"The impact of dynamic marketing capabilities on startup performance: A case of business incubators in Jordan"

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THE IMPACT OF DYNAMIC MARKETING CAPABILITIES ON STARTUP PERFORMANCE: A CASE OF BUSINESS INCUBATORS IN JORDAN

Abstract

Dynamic marketing capabilities provide startups with the platform and market knowledge that entitle them to achieve their goals and survive the competition. The study aims to examine the impact of dynamic marketing capabilities dimensions on startups' performance in Jordan. This quantitative study employs a questionnaire to solicit answers from respondents who are the incubates that use business incubator services. A total of 302 entrepreneurs from different incubator centers in Jordan participated in the online survey. Using the SmartPLS program version 4, structural equation modeling (PLS-SEM) was used to examine the study model. The findings indicate that startup performance is significantly impacted by dynamic marketing capabilities (β = 0.937, t = 127.2, p = >0.00). Concerning absorptive capacity, both dimensions revealed a significant impact on startup performance: potential absorptive capacity (β = 0.251, t = 7.932, p > 0.000) and realized absorptive capacity (β = 0.177, t = 5.409, p > 0.000). For knowledge management, the results for knowledge acquisition were β = 0.360, t = 11.089, p = >0.000, for knowledge dissemination, β = 0.102, t = 2.367, p = >0.018, and for responsiveness to knowledge β = 0.318, t = 6.852, p = >0.000.

Keywords	dynamic marketing capabilities, startups, performance, knowledge management, business incubators, Jordan
JEL Classification	M10, M14

INTRODUCTION

In today's turbulent and unpredictable business environment, business incubators enhance the likelihood that new ventures will survive throughout their early stages. Business incubators are usually acknowledged as crucial tools in boosting startup growth. A difficult choice that entrepreneurs frequently confront is which incubator to choose. The consequence of this decision may determine the success or failure of the startups and the loss of the limited available resources. Startups do not always grow in a straight line; therefore, unpredicted market circumstances or enhancements in firm strategies and technology exploration may modify time to market and performance. According to Bismala et al. (2020), many beginner businesses fail early because of a lack of direction, marketing support, and financial access. Even though empirical study on dynamic marketing capabilities is still in its early stages, it is interesting to look at how dynamic marketing capabilities affect startup performance. This topic is increasingly gaining attention in academia (Mitręga, 2020). Dynamic marketing capabilities include corporate actions committed to developing new marketing potentials (such as new marketing networks and novel marketing apparatuses) and integrating them into business strategic plans rather than focusing on existing marketing achievements or re-

sources. The domain of dynamic marketing capabilities is directed to fulfill more satisfactory customer valuable offerings inside fluctuating market circumstances, and this procedure differentiates the dynamic marketing capabilities theory from the dynamic capabilities domain. Consequently, Hoque et al. (2021) imply that the view of dynamic marketing capabilities deserves more research to disentangle the camouflaged dimensions of dynamic marketing capabilities. In addition, Ayatse et al. (2017) observed that most literature focuses on and solely examines financial metrics; accordingly, other key performance indicators of incubator firms have remained uninvestigated.

1. LITERATURE REVIEW

According to NBIA (2009), Joseph Mancuso established the first business incubator in 1958. He was recognized as the founder of incubators in a large manufacturing facility in New York City's Batavia Industrial District. During the post-industrial era, business incubators were created to boost the economy and lower the unemployment rate. Krpálek and Krpálková Krelová (2016) defined a business incubator as "a company that assists startups and new companies in developing through offering services such as office space or management training." The NBIA (2014) affirmed that "business incubators is a dynamic process of business enterprise development and a business support process that accelerates the successful development of startup companies by providing entrepreneurs with specific resources developed by the business incubator management offered through its network of contacts." According to Blank and Dorf (2012), "a startup is an organization formed to search for a repeatable and scalable business model." While Ahmed et al. (2021) define it as "newly established business organizations aiming to fulfill a need or gap in the marketplace." Indiran et al. (2021) categorize business incubators into four types: public, private, university, and hybrid business incubators. The academic literature has long recognized the significance of incubation in developing successful startups (Pinto & Rua, 2023; Voisey et al., 2006; Cao et al., 2023). These studies demonstrate the significance of investigating and evaluating incubators by hard and soft measures. Using subjective and objective measures to analyze the startups' performance is recommended. As a result, it is essential to assess how business incubation services impact the team and individual growth at the company (Voisey et al., 2006).

