

Enhancing Entrepreneurial Abilities through Various Crowdfunding Models

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Abstract: This study aims to study different crowdfunding models and how those models enhance entrepreneurial abilities. The study conducted on Arabic region by using different models of Crowdfunding platforms (reward, donation, equity, lending) as the field of study.

The population of (15) platforms consist of: individuals, entrepreneurs, investors, employees at Crowdfunding platforms. Descriptive and quantitative approach used in this article, and a questionnaire used as a tool to collect primary data.

The results showed an agreement from respondent on the importance of reward base model for financing small and micro startup projects. Also results showed that lending models still need more legislation involve assuring the credibility of project owners. Additionally, from regression analyses data showed that Crowdfunding models effect on entrepreneurial abilities.

The study recommended more governmental and private sector rolling those models of Crowdfunding, developing regulations that organize different Crowdfunding models, especially lending and equity, and give more flexible platforms that could serve many Arabic countries.

Keywords: Entrepreneurial Abilities, Crowdfunding, reward, donation, lending, equity.

1. INTRODUCTION

Crowdfunding is a relatively new form of startup financing. It allows entrepreneurs to make an open call to a large crowd of anonymous investors via online platforms in order to achieve a specified funding goal. There are several crowdfunding models: donation, reward, lending, and equity. [1]

All models work in main concept which collects three components: project owner, platform, investors.

In depth, each crowdfunding model have it is own features which distinguished the procedures and roles controlling them. Other mixed models like: royalty, mixed and hybrid are used in some platforms to give more alternatives for investors. [2]

Entrepreneurship is one of the most important issues in the economies and growth of countries and is the real engine of social and economic development. Entrepreneurship remains the best hope for any country to prosper. As societies seek to meet their operational requirements, the importance of caring for a new generation of entrepreneurs, both from employers and those with entrepreneurial spirit, is crucial. [3]

Entrepreneurial abilities refer to entrepreneur's characteristics and those of their businesses. Different types of entrepreneurial abilities can be distinguished within the realm of new business efforts. Creating businesses may vary by industry sector, the legal form of organization, and demographics such as age and education. [4]

Crowdfunding models as financial leverage for startup play an increasing role in new digital economic environment. The study focuses on Arabic crowdfunding platforms. The objective of this study is to determine crowdfunding models

used in Arabic region, how those models participate in financing entrepreneurship and the impact of crowdfunding models on entrepreneurial abilities. In view of the literature review, the study raises the question of:

Q1. What are crowdfunding models used in Arabic region?

Q2. What is the impact of crowdfunding models on entrepreneurial abilities?

2. LITERATURE REVIEW

2.1 Crowdfunding models

With the development of technology, the transition to the age of knowledge, the digital and participatory economy, the spread of the Internet, smart phones and high technology, there has been an evolution in contemporary finance and participatory financing takes another approach called "Crowdfunding". [5]

UNCTAD defines crowdfunding as "a means of obtaining early-stage funding through the use of the Internet to connect entrepreneurs and investors, and developing web-based schemes to help investors access their investment-seeking projects". [6]

The World Bank defines Crowdfunding as "enabling companies and business organizations relying on the Internet to collect the necessary funds, whether voluntary or investment by many individuals". [7]

Crowdfunding is characterized by its flexibility on the one hand, and its ability to adapt to environmental changes around it to fit with the objectives and policies of each country, and with the patterns of entrepreneurial projects prevailing in each country.

In general, there are four main models of Crowdfunding: Equity, Debt or Peer to Peer lending (financial models),

Reward and Donation based Crowdfunding (non-financial models). [8]

Each model has its own attributes which might attract investors to involve in. The following table (1) clarifies those attributes for each model. [9]

Table 1: Model Attributes

No.	Model	Investor	Entrepreneur
1	Reward based	Small contribution	Raise capital
2	Donation based	Small contribution	Charity
3	Equity based	Medium contribution Losing assets is possible Can't sell the share	Raise capital Might be debtor
4	Lending based	High risk Losing money is possible Return is good	Bankruptcy is possible High interest

Source: Authors

First: donation model

Donation crowdfunding is the mechanism by which funders send money to fundraisers with no financial return consideration in exchange for their money. It is one of the forms of crowdfunding, which is part of the broader universe of financial innovations enabled by technological advancements known as FinTech and belongs to FinTech's subcategory of alternative finance which refers to technology enabled market-based funding outside the traditional financial system. [10]

