

# The Scientific Journal of Business and Finance

https://caf.journals.ekb.eg

# Crowdfunding Campaigns and Startups Financing: An Applied Study on the MENA Region

#### Remond Elsaid Mohamed Libda

Business Administration Department, Faculty of Commerce, Tanta University, Tanta, Egypt

Published online: June 2025.

To cite this article: Libda, Remond Elsaid Mohamed. Crowdfunding Campaigns and Startups Financing: An Applied Study on the MENA Region, The Scientific Journal of Business and Finance, 45, (2), 236-268.

DOI: 10.21608/caf.2025.434547

<sup>\*</sup>Corresponding author: remond.libda@commerce.tanta.edu.eg

# Crowdfunding Campaigns and Startups Financing: An Applied Study on the MENA Region

#### Remond Elsaid Mohamed Libda

Business Administration Department, Faculty of Commerce, Tanta University, Tanta, Egypt

# **Article History**

Received 1April, 2025, Accepted 20May, 2025, Available online June 2025.

# **Abstract**

This research aims to analyze the impact of crowdfunding campaigns on startups' financing in the MENA region. This applied study was conducted on 3,179 crowdfunding campaigns for startups selected from 2019 to 2024. These campaigns provided approximately 13 billion in this period, with a growth rate of 17% in 2024. This study was conducted on eleven countries: Egypt, Morocco, Saudi Arabia, UAE, Bahrain, Qatar, Oman, Kuwait, Iraq, Jordan, and Palestine. The study depended on secondary data published in the crowdfunding platforms' reports, Arabnet and Digital Digest reports, Statista 2024b platform, Wamda reports and World Bank databases, and also relied on the data method that combines time series data with cross-sectional series data (Data Panel) to conduct the study, and the data were analyzed statistically by relying on statistical software packages STATA 14. The study results showed that the four models studied variables have a significant effect on startup financing. The first model crowdfunding campaigns showed a positive and strong relationship with startup financing, while the second model showed a strong effect on startup investment through funding goal size. The third model that related to project type showed a significant effect for both technology and non-technology firms, but explained less of the variance in startup financing than the other models. The fourth model showed a significant impact of geographical location variables on startup financing and was the most likely to explain the variance between the models.

**Keywords**: Crowdfunding ;Campaigns; Startups; MENA; Funding Goal Size; Project Type; and Geographical Location.

# 1. Introduction

Businesses and individuals are increasingly seeking funding alternatives that are both flexible and efficient in comparison to traditional banking models. Funding from banks and venture capitalists is in fact, available only in the subsequent phases with respect to those of start-up (Imdad, 2023). In the initial stages of the company's life cycle, funding usually comes from the personal savings of the entrepreneur, his family, his friends or, sometimes, business angels (Salvi et al., 2021). In case these funds are not enough to cover the financial needs the venture faces a funding gap (Meghouar et al., 2023).

Startups can raise funds through crowdfunding, which is facilitated by the Internet. This process involves soliciting donations or investments from a large number of individuals. This novel method of capital formation was primarily the result of the challenges encountered by entrepreneurs and early-stage enterprises in fundraising following the 2008 financial crisis (Imdad, 2023). The funding of initiatives or businesses is facilitated by crowdfunding. Individuals and organizations have raised billions of dollars in debt, equity, and donations for initiatives through the use of social networks, social profiles, and web-based communication techniques. Key enablers are essential for the establishment of a crowdfunding ecosystem, as they facilitate the development of trust (World Bank Group, 2021).

Crowdfunding represents a tool able to reduce the funding gap, especially in the early stages of new ventures. It is inspired by crowdsourcing and microfinance and allows entrepreneurs to fund their ventures by collecting small contributions from many individuals. This is done through specific web-based platforms called crowdfunding platforms (Salvi *et al.*, 2022).

Crowdfunding platforms, which enable the collection of capital from a diverse array of investors, and peer-to-peer lending platforms, which provide a direct connection between borrowers and lenders, are among the most significant trends. These platforms offer more accessible and potentially cost-effective financing (Statista, 2024).

Many factors impact attracting funding to startups in crowdfunding platforms, such as funding goal size (Ed-Dafali *et al.*, 2025; Yin *et al.*, 2024), project type (Cheng & Jang, 2023;

Maier et al., 2023), and geographic location (Atawna et al., 2024; Maymoni & Solodoha, 2025). This research may also help investors in the assessment of crowdfunding campaigns in the MENA region.

As an increasing number of entrepreneurs in the MENA region use digital platforms to finance their ventures, the crowdfunding market is expanding significantly. The increasing prevalence of digital literacy has resulted in an increase in the number of individuals participating in crowdfunding investment opportunities, which underscores a shift toward contemporary financial practices that could change the way businesses secure funding in the future (Kumar & Agrawal, 2025).

Startups in the MENA region are progressively utilizing digital platforms to secure funding. The United Arab Emirates takes advantage of an economy that is driven by expatriates and is diverse,

which encourages investment in crowdfunding and innovation. Meanwhile, Saudi Arabia's Vision 2030 initiative is promoting local investments in digital finance by improving regulatory frameworks. Crowdlending is becoming an increasingly viable financing option for small enterprises in Jordan, as a growing youth demographic seeks alternative funding sources (Abdeldayem & Aldulaimi, 2023; Statista, 2024).

On the basis of type, the market is classified as equity-based, debt-based, blockchain-based, and other. The market share that the debt-based segment is expected to hold in 2024 is the highest. This method is among the most effective for obtaining startup funding. Compared to bank loans, debt-based loans offer more benefits, which are comparable to traditional bank loans. Additionally, investors are provided with lower interest rates for programs that are paid in regular monthly installments through debt-based funding. Estimates indicate that these factors will contribute to growth in the years ahead (Fortune Business Insights, 2025).

This study tried to investigate the impact of crowdfunding campaigns in the MENA region, and startups can consider it an alternative source of financing. In addition, the findings of this study provide insight into the factors that may affect the ability to obtain startups financing through crowdfunding campaigns.

### 2. Research Problem

Startups face several challenges, the most important of which is the problem of funding, as their activities are limited and their resources are insufficient to meet the requirements of establishment or ongoing operations and renewal. In addition, it is not possible for them to manage their needs from banks and financial institutions, due to their lack of guarantees to be provided in exchange for obtaining the loan. So, it requires the search for innovative mechanisms to obtain financing sources in line with the financial nature of this type of company.

There is no doubt that the world is recently experiencing a huge technological revolution, which has affected everything, especially financial technology. It has become a global trend for economies in all developed and developing countries of the world alike (Libda, 2024).

Entrepreneurs in the Middle East, do not have many sources of funding, mostly relying on close-to-home assets, family and friends. They face enormous difficulties if they resort to banks. This is clear from the fact that in the Middle East and North Africa (MENA) only 8%–10% of absolute bank loans go to entrepreneurs. Here, the limited sources of financing are to blame for an expected financing gap of more than US\$400bn (Abdeldayem & Aldulaimi, 2023).

Thus, crowdfunding platforms are becoming a more viable alternative to conventional financing methods among investors in the MENA region. The adoption of collective financial support is increasing, and cultural attitudes toward peer-to-peer lending are evolving because investors seek accessible funding solutions to initiate startups and scale businesses. Crowdfunding investment opportunities are being investigated by an increasing number of individuals as financial literacy

improves, which is indicative of a broader trend toward digital engagement in financial markets (Kumar & Agrawal, 2025).

In the global market, instead of relying on a single source of financing, crowdfunding campaigns allow startups to obtain the requisite financial resources by soliciting small sums of money from a large number of individuals. This research tries to investigate whether the implementation of this new mechanism in the MENA region would provide alternatives to bridge the funding gap in startups or wouldn't be qualified applicable in this region. Based on the above, the research problem can be formulated in the following two questions:

- 1) Do crowdfunding campaigns serve as an alternative source of financing for startups in the MENA region?
- 2) Then, if these campaigns do indeed provide an alternative source of funding for startups in MENA, are there other factors such as the funding goal size, the type of project, and the geographic location of these campaigns, likely to help increase this funding?

# 3. Research Objectives

The essential objective of this research is to identify the impact of crowdfunding campaigns on startup financing in the MENA region. The researcher believes that there are clear benefits of technology innovations, especially financial technology. Crowdfunding platforms are considered a kind of financial technology that has great importance in MENA region, where crowdfunding is still growing. These platforms can help startups and innovators to better understand the market, improve their marketing strategies, accurately identify the target audience, and improve the chances of success of their future campaigns. Therefore, crowdfunding campaigns enable them to have an alternative financing source rather than a traditional one.

Then, if these campaigns do indeed provide an alternative source of funding for startups in MENA, the second objective of this research is to investigate the impact of other factors such as the funding goal size, the type of project, and the geographic location of these campaigns, on the total capital raised by startups.

