

# Narratives, Social Image, and Entrepreneurship in Developing Countries

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# Motivation



**Nathan Baugh** @nathanbaugh27 · Sep 30



Nike sells greatness, not clothes.

RedBull sells adrenaline, not drinks.

Polaroid sells memories and nostalgia, not cameras.

Shopify sells the dream of entrepreneurship, not websites.

The best brands sell stories, not things.



107



817



4,635

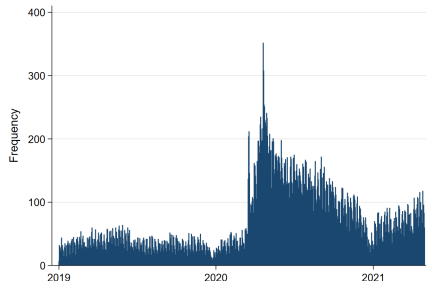


# Motivation

- ▶ Narratives are a central building block of human societies (Michalopoulos and Xue 2021)
- ▶ Cognitive psychologists argue that humans employ narratives to make sense of the world (Bruner 1991)
- ▶ Economists only recently began paying attention to the impact of narratives on economic outcomes (Bénabou et al. 2018; Shiller 2020; Gibbons and Prusak 2020; Michalopoulos and Xue 2021; Goetzmann et al. 2022)
- ▶ We know very little about the role of narratives in entrepreneurship
- ▶ In particular, **are narratives —the stories that entrepreneurs tell about their companies— an effective market strategy?**

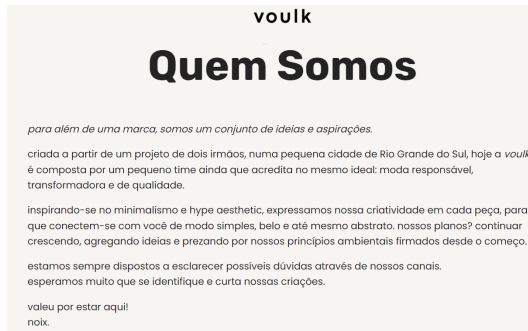
## Our Focus: Online Entrepreneurs in Latin America

- ▶ E-commerce is a rapidly expanding sector in Latin America and the rest of the developing world
  - ▶ Driven by growing Internet and mobile phone penetration
- ▶ The COVID-19 pandemic accelerated this process
  - ▶ E-commerce revenue more than doubled between 2017 and 2020



Daily creation of e-commerces in Argentina through a major platform

# Narratives in Online Entrepreneurship: The “About Us” Section



*“Beyond a brand, we are a collection of ideas and aspirations. Created from a project by two brothers in a small town in Rio Grande do Sul, today Voulk is composed of a small team that still believes in the same ideal: responsible, transformative and quality fashion. Inspired by minimalism and hype aesthetic, we express our creativity in each piece, so that they connect with you in a simple, beautiful and even abstract way.”*

# A Research Agenda

- ▶ We seek to study whether narratives are an effective market strategy
  - ▶ What topics do entrepreneurs focus on — and what determines that choice?
  - ▶ Do narratives matter for firm performance — and why?
  - ▶ Are narratives and reputation strategic complements or substitutes?
  - ▶ What is the interaction of narratives with trust?

# The Data

- ▶ We build on a collaborative relationship with one of the largest platforms for e-commerces in Latin America
  - ▶ Akin to Shopify in the US/Europe — a *platform*, not an *aggregator* like Amazon or Ebay. In our set up, firms sell through their own website (not a marketplace)
- ▶ Initial sample of 25,000 online stores active as of October 2021 in Argentina ( $\approx$  13,000) and Brazil ( $\approx$  12,000)
- ▶ We observe date of entry, location, sales, self-reported sector and size, number of products, social media accounts, and integration with web analytics, among other variables
- ▶ These are small and young firms
  - ▶ Median sales: \$ 220/month during Aug-Oct 2021; 25<sup>th</sup>pc: \$ 90; 75<sup>th</sup>pc: \$ 557
  - ▶ Median age: 16 months; 25<sup>th</sup>pc: 9 months; 75<sup>th</sup>pc: 29 months
  - ▶ [▶ Size](#) [▶ Sectors](#)