To realize the profound factors that affect startup performance, it is crucial to primarily examine how dynamic marketing capabilities rendered by business incubators impact startup performance. The reason for selecting dynamic marketing capabilities is established by what Slesarev (2022) found. Marketing consulting is among the most demanded services provided by business incubators (provided by 90% of business incubators) across the globe. Games et al. (2021) found that marketing factors are the most critical point considered by the incubates, and marketing-related elements are the preeminent essential factor from the incubate viewpoint to ensure business growth. Otto (1999) asserted that commercialization may be difficult for aspiring entrepreneurs who lack marketing knowledge and skills. Battistella et al. (2017) showed that many variables cause startup failures, such as lack of or wrong direction in product marketing, little (or none) customer feedback, and low-marketing intensity/market research, which a startup does not usually own due to its "newness."

Concerning Jordan, the top management of business incubators has been assigned to the Jordan Enterprise Development Corporation (Emhamad, 2014). On a smaller scale, they are managed by local government, often in collaboration with universities, state-owned businesses, and other sponsors. The Board of Directors of Business Incubators, which is responsible for setting rules and overseeing business incubators, comprises representatives from these founders and financing organizations. Almost 80% of incubators in Jordan are nonprofit entities, and local governments offer incentives to help SMEs start up. Governments frequently provide free land and initial building financing to business incubators at a relatively early stage (Emhamad, 2014). There are 20 business incubators in Jordan, categorized as public, public and private, and private (Hanandeh, 2021).

The dynamic capability view (DCV) theory was initially developed by Teece and Pisano (1994), whereas Teece et al. (1997) refined the concept.

Teece and Pisano (1994) contend that dynamic capacity relates to firms' capacity to integrate, develop, and reconfigure both external and internal capabilities to respond effectively to surroundings that are undergoing fast change. Kachouie et al. (2018) classified organizational capabilities into dynamic capabilities and operational capabilities. The significance of these capabilities' structure stems from their importance in creating knowledge about consumer demands, rival goods, and supply chains (Barrales-Molina et al., 2014), in tandem with their involvement in the effectiveness of the organization (Cacciolatti & Lee, 2016). As Sedita et al. (2019) mentioned, startups often miss the point when trying to commercialize new products due to a lack of marketing capabilities. Abu-Jalil (2017) asserted that business incubators support and develop marketing capabilities for business entrepreneurship and small businesses. They encompass enterprise abilities in the different areas of marketing directed toward product, pricing, people, promotion, channel, and market and place management. These capabilities play an influential role by helping firms connect well with their external environment over and beyond their internal environment.

Priem and Butler (2001) proclaimed that the DCV theory does not sufficiently explain how resources and capabilities are developed and deployed by firms to earn a superior market position. Based on these transitions, dynamic marketing capabilities, a subset of dynamic capabilities, have emerged over time with a greater devotion to customer quality (Fang & Zou, 2009). Dynamic marketing capabilities are distinct from other capabilities because they prioritize gathering and incorporating market insights into the business. Currently, the context of shifting market conditions and focusing solely on traditional "marketing mix" activities makes it extremely difficult to understand customers' wants, rival strategies, and market trends. The newly emerged DCV theory illustrates knowledge management centered on market situations, more evidently in uncertain market environments. According to Barrales-Molina et al. (2014), dynamic marketing capabilities are defined as market-knowledge adoption and deployment into cross-functional business processes through the firms' possession of higher-order marketing capabilities. Morgan (2012) conceptualized dynamic marketing capabilities as the extent to which an organization leverages its resources and capabilities in ways that fit into a rapidly changing market by continuing the knowledge reconfiguration process. Bruni and Verona (2009) emphasized that dynamic marketing capabilities are different from ordinary marketing capabilities, contribute to the process of new product development, and modify the firms' capability base over time. As a result, dynamic marketing capabilities strongly emphasize developing innovative marketing resources and engaging them in the current market strategy. Dynamic marketing capabilities can be achieved through various techniques, which include maintaining relationships with consumers and suppliers, participating in professional associations, and employing the most promising practices. That suggests that the essence of dynamic marketing capabilities entails enhancing knowledge-management capabilities for implementing marketing strategies in the face of complex market circumstances rather than being just dependent on fulfilling the marketing mix strategy.

To apprehend the newly emerged school, Hult and Sjölund (2017), Barrales-Molina et al. (2014), and Silvianita and Pradana (2022) firmly agree that dynamic marketing capabilities are alienated into two main components: absorptive capability and knowledge management. One can provide a compelling justification for the task of dynamic marketing capabilities in the company using these two elements as the cornerstone. Fang and Zou (2009) emphasize that the marketing department must first integrate market knowledge since the primary role of dynamic marketing capabilities is to engross market knowledge and integrate it into the remnant of the company's operation and then incorporate the earned knowledge into the rest of the firm with knowledge management. Easterby-Smith and Prieto (2008) asserted that defining dynamic marketing capabilities using these two elements (absorptive capacity and knowledge management) enables one to incorporate both exploration and exploitation of market knowledge as underlying dimensions of successful dynamic capabilities. Therefore, this study will incorporate the two elements as independent variables and examine their impact on startup performance.