# 4. Literature Review and Hypotheses Development

This section was divided into three parts. The first part is the conceptual framework of the study, which includes crowdfunding campaigns and startups financing. The second part is the association between crowdfunding campaigns and startups financing in the MENA region. The association between some factors of the crowdfunding campaigns and startups financing is located in the third part of this section.

# 4.1 The Conceptual Framework of the Study

Increasing crowdfunding platforms have simplified the connection between investors and local startups, also fostering a sense of community and collaboration. As a result, crowdfunded campaigns are reshaping the investment landscape and providing an alternative finance source for many startups. This section includes two parts: crowdfunding campaigns and startups financing.

# 4.1.1 Crowdfunding Campaigns

In the realm of entrepreneurial finance, crowdfunding is a novel and evolving phenomenon that enables project owners to request financing from a potentially vast population of financial supporters (Abdeldayem & Aldulaimi, 2022a; Abdeldayem & Aldulaimi, 2023; Arshad & Berndt, 2021). Various crowdfunding platforms, including GoFundMe, Kickstarter, Indiegogo, Inc., Double the Donation, Fundable, and others, have been used to make campaigns. A crowdfunding campaign is a method of raising funds for a specific project by providing contributions from a large number of individuals and businesses, typically in small amounts of money. This process is conducted online through social media platforms, which facilitates the sharing of projects among groups (Fortune Business Insights, 2025).

Alternative financing solutions for private borrowers and businesses are provided by a variety of digital financial services that comprise the digital capital raising market. Within the forecast period, the global crowdfunding market is anticipated to expand from USD 1.83 billion in 2025 to USD 4.45 billion by 2032, with a compound annual growth rate (CAGR) of 13.5%. In 2024, the market was valued at USD 1.60 billion. At 40% of the global market in 2024, North America was the dominant region (Fortune Business Insights, 2025).

Crowdinvesting, Crowdlending (Business), Marketplace Lending (Consumer), and Reward-Based Crowdfunding are the four distinct segments that form the Digital Capital Raising market. Reward-based crowdfunding, which supports initiatives such as product launches and creative ventures, and crowdinvesting, which enables investors to provide funding for startups in exchange for equity. Crowdlending and marketplace lending are also included, providing funding options for small and medium-sized enterprises (SMEs), freelancers, and private individuals that are not available through traditional institutions. The global Digital Capital Raising market, which had a transaction value of approximately US\$ 66.35 billion in 2023, is anticipated to reach approximately US\$ 69.80 trillion in 2025.

According to the MENA region, the total transaction value is small compared to the global one. In 2025, the total transaction value in the Crowdlending (Business) market is expected to reach US\$186.03m. But globally, Fortune Business Insights (2025) demonstrates that China attains the highest transaction value, with a total of US\$17 billion in 2025. However, the total transaction value is expected to reach US\$109.07m in 2025. According to a global comparison, the United Kingdom achieved the maximum transaction value in 2025, which was US\$643 million.

Additionally, the Reward-Based Crowdfunding and Marketplace Lending markets are anticipated to generate a total transaction value of \$11.63 million and \$132.17 million, respectively by 2025. According to a global comparison, the United States achieved the maximum transaction value in the two markets in 2025, with a total of US\$475 million and \$28 billion. (Statista, 2024b).

Overall, the Digital Capital Raising continues to exhibit a consistent upward trajectory, despite the Traditional Capital Raising's temporary decline. Thanks to the swift advancement of technology, it is anticipated that the market will only continue to expand. The growth of the Digital Capital Raising market is further fueled by factors such as the global transition toward digitalization and low interest rates. In both developed and emerging markets, digital platforms provide a streamlined method of capital raising, satisfying the requirements of individuals seeking innovative and efficient financial solutions. Businesses and individuals are presented with a valuable opportunity to secure funding as the market continues to expand as digital platforms evolve (Ed-Dafali *et al.*, 2025; Yin *et al.*, 2024).

#### 4.1.2 Startups Financing

According to end-user, the market is divided into NGOs, startups, and individuals. The startups segment has the largest market share in 2024, aiding them in testing their ideas and products in the market without a final Minimum Viable Product (MVP). Entrepreneurs in emerging markets have limited access to traditional funding sources, such as bank loans (Creek et al., 2023), and eventually rely more on a relatively new financing mechanism – crowdfunding platforms. Startups help in financial support, new product development, and feedback from investors and potential users on a single platform. It is a good way for startups to raise capital and build a community of supporters, and also to test business ideas with the market before committing to them (Bellaama, 2020).

According to Berger and Udell (1998), who applied the life cycle concept to financing decisions, in the startup phase of the firm life cycle theory, companies often face significant challenges such as limited financial and human resources, and a high level of uncertainty. As a result, startups typically rely on self-financing, loans from friends and family, or crowdfunding as their primary sources of funding. Their ability to secure external financing is usually limited due to the absence of a credit history or a proven financial track record (Boyarchenko, 2021).

Diversifying income sources within a nation is a fundamental prerequisite for the establishment of an economy that experiences sustainable growth under normal circumstances (Abdeldayem & Aldulaimi, 2022a). Entrepreneurs invest their own resources and attract capital (in debt, shares, etc.) from investors and capital owners as a business entity to catalyze structural transformations in national economies. These same funds, on the one hand, contribute to the economic success of entrepreneurs and, in turn, serve the community. This project, which is the same as the projects that provide services to society in general, was funded by the entrepreneurs, who either collected their own money or the money of other investors. The success of new startups that ventured into

business from a garage and small avenue inspires millions of young people to begin their business journey and create employment (Maier et al., 2023; Meghouar et al., 2023).

Abdeldayem and Aldulaimi (2022) describe crowdfunding as a straightforward and expeditious method of obtaining capital. The market structure of the Gulf Cooperation Council (GCC) on the growth of entrepreneurship start-ups would soon necessitate new financing, such as crowdfunding, which could serve as a new financier. The conventional banking system confronts numerous obstacles, including high transaction costs, double payments, and multiple intermediaries, which can be mitigated by the legal adoption of crowdfunding (Chandwani *et al.*, 2023; Rabbani *et al.*, 2020).

The crowdfunding market in the MENA region is experiencing a surge in demand for platforms that facilitate impact-driven investments, with a notable increase in projects focusing on social entrepreneurship and sustainability. This trend is propelled by a tech-savvy youth population that prioritizes ethical funding and community-oriented initiatives. Furthermore, regulatory advancements are enhancing investor confidence, encouraging participation in digital capital raising. Consequently, stakeholders—including startups, investors, and policymakers—must adapt to this evolving landscape, fostering collaboration and transparency to capitalize on emerging opportunities (Abdeldayem & Aldulaimi, 2023; Thottoli, 2022).

The crowdinvesting market in Saudi Arabia is fostered by Vision 2030, a policy that prioritizes entrepreneurship and innovation, particularly in technology-driven enterprises. In Turkey, the diverse economy attracts a mixture of local and international investors, thereby creating a competitive environment for crowdfunded projects. Concurrently, the UAE's progressive regulations and strategic position as a financial center foster investor trust and participation in digital capital raising, thereby establishing a dynamic environment for growth (Wamda, 2024; Wamda, 2025).

# 4.2 The Association between Crowdfunding Campaigns and Startup Financing in the MENA Region.

Recently, the growth of start-up companies and the importance of the source of finance are inseparable (Abdeldayem & Aldulaimi, 2022b). There are many studies conducted in developed countries (Liu *et al.*, 2025), but in the MENA region, there are lake of them (Abdeldayem & Aldulaimi, 2022). In the Arabic region, crowdfunding has facilitated the emergence of entrepreneurial businesses that offer an alternative source of financial services. Equity crowdfunding and marketplace financing, which are among the fintech lenders, are beginning to challenge conventional business models (Abu Amuna *et al.*, 2019; Thottoli, 2022). In the UAE, Zarrouk *et al.* (2020) observed that none of the interviewees, entrepreneurs, were aware of crowdfunding or any other venture capital source of financing that had recently emerged.

Abdeldayem and Aldulaimi's (2022a, 2022b) studies aim to analyze crowdfunding's success in the different Arab countries using different platforms, because the Crowdfunding experience and practice in this part of the world tend to be unexplored in terms of research.

In their 2022a study, Abdeldayem and Aldulaimi examined startups from five Gulf countries (Saudi Arabia, Bahrain, Kuwait, Oman, and the United Arab Emirates) as well as several crowdfunding platforms that are frequently employed by crowdfunders in this region (including Indiegogo, Kickstarter, Eureeca, Beehive, and GoFundMe), which collectively have a total of 10,2964 members. While the Zoomaal.com platform is used in the second research of Abdeldayem and Aldulaimi (2022b) from 2019 to 2020 in the selected middle eastern countries. Both of them find that the success of fundraising is positively influenced by crowdfunding, and crowdfunding platforms are an effective instrument for financing entrepreneurs in these countries and for startup finance. One of the most significant project financing mechanisms is the emergence of crowdfunding platforms, as noted by Abdeldayem and Aldulaimi (2022b).

