



# Evolution of entrepreneurs' expectations using instagram as a business practice: A transformative learning perspective in the case of sustainable fashion entrepreneurs in Mexico

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## ABSTRACT

Sustainability entrepreneurs act based on expectations about how products will be received by consumers, in which directions markets and demand will develop, or which business models and innovations will prevail. Through their action-guiding function, expectations play an important role in how sustainability ventures develop in and out of niches. However, little attention has been paid to how new communication media, especially increasingly important social media, affect the way entrepreneurs articulate and change their expectations. This paper addresses this research gap using transformative learning theory to examine the communication of Mexican sustainable fashion entrepreneurs on Instagram. We used snowball sampling to select a representative sample of fashion brands operating in the sustainable fashion niche in Mexico. We used a mixed-methods approach: To analyze entrepreneurs' expectations, their use of social media and other learning outcomes, we employed semi-structured interviews. To track the evolution of entrepreneurs' expectations and their activity on Instagram, we scraped content (posts) from their respective brands' pages. Fashion brands in Mexico with business models based on sustainable fashion are a mixture of market-based and grassroots initiatives. Although sustainability concerns drive the ventures of sustainability entrepreneurs, Instagram has played a crucial role in the evolution of entrepreneurs' expectations towards innovation with products and business growth. This change in expectations can be understood as a transformative learning process that underscores different phases, action engagement, disorienting dilemmas and discourse. We contribute to opening and exploring the black box regarding the learning processes in the articulation and evolution of expectations.

## 1. Introduction

Sustainability transitions require the participation of industries, public institutions and incumbents, as well as the active involvement of sustainability entrepreneurs through sustainable innovations and ventures [1,2]. Sustainability entrepreneurs (henceforth entrepreneurs) hold specific expectations about the future and the desired performance and outcomes of their sustainable ventures (henceforth ventures) [3–5]. Guided by their expectations, entrepreneurs test and experiment with their innovations as they seek to ascertain the desirability, feasibility and viability of their ventures [6] and to raise awareness of the broader cause of sustainability [7]. However, in doing so, entrepreneurs' expectations do not remain static; they evolve throughout the venturing process.

The evolution of expectations is a central topic in sustainability transitions and strategic niche management [8–10]. Although commonly re-

ferred to as articulation of expectations, we use the term evolution of expectations instead to denote the dynamic nature and gradual change of expressions over time. Change in entrepreneurs' expectations not only affects the direction of the ventures but also influences the development and trajectories of sustainability niches (henceforth niches) [8,9]. Nonetheless, the evolution of expectations entails communication and learning processes that have rarely been explored from a learning perspective, remaining black boxes [11].

The evolution of entrepreneurs' expectations can be considered a transformative learning process. Transformative learning refers to changes in individuals' meaning structures that guide their thoughts and actions [12]. As individuals act and experience the world, they might face critical events that challenge these meaning structures. They then enter a process of critical (self-) reflection and discourse, in which they revisit and change them [13,14]. In this sense, entrepreneurs' expectations can be understood as meaning structures that are constantly chal-

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lenged, revisited and changed, as entrepreneurs engage in communication and interaction during the venturing process.

Today, part of this process is the use of social media as a business practice, which allows entrepreneurs to improve their communication and business activities [15–18]. Instagram, for instance, is one of the social media platforms most used for businesses purposes: “90% of people on Instagram follow a business; two in three people surveyed say that Instagram enables interaction with brands; and 50% [of users] are more interested in a brand when they see ads for it on Instagram” [19, “Join millions of businesses engaging with vibrant communities”].

As there is little existing empirical evidence concerning the learning processes behind the evolution of expectations, we raise the following research question:

How does Instagram use affect the evolution of entrepreneurs’ expectations and transformative learning?

The topic of expectations has been studied in several contexts such as sustainable energy [9,20], bioplastics [21] and industrial ecology niches [22]. However, other important sectors such as the textile-fashion industry (henceforth fashion industry) have been overlooked despite their relevance to sustainability transitions. Due to the unsustainable production and consumption practices of this industry [23,24], a sustainable fashion niche has emerged, creating space for innovation and venturing. Entrepreneurs, mostly from the global north, have engaged in new business models by incorporating both technological and social innovations (e.g., circular production, cradle-to-cradle materials and supply chain traceability) [25]. However, in other regions of the world such as Mexico, entrepreneurs and venture practices in this niche have not yet been investigated.

Mexico is both a fast-growing fashion market for international fashion firms and an important textile manufacturer for the US fashion market [26,27]. With regard to sustainability challenges, Mexico suffers from high environmental pollution due to the textile industries and maquiladoras, perpetuating poor economic, social and health conditions for workers and communities [28,29]. The growing fast fashion culture in Mexico also leads to a higher rate of clothing disposed of in landfills, justified by reports of increase of textile waste in landfills in low- and middle-income countries due to increased consumption patterns [23]. Nonetheless, a sustainable fashion niche is gaining momentum in Mexico, fueled by dispersed ventures and start-ups led by entrepreneurs who are aware of and want to tackle the sustainability challenges of the fashion industry [30]. Sustainable fashion entrepreneurs represent crucial stakeholders who connect production practices with consumer habits and behaviours among their ventures. For that reason, Mexico was chosen as a relevant context to study the evolution of entrepreneurs’ expectations and their impact on the sustainable fashion niche.

The purpose of this work is to explore the transformative learning process behind the evolution of entrepreneurs’ expectations due to the use of Instagram as a business practice. We focus on Mexican entrepreneurs running small- and medium-sized fashion brands tagged as “sustainable”. We chose Instagram because it is the social media platform with the largest influence on fashion brands’ communication [31]. We will provide a transformative learning model that explicates the evolution of expectations due to the influence of Instagram as a business practice, specifically including (a) a description of entrepreneurs’ initial expectations regarding their ventures and Instagram use, (b) an analysis of learning mechanisms implicated as entrepreneurs use Instagram and (c) the respective change in expectations and other learning outcomes.

## 2. Theoretical framework

### 2.1. The niche of sustainable fashion: properties and business models

The current regime of the fashion industry is one of the most complex economic activities due to the global configuration of the supply chain, which has negatively impacted multiple socio-ecological systems [32]. As a response, a global niche of sustainable fashion has emerged

to transition towards a sustainable industry that optimises the use of material resources and energy, reduces the pollution of socio-ecological systems, and respects human rights through transparent and traceable production-consumption schemes [33].

Although several terms are used to refer to the sustainability dimension of the fashion industry, such as ethical, slow, or ecological fashion [34–36], sustainable fashion is characterised by the following properties:

- Sustainable processes: Low-impact, environmental approach to design, supply of materials, manufacture, logistics, retailing and disposal
- Sustainable materials: Use of raw, natural, organic or upcycled materials (fibres, yarns, dyes, fabrics, etc.) that can be extracted/prepared with minimal environmental impact
- Slow production: Handmade, artisanal production, small batches, timeless collections, production on demand
- Ethical impact: Respect for and appreciation of workers, fair wages, good labor conditions; socioeconomic support for disadvantaged groups, promotion of sustainable consumption, addressing gendered beauty stereotypes, etc.