The owner of the project displays either an idea or a prototype and requests the idea to be financed or the production of prototype to be financed commercially. In this model entrepreneurs cannot increase the original capital for their project later, and donors do not get any guarantee against fraud or failure to implement the idea. The most famous platforms worldwide that provide this service are Justgiving, Indiegogo. [11]

The size of this of donation-based crowdfunding model is about \$0.56 billion reflecting rapid growth over 2014-2016, largely spurred by China. When considering all forms of crowdfunding the largest market is Asia-Pacific (China) followed by Americas (US), Europe (UK) and Africa/Middle-East. When looking at donation-based crowdfunding, the order is slightly different, Americas (US) come first, followed by Asia-Pacific (China), Africa/Middle East and Europe (UK).

The social causes leading to the recent rise of donation-based crowdfunding are diverse but generally related to the unfulfillment of public services or under provision of public goods. Donation-based campaigns almost always involve some civic and public good components being funded, such

as education, crisis and journalism, thus offering financial and social support to individuals and communities that can hardly seek help elsewhere. [12]

During community disruptions, such as Flint water crisis in Michigan in which governmental actions are delayed or absent, crowdfunding has been playing an important role in providing resources and services to the residents in time. [13]

For Nonprofit Organizations (NPO) in particular, donation-based crowdfunding through digital platforms -on-line portals to connect fundraisers and funders - is growing rapidly as an online tool that complements, or substitutes, the usage of traditional fundraising instruments to develop campaigns for charitable causes, in response to the reduction of access to traditional income sources in a context of economic strains. [14]

Previous evidence suggests that the number of potential victims assisted by an offline fundraising campaign affects their likelihood to succeed, since it serves as indicator of the scale of an emergency. Because of the feelings of empathy among potential donors, disasters with a large number of victims tend to raise more money. Along the same line, sudden and catastrophic disasters (e.g. tsunamis or earthquakes) tend to be more supported than slow-acting and gradual disasters as famines and droughts. Australian donors, for instance, gave \$100 million in donations to the Asian tsunami victims in contrast to the 2 million raised for famine victims in the same year.

In the Arabic region, evidents from data collected through donation sites, showed a very poor results. Two donation platforms Cofundy in Tunes and Cotizi in Morocco, raised alternatively 72.000 \$

donated for 17 projects and 32.000 \$ donated for three projects only. This poor performance is a reasonable result for the absent of legislations and the culture that related to old traditions and religious reasons.

Second : reward model

This model is called (Reward-Based), and it resembles donations model in terms of being a low risk to the owner of the project, where the project owner undertakes to provide a non-cash symbolic reward to financiers in order of precedence, or the amount of funding.

The project owner faces difficulty in raising the capital. Financiers received a gift which is a portion of the product or service, or sometimes get a complete product by the amount of their contribution. The return to the investor is low and there are no sufficient guarantees to financiers. [15]

Reward models (donation - the reward) use two types of financing: (AON) and (KIA). The first type (AON) called "all or nothing" or "fixed funding". The owner of the project does not receive any funding only if it has reached the amount required during the permitted time period for the campaign. In case the necessary amount did not reach what is required, the project owner does not receive any amount and lose the site fees. One of the famous sites is (Kickstarter). [16]

The second type of financing (KIA) is called "retention of what has been collected" or "flexible funding", and allows the entrepreneur to obtain any amounts collected during the campaign period even if they have not attained the desired goal. Among the most famous sites that uses this model (Indiegogo) site; furthermore, (AON) model is also used. [17]

This type of financing is common in financing a product or project which is still prototype. A form of compensation for the financier is the right to pre-order the product or get the product sent when it is finished. An advantage of this form of financing is that it is an alternative market research; if the investors are not willing to invest, they are not interested in the product or project. [18].