# The Data

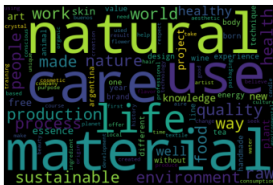
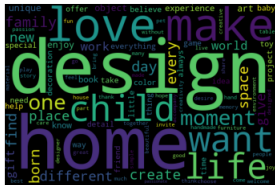
- ▶ Building on the initial sample, we web-scraped  $\approx 5,000$  **“About Us”** sections from the stores websites
  - ▶ Missing stores could be due to:
    - ▶ Section not developed
    - ▶ Section developed but URL is non-standard, so not picked by the algorithm
- ▶ Note they may also share a narrative through other channels (posts in social media, other sections of the website, etc.)  $\Rightarrow$  We have also scraped Instagram posts for a subsample of 15,000 firms



# A First Look at the Data

- ▶ We estimate a Latent Dirichlet Allocation (LDA) (Blei et al. 2003)
- ▶ We obtain a set of topics covered in the narratives in an unsupervised manner
- ▶ Our preferred implementation identifies five latent topics

# Topic Model



The bottom-right cloud most clearly captures the narrative topic. The top-left cloud most clearly captures consumer- and customer-related terms. The bottom-left cloud appears to capture “post-material” values (mostly related to sustainability). The top-right cloud appears to capture that most stores sell clothing items.

## Bags of words

- ▶ We complement the topic model with a supervised approach, which allows to measure topics of interest with higher precision
- ▶ Upon visual inspection, we identified recurrent themes and queried the corpus with lists of terms (bags of words) belonging to those themes
  - ▶ **Business/personal history:** 78% frequency ('born' 'story' 'started' 'decided' 'since' 'always' 'grew' etc)
  - ▶ **Values:** 67% frequency ('mission' 'philosophy' 'environment' 'women' 'community' 'innovative' 'traditional' etc)
  - ▶ **Identity:** 54% frequency ('we are' 'represent' 'symbolize' 'meaning' 'unique' 'personally' 'spirit' etc)
  - ▶ **Family:** 28% frequency ('parent' 'wife' 'husband' 'sister' 'brother' 'siblings' 'grandparent' etc)

▶ Examples by topic

# Narratives and Firm Performance

- ▶ What is the association between developing a narrative and firm performance?
- ▶ We answer this question by regressing log-sales during August-October 2021 on an indicator for observing the “About Us” section developed after our scraping exercise — *Table in the next slide*
- ▶ We incrementally include controls: country fixed effects (FE), time since entry, proxies for sophistication of the entrepreneur (using Google analytics and Facebook Pixel), sector FE, and FE for each possible number of employees and brick-and-mortar stores
- ▶ Even after controlling for this rich set of covariates, having a narrative is associated with 11% higher sales and the relationship is statistically very strong

# Narratives and Firm Performance

	(1)	(2)	(3)	(4)	(5)	(6)
Narrative	0.27*** (0.02)	0.24*** (0.02)	0.18*** (0.02)	0.13*** (0.02)	0.11*** (0.02)	0.11*** (0.03)
Age in months			0.02*** (0.00)	0.02*** (0.00)	0.02*** (0.00)	0.02*** (0.00)
Age in months, sq.			-0.00*** (0.00)	-0.00*** (0.00)	-0.00*** (0.00)	-0.00*** (0.00)
Google analytics				0.31*** (0.02)	0.29*** (0.02)	0.25*** (0.02)
FB pixel				0.12*** (0.02)	0.09*** (0.02)	0.09*** (0.03)
Country FE	No	Yes	Yes	Yes	Yes	Yes
Sector FE	No	No	No	No	Yes	Yes
Size and B&M FE	No	No	No	No	No	Yes
Obs.	24714	24714	24714	24714	17799	13018

Standard errors in parentheses. \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ . [► Fixed sample size](#)