These properties are translated into specific business models by either large companies or entrepreneurs. 25 [25] identified five major trends in business models with their respective drivers of innovation: circular economy (e.g., recycling, upcycling), corporate social responsibility (e.g., fair trade, locally sourced), sharing economy (e.g., renting, second hand), technological innovation (e.g., sustainable raw materials, zero waste) and consumer awareness (e.g., lowsumerism, slow fashion).

### 2.2. Evolution of expectations as a process of transformative learning

As an innovation emerges to respond to the sustainability challenges of a current regime, it must prove its technical and economic feasibility and its socio-environmental benefits [6,37]. This validation process starts as soon as entrepreneurs formulate expectations around these innovations and their respective ventures. Such expectations can be defined as “a set of cognitive rules that are oriented to the future and related to action, in the sense that they give direction to search and development activities” [8, p. 375]. In this sense, entrepreneurs’ expectations include future personal and collective visions about the success of their ventures and their contributions to sustainability transition. According to the literature, expectations can be classified into two major groups:

- Market-economic: Commercial profits, customer loyalty, brand image, market diversification/expansion [10,38]
- Socio-environmental: Contributing to the common good, creating benefits for local businesses, supporting and informing people about ethical decisions, reducing environmental impact, building awareness, promoting sustainable development and alternative lifestyles [38]

Initially formed as vague promises with a high degree of uncertainty [39], expectations are continuously reshaped in an ongoing learning process as innovations are challenged or do not work as planned [10,9]. This learning process can be explained by the learning selection model [40,41] based on Kolb’s [42] experiential learning model. This learning model shows a cycle of experience, making meaning, drawing conclusions (e.g., changing expectations) and action: Entrepreneurs experience events that challenge their expectations. They reflect upon these experiences and make sense of them. Based on this reflection, they draw conclusions and might change their expectations accordingly. Their new expectations are translated into actions that trigger a new cycle of experience.

The learning selection model resonates with transformative learning theory [43] (see Fig. 1). Expectations constitute part of the meaning structures that determine how entrepreneurs perform and experience

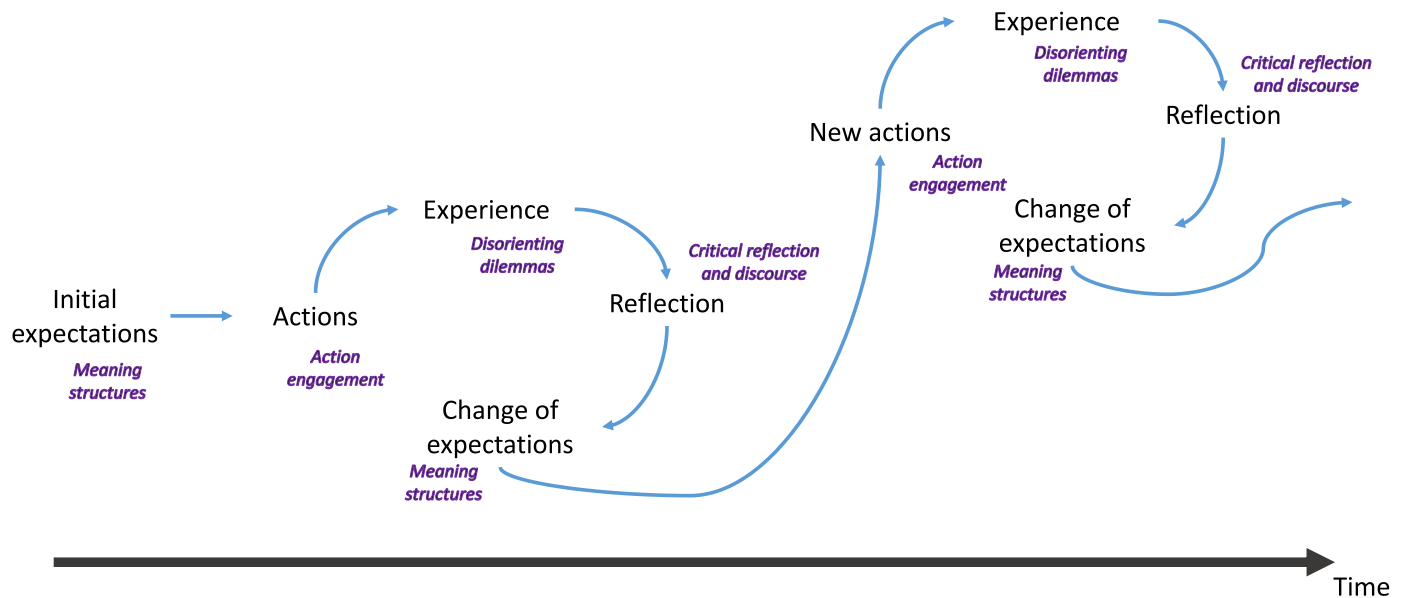


Fig. 1. Model of evolution of expectations, based on the learning selection model [40,41] and complemented with elements of transformative learning theory (words in italics and purple) [43].

the venture; that is, expectations guide their practices and activities in the venturing process [30,44]. Expectations are challenged and confronted as entrepreneurs experiment and test their innovations, causing disorienting moments or dilemmas [45]. To make sense of these moments of discrepancy and contradiction, entrepreneurs enter a process of critical (self-)reflection and discourse [46] in which they examine their meaning structures and expectations, resulting in learning outcomes such as a change of perspectives and expectations [47].

### 2.3. Social media in strategic niche management

Communication is inherently involved in articulating expectations because it constitutes a dialog between stakeholders that enables the formation of networks, contributing to the acceleration of sustainability of transition processes [48,49]. The emergence of social media (e.g., Twitter, Facebook, Instagram) is changing how sustainability is communicated [50]. Social media encompasses online communication platforms that allow massive distribution of and interaction about information and knowledge with minimal time delays and at a low cost [51]. Like any social media, Instagram is a social network of users constituted not only by individual people but also by companies and institutions. Instagram attractiveness relies on engaging users through posts in the format of images and videos [52]. Users follow each other to see each other's posts. They interact through functions such as likes, comments and private messages [31]. Today, many businesses are using Instagram to locate potential customers and promote products and services through content creation [53].

When entrepreneurs create social media content, they introduce features of their innovations and new business models or even disclose their working environments [54]. Moreover, by interacting on social media, entrepreneurs infer users' purchasing practices and influence consumption behaviours through strategic communication [55]. Social media extends communication about niche innovations, bridges knowledge between niche and regime actors, and helps constitute social networks, which ultimately leads to the visibility and diffusion of the niche [10]. Social media re-contextualises niche innovations and reframes their application and use in other local or national scenarios [10]. This is where local sustainability entrepreneurs play an essential role in translating the use and benefits of specific innovations and connecting global and local actors. Furthermore, social media influences processes such as form-

ing opinions, understanding information, articulating expectations, and changing actors' perceptions [7,10]. From a transformative learning perspective, social media might be seen as an area for critical reflection and discourse as "people construct meaning and make sense of the information they encounter" [10, p. 3]. In this context, discourse encompasses sharing, challenging and validating viewpoints that could lead to a change in frames of reference, meaning structures and expectations.