Third: equity model

In this model, the financiers have part of the property rights or participate in the profits or management, as previously agreed with the owner of the project. This model can achieve a high financial gains, and capital can be increased significantly as a result of attracting a large number of investors who are looking for shares in a company or a successful project outside the restrictions of stock market, brokers and do not have large amounts of money to speculate in the stock market. [19]

Sharing profits model called royalty. In this models investors share only profits not the assets of the company. Royalty crowdfunding offers backers a percentage of revenue from the project or venture the backer supports, once it is generating capital. A good example of this approach is a mobile app website where backers can support an app before it's fully developed or launched, and then share in the revenue once the app starts selling to the public. [20]

Forth: lending model

This model also known (Peer-to-Peer). The idea behind this type of Crowdfunding is to cut out the mediators and get cheaper loans or as an investor, get better interest rates. Also this kind of crowdfunding called debt-base. [21]

Rather than owning a stake in a business, investors' money is matched, via an online platform, to a loan for a person or business. It's a specific amount of money, repaid over a defined term, and investors earn a return via interest payable on the loan. Generally, the risks and rewards are more modest with peer-to-peer lending.

Debt-based crowdfunding has been proven one of the most effective ways to raise funds for startups. Although similar to a traditional bank loan, debt-based crowdfunding has got many more advantages when compared to bank loans. Startups can use it as an alternative if they think, approaching a VC, might be a tedious task.

Crowdfunding models in Arabic world

In Arabic region, crowdfunding models are still in startup mode, Fintech and regulations still in first stages. In general, Arabic crowd funding industry still need time to spread. The concept might still need more effort from scholars and formal institutions. According to (Abu Amuna, 2018) study, there were (15) Arabic crowdfunding platforms in (2018).

The next table (2) shows Arabic crowdfunding platforms and the model used. [22]

Table 2: Arabic crowdfunding platforms (2018)

N	Platform	Coun	Registra	Model	Total	
1	Eureeca	UAE	UAE	Equity	5 M	
2	Shekra	Egypt	Egypt	Equity	*	
3	Happysm	Moro	Morocco	Equity	*	
					Total	5 M
4	Liwwa	Jorda	Jordan	Lendi	21.142 M	
5	Beehive	UAE	UAE	Lendi	43 M	
6	Pi-slice	UAE	UAE	Lendi	*	
					Total	64.142 M
7	Smalaand	Moro	Morocco	Rewar	25.718	
8	Zoomaal	Leban	Lebanon	Rewar	2.2 M	
9	Buildpale	Palest	Palestine	Rewar	57.645	
10	Yomken	Egypt	Egypt	Rewar	112.800	
11	Jaribha	Kuwa	Kuwait	Rewar	127.000	
12	Share-	Palest	Palestine	Rewar	*	
					Total	2.523.163
13	Cotizi	Moro	Morocco	Donati	32.617	
14	Cofundy	Tunis	Tunis	Donati	71.910	
15	Afineety	Moro	Morocco	Donati	*	
					Total	104.527
* No official information's in the					Total	71.769.690

Source: Abu Amuna, Y. M. (2019). Entrepreneurship, Crowdfunding Platforms and Sponsors Interaction, International Journal of Academic Management Science Research (IJAMSR), vol. 3, issue 1, pp. 53-60.

As showed in previous table 2, the highest investments model was lending Crowdfunding model. Behive then Liwwa. Liwwa was the first arabic lending platform established in 2013 in Jordan. Beehive established in UAE in 2014 and now it is the leading Fintech company in Mena region.

Comparing with previous years, the total investments in (2017) was only (35 M) with increase 105% in (2018).

2.2 Entrepreneurship

The basic feature of entrepreneurship as a socio-economic when the unemployment rate in the United States was 10 percent during the great recession it was considered a catastrophe. However, the unemployment rate in most MENA countries is close to 30 percent and even higher in some other countries. This is a disaster for many parts of the world. It leads to desperation and violence as millions of youth struggle to survive. The world needs to create a billion jobs in the very near future to create global peace and prosperity. Entrepreneurship creates jobs and generates economic growth - the underpinning of a stable and civil society.

Entrepreneurship is one of the primary purposes for which human efforts is heading to, every day trying to find new and innovative ways to earn his living, start a new project or take advantage of an idea. There are various patterns of entrepreneurs between peddlers to creators of advanced technology, and these all are united by the desire to exploit their talents and resources in the best way possible, while distinguishes them is the success rate in achieving the ambitions that depend on the environment in which they work. [23]

Entrepreneurship requires innovation and change that might take different forms, where the Arab world is full of young talented and creative ideas. But those ideas often do not see the light for several reasons including lack of financial support from relatives, government agencies, or business men.

Entrepreneurship is considered an important mechanism that promotes economic development through employment, innovation, and welfare, but it does not appear like manna from heaven as a country moves through the stages of development. Rather, it plays a role in all development stages and is a process that continues over many years. Economists have come to recognize the “input-competing” and “gap-filling” capacities of entrepreneurial activity in development.