Corresponding to Cohen and Levinthal (1990), absorptive capacity is defined as a firm's ability to recognize the value of new, external knowledge,

assimilate it, and apply it for commercial ends. Yet, marketing research pertaining to absorptive capacity is very scant (Rakthin et al., 2016). Zahra and George (2002) define absorptive capacity as a set of organizational routines and processes by which firms acquire, assimilate, transform, and exploit knowledge to produce a dynamic capability. Grandinetti (2016) asserted that a firm's absorptive capacity lies in its ability to recognize the value of new, external information, assimilate it, and apply it to commercial ends. Jansen et al. (2005) classify absorptive capacity into two subdimensions: the first is potential absorptive capacity (knowledge acquisition and assimilation), and the second is realized absorptive capacity (knowledge transformation and exploitation/application). Following the researchers in this domain, this study adheres to the two dimensions in a conceptual framework and explores the distinctive effects of potential and realized absorptive capacity.

The second dimension is knowledge management, defined by Laurie (1997) as the creation, acquisition, sharing, and utilization of knowledge to promote organizational performance. Ahmed et al. (2021) maintain that the advantages of adopting knowledge management in a startup to grow and reach success have been highlighted and proven to lead to more successful scalable organizations. To overcome the scarcity of resources characterizing a startup, it should leverage intangible assets like knowledge to achieve scalability goals (Blank & Dorf, 2012). Wang and Yang (2016) researched a group of Taiwanese startup companies. Results confirmed that the application of knowledge management has affected employee efficiency. They improved service superiority standards, leading to customer delight and enhancing the company's overall performance. Krumina et al. (2015) examined startups in local provinces in Europe. They revealed how startups without adequate utilization of knowledge management principles suffer from poor performance, and their progress is adversely affected. López-Nicolás and Meroño-Cerdán (2011) concluded that knowledge management strategies impact organizational performance directly and indirectly.

This study adopts Vincent and Zakkariya's (2021) definition of performance "as a continuous variable determined by hard and soft measures of incubator performance." Stephens and Onofrei (2012) proposed two categories to measure incubation performance: hard and soft measures. They asserted that hard measures are related to sales turnover, profitability, growth, independence, and the number of clients. In contrast, soft measures are related to professionalism, improved business skills, confidence, productivity, knowledge, cost savings, and publicity. Voisey et al. (2006) showed that soft measures include increased business knowledge and skills, business awareness, and client networking. Stephens and Onofrei (2012) found that soft measures, such as increased business knowledge and skills, business awareness, and client networking, are beneficial. These subjective measures are difficult to ascertain and assess but they exist.

Many recent studies have investigated the impact of dynamic marketing capabilities on various business areas. For example, Nayal et al. (2023) found that industrial dynamic marketing capabilities sustain the implementation of circular product design techniques to facilitate market performance growth. According to Ciszewska-Mlinarič et al. (2023), export producers may boost performance by applying worldwide dynamic marketing capabilities in the face of environmental disturbances. According to Alani et al. (2023), in Jordan's pharmaceutical and healthcare sectors, organizational innovation and customer knowledge management are mediated by dynamic marketing capabilities. Accordingly, these recent studies confirm the prominence and significance of dynamic marketing capabilities in all business areas.

The purpose of this study is to examine the impact of dynamic marketing capabilities provided by business incubators on startups' performance. Providing dynamic marketing capabilities to incubate is highly critical for startup success since market knowledge and marketing know-how are essential in the early stages for every startup to survive and grow. A comprehensive view of the impact of business incubators on startup performance was provided by previous research. At the same time, this study gives an in-depth view of the impact of dynamic marketing capabilities dimensions on startup performance as presented in the research model (Figure 1).
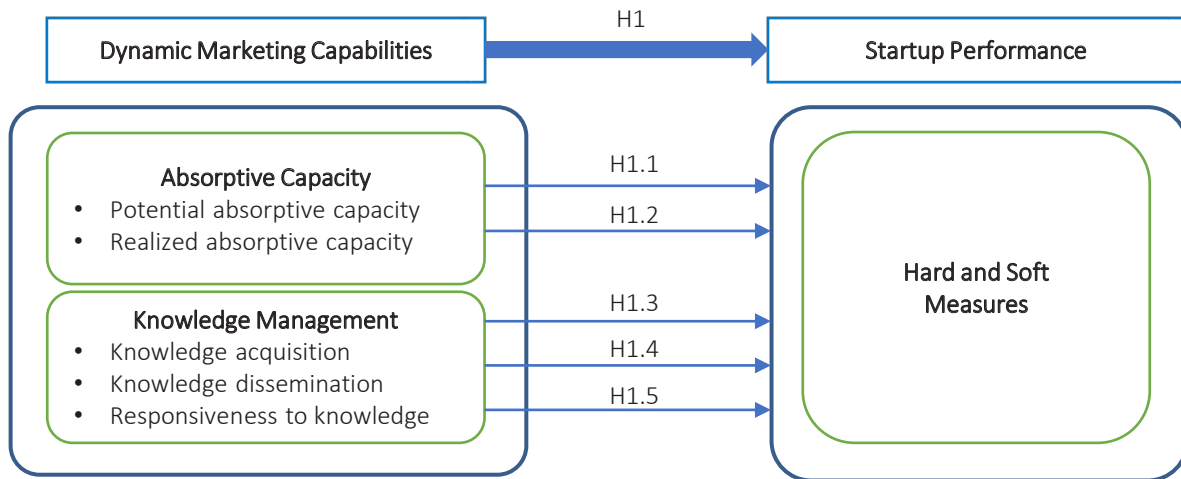
Figure 1. Research model

