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# Guest editorial: Exploring the entrepreneurial jungle: unicorns, gazelles, zebras and other venture species

Guest editorial

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## 1. Introduction

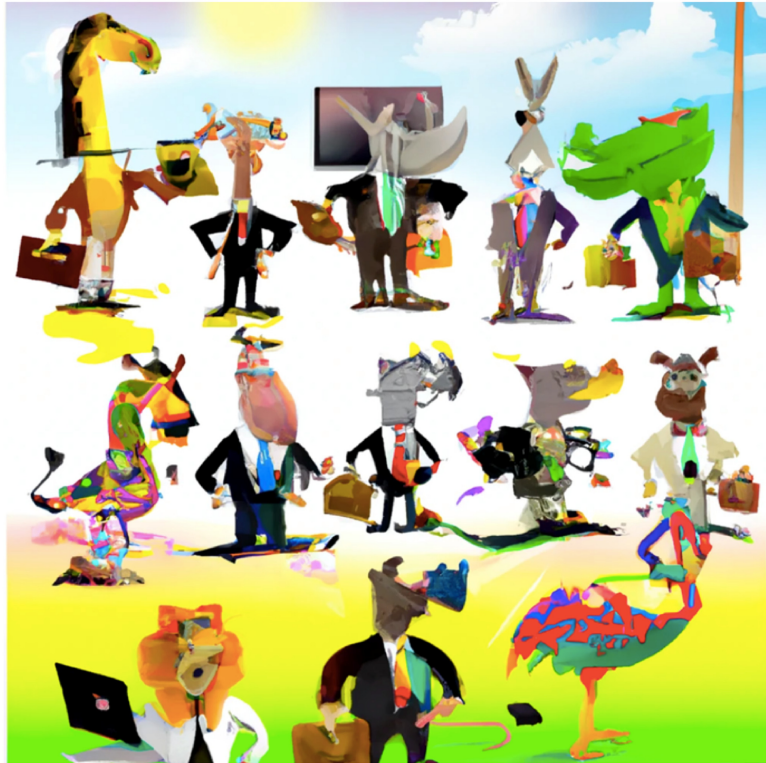
Just as animals in the wild follow distinct behavioral patterns intrinsic to their species, so do entrepreneurial ventures. Companies like Amazon, Facebook, Uber, Airbnb and Tesla stand as a testament. These giants, with their significant financial achievements, have dominated our economies and irrevocably transformed our social and professional behaviors. In the entrepreneurial world, ventures are often metaphorically grouped based on their distinct behavioral patterns and characteristics. In today's media and venture capital discussions, ventures are increasingly metaphorically categorized based on their distinct behavioral patterns and characteristics. Classifications such as unicorns (valued at over \$1bn), decacorns (over \$10bn), hectocorns (over \$100bn) and gazelles (fast-growing companies) have become commonplace. Simultaneously, ventures with other distinctive business patterns earn whimsical labels like zebras (profitable and beneficial for society), camels (resilient businesses that can navigate challenging terrains) and donkeys (consistent, hard-working businesses).

*Welcome to the entrepreneurial jungle!* As you embark on your journey into the realm of entrepreneurship, prepare to observe these “species” as they navigate their ecosystem (see [Figure 1](#)).

Indeed, the world of entrepreneurship boasts a diversity of patterns as vast and captivating as the creatures that once boarded Noah's ark. This phenomenon is due to their notable features, business results and implications. Entrepreneurs, investors and policymakers desire to know where to find these “fantastic” ventures and how to influence their formation – or restrict their operations when they are not good benchmarks (e.g. [Sims and O'Regan, 2006](#); [Coad and Srhoj, 2020](#); [Kuratko et al., 2020](#); [Coad and Karlsson, 2022](#)). Indeed, entrepreneurial ventures that evolve in radically powerful ways affect employment, innovation rates and urban politics in the environments where they are embedded ([Henrekson and Johansson, 2010](#); [McNeill, 2016](#); [Murphy et al., 2022](#)). Therefore, research on the essence of these entrepreneurial “species” and the underpinnings of their evolution is warranted ([Mollick, 2020](#)).

According to the current literature, the extraordinary impact of these entrepreneurial species is due to (1) breakouts from traditional life cycle phases and (2) progressive approaches to valuation that do not apply to more traditional businesses ([De Massis et al., 2016](#); [DeSantola and Gulati, 2017](#); [Bock and Hackober, 2020](#); [Cowden et al., 2020](#); [Kuratko et al., 2020](#); [Abatecola et al., 2021](#)). This can be seen in Uber. Since its first operations in 2011, Uber – dominating CB Insights' roster of unicorns for an extended period – has yet to attain annual profitability. Nonetheless, this has not impeded the exceptional expansion of the venture. Today, notwithstanding the substantial \$9.2bn losses incurred in 2022, Uber operates across approximately 70 countries and services 10,500 cities. It claims over 131 million monthly active users, a global cohort of 5.4 million active drivers and a workforce totaling 32,800 employees. Reflecting on the annals of the venture, Dara Khosrowshahi, the Chief Executive Officer (CEO), conceded during a discourse with analysts, “For most of our





Source(s): Generated with DALL-E

**Figure 1.**  
Entrepreneurial jungle:  
a zoological fictitious  
representation of  
venture archetypes

history, profitable wasn't the first thing that came up when you asked someone about Uber. In fact, many observers over the years boldly proclaimed that we would never make any money" ([Financial Times, 2023](#)). Hence, the intriguing query emerges: How has a corporation without profitability managed to achieve such staggering growth, whereas commonplace ventures – take a local laundromat, for example – might fail within a few months if unable to yield profits?