Entrepreneurship abilities:

* Emerging company opportunities and constraints:

Is a measure of emerging companies that are motivated by opportunity but face regulatory constraints. The availability of motivation to start a business is a good indicator of quality of work and entrepreneurs who are aware of the opportunities are more skilled and more willing to profit and continue to work than other projects as this is an opportunity to increase income or achieve personal goals. In contrast, non-entrepreneurial project owner have been forced to do this because they have no other options.

An examination of the top-ranked economies illustrates the importance of having healthy conditions across all aspects of the environment affecting entrepreneurship. The entrepreneurship context thus requires attention to the range of factors; it could be argued that poor conditions in a few areas may limit the willingness and ability of people to start businesses, despite strengths elsewhere. [24]

* Absorption of technology:

In the digital knowledge, information and communication economy, information technology (ICT) plays a crucial role in economic development. Not all industrial sectors provide the same opportunities for enterprises to survive or enhance their potential for growth.

The proliferation of new technology, as well as the ability to absorb it, is vital for innovative companies with high growth. This requires regulatory action by the state to open up and support local and international technology companies as a key factor in promoting entrepreneurship. Technology adoption requires appropriate business legislation, infrastructure availability and accessibility, availability of

communications and availability of different transport routes. [25]

*Availability of Human Capital:

The prevalence of high-quality human capital is vitally important for ventures that are highly innovative and require an educated, experienced, and healthy workforce to continue to grow. An important feature of a venture with high growth potential is the entrepreneur’s level of education. The Educational Level variable captures the quality of entrepreneurs; it is widely held that entrepreneurs with higher education degrees are more capable and willing to start and manage high-growth businesses. The labor market possibilities and the capability to easily hire quality employees also have an impact on business development, innovation, and growth potential. The institutional variable Labor Market has two components. Labor Freedom measures the freedom of the labor from the regulatory perspective and Staff Training is a country’s level of investment in business training and employee development. It can be expected that heavy investment in employees pays off and that training increases employee quality. [26]

Knowledge spillover entrepreneurship demonstrates that successful commercialization of new knowledge in an entrepreneurial process of creating a new firm depends not only on new knowledge but also on absorptive capacity of entrepreneurs.

The importance of human capital as the major determinant of both new knowledge and entrepreneurial absorptive capacity. The absorptive capacity theory of knowledge spillover entrepreneurship explains knowledge-based entrepreneurial activity from a human capital perspective

* The level of availability and access to markets

Competition is a measure of the uniqueness of a product or market alongside the market power of existing business group companies. Competitors are a group of companies that have a few competitors who offer the same product or services. However, market entry can be prevented or made more difficult if there are strong business groups dominating the market. The size of the market (small-medium-large) and the type of customer (individuals-corporations-government) also play an important role in the success of the competition. The external environment of a global market needs to be considered in order to decide on the optimal time to enter. However, this decision becomes more complex when the global market is not homogenous, but there exists important market differences between markets in emerging and developed economies. Given important differences between markets in an emerging economy relative to that in a developed economy, the optimal times to enter are likely to be different for the two markets and different again if it were a homogeneous global market. [27]

While timing of entry is central to any entry strategy, the entrepreneur must decide on the entry mechanism to be used—the means of breaking into the established pattern of commerce. However, given a particular mode of entry,

should the new venture imitate the practices of others or rely on the innovativeness of its market offering.

2.2.1 Entrepreneurship in Arabic region

In spite of many Arabic attempts to grow up with entrepreneurship, as many experiences in UAE, KSA, Egypt, but in total still entrepreneurship in Arabic region need more focusing and interest.

In Egypt, The Egyptian government has endeavored to encourage investment and development in Egypt. The new Unified Investment Law (2015) was issued in conjunction with the Conference of Support and Development of the Egyptian Economy held in Sharm El Sheikh in March 2015.

It also encouraged the initiatives of government, non-governmental and Egyptian banks to lend and develop small projects such as the "Your Project" initiative for banks (Egypt-Ahli-Agri-Cairo-Islamic) and the Social Fund for Development (currently the Ministry of Social Development). In addition, there are many legislations, laws and initiatives adopted to encourage entrepreneurship and small enterprises in Egypt. [28].