Based on extant literature and research model, the following hypotheses are proposed:

H01: *Dynamic marketing capabilities offered by business incubators significantly impacts startup performance at α = 0.05 level.*

H1.1: *Potential absorptive capacity significantly impacts startup performance at α = 0.05 level.*

H1.2: *Realized absorptive capacity significantly impacts startup performance at α = 0.05 level.*

H1.3: *Knowledge acquisition significantly impacts startup performance at α = 0.05 level.*

H1.4: *Knowledge dissemination significantly impacts startup performance at α = 0.05 level.*

H1.5: *Responsiveness to knowledge significantly impacts startup performance at α = 0.05 level.*

2. METHOD

The study utilizes a quantitative method, using a questionnaire to solicit the incubate responses to measure startup performance. The study measures incubation performance using soft and hard measures, leaving aside the traditional comprehensive bundle of performance measures. By doing this, the study can prove business incubators' effective-

ness in providing that specific service. An online questionnaire is distributed to incubates at different types of incubators in Jordan. A total of 302 respondents completed and returned the questionnaires. A five-point Likert scale was used to measure the items, anchored by one as strongly disagree and five as strongly agree. The questionnaire comprises three sections: respondents' demographics, dynamic marketing capabilities, and startup performance. The research adopted the scale for both dimensions of absorptive capacity (realized and potential) from Flatten et al. (2011), using seven items to assess each. This study adopts Stephens and Onofrei's (2012) scale for measuring startup performance (dependent variable). The scale consists of eleven items: four for soft and seven for hard. The tolerance levels and variance inflation factor (VIF) for the variables' dimensions are presented in Table 1.

The Kolmogorov-Smirnov test was used to ensure the data had a normal distribution and were free of statistical errors. Kim (2019) asserted that the variance inflation factor (VIF) and tolerance are recommended to confirm that the independent variable data are unaffected by multicollinearity. Sekaran and Bougie (2016) emphasized that a common cutoff value is a tolerance value of 0.10 and a VIF value of 10. Table 1 shows that VIF values for the independent variable ranged between 1.45 and 1.81, and the tolerance results ranged between 0.558 and 0.824. The results indicate that all tolerance values are greater than 0.10, and all VIF values are less than ten. This suggests no multicollinearity issue among the independent variable's dimensions, according to these data.

Table 1. Variance inflation factor (VIF) and tolerance values for variable dimensions

	Dimensions	No. of questions	VIF	Tolerance	Source
1	Potential absorptive capacity	5	1.58	0.824	Flatten et al. (2011)
2	Realized absorptive capacity	5	1.63	0.558	Flatten et al. (2011)
3	Knowledge acquisition	5	1.45	0.612	Darroch (2005), Zahra and George (2002)
4	Knowledge dissemination	5	1.74	0.711	Darroch (2005), Zahra and George (2002)
5	Responsiveness to knowledge	5	1.77	0.652	Darroch (2005), Zahra and George (2002)
6	Soft measure of Incubation	7	1.81	0.603	Stephens and Onofrei (2012)
7	Hard measure of Incubation	4	1.73	0.574	Stephens and Onofrei (2012)

3. RESULTS

As exhibited in Table 2, more than 65% of incubates using business incubators to outset their startups are male, 38.7% are aged between 20 and 25, and 26.1% are from 26 to 30 years. More than half, 58.3%, obtained an undergraduate degree; in terms of the team number, 59.9% consist of less than 2. Finally, concerning the sector, the highest rate was for those in IT/E-business with 48.0%, followed by restaurant/food startups with 17.8%.

Table 2. Demographic profile

Items	Frequency	Percentage, %
Gender		
Male	197	65.2
Female	105	34.8
Age		
20-25 years	117	38.7
26-30 years	97	26.1
31-35 years	52	17.2
36-40 years	26	8.6
More than 40	10	3.34
Educational level		
Diploma or less	66	21.8
Undergraduate	176	58.3
Postgraduate	60	19.9
Team number		
less than 2	181	59.9
3-5	74	24.6
6-10	38	12.5
More than 11	9	3.00
Type of sector		
Manufacturing	43	14.5
IT/E-business	145	48.0
Services	18	6.00
Agriculture	22	7.22
Restaurant/Food	54	17.8
Tourism	20	6.65

Hair et al. (2012) showed that partial least squares (PLS) and structural equation modeling (SEM) techniques are considered more suitable for new research nowadays. The collected data were assessed using Leguina's (2015) two-step procedure, which consists of assessing the measurement model (outer model) for validity and reliability first and then testing the structural model (inner model) to determine if the well-supported hypotheses may be accepted or rejected.

