mean number of entrepreneurial ideas for online nascent entrepreneurs was significantly larger than for offline nascent entrepreneurs (6.2 compared with 3.3 respectively). This difference was statistically significant at the  $p < .05$  level.

**Table (18) t-Test for the difference between online and offline nascent entrepreneurs considering the number of entrepreneurial ideas they are identifying**

	Mean***	Std. deviation
Online nascent entrepreneurial ideas	6.19	5.532
Offline nascent entrepreneurial ideas	3.32	4.032

\*\*\*significant difference at  $p < .05$

Results show support for the difference in means which statistically support for rejecting Hypothesis 3c.

As a further test of the hypothesis, a Hierarchical Regression Analysis was conducted. Entrepreneurial ideas were first regressed against age and education, then on online information exchange, and finally upon online nascent entrepreneur offline information exchange to determine if any of these factors could be used to predict the number of entrepreneurial ideas identified. The results are shown in Table 19. None of the models showed significance.

**Table (19) Regression Results for Online and Offline Information Exchange, Age, and Level of Education Impact on Entrepreneurial Ideas**

Variable	Model 1 beta	Model 2 beta	Model 3 beta
Age	-.225	-.230	-.244
Education	.019*	.017*	.049
Online information exchange		.058	-.014
Offline information exchange			.162
F	1.952	1.344	1.336
Adjusted R square	.029	.016	.021
Change in R from model 2			-.013
Change in R from model 3			.005

\*significant difference at  $p < .05$

**Hypothesis 3d:** *There is no significant difference between online nascent entrepreneurs considering the number of entrepreneurial ideas they are identifying from their online and offline only contacts.*

The means testing results in Table 20 show a mean of 3.14 and a standard deviation of 1.02, which places responses firmly around the number “3”. In addition the list of responses show that 15 responses were below “3”, indicating disagreement or strong disagreement, and 25 were above “3”, indicating agreement or strong agreement.

**Table (20) Test of Means for the difference between online nascent entrepreneurs considering the number of entrepreneurial ideas they are identifying from their online and offline only contacts**

	Mean	Std. deviation
Online nascent – online vs. offline entrepreneurial ideas	3.14	1.02

Results were mixed, the mean indicates that respondents generally neither agree nor disagree with the previously identified statement. However, the largest number of respondents (25) either “Agreed” or “Strongly Agreed” with the statement. Only 15 either “Disagreed” or “Strongly Disagreed,” while 24 “Neither Agreed nor Disagreed.” Results were conclusive for Hypothesis 3d. However, results show that when “agree/strongly agree” responses are combined; they represent the largest response group. When the 24 “neither agree/disagree” responses are added to the “agree/strongly agree” responses, more than 76% of the respondents, 49 out of 64 respectively, did not disagree that they identified more ideas from their online network.

*Hypothesis 3e: There is no significant difference between online nascent entrepreneurs considering the business knowledge they gain.*

This was a single item measure based on responses to a 5-point Likert scale of agreement. A “3” in the results is an indicator that the respondents neither agreed nor disagreed with the statement that, “Since I began using my online social network, I have increased my general business knowledge.” The means testing results in Table 22 show that the mean response was 3.11 with a standard deviation of 1.11. In addition the list of responses shows that 26 responses were above the mean and 15 below it. The two largest response categories, by a significant margin, are “3” (Neither Agree/Disagree) and “4” (Agree).

**Table (21) Test of Means for the difference between online nascent entrepreneurs considering the business knowledge they gain**

	Mean	Std. deviation
Online nascent business knowledge	3.11	1.11

Results were mixed, the mean indicates that respondents generally neither agreed nor disagreed with the previously identified statement. However, the largest number of respondents (26) either “Agreed” or “Strongly Agreed” with the statement. Only 15 either “Disagreed” or “Strongly Disagreed,” while 23 “Neither Agreed nor Disagreed.” Results were conclusive for Hypothesis 3e.

However, results show that when ‘agree/strongly agree’ responses are combined; they represent the largest response group, with a total of 26 respectively. When the 23 ‘neither agree/disagree’ responses are added to the “agree/strongly agree” responses, more than 76% of the respondents, 49 out of 64 respectively, did not disagree with the statement that “since they began using their online social network site, they have increased their level of business knowledge.”

*Hypothesis 4a: There is no significant difference between online and offline nascent entrepreneurs considering the number of weak ties they possess.*

The t-test results in Table 22 show that the mean number of weak ties for online nascent entrepreneurs was 295 while for offline nascent entrepreneurs it was 27. The difference was statistically significant at the  $p < .05$  level. Both have a rather large standard deviation, but they are consistent in relation to their respective means.

**Table (22) t-Test for the difference between online and offline nascent entrepreneurs considering the number of weak ties they possess**

	Mean***	Std. deviation
Online nascent weak ties	295.45	272.25
Offline nascent weak ties	26.88	24.90

\*\*\*significant difference at  $p < .05$

These results show strong statistical support for rejecting Hypothesis 4a.

**Hypothesis 4b:** *There is a significant difference between online and offline nascent entrepreneurs considering the number of strong ties they possess.*

The t-test results in Table 23 show that the mean number of contacts communicated with by online nascent entrepreneurs was 33 while it was 6.3 for offline nascent entrepreneurs. The difference was statistically significant at the  $p < .05$  level. The standard deviation for both is quite large, but they are consistent in relation to their respective means.

**Table (23) t-Test for the difference between online and offline nascent entrepreneurs considering the number of strong ties they possess**

	Mean***	Std. deviation
Online nascent strong ties	33.16	34.35
Offline nascent strong ties	6.36	5.22

\*\*\*significant difference at  $p < .05$

These statistical results show strong support for rejecting Hypothesis 4b.

**Hypothesis 4c:** *There is no significant difference between online nascent entrepreneurs considering the amount of information they are exchanging with their online and offline only strong ties contacts.*

This was a single item measure based on responses to a 5-point Likert scale of agreement. A “3” in the results is an indicator that the respondent neither agreed nor disagreed with the statement that, “they exchange more information with their very close online contacts than with their very close offline contacts.” The means test results in Table 24 show that the mean response was 2.84, with a standard deviation of 1.22. In addition the list of responses shows that 27 responses were below the mean and 24 above it. The two largest response categories were “2” (disagree) and “4” (agree).

**Table (24) Test of Means for the difference between online nascent entrepreneurs considering the amount of information they are exchanging with their online and offline only strong ties contacts**

	Mean	Std. deviation
Online strong ties vs. offline strong ties information exchange	2.84	1.22

The interval is closer to “3” than “2”. This, combined with the response listings indicates that although respondents generally neither agree nor disagree, they are more likely to disagree than agree. Results are conclusive for Hypothesis 4c.

**Hypothesis 5:** *The number of contacts within a nascent entrepreneur’s online network is positively related to the number of entrepreneurial ideas they identify.*

A means for online nascent entrepreneurial total contacts and entrepreneurial ideas are shown in Table 25. A Pearson Correlation was conducted to determine if any correlation or association existed between the factors, with results in Table 26. The Pearson results show no significance at the  $p < 0.05$ .

**Table (25) means testing for the relation between the numbers of contacts within a nascent entrepreneur’s online network and the number of entrepreneurial ideas they identify**

	Mean	Std. deviation
Online nascent total contacts	249.02	230.39
Offline nascent entrepreneurial ideas	6.19	5.53

**Table (26) Pearson Correlations between the numbers of contacts within a nascent entrepreneur’s online network and the number of entrepreneurial ideas they identify**

		Contacts	Ideas
<b>Online contacts</b>	Pearson correlation	1	.175
	Sig. (2- tailed)		.167
<b>Entrepreneurial ideas</b>	Pearson correlation	.175	1
	Sig. (2- tailed)	.167	

As a further test of the hypothesis, a Hierarchical Regression Analysis was conducted. Entrepreneurial ideas were then regressed against weak ties, strong ties, online business contacts, and offline business contacts to determine if any of these factors could be used to predict the number of entrepreneurial ideas identified. Results are in Table 30. None of the models showed significance.

**Table (30) Regression Results for Weak Tie, Strong Tie, Online and Offline Business Contacts Influence on entrepreneurial Ideas Identified**

Variable	Model 1 beta	Model 2 beta	Model 3 beta
<b>Weak ties</b>	.253	.225	.224
<b>Strong ties</b>	-.049	-.038	-.037
<b>Online business contacts</b>		.089	-.081
<b>Offline business contacts</b>			.024
<b>F</b>	1.904	1.414	1.052
<b>Adjusted R square</b>	.028	.019	.003
<b>Change in R from model 2</b>			.008
<b>Change in R from model 3</b>			.016

**6. Conclusion, Limitations and Future Research**

Research results showed that approximately one-third of a respondent’s online contacts were also offline contacts, with 205 online contacts and 67 online/offline contacts on average. Online nascent entrepreneurs demonstrated a link between business decisions and social structures as shown through their increased number of business contacts as compared to offline nascent entrepreneurs (Hypothesis 3a). Entrepreneurs also tend to have well established social networks, using them to obtain and generate business ideas (Brown & Butler, 1995) and to get advice and resources to launch a business (Granovetter, 1985; 1992).

As nascent entrepreneurs work through the discovery process, they make extensive use of their network of friends or their social capital. This social capital helps to expose them to varying ideas and views, providing a wider frame of reference and support for new business ideas (Aldrich et al., 1998; Aldrich & Zimmer, 1986).

The large number of online contacts and increased information exchange as compared to offline nascent entrepreneurs found in this research seems to demonstrate improved access to this social capital. The immediate access to so many individuals through use of online social networks may impact how these networks are accessed and the way in which ideas and knowledge are exchanged within a network. This did provide some support for the notion that social capital can be more important than obtaining a college education and in the same time the current research found that the level of education has little impact on the idea identification process.

In addition nascent entrepreneurs and entrepreneurs with only some college education were found to identify just as many or more ideas than those with advanced (bachelors and graduate) degrees. These results provide insight into the power of social capital in recognizing entrepreneurial ideas.

Access to the appropriate information plays a critical role in opportunity recognition (Gaglio& Katz, 2001; Kaish&Gilad, 1991; Shane, 2003), and this research postulated that the unique

capabilities inherent to online social network sites would enhance a nascent entrepreneur's ability for idea identification or at the very least, increase the number of possible opportunities that nascent entrepreneurs would be exposed to. Research results support this postulation, with nascent entrepreneurs using online social networks to exchange in more information exchange with their contacts (Hypothesis 2a), possessing a larger number of online business contacts than offline business contacts (Hypothesis 3b), and ultimately identifying more opportunities than those that do not use online social network sites (Hypothesis 3c).