The UAE government recognized early on the importance of entrepreneurship in sustainable development and despite its enormous oil wealth; it has pursued a policy of supporting small and medium enterprises and promoting a culture of entrepreneurship in order to make the economy a knowledge-based and competitive economy.

Dubai is known for its strong support for entrepreneurs through the Mohammed Bin Rashid Establishment for Young Business Leaders, the Mohammed Bin Rashid Award for Young Business Leaders and the Mohammed bin Rashid Al Maktoum Foundation. These institutions seek to urge Arab entrepreneurs to become an integral part of the region's economy. The Government of the UAE is very generous in supporting UAE youth entrepreneurs and provides many gifts to young people with a well-defined business plan.

In addition, the Government of the UAE provides great support to Emirati entrepreneurs through the Government Procurement Program, which stipulates that all government departments must allocate at least 5% of their annual purchases to companies registered with the Mohammed Bin Rashid Establishment for Young Business Leaders. [29]

Saudi Arabia enjoys a great deal of economic advantages and political, security and social stability compared to its counterparts in the world. This can be summarized as follows: [30]

- 1- The first in the world in terms of oil reserves and export.
- 2- A geographical location and a large area.
- 3- Diversity of their environment and climate.
- 4- A huge geographical area and overlooking the bodies of water of global importance for trade.
- 5- The spread of education and the high proportion of its outputs and the interest of the state in scientific research.
- 6- Source of religious tourism.
- 7- Flexibility of laws regulating investment.
- 8- The huge investments in infrastructure.

All of these factors have helped a tremendous economic development in the field of entrepreneurship and the promotion of entrepreneurial behavior and instilled in youth and children at an early age. These factors also helped create generations that seek to think, achieve, improve and develop continuously by promoting activities and leading events, offering educational competitions and awarding pioneering prizes that encourage innovation.

In spite of its modernity, the Saudi experience has been characterized by providing an environment conducive to the growth of small and medium-sized enterprises through the multiplicity of SME support and support agencies and supporting women's projects as a model for productive families.

In addition to providing soft loans without interest, to promote the production and innovation of outstanding entrepreneurs by involving them in international forums for entrepreneurship and to support some of them receive awards. [31]

The Kingdom also held two international conferences for Entrepreneurship (2014-2016) in Riyadh. It also promoted pioneering leadership in universities and greatly supported business incubators. Saudi Arabia also established the Entrepreneurship Center (MIT).

2.2.2 Entrepreneurship and Crowdfunding in Arabic region

Crowdfunding has been called the great equalizer, because anyone with a good idea can access global backers or contributors and a global market. As an intermediate of funders and fundraisers, a crowdfunding platform offers the information and matching service between the crowd and projects. [32]

Arab countries are still moving slowly towards the era of the digital economy, despite their recognition of the importance of catching up with the digital economy in light of changing and changing environmental conditions and the tremendous revolution in ICTs.

First: Saudi Arabia: The Capital Market Authority (CMA) has agreed to award the first two financial technology pilot certificates to two local companies to provide Crowdfunding in Saudi Arabia, Manafa Investment and Skopier. These two statements are the first product of the Financial Technology Laboratory initiative launched by the Authority at the beginning of the current year (2018), as the Authority seeks to open the way for financial technology companies to push the competition in the financial market to provide services related to the financial market in innovative ways that meet the aspirations of the participants.

These include collective ownership financing platforms, which play an important role in financing entrepreneurs and small and medium-sized enterprises. The Financial Technology Lab's statement is one of the company's strategic initiatives, the "Entrepreneurship 2020" program, which contributes to the initiatives of the Financial Sector Development Program, one of the programs to achieve the vision of the Kingdom (2030). [33]

Second: United Arab Emirates: The Board of JSC discussed at its 6th session on 25-11-2018 the project law on collective financing. The Authority's management prepared a proposal for the issuance of a system for collective financing, which means that the applicant obtains certain amounts of money from investors in exchange for founding shares or increase the company's capital, through an electronic operating system (platform) programmed to display the requests for collective financing in the market.