Likewise, Abdeldayem and Aldulaimi (2023) demonstrate that the success of fundraising is positively influenced by the presence of crowdfunding and that crowdfunding platforms are a viable financial technology (Fintech) instrument for financing entrepreneurs in the Middle East. There were seven Middle Eastern countries in which it was conducted. These countries include Turkey, Egypt, Iraq, Saudi Arabia, Bahrain, Kuwait, and the United Arab Emirates, in addition to several CF platforms that are frequently employed by crowdfunders in the region, including Kickstarter, GoFundMe, Beehive, and Zoomal, with a total membership of 195,193.

As per the findings of prior research, the MENA region has the potential to drive growth by employing crowdfunding to leapfrog the traditional capital market structures and financial regulatory regimes of the developed world. therefore, the following hypothesis is formulated as;

H1: Crowdfunding campaigns have a significant effect on the total capital raised by startups in the MENA region.

# 4.3 The Association Between Some Factors of The Crowdfunding Campaigns and Startups Financing

Many factors that affect on success of crowdfunding campaigns were investigated from the existing relevant studies. But this study focused on some of them to identify how they affect on fundraising outcomes of startups in the MENA region. The three most prevalent factors were chosen to test them in the MENA region, which are financial goal size (Ren *et al.*, 2021a; Pinkow, 2022; Felipe *et al.*, 2022; Wang & Zhang, 2022; Ed-Dafali *et al.*, 2025; Yin *et al.*, 2024), Project type (Cheng & Jang, 2023; Lee & Zhao, 2022; Maier *et al.*, 2023), and geographic location (Atawna *et al.*, 2024; Gallemore *et al.*, 2019; Maymoni & Solodoha, 2025; Omrani *et al.*, 2022; Tanga *et al.*, 2022).

#### 4.3.1 Funding Goal Size

When starting a crowdfunding campaign, founders often set a funding goal to illustrate their objectives for their campaign and assist prospective investors in assessing its feasibility and potential risks (Ren *et al.*, 2021a). Many studies identified "funding dynamics" as a critical cluster influencing crowdfunding outcomes. Between 2014 and 2022, a comprehensive study analyzing 152 scientific papers published that setting realistic funding goals is pivotal for campaign success. Overly ambitious targets can deter potential backers, while objectives that are feasible are considerably more probable to be accomplished (Ed-Dafali *et al.*, 2025). The crowdfunding campaign's objective size is indicative of the founders' anticipated fundraising volume (Yin *et al.*, 2024).

The correlation between the size of a crowdfunding campaign's objective and the likelihood of successful funding has been the subject of numerous studies (Ren *et al.*, 2021a; Pinkow. 2022; Felipe *et al.*, 2022; Wang & Zhang, 2022; Ed-Dafali *et al.*, 2025). A larger funding target would have a detrimental effect on fundraising outcomes, as these studies have relatively consistent perspectives.

According to Ren *et al.*, (2021a), 565 crowdfunding campaigns from CrowdJustice, a prominent platform, indicate that unsuccessful crowdfunding campaigns typically have a larger target size than successful campaigns on the same platform. A dataset consisting of 174 successful reward-based crowdfunding initiatives is also analyzed in Pinkow's 2022 study. The study identifies a negative correlation between the size of the initial funding goal and the likelihood of overfunding. Specifically, campaigns with lower initial funding goals are more prone to exceed their targets significantly. Whereas the study demonstrates that as the logarithm of the funding goal increases, the probability of achieving overfunding (defined at thresholds of 110%, 130%, and 150% of the initial goal) decreases. This study suggests that higher funding goals may deter additional contributions beyond the set target.

Deng et al., (2022) identify determinants of crowdfunding success. This study reveals that Lower funding goals are associated with higher backer participation, as they are perceived as more attainable. Higher funding goals may deter potential backers due to perceived risks and doubts about the campaign's feasibility. By analyzing 94 empirical studies, this study suggests that Campaign creators should set realistic funding goals to maximize backer engagement, balancing ambition with achievability to can raising the fund.

Wang and Zhang' (2022) research revealed that the displayed funding goal has the most significant causal relationship with success. Specifically, higher crowdfunding goals were associated with lower success rates. The study investigated over 36,370 projects from 2018 to 2020 and suggests that the funding goal signals the project's complexity, and higher goals may deter potential backers. Similarly, Felipe et al. (2022) focused on the time-to-success of a crowdfunding campaign and its financial goal size. The researchers found that campaigns with

smaller goal sizes are more likely to achieve their goal in a shorter period, while campaigns with larger goal sizes have lower chances of success.

The research conducted by Yin and his colleagues (2024), in contrast, discovered no significant evidence that the size of the funding goal impacts the success of green crowdfunding campaigns, by analyzing 720 green crowdfunding campaigns on GoFundMe (Yin *et al.*, 2024). In summary, most existing studies highlight that a successful crowdfunding campaign tends to have a relatively smaller financial goal size (Ed-Dafali *et al.*, 2025; Felipe et al., 2022; Pinkow, 2022; Ren et al., 2021a; Wang & Zhang, 2022).

Therefore, this study aims to test the relationship between a crowdfunding campaign's funding goal size and successful fundraising in startups in the MENA region. As previous studies have empirically proven that goal size generally impacts the fundraising outcomes of crowdfunding campaigns, a hypothesis (H) is posited:

# H<sub>2</sub>: The crowdfunding campaign's funding goal size has a significant effect on the total capital raised by startups in the MENA region.

### 4.3.2 Project Type

There are many studies analyzing project type effect, especially as a moderating variable (Cheng & Jang, 2023; Lee & Zhao, 2022; Maier et al., 2023). Project type moderates the impact of message framing and green emphasis on campaign success on the Indiegogo platform from 2015 to 2020, in Rossolini et al. (2021) study. The research highlights that the type of project, particularly those with green or sustainable objectives, benefits from specific communication strategies. Positive framing increases agri-food campaign success, while for climate preservation and renewable energy initiatives, negative framing is more advantageous. As the same of Lee and Zhao (2022) research that investigates how social media engagement impacts crowdfunding performance, focusing on the moderating effects of product type (hardware vs. software) and entrepreneur characteristics. The study finds that Facebook engagement has a more significant positive effect on funding outcomes for hardware products, while Twitter engagement is more influential for software products.

Maier et al. (2023) research indicates that project type influences the legitimization effect, exploring how past crowdfunding success affects consumer perceptions and behaviors. This research reveals the mediating effects of perceived cognitive legitimacy on brand attitude for both low- and high-tech products. Similarly, Pan & Dong (2023) focus on 427 COVID-19-related crowdfunding campaigns in China; this study examines factors contributing to campaign success. While the study centers on charitable campaigns, it underscores the importance of project type in determining funding outcomes. The study's findings indicate that informal campaigns, despite lacking formal authorization and recognition, often outperform formal campaigns in terms of total donations received.

In France, Khadhraoui and Ajina (2024) analyzed 424 projects from the KissKissBankBank platform. The research employs Generalised Linear Models to pinpoint decisive performance factors. The research indicates that the success of a campaign is positively influenced by a variety of factors, including the number of sponsors, the number of publications, the geographical location, the project category, the creator's previous experience, and the amount of money raised. The research illustrated that some categories, such as creative arts and technology, have higher success rates, suggesting that project type plays a crucial role in attracting backers.

There are many classifications used in the previous studies, such as green project vs. other (Rossolini *et al.*, 2021), formal projects vs. Informal projects (Pan & Dong, 2023), hedonic product projects vs. utilitarian product projects (Cheng & Jang, 2023), hardware product projects vs. software product projects (Lee & Zhao, 2022), and technology projects vs. non-technology projects (Khadhraoui & Ajina, 2024; Maier *et al.*, 2023).

Regardless of the different classification of project type, all these studies collectively underscore the significance of project type in crowdfunding success (Cheng & Jang, 2023; Khadhraoui & Ajina, 2024; Lee & Zhao, 2022; Maier *et al.*, 2023; Pan & Dong, 2023; Rossolini *et al.*, 2021). This study tests whether it is also affected in startups in the MENA region, by formulating the following hypothesis:

# H3: The crowdfunding campaign's project type has a significant effect on the total capital raised by startups in the MENA region.

# 4.3.3 Geographic Location

Gallemore, Nielsen, and Jespersen (2019) used the campaign origin ZIP code that mapped to urban/rural classification to analyze over 134,000 Indiegogo campaigns in the U.S between 2009 and 2015. This study finds that campaigns from urban and affluent areas with higher "spatial capital" (social, economic, and digital infrastructure) had higher success rates. Given that only around 10% of Indiegogo campaigns are fully funded, the potential beneficiaries of crowdfunding campaigns are significantly restricted by spatial inequalities, which implies that crowdfunding may not equalize access to finance as the optimists anticipate. Tanga, Baker, and An (2022) employed the Metropolitan vs. non-metropolitan area of project origin as a metric for geographic distance in their investigation. Finding that the number of funders for innovative technology and for projects with early supporters from large metropolitan areas increased as a result of geographic distance. Nevertheless, the impact of this effect is less pronounced for initiatives that originate from smaller cities.

