

Digital Marketing for startups: How to commercialize innovation through SMDAB framework

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Abstract

Highlighting the integral role of digital marketing for the startups, the current research study presents review of the literature of digital marketing for startups and examines the most effective way to digitally market the new innovative ventures. In the process of the review, the author has developed a detailed framework for the digital marketing of the startups to provide a way forward to commercialize the startups. The author outlines the potential strategies that can be used by the startups to commercialize their products or services. Based on review of literature and analysis, SMDAB framework has been established for the start-up commercialization consisting of following components: social media, marketing capabilities, digital platform, analysis, and big data. The framework enables to enhance the understanding of startups regarding commercialization and provides guidelines for further research in the field of digital marketing.

Keywords: Digital marketing, startups, entrepreneurship, commercialization, innovation

It has now become necessary for the companies to have online presence in one way or the other in order to expand its market for the services or the products it is offering. As there has been a rapid growth in the digital platforms that a company can use, it is also integral that startups are well-aware regarding the different platforms available in order to decide the best suitable option for the growth of the start-up (Teixeira et al., 2017). Digital marketing not only allows to enhance sales but enables to understand how the consumers of a particular company use the new online platforms which allows for a more efficient interaction with the targeted audience. Digitalization further enables the startups to scale in a rapid manner, provides them with a faster time to the market (Proksch et al., 2021) and enhances their operational efficiency (Rosin et al., 2020).

The focus of the digital marketing should not be on the technologies but in fact it should be on the target customers. The interconnection of the market positioning and the network enables to create a strong brand presence on the online platforms (Reino, 2010). Online platforms have created new business opportunities for the startups and order to achieve their business objectives. Kanttila (2004) stated that digital marketing provides results if there is accessibility of the digital content, speed and navigation. On the other hand, social media has opened doors for the businesses to communicate with millions of people through various means and has opened new market opportunities. However, effective results are obtained once the managers are well aware regarding the communication strategies that need to be used in order to engage the customers and enhance the experience of the customers. In this regards, Borah et al (2020) emphasize on the importance of improvised marketing interventions on social media as contributes towards the value of the firms. Digital marketing platforms for businesses include but not limited to social media (Facebook, LinkedIn, YouTube, Instagram, TikTok), blogs, websites, and SEO.

Gulati & Sawhney (2019) argue that startups tend to fail if they don't have a viable business model, inability to gain enough customers or cope with the traction. All these reasons of startups failure point towards inability to commercialize the businesses successfully which needs to be further explored. An unfortunate truth is that nine of ten startups tend to fail (Patel, 2015) which reflects that every over optimistic entrepreneur needs a dose of reality to ponder on the tactics required to commercialize their products or services.

It is important to understand how the digital technologies can act as a fuel towards the sustainable advantage for businesses (Herhausen et al, 2020). Digital marketing can help businesses to achieve the loyalties of users (Garcia et al., 2019), contribute towards the business growth (Gayathiri & Ravindran, 2020), enables to make a difference and compete effectively (Karaagaoglu & Cicek, 2019), and creates brand awareness for startups (Prabhi, 2019).

A systematic literature review can be found on the knowledge management of startups (Centobelli, Cerchione & Esposito, 2017), business model innovation (Silva et al., 2020), investor relationship marketing of startups (Kaiser & Berger, 2020), and pivot decisions in startups (Chaparro

& Gomes, 2021), barriers in digital marketing (Setkute & Dibb, 2022), whereas, digital marketing in startups has not been the focus in the academic literature. A wide range of literature is evident that focuses on digital marketing for startups, however, a defined framework has not been developed that guides the startups on how to commercialize their companies. The literature lacks conceptual papers or empirical studies in this regard. Faruk et al (2021) states that the literature has been largely focused on strategic planning, mobile marketing with application development and customer's demographic profiles. Amjad (2022) argued that digital marketing is essential part of the startups and that if the same is taught at schools, then market failure can be avoided to a great extent. However, the study mainly focused on digital marketing implementation at schools and focus has not been mainly on the startups. In this article, we seek to develop a framework for the starting based on digital marketing to commercialize their startups. The work is motivated by the need for a comprehensive review and framework related key drivers for digital marketing of the startups. In order to achieve the aim of the study, we pose the following research question: What digital marketing strategies do the startups need to adopt to commercialize their businesses?

