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Towards Crowdfunding Performance through Crowdfunding Digital Platforms: Investigation of Social Capital and Innovation Performance in Emerging Economies

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Abstract: The current study aims to explore how different owners and investors use digitalcrowd-funding platforms for advertisement and selection of different projects. This connection enhances the number of effective projects and attracts the attention of various entrepreneurs for investment. This research examines the direct impact of the crowdfunding digital-platform on crowdfunding performance as well as the role of the social capital as a mediating variable and innovative performance as a moderating variable. A quantitative approach was used for data collection and analysis. The findings show that digitalcrowdfunding platforms can be predicted through crowdfunding performance. The outcomes show that innovative performance strengthens the relationship between crowdfunding digitalplatforms and crowdfunding performance. This research reveals how fundraisers can improve crowdfunding performance through crowdfunding digitalplatforms, social capital, and innovative performance. Social capital plays a critical role in the enhancement of crowdfunding performance.

Keywords: crowdfunding performance; crowdfunding digital platforms; social capital; innovation performance

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1. Introduction

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Crowdfunding digital platforms can facilitate fundraising and accrual of resources from a substantial number of supporters via internet [1]. The digital crowdfunding platform industry is growing globally and has attracted the attention of the scholars and researcher toward various aspects of substitute funding and financing in digital society [2]. In earlier periods crowdfunders used social media, for instance, emails and online social networks, to attain their objectives [3]. Nowadays, the advancement in technologies make crowdfunding a particular concern for entrepreneurs and investors, and they are able to use crowdfunding digital platforms such as Kickstarter, and Facebook that bring potential entrepreneurs and the backers together and assist them in the flow of transactions, details, and information [4]. Each crowdfunding digital platform describes project information that frequently includes video and photo, which can help in the fundraising process [5]. Crowdfunding digital platforms have been found to be a recently emerging funding technology which can facilitate both entrepreneurs and investors, providing affordable tool to entrepreneurs for the management of fundraising campaigns to assist in money transfer and helps in communication with potential investors [6]. Crowdfunding digital platforms facilitate outsourcing of interior business activities and tasks through crowdfunding performance [7]. The crowd can invest and provide funds for business ideas started by entrepreneurs and firms that do not have traditional ways to achieve monetary resources, for instance



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from investment agencies and banks, for implementation of their projects and ideas [8]. These firms pledge the funds and financial resources raised from the crowd, and this emerging phenomenon of raising funds through the internet is called a crowdfunding digital platform [9]. Crowdfunding digital platforms offer various reward-based websites; about 57% of entrepreneurs have obtained USD 950 million funds for running 12 million different projects, 40% of which raised money effectively [10]. Recently, digital platforms have become an important component of survival in the digital world. Twenty-four years ago, however, this was not the case [11]. The development history of crowdfunding can be traced back to the 1800s. In 1997, British band Marillion managed their tour through crowd funded digital donations [12]. Motivated by the success of this campaign, in 2001 Brian Camelio from the US created the Artist share platform, where musicians could collect donations from their fans through digital recordings [13]. This was the first fundraising platform in history of crowdfunding digital platforms for musicians, photography, and film projects. After two years, jazz artist Maria Schneider won a record sponsored Grammy award through her fans' funding on Artistshare [14]. This was first Grammy award with no sales in normal stores. Taking into consideration the quick growth in crowdfunding performance and its significance to the business in recent years, our study attempts to provide an overview of the development and history of this industry [15].

The trend of fundraising from different crowdfunding digital platforms has attracted the scholars' attention. In the contemporary era, crowdfunding performance has grown to be a popular source of fundraising in different industries. Various researchers have placed emphasis on crowdfunding digital platforms as a means of crowdsourcing, which has great history with origins going back to the 1800s [16]. Crowdfunding digital platforms were primarily designed for central firms that help others in accessing knowledge from relevant areas and support in solving problems which improve crowdfunding performance where normally these firms cannot get access [17]. Crowdfunding digital platforms are an open call over the internet for the exchange of financial funds regarding information on the donation of funds to in turn support a project for particular purposes [18].

Prior studies highlight crowdfunding performance improvement in highly positive language [19] and relevance of relationships [20], but barely enlighten in banking sector in Arabic through social capital. Various research has been conducted in Arabic, focusing on variables such as crowdfunding rewards, campaigns, and cultures that facilitate improvement infirm performance; however, crowdfunding digital platforms have not been considered as a mechanism for increasing crowdfunding performance of the investors in the Arab banking sector. Thus, this research model is unique and focused into three different constructs, namely, crowdfunding digital platforms as an independent variable, innovative performance as a moderator of the link between them, and social capital as a mediator of the association between dependent and independent variable. We experimentally test the effect and results of these variables in boosting of crowding performance in the emerging Arab economy. Emerging markets support the overall economy to grow up and develop, which eventually directs developing nation to grow rapidly and engage with the worldwide marketplace, particularly those that are regarded as more advanced. However, previous studies have investigated the conditions under which entrepreneurs obtain funds and found that how crowdfunding digital platforms successfully appeal to crowds for funding and enhance crowdfunding performance by knowledgeable and skillful set of technologies and request smaller funding amount for projects. Advancement in digital technologies has transformed the way of crowdfunding of the firms and owners [6]. The firms require crowdfunding digital platforms for the advertisement of innovative products, which shows their innovativeness to the potential investors so they provide funds to them. The crowdfunding digital platform facilitates firms in acquiring funds, raising money, and communicating with other entrepreneurs by means of the internet. The crowdfunding digital platforms play a critical role for the backers and entrepreneurs that put their prints into social capital, which leads to high crowdfunding performance for projects. The crowdfunding digital platforms show the innovative idea and performance of