# Narratives and Firm Performance: Heterogeneities

- ▶ Running the last column on different subsets of the data we find the following patterns:
  - ▶ **By age:** Larger for young firms ( $\leq 12$  months) — .19\*\*\* v. .07\*\*\*, which is consistent with narratives and reputation being strategic substitutes
  - ▶ **By type of operation:** Larger for fully online firms (no brick-and-mortar stores) — .13\*\*\* v. .06, which is what we would expect if the narratives were indeed a productive investment (their return is higher for fully online firms)
  - ▶ **By size:** No significant change for  $\leq 5$  full-time employees

## A possible framework

- ▶ **Narratives as social image** (Bursztyn and Jensen 2017)
  - ▶ Entrepreneurs use narratives to signal their type
  - ▶ They seek to attract customers with certain identity or values
  - ▶ It is an element of a firm's marketing strategy — A form of intangible capital (Bronnenberg et al. 2022)
- ▶ Why might this work?
  - ▶ Narratives appeal to consumers' group identity
  - ▶ Storytelling boosts pro-sociality (Smith et al. 2017; Zak 2014)
  - ▶ Helps to anthropomorphize a firm (Cowen 2019)
  - ▶ May substitute for lack of reputation (Tadelis 2016)
  - ▶ May be particularly relevant in low-trust, low-information environments (Di Tella, Dubra and Lagomarsino 2022)

## Next steps

- ▶ We have the following next steps in the agenda:
  - ▶ Implement additional analyses on the narratives, including (but not limited to):
    - ▶ Narrative detection (to what extent a text resembles a story)
    - ▶ Sentiment analysis (including joy, love, fear, etc.)
    - ▶ Measure language sophistication and text complexity
  - ▶ Analyze captions in Instagram posts, allowing to observe narrative elements among a larger set of firms and study the interaction with the “About Us” section when observing both
  - ▶ Run an experiment with consumers to elicit the causal impact of narratives on willingness to buy from a seller + evidence on potential mechanisms
  - ▶ Run an experiment with firms to estimate the causal impact of narratives on firm performance and survival, among other firm-level outcomes



thank you!

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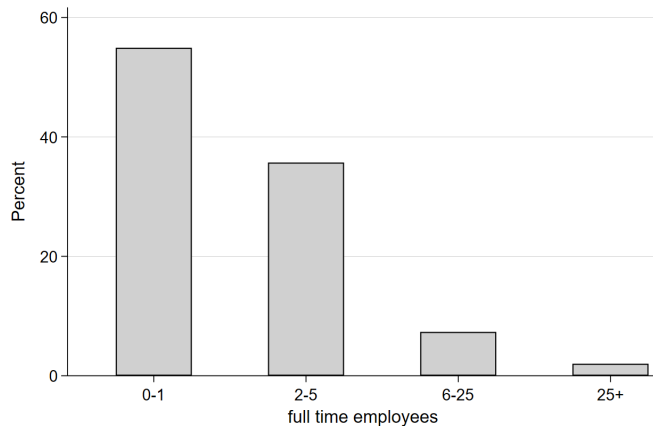
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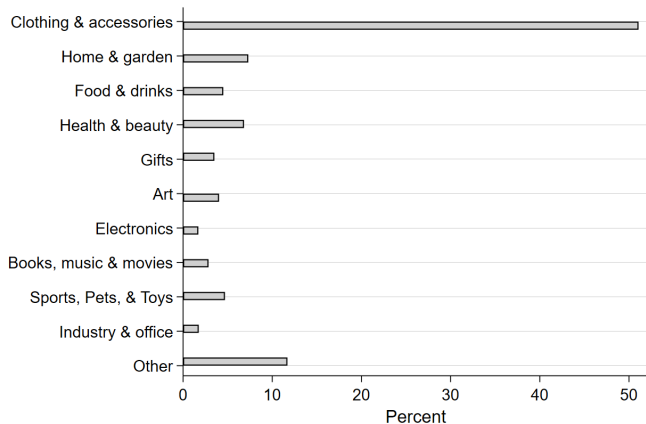
# APPENDIX

## Data: Size distribution [▶ back](#)



- ▶ **Size:**  $\approx 90\%$  have at most 5 full-time employees; only 2% have more than 25
- ▶ Reported by 53% of the firms in the sample