The assessment model is designed to evaluate the outer measurement model. Table 3 shows several measures used to validate the questionnaire's validity and reliability, including discriminant validity for construct validity, internal consistency measured by Cronbach's alpha, and composite reliability (CR). The dimensions entailed potential absorptive capacity ($\alpha = 0.740$, C.R = 0.827, AVE = 0.592), realized absorptive capacity ($\alpha = 0.773$, CR = 0.746, AVE = 0.552), knowledge acquisition ($\alpha = 0.736$, CR = 0.826, AVE = 0.591), knowledge dissemination ($a = 0.858$, CR = 0.899, AVE = 0.640), and responsiveness to knowledge ($\alpha = 0.862$, CR = 0.900, AVE = 0.753). As demonstrated, the scale items possess adequate internal reliability and convergent validity; the results of Cronbach's alpha, CR, and AVE scores for all dimensions exceeded the suggested cutoff level, as suggested by Hair et al. (2014). Furthermore, all standardized factor loadings exceeded the value of 0.70, providing additional proof of scale reliability.

Additionally, Leguina's (2015) Fornell-Larcker criterion was used to determine discriminant validity. The results are shown in Table 4. The discriminant validity of the variables was assessed using two different techniques. According to Hair et al. (2012), the cross-loadings of indicators should be larger than any other opposing constructions. Under the criteria, the square root of AVE for each construct should be greater than the correlations of the construct with other model components. Thus, as shown in Table 4, both methodologies

Table 3. Factor loadings, Cronbach's alpha, average variance extracted (AVE), and weight of item loading

Variable	Factor Loadings	Cronbach's Alpha	CR	AVE
Potential absorptive capacity				
PAC1	0.721			
PAC2	0.795			
PAC3	0.716	0.740	0.827	0.592
PAC4	0.834			
PAC5	0.714			
Realized absorptive capacity				
RAC1	0.741			
RAC2	0.782			
RAC3	0.744	0.773	0.746	0.552
RAC4	0.763			
RAC5	0.767			
Knowledge acquisition				
KMKA1	0.702			
KMKA2	0.758			
KMKA3	0.768	0.736	0.826	0.591
KMKA4	0.787			
KMKA5	0.755			
Knowledge dissemination				
KMKD1	0.734			
KMKD2	0.847			
KMKD3	0.811	0.858	0.899	0.640
KMKD4	0.741			
KMKD5	0.859			
Responsiveness to knowledge				
KMRK1	0.792			
KMRK2	0.802			
KMRK3	0.828	0.862	0.900	0.753
KMRK4	0.801			
KMRK5	0.704			

guaranteed that the findings and validity were satisfactory. As a result, it could be said that the discriminant validity of all the constructs used in the present study was satisfactory. According to the obtained results in Tables 3 and 4, data used in measuring the study dimensions have acceptable reliability, discriminant, and convergent validity. As a result, the study may evaluate the inner model for testing hypotheses.

After the measurement model's acceptable convergent and discriminant criteria were confirmed, the structural model (Figure 2) was utilized to assess the model's ability to explain and anticipate the effect of exogenous latent variables on the endogenous dependent variable. The model's goodness of fit (GoF) was assessed using several measures. Results indicate that the model was fit, based on the structural model analysis (SRMR

**Table 4.** Discriminant validity: Fornell-Larcker criterion

	KMKA	KMKD	KMRK	Potential AC	Realized AC	Startup
KMKA	0.780					
KMKD	0.639	0.800				
KMRK	0.504	0.621	0.842			
Potential AC	0.172	0.494	0.591	0.701		
Realized AC	0.683	0.607	0.667	0.401	0.795	
Startup	0.741	0.755	0.823	0.614	0.766	1.000

= 0.11, d_ULS = 4.272, d_G = 2.237, χ2 = 3.059, NFI = 0.524). According to Hair et al. (2014), the minimum acceptable R² score is 0.10 to secure a proper model fit. Accordingly, all the endogenous latent variables, potential absorptive capacity, realized absorptive capacity, knowledge acquisition, knowledge dissemination, and responsiveness to knowledge had R² values of 0.554, 0.670, and 0.273, respectively, demonstrating the research model's appropriate predictive capability. A 5000 bootstrapping method was used in the last phase of the smartPLS4 computations to evaluate the route coefficient effects and t-significant levels for the direct correlations (as shown in Table 5). The study proposed and examined one main hypothesis and five sub-hypotheses (Figure 1). The SmartPLS findings revealed that dynamic marketing capabilities positively and significantly impact startup performance (β = 0.937, t = 127.2, p = >0.00), as presented in Figure 2; hence, the main hypothesis is accepted. Concerning the first dimension of dynamic marketing capabilities, results show that absorptive capacity was significant for potential absorptive capacity (β = 0.251, t = 7.932, p > 0.000)

and for realized absorptive capacity (β = 0.177, t = 5.409, p > 0.000), as presented in Figure 3; hence, the study accepts H1.1 and H1.2.