The intended contribution of the study is to provide a suitable digital marketing framework to the startups which would benefit not only the startups but the beneficiaries include but not limited to government & private incubation centers, accelerators, entrepreneurship speakers & professors, entrepreneurship related workshops and bootcamps. Furthermore, the global pandemic is a fundamental challenge for all the businesses whether small, medium or large. In this situation digitization can play a crucial role to mitigate the damages and economic losses (Katz et al, 2020). COVID-19 pandemic has drastically increased the internet traffic as well (Feldman et al., 2021) which suggests that startups must incorporate digital marketing within their strategies to remain competent within the market. Therefore, the objective of the study is to find the digital strategies that contribute towards the commercialization of startups. Based on the discussion the study answers the follow research questions:

Question 1: How can digital marketing be used for commercialization of startups?

Question 2: What digital strategies can assist startups in their growth?

Methodology

In order to address the research question of the study, we start with the review of the literature in order to identify the key platforms, tools and strategies used by startups to enhance their growth. Theory synthesis has been done in the paper as we seek to achieve conceptual integration across various theories and streams of literature (Jaakkola, 2020). This helps in providing an enhanced concept of the digital marketing strategies and enables to connect the unconnected pieces of the literature in a novel manner (Jaakkola, 2020). The article first summarizing and integrates the current understanding of digital marketing for startups, structures the fragmented field of digital marketing, and then outlines a conceptual domain for the proposed framework. The phenomenon that has been addressed in a piecemeal fashion has been structured in the current paper via theory synthesis procedure. Therefore, the disparate elements of digital marketing are attempted to be integrated in a coherent manner. This in turn has helped to achieve the research objective of the study by unveiling the big picture patterns in the field of digital marketing. The detailed review of the literature carried out enables to unravel the components of digital marketing and the incommensurable elements are excluded. The set of papers that are read in the study are then grouped into themes in order to form a suitable framework. Review of the literature has been carried out by considering only those journals that have a high impact factor (above 3.0) as also used by the conceptual study of White, Habib and Hardisty (2019). Literature search has been carried out using multiple article search engines i.e., google scholar, web of science, ScienceDirect and Scopus. Keywords have been used in order to search for relevant articles after which the articles were read and reviewed for their relevance and quality before inclusion in the study. Over 600 articles have been screened via the results obtained through the mentioned search engines and suitable and most relevant articles have been reviewed in the process. For development of the framework 32 journal articles having impact factor above 3.3 we studied in detail and 28 of them were considered most relevant for the study.

An epistemological constructivist paradigm has been adopted in the study as also adopted by Riebe et al (2016). In this paradigm the reality is perceived to be subjective and since a systematic literature review is being conducted therefore a subjective approach has been adopted in order to develop the framework for the study. Literature has been studied and interpretation of the data has been made in order to come up with a suitable framework for the study.

SMDAB Framework

A systematic literature review has been conducted in order for the selection of relevant articles on digital marketing. Systematic review is done as it helps in identifying the research gaps and a comprehensive overview is obtained in this manner. 28 articles have been reviewed that have been published between 2016-2021 as given in Annex A and themes have been generated from these articles in order to come up with a suitable framework for the commercialization of startups. In the SMDAB framework 'S' represents social media, 'M' represents marketing capability, 'D' represents digital platform, 'A' represents analysis and 'B' represents big data.