The Board reviewed the main features of the proposed draft system, reviewed a demonstration on the licensing system of the operator of a collective financing platform, and proceeded to complete the project axes and prepare the system according to the plan, stressing that the system includes protecting the rights of financiers through the collective financing platform As well as ensuring the establishment of control procedures to ensure the safety of application and reduce risks, and to ensure that the system operator know your customer through KYC models, taking into account that the Authority applies the best global practices in the preparation of the system as well as consultation with industry and markets locally and internationally during the process of preparation. [34]

Digital asset issuances have been organized and recognized as securities in the light of the accelerated development of the digital asset market and the responsiveness of regulatory bodies in a number of countries in the world. The Board of Directors approved the TRA's plan to regulate the issuance of digital assets (ICO) and to recognize them as securities. The Board directed to regulate the procedures for the circulation of these digital assets after reviewing a study of best international practices in this regard. As part of an integrated project to regulate securities and digital goods.

During the meeting, the Board was briefed on a presentation on proposed mechanisms for digital asset issuances that would ensure that the issuance of such securities was organized and included: the type of private / public issue, the issuers, the legislative requirements for registration, fees, etc., and the issuers Blockchain Operators, Target Entities by Release Type and Minimum Whitepaper Content, and whether or not they are responsible for the registration, whether by publication type.

It also includes licensing of the issuing, trading, clearing, listing, custody, settlement and payment platform as a central trading, custody, clearing and deposit platform, as well as the legal form it will take, organizing the listing and trading of such securities, organizing smart contracts used in securities, KYC and money laundering requirements.

Egypt's Entrepreneurship Program is based on four pillars: finance, business projects, business service centers, and legislative and regulatory reforms. These four pillars provide the foundation for young people to start their businesses, creating new jobs and contributing to economic growth.

Egypt Company for Entrepreneurship: The Ministry of Investment and International Cooperation signed a financing agreement with the Saudi Fund for Development in March

2017 for the establishment of Egypt Company for Entrepreneurship and Investment also known as "Projects Egypt". The investment company acts as an emerging investment fund that invests in emerging-market funds, incubators and venture capital funds and invests directly in fast-growing companies. The fund is valued at LE450 million and is not focused on any sector. This is a good opportunity for entrepreneurs to set up their projects and provide innovators with the opportunity to implement their ideas. [35]

In general, as we seen above from table (1), total investments in Crowdfunding models were (71.769.690\$) in 2018, and data collected from Arabic Crowdfunding platforms showed that only (2800) projects were financed by Crowdfunding.

From previous literature review, the following hypothesis in this research can be written as:

H0: There is a statistically no significant effect for crowdfunding models on entrepreneurship abilities.

3. RESEARCH DESIGN

3.1 Study population and sampling

This study conducted at (15) Arabic Crowdfunding platforms with total members (47.814). A pilot sample of (53) units was used to study the tools of the study, to verify the validity and stability of these tools. The research sample consist from (545) unit from all platforms as shown in table (3).

Table 3: Study population

No.	Platform	Country	Members No,	Registration
1	Eureeca	UAE	21226	UAE
2	Pi-slice	UAE	681	UAE
3	Beehive	UAE	8400	UAE
4	Zoomaal	Lebanon	11967	Lebanon
5	Buildpalestine	Palestine	332	Palestine
6	Yomken	Egypt	1500	Egypt
7	Shekra	Egypt	12	Egypt
8	Share-crowd	Palestine	100	Palestine
9	Liwwa	Jordan	502	Jordan
10	Smalaandco	Morocco	1207	Morocco
11	Cotizi	Morocco	1067	Morocco
12	Afineety	Morocco	228	Morocco
13	Happysmala	Morocco	45	Morocco
14	Jaribha	Kuwait	487	Kuwait
15	Cofundy	Tunis	60	Tunis
Total Members			47814	

3.2 Research Mythology

Since the nature of hypothesis and the variables involved are the ones that control the selection of the appropriate tool, accordingly, the researchers have prepared a measure for that

study commensurate with its objectives and requirements, the elements of Crowdfunding models and entrepreneurship abilities.

The process of designing and preparing the study scale has gone through several stages. Review the literature of crowdfunding, and previous studies on the subject of the current study. After that collecting and define scale paragraphs. And formulation of the standard expressions according to the study sample.

Then setting and modify the meter instructions and correct it. Also authors conduct the stability and honesty of the scale.

The first dimension referring to Crowdfunding models prepared by the authors from (10) paragraphs. The second dimension of the instrument which measure entrepreneurship abilities was developed depending on Global Entrepreneurship Index (GEI) and consist from (7) paragraphs.