Finally, concerning the second dimension, knowledge management, revealed results show values for knowledge acquisition (β = 0.360, t = 11.089, p = >0.000), knowledge dissemination (β = 0.102, t = 2.367, p = >0.018), and responsiveness to knowledge (β = 0.318, t = 6.852, p = >0.000); hence, the study accepts H1.3, H1.4, and H1.5 as presented in Figure 4.

Table 5 displays the analysis of the construct hypotheses, along with the beta value, mean, standard deviation, t, and p-value. The main hypothesis was developed to assess dynamic marketing capabilities' positive and significant impact on startup performance. The effects of knowledge management and absorptive ability on startup success were measured through sub-hypotheses. Table 5 displays the findings, and according to the values provided, it was decided to support the created sub-hypotheses.
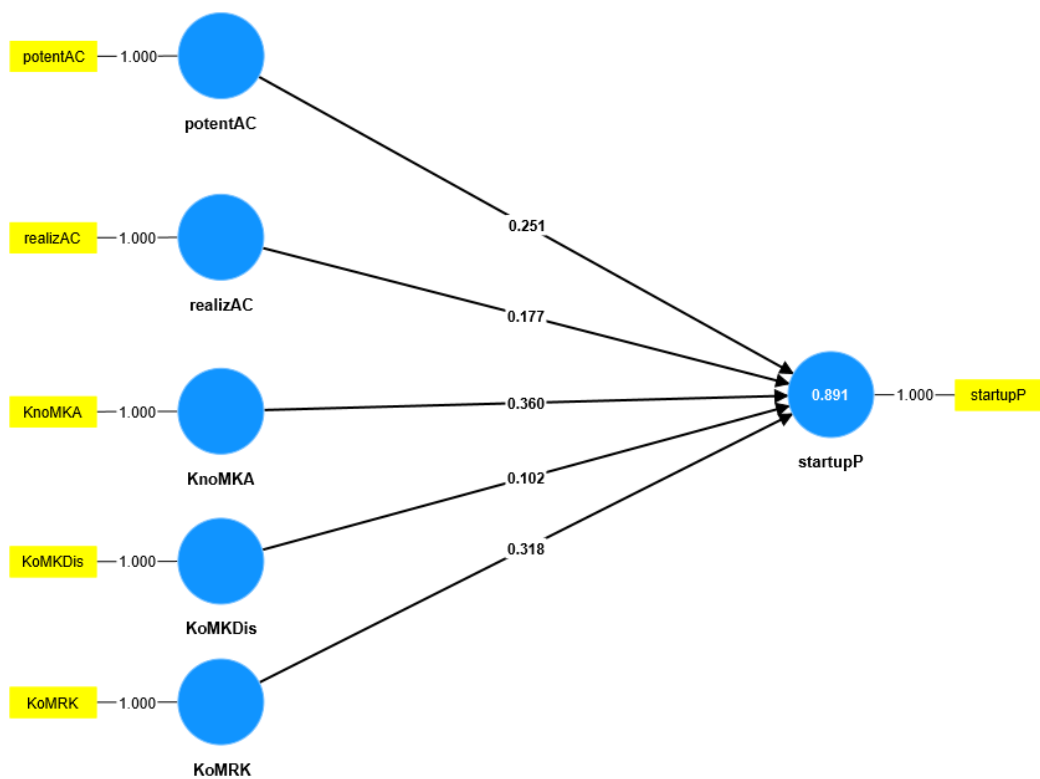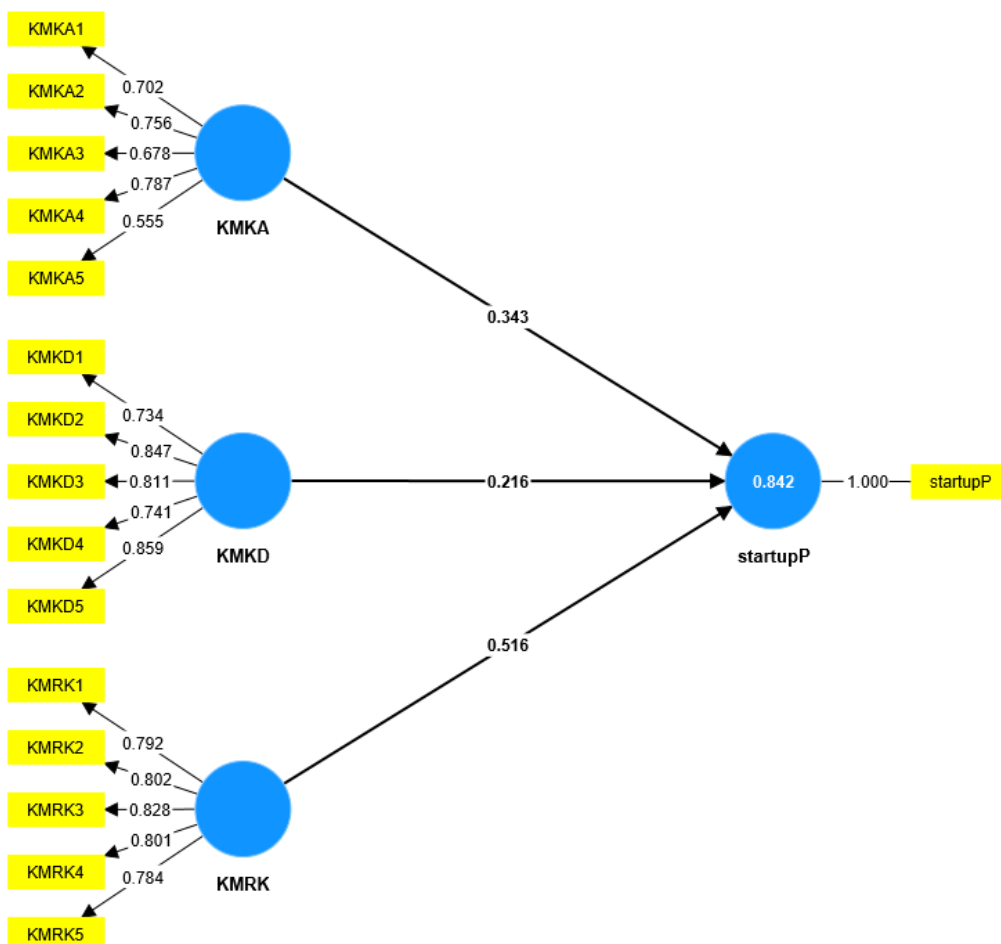