This Special Issue of the *Journal of Small Business and Enterprise Development* advances the understanding of these *fantastic entrepreneurial species*, a nascent field mostly consigned into venture capital conversations (e.g. [Kenney and Zysman, 2019](#)) and media articles ([Gupta, 2015](#); [Mara and Aniyia, 2016](#); [Rice, 2021](#)) – only recently, scholar attention has been posed on the entrepreneurial jungle [1]. The objective is to clarify whether gazelles, unicorns, zebras and so on constitute a new paradigm in entrepreneurial thought or merely a distraction. Some academics suggest that studying these exceptional ventures might only address challenges a minuscule fraction of ventures face ([Litan and Hathaway, 2017](#); [Aldrich and Ruef, 2018, 2020](#)). However, our stance is that we, as researchers, must delve into these fantastic entrepreneurial species. This is not just because of their significant influence (as evidenced above) but also to comprehend why traditional entrepreneurial theories may not fit their mold.

Beyond synthesizing the featured articles in this Special Issue, this lead article navigates the vast sea of entrepreneurial species that have captured the zeitgeist in media and scientific articles alike. Indeed, we identify the species that have emerged, from the well-documented

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unicorns to the less-known lame ducks and phoenixes. In doing so, we venture into the uncharted territories of entrepreneurial taxonomy, not only uncovering the most adopted definitions but also pinpointing the unanswered questions and potential avenues of research for each species. Notably, we emphasize exploring the inter-relationships and reciprocal influences among these entrepreneurial species, highlighting a rich area for future inquiry.

## 2. The entrepreneurial jungle: theoretical premises






The entrepreneurial world is rich in diversity, as illustrated by several distinct entrepreneurial “species” garnering attention from the media, venture capitalists and academia. Many are detailed here – see also [Table 1](#), though some might be absent due to ambiguities in their definitions.

- (1) *Unicorns* are predominantly high-tech ventures surpassing the valuation of US\$1bn ([Lee, 2013](#); [Urbinati et al., 2019](#)). As of September 2023, there are 1,226 active unicorns, with a significant number concentrated in the US and China. They are collectively valued at approximately US\$3.845bn ([CB Insights, 2023](#)). These entities lean on mathematical algorithms and platform technologies, often revolving around unique products or services ([De Massis et al., 2016](#); [Kotha et al., 2022](#)). Some scholars started studying the birth of unicorn ventures. The founding teams of Unicorns usually exhibit distinct traits: well-educated solo founders with prior experience in high-tech ventures, minimal heterogeneity among founders with a history of shared education or work experience and often a change in CEO before a liquidity event ([De Massis et al., 2016](#); [Govindarajan et al., 2016](#); [Kotha et al., 2022](#)). In addition, it has been proposed that unicorns’ network effect triggers cognitive biases of founders’ and investors’ decisions, leading them to provide initial assets (i.e. beliefs/goodwill, trust, financial resources and psychological commitment) to the nascent unicorn. Therefore, the network effect and biases resulted in significant antecedents for unicorn’s honeymoon ([Abatecola et al., 2021](#); [Cristofaro et al., 2023](#)).
- (2) *Gazelles*, according to the Organisation for Economic Co-operation and Development ([Ahmad, 2006](#)), are ventures under five years old with an average employment growth rate of more than 20% per year over three years and with ten or more employees at the beginning of each reporting period ([Erhardt, 2021](#); [Henrekson and Johansson, 2010](#)). Scholars have identified two primary determinants of their growth rates: unique venture-specific characteristics (single innovative products) and external factors (usually connected with the environment in which they are embedded) indirectly influencing their performance ([Czarnitzki and Delanote, 2013](#); [Bianchini et al., 2017](#)).
- (3) *Mice* ventures are small businesses of up to 20 employees ([Birch, 1987](#)). Their unique value propositions stem from social missions and innovative products, making them attractive to larger corporations ([Austin and Leonard, 2008](#); [Waddock, 2008](#)). They create strong connections with consumers based on values and social principles, and their organizational cultures are deeply intertwined with these missions. However, their smaller size makes them vulnerable to acquisitions by larger predator ventures or unfavorable market conditions ([Birch, 1987](#); [Acs and Muller, 2008](#)).
- (4) *Elephant* ventures are behemoth organizations, often globally recognized and entrenched in various markets. Their vast operational structures, massive resource pools and extensive history give them significant influence within their industries. While they have unparalleled economic and organizational resources, they also often face challenges in agility, often resulting in slower decision-making processes ([Austin](#)