By using Kickstarter platform, Omrani et al. (2022), and Tanga et al. (2022) find that geographic distance significantly impacts campaign success. Despite the Omrani et al. (2022) study measuring the geographic location by geographic distance between project creators and contributors. This research finds that the farther the funder is located from the project, the less is

the probability of the campaign's success and increasing the funding. This study analyzed 9,146 projects across 165 countries financed by more than 300,000 funders from 2012 to 2013.

Atawna, Testa, and Cincotti (2024) study analyzed 350 campaigns from the StartSomeGood platform. They compared donations for developing vs. developed countries and the origin of fundraisers, indicating that Fundraisers from developed countries attract more donations, even when supporting projects in developing regions. Therefore Maymoni & Solodoha (2025) compared funding outcomes between core and periphery locations by testing interaction with experience signals by analyzing 2,578 campaigns on the Headstart platform. This study reveals that central regions amplify the effectiveness of entrepreneurial signals (like prior experience), while peripheral regions face systemic barriers that weaken these signals, leading to regional disparities in crowdfunding success.

Previous studies used a variety of classifications, but this study focuses on the MENA region. So, the researcher classified it into three groups: Gulf Cooperation Council (GCC), North Africa, and the Levant. The following hypotheses can be formulated as follows.

H4: The crowdfunding campaign's geographic location has a significant effect on the total capital raised by startups in the MENA region.

# 5. Research Methodology

This section consists of 6 parts that included Research Sample, Variables and their Measurements, Research Hypotheses, Hypotheses Testing, Research Results, and Conclusion.

# 5.1 Research Sample

The study sample consists of 3,179 crowdfunding campaigns for startups selected based on specific criteria related to funding type and geographic size from 2019 to 2024. These campaigns provided approximately 13 billion in this period, with a growth rate of 17% in 2024. Because of the unavailability of data, this study was conducted on eleven countries only: Egypt, Morocco, Saudi Arabia, UAE, Bahrain, Qatar, Oman, Kuwait, Iraq, Jordan, and Palestine. Startups were selected to represent different geographic regions: North Africa (NAFRICA) (Egypt and Morocco), the Gulf Cooperation Council (GCC) plus Iraq, and the Levant (Palestine and Jordan). Additionally, companies were divided into technology and non-technology companies to provide a comparison between the two sectors regarding investment. Startups that focus on large campaigns (over \$10 million) and smaller campaigns (less than \$10 million) were included in the sample. Data was collected from the crowdfunding platforms' reports, Arabnet and Digital Digest reports, Statista 2024b platform, Wamda reports, and World Bank databases, allowing for a broader exploration of the impact of crowdfunding across multiple environments. The number of observations of the study sample reached 30 observations.

The graph (Figure 1) shows that the number of campaigns launched has seen significant growth from 2019 to 2022. In 2019, the number was very low, with only 244 campaigns launched. However, in 2020, the number rose significantly to 417, reflecting the beginning of a shift in

activity. In 2021, campaigns saw a significant increase to 664, reflecting a significant acceleration in campaign launches. However, in 2022, the number reached an all-time high, with 795 campaigns launched, indicating a significant increase in support or opportunities that year. However, in 2023, we saw a decline to 488 campaigns, a significant decline compared to the previous year. In 2024, the number rebounded slightly to 571 campaigns, reflecting a partial improvement in activity after the decline that occurred in the previous year.



Figure 1: Number of Campaigns Launched

Source: from Tableau output

Figure 2 shows that the volume of deals over \$10 million has varied significantly between years. In 2019, the value was 0.291, reflecting a small volume of deals over \$10 million. In 2020, the value rose to 0.469, indicating an increase in the volume of large deals compared to the previous year. Then, in 2021, we saw a significant jump to 2.17, indicating that much larger deals were completed that year, reflecting a significant increase in transaction volume. However, in 2022, the value dropped to 0, indicating that there were no deals over \$10 million. This decline continued in 2023 and 2024, where the value was 0, indicating the absence of large deals in those years.

Compared to the FGSG10, the volume of deals under \$10 million has seen a significant increase in some years. In 2019, the value was 0.26, and in 2020, it rose to 0.306, reflecting a gradual increase in smaller deals. In 2021, the value reached 0.72, a significant increase compared to the previous two years, reflecting an increase in the volume of these deals. In 2022, the value was 3.94, the highest level reached in the period under study, indicating a significant shift toward smaller deals. However, in 2023 and 2024, the volume of smaller deals stabilized at 2.2 and 2.3, respectively, indicating relative stability in this type of deal during those years.



Figure 2: Value of Big and Small Funding Goal Size Campaigns

Source: from Tableau output

From the data presented, we note that the value of the technology projects has experienced significant fluctuations over the years. In 2019, the technology projects' value was 556.8, reflecting healthy investment in technology companies. In 2020, the value was 487.2, indicating a slight decline compared to the previous year. In 2021, the value dropped significantly to 348, indicating a significant decline in interest or investment in this sector.

However, in 2022, a significant shift occurred, with the technology value reaching 1,327.6, a huge jump reflecting an unprecedented increase in the volume of investment in the technology sector or a significant expansion in the technology market. In 2023, the value fell to 254.1, indicating a significant decline in activity. However, in 2024, the value rose again to 1,035.5, reflecting a partial recovery in the technology sector after the decline in the previous year.

As for the value of non-technology projects, 2019 recorded a value of 461.6, indicating that non-technology companies enjoyed good investment activity during that period. Then, in 2020, the value was 403.9, reflecting a slight decline. In 2021, the value continued to decline, reaching 288.5, reflecting a continued decline in investment in this sector.

In 2022, the non-technology value rose to 456, showing a slight increase compared to the previous two years, but it did not surpass the technology value in this year. From 2023 to 2024, the value continued to decline, reaching 201.3 and 190.4, respectively, reflecting a significant decline in investment or growth in non-technology companies.



Figure 3: Technology and Non-technology Projects Value

Source: from Tableau output

Data in Figure (4) indicates that the value in North Africa saw a significant increase from 2019 to 2022. In 2019, the value was 360.87, rising to 410.08 in 2020. Growth continued in 2021, reaching 466.00. In 2022, we saw a significant increase, reaching 745.85, reflecting a significant increase in investment activity in this region. In 2023, the value continued to decline to 626.00, then declined further in 2024, reaching 354.80, indicating a decline in investment activity in the region in recent years.

As for the Gulf Cooperation Council (GCC) countries, the region witnessed a significant jump in investment activity, especially in 2022. In 2019, the value was 581.16, gradually rising in 2020 to 660.40, and then continuing its rise in 2021 to reach 750.46. However, in 2022, there was an exceptional increase, reaching 2,916.97, a huge jump indicating an unprecedented investment flow that year. However, we witnessed a decline in 2023 to 1,024.50, and these trends continued in 2024 to 809.00, indicating a significant decline compared to the previous year.

In the Levant region, which includes Palestine and Jordan, the region recorded significant variations in its values over the years. In 2019, the value was 742.65, then rose to 843.92 in 2020, and continued to rise in 2021 to 959.00. In 2022, the area recorded 2,357.90, reflecting a significant increase in investment activity. However, in 2023, the area experienced a significant decline to 475.50, while in 2024, the value declined significantly to 18.60, indicating a sharp decline in investment activity in this area.

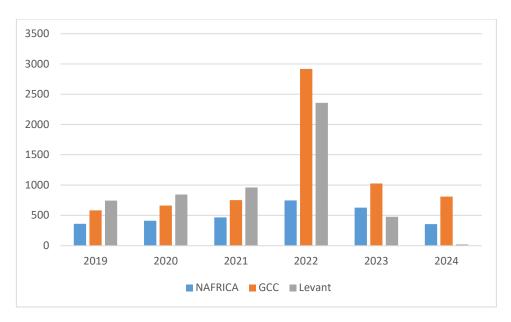


Figure 4: Value of Campaigns by Country

Source: from Tableau output

#### 5.2 Variables and their Measurements

The study variables can be presented, which aim to measure the impact of crowdfunding campaigns and its factors on startup financing on the MENA region. Table No. (2) shows the independent, dependent variables of the study.

# 5.2.1 Independent variables

This study depends on four independent variables,

#### 1- Crowdfunding Campaigns

Crowdfunding Campaigns are measured by the number of campaigns launched. It is defined as the total crowdfunding campaigns initiated by the startup. Many previous studies relevant to the subject of the study have relied on the number of campaigns launched (Abdeldayem & Aldulaimi, 2022b; Ed-Dafali *et al.*, 2025).