As entrepreneurs participate in the sustainable fashion niche through various business models and innovations, they develop certain expectations that are likely to change and evolve during their venturing process. While social media, specifically Instagram, represents a new method of business practice for entrepreneurs, given its features, its influence in processes of articulation and evolution of expectations as a transformative learning process remains unknown.

## 3. Research methodology

Given the lack of previous research on entrepreneur expectations in the fashion industry, we employed an exploratory research approach for this study. We used a mixed-methods research design (see Fig. 2) to (a) estimate the population of sustainable fashion brands in Mexico, (b) identify an appropriate sample and (c) collect data through both quantitative and qualitative methods.

### 3.1. Sampling

As there is no official account of how many sustainable fashion brands in Mexico exist, we estimated the size of this population with snowball sampling through social media. Traditional snowball sampling permits access to hard-to-reach or unexplored populations [56,57] and consists of approaching subjects whose names or information have been given by previous informants or initial seeds [57,58]. However, this technique is constrained by material and time obstacles [57]. Therefore, an alternative approach is snowball sampling with online tools. Snowball sampling through social media does not require asking subjects about other potential subjects' information and makes the identification of social networks easier. Nonetheless, to date, this technique has mainly been used for sample recruitment purposes [59].

Our exploratory approach made it necessary to select a feasible set of theoretically defined cases to investigate the phenomenon in greater

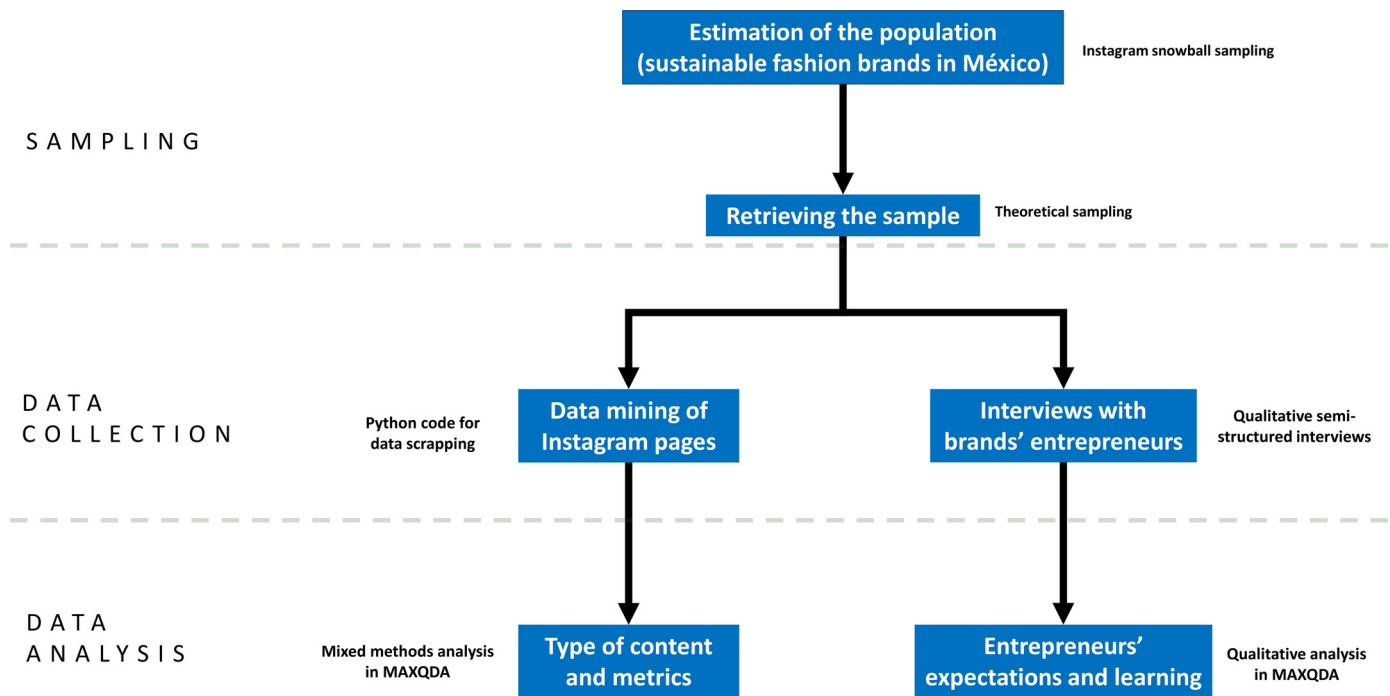


Fig. 2. Research methodology.

depth qualitatively. We began the snowball sampling with two initial seeds, namely two fashion brands identified in Rodríguez Aboytes and Barth's study [30]. Using the grid view of each seed's Instagram page, we screened the posts whose date of publication ranged from January 1st 2019 to October 29th 2020, in order to identify those posts whose cover image contained phrases related to the sustainable fashion properties described in Section 2.1. Then, we located other brands that were tagged in those posts (see Fig. 3) and collected the brands' names for an inclusion/exclusion criteria selection. We excluded brands that did not operate in Mexico or focused primarily on accessories such as jewelry, home textiles or second-hand or vintage clothing. The remaining brands were included in a preliminary sample and functioned as new seeds. The identification of brands from the initial seeds corresponds to iteration 1. We ran five iterations in total, which led to a preliminary sample of 82 brands (see Appendix A for a detailed description of the snowball sampling procedure).

We imported all the brands' general descriptions from three sources (i.e., Instagram, Facebook and brand website) to MAXQDA and reduced the preliminary sample to 59 brands by excluding those brands that did not fulfill the attributes of sustainable fashion (see Section 2.1). We further refined the sample by focusing on one aspect that characterises brands' business models in the niche of sustainable fashion: the supply of materials. To this end, we only included brands that explicitly showed on their social media and website that they were mostly using sustainable materials (fabrics, threads and dyes), regardless of if they were focusing on aspects of slow or ethical fashion. The resulting sample, that is, the sample universe, consisted of 37 brands.

To arrive at a final set of brands for data collection, we grouped the 37 brands according to the type of clothing they produced and the business model according to their material obtainment: either by self-upcycling clothing waste or via an external supplier. These two dimensions are key to inform the theoretical sampling. We show this classification in Fig. 4, highlighting the iteration from which the selection of brands resulted.

To achieve the aspired depth in the analysis, from each group in Fig. 4 (type of product, business model), we selected the brand with the highest number of followers on Instagram and added it to the fi-

nal sample, as we consider the number of followers a criterion of group representativeness. If the brand's founders did not consent for data collection (interviews) or were unavailable, we chose the next brand with the most followers. In the case of footwear with an upcycling model, no brands were available. The final sampling resulted in ten brands (see also Fig. 4).

### 3.2. Data collection

We collected both qualitative and quantitative data using semi-structured interviews and data scraping as two complementary methods. The latter has become a valuable method to gather and collect high volumes of data from digital web platforms through automatised search and data collection routines [60]. Qualitative interviews allow collecting information based on the particular perspectives of subjects who participate in a given phenomenon [61].