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the firm to potential investors. The preceding studies have proposed distinctive features that play a critical role in the improvement of crowdfunding performance. One major element of crowdfunding digital platforms is the social capital that successively affects crowdfunding performance. In the current study, our main objective is to investigate the direct link between crowdfunding digital platforms and crowdfunding performance. Secondly, we examine the mediating role of social capital between crowdfunding digital platforms and the crowdfunding performance link. Thirdly, we put emphasis on the outcomes of moderating variable innovation performance between crowdfunding digital platforms and crowdfunding performance. Numerous studies have suggested that entrepreneurs face different challenges in the achievement of funding from crowds due to lack of innovative performance. Therefore, we used innovative performance as a moderating variable between crowdfunding digital platforms and crowdfunding performance link. The innovative performance of firms attracts and motivates investors for funding and investment in specific firms. Therefore, the innovative performance of a firm plays a vital role in improvement of crowdfunding performance. In the current research, we use these three variables for the enhancement of crowdfunding performance. This paper is arranged in the following pattern. The second part consists of a literature review, the third section contains our methodology, and the next section comprises data analysis. The last section contains discussion. Figure 1 shows theoretical Framework.

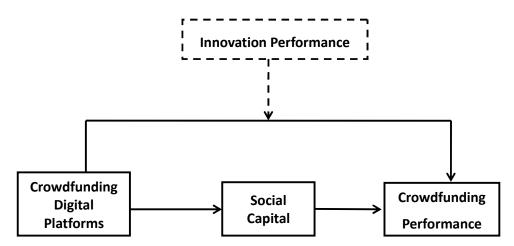


Figure 1. Theoretical Framework.

2. Literature

2.1. Crowdfunding Digital Platforms Predicts Crowdfunding Performance

Crowdfunding digital platforms are the latest means of fund raising for projects through internet services. Its main target is to approach the diverse and vast crowd/audience [21]. Crowdfunding digital platforms provide a platform for the gathering of resources which is necessary for project development, and enhance crowdfunding performance [22]. The crowdfunding digital platform provides motivation to owners for fund raising for projects and to attract the attention of the people, and to obtain money and feedback on their services and products from the public. These platforms improve and increase the crowdfunding performance for project funding [23]. These platforms facilitate customers not only in the fund and access terms but also in resource exchange and multi-interactions by emotional support, which boosts the crowdfunding performance of the connected actors [24]. A crowdfunding digital platform will act as an alternative for the projects which face difficulties in fund raising through conventional ways, as it helps owners to collect funds easily through crowdfunding improved performance. In addition, these platforms can make peoples' emotions shared and visible [25]. These digital crowdfunding platforms have an affirmative and encouraging impact on crowdfunding performance due to their multimodality, congregation, and interactive nature, which enable investors to dedicate their deeper and longer attention [26]. Crowdfunding digital platforms act as a means of communication in the association between the campaigners and investors. After a

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communication path is provided to the investors and customers, then crowdfunding performance will be boosted up for the project funding [27]. Owners and entrepreneurs interrelate with the funders and share information and details of the projects through the crowdfunding digital platform [28]. In succession, the process of the fundraising results from dynamic combinations of enhanced crowdfunding performance of the investors and entrepreneurs. These platforms provide an online space to users for interaction and drawing of contributions from various individuals [29]. Customers/users are usually located in these two categories: creators of projects who are looking for funding of their project or idea, and sponsors who are willing to contribute to projects which interest them. The project owners launch campaigns for fund raising, providing an opportunity to the investors to provide funds for the project and working on an idea by campaign page [30]. The project creators through the campaign will obtain funds, feedback, etc., and sponsors can receive are ward for the project backing. Prominent examples of crowdfunding digital platforms include Kickstarter and Facebook; in these, fans are influenced by different posts [31]. Crowdfunding digital platforms are places for sharing knowledge and business ideas among creators and investors. These platforms increase crowdfunding performance and people contribute more funding for projects [32].

Hypothesis 1 (H1). *Crowdfunding digital platform is linked with crowdfunding performance.*

2.2. Social Capital as Mediator between Crowdfunding Digital Platform and Crowdfunding Performance

Social capital is the social structure of an individual which aids in sharing of the information in these forms; easily accessible, timely, and give referrals [33]. Crowdfunding digital platforms help creators to share knowledge and information about projects, and social capital is the major factor in investment process that increases crowdfunding performance through amount of the friends [34]. Social capital facilitates individuals in sharing of information and financial resources exchange through crowdfunding digitalplatform; an entrepreneur obtains funds from sponsors and invests them in the future crowdfunding projects [35]. The crowdfunding digital platform facilitates creators/owners of projects to increase social capital through development of strong relationships with backers that build up strong social capital ties, which leads to higher crowdfunding performance and increases funding for project [36]. When investors build up high level social capital ties through crowdfunding digital platforms, the crowdfunding performance will be more likely and will provide funds for the project effectively [37]. These platforms increase the crowdfunding performance and increase investment for the project [33]. Crowdfunding digital platforms are used by owners to launch their crowdfunding projects for the audience and their social capital network or friends, which improves crowdfunding performance and customers invest more funds for the project [38]. The crowdfunding digital platform enables an entrepreneur to maintain and create their social capital and obtain investment funds for various projects [39]. Social capital acts as a bridge between the crowdfunding digital platform and the crowdfunding performance. Social capital is the summation of the actual and potential resources available and derived from within and through network association that an individual and social unit has [40]. Crowdfunding digital platform is the co-production platform where investors work directly with owners in the supportive manner, share ideas, generate social capital, and participate actively in improvement of crowdfunding performance that promotes projects through funding of the backers. Social capital plays a significant role in the success of the project [41]. A crowdfunding digital platform is a supportive means for owners to advertise their services and products and to obtainmoney and feedback from investors and customers about services and products. These platforms can increase crowdfunding performance, which results in an improved social reputation and financial return from business initiatives and project success [42].

Hypothesis 2 (H2). Crowdfunding digitalplatforms and crowdfunding performance is mediated by social capital.

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2.3. Innovative Performance Moderates between Crowdfunding Digital Platforms and Crowdfunding Performance Link

Entrepreneurs or project owners start advertisement of the latest innovative products at crowdfunding digital platforms and describe advanced final products which are not offered on the market yet [43]. These platforms show innovative performance of the firm through its innovative product, which drives higher enhanced crowdfunding performance [44]. The inventor of the project presents the monetary and the non-monetary rewards list to investors through the crowdfunding digital platform and provides details about the uniqueness of their product and services. This innovative performance of the firm motivates the backers to invest funds for different projects in the firm [45]. Crowdfunding digital platforms provide benefits for customers and sponsor alike, and boost the firm's innovative performance by enhancement of their experience in the latest innovative product development process, which leads to improved crowdfunding performance that gives opportunities to backers for investment in future projects [46]. Crowdfunding digital platforms increase the chances of interaction between investors and other entrepreneurs for testing products and advancing innovative features and ideas. These innovative ideas lead to the innovative performance of the firm, which boosts crowdfunding performance positively [8]. The crowdfunding digital platform provides the opportunity to owners to post their highly innovative product list because investors want to fund those firms that design novel innovative products [47]. The innovative performance of the firm boosts crowdfunding performance because investors support those projects that have an innovative idea [48].

Hypothesis 3 (H3). Innovative performance plays a moderating role between crowdfunding digital platforms and crowdfunding performance.

3. Methodology

3.1. Research Methods

We used a quantitative research approach in this study because it is focused to quickly gain data and information from large sample sizes through random sampling. In quantitative research, we can duplicate results; it is a flexible approach which enables participants to express their views when providing data.

We chose a quantitative method in our research because it produces numerical data which are reliable and factual data that are frequently generalizable to huge populations and used to change quantify opinions and attitudes of other variables.

In the current study, a quantitative research approach and questionnaires were used for data collection. The major potential of our study is that it is based upon on the few representative samples whose outcomes will be generalized to the entire population.

3.2. Data Collection

Data collection was done through questionnaires. Managers and CEOs were selected as a sample from Arab banks. Questionnaires were sent to respondents via email and with the aid of a research assistant. A concise description letter was attached with questionnaires to define the study purpose. After two months of efforts, 426 responses were received out of 725 total distributed questionnaires through email and hard copy. Out of 426 responses, only 324 questionnaires were used for analysis, creating are turn rate of 44.68%. Questionnaires were certified by experts before their distribution to respondents.

3.3. Measurement

The questionnaires contained two sections. The first section was composed of demographic constructs, i.e., business size, experience, and respondent's qualifications. The second section of the questionnaires contained items to compute, such as crowdfunding digital platform, social capital, innovation performance, and crowdfunding performance. A 5-point Likert scale was used to measure the items comprising value from 1–5.

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Innovative performance

The innovative performance of the firm was measured through four item scales adapted from [49]. A sample item is "We improve innovation performance through continuous R&D".

Crowdfunding digital platform

Four items were used to measure the crowdfunding digital platform, which were adapted from the scale designed by [50]. A sample item is "We provide an opportunity to know the status of fundraising on the basis of 24/7".

Crowdfunding performance

For the measurement of crowdfunding performance, five items were adapted from [51]. A sample item is "We have achieved targeted goals of funds".

Social capital

Social capital was measured through five items which were adapted from [52]. A sample item is "We believe that our community members are dedicated about collective missions and goals of the community".

Analysis

Measurement Scale

SPSS 21 software was utilized to examine the data. The model was fitted to the data by the process of structural equation modeling. Ref. [53] Were used for checking the mediation effect of DI, while to examine the moderation effect, multiple moderated regression analysis was utilized. A four-factor model proved fitness (χ^2 = 2236.25; RMSEA =0.05; CFI = 0.93; GFI = 0.92). Discriminant and convergent validity (CR) were checked as well. The AVE procedures were examined to test the convergent validity. We used the techniques of [54] to test the discriminant validity. Table 1 shows that all values were confirmed, and CR and AVE were higher than the cut-off points.

Table 1. Results of Alpha, CR, and AVE.

Variable Detail	FL	T-Value	Alpha	CR	AVE
Crowdfunding			0.85	0.92	0.73
Digital Platform			0.05	0.72	0.73
CFDP-1	0.88	12.23			
CFDP-2	0.79	13.11			
CFDP-3	0.85	20.15			
CFDP-4	0.86	19.24			
Social Capital			0.86	0.94	0.72
SC-1	0.81	17.12			
SC-2	0.85	13.25			
SC-3	0.86	18.91			
SC-4	0.79	16.21			
Innovative			0.00	0.06	0.74
Performance			0.88	0.96	0.74
InP-1	0.82	12.15			
InP-2	0.79	16.35			
InP-3	0.82	17.46			
InP-4	0.77	13.94			
InP-5	0.79	19.22			
Crowdfunding			0.04	0.02	0.76
Performance			0.84	0.93	0.76
CFP-1	0.81	13.87			
CFP-2	0.79	15.92			
CFP-3	0.81	13.21			
CFP-4	0.83	18.17			
CFP-5	0.74	13.22			

Table 2 shows correlation results and all values support our developed theory as the variables were significantly related.

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Table 2. F	Results	of Mean,	SD,	and	Correl	lations.
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	Variable	Mean	SD	1	2	3	4	5	6	7	8
1	B-Age B-Size	2.05 2.36	1.14 0.47	1.00 0.101 **	1.00						
3	Exp	3.56	0.48	0.193 **	0.66 *	1.00	1.00				
4 5	Edu Crwodfunding DP	2.89 3.11	0.58 0.54	$-0.13 \\ -0.12$	0.17 -0.08	1.00 0.01	$ \begin{array}{r} 1.00 \\ -0.11 \end{array} $	1.00			
6 7	Social Capital Innovation Performance	23.43 3.62	0.36 0.85	$0.14 \\ -0.19$	-0.15 -0.05	0.093 * -0.04	-0.22 $0.025*$	0.158 * 0.287 **	1.00 0.335 **	1.00	
8	Crowdfunding Performance	3.43	0.25	0.13	-0.02	-0.15	-0.11	0.320 *	0.319 **	0.336 **	1.00

Note: * = significant at p < 0.00, ** = significant at p < 0.05.

Table 3 shows EM results and proved that crowdfunding digital platform positively predicts crowdfunding performance (Beta = 0.19.36, t = 5.85, P = sig).

Table 3. Crowdfunding Digital Platform Crowdfunding Performance.

Model Detail	Hypothesis Detail	Beta Value	F	T	Sig	Remarks
Model #1	$IN \rightarrow IP$	0.18	19.36	5.85	0.000	Accepted

The mediating effect was tested through [53] analysis. Table 4 shows the results of, i.e., indirect effect social capital acts as mediator (Data = 0.19, Low =0.2235 to Up = 0.3618 Thus, H2 was proved, and it is proved that crowdfunding digital platform positively indirectly affects crowdfunding performance through the mediation of social capital.

Table 4. Mediating role of social capital.

Bootstrap with Indirect Effect "ab path"								
Model Detail	Data	Boot	SE	Lower	Upper	Sig		
IN-DI-IP	0.1975	0.189	0.52	0.2235	0.3618	0.0000		

Model: $R^2 = 0.195$; F = 23.45; P = sig.

H3 proposed that innovation performance strengthens the link between crowdfunding digital platform and crowdfunding performance. To test H3, multiple-moderated regression was used (See Table 5). We added control variables in step 1. In step 2, crowdfunding digital platform and innovation performance were added (CFDP*IP). In the last step, step 3, a relationship between CFDP and IP was entered. The result shows that the combined effect of CFDP and IP (Beta = 0.28, p = <0.05) on CFP is positive (p = <0.05). This result proves that IP strengthens the relationship between CFDP and CFP link, therefore, the H3 is proved.

Table 5. Hierarchal Regression testing IP as moderator.