Social Media

Social media plays a crucial role in the commercialization of startups. Having social media presence not only helps in visibility but attracts funding (Banerji & Reimer, 2019; Gloor et al., 2020), contributes towards start-up's success (de Zubielqui & Jones, 2020; Muninger et al., 2019; Olanreqaju et al., 2020), enhances reputation (Fink et al., 2020), enables networking (Ahmad et al., 2018; Wang et al., 2020) and contributes towards business growth (Chatterjee & Kar, 2020). We examine how LinkedIn, Twitter, Facebook, Social media networking, Celebrity endorsements influence the startups in flourishing. Social media capability for startups is highly integral as entrepreneurial ventures can coordinate their own social media capabilities with their partners in order to mitigate threats and it provides ease to international markets (Fraccastoro et al., 2021). Adding to it, valuable social capital is created via social media which increase the entrepreneurial entry of the startups (Wang et al., 2020).

LinkedIn. Banerji & Reimer (2019) find in their study that the startups that tend to have more followers on LinkedIn tend to raise more money for their respective startups. The social connectedness proves to be advantageous for the companies to raise money (Banerji & Reimer, 2019). Marin & Nila (2021) highlight that LinkedIn can be used for the purpose of personal brand communication and that it is helpful for the individuals to develop personal brand. This reflects the start-up team should actively make use of LinkedIn which will promote their personal brand and in turn strengthen the start-up. LinkedIn profile further aids in developing trust which is highly essential for the startups at an early stage (Quinton & Wilson, 2016). The LinkedIn professional grouping provides a trusted filter as it provides a screening mechanism to others (Quinton & Wilson, 2016).

Twitter. Twitter helps the companies achieve a lower cost of equity capital (Al Barrak et al., 2020; Al Guindy, 2021). This reflects that twitter should be actively used by startups for dissemination of information. Twitter can also be actively used for the purpose of disseminating financial information as that can help attract potential investors for the startups (Al Guindy, 2021). Capriotti & Ruesja (2018) state that twitter helps in facilitating companies in having dialogues with the relevant market and that CEOs should utilize all the possibilities that Twitter offers as the digital communication tool. Strategic communication can be enhanced in this manner through the use of Twitter by CEOs of the companies. Furthermore, twitter sentiments tend to be highly essential for the startups at a young age venture capital financing (Tumasjan et al., 2021). Twitter tends to be integral for the purpose of engagement of networks, information sharing, collaboration, coordination process, and reconfiguration process of entrepreneurial firms (Drummond et al., 2018).

Facebook. Pawsey et al (2018) suggest that Facebook should be used to enhance engagement; refine the content of posts, increase the regularity of posts and make use of photos, videos. Businesses can actively make use of social media to manage the relationships which includes informal communication, transparent communication and dialogic communication (Johann et al., 2021). Facebook advertisement can be used by the companies by understanding the unique characteristics and its effectiveness to reach the target market effectively (Wiese et al., 2020). Businesses can come up with suitable brand positioning strategies using Facebook. The digital brand positioning strategy helps to enhance sales of businesses as consumer's decision-making regarding product or services is compelled through social media (Bahcecik et al., 2019). Integral networks are created and relationships are maintained via Facebook and new and existing relationships can be developed which is significant for the success of startups (Drummond et al., 2018).

Networking. Social networks in the entrepreneurial process play an integral role. Davis et al (2020) highlights that the networking ability is related in a positive manner with the LinkedIn usage which reflects that entrepreneurial teams should make use of LinkedIn actively in order to expand their network and for benefits for the start-up. The larger the social network of the start-up, the better the financial outcome of the companies (Banerji & Reimer, 2019). Social media networks are integral as they contribute towards the enhancement of business performance as it has the ability to provide new business contracts and collaborative problem solving can be performed. A trusted environment is provided via the social media networks which provides a global reach (Quinton & Wilson, 2016). Founders need not only extract the information resources from the digital networks but they need

to extract advice, emotional support, substantive advocacy and material resources as well and should make use of the online network fruitfully (Smith & Smith, 2021).

Celebrity endorsements. Social media platforms aid in facilitating a greater influence and outreach (Arora et al., 2019). Identifying the right influencer helps the companies to promote their services and products (Huang et al., 2014). Social media influencers tends to be one of the most important influence marketing strategies for the companies in order to influence their target audience (Lou & Yuan, 2018). The businesses need to focus on the footprint, sentiment, outreach and engagement of the influencers in order to opt for the suitable social media influencers (Arora et al., 2019). Based on the above discussion the following proposition is proposed:

P₁: Active and appropriate social media usage enables startups to commercialize their venture successfully.