We first scraped all content (the first post the brand ever published to the last one until December 14th 2020) from the ten brands' Instagram pages using an algorithm programmed in Python (see Appendix B). We extracted and downloaded each post link, its description, the date it was posted and its number of likes. We then conducted semi-structured interviews in Spanish with the entrepreneurs who founded their respective brands (see interview guide in Appendix C). Interviews lasted between 30 and 60 min and were recorded and transcribed. The interview data were not translated for the analysis.

### 3.3. Data analysis

We performed a content analysis of the Instagram data [62] in MAXQDA, where each brand represented a document group containing each Instagram post as a single document. We proceeded to code inductively both each post's content (photo or video) and its description (omitting hashtags) in each document. The number of likes was introduced as an integer variable (see Fig. 5). In this way, we developed a category system where each category represented a specific type of content. A single document (post) could have more than one type of content; different categories were assigned to different segments

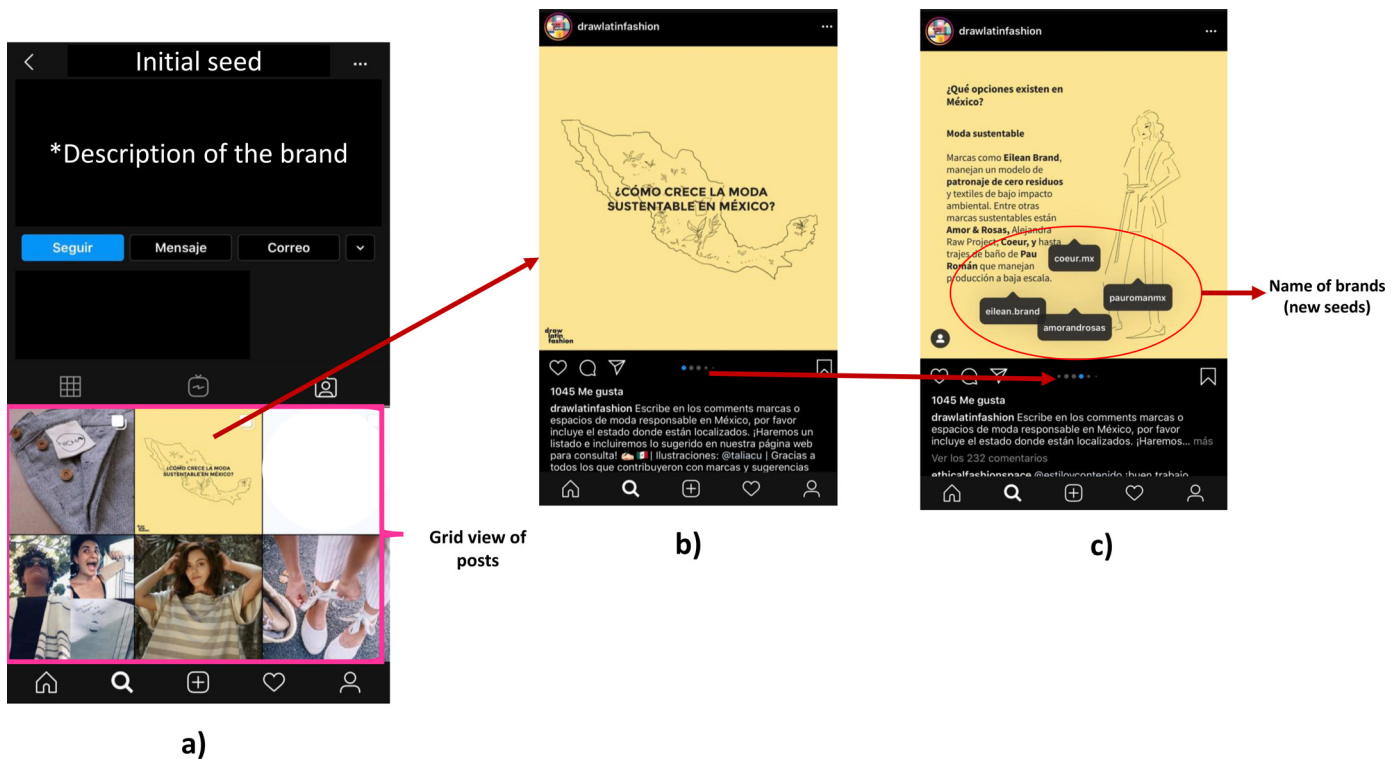


Fig. 3. Representation of the snowball sampling procedure with Instagram: (a) grid view of the seed's Instagram page, (b) cover image of a post<sup>1</sup> with a phrase related to sustainable fashion, "How does sustainable fashion grow in Mexico?" (translated by the author), (c) brands tagged in the post. Source of the post: drawlatinfashion (2019).