## Data: Sector composition [▶ back](#)



- ▶ **Sector:** “clothing and accessories”  $\approx 50\%$  , “home and garden” (7.1%), “health and beauty” (7.0%), “industry and office” (4.9%), and “food and drinks” (4.5%)
- ▶ Reported by 71% of the firms in the sample

*"(...) I **was born** and **grew up** in Araras, a very charming city in the interior of Sao Paulo. Since I was a little girl I **have always been** in love with nature, both to know it better through books and to be in full contact and explore it. Such taste and curiosity **led me to** study biology, and to a post-graduation course in biotechnology, but you know how **life is**, right? [...] I **found** a second passion in semi-jewelry. At the same time, in 2015, I **started** to resell consigned pieces to known people, from door to door, and I was taking a liking to it, until the company I was working for was forced to close, I was worried, but I **faced** it as a push to enter headlong into this new branch. **Later on**, I **started** to work with my own pieces, and then the opportunity **arose** to have a space inside a beauty salon, where I stayed for a few years, and I could grow even more, as a person too [...] In partnership with my boyfriend, Pedro, who recently graduated in civil engineering, and dividing the time with his profession, we set up the site. A longing **since I started** in the business, the consolidation of the Lemon Rose in e-commerce, in a delicate moment for all, our Lemon, **we saw the opportunity** to enter a new segment [...]"*

*"Mizu means water in Japanese. Our **philosophy** comes from the concept of believing that people should be pure as water. Our **goal** is to always be ourselves and keep our principles intact. Mizu lives in the fantasy and hope of forming a world where we can all coexist despite our differences. Mizu represents genius. It is a venture that was born after a big change in our lives. We are two girls **passionate** about embroidery and the creation of objects. For us, embroidery is a great therapy and meditation. We love our **work** and we want to transmit love. We make all our products by hand. Much of our embroidery is **inspired** by the Japanese technique called sashiko, which in Japanese means "small stab" or "small perforation" which is an accurate description of the stitching action. It was used many years ago for mending and generating more heat in garments. We use 100% cotton fabrics, dyed with natural dyes to make the product more unique. Cotton is the most environmentally friendly fabric, it degrades faster than polyester fabrics. That means our waste doesn't harm our planet as much. Just like our dyes. Our products are unique and are made with a lot of love, patience and dedication."*

*"#goodvibes came to tell you that happiness and peace of mind are within the heart of each one of us! And that things can be incredibly better with love, kindness and creativity. Our **mission** is to contribute to the awakening of humanity in a **creative** and loving way, through our children. Welcome to the Baby Buddha world! Baby Buddha is a seasonal store, that means we open for seasons, only a few times a year. Today Baby Buddha transforms its **mission** into clothes for babies and children, with a unique concept in Brazil. Here you will find children's products that talk about yoga, astrology, meditation, Buddha, spirituality, nature and everything else that connects us to our **true essence**! Baby Buddha is managed by (...), currently based in (...). Guided by intuition, Mariana believes that humanity is awakening to a new moment: a world of love and harmony for all! Lover of yoga, meditation, astrology, and self-knowledge, Mariana united these passions with her creative profession, and thus, inspired by the birth of her godson Bento, Baby Buddha was born! (...)"*

*"Topsy is a brand genuinely from Cear, created from a **couple's** dream, in the backyard of their house, in 2008, when everything started.(...) When work got tight, the **family** mode would be activated and the other members would lend a hand: one **son** would make deliveries, the other would look for a fabric, buy some trimmings; the **daughter** would be a model and a saleswoman (...) But despite so many changes, one thing never changed: Topsy was born and developed within a **family-husband and wife, mothers, fathers, children, grandparents, brothers, uncles and nephews**, non-blood bonds, but always as a **family**, each one gave a little piece of herself and contributed so that a small factory that started in a small room could become a company full of meaning and identity that Topsy is."*



# Narratives and Firm Performance — Fixed sample size [▶ back](#)

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Country FE	No	Yes	Yes	Yes	Yes	Yes
Sector FE	No	No	No	No	Yes	Yes
Size and B&M FE	No	No	No	No	No	Yes
Obs.	13018	13018	13018	13018	13018	13018

Standard errors in parentheses. \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ .