

# The Challenge of Inspiring Women Startups in a Latin American Country

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**Abstract.** Leading Latin American women to take the risk of transforming ideas into realities that can improve their financial stability is a challenge. Traditionally, women are brought up to work for someone or be on a payroll to guarantee an income that gives them the feeling of security and independence. This paper presents the experience of connecting a group of women for a lapse of time with digital entrepreneurs, successful persons with years of experience and know-how, that will help them learn to unleash their capacity to change an idea into an opportunity to make a profitable business. Some of the results of this experience go from the knowledge gained, the loss of fear in presenting a solution using networking and the one-to-one in mentorship towards the execution of a Startup. A great amount of ideas flow, some get to be implemented, others not, but the experience gained during one weekend changes the vision of women who learn to overcome the fear of taking a risk.

**Keywords:** women entrepreneur, female entrepreneur, workshop, equity, ICT, gender, gender equality, startup, Latin American women, gender gap

## 1 Introduction

The gender situation in Panama is the same as in many Latin American countries, and the same worldwide. Reviewing this situation and the Sustainable Development Goals (SDG), there's a great distance from reality even when it quotes "promote prosperity and protect our planet" something we are conscious that has to be done from all aspects of the humanity. One of the goals attached to this paper is Goal 5, related to gender equality [1], sometimes misinterpreted as to favor only women, when the ideal is that both women and men have the same opportunities. The goal is to reach out for girls and women so that they can also grasp prosperity, develop their homeland and countries. For women, competing at the same level as men is difficult when their responsibility historically has been to take care of home and children. The aim

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referenced in [1] includes eliminating further means of discrimination, ensuring equal opportunities for both men and women to obtain economic resources, to reach leadership roles, and other targets that, are also important but not included in this paper. From 2015 until 2019 indicators presented have shown that progress is still a slow, the gaps remain especially in laws definition and female participation in leadership positions; these decisions remain in the hands of each country. What and how the deployment will be achieved, also depends on a cultural variable that could make it even more difficult to accomplish greater changes.

In major economic studies held in 21st century, most Latin American girls and women are not brought up with the mentality of being their own bosses. This idea of self-employment must be promoted from the home environment and supported by the society, to increase financial stability and guarantee a better life for families [2]. Even more, according to [3][4], developing entrepreneurship activities helps create knowledge and innovation, and is one of the key factors involved in social and economic growth in a country.

Due to these and other facts stated previously, governments create policies to gain points on gender equity, such as establishing social oriented programs for entrepreneurs to strengthen women qualifications and promoting their participation as part of a sustainable economy offering to the market domestic products and services; the latter are mostly the type of startups Panamanian women develop.

So, what is to be done? We can start at the premise of finding a way to make dreams come through, but these dreams must be based on the actual trends and needs, using the benefits of Information and Communications Technologies (ICT) to present products and services that can compete with a specific niche in the market. This means that it is necessary to work on the ICT knowledge. The author in [5] refers to the relationship between startups, entrepreneurship, and economy, emphasizing that any misuse of these concepts might not give the expected outcome [6]. This article also presents three approaches to entrepreneurship in technology field: technological entrepreneurship, entrepreneurship in the field of digital technology and digital entrepreneurship.

Any effective startup must imply the presence of two components: mentors and network [2], without them the effectiveness is questionable.

Then, who are mostly interested in these types of workshops? What are they expecting of startup weekends? What are the cue motivations of these women? What difference exists in women's motivation according to their education and profession? Do they identify themselves as entrepreneurs, just with one weekend? What experience do the organizers get out of doing several Startup Weekends? These are some questions we hope to share for future interchange and investments.

## **2 Background**

### **2.1 Motivation in Women to Adopt Self-employment**

Traditionally, the human being reacts to events in many ways, and these are usually due to several independent variables, some related to: background, gender, age, values,

academic level, culture, and we could continue mentioning one after another that in the end turns out to be a complex being. This complexity often affects the way women and men perform their tasks, which is why [7] identify the existence of borders between work and personal life; the article points out the dynamic behavior of the borders, because they tend to expand or contract depending on environmental variables that makes the existence of a work-life balance necessary. When we talk about entrepreneurship, there are issues involved in the balance, that has to be considered, [8] exposes the existence of a double identity that coexists in one sole human being, and states that the blame is on the family tradition and society; this is supported by targets that must be achieved in Goal 5 [1].