#### 2- Funding Goal Size

Funding Goal Size is the target amount of capital a campaign aims to raise. This study used Stated funding goals in campaign materials and categorized them into two groups: big funding goal (size more than > \$10 m) and small funding goal (size less than  $\le $10$ m) (Pinkow, 2022; Yin et al., 2024).

## 3- Project Type

Classification based on the nature of the project offered by startups. This research categorized it into two groups: technological projects and non-technological projects. This study also used the number and value of these two categories of projects (Cheng & Jang, 2023).

#### 4- Geographic Location

This study contains data from 11 countries and obtains the number and value of the campaigns in each of them. They are categorized into three groups: Gulf Cooperation Council (GCC), North Africa, and the Levant. GCC is a group of six countries in the Persian Gulf: Bahrain, Kuwait, Qatar, Oman, Saudi Arabia, and the United Arab Emirates. This study added Iraq to the GCC group. North Africa consists of Egypt and Morocco, whereas the Levant consists of Palestine and Jordan (Abdeldayem & Aldulaimi, 2022b; World Bank Group, 2021).

# 5.2.2 Dependent variables

# **Startups Financing**

The study relied on startups financing as a dependent variable, which was measured by the Total Capital Raised measure (Abdeldayem & Aldulaimi, 2022b; Ameziane & Touat, 2024) used by the previous empirical studies mentioned in the current study. This measure can be defined as the aggregate amount of funds secured by startups through crowdfunding campaigns. This research sums up all financial contributions received.

**Table 1**: Variable Measuring

Variables	Measure	Reference
Independent variables		
Crowdfunding campaigns (CF)	Number of Campaigns Launched	Abdeldayem & Aldulaimi, 2022b; Ed-Dafali et al., 2025
Funding Goal Size	Stated funding goal in campaign materials: size more than > \$10 m and size less than ≤ \$10m	Pinkow, 2022; Yin et al., 2024
Project Type	Classification based on the nature of the product or service offered: technological & non-technological projects	Cheng & Jang, 2023
Geographical Location	Categorized into three groups: Gulf Cooperation Council (GCC), North Africa, and the Levant	Abdeldayem & Aldulaimi, 2022b; World Bank Group, 2021
Dependent variable		
Startups Financing (SF)	Total Capital Raised	Abdeldayem & Aldulaimi, 2022b; Ameziane & Touat, 2024

Source: Prepared by the researcher

# 5.3 Research Hypotheses

In light of the above literature and previous studies, the hypotheses and study regression models can be formulated as follows.

H<sub>1</sub>: Crowdfunding campaigns have a significant effect on the total capital raised by startups in the MENA region.

H<sub>2</sub>: The crowdfunding campaign's funding goal size has a significant effect on the total capital raised by startups in the MENA region.

H<sub>3</sub>: The crowdfunding campaign's project type has a significant effect on the total capital raised by startups in the MENA region.

H<sub>4</sub>: The crowdfunding campaign's geographic location has a significant effect on the total capital raised by startups in the MENA region.

# 5.4 Hypothesis Testing

Here is a structured overview of quantitative measures for crowdfunding campaigns (independent variable) and startup financing (dependent variable) specific to the MENA region.

The impact of crowdfunding on startup financing in the MENA region has been the subject of several recent studies. These studies identify both dependent and independent variables that influence the success and adoption of crowdfunding as a financing tool for startups. Below is the testing hypotheses by the four following regression models:

1. The first study model was formulated to test the first hypothesis: H<sub>1</sub>: Crowdfunding campaigns have a significant effect on the total capital raised by startups in the MENA region.

$$SF_t = B_0 + B_1 CF_t + e_t .....(1)$$

Where,

SF<sub>t</sub>: represents startup financing, which is measured by total capital raised.

CF<sub>t</sub>: represents crowdfunding campaigns, which are measured by the number of campaigns launched.

2. The second model was formulated to test the second hypothesis of the study: H<sub>2</sub>: The crowdfunding campaign's funding goal size has a significant effect on the total capital raised by startups in the MENA region.

$$SF_t = B_0 + B_1 FGSG10_t + B_2 FGSL10_t + e_t .....$$
 (2)

#### Remond Elsaid Mohamed Libda

Where,

FGSG10<sub>t</sub>: Funding goal Size that is greater than > \$10m

FGSL10<sub>t</sub>: Funding goal Size that is less than > \$10m

3. While the third study hypothesis: H<sub>3</sub>: The crowdfunding campaign's project type has a significant effect on the total capital raised by startups in the MENA region.

$$SF_t = B_0 + B_1 TECH_t + B_2 NTECH_t + e_t ...... (3)$$

Where,

TECHt: Technology Projects

NTECH<sub>t</sub>: Non-technology Projects

4. Finally, the fourth study hypothesis: H<sub>4</sub>: The crowdfunding campaign's geographic location has a significant effect on the total capital raised by startups in the MENA region.

$$SF_t = B_0 + B_1 \text{ NAFRICA}_t + B_2 GCC_t + B_3 \text{ Levant}_t + e_t \dots$$
 (4)

The three variables NAFRICA, GCC, and Levant represent the geographic location of startups.

Where,

NAFRICA: represents startups in North Africa,

GCC: represents startups in the Gulf Cooperation Council, Plus Iraq.

Levant: represents startups in Jordan and Palestine.

The methodology of this study relies on quantitative analysis using secondary data collected from startups across various geographic sectors. A multiple regression model was used to analyze the relationship between startup financing (measured by total capital raised) and several independent variables, such as crowdfunding campaigns (CF), funding goal size (FGSG10 and FGSL10), project type (TECH and NTECH), and geographic location (NAFRICA, GCC, Levant).

The quality of the models was assessed using the Variance Inflation Factor (VIF) test to ensure the absence of multicollinearity between variables, and the Breusch-Pagan test to detect heteroskedasticity. Analysis of Regression (AR) was also used to analyze the impact of each variable on startup financing, with the coefficient of determination (R-squared) calculated to determine the model's ability to explain the variance in the data.

Stata V14 was used to analyze the data, perform all statistical operations, calculate the values needed to estimate the models, and evaluate the coefficients and relationships between the variables. The methodology aims to provide scientific insights into the factors that influence

startup financing and provide usable results to improve the financing strategies of these companies.

#### 5.5 Research Results

After presenting the study models, we will discuss the descriptive analysis. the study used Several variables to represent startup financing, crowdfunding campaigns criteria, funding goal size, project types, and geographic location. Data were collected over six observations for each variable, spanning the period from 2019 to 2024, ensuring consistent analysis across the sample. The results of the descriptive analysis of the study variables are presented below.

Table 2: Descriptive analysis for study variables

Variables	Obs	Mean	Std. Dev.	Min	Max
CF	6	529.827	192.97	244	795
SF	6	2.155	1.295	.551	3.94
FGSG10	6	.488	.846	0	2.17
FGSL10	6	1.621	1.454	.26	3.94
TECH	6	668.2	421.639	254.1	1327.6
NTECH	6	333.617	123.573	190.4	461.6
NAFRICA	6	493.933	158.605	354.8	745.846
GCC	6	1123.749	891.404	581.156	2916.971
Levant	6	899.595	789.167	18.6	2357.9

Source: from Stata V14 output.

Table (2) show the Startup Financing SF was measured by total capital raised. The mean value of the variable is 2.16 with a standard deviation of 1.29, and values range from 0.55 to 3.94. The low variance in this variable indicates that most of the startups for which data was collected had raised similar amounts of funding.

Also, the mean value of Crowdfunding CF is 529.83 with a high standard deviation of 192.97, indicating significant variation in the number of campaigns among the startups in the sample. Values range from 244 to 795, reflecting the diversity of crowdfunding-related activities among companies.

FGSG10 (Deals Over \$10 Million), This variable measured the number of deals exceeding \$10 million. The mean for this variable was 0.49 with a standard deviation of 0.85, indicating that most companies did not participate in large deals. The maximum number of deals was 2.17, reflecting some exceptional cases where companies closed large deals.

FGSL10 (Deals Under \$10 Million), This variable measured the number of deals under \$10 million. The mean for this variable was 1.62 with a standard deviation of 1.45, indicating that most startups in the sample participated in small deals. Values ranged from 0.26 to 3.94, indicating some variability in deal size.

TECH (Technology Projects), This variable was measured among companies operating in the technology sector. The mean value of TECH was 668.2 with a high standard deviation of 421.64, reflecting significant variation in performance among technology firms. Values ranged from 254.1 to 1327.6, indicating significant differences in the size of technology firms.

NTECH (Non-Technology Projects): This variable was measured among companies not operating in the technology sector. The mean of this variable was 333.62 with a standard deviation of 123.57, indicating that non-technology firms exhibit greater stability in their performance compared to technology firms.

NAFRICA (North Africa), This variable was measured among startups in the North African region. The mean value for NAFRICA was 493.93 with a standard deviation of 158.60, indicating moderate variation in performance among startups in this region.

