Social Media and E-commerce as Mechanisms to Enhance Entrepreneurship Among Graduate Students

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Abstract
In recent years, entrepreneurship has been one of the most discussed issues among government agencies, education institutions and international organizations, given the restrictions on the labor market. The above, since entrepreneurship is considered as an important mechanism to generate direct and indirect jobs. However, the increasing participation of electronic mechanisms in society has transformed the way we carry out our activities, redefining the processes through which the various goods and services are produced and offered. Therefore, there is a consensus towards the need for entrepreneurs to adopt a profile oriented towards social media and electronic commerce. However, this topic is still in its first stages, so it is necessary to identify how much these concepts have been integrated into the university entrepreneurial ecosystem, which represents one of the main channels for promoting entrepreneurial culture. After a study among a group of students graduated from university, it was detected that they attach high importance to social networks and electronic commerce, since they allow them to increase their presence in the markets at a relatively low cost; however, its adoption process has been heterogeneous, given the lack of knowledge of many tools and the lack of financing. Finally, a series of recommendations that could improve these skills among future entrepreneurs from the university level are indicated.

Keywords: entrepreneurial culture, digital skills, self-employment.

Introduction
The consensus about entrepreneurship as an optimal mechanism to create employments during this century has positioned it among some of the most analyzed topics around the globe, not only by governments but in the academic and enterprise context. Nevertheless, the accelerated technological findings and their implementation on business has provided entrepreneurs efficient tools to improve their ideas and boost innovation, producing spillovers to other groups and activities.

Then, technological innovation has brought an ideal scenario for young entrepreneurs, considering that most of them are part of Y (millennials) or Z generations; the first group is usually known as those individuals born between and 1981 and 1996 and the second one covers those ones born from 1997 onwards (Dimock, 2019). Both clearly associated to technology as part of their lives, using it at school, to buy and sell goods and services or to promote or apply their skills in labor market.

Based on the above, it could be thought that nowadays most entrepreneurs tend to start their businesses through digital platforms or using electronic mechanisms like, for example, social media and e-commerce. According to Michalczewsky (2017), e-commerce can be classified as follows (Table 1):
This is relevant considering that the digitalization of economic activities and transactions can help overcome certain obstacles to more inclusive development, as mentioned by (United Nations Conference on Trade and Development UNCTAD, 2017). For example, information and communication technologies (ICTs), e-commerce and other digital applications can take advantage to promote entrepreneurship (including the empowerment of women as entrepreneurs and traders), productive activities, creativity and innovation, as well as the creation of decent jobs.

Also, digital solutions can increase the access of micro, small and medium-sized enterprises (MSMEs) in developing countries to financial services (online and mobile phone payments) and markets (for example, through virtual markets), and allow their integration into the supply chains of value. Likewise, e-commerce will be increasingly important to increase exports from developing countries, and double the participation of least developed countries (LDCs) in world exports by 2020 (United Nations Conference on Trade and Development, 2017).

Among these technological developments, social media takes an important place since it provides new opportunities for business, improving communications among consumers and producers (Rajagopalan & Jayansingh, 2016) and allowing organizations to reach new markets. Even more, (ORACLE, 2012) emphasizes that the intensification of social media has revolutionized relations between businesses and costumers, providing new trends in costumer experience. This also has opened new ways for increasing revenues faster than before (the pre-digital era) since, usually, social media campaigns target specific markets. Then, businesses that develop social media strategies have competitive advantages compared to those which not, considering the growing influence of electronic communication mechanisms in our society. Thus, social media strategies should be considered as part of business strategies (ORACLE, 2012).

For small businesses, social media delivers low-cost tools for advertising (Abuhashesh, 2014) which represent a mechanism for enhancing their competitiveness considering that they might not have as much resources as bigger companies do. Also, (Park, Sung, & Im, 2017) state that social media tools have gained researchers attention since they can be effective means to boost entrepreneurial projects. Then, these could be used for deploying businesses ideas or consolidating brands among costumers. Also, the (Australian Government, 2018) points out that smalls businesses which have deployed efficient digital plataforms strategies or started to develop social media plans could experience these benefits: lower marketing expenditures, higher sales, increased website traffic, bigger scope to reach international markets, faster interaction with costumers, among others.