Also Trustees validity has been conducted by a group of expert in Crowdfunding and entrepreneurship field. Those statements were further revised and modified by the experts in a subsequent stage before drafting the final version of the questionnaire.

A five-point Likert scale of agreement was used for measurement, running from “Strongly Agree” to “Strongly Disagree”, with a Neutral category for scale midpoint.

Several statistical tools were used for data analysis and hypothesis testing, including reliability Correlation using Cronbach’s alpha, “ANOVA”, Simple Linear Regression.

3.3 Research instrument

Since the nature of hypothesis and the variables involved are the ones that control the selection of the appropriate tool, accordingly, the researchers have prepared a measure for that study commensurate with its objectives and requirements, the elements of financial attributes and risk taking.

The process of designing and preparing the study scale has gone through several stages and steps:

1. Review the literature of crowdfunding, and previous studies on the subject of the current study.
2. Collect and define scale paragraphs.
3. Formulation of the standard expressions according to the study sample.
4. Set the meter instructions.
5. Correct the meter.
6. Conduct a study of stability and honesty of the scale.

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Several statistical tools were used for data analysis and hypothesis testing, including reliability Correlation using Cronbach’s alpha, “ANOVA”, Simple Linear Regression.

3.4 Validity and reliability assessment

The study adopted Cronbach’s α and Split half methods to measure the internal consistence reliability of the questionnaire. The results showed that Cronbach’s α values for all dimensions were $> (0.5)$. It indicated that the design of the questionnaire had a high internal consistency as shown in table (4). Split half method show that correlation is 0.719 for Crowdfunding models and 0.802 for Entrepreneurship abilities which are high value and indicate that both had strong reliability. Those results shown in table (5).

Table 4: Coefficients of Alpha Cronbach

Field	No. of paragraphs	Alpha-Cronbach stability
Crowdfunding models	10	0.606
Entrepreneurship abilities	7	0.726

Table 5: Split Half Methods

Field	No. of paragraphs	R	Adjusted R
Crowdfunding models	10	0.561	0.719
Entrepreneurship abilities	7	0.672	0.802

3.4 Data analysis and discussion of results

Descriptive analysis for independent variable (Crowdfunding models) was conducted to determine weighted average and rank for paragraphs are shown in table (6).

Table 6: Descriptive analysis for Crowdfunding models

NO.	Field	Mean	Dev.	Weight	Rank
1	Leas-line lending models (p-p) is suitable model for crowdfunding	2.24	1.359	44.8%	10
2	Lending models for micro-finance projects decrease the opportunity to have finance	3.29	1.248	65.8%	2
3	Interest rates for lending models affect on raising	3.24	1.351	64.8%	4

NO.	Field	Mean	Dev.	Weight	Rank
	finance				
4	Legal regulations in lending models protect the lender rights	3.22	1.349	64.4%	5
5	The difficulty of selling assets shares in equity model decrease the successes of financing	3.18	1.318	63.6%	6
6	Tax reduction helps in spreading the equity model	3.28	1.381	65.6%	3
7	Reward model helps in testing the market and adjusting the product	3.12	1.469	62.4%	8
8	The finance success for reward model depends on how far the project owner can persuade the public	3.05	1.393	61.0%	9
9	Reward model is used to finance small projects	3.32	1.350	66.4%	1
10	The low financial risk for the project owner and the investor helps in spread the reward model	3.14	1.409	62.8%	7

According to previous table (6), the relevant importance can be shown as following:

- 1- The respondents agreed on the importance of the reward model in financing small projects that are emerging effectively.
- 2- Lending models are ineffective on the Arabic region because of the question of trust, interest rate and collateral required from entrepreneurs that may be an obstacle to obtaining funding through this model but at the same time reserving the rights of the lender.
- 3- Respondents considered that equity model reduces the chances of financing because of the difficulty of selling shares only to the main partners of the project, which leads to the loss of part of the capital.

Entrepreneurship abilities descriptive analysis as dependent variable is shown in table (7) to determine weighted average and rank for the total field.