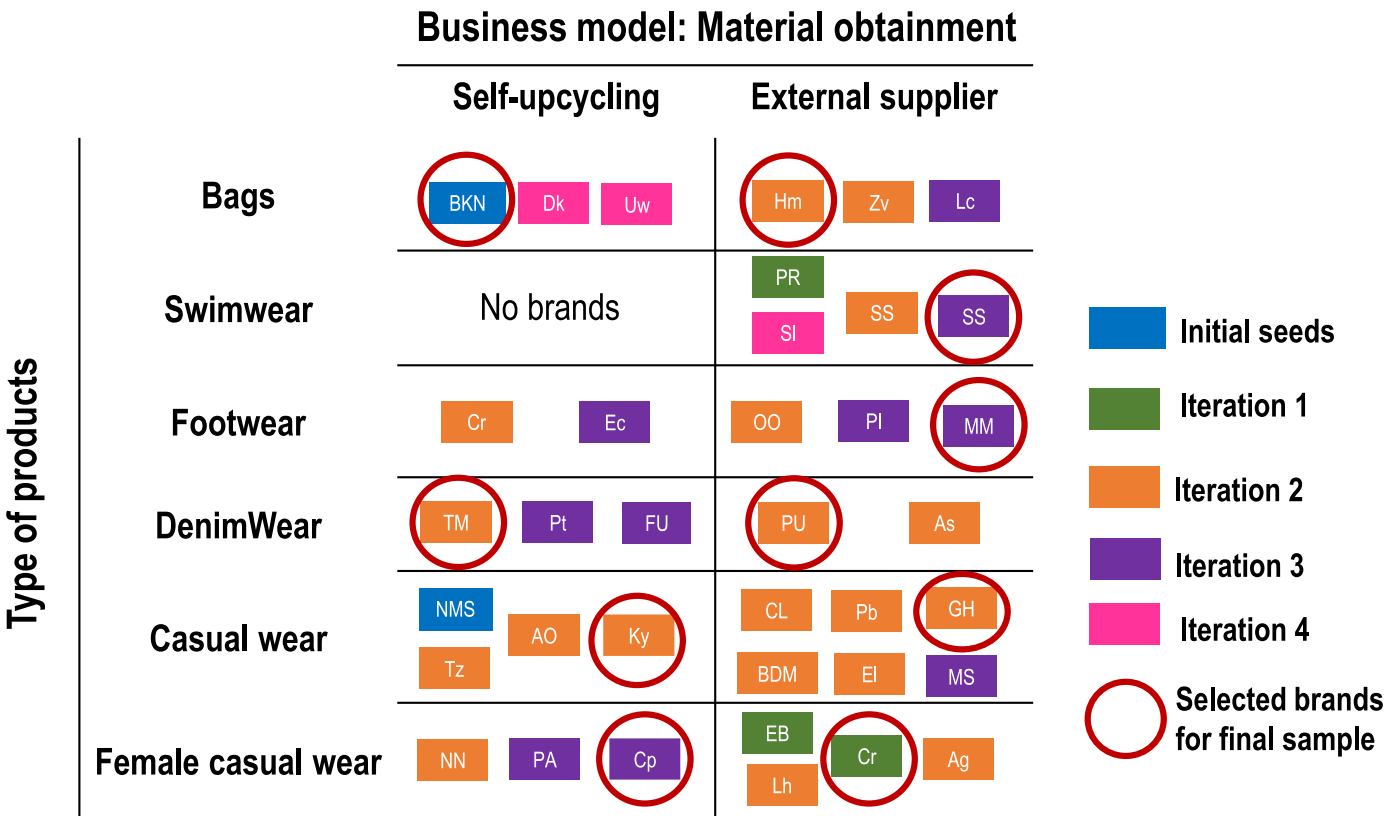


Fig. 4. Classification of sustainable fashion brands population ( $n = 37$ ) and selection of brands for the final sample ( $n = 10$ ).





Fig. 5. Example of an Instagram post<sup>1</sup> and the elements that were considered for analysis.

within a single document (see Appendix D for the category system of the posts). For interview data, we ran a preliminary deductive coding derived from the main topical areas of the interview guide. This deductive coding allowed us to organize preliminary data into three sections, namely initial expectations, use of Instagram, and current expectations and learning outcomes. Again using MAXQDA software, we grouped the entrepreneurs' initial venture expectations into the categories described in Section 2.2 (i.e., socio-environmental and market-economic). From there, we derived specific themes inductively. Separated from the initial venture expectations, we also inductively derived themes regarding expectations about the use of Instagram. For this second section of the data, the use of Instagram, we performed inductive coding to identify common categories. We again used the categories in Section 2.2 to classify the entrepreneurs' expectations and identified themes inductively. We coded the learning outcomes inductively, although we realised that they appeared throughout all the data in no specific chronological order (for the detailed category systems from the interview data, see Appendix C).

#### 4. Findings

The structure of this section is derived from the preliminary organization of the data. In the first subsection, we present the entrepreneurs' initial expectations regarding both the venture and the use of Instagram. In the second subsection, we present the ways in which entrepreneurs use Instagram as a business practice. This subsection combines findings from the data analysis of the interviews and the content analysis of the brands' Instagram pages. In the third subsection, we show the evolution of entrepreneurs' expectations and the associated learning outcomes. To

refer to the interview excerpts, we use the prefix e- in the code names of the brands. All the excerpts were translated into English by the authors.

##### 4.1. Initial expectations

We grouped entrepreneurs' initial venture expectations into socio-environmental and market-economic expectations. For our purposes, the former type of expectations refers to raising awareness about the impact of the fashion industry, fostering sustainable consumption, and contributing to solving social or environmental problems.

"My idea was not to sell the backpacks; it was more like reaching people by telling them that they could do other things with the clothes they discarded, that they actually were not garbage yet. It was not necessary to dispose of them immediately." (e-BKN)

The latter type of expectations refers to profit-making and achieving market success by offering high-quality products that can compete against those from conventional fashion brands.

"So I basically wanted to reuse and take advantage of all the [recycling] processes. I mean, at the end of the day, all this is a business. So, it's about how I can have economic raw material and at the same time quality raw material to lower my costs and to be able to present it in something that is of greater value, to add our value to it and that has quality." (e-TM)

In general, entrepreneurs held both types of expectations, although there was a slight tendency to prefer socio-environmental ones. There was no difference in the types of expectations according to material obtainment (by self-upcycling or by external supplier) nor type of product. However, holding both types of expectations was troubling for some entrepreneurs.

"For me, to get the idea that we are a sustainable brand, it's difficult, that's why I don't like to trumpet myself in that, because as we have already said, it's difficult for your whole process to not affect the environment in some way." (e-MM)

Since almost the beginning of their ventures, most of the entrepreneurs have used Instagram as a business practice. They view this social media platform as a sort of requirement, not only for positioning their brands in the market but also for societal impact. Today, an Instagram account is vital for the existence of their brands.

"There are already many brands that no longer even have pages; they have Instagram. In the past, if you didn't have a website, you didn't exist. Now, if you don't have Instagram, you don't exist. I think that more than being an advantage, it is already a requirement for any brand." (e-Hm)

In this sense, entrepreneurs' initial expectations were channeled to the use of Instagram for their brands. We identified four types of expectations regarding Instagram: retailing efficiency, communicating sustainability, showing the brand's processes and transmitting positive messages.

For most entrepreneurs, Instagram is the main window to show their products and innovations and connect with users from different places. Since Mexican entrepreneurs face many economic barriers in their journeys [30], Instagram provides an efficient method of client acquisition and retailing; entrepreneurs utilize Instagram to optimise resources by not having a physical retailing location or even by not maintaining a website.

"[Instagram is] a free platform where you can show your work. So, it was easy for me to open my Instagram and start uploading photos of my products. And I caught clients from there. So I think it was like ... [that] the first approach that I had with my clients was through this network." (e-Ky)

Moreover, communicating sustainability aligned to entrepreneurs' socio-environmental expectations. Entrepreneurs wanted to make people conscious of the value of clothing and encourage them not to buy the cheapest garments produced under fast-fashion models. Through their brands, entrepreneurs wanted to show that they were not only selling clothing but also contributing to solving problems in the fashion industry, more than a mere greenwashing strategy.

"You must have 100% coherence and congruence with what you do because if you doubt a little, you fall into greenwashing, and people no longer buy your story. We really have to fall in love with this problem that we are trying to solve, which is the pollution of the fashion industry, and be able to teach these people that we are truly committed to solving this problem." (e-GH)

In addition to these expectations, entrepreneurs also wanted to show the brand's production processes and transmit an inspiring brand image. Entrepreneurs mentioned that Instagram offered the opportunity to show users what occurs behind the scenes of the brand and to go beyond the superficial representation that conventional fashion brands project.

"Being transparent with them, that they understand what we do with the brand, all the sustainable part (...) We engaged with Instagram not only to promote products but also to give users a bit of positivity, not being so superficial." (e-PU)

Therefore, entrepreneurs' venture expectations are better understood in the context of their aims regarding the use of Instagram as one core venture practice.

## 4.2. Use of Instagram as a business practice

The use of Instagram as a business practice encompasses two main activities: content creation and interaction with users. During these activities, entrepreneurs experienced learning processes that changed their initial expectations.

### 4.2.1. Content creation

Content creation refers to "brand-initiated marketing communication on [the brand's] own visual social media account. Advertising and brand-generated visual content share commonalities as both contain visual and textual message elements and are produced by brands" [63, p. 22].