So [8] decides to study this balance through a gender lens, and one of the findings that we find of interest is that women struggle to coordinate both fields in different proportions, some depending on their responsibilities (children), marital status or professional career. This could indeed cause several issues or none at all. As ICT, and in this article, we aim to discover if the proper motivation could promote women as entrepreneurs.

## **2.2 Global Entrepreneurship Monitor, Panama**

One of the goals of the Global Entrepreneurship Monitor (GEM) is to discover the factors that determine the levels of entrepreneurship activity in a specific country, as well as the factors that favor or hinder businesses and can be used to guide the formulation of effective policies designed to promote dynamism in business. We would like to comment on the most recent GEM report issued of Panama [9], where the City of Knowledge and other organizations through training, promotes conditions to form successful entrepreneurs.

Two findings we consider of relevance are: of 71.3% of women with cultural acceptance of business activity, only 3.1% are established businesswomen; Panama is the third country where women report to have the highest entrepreneurial activity rate. On the other hand [10] accounts on consistency, screening women between countries with the highest level of Total Entrepreneurial Activity (TEA). Also, according to the GEM, the reasons that motivate people to pursue entrepreneurship, the highest percentage of women indicated that they do it as a source of income, to continue a family business or to make a social impact. Interestingly, more men than women look at entrepreneurship as a way of seeking much more income than they currently possess.

## **2.3 Startup Weekends Program**

Startup Weekends are events held worldwide, organized in several regions: European, Asian, North American, Latin-American and now in 2020, African and Oceania. In [11] David Brown and David Cohen, both entrepreneurs in 2006 came out with an idea to help entrepreneurs. With a complete structure and for more than fifteen years, they took the program to another level, from weekend, weekdays and the latest, Startup Weekend women version.

The complete methodology to carry out a Startup Weekend has been verified and is available for organizations that are interested in training women to be entrepreneurs, to take a risk and prove ideas, team up, meet professionals, CEOs, and other people with successful companies and large history of business experience. The methodology includes several forms and templates to recruit girls and women, mentors, facilitators and organizing team. Countries such as Peru, Argentina, Bolivia, the Dominican Republic, Colombia, Guam, among others, have opted to use SWWE as a mechanism to reduce the gender gap in entrepreneurship, empowering women with STEM skills that are necessary, to develop creative minds.

### **3 Materials and Methods**

#### **3.1 Methods**

The organization and execution of Startup Weekends Women edition (SWWE) was based on the one proposed by [11]. For our analysis it was structured in four stages: first stage and second stage, before the event and during the event; third stage and fourth stage, were considered for after the event and the evaluation stage. We are analyzing three Startup Weekend editions completed between 2018 and 2019 in Panama.

#### **First and Second Stage**

The first stage included finding co-organizers, defining roles and responsibilities. Teamwork was very important, and so was the diversity among the team, mainly because of the variety of people that signed up for the Startup Weekends. Defining sponsors and the marketing strategy; the venue, date, website and means for registration were also part of this first stage. A budget was established and reviewed at the end of each event.

Attendees were prepared for the event, orientated on What to do? What to bring? Who to invite? Which was the best option to attend? Let them know the coordinates. The connection prior to the event was very important and influenced the amount of people who attended.

The schedule included a full three-day organization with short lectures on topics such as teamwork, networking, communicating skills, the know-how of entrepreneurship, technical skills using software and hardware as means to innovate, and preparing the elevator pitch. Further on, encouraging networking while choosing an idea to work on. As a result of this we have one-minute pitches and team building.

#### **Third Stage and Fourth Stage**

The third stage includes the follow-up session, where coaches and facilitators contact the attendees to find out how they are doing and encourage them to pursue their project in a real scenario. Besides that, documentation is performed, generating reports and experience communication such as testimonials.

This last stage is the evaluation, which is to find out more about the attendees' background, compare previous versions and learn from them. Data is analyzed using statistical measures such as mean and frequency, for example, to explain more about the subjects, discuss these results and continue with the conclusions.

### 3.2 Materials

Mostly all of the tools used in this paper were supplied by [11], that has a proven worldwide methodology.

Also, we are using three samples of subjects that came from three SWWE, one from 2018, which was first edition named Location 1 with 20 participants; from 2019 we have one second edition named Location 2 with 29 and third edition, Location 3 with 41 participants. The ages of the subjects ranged between 18 and 58 years.

The registration form had eight (8) questions between general information and their job and motivation, as we detail in Table 1. Although there is only one question pertaining to motivation, each subject can select up to five reasons for attending the event. On the other hand, we use location to identify the different editions of SWWE.