Note: potentAC = Potential absorptive capacity, realizAC = Realized absorptive capacity, KnoMKA = Knowledge acquisition, koMKDis = Knowledge dissemination, KoMRK = Responsiveness to knowledge, startupP = Startup performance.

Figure 2. Main hypothesis testing
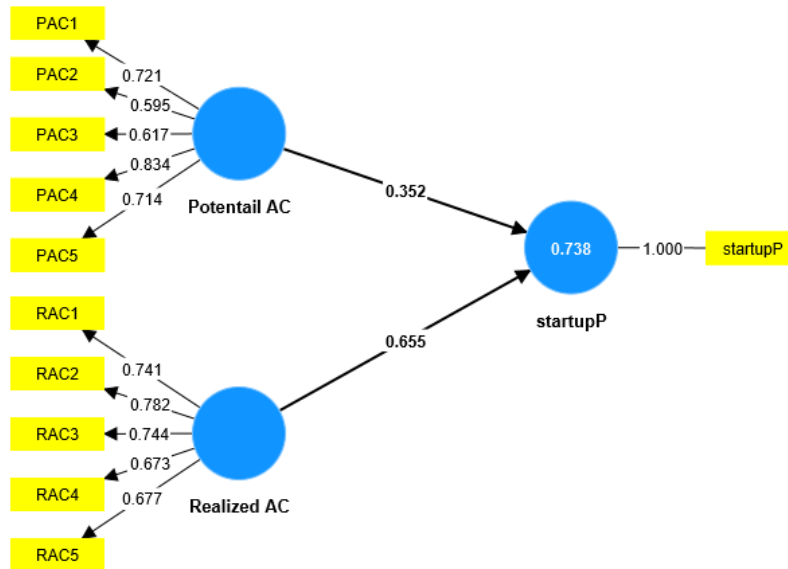
Note: Potential AC = Potential absorptive capacity, realized AC = Realized absorptive capacity, and startupP = Startup performance.

Figure 3. The impact of absorptive capacity on startup performance

Note: KMKA = Knowledge acquisition, KMKD = Knowledge dissemination, KMRK = Responsiveness to knowledge, and startupP = Startup performance.