GCC, the mean value for GCC was 1123.75 with a high standard deviation of 891.40, indicating that startups in the Gulf region exhibit significant variation in activity volume and deal performance.

Levant, this variable was measured among startups in Jordan and Palestine. The mean value for Levant was 899.59 with a standard deviation of 789.17, indicating significant variation in startup performance in this region.

The results show significant variation across geographies, with startups in the Gulf (GCC) region ranking first in activity volume and deal performance, followed by the Levant region, while startups in North Africa ranked last. There is also a significant variation in performance between technology and non-technology companies, with technology companies showing greater variation in size and performance.

To determine which statistical methods are appropriate for the study sample, the normal distribution of the study variables was tested. It was found that the variables FGSG10 and GCC do not follow the normal distribution. Therefore, a ladder of powers histogram test was conducted to determine the appropriate transformation to make these variables follow the normal distribution. This is clear from the following figure:

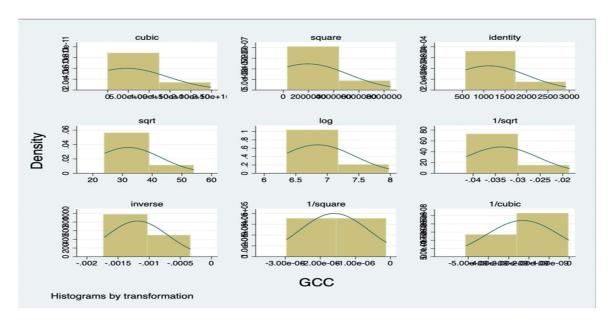


Figure 5: ladder of powers histogram

Source: from Stata V14 output.

It is clear from the previous figure that the best way to transform variables to follow the normal distribution is to calculate 1/square of the variable, so the variables were converted using this formula, which is clear in the results of the normal distribution table (3).

Table 3: The result of normal distribution

Shapiro-Wilk W test for normal data

Variable	Obs	W	V	Z	Prob>z
CF	6	0.997	0.032	-3.318	1.000
SF	6	0.939	0.752	-0.394	0.653
FGSG10	3	0.916	1.256	0.156	0.438
FGSL10	6	0.884	1.436	0.559	0.288
TECH	6	0.890	1.364	0.475	0.317
NTECH	6	0.859	1.750	0.897	0.185
NAFRICA	6	0.870	1.610	0.752	0.226
GCC	6	0.868	1.630	0.772	0.220
Levant	6	0.873	1.573	0.712	0.238

Source: from Stata V14 output.

Based on the results of the Shapiro-Wilk test, it can be concluded that all studied variables follow a normal distribution. The results showed that the Prob>z values were higher than 0.05 for all variables, indicating that the hypothesis of a normal distribution cannot be rejected. These results support the validity of hypotheses based on the normal distribution of data in the statistical analysis of this study.

Table (4) show the results of the Variance Inflation Factor (VIF) CF variable was 1, indicating the absence of multicollinearity among the variables in this model. The mean VIF in the model was 1, further strengthening this result. For the Brioche-Pagan heteroskedasticity test, the chi2(1) value was 1 with Prob > chi2 = 0.3171, indicating that there was no heteroskedasticity problem in this model.

**Table 4**: Results of evaluating the quality of the study models

Model	variance i	nflation factor	Breusch-Pagan heteroskedasticity		
	VIF	VIF 1/VIF		Prob > chi2	
Model (1)					
CF	1	1	1	0.3171	
Mean VIF	1				
Model (2)					
FGSG10	1.3	0.7673	0.22	0.6376	
FGSL10	1.3	0.7673			
Mean VIF	1.3				
Model (3)					
NTECH	1.08	0.9271	0.04	0.8459	
TECH	1.08	0.9271			
Mean VIF	1.08				
Model (4)					
GCC	1.22	0.1607	1	0.3179	
NAFRICA	1.14	0.1628			
Levant	1.29	0.4366			
Mean VIF	1.22				

Source: from Stata V14 output.

The VIF results in the second model also showed that the values of the FGSG10 and FGSL10 variables were 1.3 each, with a 1/VIF value of 0.7673, indicating that there was little variation among the variables, but no excessive multicollinearity. The mean VIF in this model was 1.3. For the Brioche-Bagan variance test, the chi2(1) value was 0.22 with Prob > chi2 = 0.6376, indicating that the model does not suffer from a random distribution problem.

The VIF values for both NTECH and TECH in this third model were 1.08, with a 1/VIF value of 0.9271, indicating no significant multicollinearity between the variables. The mean VIF was 1.08. For the Brioche-Bagan variance test, the chi2(1) value was 0.04 with Prob > chi2 = 0.8459, indicating no random distribution problems.

The results also showed that the VIF values for the geographic variables in the fourth model were low, reaching 1.22 for the GCC variable, 1.14 for the NAFRICA variable, and 1.29 for the Levant variable, with a mean VIF in this model of 1.22. These values indicate that there is slight variation between the geographic variables without excessive multicollinearity. For the Brioche-Pagan heteroscedasticity test, the chi2(1) value was equal to 1 with Prob > chi2 = 0.3179, indicating that this model does not suffer from random distribution problems. After ensuring the quality of the study, the following table shows the regression model for the study.

**Table 5**: Results of estimating the study models

AR	Coef.	t-value	p-value	Sig	R-squared	F-test	Prob > F
Model (1)			-		-	-	-
CF	0.006	7.03	0.002	***	0.925	49.372	0.002
Constant	-1.264	-2.46	0.069	*			
Model (2)							
FGSG10	0.97	11.69	0.001	***	0.993	219.568	0.001
FGSL10	1.009	20.87	0	***			
Constant	0.045	2.38	0.028	**			
Model (3)							
TECH	0.042	3.5	0.001	***	0.458	8.268	0.039
NTECH	0.034	2.92	0.024	*			
Constant	2.221	3.35	0.009	***			
Model (4)							
NAFRICA	0.003	5.4	0	***	0.744	7.94	0.008
GCC	205.778	3.46	0.002	**			
Levant	0	3.35	0.003	**			
Constant	10.799	4.35	0	***			

Source: from Stata V14 output.

#### Results of the first model

The results of the first model in table (5) showed that the CF (crowdfunding campaigns) variable has a positive impact on startup financing (measured by total capital raised). The coefficient of determination (Coef.) was 0.006 with a t-value = 7.03 and a p-value = 0.002, indicating that the relationship between crowdfunding campaigns and startup financing is strong and significant at the 1% level. The R-squared value was 0.925, indicating that the model explains 92.5% of the variance in startup financing. This means crowdfunding can be considered a valuable tool in financing startups in MENA. Therefore, accept the first hypothesis: H<sub>1</sub>: Crowdfunding campaigns have a significant effect on the total capital raised by startups in the MENA region.

$$SF_t = -1.264 + 0.006 CF_t + e_t .....(1)$$

The reason for their positive effect is that startups in emerging markets have limited access to traditional funding sources, such as bank loans (Creek *et al.*, 2023), in addition to the expansion of financial technology (Fintech) in the MENA region (Abdeldayem and Aldulaimi, 2023). Crowdfunding campaigns are a viable Fintech instrument, so recently, investors have used them in large amounts to finance startups in the MENA region.

Although the constant (Constant) was significant (p-value = 0.069), it did not reach the usual significance level of 5%, indicating that the constant is not significantly influential in explaining startup financing. The F-test showed an F value of 49.372 with a p-value of 0.002, enhancing the overall fit of the model.

#### Results of the second model

In the second model, it was found that the variables FGSG10 (Deals > \$10M) and FGSL10 (Deals < \$10M) had a significant impact on startup financing. FGSG10 showed a coefficient of 0.97 with a t-value of 11.69 and a p-value of 0.001, indicating a strong, positive relationship between deal sizes larger than \$10M and startup financing. For FGSL10, the coefficient was 1.009 with a t-value of 20.87 and a p-value of 0, demonstrating a positive relationship between funding goal sizes smaller than \$10M and startup financing. The R-squared value for this model was 0.993, indicating that the model explains 99.3% of the variance in startup financing, reflecting the model's high accuracy. The F-test value was 219.568 with a p-value of 0.001, further strengthening the model's significance. Based on that, we can accept the hypothesis "H<sub>2</sub>. The crowdfunding campaign's funding goal size has a significant effect on the total capital raised by startups in the MENA region.

$$SF_t = 0.045 + 0.97 FGSG10_t + 1.009 FGSL10_t + e_t \dots (2)$$

This means that a campaign with a big or small funding goal has a significant positive effect on startups financing. Despite that, a small funding goal has a large impact on startups financing rather than a campaign with a big funding goal, which is consistent with most previous studies (Ed-Dafali et al., 2025; Felipe et al., 2022; Pinkow, 2022; Ren *et al.*, 2021a; Wang et al., 2022). It is due to boost momentum, a small funding goal appears more attainable and less risky, making people more willing to contribute early. Especially if the project team of a campaign with a big funding goal lacks credibility or a strong track record (Felipe *et al.*, 2022).

