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# **Contribution Details**

Submission Type / Conference Track: General Submission

# Unpacking the entrepreneurial perception of uncertainties in the nascent ecosystem: the role of heuristics

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Short CV of Presenting Author:

Leonardo Augusto de Vasconcelos Gomes currently works at the Departament of Administration (Sao Paulo), University of São Paulo. Leonardo does research in Entrepreneurial Action, Radical Innovation Management, and Innovation Ecosystem. His current project is 'The management of innovation in conditions of uncertainty'.

17 pages

#### **Abstract**

#### Context

It is widely accepted that the entrepreneurial judgment and action occur under uncertainty (Klein and Foss, 2018, Parckard et al., 2017). Although the uncertainty construct occupies the center of stage in entrepreneurship and innovation literature (Townsend et al, 2018), traditionally scholars approach the uncertainty construct more as a contextual variable.

#### Literature

Heuristics can be defined how cognitive shortcuts adopted by individuals when there is a restriction of time, information and processing capacity (Simon, 1965). Although scholars traditionally address the heuristics construct as biases (Tversky e Kahneman, 1974; Baron, 2007; Sbicca, 2014), which affect negatively the decision outcomes, Gigerenzer e Goldstein, 1996; Saravasthy, 2001; Bingham e Eisenhardt, 2011; Sull e Eisenhardt, 2015 consider that the heuristics might be positive and lead to superior performance in uncertain settings. Our main goal is to refine the entrepreneurial action and uncertainty management by identifying which heuristics are employed by entrepreneurs to perceive uncertainties.

### Literature Gap

Before the decision about which uncertainty is more critical to the future performance of entrepreneurial performance (as suggested Rice et al., 2008), there is a previous phase, less investigated, the perception of uncertainty. Indeed, there is little knowledge about the mechanisms related to the entrepreneurial perception of uncertainties.

## **Resarch Questions**

The research question that guides this scientific inquiry is: how do entrepreneurs perceive uncertainties in nascent markets? To approach our research question, we adopt the heuristics perspective. Heuristics can be defined how cognitive shortcuts adopted by individuals when there is a restriction of time, information and processing capacity (Simon, 1965).

# Methodology

To address our research question, we adopt the case study approach (Eisenhardt, 1989). Following Eisenhardt's (1989) recommendations for building theory from cases, we adopt an intentional, not random sampling. We looked for entrepreneurs who: (i) created a new venture for developing and commercializing a radical innovation, (ii). who had launched the new venture and commercialized his/her first product or service. The nature of this research is qualitative.

# **Empirical Material**

We produced 5 startups from an initial list with 12 candidates. We built a conceptual framework, linking the uncertainty construct (Knight, 1921), entrepreneurial judgment and heuristics (Tversky e Kahneman, 1974; Gigerenzer e Goldstein, 1996; Bingham and Eisenhardt, 2011). Based on this framework, we develop our script and research protocols. We conducted 23 interviews with entrepreneurs in different moments of startup development.

We adopted a well-structured process for coding and data analysis. We started with an open coding process by developing the first order codes from our empirical data. Based on the interaction between our conceptual framework and the empirical data, some patterns of heuristics emerged. These findings refer more to categories of heuristics than specific heuristics (once entrepreneurs expressed in different terms similar heuristics). This understanding is in line with Tversky e Kahneman, 1974; Gigerenzer e Goldstein, 1996; Bingham and Eisenhardt, 2011 and other authors.

#### Regulte

We identified five categories of heuristics related to entrepreneurial perception. The first heuristic category is the temporal heuristics, i.e., heuristics related to how entrepreneurs search for uncertainties related to time (e.g., short term, long term). We identify that some entrepreneurs looked for uncertainties related to the long term (aftermarket entry), while others focused more on uncertainties in the short term. The second category is related to the area (market, technology, resources, business model, organizational). We identified that the heuristics related to how entrepreneurs explored some themes or areas to identify uncertainties. Some entrepreneurs overemphasized a particular area (e.g., technology), ignoring others that might affect the new venture performance. The following category is scaling up heuristics. Some entrepreneurs focused on the

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identified uncertainties related to bottlenecks for new venture growth. We also some heuristics related to how entrepreneurs value some uncertainties as more critical or not. Finally, we identify a heuristic category related to the extent of uncertainty, i.e., which actors are affected by a particular uncertainty.

## **Contribution to Scholarship**

Our results advance the literature in some ways. First, our findings complement the research stream in uncertainty management (e.g., Gomes et al., 2018, Rice et al., 2008). We show how entrepreneurs explore the problem space and identify critical uncertainties that shape the action course. We also advance the heuristics research stream. We enlarge the set of entrepreneurial heuristics and connecting them into the cognition literature. Our findings show how entrepreneurs allocated the attention and advance the attention orientation approaches. Based on our findings, we propose some hypotheses, which can guide further research.

## **Contribution to Practice**

Our research will aid the process of perception of uncertainties of the entrepreneurs. With a better understanding of heuristics, entrepreneurs can improve the process of perceiving uncertainty and be more responsive in the process of choosing the best way to manage the uncertainties identified by them.

#### **Fitness**

Our research contributes to the Theme 6: Radical and systemic innovation.

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Technological Forecasting and Social Change, 128, 164-185.

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## **Session Details**

# 21-PM3-03: G3 - Intrapreneurship and Entrepreneurship

Time: Friday, 21/Jun/2019: 4:45pm - 6:15pm

Location: Amphi Becquerel
Session Chair: Rémi Maniak, Ecole Polytechnique

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