**Table 1.**  
The entrepreneurial  
jungle

Entrepreneurial species*	Suggested definition	Examples
 Unicorn	Unicorns are ventures valued at more than one billion dollars in the first years of life (Lee, 2013)	Uber, SpaceX
 Gazelle	Gazelles are ventures under five years old with an average employment growth rate of more than 20% per year over three years, and with ten or more employees at the beginning of each reporting period (Organization for Economic Cooperation and Development; Ahmad, 2006)	Cisco, Yahoo
 Zebra	Zebras are ventures that prioritize both profitability and societal impact. They emphasize mutualistic relationships, are resilient, and use alternative fundraising methods. They champion steady growth, worker welfare, and sustainability (Brandel <i>et al.</i> , 2017; Zepeda, 2017; de Gennaro <i>et al.</i> , 2023)	Switchboard, Hearken
 Camel*	Camels are resilient ventures that survive in tough conditions. These ventures are prepared for the long haul, often patiently building their business model and awaiting the right moment for major growth. Prioritizing balanced growth and long-term sustainability over rapid expansion, they emphasize proper pricing, prudent cost management, and flexibility in their growth plans. Camels often diversify by targeting multiple markets and constructing a comprehensive range of products and services to bolster resilience (Crunchbase, 2020; Lazarov, 2021; Forbes, 2023)	Grubhub, Zooma
 Donkey*	Donkeys are ventures that began as high-potential unicorns but failed to justify their lofty valuations. Often, they prioritize aggressive marketing over critical business facets and may neglect basic business economics (e.g., product margins). In some cases, they face challenges during their transition from private to public entities, leading to significant financial or reputational losses (German entrepreneurship, 2021; Gov.ph, 2022)	WeWork
 Mouse*	Mouse ventures are small businesses with up to 20 employees, often specializing in niche markets or social missions. While they can quickly adapt and innovate, their size makes them vulnerable to larger competitors and market changes. Although their macroeconomic impact may be limited, they play a significant role in market dynamics and social innovation (Birch, 1987; Acs and Muller, 2008; Austin and Leonard, 2008; Waddock, 2008)	Local artisanal shops, freelance consultants, etc.

(continued)

 <p>Elephant</p>	<p>Elephant ventures are large, established corporations that, due to their size and structural complexity, often move and adapt slowly. Their large-scale grants them significant economic and organizational resources. However, this same scale can make them bureaucratic and risk-averse (Birch, 1987; Acs and Muller, 2008; Ausin and Leonard, 2008; Waddock, 2008)</p>	<p>Colgate, Coca-Cola, Unilever</p>
 <p>Gorilla</p>	<p>Gorilla ventures are dominant in their industry, boasting substantial market shares without reaching monopoly status. Their significant presence grants them the luxury of taking risks without jeopardizing their customer base, as their size offers a cushion against potential setbacks. These ventures serve as influential market leaders, setting trends and standards. Their magnitude often enables collaborations with smaller ventures, seeking innovation and maintaining a positive corporate image (Prashantham and Birkinshaw, 2008; Prashantham, 2021)</p>	<p>McDonalds, Microsoft</p>
 <p>Dragon</p>	<p>Dragon ventures refer to those valued at \$12 billion or more, net of venture funding. These ventures not only possess substantial financial worth but also provide returns that cover an entire venture fund, making them highly valuable for investors. Dragons emphasize genuine long-term value and resilience, prioritizing sustainable business models over mere valuation figures (Axios, 2021; Fast Company, 2023)</p>	<p>Stripe, ByteDance</p>
 <p>Lame Duck</p>	<p>Lame duck are ventures that have seen a significant decline in their influence, market presence, or profitability, or ones which have defaulted on their obligations or gone bankrupt due to trading losses, rendering them ineffective in the market (Goldsmith, 2009; Investopedia, 2022)</p>	<p>Blockbuster, Blackberry</p>
 <p>Phoenix</p>	<p>Phoenix ventures arise when the business of an insolvent venture is transferred to a new entity, effectively allowing it to continue operations, while leaving behind its debts. This practice, while legal under specific conditions, is controversial due to potential misuse and fraud (Experian, 2022; Gov.uk 2023)</p>	<p>Alitalia-ITA Airways; Morris Garage</p>

**Note(s):** \*entrepreneurial evolutions not investigated within Special Issue articles

**Source(s):** Own elaboration

and Leonard, 2008; Waddock, 2008). The bureaucratic nature of these organizations can make them risk-averse, tending to prefer stability and predictability over rapid innovation (Birch, 1987; Acs and Muller, 2008).