We identified five predominant types of content (not mutually exclusive) created by entrepreneurs:

- Product features: Posts showing the garments (frequently worn by models) and describing their features
- Advertising: Posts with information on the availability and shipping of items and special offers and events related to the items
- Inspiration: Posts with an explicit message of inspiration, often combined with elements of art, nature and architecture
- Sustainability: Posts with information and reflections about the environment, nature and sustainability
- Transparency: Posts where brands show the processes behind the products, the people involved, collaboration with other projects and retailing experiences
- Other: Posts referring to the personal experiences of the entrepreneurs or founders are shown and shared, including their motivations. Posts also referring to the crisis by the coronavirus pandemic

We observed that the type of content on the brands' Instagram accounts changed over time. A general pattern was that sustainability content decreased while content related to product features and advertising increased (see example in Fig. 6).

This change in the type of content created is also corroborated in the interview data. Some entrepreneurs mentioned changing the type of content they create as they observe the impact their content generates. Entrepreneurs evaluate this impact through metrics such as the number of likes, comments, shares, etc. For instance, some entrepreneurs realised that posts were not targeting the intended users, that users were reacting in a defensive way to some messages, or that the sustainability aspect of the brand and products was not the center of attention.

"We get many more likes in posts where the model is showing her body than in others where there is a fish caught in a net (...) I feel that we have to learn to integrate better the message, that a swimsuit is recycled as the model is showing it; otherwise, people do not pay much attention to it." (e-SS)

As the above statement shows, some entrepreneurs reflect upon their experience and draw conclusions about it. In some cases, entrepreneurs adapted their practices to prevent these kinds of experiences.

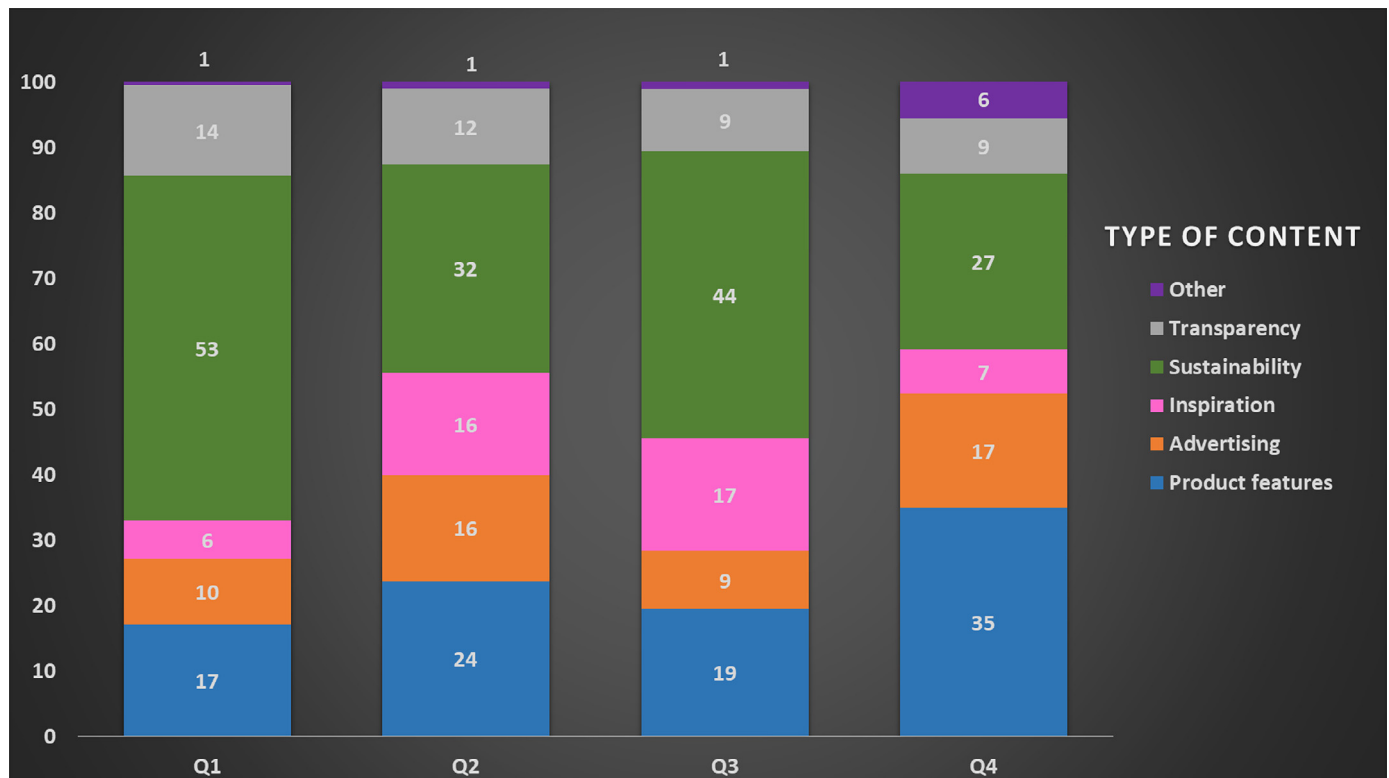
"I admit that I talk a lot about the design [of the backpacks], how they can be used, which parts are kind of hidden (...) because I feel that I bore people when I tell them that the backpacks are made of used clothes." (e-BKN)

We found no evidence in the data that the variation of content was due to the pandemic. Since there are very few posts overall that refer to any aspect of the pandemic, it can be concluded that the coronavirus pandemic had a direct effect on retailing and consumption practices i.e., closing of physical stores and increasing of online retailing, where fashion brands are more proactive to adapt and innovate [64].

### 4.2.2. Interaction with users

Entrepreneurs interacted with users in two ways: (a) inquiry about product features, price and retailing and (b) feedback about products and content on Instagram. Entrepreneurs interact with users mainly via the Instagram private messaging feature and seldom directly on posts or through features such as Instagram live videos. One key aspect regarding feedback is that some entrepreneurs include users' opinions and ideas in their design and production processes.

"That is something that I have done a lot from the beginning, to do it a bit collaboratively and that is because the people who are clients of the brand, many of whom have become friends, so to speak, have felt



**Fig. 6.** Distribution of the type of content on GH's Instagram page, showing a decrease in sustainability content and an increase in content related to product features and advertising (see the distribution of all brands in Appendix D) \*We divided the number of posts on each brand's page into four equal parts based on the date they were posted. Q1 represents the first 25% of the published posts; Q2, the second 25%, and so on until Q4.

free to express their opinions and give their feedback or so, what would they like. I like that a lot." (e-Cr)

Moreover, their constant interaction with users allows entrepreneurs to better understand their preferences.

"That has also been very cool, to change according to what the consumers like within our own preferences. They have shown us what they like, which is also cool in networks that you can observe." (e-PU)

Although entrepreneurs frequently mentioned that they have received positive feedback regarding their products, others have started to be more critical of their products and designs.