			IP			
Detail	Beta	T Value	Beta	T Value	Beta	T Value
Step-1						
Bus-Age	0.11	0.52	0.15	1.22	0.41	0.14
Bus-Size	0.09	0.42	0.11	0.56	0.43	0.26
Education	0.11	0.24	0.12	0.42	1.23	1.32
Experience	0.14	0.14	0.16	0.24	0.35	0.74
Step 2						
CFDP			0.29 *	6.36	0.28 *	8.72
IP			0.32 *	8.46	0.31 *	9.18
Step 3						
CFDP*IP					0.27 **	7.56
F		8.87 **		18.16 *		21.86 *
\mathbb{R}^2		0.16		0.24		0.22
\mathbb{R}^2				0.23		0.18

Note: * = sig < 0.001; ** sig < 0.05.

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4. Discussion

This research proposed three hypotheses to investigate the results regarding crowdfunding digital platform, social capital, and innovative performance on crowdfunding performance. This study reveals these hypotheses first to examine how crowdfunding digital platforms influence crowdfunding performance. H2 is designed to test the mediating role of the social capital between crowdfunding digital platforms and crowdfunding performance. Finally, H3 examines how innovative performance moderates positively between crowdfunding digital platforms and crowdfunding performance. H1 of the current research investigates the effect of the crowdfunding digital platform directly on crowdfunding performance. Researchers and policy makers have been attracted to crowdfunding digital platforms because of their supportive financial intermediation role between backers and organizations looking for capital. The results of H1 confirm that Crowdfunding digital platforms provide a platform for the gathering of resources which is necessary for project development, and enhance crowdfunding performance [22]. The crowdfunding digital platform provides motivation to owners for fund raising for projects and to attract the attention of the people, and to obtain money and feedback on their services and products from the public. These platforms improve and increase the crowdfunding performance for project funding [23]. These platforms facilitate customers not only in the fund and access terms but also in resource exchange and multi-interactions by emotional support, which boosts the crowdfunding performance of the connected actors [24]. A crowdfunding digital platform will act as an alternative for the projects which face difficulties in fund raising through conventional ways, as it helps owners to collect funds easily through crowdfunding improved performance. In addition, these platforms can make peoples' emotions shared and visible [25]. These digital crowdfunding platforms have an affirmative and encouraging impact on crowdfunding performance due to their multimodality, congregation, and interactive nature, which enable investors to dedicate their deeper and longer attention [26]. Crowdfunding digital platforms act as a means of communication in the association between the campaigners and investors. After a communication path is provided to the investors and customers, then crowdfunding performance will be boosted up for the project funding [27]. Owners and entrepreneurs interrelate with the funders and share information and details of the projects through the crowdfunding digital platform [28]. In succession, the process of the fundraising results from dynamic combinations of enhanced crowdfunding performance of the investors and entrepreneurs. These platforms provide an online space to users for interaction and drawing of contributions from various individuals [29]. The H2 of this study examines the mediating role of social capital in the linkage between crowdfunding digital platforms and crowdfunding performance. The outcomes showed the significance of the social capital between independent and dependent variables. H2 supports previous research findings that Crowdfunding digital platforms help creators to share knowledge and information about projects, and social capital is the major factor in investment process that increases crowdfunding performance through amount of the friends [34]. Social capital facilitates individuals in sharing of information and financial resources exchange through crowdfunding digitalplatform; an entrepreneur obtains funds from sponsors and invests them in the future crowdfunding projects [35]. The crowdfunding digital platform facilitates creators/owners of projects to increase social capital through development of strong relationships with backers that build up strong social capital ties, which leads to higher crowdfunding performance and increases funding for project [36]. When investors build up high level social capital ties through crowdfunding digital platforms, the crowdfunding performance will be more likely and will provide funds for the project effectively [37]. These platforms increase the crowdfunding performance and increase investment for the project [33]. Crowdfunding digital platforms are used by owners to launch their crowdfunding projects for the audience and their social capital network or friends, which improves crowdfunding performance and customers invest more funds for the project [38]. The results of H3 are consistent with prior findings. The outcomes of the prior findings show that Crowdfunding digital platforms provide

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benefits for customers and sponsor alike, and boost the firm's innovative performance by enhancement of their experience in the latest innovative product development process, which leads to improved crowdfunding performance that gives opportunities to backers for investment in future projects [46]. Crowdfunding digital platforms increase the chances of interaction between investors and other entrepreneurs for testing products and advancing innovative features and ideas. These innovative ideas lead to the innovative performance of the firm, which boosts crowdfunding performance positively [8]. The crowdfunding digital platform provides the opportunity to owners to post their highly innovative product list because investors want to fund those firms that design novel innovative products [47]. The innovative performance of the firm boosts crowdfunding performance because investors support those projects that have an innovative idea [48].

5. Theoretical Implications

The current study adds to the literature in these ways. First, we conducted a confirmatory investigation about positive outcome of the latest crowdfunding digital platforms into crowdfunding performance and give a solid basis for testing the role of crowdfunding digital platforms in the accomplishment of crowdfunding performance in the emerging Arab economy. Second, we are the first to explore the role of innovative performance as a moderating construct between crowdfunding digital platforms and crowdfunding performance. Third, we used social capital as a key mediating factor for the enhancement of crowdfunding performance on crowdfunding digital platforms. Furthermore, we studied the role of social capital in the process of fundraising.

6. Practical Implication

This research offers various practical implications for the providers of crowdfunding digital platforms as well as investors. First, for the promotion of crowdfunding digital platforms, we pay attention to the innovative performance of the firm, because this plays a critical role in boosting crowdfunding performance. Investors support those projects that have an innovative idea and share information about crowdfunding projects to backers in diverse formats.

Second, social capital is the key factor in crowdfunding performance. The crowdfunding digital platform facilitates project owners to motivate backers and investors to maintain their social capital for the successful achievement of funding for projects.

7. Limitations and Future Research

This study contains the following limitations. First, the sample size of this study is small compared with the trend of big data analysis, which catches consideration from the research community. Second, we did not regard other moderating variables in this study, such as uncertainty, culture, etc. Third, we used text description and no friends at crowdfunding digital platform as a means of measuring the social capital. The social capital may be in a different form, and project information can be shared with entrepreneurs through word of mouth and other channels.

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Informed Consent Statement: All participants provided ICS.

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References

 Hendratmi, A.; Ryandono, M.N.H.; Sukmaningrum, P.S. Developing Islamic crowdfunding website platform for start-up companies in Indonesia. *J. Islamic Mark.* 2019, 11, 1041–1053. [CrossRef]

- 2. Lacasse, R.M.; Lambert, B.A.; Roy, N.; Sylvain, J.; Nadeau, F. A digital tsunami: FinTech and crowdfunding. In Proceedings of the International Scientific Conference on Digital Intelligence, Quebec City, QC, Canada, 4–6 April 2016; pp. 1–5.
- 3. Belleflamme, P.; Omrani, N.; Peitz, M. The Economics of crowdfunding platforms. Inf. Econ. Policy 2015, 33, 11–28. [CrossRef]
- 4. Mollick, E. The dynamics of crowdfunding: An exploratory study. J. Bus. Ventur. 2014, 29, 1–16. [CrossRef]
- 5. D'Amato, F.; Cassella, M. Cultural production and platform mediation: A case in music crowdfunding. *New Media Soc.* **2021**, 23, 2575–2592. [CrossRef]
- 6. Piliyanti, I. Fintech achieving sustainable development: *The* side perspective of crowdfunding platform. *Shirkah J. Econ. Bus.* **2019**, 3, 207–232. [CrossRef]
- 7. Kromidha, E.; Yadav, N.; Ilavarasan, P.V. Digital Microfinance Crowdfunding for Disconnected Women Entrepreneurs in India. *Int. J. Entrep. Small Bus.* **2021**, *1*, 2–34.
- 8. Jung, E.J. Antecedents of Fundraising Success and Entrepreneurial Performance in Crowdfunding Platforms; Michigan State University, Business Administration-Business Information Systems: Ann Arbor, MI, USA, 2015.
- 9. Upadhyay, C.K.; Pandiya, B.; Tewari, V. Digital disbursements over crowdfunding platform for start-ups in India with blockchain technology: A conceptual framework. *Int. J. Blockchains Cryptocurrencies* **2021**, 2, 263–283. [CrossRef]
- 10. Wang, W.; Mahmood, A.; Sismeiro, C.; Vulkan, N. The evolution of equity crowdfunding: Insights from co-investments of angels and the crowd. *Res. Policy* **2019**, *48*, 103727. [CrossRef]
- Ahlers, G.K.; Cumming, D.; Günther, C.; Schweizer, D. Signaling in equity crowdfunding. Entrep. Theory Pract. 2015, 39, 955–980.