- (5) *Gorillas* signify dominant market leaders. Their market presence and vast resources enable them to drive innovations and set industry standards, showcasing their immense growth potential (Prashantham and Birkinshaw, 2008). Gorilla ventures actively pursue collaborations with smaller ventures, tapping into localized innovations and reinforcing their competitive edge (Prashantham, 2021). However, such partnerships can restrict smaller ventures' potential growth and push them into low-margin subcontracting roles.
- (6) *Dragons* are ventures reaching a \$12bn or more valuation after accounting for venture funding (Axios, 2021). Despite their billion-dollar tags, many unicorns and decacorns lacked genuine long-term value and had shaky foundations. In contrast, dragon ventures are characterized by their robustness, tenacity and formidable strength in the market. Unlike unicorns or decacorns that might spend venture capital frivolously to acquire market share, dragons strategically build genuine defensive moats, ensuring underlying business rigor and long-term sustainability. These ventures emphasize sustainability and profitability over mere scale, offering a realistic vision of entrepreneurship (Fast Company, 2023).
- (7) *Lame ducks* represent ventures on the brink of irrelevance due to various challenges such as outdated business models, external pressures or, drawing from its roots, significant financial duress that prevents them from effectively operating in the marketplace (Investopedia, 2022). Its influence, stakeholder confidence and ability to compete may be substantially diminished, marking its trajectory toward obsolescence unless significant restructuring or innovations are introduced (Goldsmith, 2009).
- (8) *Phoenix* ventures face a recurrent cycle of business rise and fall. They transfer assets from a failing venture to a new one, ensuring business continuity amidst challenges (Experian, 2022). The insolvent venture ceases its operations, often entering formal insolvency proceedings like liquidation, administration or administrative receivership. The new entity rises from the ashes of the old one and continues the business. The practice has a legal basis in insolvency law, provided certain rules and ethical standards are observed (Gov.uk, 2023).

In the following section, we delve into the articles of this Special Issue, which exclusively explore the nuances of Unicorns, Gazelles and Zebras – the three entrepreneurial “species” that the accepted articles have investigated.

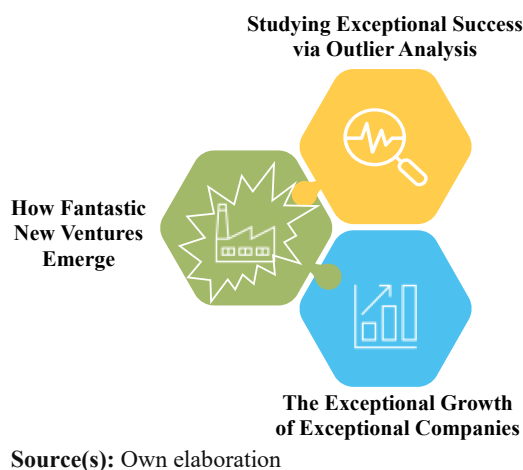
### 3. The Special Issue

All submissions to the Special Issue were given full consideration, and many were subjected to several rounds of peer review. Ultimately, we accepted six excellent contributions for publication.

The six articles can be ideally clustered into three distinct topics (see Figure 2), each offering valuable insights into different aspects of the research on gazelles, unicorns, zebras and other fantastic new ventures. These clusters are (1) studying exceptional success via outlier analysis, (2) how fantastic new ventures emerge and (3) the exceptional growth of exceptional ventures. Their description is offered in the next subsections.

#### 3.1 Studying exceptional success via outlier analysis

This cluster delves into entrepreneurial success through the lens of outlier analysis. The highlighted articles emphasize lessons learned from outliers in entrepreneurial success,



**Figure 2.**  
Topics in “fantastic  
new ventures” research

exploring the unique case of the House of Rothschild and comparing the strategies of unicorn ventures to the early-stage and Fortune 500 ventures. These contributions provide valuable insights into the exceptional factors driving entrepreneurial achievements and strategies.

Ruef, Birkhead and Aldrich’s work “What can outliers teach us about entrepreneurial success?” is exemplary in method and theory building. As stated in the article, the House of Rothschild was one of the largest and most powerful banking conglomerates the world has ever seen. At one point, the Rothschilds were the bank of choice for states, principalities and corporations. While there had been other financial empires (e.g. The House of Morgan), both before and after the Rothschild ascendancy, what was truly remarkable about the Rothschilds was that they remained a financial powerhouse for generations and across countries, as the bank had numerous branches. The Rothschilds founded two banks, the London-based Rothschild & Company and the Zurich-based Rothschild Bank, which exist in the 21st century. As such, the Rothschild has been common fodder for historians. Usually, historians have highlighted various reasons for the Rothschild’s success, which could lead the reader to believe that there is nothing more to say about the Rothschild. However, [Ruef et al. \(2023\)](#) augment this narrative by pointing out a clear reason for the success of the Rothschild, namely risk-sequencing, transfers and spatial brokerage. The dynasty started with Mayer Rothschild as the leading dealer of antique curiosities. During the 1790s, he switched increasingly to banking transactions, which were highly volatile but incredibly lucrative. Mayer could make this switch because of the Napoleonic wars, which meant a vast demand for money. To take advantage of this opportunity, they utilized their network (developed while selling antiquities) to act as brokers for the aristocracy, which ran these countries. In addition, Mayer and his sons developed a clear line of succession. The authors then compared these findings against a sample of contemporary (to the Rothschild) Jewish entrepreneurs.