**Table 1** Structure of the instrument used in the registration of the Startup Weekend

Questions	Number	Description
General	4	Name, age, ethnic group, highest education level
Job status	3	Profession, Position and Company
Motivation	1	Motivational aspects

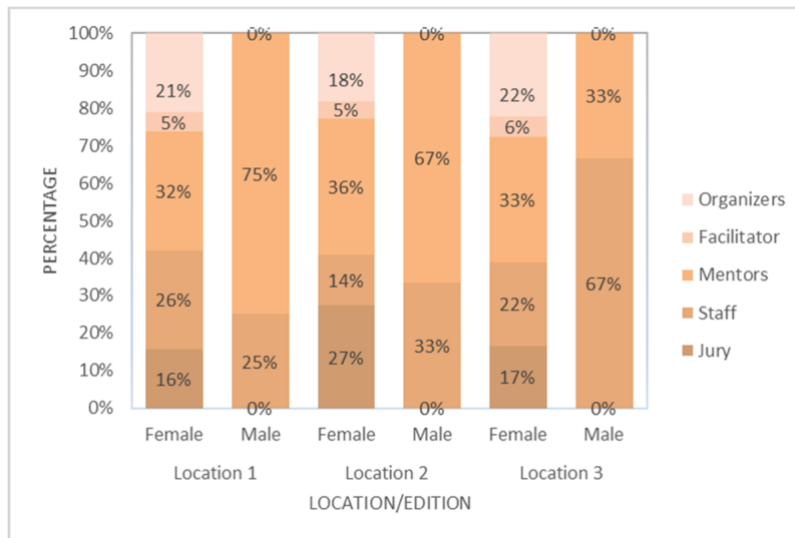
Source: From the authors [16]

Some interesting matters found in this paper, the fact after each edition the organizers evaluated the variables according to aspects related to actual trends in female studies and proceed on updating questions after the first release. As of that three more variables were added, that were considered essential to measure and helped deepen the study of the participants in following SWWE editions.

After collecting the significant data, the information of all three editions was organized and cleaned for the analysis using Microsoft Excel dynamic tables. The visualization planned was with the most appropriate tables and charts, with the intention that readers could understanding the reasons that motivated the girls and women to register as participants of SWWE. Participants were summoned to present from 1 to 6 reasons, of these we decided to analyze the first reasons of all the participants. Additionally, qualitative observations were added to the evaluation of the female participants.

## 4 Results

The main object of this paper is to share the experiences that organizers of SWWE in Latin America had, during the process of inspiring women to create start-ups and learn the exciting world of entrepreneurs. Looking through the organizing team from a gender point of view in the Fig. 1, we can see that the female representation in all roles has been consistent; on the other hand, the male representation was mainly in the mentors and staff roles noting a substantial decrease in mentor roles. The male



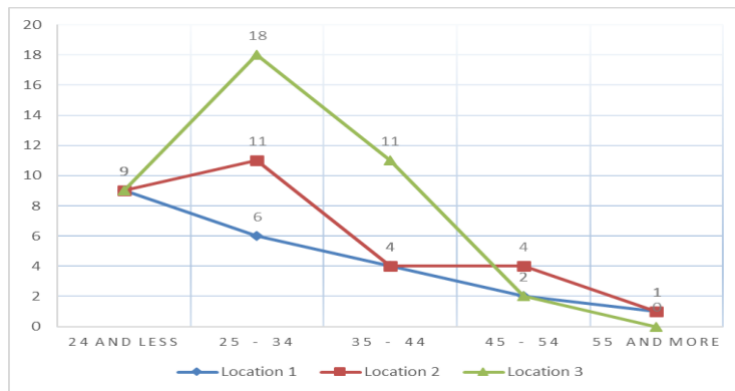
**Fig. 1.** Distribution of the organizing team for the Startup Weekend Women Edition, by role and gender

representation in the first edition, 75% were mentors and in later editions decreased even more, to 33%. In all these topics related to gender, something that we have to make notice is that we cannot disregard the male presence in these types of activities; it is safe to understand that mixed gender wisely controlled in the teamwork structure, increases the effectivity of the outcome [12]. For some, this may seem contrary to our main objective of enhancing in female participants the courage and inspiration, but pursuing an unrealistic scenario, different to the common situations observed in the day by day commercial work environment, could create weak responses in women that ultimately will affect all the effort and time devoted in the program.