Ganovetter (1973) advocated maintaining an extensive network of weak ties since a majority of the new information within a network is transmitted through these weak tie exchanges (Granovetter, 2004). Results show that not only do online nascent entrepreneurs identify and maintain a larger number of weak ties overall (Hypothesis 4a), but they also maintain a larger number of strong ties (4b) than those that do not use an online social network. This research found that nascent entrepreneurs using online social networks did report more entrepreneurial ideas than those that did not (Hypothesis 3c), supporting the belief that the use of an online social network does provide additional support for idea identification.

However, this research did not provide conclusive evident for supporting the positive link between the number of online contacts and idea recognition (Hypothesis 5), which was only weakly supported in this study. Results from this research demonstrate that more entrepreneurial ideas are identified by those using online social networks, but it is still unclear what combination of online factors truly influences this increase in idea identification. In addition another finding from this research was that age and level of education did not impact results.

Overall, this research has expanded the applicability of previous research from traditional social networks to online networks. Nascent entrepreneurs who use online social networks communicate with more contacts (Hypothesis 1a), communicate with more online than offline contacts (Hypothesis 1b), have a larger number of business contacts (Hypothesis 3a), have a larger number of weak and strong ties (Hypotheses 4a, 4b) and identify more entrepreneurial ideas than those that do not use online social network sites (Hypothesis 3c).

### **Limitations**

The research sample was distributed through only one educational segment, community colleges, within Egypt. Time constraints and desire for a larger response rate provided constraints on the use of a broader sample base. This limitation was addressed through the expanded inclusion of adult continuing education students. This student base provided access to a broader age, race, and work experience demographic than was possible by targeting only undergraduate students. By limiting the survey to Egypt, findings from this research may be limited due to cross-cultural differences. However, two key factors critical to this research were easily met by conducting this survey in Egypt and more specifically, in Cairo.

Cairo has a large percentage of the general population who has access to the Internet and online social networks. The other critical factor to be met was that the general population had to have a high enough concentration of nascent entrepreneurs so that the total sample size could be limited to hundreds instead of thousands. The Internet-based survey method brought some limitations as well. While different Internet connection speeds and browser differences/settings (Couper, 2000) can impact survey completion, the broad-based student use of college computer systems and networks mitigated many of these limitations.

### **Future Research**

There are five directions that should be taken in consideration for future researches. The first future research direction is to extend the research to study online and offline entrepreneurs. The second research direction would be to focus more on the factors impacting entrepreneurial idea

identification such as online social network use, the number of contacts, and information exchange combine to influence the idea identification process.

The third research direction is to expand this research on idea identification to include the opportunity recognition process. While this study focused on idea identification and not the opportunity recognition process, results suggest a need to conduct further research concerning the impact of online social networks on the opportunity recognition process. The fourth research direction is to determine how the combination of online and offline factors influence idea identification.

The fifth research direction is to better measure the hypotheses that produced inconclusive results. Since results from this research indicate that more entrepreneurial ideas are identified by nascent entrepreneurs that use online social networks, further research is needed to determine the combination of online factors that influence this increase in idea identification.

## REFERENCES

- Adler, P. & Kwon, S. (2002). Social capital: Prospects for a new concept. *Academy of Management Review*, Vol.27 No.1, pp. 17–40.
- Aldrich, H. & Zimmer, C. (1986). Entrepreneurship through social networks. In D. Sexton & R. Smiler (eds.), *The Art and Science of Entrepreneurship*: 3–23. New York: Ballinger.
- Aldrich, H., Renzulli, L., & Langton, N. (1998). Passing on privilege: resources provided by self-employed parents to their self-employed children. *Research in Social Stratification and Mobility* 16, 291–17.
- Arenius, P. & de Clercq, D. (2005). A network-based approach on opportunity recognition. *Small Business Economics*, 24, 249–265.
- Baron, R.A. & Ensley, M.D. (2006). Opportunity recognition as the detection of meaningful patterns: Evidence from comparisons of novice and experienced entrepreneurs. *Management Science*, Vol. 52 No.9, pp. 1331–1344.
- Birley, S. (1985), the role of networks in the entrepreneurial process, *Journal of Business Venturing*, Vol. 1, pp. 107–117.
- Bourdieu, P., (1983). Forms of capital, In: Richardson, J. (Ed.), *Handbook of Theory and Research for the Sociology of Education*, Greenwood Press, New York, pp. 241–258.
- Bowles, S. and Gintis, H. (2002), “Social capital and community governance”, *The Economic Journal*, Vol. 112 No. 483, pp. 419-36.
- Boyd, D. and Ellison, N. (2008), “Social network sites: definition, history, and scholarship”, *Journal of Computer-Mediated Communication*, Vol. 13 No. 1, pp. 210-30.
- Brown, B. & Butler, J.E. (1995). Competitors as allies: A study of entrepreneurial networks in the U.S. wine industry. *Journal of Small Business Management*, Vol.33 No.3, pp.57–66.

- Casson, M. (2005), the individual-opportunity nexus: a review of Scott Shane: A general theory of entrepreneurship, *Small Business Economics*, 24, 423–430.
- Centola, D. & Macy, M., (2007). Complex contagions and the weakness of long ties. *American Journal of Sociology*, Vol.113, pp. 702–734.
- Coleman, J. (1990). *Foundations of social theory*, Cambridge, MA: Belknap Press.
- Coleman, J.S. (1988). Social capital in the creation of human capital, *American Journal of Sociology Supplement*, Vol. 94, pp. 95–120.
- Couper, M. (2000). Web surveys: A review of issues and practices. *Public Opinion Quarterly*, Vol.64, pp.464–494.
- Coyle, C.L. & Vaughn, H. (2008). Social networking: communication revolution or evolution? *Bell Labs Technical Journal*, Vol. 13 No.2, pp. 13–18.
- Cross, R. & Cummings, J. (2004). Tie and network correlates of individual performance in knowledge intensive work. *Academy of Management Journal*, Vol.47 No.6, pp. 928–937.
- Davidsson, P. and Honig.B. (2003). the role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, Vol.18 No.3, pp. 301-331.
- De Carolis, D.M. &Saparito, P. (2006). Social capital, cognition, and entrepreneurial opportunities: A theoretical framework. *Entrepreneurship Theory, and Practice*, 30 (1), 41–56.
- Ellison, N.B., Steinfield, C., & Lampe, C. (2007). The Benefits of Facebook ‘friends’: Social capital and college students’ use of online social network sites. *Journal of Computer-Mediated Communication*, Vol. 12 No. 4, pp. 1143–1168.
- Gaglio, C.M. & Katz, J. (2001). The psychological basis of opportunity identification: Entrepreneurial alertness. *Small Business Economics*, Vol. 16 No.2, pp.95–111.
- Gaglio, C.M., &Taub, R.P. (1992). Entrepreneurs and opportunity recognition. *Frontiers of Entrepreneurship Research*, Vol.12, pp.136–147.
- Granovetter, M.S. (1973). The strength of weak ties, *American Journal of Sociology*, Vol.78 No. 6, pp. 1360–1380.
- Granovetter, M.S. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, Vol.91 No.3, pp.481–510.
- Granovetter, M.S. (1992). Problems of explanation in economic sociology. In N. Nohria &R. Eccles (Eds.), *Networks and organizations: Structure, form, and action*: pp.25–56. Boston: Harvard Business School Press.
- Granovetter, M.S. (2004). The Impact of social structures on economic development. *Journal of Economic Perspectives*, Vol.19 No.1, pp.33–50.

- Greene, P. & Brown, T., (1997), Resource needs and the dynamic capitalism typology, *Journal of Business Venturing*, Vol. 12 No. 3, pp. 161–173.
- Greve, A. and Salaff, J.W. (2003) Social networks and entrepreneurship. *Entrepreneurship Theory and Practice*, Vol.28 No.1, pp. 1–22.
- Hanifan, L.J. (1916), “the rural school community centre”, *Annals of the American Academy of Political and Social Sciences*, Vol. 67, pp. 130-8.
- Im, S. and Workman, J.P. (2004), “Market orientation, creativity, and new product performance in high-technology firms”, *Journal of Marketing*, Vol. 68 No. 2, pp. 114-32.
- James Christian Franklin, Michael Mainelli, Robert Pay, (2014), “Measuring the value of online communities”, *Journal of Business Strategy*, Vol.35 No.1, pp. 29-33.
- Kaish, S. & Gilad, B. (1991). Characteristics of opportunities search or entrepreneurs versus executives: Sources, interests, general alertness. *Journal of Business Venturing*, Vol.6, pp.45– 61.
- Ko, S. & Butler, J.E. (2007). Creativity: A key link to entrepreneurial behavior. *Business Horizons*. Greenwich: Vol.50 No.5, p.365.
- Lee, J.H., & Venkataraman, S., (2006). Aspirations, market offerings, and the pursuit of entrepreneurial opportunities, *Journal of Business Venturing*, Vol.21, pp.107–123.
- Lin, N. (2001). *Social Capital: A theory of social structure and action*. New York: Cambridge University Press, pp. 150–151.
- Lin, N., Ensel, W., & Vaughn, J. (1981). Social resources and strength of ties: structural factors in occupational status attainment. *American Sociological Review*, Vol.46 No.4, pp. 393–405.
- Long, W. & McMullan, W.E. (1984). Mapping the new venture opportunity identification process. *Frontiers of Entrepreneurship Research*, Vol.4, pp. 567–590.
- Loury, G. (1987). Why should we care about group inequality? *Social Philosophy and Policy*, Vol. 5, pp. 249–271.
- Lumpkin, G.T., Hills, G., & Shrader, R. (2004). Opportunity recognition. In H.P. Welsch (Ed.) *Entrepreneurship: The way ahead*, pp.73–90. New York: Routledge.
- Lumpkin, G.T., Lichtenstein, B.B., (2005). The role of organizational learning in the opportunity-recognition process. *Entrepreneurship Theory and Practice*, Vol. 29 No. 4, pp. 451–472.
- Malhotra.N.K & Birks.D.F, (2006), *Marketing Research: An Applied Approach*, Third European edition.
- Molina-Morales, X.F. and Marti´nez-Ferna´ndez, T.A. (2010), “Social networks: effects of social capital on firm innovation”, *Journal of Small Business Management*, Vol. 48 No. 2, pp. 258-79.
- Paldam, M. and Svendsen, G.T. (2000), “an essay on social capital: looking for the fire behind the smoke”, *European Journal of Political Economy*, Vol. 16, pp. 339-66.