Problem

Despite the enormous contribution of e-commerce and other digital applications to ease trade, in Latin American & the Caribbean only 54% of total population uses internet while in transition economies or developed countries shares are 65% and 84% respectively (United Nations Conference on Trade and Development UNCTAD, 2018). In Mexico, 64% of total population uses internet but only 37% of individual 15 or older have an account in a financial institution, which is often a barrier to run electronic transactions, regardless of whether these are done under the model business to business (B2B) or business to costumer (B2C). Therefore, it is not a coincidence that Mexico dropped 5 positions, from 90 to 95, in the UNCTAD B2C E-commerce Index 2018 respectively (United Nations Conference on Trade and Development UNCTAD, 2018). Furthermore, (Blaise, 2019) mentions that Mexican consumers are increasing their online purchasing habits, since in 2017 only 7% shopped online weekly and in 2018 increased to 38%. About their preferences, clothes, food and electronics are the most consumed online items. Then, businesses have incentives to participate in digital platforms and increase their market opportunities.

As for the most used social networks among Mexicans, (The Ecommerce Foundation, 2018) reported that Facebook is by far the most popular, reporting 68.5% in 2018, followed by Twitter (14.1%), Youtube (11.3%), Pinterest (5.3%) and Instagram (0.4%). As mentioned by (Tobar, 2016), the future of e-commerce lies on social media since more customers are heading through them. These premises point out the relevance for businesses to incorpore digital tools in order to satisfy customers needs.

Objective
The general objective of this study is to identify the effect of social media and e-commerce as mechanisms to enhance entrepreneurship among graduate students. This is relevant due to labor market constraints which face graduate students from both public and private higher education institutions in Mexico; in this regard, the ManpowerGroup, quoted in (Mendoza, 2018), states that 50% of unemployed people in Mexico have coursework middle or higher education and this situation contributes to increase informal labor rate which is about 56% and represents a challenge to the government. In addition, the Mexican Ministry of Labor and Social Welfare reported that in the second trimester of 2019 the unemployment rate in the age range of 20 to 29 years was 39% (Subsecretaría de Empleo y Productividad Laboral, 2019). Then, it is necessary to design strategies to boost employment among graduate students since they have gained knowledge and skills which could be transformed in productive projects that deliver formal jobs and incentivize economic growth. Also, this research seeks to link up two fundamental issues in our society nowadays: entrepreneurship and e-commerce. So, these results could represent an academic precedent for the study of these topics, fulfilling one of the main goals among universities: the generation and dissemination of knowledge to propel social development.

Methodology

This research is conducted by an exploratory study and results are strictly descriptive; As for the sample size, this was determined from the use of non-probabilistic sampling techniques, considering only twenty graduates from a public university in southeastern Mexico. In addition, this work is non-experimental since subjects involved in its development were not inducted to deliver specific answers, and, attending to its temporality, it is cross-sectional since data were collected in a single moment.

Then, data were obtained from the application of a research instrument, which was designed by the authors and consists of three sections: general information; entrepreneurial project information; and, social media and e-commerce. The characteristics of data do not provide enough information to perform deep statistical analysis. Nevertheless, these limitations are considered as opportunities for further studies which could enrich research in this area.

Results

This section presents the most outstanding results in each section and are summarized in three tables, starting by reviewing the general information got from the sample covered and is summarized next in Table 2:

| Indicator          | Results                                      |
|--------------------|----------------------------------------------|
| Age                | Average: 28.05; Younger: 26; Older: 30.      |
| Gender             | Male: 60%; Female: 40%                       |
| University Degree  | Business Management: 70%; Tourism: 20%; Administerive Computing Systems: 10%. |
| Posgraduate        | Yes: 30% (all at the master's level); No: 70%. |

Considering Table 2, it is remarkable that 70% of individuals got a Business Management degree and only 30% of graduates have a master’s degree. Then, information related to entrepreneurial activity is reported next in Table 3:

| Item                                                                 | Main Results                                                                 |
|----------------------------------------------------------------------|------------------------------------------------------------------------------|
| 1.- How long did it take you to start your first entrepreneurship project after graduate? | Less than 6 months: 5%; Between 6 & 12 months: 10%; Between 13 & 24 months: 15%; More than 24 months: 70% |
| 2.- Which was the main cause that raised the project?                  | I always envisioned myself as an entrepreneur: 15%; I had a job, but it did not satisfy me: 25%; I only found job offers far from my university background: 35%; I could not find any job: 25% |
| 3.- How many people started the project? Considering the owner         | One: 25%; Two: 55%; Three: 15%; Four: 5%; Average: 2.                        |
| 4.- Did you face any constraints for starting the project? If there were more than 1, assign a value of 5 to the most important, then 4 and so on. | No: 20%; Yes: 80%; Most popular: Financial (51.81%); Technical (22.22%); Legal (11.11%); Human Resources (11.11%); Other: (3.7%). |