 [CrossRef]
- 12. Aldrich, H.E. The democratization of entrepreneurship? Hackers, makerspaces, and crowdfunding. In Proceedings of the Annual Meeting of the Academy of Management, Philadelphia, PA, USA, 4 August 2014; Volume 10, pp. 1–7.
- 13. Nucciarelli, A.; Li, F.; Fernandes, K.J.; Goumagias, N.; Cabras, I.; Devlin, S.; Kudenko, D.; Cowling, P. From value chains to technological platforms: The effects of crowdfunding in the digital game industry. *J. Bus. Res.* **2017**, *78*, 341–352. [CrossRef]
- 14. Yu, P.F.; Huang, F.M.; Yang, C.; Liu, Y.H.; Li, Z.Y.; Tsai, C.H. Prediction of crowdfunding project success with deep learning. In Proceedings of the 2018 IEEE 15th International Conference on E-Business Engineering (ICEBE), Xi'an, China, 12–14 October 2018; IEEE: Piscataway, NJ, USA, 2018; pp. 1–8.
- 15. Wang, F. The Crowdfunding Content: New Challenges of Dictionary Compilation: Discussion on the Significance of Crowdfunding Model on Dictionary Compilation and Publication. In Proceedings of the 4th International Conference on Culture, Education and Economic Development of Modern Society (ICCESE 2020), Moscow, Russia, 13–14 March 2020; Atlantis Press: Moscow, Russia, 2020; pp. 49–52.
- 16. Pangaribuan, C.H.; Wulandar, Y.S. A Crowdfunding Platform User Acceptance: An Empirical Examination of Performance Expectancy, Effort Expectancy, Social Factors, Facilitating Condition, Attitude, And Behavioral Intention. In *Proceedings of the SU-AFBE 2018: Proceedings of the 1st Sampoerna University-AFBE International Conference, SU-AFBE 2018, Jakarta, Indonesia, 6–7 December 2018;* European Alliance for Innovation: Jakarta, Indonesia, 2018; p. 346.
- 17. Chandler, J.A.; Short, J.C.; Wolfe, M.T. Finding the crowd after exogenous shocks: Exploring the future of crowdfunding. *J. Bus. Ventur. Insights* **2021**, *15*, e00245. [CrossRef]
- 18. Li, Y.; Liu, F.; Fan, W.; Lim, E.T.; Liu, Y. Exploring the impact of initial herd on overfunding in equity crowdfunding. *Inf. Manag.* **2020**, *59*, 103269. [CrossRef]
- 19. Anglin, A.H.; Short, J.C.; Drover, W.; Stevenson, R.M.; McKenny, A.F.; Allison, T.H. The power of positivity? The influence of positive psychological capital language on crowdfunding performance. *J. Bus. Ventur.* **2018**, *33*, 470–492. [CrossRef]
- 20. Borst, I.; Moser, C.; Ferguson, J. From friend funding to crowdfunding: Relevance of relationships, social media, and platform activities to crowdfunding performance. *New Media Soc.* **2018**, 20, 1396–1414. [CrossRef]
- 21. Chandna, V. Social entrepreneurship and digital platforms: Crowdfunding in the sharing-economy era. *Bus. Horiz.* **2022**, 65, 21–31. [CrossRef]
- 22. Ingram Bogusz, C.; Teigland, R.; Vaast, E. Designed entrepreneurial legitimacy: The case of a Swedish crowdfunding platform. *Eur. J. Inf. Syst.* **2019**, *28*, 318–335. [CrossRef]
- 23. Reddy, S.K.; Tan, Y.H. Crowdfunding: Financing ventures in the digital era. NIM Mark. Intell. Rev. 2017, 9, 36–41. [CrossRef]
- 24. Salido Andrés, N.; Rey García, M.; Álvarez González, L.I.; Vázquez Casielles, R. Determinants of success of donation-based crowdfunding through digital platforms: The influence of offline factors. *Ciriec-España Rev. De Econ. Pública Soc. Y Coop.* 2019, 95, 119–141. [CrossRef]
- 25. Gupta, G.; Bose, I. Strategic learning for digital market pioneering: Examining the transformation of Wishberry's crowdfunding model. *Technol. Forecast. Soc. Chang.* **2019**, *146*, 865–876. [CrossRef]