In further sections we will be appointing to initial inquiries made at the beginning of this paper, which are related to female participants and their cue motivations.

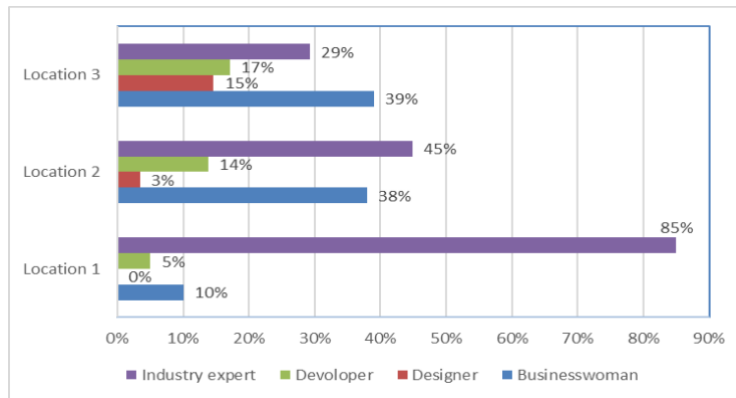
#### 4.1 General Profile of Female Participants

The age group with the most female representation in all three locations were 25 to 34 years and 24 years and less; the least representation was in age group of 55 and more, as you may see in Fig 2. This persistence tells us something about the age group that is more constant and could considered when building the entrepreneur community.



**Fig. 2.** Participants of Startup Weekends by location and age group. Years 2018-2019

On the other had we can see in Location 2 also showed how the number of female participants in the age group 25 to 34 increased. Another characteristic of the analyzed participants was the profession they performed, as we can see in Fig. 3. The trend



**Fig. 3.** Profession of Participants in Startup Weekend Women Edition by location. Years:2018-2019.

professions of participants observed was more variable; in Location 1, 85% were industry experts (people who had technical knowledge of ICT), 5% developers and 10% businesswomen. These numbers in Location 3 showed a better representation in professions, with businesswomen (39%), industry experts (29%), developers (17%),

and designers (15%), this showed how participants of different sectors are mostly interested in seeking to learn as entrepreneurs.

Another characteristic that was analyzed in Table 2 was the ethnicity. Even though one third were non respondents (DNR), it is important to identify by profession, the ethnic group representation. These are some matters related to under representation within entrepreneurs studied by [13], this could be interpreted that it is not only a gender problem but also we could slightly view that there is an ethnic component involved, basically as an identity issue that could be mainly a perception that any recognition could affect their acquired position in the profession chosen. Please note that businesswomen and industry experts, that are leadership roles, appoints the highest scores.

In Table 2, we can also notice that fifty-six (56) were from the Latin group, and four (4) between Asian and Native. The 30 non respondents were not from any of the previous groups and could be considered as mixed-race, knowing the ethnic complexity of Latin American countries [14].

**Table 2.** Participants in Startup Weekend Women Edition, by profession and ethnicity. Years: 2018-2019

Profession	Asian	DNR	Latin	Native American	Total
Businesswoman	0	11	16	2	29
Designer	0	4	3	0	7
Developer	0	5	7	0	12
Industry expert	1	10	30	1	42
Total	1	30	56	3	90

## 4.2 Motivations of Female Participants

Reviewing the overall female motivations, we can list the four most common motivations that were reported: establish a startup, training, networking and learning new skills; this tells us further knowledge, that there is an important female interest, which can be enhanced offering more qualification, more professional contact, more role models, more computer skills development, This last is always more difficult from genders point of view, because in computer or ICT area, women need confidence as in [15] the productive environment, been bias and interrupters have to be implemented. Challenges as simple as these are what women are seeking with SWWE.

As the participants had the opportunity to express up to six responses in motivations items, we studied only the first motivations according to [16] because there is a high possibility that these responses are most satisficing and anchoring, giving us reliable data.