Table 2. Part A. General information

Table 3. Part B. Entrepreneurial Project information
5.- For how long has your project been running?
   Most popular: 2 years; Average: 2.6 years; Minimum: 1 year; Maximum: 4 years.

6.- How many direct jobs has created your project since it started? Not considering the owners
   Most popular: 1 job; Average: 1.7 jobs; Minimum: 1 job; Maximum: 5 jobs.

7.- How do you describe the evolution of your project?
   More than satisfactory: 15%; Satisfactory: 50%; Neutral: 15%; Not satisfactory: 20%; Not satisfactory at all: 0%.

As seen in Table 3, it is important to mention that most individuals started their projects at least 24 months after graduate and only 15% of them envisioned themselves as entrepreneurs. Also, it is relevant that 60% of them decided to become entrepreneurs due to job dissatisfaction (25%) or lack of opportunities to apply their university training (35%). Evenmore, all entrepreneurs stated that their projects have produced at least one direct job and 50% of them consider this experience as satisfactory, despite most of them faced a series of obstacles when started. Regarding the importance of social networks and electronic commerce, Table 4 shows results as follows:

| Item                                                      | Main Results                                                                 |
|-----------------------------------------------------------|-------------------------------------------------------------------------------|
| 6.- Do you use social media to promote your products and services? | Yes, from the beginning: 15%; Yes, but not from the beginning: 20%; No, but I am considering it: 30%; No: 35% |
| 9.- Which social media platforms do you use?              | Facebook: 100%; Instagram: 20%; no other platforms were mentioned.           |
| 10.- In your opinion, which proportion of your sales are generated by social media platforms? | 95% or more: 14.28%; From 75% to 94%: 85.71%                                  |
| 11.- Can your costumers pay through electronic mechanisms? | Yes, since the project started: 57.14%; Yes, but not from the beginning: 28.57%; No, but they will be able to soon: 14.28% |
| 12.- Do you consider that social media is an important mechanism to run your business? | Definitely: 71.42%; Yes: 28.57%                                              |
| 13.- In your opinion, how social media boost entrepreneurial projects? | Increases market reach: 42.85%; Lowers marketing costs: 42.85%; Fastens communication with customers: 14.28% |
| 14.- Finally, has social media ease up the process of becoming an entrepreneur? | Definitely: 14.28%; Yes: 42.85%; Neutral: 14.28%; No: 14.28%                |

Regarding the relevance of social media and e-commerce to boost projects, it stands out that Facebook is the most popular social network among entrepreneurs but only 15% promoted their products and services through social media since their projects started. Likewise, 71.42% of individuals consider that social media is an important mechanism to run a business and about 57% account that it can ease up the process of becoming an entrepreneur.

Conclusion

The effect of social media and e-commerce on entrepreneurial projects is still a subject rarely studied in the Mexican context and even more when it is focused on graduated students. Therefore, the development of this paper provides a framework for further research; main results reflect a scarce entrepreneurial motivation among graduates since only 15% of them envisioned themselves as entrepreneurs and most of them took at least 24 months to start a project. Also, it was observed that individuals faced obstacles to initiate operations, which were mainly related to funding issues. Nevertheless, all entrepreneurs stated that their projects have produced at least one direct job and 50% of them consider this experience as satisfactory. As for the tendency of entrepreneurs towards the use of social media and e-commerce, a favorable trend was detected, as well as a positive perception about the value of these tools to boost the development of projects. In this way, most of the sample expressed to agree that these mechanisms drive the emergence of entrepreneurs. Therefore, it is suggested to design a follow-up program for graduate entrepreneurs, in order to divulge the results of their projects and share their experience with future generations, promoting entrepreneurial culture and the implementation of new technologies in business. Finally, it is recommended to strengthen the research instrument to replicate this work in larger samples and process data through more robust statistical techniques.

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