#### Results of the third model

In model three, both technology and non-technology firms had a significant impact on startup financing. The coefficient for the TECH variable was 0.042 with a t-value of 3.5 and a p-value of 0.001, indicating that technology firms contribute positively to startup investment. For the NTECH variable, the coefficient was 0.034 with a t-value of 2.92 and a p-value of 0.024, indicating a significant impact as well, but to a lesser extent compared to technology firms. The R-squared for this model was 0.458, meaning that the model explains 45.8% of the variance in

startup financing. This is lower than previous models, suggesting that other factors may play a greater role in explaining startup financing in this model. The F-test value was 8.268 with a p-value of 0.039, indicating that the model has a significant fit. So, the third study hypothesis (H<sub>3</sub>: The crowdfunding campaign's project type has a significant effect on the total capital raised by startups in the MENA region) is accepted.

$$SF_t = 2.221 + 0.042 \text{ TECH}_t + 0.034 \text{ NTECH}_t + e_t \dots$$
 (3)

All these studies collectively underscore the significance of project type in crowdfunding success; therefore, this study is consistent with them (Cheng & Jang, 2023; Khadhraoui & Ajina, 2024; Lee & Zhao, 2022; Maier et al., 2023; Rossolini *et al.*, 2021; Pan & Dong, 2023). This result indicates that investors prefer to finance technological projects rather than non-technological projects. It is due to that investors are looking for groundbreaking opportunities that provide high returns or long-term impact (Cheng & Jang, 2023).

#### Results of the fourth model

In the fourth model, geographic variables had significant effects on startup financing. The coefficient for the NAFRICA variable was 0.003 with a t-value of 5.4 and a p-value of 0, indicating that firms in the North African region have a strong positive impact on startup financing. For GCC, the coefficient value was 205.778 with a t-value of 3.46 and a p-value of 0.002, reflecting a very significant effect of the variable on startup financing. For Levant, the coefficient was 0, with a t-value of 3.35 and a p-value of 0.003, indicating that the variable has a significant effect on increasing startup financing. The R-squared value in this model was 0.744, indicating that the model explains 74.4% of the variance in startup financing, a good indicator of the model's fit. The F-test value was 7.94, with a p-value of 0.008, further strengthening the model's significance.

The fourth study hypothesis, H<sub>4</sub>: The crowdfunding campaign's geographic location has a significant effect on the total capital raised by startups in the MENA region, is also accepted.

$$SF_t = 10.799 + 0.003 \text{ NAFRICA}_t + 205.778 \text{ GCC}_t + 0 \text{ Levant}_t + e_t \dots$$
 (4)

The most significant impact on startup financing is the Gulf Cooperation Council (GCC). The administrations of the GCC have implemented comprehensive national development plans that are designed to promote innovation and economic diversification. The reduction of dependence on hydrocarbons and the promotion of sectors such as technology, renewable energy, and advanced manufacturing are the primary objectives of initiatives such as Saudi Arabia's Vision 2030, the UAE's "We the UAE 2031," and Qatar's National Vision 2030. These initiatives have resulted in substantial modifications to legal and regulatory frameworks, which have increased the region's appeal to entrepreneurs and investors (Abdeldayem & Aldulaimi, 2022a; Hasbani et al., 2024; Wamda, 2024). Levent is confronted with obstacles that impede startup financing due to political instability, limited access to capital, and underdeveloped infrastructure, which make it

more difficult for businesses in these regions to attract investment and expand operations (Global Finance Magazine, 2023).

#### 5.6 Conclusion

The current study investigated the impact of crowdfunding campaigns on startups financing in the MENA region for the period of 2019-2024 by applying multiple regression. The number of campaigns launched is the crowdfunding measure, and there are also three other independent variables that are illustrated to show their impact on startup financing. The first model (CF) showed a positive and strong relationship with startup financing, while the second model showed a strong effect on startup investment through funding goal size. A small funding goal has a large impact on startups financing rather than a campaign with a big funding goal.

The third model, which related to project type, showed a significant effect for both technology and non-technology projects, but explained less of the variance in startup financing than the other models. This result indicates that investors prefer to finance technological projects rather than non-technological projects because investors are risk takers who looking for high returns. The fourth model showed a significant impact of geographical variables on startup financing and was the most likely to explain the variance between the models. The most significant impact on startup financing is the Gulf Cooperation Council (GCC), which conducts many initiatives such as Saudi Arabia's Vision 2030, the UAE's "We the UAE 2031," and Qatar's National Vision 2030.

This research reinforces a new mechanism that already exists in the global market to pool startup capital, especially for risky projects or new technology projects. In addition, it investigated the extent to which this new mechanism can be applied to the MENA region. All the hypotheses of this study are accepted, as crowdfunding campaigns are gradually prevalent in large quantities to fund startups in the MENA region. This research recommends more attention to the regulation of this mechanism through the development of legislation and laws related to it in the rest of the MENA countries. Some countries have already started initiatives such as Saudi Arabia's Vision 2030, the UAE's "We the UAE 2031," and Qatar's National Vision 2030. These initiatives have resulted in substantial modifications to legal and regulatory frameworks, which have increased the region's appeal to entrepreneurs and investors.

For future research, exploring the effect of crowdfunding in different countries with different measures is very important. Future research could investigate the impact of the Islamic crowdfunding platform, which has a great impact nowadays. Also, it may study the risks and obstacles of this platform in the MENA region.

# References

- Abdeldayem, M. M., & Aldulaimi, S. H. (2022a). Crowdfunding success in the GCC. International Journal of Engineering Business Management, 14, 1–12. https://doi.org/10.1177/18479790221074477
- Abdeldayem, M. M., & Aldulaimi, S. H. (2022b). The dynamics of crowdfunding campaigns in the Middle East. Zbornik radova Ekonomskog fakulteta u Rijeci, 40(1), 63–78. https://doi.org/10.18045/zbefri.2022.1.63
- Abdeldayem, M. M., & Aldulaimi, S. H. (2023). Crowdfunding in the Middle East: Predicting project success. International Journal of Organizational Analysis, 31(1), 275–293. https://doi.org/10.1108/IJOA-03-2021-2684
- Abu Amuna, Y. M. (2019). Crowdfunding Financing Model Effect on Entrepreneurship Aspirations. International Journal of Academic Accounting, Finance & Management Research (IJAAFMR), 3(1), 53–60
- Ameziane, M., & Touat, O. (2024). Crowdfunding and financial inclusion of SMEs in the MENA region. *Revue du contrôle, de la comptabilité et de l'audit*, (12), 285–296. <a href="https://www.researchgate.net/publication/383219491\_Crowdfunding\_and\_Financial\_Inclusion\_of SMEs in the MENA Region">https://www.researchgate.net/publication/383219491\_Crowdfunding\_and\_Financial\_Inclusion\_of SMEs in the MENA Region</a>
- Arabnet & Digital Digest. (2022). The state of digital investments in MENA 2019–2021. https://www.arabnet.me/english/business-intelligence/the-state-of-digital-investments-in-mena-2019-2021
- Arshad, N., & Berndt, A. (2021). Expanding understanding of family social capital in crowdfunding of migrant entrepreneurial ventures. *Journal of Enterprising Communities: People and Places in the Global Economy*, 17(1), 182–207. https://doi.org/10.1108/JEC-04-2020-0056
- Atawna, R., Testa, S., & Cincotti, S. (2024). The impact of geography on prosocial crowdfunding. International Journal of Electronic Commerce, 28(3), 332–357.
- Bellaama, A. (2020). Crowdfunding as an innovative mechanism to increase funding opportunities for startups: A reference to the Middle East and North Africa. Contemporary Economic Studies Journal, 50(2), 0–50.
- Boyarchenko, S. I. (2021, April 27). *Life cycle of startup financing*. SSRN. <a href="https://doi.org/10.2139/ssrn.3835495">https://doi.org/10.2139/ssrn.3835495</a>
- Chandwani, R., Vimalkumar, M., Singh, J. B., & Asthana, S. (2023). MILAAP Crowdfunding for all: Helping patients by facilitating philanthropy. IIMA Case Series. https://doi.org/10.1108/CASE.IIMA.2023.000044