Meek and Cowden’s article “Strategies of unicorn startups: how these positive deviants compare to early-stage and Fortune 500 ventures” examines the differences in the financial intentions of Fortune 500 ventures versus a unicorn regarding strategic priorities. They carry out a comparison study of 75 unicorn ventures, 37 early-stage ventures and 45 Fortune 500 organizations using computer-aided text analysis to conduct within- and between-sample comparisons. A Fortune 500 company focuses on financial performance, corporate social responsibility and financial stability, whereas a unicorn start-up focuses on missions, balancing industry disruption and financial performance and using less positive tone, affect

and prosocial language in their communications. As stated, [Meek and Cowden's \(2023\)](#) findings provide a clear picture of the strategic priorities of entrepreneurial ventures at different stages of the venture. A noteworthy finding is that the start-ups have a high focus on mission, which the authors contend is the source of their fast growth. As such, unicorns have different strategic priorities – which the authors state could signal market disruption to investors. Namely, the managers signal to the investors the potential of abnormally high returns (driven by market disruption), offsetting the risk of purchasing the stock (see also [Abatecola et al., 2021](#); [Cristofaro et al., 2023](#) for a behavior-oriented explanation). However, the authors contend that the unicorn has difficulty balancing market disruption and financial results. They may have issues in determining whether to invest in new or complementary resources. Finally, the authors contend that established ventures can learn much from unicorns about how to grow their ventures.

### *3.2 How fantastic new ventures emerge*

This cluster centers on the emergence of exceptional new ventures, particularly zebras and unicorns. The highlighted articles investigate the organizational configurations of Generation Z–driven Italian start-ups and present a systematic literature review on the emergence of unicorn ventures. These contributions offer insights into understanding the distinct characteristics and dynamics contributing to the rise of exceptional entrepreneurial species.

The first work by [de Gennaro et al. \(2023\)](#) explores the organizational forms adopted by Zebras ventures. Drawing from in-depth interviews with 41 young entrepreneurs (i.e. generation Z entrepreneurs) who have been recognized as innovative and promising by Forbes Magazine, the study provides a nuanced understanding of how these start-ups identify as zebras. These unique entrepreneurial species strive to balance economic and social values. They emphasize the principles of mutualism and resilience, challenging the conventional focus on profit maximization. Moreover, the study reveals that these start-ups align with the “teal” organizational paradigm, characterized by an evolutionary purpose, distributed leadership and a focus on employee empowerment. This dual focus on the “zebra” and “teal” paradigm contributes to the existing theoretical discourse on entrepreneurial species and organizational forms, particularly within the Italian context. The work by [de Gennaro et al. \(2023\)](#) suggests, for instance, that adopting a “teal” organizational structure can lead to more sustainable and resilient business models. It implies that policymakers should consider these new organizational forms when crafting regulations to foster innovation and entrepreneurship. To this end, the article has value for anyone interested in understanding the evolving landscape of entrepreneurship in Italy and beyond.

In their article titled “Beyond myth: a systematic literature review on the emergence of unicorn firms,” [Giardino et al. \(2023\)](#) employ a systematic literature review of 35 articles published in peer-reviewed journals, contributing to a profound and comprehensive exploration of what leads to the emergence of unicorns. Specifically, these authors propose a framework that, embracing existing knowledge from both an internal and external perspective, serves to disentangle how the simultaneous presence of specific entrepreneurial, venture, funding and ecosystem factors generate the fertile ground for ventures to achieve unicorn status. For instance, the authors stress the importance of entrepreneurial qualities (see also [Lehmann et al., 2019](#)), including founders’ experience, skills and vision, as well as the ability of ventures to innovate and adapt to changing markets. They also highlight venture-specific factors like the business model, corporate governance mechanisms and sustainable growth and profitability resources. Furthermore, the study indicates the role of investors and other factors such as mentors, infrastructures and supportive policies in achieving unicorn status. In this regard, [Giardino et al. \(2023\)](#) present various practical takeaways. Entrepreneurs can benefit by building



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robust business models, assembling talented teams, fostering innovation and adaptability for sustainable growth and tailoring products and services to attract venture capital funding. Investors can leverage this article to identify potential unicorn ventures and make well-informed decisions as it discloses the factors more likely to enable ventures to become unicorns.

### 3.3 *The exceptional growth of exceptional ventures*

This cluster focuses on exploring the factors impacting high growth in different contexts. The highlighted articles delve into a life cycle view of unicorns and the effects of the COVID-19 pandemic on business growth. These contributions collectively illuminate the drivers and challenges associated with achieving and sustaining high growth, considering both industry-specific trends and external shocks.

Coad, Bauer, Domnick, Harasztosi, Pal and Teruel's work "From rapid decline to high growth: where in the distribution did COVID hit hardest?" examines the implications for venture growth and questions whether certain ventures were able to thrive during a bleak economic period of uncertainty and shutdowns. The resulting economic downfall evoked memories of the 1930s, as this was the steepest decline of the world economy since the Great Depression. However, while it was clear that all ventures lost wealth, there was a question of the extent to which high-growth ventures were impacted. The authors analyzed the European Investment Bank Investment Survey (2016–2020) as a source of information. Not surprisingly, they found that COVID-19 negatively impacted all ventures. However, the contribution of this article is to examine whether ventures facing very different growth rates would have the same impact. Previous research has found only an average effect of COVID-19. The authors found that COVID-19 hurt sales and value-added growth across the distribution of growth rates. However, the authors found that the effect was stronger at the lower quartiles as the lockdown of the economy adversely impacted some declining ventures. [Coad et al. \(2023\)](#) also found that fully digitalized ventures may have been somewhat shielded from the harmful effects of COVID-19. In addition, those receiving support from the government were relatively strongly affected by COVID-19. For labor productivity, the authors found no impact of COVID-19's influence. However, at rapidly and slowly growing ventures, employment declined.

The work by [Kabbara and Hagen \(2023\)](#), titled "A life cycle view on unicorn start-ups: drivers of long-term high-growth," explores the life cycle of unicorns, focusing on the drivers contributing to their long-term high growth. The research questions aim to understand the endogenous and exogenous factors, such as entrepreneurial experience and industry dynamics that influence these ventures' growth trajectories. Employing a matched-pair case study methodology, the study analyzes two fintech unicorn ventures (Klarna and Scalapay) in different time frames. The findings reveal that the entrepreneurial team's experience and key partnerships are crucial triggers for growth. The study also identifies the industry's role as a significant exogenous driver affecting long-term growth. It emphasizes that being digital is not just an enabler but needs to be coupled with a constantly developed differentiated value proposition. The work's originality lies in extending the high-growth literature to unicorn start-ups, linking new venture life cycles to industry life cycles. It also provides a nuanced understanding of the drivers that accelerate or constrain fintech unicorns over time. For practice and policymakers, the study offers guidance for new entrepreneurial ventures aiming for long-term growth.

## 4. Future research

As we navigate the intricate tapestry of entrepreneurial species, we uncover numerous research opportunities awaiting exploration. *The jungle is vast*, and while some studies have

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delved into the details of specific species (Abatecola *et al.*, 2021; Coad *et al.*, 2023), many uncharted territories remain.

This section highlights key research avenues, some emanating into insights from the published contributions and others drawing from the authors' understanding of this nascent literature. These directions, depicted in Tables 2 and 3, can cater to the nuances of entrepreneurial species (also outside of what has been investigated in this Special Issue) or address overarching themes that encompass them all, offering a comprehensive roadmap for future academic endeavors.

#### *4.1 Future research on specific entrepreneurial species*

Delving into the phenomenon of unicorns, Giardino *et al.* (2023) emphasize the need for multidimensional research, shedding light on unique corporate governance mechanisms and decision-making processes. This understanding converges with Meek and Cowden's (2023) exploration of signals ventures use to showcase high return potential for investors, suggesting that robust signals might stretch beyond traditional press releases. Simultaneously, they question mature ventures' strategies, wondering if corporate social responsibility becomes a proxy for growth amid competition and rising transaction costs. Kabbara and Hagen (2023) highlight targeted policy interventions, underscoring the role of tax incentives, fintech regulations and the significance of specialized mentorship. Merging these perspectives, future research should assess policy impact and navigate the intricate balance of regulations, mentorship and the broader influence unicorns have on technological change and innovation ecosystems. Finally, there is a paucity in the definition of unicorns since it is linked to a financial evaluation (onebn dollars) given by interested investors and that can vary according to the geography, life cycle of the economy and other contingencies.

Similarly, for Gazelle ventures, defining clear and precise criteria remains crucial for accurately categorizing and understanding their growth trajectories. Refining the "under five years old" timeframe and reconsidering the "20% average employment growth rate" can pave the way for a more comprehensive assessment of their development. Similarly, it is essential to re-evaluate the "ten or more employees" threshold to ensure that smaller but high-potential ventures are not overlooked, ensuring a more inclusive recognition of varying venture scales. Further exploration is also needed into the sustainability of Gazelles' rapid growth, delving into internal organizational challenges and external drivers such as innovation and macroeconomic events. Additionally, with their unique financial structures and rapid growth, Gazelles' capital requirements and financial health warrant thorough examination to ascertain their long-term viability. Finally, the multifaceted influences of regional and generational factors on Gazelles' emergence, strategies and success cannot be ignored. A deeper look into these aspects across various cultural contexts will provide a richer understanding of the broader landscape in which Gazelle ventures operate and thrive.

As de Gennaro *et al.* (2023) pointed out, future research on Zebra ventures should prioritize several key areas. Firstly, it is crucial to establish a clear equilibrium between profitability and social impact and set parameters for genuine "mutualistic collaboration" to ensure truly beneficial interactions. Concurrently, there is a need to develop robust metrics to evaluate resilience and capital efficiency. Investigating the influence of generational approaches on Zebra business dynamics, especially in diverse contexts, can provide a nuanced understanding of their strategic goals. Validating findings requires broader empirical studies, highlighting the intricacies of Zebra's organizational structures and the distinctions between self-management and mutual adjustment in larger ventures. Furthermore, longitudinal analyses can offer insights into the evolutionary trajectory of Zebra ventures, capturing both their short-term stances and potential long-term strategic transformations.