Table 3 shows the results of first motivation registered by the participants, that we consider important identifying. 54.2% of the assistants with bachelor's degree and the 29.2 % with master's were motivated to participate to establish a startup; three quarter

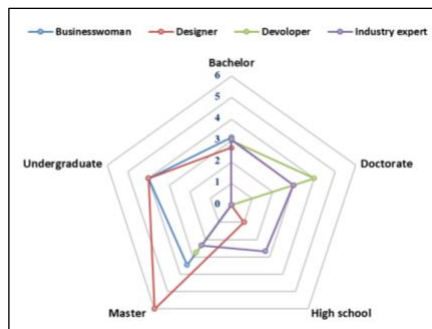
**Table 3.** Results in first motivation of participants of Startup Weekend Women edition. Years 2018-2019

	<b>EaS</b>	<b>%</b>	<b>LNS</b>	<b>%</b>	<b>MaCF</b>	<b>%</b>	<b>EE</b>	<b>%</b>
<b>Highest level</b>	48	100.0%	2	100.0%	4	100.0%	16	100.0%
<b>High school</b>	4	8.3%	0	0.0%	0	0.0%	0	0.0%
<b>Undergraduate</b>	3	6.3%	0	0.0%	0	0.0%	0	0.0%
<b>Bachelor</b>	26	54.2%	2	100.0%	1	25.0%	8	50.0%
<b>Master</b>	14	29.2%	0	0%	3	75.0%	7	43.8%
<b>Doctorate</b>	1	2.1%	0	0%	0	0.0%	1	6.3%
<b>Profession</b>	48	100.0%	2	100.0%	4	100.0%	16	100.0%
<b>Designer</b>	6	12.5%	0	0.0%	1	25.0%	0	0.0%
<b>Devoloper</b>	6	12.5%	1	50.0%	0	0.0%	3	18.8%
<b>Industry expert</b>	17	35.4%	1	50.0%	1	25.0%	7	43.8%
<b>Businesswoman</b>	19	39.6%	0	0.0%	2	50.0%	6	37.5%

Note: EsS: Establish a Startup, LNS: Learn New Skills, MaCF: Meet a Co-founder, EE: Entrepreneur Education  
Source: From the authors

of those with master's degree were interested in meeting a co-founder, while the rest were of bachelor's degree. On the other hand, about receiving entrepreneur education, the most motivated party were those with bachelor's degrees (50%) followed by master's (43%). Continuing with the profession category, for businesswomen and industry experts, the motivations that stood out the most was establishing a startup, meeting a co-founder and receiving entrepreneur education.

The female motivation reflected by the average of reasons to participate, designers with master (6) and developers with doctorate (3) degree showed more reasons for assisting to SWWE. See Fig.4.



**Fig. 4.** Average number of reasons from SWWE participants



**Fig. 5.** Participants of the First SWWE

### **4.3 Qualitative observations**

Being an entrepreneur is the first step to a startup, and participants' attitude led us to believe it, their life changed in 54 hours, Fig 5. After their training, most of the participants get involved as volunteers in future editions presenting experiences, meeting other entrepreneurs, finding new business opportunities and allies. They even begin becoming part of local entrepreneur communities such as “Canal de Empresarias” (local program that provides training and mentoring for women) and AMPYME (Micro, Small and Medium Enterprise Authority), a government institution that provides legal and economic support for small businesses.

The organizers of SWWE are looking forward to help women through the journey of entrepreneurship, teaching the know-how from well-known personalities in the country, sharing all the tools they need to carry out their projects.

As a consequence of these startup weekends, the juries select the three most prominent projects, but all participants receive prizes, such as domain names, credits from several software and cloud solution providers such as Google Cloud, which is a way to motivate people to attend.

## **Conclusions**

Entrepreneurship is a transformation machine and forming a startup community requires the involvement of many actors, such as companies, government, and most important, entrepreneurs. The greatest satisfaction is represented in the number of participants of each edition, that increases its number since there is more awareness among women in the entrepreneur environment; more are people getting involved, wanting to learn the know-how to undertake their ideas in a safe environment, and discover their business potential. When diverse people meet for a weekend to start something that can contribute for the country, there is always inspiration before and after these startup weekends. Future actions should be assessed such as: including females from different ethnicity, women with low income or with a disability, increase the male representation as mentor, and why not as jury, increasing the participation of female at university level that can guarantee a new vision, after academic studies as businesswomen. There is the possibility of analyzing the female confidence, their capacity of risk-taking, and defining in there is a positive relationship with gender. The fact is that the knowledge obtained can support the government policies to sponsor new initiatives, to can keep inspiring any outcome that can boost stronger, diverse, and long-lasting female startups.

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We would like to thank all the girls and women that were encouraged to take the first step as an entrepreneur, through these three editions of Startup Weekend Women, the sponsors: Panama City of Knowledge, Canal de Empresarias and AMPYME, organizers, mentors, facilitators, juries, other actors, and most of all female participants, whose interests are portrayed in this paper.

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