- Cheng, Y., & Jang, Y. (2023). Crowdfunding technology projects: Moderating effect of product type. Technology Analysis & Strategic Management, 36(12), 4500–4514. https://doi.org/10.1080/09537325.2023.2259006
- Creek, S. A., Maurer, J. D., & Kent, J. K. (2023). Perceptions of market orientation in emerging economies. *International Journal of Emerging Markets*. https://doi.org/10.1108/IJOEM-07-2021-1000
- Ed-Dafali, S., Patel, R., & Paltrinieri, A. (2025). Factors influencing the success and failure of crowdfunding campaigns: A systematic review and bibliometric analysis. *Venture Capital*. <a href="https://doi.org/10.1080/13691066.2025.2451853">https://doi.org/10.1080/13691066.2025.2451853</a>
- Felipe, I. J. S., Mendes-Da-Silva, W., Leal, C. C., & Santos, D. B. (2022). Reward crowdfunding campaigns: Time-to-success analysis. Journal of Business Research, 138, 214–228. https://doi.org/10.1016/j.jbusres.2021.09.004
- Fortune Business Insights. (2025). Crowdfunding market size, share & COVID-19 impact analysis. https://www.fortunebusinessinsights.com/crowdfunding-market-107129
- Gallemore, C., Nielsen, T. D., & Jespersen, K. (2019). The uneven geography of crowdfunding success. Environment and Planning A, 51(7), 1480–1499. https://doi.org/10.1177/0308518X19843925
- Global Finance Magazine. (2023, December 13). *Boom times ahead for MENA?* Global Finance. https://www.gfmag.com/features/boom-times-ahead-mena/
- Hasbani, M., Bax, H. J., & Lhermitte, M. (2024, November 26). How the GCC is leveraging foreign direct investment to boost regional confidence. EY. https://www.ey.com/en\_eg/attractiveness/how-the-gcc-is-leveraging-foreign-direct-investment-to-boost-regional-confidence
- Imdad, H. (2023). Access to finance for entrepreneurs in MENA. *CARC Research in Social Sciences*, 2(1), 1–7. <a href="https://journals.carc.com.pk">https://journals.carc.com.pk</a>
- Khadhraoui, N., & Ajina, A. (2024). What drives crowdfunding success? International Journal of Innovation Management, 28(1), 2450003. https://doi.org/10.1142/S1363919625500033
- Kumar, A., & Agrawal, G. (2025). Dynamics of entrepreneurial behaviour for crowdfunding: Insights from a hybrid review. Kybernetes. Advance online publication. https://doi.org/10.1108/K-09-2024-2568
- Lee, S., & Zhao, K. (2022). Social media engagement and crowdfunding performance. Journal of the Association for Information Science and Technology, 73(11), 1559–1578. https://doi.org/10.1002/asi.24694

- Libda, R. (2024). The impact of fintech on credit risk in Egypt. *Alexandria Journal of Accounting Research*, 61(5), 391–422.
- Liu, X., Xu, Y., Ye, Q., & Jin, Y. (2025). Learning for success: Understanding crowdfunding relaunch performance after initial failures. Internet Research, 35(1), 237–263. https://doi.org/10.1108/INTR-01-2022-0063
- Maier, L., Wimmer, S., & Brettel, M. (2023). The legitimization effect of crowdfunding success. Entrepreneurship Theory and Practice, 47(4), 1389–1420. https://doi.org/10.1177/10422587211057025
- Maymoni, S., & Solodoha, V. (2025). Crowdfunding beyond borders: Geographic disparities. Journal of Business Venturing Insights, 23, e00520. https://doi.org/10.1016/j.jbvi.2025.e00520
- Meghouar, H., Ezzahid, H.-A., & Shneor, R. (2023). What drives the use of crowdfunding by micro-entrepreneurs in Morocco? Journal of Entrepreneurship in Emerging Economies, 16(6), 1873–1902. https://doi.org/10.1108/JEEE-04-2023-0177
- Omrani, N., Khessina, O., & Chen, L. (2022). Geographic dimension and information asymmetry. International Journal of Entrepreneurship and Small Business, 45(1), 16–34. https://doi.org/10.1504/IJESB.2022.120551
- Pan, X., & Dong, Y. (2023). Success of charitable crowdfunding campaigns in China during COVID-19. VOLUNTAS, 34(6), 1284–1298. https://doi.org/10.1007/s11266-023-00557-z
- Pinkow, F. (2022). The impact of common success factors on overfunding in reward-based crowdfunding. Journal of Entrepreneurship, Management and Innovation, 18(1), 7–34.
- Ren, J., Raghupathi, V., & Raghupathi, W. (2021a). Exploring the factors that determine the success of litigation crowdfunding: Implications for social justice. Technological Forecasting and Social Change, 169, 120813. https://doi.org/10.1016/j.techfore.2021.120813
- Rossolini, M., Pedrazzoli, A., & Ronconi, A. (2021). Greening crowdfunding campaigns. International Journal of Bank Marketing, 39(7), 1395–1419. https://doi.org/10.1108/IJBM-01-2021-0039
- Salvi, A., Raimo, N., Petruzzella, F., & Vitolla, F. (2022). The role of communication in restaurant crowdfunding success. *British Food Journal*, 124(12), 4323–4338. https://doi.org/10.1108/BFJ-07-2021-0797
- Statista. (2024a). Digital capital raising. https://www.statista.com/study/175898/digital-capital-raising

- Statista. (2024b). Reward-based crowdfunding MENA. https://www.statista.com/outlook/fmo/capital-raising/digital-capital-raising/reward-based-crowdfunding/mena
- Tanga, R., Baker, J., & An, S. (2022). Crowdfunding projects: Technology and geography. Economics of Innovation and New Technology, 31(7), 553–574. https://doi.org/10.1080/10438599.2020.1838412
- Thottoli, M. M. (2022). The starring role of crowdfunding in GCC. Asian Journal of Economics and Banking, 6(ahead-of-print). https://doi.org/10.1108/AJEB-02-2022-0022
- Wamda. (2024, January 8). 2023 year in review Investments in MENA. https://www.wamda.com/research/2023-year-review-investments-mena
- Wamda. (2025, January 27). 2024 year in review Investments in MENA. https://www.wamda.com/research/2024-year-review-investments-mena
- Wang, J., Luo, J., & Zhang, X. (2022). How COVID-19 has changed crowdfunding: Evidence from GoFundMe. Frontiers in Computer Science, 4, 893338. https://doi.org/10.3389/fcomp.2022.893338
- World Bank Group. (2021). *Crowdfunding's potential for the developing world*. <a href="https://documents1.worldbank.org/curated/en/409841468327411701/pdf/840000WP0Box380crowdfunding0study00.pdf">https://documents1.worldbank.org/curated/en/409841468327411701/pdf/840000WP0Box380crowdfunding0study00.pdf</a>
- Yin, Z., et al. (2024). Information disclosure and funding success of green crowdfunding campaigns: A study on GoFundMe. Financial Innovation, 10(1), Article 147. https://doi.org/10.1186/s40854-024-00666-8
- Zarrouk, H., Sherif, M., Galloway, L., & El Ghak, T. (2020). Entrepreneurial Orientation, Access to Financial Resources and SMEs' Business Performance: The Case of the United Arab Emirates. *Journal of Asian Finance, Economics and Business*, 7(12), 465–474. <a href="https://doi.org/10.13106/jafeb.2020.vol7.no12.465">https://doi.org/10.13106/jafeb.2020.vol7.no12.465</a>.

#### المستخلص

يهدف هذا البحث إلى دراسة أثر التمويل الجماعي على تمويل الشركات الناشئة في منطقة الشرق الأوسط وشمال أفريقيا، ولتحقيق هذا الهدف تم إجراء دراسة تطبيقية على عينة مكونة من 3,179هـمفقة خلال الفترة من 2024 . قدمت هذه العدملات ما يقرب من 13مليار في هذه الفترة، بمعدل نمو قدره 17٪ في عام 2024. تعتمد الدراسة على البيانات الثانوية المنشورة في تقارير منصات التمويل الجماعي، وتقارير ومضة و منصة Statista وقواعد بيانات البنك الدولي، كما تعتمد على أسلوب البيانات الذي يجمع بين كل من بيانات السلاسل الزمنية وبيانات السلاسل المقطعية (Data Panel) لإجراء الدراسة، وتم تحليل البيانات من خلال الاعتماد على حزم البرامج الاحصائية14 Stata المقطعية (المتغيرات الأربعة التي تمت دراستها لها تأثير كبير على تمويل الشركات الناشئة. أظهر النموذج الأول لحملات التمويل الجماعي علاقة إيجابية وقوية مع تمويل الشركات الناشئة، بينما أظهر النموذج الثاني تأثيرا قويا على الاستثمار في الشركات الناشئة من خلال حجم هدف التمويل. أظهر النموذج الثالث المتعلق بنوع المشروع تأثيرا كبيرا لكل من الشركات التكنولوجية وغير التكنولوجية، لكنه أوضح أقل تباينا في تمويل الشركات الناشئة مقارنة بالنماذج الأخرى. أظهر النموذج الرابع تأثيرا كبيرا لمتغيرات الموقع الجغرافي على تمويل الشركات الناشئة وكان الأكثر احتمالا لتقسير التباين بين النماذج.

# الكلمات المفتاحية:

التمويل الجماعي؛ الحملات؛ الشركات الناشئة؛ منطقة الشرق الأوسط وشمال أفريقيا؛ حجم هدف التمويل؛ نوع المشروع؛ والموقع الجغرافي.