Marketing Capability

Startups require a deep understanding of the market and need resources to develop appropriate marketing capabilities (Patel et al., 2021). Dutta, Narasimhan & Rajiv (1999) define marketing capability as superior ability to define the needs of the customers and the ability to understand the factors that influence the choice of the customers. Development of marketing capability at an early stage for new ventures can act as the competitive advantage in the longer term. Patel et al (2021) argues that marketing capability of a venture has a positive impact on the survival of the business. If the marketing capabilities are good then the ventures can become dominant players in the market via social media engagement, emotion connection and word of mouth (Patel et al., 2021). Bucciari et al (2020) conclude in their study that marketing capabilities of a new venture influence the performance of the venture. For ventures operating in the product industry, Gregory et al (2019) suggests that e-commerce marketing capability has the ability to enhance the efficiency of communication and distribution. Startups need to integrate marketing insights in order to enhance their marketing capability and scientific data needs to be analyzed in order to predict social media activity (Jung & Jong, 2020).

Open strategy should be adopted by the startups in order to progress further. Blogging enables ventures to attract audience leading towards endorsements for the products, services or the organization (Gegenhuber & Dobusch, 2017). Open-strategy helps in engaging external audiences and later on when relevant strategic information is broadcasted then media audiences can be attracted which provides additional support to the new ventures (Gegenhuber & Dobusch, 2017). Based on the above discussion, we propose the following:

P₂: Having appropriate marketing capabilities enables startups to commercialize their venture successfully.

Digital Platform

Digital technologies have redefined the way in which the business ventures are developed. Digital technologies have enables to launch more sustainable entrepreneurial ventures (Elia et al., 2020). Startups need to think regarding what digital activities can be incorporated within their businesses, what the technological pillars of the venture are, who are the digital actors, and what is the digital motivation for the start-up. Digital transformation needs to be considered by the startups which is driven by innovation. The significance of platform-based innovation ecosystem has also been highlighted by Hsieh & Wu (2019) who emphasize that entrepreneurial processes can benefit through digital platforms. Four main types of platforms have been defined by Hsieh & Wu (2019) which are based on the new product/service development and the commercialization capabilities namely Mavens (type 1), Enthusiasts (type 2), technical needs (type 3) and Intrapreneurs (type 4). Therefore, entrepreneurs need to decide which type of platform fulfills their need and need to take advantage of the digital platforms to penetrate into the market. Boeker et al (2021) further states that digital technologies tend to influence the knowledge quality that is developed in an entrepreneurial venture and superior information technology systems enhance the knowledge quality of the ventures. High growth venture needs to be scalable and need to have digital presence that is interactive (Pearce & Pearce, 2020). Scalability is accelerated via the technological innovations at decreasing marginal costs (Pearce & Pearce, 2020), therefore, digital platform has become the need of the hour for the startups for their continued sustainable growth.

In today's era, digitization capability holds importance and it can be subdivided into underlining capabilities namely; digital innovation capabilities, digital platform capabilities and digital integration capabilities (Annarelli et al., 2021). Digitalization capabilities help in transformation and creates value and competitive advantage for the firms (Annarelli et al., 2021). Based on the above discussion, we propose the following:

P₃: Digital platform establishment enables startups to commercialize their venture successfully.

Analysis

Analysis refers to analyzing the start-up needs and data constantly in order to come up with suitable decisions for the business. The need for analysis has been highlighted in previous research works in the form of data analytics (Ciampi et al., 2021; Dubey et al., 2020) and also in terms of social media analysis (Bahcecik et al., 2019). Suh & Chow (2021) emphasize on the importance of web demographics for business ventures which enables to mitigate problems of new ventures and fast-growing companies and puts them on the path of success as it is a strategy towards shaping the market of the new ventures. Startups need to constantly analyze the digital data in different forms in order to progress and to ensure a smooth entry and progress in the market. Therefore, we propose the following:

P_a: Digital analysis enables startups to commercialize their venture successfully.