Figure 4. The impact of knowledge management on startup performance

Table 5. Results of hypotheses testing

Hypothesis	Mean	SD	B	*t*-Value	*p*-Value	Decision
Dynamic marketing capabilities → Startup performance	0.938	0.007	0.937	127.2	0.000	Supported
Potential absorptive capacity → Startup performance	0.249	0.032	0.251	7.932	0.000	Supported
Realized absorptive capacity → Startup performance	0.179	0.033	0.177	5.409	0.000	Supported
Knowledge acquisition → Startup performance	0.359	0.032	0.360	11.089	0.000	Supported
Knowledge dissemination → Startup performance	0.104	0.043	0.102	2.367	0.018	Supported
Responsiveness to knowledge → Startup performance	0.316	0.046	0.318	6.852	0.000	Supported

4. DISCUSSION

Startups are critical ingredients in building and developing economies, mainly in developing countries. Services provided by different business incubators can boost and accelerate the process in which startups can reach the survival stage. Startups need many services and guides in various areas and soft and hard resources that enable them to start the business journey. As presented in the literature, dynamic marketing capabilities is a new emerging school that shifts marketing from the traditional marketing mix to a more dynamic process regarding market-knowledge diagnosis and integrating knowledge management in upgrading its operational marketing capabilities in designing exceptional customer solutions. The results found that dynamic marketing capabilities have a significant impact on startup performance (β = 0.937, t = 127.2, p = >0.00), and this result is in line with empirical research in the dynamic marketing capabilities domain (Barrales-Molina et al., 2014; Grandinetti, 2016; Hult & Sjölund, 2017; Kachouie et al., 2018; Ahmed et al., 2021; Silvianita & Pradana, 2022). This study confirms that absorptive capacity and knowledge management are appropriate tools for measuring startup performance. This study affirms that dynamic marketing capabilities are critical for improving the performance and, hence, the success of startups.

The results reveal that absorptive capacity has a statistically significant impact on startup performance; both dimensions, potential absorptive capacity (β = 0.251, t = 7.932, p > 0.000) and realized absorptive capacity (β = 0.177, t = 5.409, p > 0.000), have a significant impact on startup performance. The outcome supports the crucial importance of acquiring information from external sources and building capabilities within the startup, thus enhancing the startup's likelihood

of survival. This result aligns with Gray (2006) and Jansen et al. (2005). Business incubators need to provide their incubates with the required information to enable them to adapt, change, and take advantage of emerging opportunities by the startup members. Startups need professional marketing information that aids in developing new market strategies that fit with the turbulent business environment and make them adjust and adapt to new opportunities more dynamically. Therefore, business incubators are directed to provide startups with customer and competitor intelligence absorptive capacity to employ and capture opportunities by creating new products, enhancing quality, developing the image, and improving the decision-making process.

Concerning knowledge management, the results of knowledge acquisition (β = 0.360, t = 11.089, p = >0.000), knowledge dissemination (β = 0.102, t = 2.367, p = >0.018), and responsiveness to knowledge (β = 0.318, t = 6.852, p = >0.000) prove that knowledge management has a statistically significant impact on startup performance. Knowledge management is an important platform and mechanism that assists startups in knowledge acquisition and dissemination. Furthermore, knowledge management supports the execution of both potential absorptive capacity and realized absorptive capacity that should be integrated with knowledge management in startups since it has a constructive impact on overall performance and success. Knowledge management may assist startups in improving their performance in various ways, including improved communication channels, enhanced customer service, faster decision-making processes, higher efficiency in methods and measures, and a lower risk of losing substantial competencies. The current results are consistent with Wang and Yang (2016) and López-Nicolás and Meroño-Cerdán (2011).

CONCLUSION

This study examines the impact of dynamic marketing capabilities delivered by business incubators to startups and whether it affects startups' performance from an incubate perspective. Research hypotheses were examined using a questionnaire distributed online to incubates in business incubators. The results confirm that the proposed model of both independent variables, absorptive capacity and knowledge management, and their dimensions show a statistically significant impact on startup performance. Furthermore, the paper offers an indication that employing dynamic marketing capabilities to startups appears to be meaningful for measuring startup performance and not only restricted to financial resources. There is substantial support for using dynamic marketing capabilities as a strategic tool in supporting and enhancing the survival of startups during their different life stages in business incubators through anticipating market fluctuations and reconfiguring marketing resources appropriately. The obtained results from this study conform to the literature. Finally, to boost startup performance, it is highly recommended that companies apply and incorporate both dynamic marketing capabilities dimensions to manage market knowledge more competently.

AUTHOR CONTRIBUTIONS

Conceptualization: Hamza Salim Khraim.
Data curation: Hamza Salim Khraim.
Formal analysis: Hamza Salim Khraim.
Investigation: Hamza Salim Khraim.
Methodology: Hamza Salim Khraim.
Project administration: Hamza Salim Khraim.
Resources: Hamza Salim Khraim.
Software: Hamza Salim Khraim.
Validation: Hamza Salim Khraim.
Visualization: Hamza Salim Khraim.
Writing – original draft: Hamza Salim Khraim.
Writing – review & editing: Hamza Salim Khraim.

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