"I think that I do need to be more critical because I get carried away with thoughts like 'oh well, what I'm already doing is fine, it doesn't need improvement'; but when users say 'hey, but you should do this and this' I do a review of the design or the quality of the materials, and I change them." (e-BKN)

In general, we see that the two activities that constitute the use of Instagram have different implications for changing expectations; however, together, both play a significant role in the evolution of expectations.

#### 4.3. Evolution of expectations

From the use of Instagram as a business practice, entrepreneurs' venture expectations have evolved over the course of time and oriented more towards innovation with products and business growth. Innovation with products entails enhancing design and product features, diversifying products and experimenting with new materials and designs. Regarding the business growth expectation, entrepreneurs mentioned that they aim to increase production and expand their selling points and distribution nationally or even internationally.

"We want to expand, to introduce in different countries the possibilities that denim has in terms of sustainability, and through social networks reach more people, put different selling points and create more relationships." (e-PU)

Entrepreneurs have become more competent in the management of Instagram for their ventures. They can now understand and make use of (a) paying services within Instagram to make their content and brands more visible and (b) the role of influencers in attracting new users. Moreover, entrepreneurs have learned how to segment the market, which is refining the groups of users they are targeting. Other entrepreneurs have also learned to improve their customer service, especially considering that they are usually retailing via Instagram and seldom physically.

"Whether they send us an email, in the webchat, here or whatever, I always like to make it very personalised, from, 'What is the problem?' 'How can we help?' Whatever and transfer it in social media... I think that is what I have learned." (e-Cr)

Expectations regarding Instagram aligned to the aforementioned expectations and learning outcomes. Now that entrepreneurs possess more insights regarding social media management, they aim to make the most of the different options Instagram offers to reach wider audiences.

"I plan to stay always on Instagram, growing this community and taking advantage of all the tools that Instagram has. I also want to continue experimenting with [these tools] because it generates more visibility to an audience that has not been following yet." (e-Cp)

At the same time, entrepreneurs also aim to create more sustainability content. In particular, most entrepreneurs who were driving their ventures primarily based on market-economic expectations realised that, since Instagram is one of the most popular social media platforms, it has the potential to communicate and raise awareness about the main issues of sustainability.

"If people are on their cell phones all day, especially on Instagram, what if more information appears to them, information about the fact that the world is ending, that it is real. Yes, with this urgency and concern to do something, to create awareness, to provide more information about it. In this way, I would like to grow MM to more than just a sales platform." (e-MM)



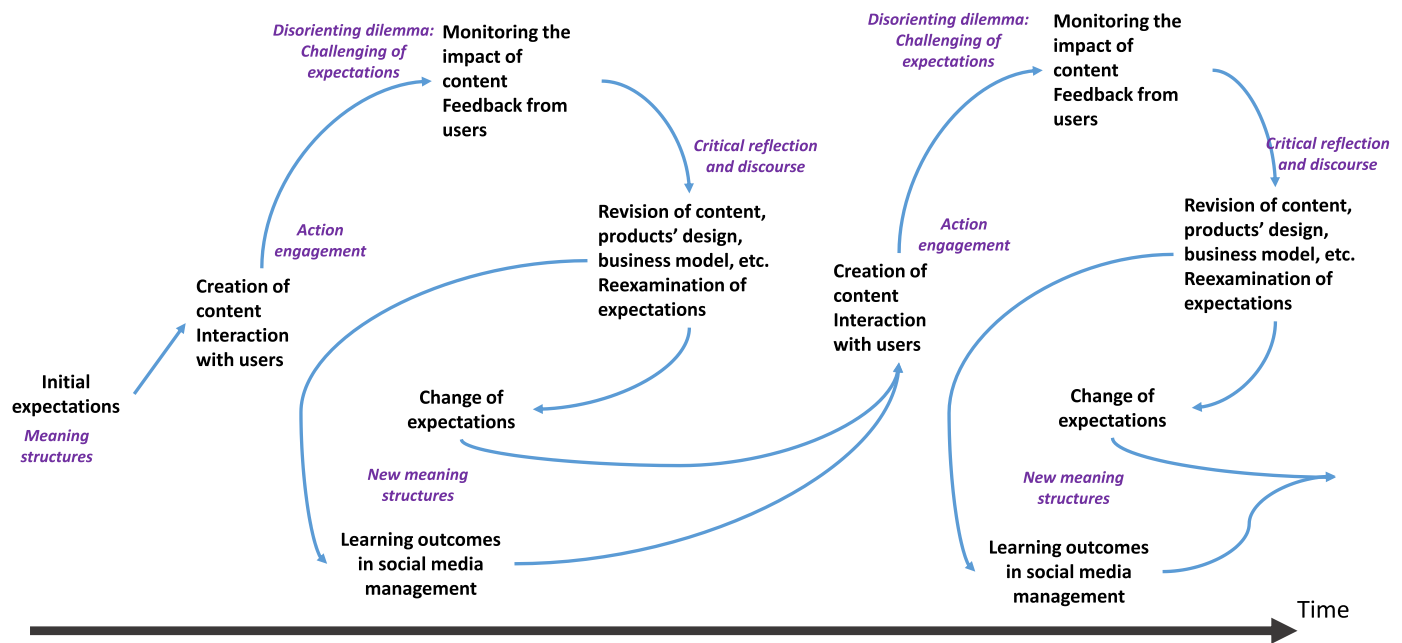


Fig. 7. Transformative learning model of the evolution of expectations using Instagram as a business platform.

## 5. Discussion

Drawing from the learning selection model [40,41], we propose a model (see Fig. 7) that illustrates the transformative learning process behind the use of Instagram as an essential practice affecting the evolution of entrepreneurs' expectations. In this model, entrepreneurs, guided by specific initial expectations, engage in activities on Instagram (content creation and interaction with users). By monitoring the impact of their content and receiving feedback from users, entrepreneurs' expectations are challenged and confronted, entering a state related to disorienting dilemmas, as stated in transformative learning. Entrepreneurs then reflect upon this experience by revising their content, product design and business model and re-examining their expectations. As a result, entrepreneurs modify their expectations and enter a new cycle, which continues as long as they employ Instagram as a business practice.

The main features of this model are prior learning, experimentation, disequilibrium and reflection, four essential components of transformative learning processes [14]. When referring to entrepreneurs' expectations, we are discussing meaning structures that guide their actions. We can infer from our findings that entrepreneurs generally focused on two major aspects of their brands: market-economic and social-environmental. Although entrepreneurs held both types of expectations, this differentiation allows us to understand that they approached the sustainable fashion niche as a combination of market and grassroots ventures [38]. We underscore the importance of studying initial expectations in strategic niche management processes, as these expectations define the nature and type of ventures, as well as the way entrepreneurs experience and act in the ventures [30,44]. This will allow us also to understand the diversity of ventures, business models and practices in sustainability niches.

It has been argued that experimentation and testing products are crucial in the strategic management of sustainability niches [65], but these arguments originated in an era before the explosion of internet applications such as social media and e-commerce. Today, especially considering the social restrictions posed by the coronavirus pandemic, Instagram has become fundamental to the survival and operation of these fashion brands. In this sense, entrepreneurs' expectations gained a new meaning. Instagram is not only a virtual space for market experimentations allowing entrepreneurs to scale up and promote their innovations; it is also

a powerful tool that contributes to changing actors' perceptions [7,10]. Therefore, when discussing expectations in sustainability transitions, we should consider expectations regarding the use of social media.