- Parameswaran, M. & Whinston, A. (2007). Research issues in social computing. *Journal of the Association for Information Systems*, Vol.8 No.6, pp. 336–350.
- Peltier, J.W., Schibrowsky, J.A. and Zhao, Y. (2012), “Technology adoption by small businesses: an exploratory study of the interrelationships of owner and environmental factors”, *International Small Business Journal*, (forthcoming).
- Portes, A. (1998). Social capital. *Annual Review of Sociology*, Vol. 23, pp. 1–24.
- Puhakka, V. (2006). Effects of social capital on the opportunity recognition process. *Journal of Enterprising Culture*, Vol.14 No.2, pp. 105–124.
- Putnam, R. (2000). *Bowling alone: the collapse and revival of American community*. New York: Simon and Schuster.
- Putnam, R.D. (1993). The prosperous community: Social capital and economic growth. *American Prospect*, Vol. 13, pp. 35–42.
- Putnam, R.D. (1994), “Tuning in, tuning out: the strange disappearance of social capital in America”, *PS Online: American Political Science Association’s Journal of the Profession*, December.
- Putnam, R.D., Leonardi, R. and Nanetti, R.Y. (1993), *Making Democracy Work*, Princeton University Press, Princeton, NJ.
- Routledge, B. and von Amsberg, J. (2003), “Social capital and growth”, *Journal of Monetary Economics*, Vol. 50 No. 1, pp. 167-93.
- Sanz-Velasco, S. (2006), “Opportunity development as a learning process for entrepreneurs”, *International Journal of Entrepreneurial Behavior and Research*, Vol. 12 No. 5, pp. 251-71.
- Sayed, S.F. and Murphy, J. (2010), “Social networking as a marketing tool: the case of a small Australian company”, *Journal of Hospitality Marketing & Management*, Vol. 19 No. 7, pp. 700-716.
- Schumpeter, J. A. (1934). *Theory of economic development* (trans. R. Opie). Cambridge, MA: Harvard University Press.
- Seerat Fatima, (2011), a study of factors affecting opportunity recognition process—case study of Pakistan, an opportunity recognition process framework, *interdisciplinary journal of contemporary research in business*, vol3, No 8, pp. 1110-1115
- Shane, S. (2003). *a general theory of entrepreneurship: The individual-opportunity nexus*. Northampton, MA: Edward Elgar.
- Shane, S. & Venkataraman, S. (2000), *The promise of entrepreneurship as a field of research*, *Academy of Management Review*, Vol. 25, pp. 217–226.

- Shaver, K.G. & Scott, L.R. (1991). Person, process, choice: The psychology of new venture creation. *Entrepreneurship Theory and Practice*, Vol.16 No.2, pp.23–45.
- Sheau Fen Crystal Yap, Christina Kwai Choi Lee, (2014), “Leveraging the power of online social networks: a contingency approach”, *Marketing Intelligence & Planning*, Vol. 32 No.3, pp. 345-350.
- Shepherd, C. (2011), “Does social media have a place in workplace learning?” *Strategic Direction*, Vol. 27 No. 2, pp. 3-4.
- Shu, W. and Chuang, Y.-H. (2011), “The perceived benefits of six-degree-separation social networks”, *Internet Research*, Vol. 21 No. 1.
- Simonds, D. (2011), “Is Facebook really worth \$50 billion?” *Economist*, Vol. 398 No. 8715, pp. 63-64.
- Singh, R. (2000). *Entrepreneurial opportunity recognition through social networks*. New York: Garland Publishing, Inc. Taylor and Francis Group.
- Singh, R., Hills, G.E., Hybels, R.C. & Lumpkin, G.T. (1999). Opportunity recognition through social network characteristics of entrepreneurs. *Frontiers of Entrepreneurship Research*, Wellesley, MA: Babson College: pp. 228–241.
- Steinfeld, C., Ellison, N.B., & Lampe, C. (2008). Social capital, self-esteem, and use of online social network sites: A longitudinal analysis. *Journal of Applied Developmental Psychology*, Vol. 29, pp. 434–445.
- Taylor, C. (2010). Integrated marketing communications in 2010 and beyond. *International Journal of Advertising*, Vol.29 No.2, pp. 161-164.
- Terry Hui-Ye Chiu , Chien-Chou Chen , Yuh-Jzer Joung , Shymin Chen, (2014), “A study of blog networks to determine online social network properties from the tie strength perspective”, *Online Information Review*, Vol.38 No. 3, pp. 381-398.
- Torsvik, G. (2000), “Social capital and economic development: a plea for the mechanism”, *Rationality and Society*, Vol. 12, pp. 451-76.
- Uzzi, B. (1996), the sources and consequences of embeddedness for the economic performance of organizations: The network effect. *American Sociological Review*, Vol. 61, pp. 674–698.
- Ward, T.B. (2004). Cognition, creativity, and entrepreneurship. *Journal of Business Venturing*, Vol.19 No.2, pp.173–188.
- Watts, D. (2002). A simple model of global cascades on random networks. *Proceedings of the National Academy of Sciences* Vol. 99, pp. 5766–5771.
- Watts, D.J. & Strogatz, S.H. (1998). Collective dynamics of ‘small-world’ networks. *Nature*, Vol.393, pp.440–42.

Wellman, B., Salaff, J., Dimitrova, D., Garton, L., Gulia, M., & Haythornthwaite, C. (1996).  
Computer networks as social networks: Collaborative work, telework, and virtual community.  
*Annual Review of Sociology*, Vol. 22, pp. 213–38.

Wen Gong , Rodney L. Stump , Zhan G. Li, (2014), “Global use and access of social networking  
web sites: a national culture perspective”, *Journal of Research in Interactive Marketing*, Vol.8  
No.1, pp. 37-55.

Zak, P. and Knack, S. (2001), “Trust and growth”, *The Economic Journal*, Vol. 111, pp. 295-321.

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**THE EFFECTS OF INTERNET AND E-COMMERCE ON ENTREPRENEURSHIP AND SMEs IN  
PAKISTAN**

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**Abstract:** Small and medium enterprises (SME's) have a major contribution to the Pakistani economy. However, scant research has addressed the entrepreneurial talent in e-commerce pertaining to Pakistan. This paper investigates young entrepreneurs from different universities in Pakistan, professionals, proprietors and owners of Small and Medium Enterprises (SME) and unfolds the entrepreneurship impact of internet and e-commerce in Pakistan. Structural equation model has been incorporated and findings revealed a positive relationship between adoption and e-commerce. Similarly, significant positive relationship was seen between entrepreneurial motivation and success.

Key words: Entrepreneurship, SME's, Entrepreneurial Success, E-commerce

## **1 Introduction**

Entrepreneurship has gained popularity consistently throughout the 1990s and has developed as a legitimate scholarly teach in this century. Entrepreneurship has a significant role in developing and boosting the economies (Khan, 2000). With the advent of e-commerce in the SME sector there has been a rise in challenges that have lead to a healthy competition. Internet has encouraged many entrepreneurs to take risks and implement unique business ideas such as Sean Parker the founder of Napster (file-sharing computer service), Mark Zucherberg the co-founder of Facebook, Jerry Yang; cofounder of Yahoo Inc. and many more. However, the field has been dominated with research from the US, UK, and Canada (Meyer et al., 2014) while the remaining countries have been underrepresented in empirical research. .

Entrepreneurship is a thriving force in the economic development of an economy. Thus it is important to investigate whether the increase in the use of internet has influenced entrepreneurship in Pakistan. To the extent of our knowledge, this research question has not been addressed by previous studies. This research may be used as a motive to explore entrepreneurship in Pakistan. SME's have a major contribution to the Pakistani economy and the increase in the SME's would be an improvement of the Pakistani economy. This paper specifically addresses the following research questions:

RQ<sub>1</sub>: Is innovation an important factor to entrepreneurial success, what other factors lead to entrepreneurial success?

RQ<sub>2</sub>: Does internet and e-commerce motivate an entrepreneur in Pakistan?

RQ<sub>3</sub>: Can adoption have a positive relation with e-business and ecommerce which may eventually help to motivate entrepreneurs and lead to entrepreneurial success.

## **2 Literature Review**

Entrepreneurship and economic development are highly correlated and significantly impact economic development (Khan, 2000). Entrepreneurs cannot easily succeed in making successful business without facing the risk arising from internal and external conditions which ultimately results in the change of standard of living of the common masses (Quadir and Jahur, 2011). The success of the idea is dependent on many factors which includes the uniqueness of the idea, the strength of the actual product or the hard work or any inside information which the entrepreneur has which will guarantee the success (Quadir and Jahur, 2011). Navot and Cohen (2015) infer another point of view for analyzing approaches by stressing the essential part of strategy business people.

Scholars have investigated the relationship of e-commerce with customer commitment and customer retention (Delone and McLean, 2004). They introduced three types of attributes including the internet content of websites of e-trade, the technical aspect of the e-commerce system, and the assistance delivered through the e-commerce system. These attributes of e-commerce service providers let the firms gather all the information as mentioned earlier and use it to maximize the business benefits by helping in retaining their customers (Sun, 2010).

### **2.1 Innovation**

Innovation is the cornerstone of business success in the dynamic emerging markets and requires a good knowledge of the area in which your core competency belongs and the ability to acquire and apply new knowledge to solve the problems (Shane and Venkataraman, 2000). Marcati et al. (2008) discussed two types of innovativeness including general and specific innovativeness. General innovativeness is the degree of openness to new and specific advancement to be among the firsts to adopt innovations in the specific domain. The behavioral aspect of the person is analyzed by the attitude towards the behavior, the subjective norm and the social pressure to perform or not to perform.

Innovation has been studied from various perspectives. Marcati et al. (2008) stated that innovation is the part of the personality and is an important factor in entrepreneurship. However, Hasan and Harris (2009) viewed innovation as a vague and a subjective statement. Whereas Vischer et al. (2014) have analyzed innovation as the key to success towards creativity and effective management for a firm. They explained that innovation in management is a continuous process which is to be followed by the firm to effectively enhance the management skills and eventually achieve the entrepreneurial success.

H<sub>1</sub>: Innovation has a significant positive impact on Entrepreneurial success

### **2.2 Adoption**

Compatibility has evolved as an independent factor which highly influenced the e-commerce adoption (Grandon and Pearson, 2004). Rugman et al. (2011) contend that firms are built firstly on nation particular preferences before they begin creating firm-particular points of interest. Therefore, it is conceivable that the utilization of systems to uphold internationalization might significantly vary by nation which in the long run impacts the internationalization of an SME (Ciravegna et al., 2014). This shows that adoption is the most significant factor in influencing the businesses to move and adopt the new ways of doing business through e-commerce.