Table 7: Descriptive analysis for Entrepreneurship abilities

Field	Mean	Dev.	Weight	Rank
Entrepreneurship	3.32	1.385	58.6%	3
The education level encourage entrepreneurial orientation	3.22	1.425	57.2%	4
The education level generate an innovated generation	2.90	1.365	47.9%	6
Government budget supports entrepreneurs	3.17	1.387	55.7%	5
Crowdfunding help starting up entrepreneurship which suffer from the bureaucracy of establishment requirements	3.16	1.485	71.4%	1
Technology startup projects have the forefront	3.10	1.435	70.2%	2
The local market enhance the success of startup business	2.41	1.388	32.2%	7

According to previous table (7), the relevant importance can be shown as following:

1. The respondents agreed on the importance of Crowdfunding models as a tool for startup entrepreneurship projects.
2. The respondents agreed that they are interested in technology projects more than others projects which achieve absorption of technology.
3. The respondents agreed that there is shortage in availability of Human Capital. This result came from weak in entrepreneur education level and governmental attention. Simple linear regression used to test whether there is an impact for one independent variable (Crowdfunding models) on a dependent variable (Entrepreneurship abilities). The results are shown in Table (8) and table (9).

Table 8: Anova Test

Field	Model	Sum of means	D F	Mean squares	F	
Entrepreneurship abilities	Regression	47.119	1	47.119	221.968	
R	R²	Resident	115.268	543	0.212	Sig .

Field		Model	Sum of means	D F	Mean squares	F
0.539	0.289	Total	162.388	544		0.000

Table 9: Linear Regression

Field	Model	B	Beta	T	Sig.
Entrepreneurship abilities	constant	1.131		7.878	0.000
	Crowdfunding models	0.681	0.539	14.899	0.000

The results of Anova test in table (8) indicate that sig. is less than (0.05) for independent variable (Crowdfunding models), which mean that there is significant statistically effect for independent variable (Crowdfunding models) on entrepreneurship abilities.

Pearson coefficient and regression coefficient sign for independent variable was positive. This result means whenever the value of independent variables increase, there will be increase in entrepreneurship abilities.

Changes in the independent variable is responsible for the interpretation of a rate ($r^2 = 28.9\%$) of all the changes that occur in entrepreneurship, and there is a rate $(100 - r^2)$ due to other factors specific to the other independent variables and other factors not mentioned in the model, in addition to the random error.

Table (9) reveals that the findings of significance level are less than (0.05), which means that we can rely on the previous model and circulating the sample results on research community.

Therefore, the results of the analysis proved the existence of a relationship between the independent variable and the dependent variable. According to that, we accept hypothesis H1 and refuse H0. The H1 hypothesis can be written as:

H1: There is a statistically significant effect for Crowdfunding models on entrepreneurship abilities.

Table (9) determines the figure of linear regression equation for the impact of Crowdfunding models on entrepreneurship abilities. This equation can be written as follow:

$$\text{Entrepreneurship abilities} = 1.131 + (0.681 * \text{Crowdfunding models})$$

4. CONCLUSION

One of the most important factors for Crowdfunding that Crowdfunding is a contemporary mode of financing in line with technological development. The Crowdfunding flexibility and its reliance on technology is the future of contemporary finance in all fields. The results showed an agreement from respondent on the importance of reward base model for financing small and micro startup projects. Also results showed that lending models still need more legislation involve assuring the credibility of project owners. Respondents agree that the participation model achieves advantages such as tax reduction and partnership and that selling their stake in the partnership model is an impediment

to access to finance Additionally, from regression analyses data showed that Crowdfunding models effect on entrepreneurial abilities.

The study recommended more governmental and private sector rolling those models of Crowdfunding, developing regulations that organize different Crowdfunding models, especially lending and equity, and give more flexible platforms that could serve many Arabic countries.

Also the study recommends developing corrective plans for development of the local economy and the local market in the Arab countries and by adopting the economies of countries that are successful globally. In addition, adopting more initiatives that support entrepreneurs and provide them with additional financing tools.

An important factor to be concentrate on is education. Activating the role of educational institutions as one of the components of the ecosystem of entrepreneurship and strengthen its leading role in society and the dissemination the leading trend.

Another factor which needs to be reviewed is financial lending regulations, legislating investment laws in the local economy, adopting more robust programs of work, and developing programs to encourage investment in the early foundation of the life of start-ups.

In conclusion, Crowdfunding is not only the solution for leak in finance that face entrepreneurs in Arabic region, but as we notice from secondary data collected (71.769.690\$) that it is participate in small amount in financing start-ups projects. In more concentrate this method might have a good part in the future. Till now, the insight view for Crowdfunding still in it is beginning steps, but it has promising future.

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