Big Data

Scientific processes and machine learning can be used by the startups in order to predict various factors for the progress of their startups. Data has become highly valuable for the modern organizations (Albergaria & Jabbour, 2019). It has also become significant for the startups to predict social media marketing through the level of engagements (Jung & Jeong, 2020). Deep learning can provide great accuracy for the prediction of level of engagement on social media (Jung & Jeong, 2020) and acts as a support tool for the progress of startups. Google trends acts as a credible source for high-quality data and can be used for the purpose of analyzing, researching the growth prediction of the startups. The growth dynamic of the new ventures tend to be correlated positively with the web search traffic (Maly et al., 2021).

Big data enables to collect and analyse large sized and diverse data for the decision-making processes. Big data enables the firms to take advantage of the digitalization in order to bring innovation to their businesses model which in turn helps in achieving improved performance (Lokshina et al., 2018). Ciampi et al (2021) discuss in their study that big data positively impacts the business model innovation which reflects that using big data analytics is crucial for the startups in the pathway of success as important decisions can be made on the basis of big data. A similar research study has been conducted by Dubey et al (2020) concluding that Big data analytics helps entrepreneurial organizations to improve their operational performance. On the basis of the discussion, we propose our final proposition:

P_b: Big Data enables startups to commercialize their venture successfully.

How to Use the SMDAB Framework in Practice

In the review of the literature, we identified how the different components of the framework influence the businesses and companies. In this section we highlight how the framework can be used in practice by the practitioners and various stakeholders. The SMDAB framework reflects the tactics that can be used by the start-up entrepreneurs in order to commercialize their products or services. We identify that no single component of the framework can be identified as the 'best' strategy for commercialization but that each component of the framework is integral for the start-up commercialization. Practitioners need to understand the different strategies that the startups need to adopt and that an amalgam of the components of the framework need to be instilled within the start-up for its commercialization.

Although the current framework highlights the strategies that startups need to incorporate within their businesses to flourish, however, practitioners also need to think why these strategies are not being adopted by the startups. The challenges that exist in the pathway of adoption of the mentioned framework needs to be thought about as well. Thinking about the challenges that exist in adoption of the SMDAB framework, practitioners can think regarding the tools and strategies of how the adoption challenges can be mitigated for the successful commercialization of the startups.

Even if the startups have limited resources, they should try and think of strategies on how the components of the framework can be incorporated by them within the business to enhance its efficiency and try to incorporate as many components as possible. The understanding of all the components of the framework is also highly essential so that they are utilized in the right manner. When a start-up decides to incorporate a particular component for commercialization purposes, it must brainstorm ideas with experienced mentors and advisors in order to further refine the manner in which the component shall be integrated to ensure maximum value is created.

Incubation centers & accelerators can utilize the framework and further encourage the start-ups to incorporate its components and should assist the startups in doing so. The mentors and trainers within the incubation and acceleration centers should encourage the startups to implement the framework components in the best possible manner. It is predicted that framework incorporated

in line with feedback from relevant experienced personnel can enhance the efficiency and ensure the implementation is done in the right manner. Not every start-up will integrate the framework in the same manner as every business has its own model and product/service offerings that differ from the rest. Therefore, brainstorming needs to be done along with incorporating realistic stats for decision making on how to implement the components using various tools and strategies.

The governments can make suitable policies based on the framework in order to support the young businesses. Grants and loans can be offered by the governments focusing on the mentioned components of the framework so that the startups are able to give a push to their ventures via financial aid. Non-financial support in terms of directly supporting the startups by providing the services related to the framework components at a subsidized rate or on a cost sharing basis. The same can also be implemented by private entities who support startups.

Courses of entrepreneurship within universities, trainings, workshops, bootcamps etc. for startups need to incorporate the framework within the course material. This will enable the startups to incorporate latest technologies within their key operations and will aid towards revenue generation. The more the startups know regarding the latest framework for appropriate commercialization, the more the chances of success of the ventures.