H<sub>2</sub>: Adoption has a positive relationship with e business and e-commerce

### 2.3 Entrepreneurial Motivation

Entrepreneurial motivation is the driving force for the entrepreneurs which strives them to be an entrepreneur, take risks and improve the performance of the company and the economy and make the lives of the general public easy. There are many factors which influence the motivational force of entrepreneurship Arend (2013). Earlier studies show that the culture, efficacy and the policies have a huge role to play in. The culture of the area or the background (family) is more supportive of the entrepreneurs than the motivational force would be high. For example if a person belongs to a business family, he / she would be prone towards the business environment for the birth therefore the motivational force to do the business, take calculated risks and improve the performance of the company would be high to the person belonging from a family who is prone towards the job environment. Entrepreneurial motivation has a strong positive relationship between leadership, motivation and professional motivation which means that this factor can lead to entrepreneurial success (Chan et al., 2012).

H<sub>3</sub>: Entrepreneurial motivation has a positive effect on entrepreneurial success.

### 2.4 Management

It emphasizes the challenges faced by the organizations of increasing internationalization therefore the elements that help improve the firm performance will eventually lead to the entrepreneurial success, which comprises of motivation, efficacy and intent of a person's career.

Firm's management is one of the keen factors influencing the entrepreneurial success. As discussed earlier that withholding information is not enough when it comes to firm performance. Utilizing that information for the betterment of the firm will improve the firm's performance hence it can only be done by the efficient management of the firm which will ensure that the information is used efficiently as there is no direct relationship of the information acquisition and the firm performance (Keh, 2007). Innovation is an important factor for the management as well which has led to the increase in efficiency profitability of the firm (Visscher et al., 2014).

H<sub>4</sub>: Management will have a positive relationship with entrepreneurial success

### 2.5 E-Commerce and E-Business

E-commerce can be illustrated as the use of electronic transmission mediums to engage in the exchange, including buying and selling, of products and services, either physically or digitally, from different locations. Electronic commerce involves transactions of all sizes which basically require the digital transmission of transaction data (Hasan and Harris, 2009).

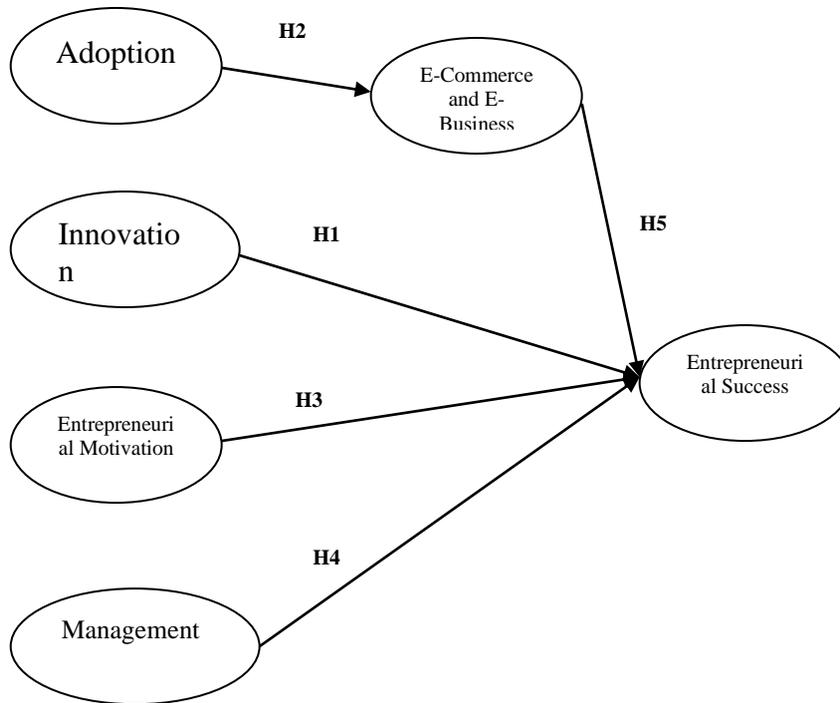
The role of the internet increased in the highly developed countries rather than the less developed countries and the frequency to use it did not increase proportionately in the world. Till today there are many countries in the world that does not have full access to the internet which includes Nepal, Indonesia (Arend, 2013). It helps the businesses to reduce the transaction costs and provides a common ground to compete for their own market share through innovativeness and unique ideas (Evan and Wurster, 1997).

In most developed countries, e-commerce is used widely and hence operated in a highly competitive market where sustainable competitive advantage is almost impossible because there are minimal barriers to entry and competition in the market is immense (Hasan and Harris, 2009).

H<sub>5</sub>: E commerce will not have positive relationship with entrepreneurial success

## 2.6 Entrepreneurial Success

**Figure 1:** *Theoretical Framework*



## 3 Data and Methodology

The sample of the study included young entrepreneurs from different universities in Pakistan, some owners of SME's and some professionals. The sample size of this research is 213 respondents which were catered through an online available questionnaire filled by the people residing in Pakistan. Convenience and snowball sampling technique were used in examining the questionnaire's results. Heterogeneity was expected among respondents in terms of relative importance attached to different attribute. There are two models of SEM that are consistently utilized within the research which includes path analysis (PA) and confirmatory factor analysis (CFA). CFA was used to check the validity and reliability of the variables. This is done by evaluating the factor loading, convergent (AVE) and discriminant validity (DV), and construct reliability (CR). All the variables measured were measured from already existing instrument (see table 1) on a 5 point Likert scale which ranges from strongly disagree to strongly agree.

## 4 Results and Analysis

### 4.1 Data Analysis

Out of 213 respondents 48.8% of the population was female and 50.7% were male, 55.4% of the population has done its bachelor's degree. The respondents were majorly from education, manufacturing and whole sale. 85% of the population have internet service provider at their businesses and 82.2% of the population has their webpage or a website, however only 62.4% of the people only use ecommerce as the tool to their business.

Outliers, normality and multicollinearity were assessed and the conditions were satisfied. Moreover in order to analyze the total common method variance a Harman's one factor test was conducted. One variable shows a common method bias of 26 percent which is significantly less than 60

percent (Premkumar and Bhattacharjee, 2008). Thus, it can be concluded that there is no variance biasness in the data used for analysis.

#### 4.2 Measurement Model

The Cronbach alpha for all the variables were greater than 0.7 showing reliable constructs (Kim, 2012). Adoption, innovation, e-motivation, management, e-commerce and e-success have the cronbach alphas of 0.903, 0.809, 0.764, 0.839, 0.912 and 0.856 respectively.

Innovation (In) was measured through 5 items deduced from Nga and Shamuganathan (2010). The factor loadings for each and every item were greater than 0.5. Adoption (Ad) was measured through 4 items deduced from Grandon and Pearson (2004). The factor loadings for the construct were greater than 0.5. Entrepreneurial motivation (EM) was measured through 3 items deduced from Chan et al. (2012). Management (MA) was measured through 2 items deduced from Chan et al. (2012). All the factor loadings were greater than 0.5 as shown in Table 1. E-commerce (EC) was measured through 13 items by Grandon and Pearson (2004). Entrepreneurial Success (ES) is measured through 4 items deduced from Shrnhur et al. (1997) and all the factors were greater than 0.5.

The reliability, convergent validity and discriminate validity were measured for all the constructs and all the values were above the benchmark by (Verhoef et al., 2002; Singh et al., 2011; Meyer et al., 2014).

<b>Table 1: Constructs and measurement items</b>	<b>Standardized loadings</b>
<b><i>Adaptation (AVE = 0.62, CR = 0.90, DV=0.787) (Grandon and Pearson, 2004)</i></b>	
Ad1: Our organization has the financial resources to adopt electronic commerce.	0.74
Ad2: Top management is enthusiastic about the adoption of electronic commerce	0.70
Ad3: Competition is a factor in our decision to adopt electronic commerce.	0.80
Ad4: Using electronic commerce would enable my company to accomplish specific tasks more quickly	0.81
Ad5: Using electronic commerce would improve my job performance.	0.84
<b><i>Innovation (AVE = 0.46, CR = 0.80, DV=0.678) (Nga and Shamuganathan, 2010)</i></b>	
In1: Entrepreneurs are able to see risks as opportunities to create social value	0.61
In2: Entrepreneurs are innovative individuals	0.82
In3: Entrepreneurs are proactive in identifying social opportunities	0.69
In4: Entrepreneurs are able to deliver sustainable advantage through innovative goods and Services	0.74
In5: Entrepreneurs are pragmatic individuals	0.49
<b><i>Entrepreneurial Motivation (AVE = 0.52, CR = 0.76, DV=0.72) (Chan et al., 2012)</i></b>	
EM1: The easiest and fastest way to make lots of money is to open my own business.	0.55
EM2: This country needs more entrepreneurs and I feel obliged to give it a go.	0.82
EM3: I like thinking about ways to create new products and services for the market	0.77
<b><i>Management (AVE =0.77, CR = 0.0.87, DV=0.88) (Chan et al., 2012)</i></b>	
M1: Plan a business (including market analysis, pricing, finances/costs, marketing/sales).	0.89
M2: Build a network of contacts or partners who will support my business.	0.85
<b><i>E-Commerce and E-Business (AVE = 0.46, CR = 0.90, DV=0.66)( Grandon and Pearson, 2004)</i></b>	
In order to provide strategic value to our organization, electronic commerce should help	0.71
EC1: Reduce costs of business operations	0.68

EC2: Improve customer services	0.73
EC3: Improve distribution channels	0.73
EC4: Provide effective support role to operations	0.77
EC5: Support linkages with suppliers	0.70
EC6: Provide managers better access to information	0.67
EC7: Provide managers access to methods and models in making functional area decisions	0.57
EC8: Improve communication in the organization	0.71
EC9: Improve productivity of managers	0.54
EC10: Support strategic decisions of managers	0.69
EC11: Help make decisions for managers	0.51
EC12: Support cooperative partnerships in the industry	
EC13: Provide information for strategic decision	
<b><i>Entrepreneurial Success (AVE 0.54, CR = 0.82, DV=0.73) (Shrnhur et al., 1997)</i></b>	
In order to provide strategic value to our organization, entrepreneurial success should help:	0.79
ES1: Meet operational and technical specifications	0.75
ES2: Solve major operational problems	0.74
ES3: Improve management skills	0.74
ES4: Improve firm's performance financially	

Note: Fit statistics for structural model:  $\chi^2/df=2.10$ ; CFI=0.85; IFI= 0.86; TLI=0.84; NFI= 0.76; RMSEA=0.07. \* $p<0.00$

In order to meet the criteria of excellent model fits, it should be above 0.90. The values of the baseline comparisons are; NFI=0.764, CFI=0.858 and TLI=0.84. The values are acceptable as studied by Köllner et al. (1998). The last measure used for model fit is RMSEA. The value of RMSEA should be less than 0.1 for the best fit. The value observed is 0.072. This is also acceptable as stated by Hair et al. (2006) according to whom the value should be less than 0.10 to be fit for the studied model. Thus, all the measures determine a moderate model fit for the studied carried out.