New entrepreneurial evolution

Future research

- Gazelles
- *Criteria precision and scope*: refining the “under five years old” timeframe and reconsidering the “20% average employment growth rate” to provide a clearer path for venture categorization and development assessment
  - *Inclusivity in scale*: evaluating the “ten or more employees” threshold to ensure recognition of smaller, yet high-potential ventures, without undermining their growth journey
  - *Growth dynamics and sustainability*: investigate the factors influencing the sustainability of rapid growth in Gazelles, encompassing internal organizational challenges, innovation drivers and the role of external macroeconomic events
  - *Capital and financial health*: analyzing Gazelles’ unique financing structures and needs, considering their rapid growth trajectories and the implications for long-term viability
  - *Regional and generational insights*: examining the influence of regional characteristics and generational shifts on the emergence, strategies and success of Gazelle ventures across different cultural contexts
  - *Corporate dynamics*: exploring unique corporate governance and decision-making dynamics within high-value ventures
  - *Societal interactions*: assessing the broader societal impacts and reciprocal effects of unicorns on ecosystems and communities
  - *Investor signals*: identifying clear and impactful signals that showcase potential high returns to investors
  - *Policy and growth*: examining targeted policy interventions, including tax incentives and specialized mentorship programs that foster unicorn growth
  - *Valuation and measurement concerns*: addressing ambiguities related to the “first years of life” timeframe, oversight of vital metrics like revenue and profitability, instability in early valuations and the impacts of monetary inflation and potential biases from investors and founders
  - *Comprehensive evaluation parameters*: recognizing the diverse growth trajectories across sectors, the potential exclusion of late-blooming successful entities and the importance of assessing long-term viability for a more holistic view of a venture’s true potential
  - *Defining purpose and collaboration*: clarifying the equilibrium between profitability and social impact, along with criteria for genuine ‘mutualistic collaboration’ to ensure authentic and beneficial interactions
  - *Measurement standards*: establishing clear metrics and standards to accurately gauge resilience and capital efficiency in Zebras
  - *Organizational dynamics and generational approaches*: exploring the business dynamics of Zebra ventures across different contexts and timeframes. Understanding how varying generational approaches within their top management influence business goals and strategies
  - *Sample scope and structural analysis*: validating the findings through large-scale empirical studies beyond prominent media outlets. Delving into the intricacies of Zebra organizational structures, particularly when distinguishing between self-management and mutual adjustment activities in larger entities
  - *Evolutionary trajectory of zebras*: conducting longitudinal analyses of Zebra ventures to discern their short-term versus long-term orientations and possible strategic shifts. Deepening the understanding of their inherent traits and potential transformations over time
- Zebras

(continued)

**Table 2.**  
Future research on the entrepreneurial jungle

New entrepreneurial evolution	Future research
Camels	<ul style="list-style-type: none"> <li>- <i>Balanced vs rapid growth</i>: the effectiveness of the balanced growth approach compared to the rapid expansion model in various industries and market conditions</li> <li>- <i>Camels vs unicorns</i>: analysis of long-term survivability and profitability of camel ventures versus unicorns</li> <li>- <i>Diversification in camels</i>: exploring the impact of diversification within camel ventures on their resilience during economic downturns</li> <li>- <i>Camel growth decisions</i>: investigating the decision-making processes in camel ventures regarding when to pursue rapid growth or maintain stability</li> <li>- <i>External influences on camels</i>: the role of external factors, such as access to capital and market size, in shaping the strategies of camel ventures in different regions</li> <li>- <i>Venture model adoption</i>: a comparative study of ventures that adopted the camel model from their inception versus those that pivoted toward it later in their lifecycle</li> <li>- <i>Psychological &amp; Cultural Influences</i>: Analyzing the psychological and cultural factors that influence founders' preferences for either the camel or unicorn venture models</li> <li>- <i>Shift from unicorn to camel mindset</i>: With the focus shifting from pure growth and valuation to resilience and longevity, there is a lot to explore about how ventures are making this pivot and what strategies they are employing</li> <li>- <i>The Transition from unicorn to donkey</i>: understanding the dynamics that cause ventures to transition from high-valued unicorns to donkeys</li> </ul>
Donkeys	<ul style="list-style-type: none"> <li>- <i>Valuation biases</i>: examining the potential overestimations in venture valuations, particularly when grounded more in potential than in realistic market analysis</li> <li>- <i>Market challenges</i>: investigating regional market constraints and their impacts on ventures that aim to scale globally, especially those with universally applicable digital products</li> <li>- <i>Funding over fundamentals</i>: delving into the trend of ventures prioritizing fundraising over establishing a solid business foundation</li> <li>- <i>Public listing impacts</i>: studying the financial and reputational challenges ventures face during the process of going public</li> <li>- <i>Marketing vs sustainability</i>: analyzing the potential pitfalls of ventures that focus excessively on marketing and hype rather than building a sustainable business model</li> <li>- <i>Lessons from Failed Unicorns</i>: Conducting case studies on notable donkeys, like WeWork, to extract lessons for future ventures</li> <li>- <i>Mitigation strategies</i>: identifying strategies that ventures can employ to avoid transitioning from a unicorn to a donkey status</li> <li>- <i>Reputation management</i>: exploring ways in which donkey ventures can rebuild their reputation and regain trust in the market.</li> <li>- <i>Entrepreneurial psychology</i>: understanding the mindset of founders and teams behind donkeys and determining if certain behavioral patterns lead to this outcome</li> </ul>