Limitations and Future Research

There are some limitations associated with the current research work. First, a very strict criteria for article inclusion has been adopted in the current study and articles which were even slightly deviating from the topic understudy were excluded from the sample. Moreover, only papers published in English were considered and none books were included in the review.

Secondly, this approach allowed us to analyze only a limited number of articles. The results might have been different if a looser criterion for the inclusion of the articles was selected. Despite the limitations of the study, it is strongly believed that the findings of the study and the framework developed can be used significantly by the startups for the commercialization purposes.

In future work, the framework developed needs to be tested quantitatively for the empirical testing of the framework and to validate the findings and ensuring they are generalizable. Startups from different industries can be taken as the sample which includes but not limited to IT, textile, food and beverage. Having empirical evidence will further strengthen the SMDAB framework.

Concluding Thoughts

The framework identified in the study can be implemented both in product and service sector startups. The framework is appropriate for those startups that have at least a minimum viable product ready. The framework shall be applicable on those startups who have tested their products or service in the market and have market proven/tested product or service to be offered. Although startups might not have the capability or resources of implementing big data tools within the start-up, however, they should try to obtain funding from relevant entities or collaborate with entities that have relevant expertise in order to increase their chances of commercialization success. Social media, analysis, marketing capability and digital platform do not involve very high costs for the startups and these components can be easily implemented by the startups regardless of their financial status.

Startups at times miss out on implementation of already present blessings of technology that we have. Digital platform and strategies enable the companies to homogenize and distribute on a large scale (Chatterjee et al., 2019). Digital technologies have further enabled the startups to compete in those markets that were thought to be reserved only for large enterprises (Chatterji et al., 2021). Digital solutions enable the entrepreneurs to change their attitudes and influences the entrepreneurial intentions of individuals and their behaviors as well (Chatterjee, 2020). The study undertakes a holistic attempt to investigate how digital marketing can be beneficial for the startups in their process of growth.

However, we believe it is necessary that startups implement the identified framework in its true spirit as missing out on elements might not be as beneficial which further needs to be explored by future works. The aim of the startups is to scale up in order to serve the masses and earn more revenues. Naturally, in today's digital era, it is not possible to scale without the usage of digital strategies and platforms. It now depends on the startups how efficiently they are able to leverage on the blessings of today's era i.e., technology. We further suggest that startups should run pilots based on SMDAB framework to figure out most suitable strategy while remaining under the umbrella of the said framework. For instance, there are different social media platforms present but the marketing team of startup need to analyze that which platform has their target market and can respond to them in the lowest possible cost and more conversion ratio. Accordingly, budget shall be set by the startups for the social media platform management. With the digital technologies present, the key is how well a startup can come up with a marketing strategy for scaling and

commercialization of their startup so that they get a good revenue by spending less. Also, for scaling up purposes, startups need to analyze what kind of digital platform with what features are required to act as their competitive advantage in the highly competitive market of today. Regardless to mention, big data has the ability to change the presence of startups as it is a step towards the technological revolution (Tian et al., 2022).

In summary, the paper uncovers strategy for commercialization of startups categorizing them into five broad categories: Social-media, marketing capabilities, digital platform, analysis and big data. We anticipate that SMDAB framework will be highly beneficial for startups, incubation centers, acceleration centers and related government entities. The framework will guide researchers in conceptualizing the commercialization process further. We hope that the framework becomes the base of success of the startups and assist their commercialization process.

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Appendix 1

The overview of the systematic literature review process is given in Fig. 1. We searched articles on science direct databases, Scopus, google scholar with the following keywords: "Digital marketing startups/new ventures", "Digitization of startups/new ventures", "e-marketing startups/new ventures", and "social media marketing startups/new ventures". The research was conducted in April-May-June 2021. All articles outside the scope of the study were excluded. The relevance of the articles to our study were evaluated using the criteria such that the articles 1) Must come under the domain of digital marketing 2) Should be focused on new ventures and startups. In order to apply the criteria, the title and abstract of the paper were reviewed and then if deemed necessary the full articles were completely read or skimmed through (Booth et al., 2012).

Fig 1.

Overview of literature review process