### 4.3 Structural Model

Path analysis (PA) models determine examples of directional and non-directional connections around dependent and independent variables. Path analysis is used to reject or accept the hypothesis of the research and to check the model fits of the research. Testing the hypothesis is done by evaluating the un-standardized estimates (betas) of each relationship and their significance (p-value) in AMOS.

The first hypothesis ( $H_1$ ) was that innovation has a positive relation with the entrepreneurial success. This hypothesis is rejected as innovation and entrepreneurial success has a negative relationship with each other hence we reject  $H_1$  and we can conclude that entrepreneurial success has a negative relationship on innovation, as it is shown in the Table 2 below that the beta (estimate) has a negative value of 0.384 however the p-value is significant but we can conclude that the relationship between these two variables is not positive as shown in Table 2. It was supported by Hasan and Harris (2009) that innovation is a vague and relevant statement.

The second hypothesis ( $H_2$ ) proposed that adoption has a positive relation with e-business and e-commerce. This hypothesis is accepted as Table 2 shows that e-commerce and adoption has a positive estimate and highly significant relationship with e-commerce. Hence, we can accept this hypothesis. As stated in the descriptive analysis of the results that more than 80% think that they should use electronic commerce as it will improve the overall performance and reduce the costs. There are many factors which leads to the adoption of ecommerce as mentioned earlier.

The third hypothesis ( $H_3$ ) was that entrepreneurial motivation has a positive relationship with entrepreneurial success. This hypothesis is accepted as there is a positive relationship between the

two variables with the estimate of 1.020 and a significant p-value of 0.005 as shown in Table 2. The relationship between management and entrepreneurial success (H<sub>4</sub>) is positive but not significant hence the hypothesis is rejected as shown in Table 2. E-commerce and entrepreneurial success has a negative relationship hence H<sub>5</sub> is also rejected. We can conclude that electronic commerce is not a certain way that would lead to entrepreneurial success.

**Table 2: Path Analysis**

Hypotheses	Relationships	Predicted Sign	Estimate	P-Value	Hypotheses Decision
H <sub>1</sub>	Entrepreneurial Success <-- Innovation	+	-0.38	0.02	Not Supported
H <sub>2</sub>	E-Commerce <- Adoption	+	1.02	***	Supported
H <sub>3</sub>	Entrepreneurial Success <-- Entrepreneurial Motivation	+	0.25	0.00	Supported
H <sub>4</sub>	Entrepreneurial Success <-- Management	+	0.01	0.8	Not Supported
H <sub>5</sub>	Entrepreneurial Success <-- ElectronicCommerce	+	-0.14	0.31	Not Supported

Note: Fit statistics for structural model:  $\chi^2/df=2.31$ ; CFI=0.93; GFI= 0.74; TLI=0.66; AGFI= 0.70; RMSEA=0.087. \*p<0.00

The CMIN/d.f which is a stand-alone index has a value of 2.614 the bench mark for this as mentioned earlier is 3 or less hence it is a good result (Goldstein 2006). Goodness of fit (GFI) has the value of 0.749, Adjusted goodness of fit (AGFI) has the value of 0.7 acceptable by Köllner et al. (1998). The last stand alone index is RMSEA has the value of 0.087. The value of RMSEA should be less than 0.05 for the best fit however this is also acceptable as stated by Hair et al. (2006) according to whom the value should to less than 0.10 to be fit for the studied model. The bench mark for CFI, NFI, IFI and TLI is 0.9 or more which means that the model fits don't hit the bench mark however value of 0.66 of NFI is used by Kushner et al. (1994). Values till 0.720 are used by Köllner et al. (1998) for CFI, IFI and TLI.

**5 Discussion and Management Implications**

The findings of the study support that internet and e-commerce has an impact over entrepreneurial success. Variables were identified from the previous literature. Structural equation modeling (SEM) was used to enable us to accept or reject the previously stated hypothesis in the study.

The first hypothesis states that there is a positive relation between innovation and entrepreneurial success. However, the study showed a negative impact of innovation on success. A possible reason for the lack of support for significant positive relationship between innovation and entrepreneurial success could be that the study has treated innovation as a single construct while Hasan and Harris (2009) have divided innovation into four sub categories, product, process, market and organization. It is possible that by looking at innovation in a greater detail we shall be able to find that certain types of innovation are more important to entrepreneurial success than others.

The second hypothesis states that adoption leads to entrepreneurial success and has a significant positive relationship on e-commerce. The current study supports the hypothesis. Responses indicate that if an entrepreneur venture is adaptable to the changing technological trends it leads to success

that enhances their overall performance. The results of the current study are supported by Guillien (2001).

The third hypothesis states that entrepreneurial motivation has a positive relationship with entrepreneurial success. The study found support for the hypothesis. This shows that motivation acts as a driving force for entrepreneurs to strive for excellence and improve their performance. Chan et al. (2012) report similar findings.

The fourth hypothesis states that a positive relationship exists between entrepreneurial success and management. The findings show a positive relationship between the constructs but insignificant due to low p-value. Thus, the hypothesis is rejected. This means management plays a minor role in entrepreneurial success. Arend (2013) also reported similar results.

The fifth hypothesis tests the positive relationship between electronic commerce and entrepreneurial success. However, the data did not support the hypothesis. The construct electronic commerce showed a negative relationship with entrepreneurial success. Thus, it can be concluded that e-commerce is not a significant contributor to the success of entrepreneurial ventures. This study will allow the managers that how effective e-commerce is and how it could help businesses or firms in achieving firm's financial performance. It additionally has suggestions for business and administration and more extensive human resource management that how the firm could benefit themselves by investing in e-commerce and how entrepreneurship has positive relationship with the various variables. The elements that help improve the firm performance and eventually leads to the entrepreneurial success comprises of a person's mindset which includes the motivation, efficiency and the level of commitment.

## **6 Limitation and Future Research and Conclusion**

This research is limited by the respondents from only few major cities and the respondents were selected by the convenience sampling which is not a significant and effective way to target your desired market. The data collection was limited by the time constraints and lack of financial resources. The questionnaire was sent to many firms and entrepreneurs but due to the time constraint of one month many of the expected responses were not recorded on time, hence the data collection duration and the number of respondents were limited to 213 which could have been improved by increasing the number of respondents which could have made the research more authentic.

Entrepreneurship is an evolving concept in the developing nation such as Pakistan hence a lot of research could be done on this with different domains of entrepreneurship. Any future researches on this could be more effective as it could be more specific to any other region in Pakistan or could just focus on the new trend on entrepreneurship in the developing country.

The study demonstrated by using structural equation modeling the importance of entrepreneurial success and factors affecting it. The findings of the study revealed that internet and e-commerce has an impact over entrepreneurial success. Innovation however is not a significant factor for entrepreneurial success (in Pakistani context). Adoption leading to adaptability of e-commerce in the business and adoption and entrepreneurial motivation are more important factors for entrepreneurial success of a firm. Internet motivates an entrepreneur to encourage the entrepreneurship in Pakistan as the number of online shopping websites are increasing in Pakistan and the trend towards online shopping have significantly increased in at least the major cities of Pakistan.

## **References**

Arend, R.J. (2013). A heart-mind-opportunity nexus: Distinguishing social entrepreneurship for entrepreneurs. *Academy of Management Review* 38(2), pp.313-315.

- Chan, K.Y., Moon-ho, R.H., Chernyshenko, O.S., Bedford, O., Uy, M.A., Gomulya, D., & Phan, W.M.J. (2012). Entrepreneurship, professionalism, leadership: A framework and measure for understanding boundary less careers. *Journal of Vocational Behavior* 81(1), pp.73-88.
- Ciravegna, L., Lopez, L., & Kundu, S. (2014). Country of origin and network effects on internationalization: A comparative study of SMEs from an emerging and developed economy. *Journal of Business Research* 67(5), pp. 916-923.
- Delone, W.H., & Mclean, E.R. (2004). Measuring e-commerce success: Applying the DeLone & McLean information systems success model. *International Journal of Electronic Commerce* 9(1), pp.31-47.
- Evans, P.B. and Wurster, B.S. (1997) Strategy and the new economics of information. *Harvard Business Review* 75(5), pp.70–83.
- Gemmell, R. M. (2011). *Entrepreneurial innovation as a learning system* (Doctoral dissertation, Case Western Reserve University).
- Grandon, E.E., & Pearson, J.M. (2004). Electronic commerce adoption: an empirical study of small and medium US businesses. *Information & Management* 42(1), pp.197-216.
- Guillén, M. F., & Suárez, S.L. (2001). Developing the Internet: entrepreneurship and public policy in Ireland, Singapore, Argentina, and Spain. *Telecommunications Policy* 25(5), pp.349-371.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R.L. (2006). *Multivariate Data Analysis* (Vol. 6). Upper Saddle River, NJ: Pearson Prentice Hall.
- Hasan, M., & Harris, E. (2009). Entrepreneurship and innovation in e-commerce. *Journal of Achievements in Materials and Manufacturing Engineering*, 32(1), pp.92-97.
- Keh, H.T., Nguyen, T.T.M., & Ng, H.P. (2007). The effects of entrepreneurial orientation and marketing information on the performance of SMEs. *Journal of Business Venturing* 22(4), pp.592-611.
- Khan, A.R. (2000). *Entrepreneurship Small Business and Lives of Successful Entrepreneurs*. Dhaka, Bangladesh.
- Köllner, C., Pugin, B., & Togni, A. (1998). Dendrimers containing chiral ferrocenyl diphosphine ligands for asymmetric catalysis. *Journal of the American Chemical Society* 120(39), pp.10274-10275.
- Kushner, M. G., Sher, K. J., Wood, M. D., & Wood, P. K. (1994). Anxiety and Drinking Behavior: Moderating Effects of Tension-Reduction Alcohol Outcome Expectancies. *Alcoholism. Clinical and Experimental Research*, 18(4), pp.852-860.
- Marcati, A., Guido, G., & Peluso, A.M. (2008). The role of SME entrepreneurs' innovativeness and personality in the adoption of innovations. *Research Policy* 37(9), pp.1579-1590.
- Meyer, M., Libaers, D., Thijs, B., Grant, K., Glänzel, W., & Debackere, K. (2014). Origin and emergence of entrepreneurship as a research field. *Scientometrics* 98(1), pp.473-485.
- Navot, D., & Cohen, N. (2015). How Policy Entrepreneurs Reduce Corruption in Israel. *Governance* 28(1), pp.61-76.
- Nga, J.K.H., & Shamuganathan, G. (2010). The influence of personality traits and demographic factors on social entrepreneurship start up intentions. *Journal of Business Ethics* 95(2), pp.259-282.
- Premkumar, G., & Bhattacharjee, A. (2008). Explaining information technology usage: A test of competing models. *Omega* 36(1), pp.64-75.

- Quadir, S.N., & Jahur, M.S. (2011). Determinants of success and failure of entrepreneurs of SMEs in Bangladesh-An Explorative Study. *European Journal of Business and Management* 3(3), pp.1-15.
- Rugman, A.M., Verbeke, A., & Nguyen, P.C. Q.T. (2011). Fifty years of international business theory and beyond. *Management International Review* 51(6), pp.755-786.
- Shah, R., & Goldstein, S.M. (2006). Use of structural equation modeling in operations management research: Looking back and forward. *Journal of Operations Management* 24(2), pp.148-169.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review* 25(1), pp.217-226.
- Shenhar, A.J., Levy, O., & Dvir, D. (1997). Mapping the dimensions of project success. *Project Management Journal* 28(2), pp.5-13.
- Singh, A.S., Vik, F.N., Chinapaw, M.J., Uijtdewilligen, L., Verloigne, M., Fernández-Alvira, J.M., & Brug, J. (2011). Test-retest reliability and construct validity of the ENERGY-child questionnaire on energy balance-related behaviours and their potential determinants: The ENERGY-project. *International Journal of Behavioral Nutrition and Physical Activity* 8(1), pp.136-147.
- Sun, H. (2010). Transferring attributes of e-commerce systems into business benefits: A relationship quality perspective. *Journal of Electronic Commerce Research* 11(2), pp.92-109.
- Verhoef, P. C., Franses, P. H., & Hoekstra, J. C. (2002). The effect of relational constructs on customer referrals and number of services purchased from a multiservice provider: does age of relationship matter? *Journal of the Academy of Marketing Science* 30(3), pp.202-216.
- Visscher, K., Stierand, M. and de Weerd-Nederhof, P. C. (2014), *Editorial. Creativity and Innovation Management* 23, pp.1-2.

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**ACCOUNTING EDUCATION IN LIBYA: THE NEED FOR REFORMS TO KEEP PACE WITH  
DEVELOPMENTS**

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**Abstract:** Accounting education is of substantial importance to the accounting profession and the wider community that the profession serves. The Libyan accounting education system places a great deal of emphasis on abstract classroom learning in universities and preparation for examinations. While this abstract learning is vital, there is a clear need for more co-operation with the profession to provide deeper experiential learning in accordance with International Accounting Education Standards (IES). There is also a need to bridge an existing skills gap in accountants' familiarity with Information Technology (IT) systems.

**Keywords:** Accounting Education, Higher Education, Accounting Profession

## **1. Introduction**

Accounting education is very important, because of the role of the accounting profession and must meet the accounting community's need. Accounting is a social sciences relating to the organization and its activity and social impact. Accounting affects the social relations of the people, as it is a source of data and information and forms the language of business records, which is used in the tabulation and summarization of economic events. Accounting can benefit those who have a direct or indirect relationship with the economic entity

The development of accounting education is the responsibility of several parties in the forefront of higher education institutions. Methods based education is required to ensure the efficiency of the professional preparation of accounts and focuses on providing the learner with abilities and professional skills for use in a professional setting (IFAC 1998).

### **Previous studies**

There are many studies that have addressed the issue of accounting education and how it has developed.

Rashed (1998) focused on identifying the extent of the link between accounting education by the profession and other education. The study showed that personal

work background and characteristics have an impact on the profession and that the contrast in professional behavior was due to the behavioral characteristics.

Kilani (2000) sought to find ways to improve the role of the securities market, by analyzing the banking system's and financial institutions' roles in the revitalization of this market. The most important recommendation in this paper is to organize and develop the accounting profession by issuing local accounting standards of a comprehensive nature and fully consistent with the principles of accounting in international accounting standards and to require companies to apply these standards and to monitor staff. A further recommendation is co-operation with universities and research centers for the development of accounting science and methods of accounting and accounting education.

Daly also confirmed (2003) in his study the need to recognize the reality of accounting education in Libya and to examine the elements of accounting education (curriculum and faculty members and the educational management body), its role in the development of students and graduates and its impact on the efficiency of accounting departments.

Furthermore, Ben Gharbia (2005) explained that the work involved in developing the professional environment requires a set of basic elements including raising awareness of the importance of the use of financial information in making economic decisions, in which users rely on the foundations of rules and standards applied in the preparation and presentation of financial statements, an understanding of the role of the audit in assessing the credibility of information and the development of the human actors who prepare and use numerical financial information.

Ammari (2006) also confirmed on the need to provide a strategic framework for the development of accounting education outputs through a set of aims successive hierarchically begin identifying the needs of the business receiving sector with respect to what is required of an accountant to do the tasks and responsibilities and then determine the knowledge, experience and skills required from accountant to do the responsibilities and follows the methods and ways of identifying the appropriate education for graduate accounting qualification to perform these tasks and then identify problems and difficulties are facing a process of development and modernization of the current curriculum and teaching methods. And finally propose measures to solve the problems

Alruyata (2007) explained that the information technology of today's world imposes further requirements on the relevant accounting education institutions, with a need to upgrade course content in line with modern technology.

Although the level of technological progress enjoyed by the accounting education in the countries of the developed world, such as the United States of America still needs

further development and reform, this kind of education needs a larger degree of reform and development in the developing countries, including Libya.

Tanthosh (2007) provides a theoretical model for a proposal to bridge the gap between accounting education and the requirements of the accounting profession. This study has suggested that there is an exchange of knowledge and experience between all of the educational sector and professional sector, so that colleges and universities have the chance to provide practical applications for accounting departments and the profession can support academic development so that the rationalization of performance in the workplace reflects the philosophy, analysis, tools and theories developed by academics, while keeping abreast of the latest developments in science and knowledge.

Abuchras (2013) focused on the need to develop accounting education through the best strategies and mechanisms and to reconsider the content subjects, styles and methods of teaching and learning with a focus on information and communication technology. This study recommended cooperation and integration between the professional bodies and academic institutions to raise awareness and to maximize the impact of research and discussion of scientific and technical and developments on professional accountants' knowledge.

After tracing the previous studies in Libya we can see that there is clear consensus on the existence of deficiencies in the accounting and auditing profession in Libya at all levels. There is an urgent need to improve and organize professional bodies to manage the profession and to establish standards and principles of accounting,

## **2. The problem of the study**

Rapid developments in the work environment presents the accounting education system in Libya with great challenges imposed by the need to develop educational programmes and methods to ensure the appropriate preparation of students and graduates and to provide them with the knowledge and skills that meet the evolving requirements of the labour market.

It is good planning to develop educational programmes for the success of the basic elements of accounting education and to increase the quality of its output but the quality of these outputs depends primarily on the quality of the accounting system and of the constituent elements of education.

Kath et al. (2007) found that for Libyan universities to be able to provide students with skills in line with work requirements they and the contents of their accounting education programmes must be reorganized.

This study centres on the extent of the problems in accounting education in Libyan universities and the need to develop in line with business requirements. The research questions are:

What are the problems and obstacles that limit the development of educational curricula without accounting in Libyan universities?

What are the ways and methods that can be followed for the development of educational curricula accounting.

### **3. Importance of the study**

The importance of this study is that the results would be useful in the identification of the most important skills and experience for accounting graduates. These skills and experiences must be available to the graduates of accounting departments in line with the requirements of the job. The curriculum development process must also keep pace with developments in the local and global environment.

### **4. Methodology**

This study is based on an inductive approach to determine the most important skills and knowledge that accounting students must have available to them in accounting departments of Libyan universities.

### **5. Divisions of the study**

This study is divided into a review of previous studies, the study problem, the importance of the study, the methods used to teach accounting and the need for change, the development of vocational education, accounting methods, the obstacles facing accounting education in Libya, the results of the study and the study's recommendations.

#### **The methods used to teach accounting and the need for change**

Many international professional organizations explain that there is an urgent need to reconsider the methods used in accounting education. The Bedford panel in 1986 reported two reasons explaining the lack of development of accounting education in the previous fifty years, which led to a gap between the academic side and the practical side in the accounting field. The results of the study carried out by HEAGY (1987) confirmed that the gap between the academic and professional side in the accounting field was due to the difference between the academic curriculum and the accounting information requirements for business decision. Furthermore, both the American Accounting Association and the Institute of Management Accountants in the United States indicated the need for the development of accounting education in line with the requirements of the profession (Albrecht and Sack, 2000).

The International Federation of Accountants also issued (IFAC, 2003) recommendations for accounting education programs, including better preparation of accounting students to provide them with the skills and knowledge that will enable them to keep pace with business requirements and new successive developments.

Kilani (2000) and Daly (2003) showed the need to modify the contents of accounting education in order to ensure the teaching and learning contribute to an understanding of economic data and that the student's participation in the debate during lectures dealt with cases of local process. They also recommended changes to methods of evaluation.

In addition, a study by Ben Gharbia (2005) confirmed that the work environment requires awareness of the importance of the use of financial information in economic decision-making and the adoption of satisfactory principles, rules and standards in the preparation and presentation of information and financial statements. It also requires an understanding of the role and function of the audit. After reviewing the previous research in the local environment, it was noted that accounting education did not receive enough attention, as most of the studies and research in this field were by postgraduate students or faculty members, with no local studies carried out by scientific institutions under the auspices of big commercial companies or firms, like the studies carried out by institutions in the developed countries.

### **The development of professional accounting education methods**

The first phase of public education in building a knowledge-based economy is at this stage to prepare students to deal with the economic variables, to enable them to reach a sufficient level in the development of mental and cognitive abilities and to equip them with basic skills. In other words, the public education is the basis of learning and of the acquisition of most of the professional skills required for accounting work. Skills that can be learned by the student at this stage include professional and technical skills, interpersonal skills and communication. Moreover, International Accounting Education Standard 1-5 (IES 1-5) indicated how important it is for students enrolled to study accounting to have had a high level of success in the public school where the student has acquired the non-professional knowledge that will enable them to pass a professional proficiency test later.

The second stage is professional accounting education. If we follow the International Federation of Accountants' standards, the development of professional accounting education would be through the adoption of an accounting education programme, which is illustrated the six international educational standards issued to 2003, namely:-

IES 1. Entry requirements to a program of professional accounting education

IES 2. Content of a professional accounting education program

IES 3. Professional skills

IES 4. Professional values, ethics and attitude

IES 5. Practical experience requirements

IES 6. Assessment of professional capabilities and competence

These standards will serve as a general framework for use in the local environment to meet local labour market needs through the development of an educational process. The key themes for discussion and development are:

(1) professional accounting education curriculum

(2) teaching methods

## (3) practical experience or practical training period

As a result of the rapid developments in information technology and in the business environment, a good plan for curriculum development is needed and this must be reviewed on a regular basis in accordance with the requirements of the labor market, so that weaknesses in the curriculum and research agenda can be identified and addressed. Many studies have shown weaknesses and suggested how to develop accounting education curricula. Among these studies are Sacks (2000) and Elliott and Albrecht (1999), which showed the importance of training and guidance for students in thinking creatively using accounting information in making different decisions, with an expansion in the study of decision-making, taking advantage of the experience and accounting curriculum models of other countries.

Since the current approaches do not direct much attention to the many moral issues in accounting and auditing, these issues should be given increased coverage. In addition, approaches to the design and implementation of computer systems and approaches to e-commerce should be included. This has been addressed by the standard IES2 addresses the contents of accounting education in detail and the following tables show the vocabulary used:

**Table 1. Financial Accounting**

Subject	Subject Content
Financial Accounting and Reporting	<p>The accounting profession and accounting thought.</p> <p>The content of the regulatory processes, and principles, and installed, and by means of the report of the internal and external use, containing the information needed by decision-makers, financial, and Calendar critical of the role of accounting information in meeting those needs.</p> <p>Local accountability, and international auditing standards.</p> <p>Accounting rules Regulation of Accounting</p>
Management Accounting and Control	<p>Include planning, budgeting, cost management, and quality control, and performance measurement, and put Benchmarking Standards</p> <p>And include the control concepts, and methods, and processes that enhance and complement the financial statements, and provide protection business assets Safeguarding of business assets.</p>
Taxes	<p>Include taxes and their impact on the financial and administrative decisions</p>

Trade and Business Law	Knowledge of the work environment legitimacy and include securities Act and the Companies Act, which fits the role of the profession in a particular country.
Review and approval of Assurance	The nature of the audit and other confirmatory services, involving estimation of risk assessment and the discovery of fraud detection of mental and procedural foundations for their implementation.
Finance and Financial Management	Knowledge in financial and financial management include: analysis of financial statements, financial instruments, and markets for local and international money, and resources management Managing resources
Values and Professional Ethics	Include ethical responsibilities, and professional accountant towards the professional environment, the public and the environment Professional and wider public environment

The contents of the Table 1, require students to develop cognitive skills and an understanding of the fundamental basis of accounting. It also requires the ability to discover and query the information necessary for decisions and to use organized, logical and analytical thinking to make critical judgments and to identify and solve problems.

**Table 2. Organizational Knowledge and Business Management**

Title	Content
Economy	Knowledge of macroeconomic and microeconomic economy
Business Environment..	Understanding of the regulations and the environments in which they operate, and this includes understanding the economic situation, and the legal, political, social, and technical, cultural and international forces and their effects and values
Financial Markets	Knowledge of commercial markets, finance, and how they work
Quantitative Methods..	The application of quantitative methods, and mathematics in solving business problems
Management and Strategic Decision-Making	Understanding the process of decision-union strategies, including strategic management, and public administration

Marketing	Understanding of personal issues and issues of human resources, personnel management, project management, marketing
Work Ethic	Understanding the dynamics of self, and collective organizations, including the methods of creating and managing change within organizations
Organizational Behaviour	Understanding of the regulatory and operational risk
International and World Trade	Basic knowledge of international trade, finance, and knowledge of the ways that made them international business management, as well as the processes of globalization

This requires scientific education and cognitive development to meet industry requirements engage in risk analysis to identify and solve problems. It also requires the acquisition of organizational and business administration skills, together with the ability to plan strategically and management personnel and resources. Different educational methods from those applied in financial accounting may be needed in the development of behavioural skills. A question arises over whether these topics are best suited to serve the labour market in the Libyan environment but most of the studies on the local environment confirm the deficiencies in the present curricula. As the student demands the ability to use information technology and tools and systems employed in the solution of business and accounting problems and needs to show an understanding of the work of these systems, the following table shows the material which the student is required to understand.

**Table 3. Knowledge of Information Technology**

Title	Content
General knowledge of the use of information	General knowledge of the use of information and information technology tools, which suit to solve business problems and accounting systems technology
Adaptation of the knowledge of information technology systems	Adapt the knowledge of information technology systems  Show understanding of accounting systems, and business systems
Terms of reference in directing the	Use metrics to verify the validity and

information technology	accuracy of personal systems
Terms of reference of information technology users	Mastery of one or a combination of the above terms of reference for the performance of the role: Director of Information Systems, or a resident, or a designer, or participate in all

The student must become familiar with the vocabulary of information technology and develop cognitive and perceptual skills to apply technical and organizational knowledge in solving complex issues. The student must learn to devise solutions and experiment and thus the student needs to learn the process of finding new answers, which is a vital life and work skill.

The knowledge of information technology content may be taught in a variety of ways, in separate sessions or together with other knowledge content, with the introduction of themes in information technology in organizational knowledge and accounting and business management content. The accounting education programme in Libya presently lacks material in computer studies, leaving scope for modernization.

### **Teaching Methods**

Accounting education programs must not focus on preparing students to pass the exam only but must focus on teaching students the skills and strategies that will help them to learn effectively and use these effective educational strategies to continue to learn throughout their careers (Albrecht and Sack, 2000).

The need to use teaching methods focused on understanding and developing students' thinking abilities use of information to solve problems requires tests designed to measure the analytical and intellectual capacity of the students and encourage them to work in groups. Students can be given assignments in the form of practical situations, such as the application of principles to the analysis of company accounts, analysis of practical cases and the oral presentation of original ideas. There needs to be an exchange of information including the participation of people with practical and professional experience in giving lectures.

### **Practical Experience**

Abstract academic education does not lead to a full qualification but must be paired with practical education and training. This is assessed by accounting institutes, which make the final judgment on the capabilities and competencies of professional graduates. IES5 makes recommendations on practical experience requirements. Some of these requirements relate to the goal of achieving professionalism through the appropriate combination of general and vocational education and practical experience.

The list of competencies may change in accordance with the rules of international standards and domestic laws and in accordance with the expectations of the public. Academics and professional supervisors should coordinate their work and develop work environments that properly accommodate graduates' needs to complete the programme of study and work experience required by professional bodies, following as far as possible a logical sequence which allows the development of advanced and specialized skills built on basic and fundamental principles. There is a need to assess the experience gained in addition to a final assessment of the capabilities and efficiency of the candidates before they become full members of the profession. IES6 indicates how to assess the capabilities and competencies as follows:-

1. Students should have appreciation of the topics in their curriculum.
2. They should have the ability to apply technical knowledge in an analytical and scientific manner.
3. They should have ability to extract knowledge that will enable them to find multiple solutions to complex problems.
4. They should have the ability to solve a specific problem using appropriate information and to distinguish between information of different qualities and relevance.
5. They should have the ability to solve complex and difficult problems by identifying causes.
6. They should have the ability to provide the possibility of alternative solutions and understand the rules of choice when dealing with them.
7. They should have the ability to synthesize various topics in knowledge and skills.
8. They should have the ability to communicate effectively with users of information.

From the above it can be said that students may sometimes become a fully-fledged professionals with incomplete professional capabilities, impairing the efficient performance of the accounting profession. It can be said that the accounting education programme in Libya does not include a certain period of practical training in work environments. Also, education institutions do not definitively assess the capabilities and competencies of professional accountants after the training course. This leads to difficulties in accounting education and training in Libya.

## **6. Difficulties Facing Accounting Education in Libya**

Most of the studies addressing the issue of accounting education in Libya agree on a set of difficulties that can be summarized as follows:

- Weaknesses in the accounting education programme caused by a curriculum which is not in line with modern educational developments

- Lack of creativity in teaching and teaching in creativity
- Failure to follow developments and changes due to the lack of resources locally and lack of links to non-academic practitioners
- Constraints associated with the accounting work environment, with the most important difficulties lying in the lack of requirements for chartered accountants to undergo periodic tests to renew their licenses as well as the lack of commitment by some practitioners to professional ethics, in addition to a failure to keep up to date with technological and accounting developments
- Constraints associated with professional bodies and the organization of the profession, with a weak legislature, ineffective accounting bodies and a failure to issue national standards or regulate the profession

### **Results of the study**

Accounting education in Libya is predominantly theoretical and has not been developed in accordance with the requirements of the times. It does not take advantage of practical undergraduate projects and postgraduate theses to direct students to study real work problems in economic units and to extract findings and recommendations for economic units, thus developing problem-solving abilities.

There is almost no cooperation between academic departments, colleges and economic units in the development of an educational framework resting on research into the skills required in the profession. There is also little communication between universities and their alumni.

There are no organized programs to develop faculty members in the methods of modern university education, in the application and development of creativity and in excellence in their performance and to encourage them to conduct scientific research and write books and articles and attend scientific conferences and symposia.

### **Recommendations of the Study**

- Develop accounting vocabulary and knowledge in the accounting education curriculum through studies in the requirements of the labor market in the local environment and in the required skills expected of accountants, with insertion of key topics identified into the curriculum in order to allow graduates to enjoy the professional skills that are able to meet the requirements of the environments in which they will work.
- Focus on the accounting education curriculum in terms of quality and promotion of technological skills, in accordance with specific plans and standards already in place and in a way that is consistent with the requirements of practical reality, with the need for co-ordination between the educational institutions and professional associations.

- Enable faculty members to develop educational methods and tactics by provision of information technology and assistance with attendance at training courses and scientific and educational conferences, which may enable them to update their information constantly, as well as the provision of modern books and periodicals.
- Include a period of practical training in the accounting education curriculum, whether in sync with the theoretical study or afterwards
- Adoption of recommendations and guidelines from IESs for content and learning assessment and evaluation

## References

Abogras, F. (2012), "Futuristic look of accounting education in the new Libya," *Scientific Journal of the Research of Physical Education and Sports Science*.

American Accounting Association (1986), Committee on the Future Structure Content, and Scope of Accounting Education, (The Bedford Committee): "Future of Accounting Education: Preparing for the Expanding Profession," *Issues in Accounting Education*, 1(1), pp.168-195.

Alamary, S.R., and ben Rashed, S. (2006), *Accounting Education in Accounting Departments at Saudi Arabia's Universities: Vision for the future*, Riyadh: King Saud University

Albrecht, W.S., and Sack, R.J. (2000), *Accounting Education, Charting the Course Through a Perilous Future*, Sarasota, FL: American Accounting Association.

Al-Daly, M.M, (2003), *The Rôle of Accounting Education in Raising and Development of the Professional Competence of the Graduates of the Accounting Departments at Libyan Universities*, MA Thesis, Academy of Graduate Studies, Tripoli.

Al-Kelany, A.Al-K. (2000), "Accounting education and its relationship to economic and social development in Libya Accounting education and its relationship to economic and social development in Libya," *Economic Research Journal of the Economic Research Center Benghazi* 11(20), p.1, <http://www.erc.org.ly/Master.asp>

Al-Rashed, W. (1998), "Build professional skills in accounting education," *Arab Journal of Accounting* 2(1).

Ashour, B.M., and Kali, A.A. (2006), "Factors affecting the development of the accounting profession in Libya," *Research First National Conference on Accounting: Accounting Profession and the Criteria for Evaluating and Repairing*, June 2006.

Ben Krbea, S. (2005), "The evolution of the accounting work environment and the possibility to benefit from the results of previous efforts in the development of national environmental accounting," *Economic Research Journal of the Economic Research Center Benghazi* 16(2).

El-Azmah, M., and Al-Bassam, S. (1989), "Economic and social aspects of accounting regulation in developing country: The case of Kuwait," *the Arab Journal of Social Sciences* 2(2).

Herring, H. C. and Izard, C.D. (1992) "Outcomes assessment of accounting majors," *Issues in Accounting Education* 7(1), pp.1-17.

Heagy, C. D. (1987), *A National Study and Empirical Investigation of the Accounting Systems Course: Academic Practice versus Professional Needs*, DBA Thesis, Memphis State University.

Howieson, B., (2003), "Accounting practice in the new millennium: Is accounting education ready to meet the challenge?" *British Accounting Review* 35(2), pp.69-103.

International Federation of Accountants Education Committee (2003), *International Education Standards 1: Entry Requirements to a Program of Professional Accounting Education*, <http://www.ifac.org/store/category.tmpl?category=Education>

International Federation of Accountants Education Committee (2003), *International Education Standards 2: Content of Professional Accounting Education Programs*, <http://www.ifac.org/store/category.tmpl?category=Education>

Klad, S., Fatuha, M., and Musa, F., (2009), "Factors affecting student in Libya's decision to choose the allocation of accounting," *Alzvia University Planning and Development Magazine* 3.

Tanthosh, M.G. (2007), "The requirements of the accounting profession and the need for a dual installation of accounting education," Scientific Conference of Accounting Education of the Academy of Graduate Studies, Tripoli, Libya.

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## APPLICABLE LAWS AND PROCEDURES IN INTERNATIONAL COMMERCIAL ARBITRATION IN JORDAN COURTS.

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**Abstract:** The jurisdiction of the tribunal is fundamental to the authority and decision-making power of the arbitrators. Awards rendered without jurisdiction have no legitimacy. The absence of jurisdiction is one of the few recognized reasons for a court to set aside or refuse recognition and enforcement of an award, this paper will present applicable laws and procedures in international commercial arbitration in Jordanian courts.

**Keywords:** Arbitration, International Law, Commercial Law

### 1. Introduction

The arbitration proceedings are the backbone of the arbitration system which sets bounds to ensure the legitimacy of the outcomes. Arbitration proceedings can be the subject of arbitration applications to gain access to the arbitration awards. Arbitration presents advantages to the international trade community: one is speed of arbitration for the opposing parties; another is that the arbitrator is an expert and judge at the same time. Many modern arbitration laws consider any participation in proceedings on its merits without challenging the jurisdiction of the tribunal. An exception to this general rule is the question of objective arbitrability of a given dispute, which is outside the reach of party autonomy (Mistelis, 2005). The arbitration procedure is of great importance to the achievement of the arbitration or the collapse of a specific case. Forasmuch as there is a large area of freedom available to the parties or the arbitrators regarding arbitration, the first paragraph of Article V of the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards sets out various grounds and errors in proceedings which can lead to refusal of implementation or to part of the arbitration ruling being discounted.

In addition, Article No. 1504 of the French Code of Civil Procedure allows an arbitration ruling to be set aside for lack of respect of certain principles, such as the presence of an arbitration agreement or the right of opposing parties to present and defend their claims. Moreover, Paragraph (3) of Article (49/A) of the Jordanian Arbitration Act, allows admission of suits for the invalidity of the arbitration in appeals of arbitration proceedings (Ahmad, 1997).

## 2. Arbitration Procedures in Jordan Courts

Although it may be envisaged to subject these actions to the same law that applies to the subject of the dispute, they can be subject to different laws and this must therefore be taken not to confuse the law governing the procedures and that which governs the subject. There is nothing to prevent the subjection of these proceedings to the will of the parties, which is the basis of all international treaties relating to arbitration, giving the parties the ability to set the rules of the procedures followed by the arbitrator or the arbitral tribunal (Sadeq, 1975). This intention has been clearly expressed by the European Geneva Convention on International Commercial Arbitration, 1961. Article IV, para.1, subpara. (b) allows the parties to the arbitration to make the rules determining the procedures to be followed to the arbitrators. The New York Convention, approved in 1958, has been approved for 1958, in Article V, allows refusal of recognition of the validity of the arbitration and implementation thereof for non-conformity with the arbitration agreement of the parties or the law of the state where the arbitration has been made, in the absence of agreement between the parties about procedures.

It also does not mean arbitration may follow any procedure during the validity of the arbitration appointment but grants authority to the parties in determining these procedures in advance before the start of the arbitration proceedings. The principle of submission to the will of the parties to arbitration in the law which was approved by the United Nations Commission on International Trade Law in 1985 also allowed approved procedures, a rule followed in Jordanian legislation in Article 24 of the Arbitration Act, which states that: the parties to the arbitration may agree on the procedures followed by the arbitration, including in essence their right to subject these procedures to the rules followed in any institution or arbitration centre in the UK or abroad and if there is no such agreement it is for the arbitral tribunal to choose arbitration proceedings as it deems appropriate and subject to the provisions of the Act. This Article further states that the freedom of the parties or the arbitrators to choose rules of procedure is not linked to the place arbitration, whether the arbitration takes place outside or inside Jordan. It also does not mean that the arbitrators may pursue any action during the course of the arbitration but means that the authority in determining these procedures in advance before the start of the arbitration proceedings is subject to the will of the parties to arbitration, if the procedure is not in dispute.

The difficulty arises when there is no agreement on the rules of procedure or a failure to agree on the law applied by the arbitrator in such proceedings, as well as in the case of the inadequacy of the rules of procedure agreed upon by the parties. This difficulty is easy to solve for arbitration which is within the framework of a permanent arbitration body because these bodies' regulations include rules of procedure applied by the arbitration bodies, such as those which form the procedures of the International Court of Arbitration of the International Chamber of Commerce.

The parties' referral of their dispute to arbitration by one of these bodies is a signal of acceptance of the procedures applied by this body.

To complete what was agreed upon by the parties concerning the rules of procedure or to apply the proper rules seems difficult when there is no agreement between the parties on the rules governing the arbitration procedure and there is no law applying to these procedures and when rules of procedure established by the permanent Court of Arbitration, which are the source or procedures when there is no agreement between the parties to arbitration for special rules of procedure and there is no indication in law of the procedures to be applied in connection with the arbitration proceedings, are inadequate. In this case, the law of the place of arbitration is referenced, taking into account what has been agreed upon by the parties (Ababneh, 2004). This is consistent with the New York Convention of 1958, which refers to the law of the state in which the arbitration was made in the absence of agreement of the parties. If the question arises of the identification of the intended law of the place of arbitration or the law of the state in which the arbitral tribunal is being held for the first time or the law of the state in which the judgment is rendered, the place of arbitration since the start of the arbitration proceedings must be specified, on the basis either of the agreement of the parties or of the place designated by the arbitral tribunal. This is provided for in Article 27 of the Jordanian Arbitration Act, saying: the parties to the arbitration may agree on the place of arbitration in the UK or abroad and if there is no agreement the arbitral tribunal shall be appointed and the place of arbitration decided taking into account the appropriate place for the parties' conditions.

A question arises on the identification of the beginning of the arbitration proceedings, as this has a great importance not only in establishing the law governing the actions at issue but also in assessing the speed of arbitration, which was one of the main reasons for the boom in arbitration at the present time. The applicable law agreed upon by the parties or determined by the arbitrator, as noted, applies to all arbitration proceedings from the beginning of arbitration until its completion. Arbitration is also associated with a limited duration during which the arbiters must adjudicate in the dispute or otherwise lose their mandate. The determination of this duration requires knowledge of the time of the beginning of the arbitration proceedings. So regulators have been keen to make rules for arbitration centres to determine the time of commencement and Article III of the International Chamber of Commerce arbitration system stipulates that the court shall consider the date of receipt of the request for arbitration by the secretariat as the date for the commencement of the arbitration proceedings. The rules on arbitration of the United Nations Commission on International Trade Law (UNCITRAL rules) Article III states that such arbitration proceedings start from the date of receipt by the respondent of the request for arbitration by the claimant but the model law prepared by the United Nations Committee on the Law of the Trade has opened the door for the parties to agree on a date other than the original deadline for the receipt of the

claimant's request for arbitration by the respondent and allowed parties to agree on an alternative latest date for commencement of the arbitration proceedings (Reyad, 2009). In the Jordanian Arbitration Act, the legislator leaves it as a general rule that procedure is a matter for the agreement of the parties and that the start of the arbitration proceedings should be the day on which the formation of the arbitral tribunal is completed unless the parties agree otherwise. We find that the Jordanian legislators use the date of the formation of the arbitral tribunal as the time of completion of the actions necessary to start the arbitration proceedings.

## References

Mistelis, L. (2005), *Applicable Laws and Procedures in International Commercial Arbitration*, London: University of London Press.

Ahmad I. (1997) *Private International Arbitration*, 2<sup>nd</sup>. Ed., Cairo: Al Nahda Arab House.

Sadeq, A. (1975), *Public International Law*, 11<sup>th</sup> ed.

Ababneh, A.A. (2004), *The Law Applicable to International Electronic Contract in the Jordanian and Comparative Law*, PhD Dissertation, Amman Al-Arabia University for Graduate Studies.

Reyad, F. (2009), *International Conflict of Laws and Jurisdiction and the Effects of Foreign Judgments*, Cairo.

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