Sustainability **2022**, 14, 9495 11 of 12

26. Defazio, D.; Franzoni, C.; Rossi-Lamastra, C. How pro-social framing affects the success of crowdfunding projects: The role of emphasis and information crowdedness. *J. Bus. Ethics* **2021**, *171*, 357–378. [CrossRef]

- 27. Tan, Y.H.; Reddy, S.K. Crowdfunding digital platforms: Backer networks and their impact on project outcomes. *Soc. Netw.* **2021**, 64, 158–172. [CrossRef]
- 28. Inbar, Y.; Barzilay, O. Community Impact on Crowdfunding Performance. Available at SSRN 2524910. 2014. Available online: https://papers.srn.com/sol3/papers.cfm?abstract_id=2524910 (accessed on 4 April 2022).
- 29. Lee, S.; Lehdonvirta, V. New digital safety net or just more 'friend funding'? Institutional analysis of medical crowdfunding in the United States. *Inf. Commun. Soc.* **2020**, 25, 1151–1175. [CrossRef]
- 30. Sidiq, R.; Sofro, S.; Jalil, A.; Achmad W, R.W. Virtual World Solidarity: How Social Solidarity is Built on the Crowdfunding Platform Kitabisa.com. *Webology* **2021**, *18*, 192–202. [CrossRef]
- 31. Chiappini, L.; de Vries, J. Civic crowdfunding as Urban Digital Platform in Milan and Amsterdam: Do not take pictures on a rainy day! *Digit. Geogr. Soc.* **2021**, *3*, 100024. [CrossRef]
- 32. Fuster Morell, M.; Senabre Hidalgo, E.; Rodríguez, E. Goteo. org civic crowdfunding and match-funding data connecting Sustainable Development Goals. *Sci. Data* **2020**, *7*, 1–10. [CrossRef] [PubMed]
- 33. Eiteneyer, N.; Bendig, D.; Brettel, M. Social capital and the digital crowd: Involving backers to promote new product innovativeness. *Res. Policy* **2019**, *48*, 103744. [CrossRef]
- 34. Madrazo-Lemarroy, P.; Barajas-Portas, K.; Tovar, M.E.L. Analysing campaign's outcome in reward-based crowdfunding: Social capital as a determinant factor. *Internet Res.* **2019**, 29, 1171–1189. [CrossRef]
- 35. Ryu, S.; Kim, Y.G. Money is not everything: A typology of crowdfunding project creators. *J. Strateg. Inf. Syst.* **2018**, 27, 350–368. [CrossRef]
- 36. Nambisan, S.; Wright, M.; Feldman, M. The digital transformation of innovation and entrepreneurship: Progress, challenges, and key themes. *Res. Policy* **2019**, *48*, 103773. [CrossRef]
- 37. Chidambaram, L.; Summers, J.D.; Miranda, S.M.; Young, A.G.; Bostrom, R.P. Time, Technology, and Teams: From GSS to Collective Action. In *Handbook of Group Decision and Negotiation*; Springer: Cham, Switzerland, 2021; pp. 655–680.
- 38. Sarwar, Z.; Khan, M.A.; Yang, Z.; Khan, A.; Haseeb, M.; Sarwar, A. An Investigation of Entrepreneurial SMEs' Network Capability and Social Capital to Accomplish Innovativeness: A Dynamic Capability Perspective. *SAGE Open* **2021**, *11*. [CrossRef]
- 39. Modaffari, G.; Paoloni, N.; Strologo, A.D. Relational Capital and Crowdfunding: A New Opportunity for Italian Woman Start-Ups. In *IPAZIA Workshop on Gender Issues*; Springer: Cham, Switzerland, 2019; pp. 251–268.
- 40. Ali Qalati, S.; Li, W.; Ahmed, N.; Ali Mirani, M.; Khan, A. Examining the factors affecting SME performance: The mediating role of social media adoption. *Sustainability* **2021**, *13*, 75. [CrossRef]
- 41. Konhäusner, P.; Shang, B.; Dabija, D.C. Application of the 4Es in Online Crowdfunding Platforms: A Comparative Perspective of Germany and China. *J. Risk Financ. Manag.* **2021**, *14*, 49. [CrossRef]
- 42. Fanea-Ivanovici, M.; Pană, M.C. Crowdfunding as a Smart Finance and Management Tool: Institutional Determinants and Well-Being Considerations. Evidence from Four Central and Eastern European Countries. In *Managing Smart Cities*; Springer: Cham, Switzerland, 2022; pp. 107–137.
- 43. Boudreau, K. Open platform strategies and innovation: Granting access vs. devolving control. *Manag. Sci.* **2010**, *56*, 1849–1872. [CrossRef]
- 44. Estrin, S.; Khavul, S.; Wright, M. Soft and hard information in equity crowdfunding: Network effects in the digitalization of entrepreneurial finance. *Small Bus. Econ.* **2021**, *58*, 1–21. [CrossRef]
- 45. Benitez, J.; Arenas, A.; Castillo, A.; Esteves, J. Impact of digital leadership capability on innovation performance: The role of platform digitization capability. *Inf. Manag.* **2022**, *59*, 103590. [CrossRef]
- 46. Xiang, D.; Zhang, L.; Tao, Q.; Wang, Y.; Ma, S. Informational or emotional appeals in crowdfunding message strategy: An empirical investigation of backers' support decisions. *J. Acad. Mark. Sci.* **2019**, 47, 1046–1063. [CrossRef]
- 47. Kasri, R.A.; Yuniar, A.M. Determinants of digital zakat payments: Lessons from Indonesian experience. *J. Islamic Account. Bus. Res.* **2021**, *12*, 362–379. [CrossRef]
- 48. Cillo, V.; Cardinali, S.; Dell'Anno, D.; Bertoldi, B. Crowd-fooding. The role of crowdfunding platforms in the food industries open innovation. In *Proceedings of the 10th Annual Conference of the EuroMed Academy of Business, Rome, Italy, 13–15 September 2017*; EuroMed Press: Rome, Italy, 2017.
- 49. Beneito, P. The innovative performance of in-house and contracted R&D in terms of patents and utility models. *Res. Policy* **2006**, 35, 502–517.
- 50. Zhang, Y.; Tan, C.D.; Sun, J.; Yang, Z. Why do people patronize donation-based crowdfunding platforms? An activity perspective of critical success factors. *Comput. Hum. Behav.* **2020**, *112*, 106470. [CrossRef]
- 51. Li, D.; Browne, G.J.; Wetherbe, J. Why do Internet users stick with a specific website? A relationship perspective. *Int. J. Electron. Commer.* **2006**, *10*, 105–141. [CrossRef]
- 52. Chow, W.S.; Chan, L.S. Social network, social trust and shared goals in organizational knowledge sharing. *Inf. Manag.* **2008**, 45, 458–465. [CrossRef]

Sustainability **2022**, 14, 9495

53. Preacher, K.J.; Hayes, A.F. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behav. Res. Methods* **2008**, *40*, 879–891. [CrossRef] [PubMed]

54. Fornell, C.; Larcker, D.F. Structural equation models with unobservable variables and measurement error: Algebra and statistics. J. Mark. Res. 1981. [CrossRef]