It is commonly assumed in strategic niche management that learning occurs by doing, experimenting or similar methods [11]. With the use of social media, learning by doing has gained a new dimension. It is not only a matter of testing and innovating with products; it concerns testing how to attract users and influence their perspectives about sustainability. Content creation and interaction with users are two fundamental actions in this regard. Content creation can appear to be a trivial activity but is the primary action of entrepreneurs on Instagram, even before interaction with users. Content through posts functions as a dialogical element around which entrepreneurs and users interact. Without content, there would be no interaction. Therefore, most entrepreneurs' expectations and efforts are oriented towards content creation.

Although action engagement, expectations disequilibrium, critical reflection and discourse are analytically distinct, they occur almost simultaneously. Once the content is created, users can see it, react to it, comment on it and further inquire about its message. Contrary to the classic criticisms of transformative learning as a purely individual process, transformative learning inherently entails a social component. In other words, expectations are challenged or confronted by others.

Challenging expectations is related to the concept of disorienting dilemmas in transformative learning. This disequilibrium episode occurs as soon as users react or do not react to a certain type of content. In our findings, we saw this with sustainability content. The metrics of the number of likes, shares and comments on posts are indirect interactions between entrepreneurs and users. The disequilibrium of expectations also occurs during virtual but direct interaction with users through private messages, either through online retailing activities or users' feedback. In both situations, the disequilibrium in expectations occurs because of users.

The phases of critical reflection and discourse are manifested when entrepreneurs revise their content and re-examine their expectations. Critical reflection is an intrapersonal process, while discourse is a social one. Both complement and begin from the disequilibrium of expectations. These are the key moments where expectations change. Although these moments do not occur in intentionally and purposefully designed situations, we can infer these moments from entrepreneurs' expressed

moments of making sense of their disequilibrium experiences. The discourse phase could even begin as entrepreneurs interact with users. Discourse aligns directly with the processes of validating expectations through users' acceptance of content and products and making sense of users' demands.

Overall, entrepreneurs' venture expectations have evolved and oriented more towards market growth and expansion, diversification of products and better organisational management. This is clear in the evolution of the brands' Instagram content, focusing more on product acceptance and advertising and less on sustainability. What we found resonates with the findings of Kuckertz and Wagne[66], who indicated that sustainability expectations in entrepreneurs "vanishes as business experience is gained" (p. 535). However, we argue that these expectations are not forgotten completely; they are latent, but the focus shifts to market-economic expectations.

What is a possible explanation for a stronger focus on market-economic aims? York and Venkataraman [67] explain that the future value and contribution of environmental innovations are uncertain, which pushes entrepreneurs to place their economic expectations at the forefront and seek market acceptance through social media [68]. In this sense, we suggest that entrepreneurs have oriented towards market validation and as a way to achieve symbolic legitimacy [69,70].

Moreover, based on van Lente and Bakker's [71] model of expectations phases, we argue that the evolution of entrepreneurs' venture expectations results from a tension between sustainability contributions and market acceptance. In the beginning, entrepreneurs want to positively impact the environment and society by communicating about sustainability topics, especially the impacts of the current fashion regime, and posing their products as sustainable alternatives. However, as the venturing process begins, sustainability expectations compete with product acceptance, market positioning and profit expectations. Since Instagram is a social media platform that has evolved to function primarily as a business platform, the improvement of entrepreneurs' skills in managing this platform may have influenced their orientation towards market-economic expectations.

By proposing our transformative learning model of the evolution of expectations, we highlight that social media plays an essential role in the development of innovations, business models and sustainability niches. We argue that entrepreneurs use social media not only to align their expectations with users' preferences but also to build up social networks [6,10]. Instagram is indeed a social network of users, incumbents and other actors that transcends physical and geographical scales. As social networks develop, entrepreneurs' expectations become more robust and impactful in expanding the niche, attracting new actors and generating trust in users [20,22,72].

## 6. Conclusions

What can we learn from this research, and what are the next steps for practitioners? We have contributed to sustainability transition research by empirically exploring how the evolution of expectations, as a transformative learning process, occurs with social media, i.e., Instagram, as a business platform. We propose a model that shows that the evolution of expectations fundamentally entails a transformative learning process. Investigating the evolution of expectations is vital for understanding how sustainable niches evolve and elucidating how processes of articulation of expectations take place.

From our research, we can see that the sustainable fashion niche in Mexico is in a phase of market acceptance, influenced by the booming e-commerce. While it was initially concerns about sustainability that spurred ventures by sustainability entrepreneurs, Instagram has played a critical role in advancing these expectations of entrepreneurs toward product innovation and business growth; however, with this comes the risk that socio-environmental expectations may be eclipsed as market penetration increases. This has important implications for sustainability transitions, as the early formation and development of a sustainability

niche do not lead automatically to a sustainable regime. Therefore, it is urgent to develop a research agenda for a strategic management of sustainability niches in Mexico and the Latin American region to guide these transformation processes. A better understanding of articulation of expectations as a learning process will facilitate conditions that support the transition towards a sustainable regime through learning interventions in the form of training and mentoring programs for entrepreneurs that help them manage and assess their expectations. Policy strategies that give institutional support and legitimacy to entrepreneurs' ventures and learning intervention are also essential.

Social media, especially Instagram, has been growing in attention not only in research in marketing studies but also in the sustainability field [see, for example, 31,53,73]. Our research provides an example of the potential use of social media in combination with qualitative and quantitative methods to explore phenomena in various sustainability areas. We recommend social media as a valuable research tool to explore unknown populations of initiatives or enterprises in sustainability niches.

We acknowledge the limitations of this paper: We have likely neglected brands and enterprises that were not mentioned in the Instagram posts or outside social media. The evolution of users' preferences and practices regarding sustainable fashion in light of the evolution of entrepreneurs' venture expectations is out of the scope of this work. Our study is exploratory rather than conclusive. We have only grazed the tip of the iceberg regarding the connection between strategic niche management, social media and transformative learning. Future research is needed to explore (a) the change of users' expectations and preferences about sustainable fashion through social media; (b) the application of niche experiments with social media as a tool for monitoring the learning processes in strategic niche management; and variation of social media usage and consumption practices in the sustainable fashion niche after two years of coronavirus pandemic.

## Footnotes

1. Source of the post: Drawlatinfashion [@drawlatinfashion]. (August 20th, 2019). Escribe en los comments marcas o espacios de moda responsable en México, por favor incluye el estado donde están localizados. [Image].Instagram. [https://www.instagram.com/p/B1Y\\_91LJip6/](https://www.instagram.com/p/B1Y_91LJip6/) (last date accessed 30/08/2021)

## Declaration of interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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## Supplementary materials

Supplementary material associated with this article can be found, in the online version, at [doi:10.1016/j.wds.2022.100005](https://doi.org/10.1016/j.wds.2022.100005).

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