(continued)

New entrepreneurial evolution

Future research

Mice

- *Origins and evolution*: examining the roots of mice ventures. How and why were they established? What challenges and opportunities did they face in their early stages?
- *Economic impact*: exploring their localized impact, especially in communities or niche industries
- *Survival Strategies*: Investigating the strategies these small businesses employ to survive in a market dominated by “elephants” or large ventures
- *Interaction with elephants*: delving into cases where “mice” ventures were approached or acquired by larger ventures. For example
- *Organizational culture*: what are the values at the basis of their peculiar organizational culture? How do they influence venture operations and strategies?
- *Market niches*: exploring the specific market niches these ventures operate in. How do they identify and cater to these niches?
- *Product innovation and branding*: researching how mice ventures leverage product innovation and unique branding to stand out in the market.
- *Consumer loyalty and connection*: delving into the relationship between mice ventures and their consumers. Why are consumers loyal to these brands? Is it just the product or are the venture’s values and mission a significant factor?
- *Impact of acquisitions*: investigating how being acquired by larger entities impacts the business operations, values and culture of “mice” ventures
- *Global reach and expansion*: studying the potential for these small ventures to go global. How do they expand and adapt to international markets?
- *Challenges and threats*: researching the most common threats faced by these ventures. What are the predatory practices they must guard against? How do external factors (like economic downturns) impact them differently compared to larger ventures?
- *Community involvement and social responsibility*: Investigating how they interact with and give back to their communities. How does this influence their brand image and loyalty?

(continued)

Table 2.

New entrepreneurial evolution	Future research
Elephants	<ul style="list-style-type: none"> <li>- <i>Organizational agility</i>: studying how elephant ventures are adapting to enhance agility in decision-making and operations, given the increasing pace of business change</li> <li>- <i>M&amp;A strategy</i>: examining the mergers and acquisitions strategies of elephant ventures, especially how they integrate smaller, innovative ventures without stifling their innovative spirit</li> <li>- <i>Cultural adaptability</i>: investigating the strategies large corporations use to evolve their deeply-rooted corporate cultures in the face of changing market and societal values</li> <li>- <i>Risk management</i>: researching how these vast organizations manage and mitigate risks in an era of rapid technological advancement and global challenges</li> <li>- <i>Global reach vs local adaptation</i>: analyzing the strategies employed by elephant ventures to balance global brand consistency with the need to adapt to local markets</li> <li>- <i>Digital transformation</i>: understanding the challenges and strategies of large, established ventures in undergoing digital transformations, especially how they compete with more agile ventures in the digital space</li> <li>- <i>Sustainability initiatives</i>: investigating how these large corporations are integrating sustainability into their business models, given the increasing importance of environmental and social responsibility</li> <li>- <i>Employee dynamics</i>: examining the challenges faced in talent acquisition, retention and training in such large organizations, especially in the context of a changing work environment (e.g. remote work, gig economy)</li> <li>- <i>Supply chain management</i>: studying how elephant ventures manage their vast and often global supply chains, especially in the face of disruptions like global pandemics or geopolitical tensions</li> <li>- <i>Consumer perception</i>: investigating how the public perceives large corporations in an era where values-driven shopping is becoming more prevalent. How do these ventures balance profit-making with social responsibility?</li> </ul>

(continued)

New entrepreneurial evolution

Future research

Gorillas

- *Innovation strategies*: analyzing how gorilla ventures source and integrate innovations from smaller ventures, ensuring they remain at the forefront of their industries
- *Local collaborations*: researching the dynamics of partnerships between gorilla ventures and local ventures, understanding the mutual benefits and potential pitfalls
- *Risk-taking capacity*: examining the extent to which their vast market share allows gorilla ventures to experiment and take risks, and how this influences their long-term strategies
- *Corporate citizenship image*: investigating the strategies gorilla ventures employ to craft a responsible corporate image through partnerships and community engagement
- *Evolution from small to gorilla*: studying the trajectories of ventures that have transitioned from small ventures to gorilla status, identifying key factors for their success
- *Market dominance vs. monopoly*: exploring the fine line between market dominance and monopoly, understanding how gorilla ventures maintain their position without triggering anti-competitive concerns
- *Partnership dynamics with gorillas*: analyzing how smaller ventures navigate partnerships with gorilla ventures, balancing growth opportunities with potential constraints
- *Consumer perception*: researching how consumers perceive gorilla ventures in terms of innovation, responsibility and market influence
- *Industry benchmarking*: understanding how gorilla ventures set industry standards and the implications for other players in the market.
- *Dragon strategy*: understanding the business strategies adopted by dragon ventures that set them apart. How do they ensure sustainability and profitability?
- *Investment patterns*: analyzing the investment patterns surrounding dragons. How do investors perceive them compared to unicorns? What factors influence investment decisions in dragon ventures?
- *Impact on venture ecosystem*: investigating the impact of dragon ventures on the venture ecosystem. Do they influence other ventures' strategies or investor expectations?
- *Dragon success factors*: delving deep into case studies of dragon ventures, understanding their journey and deciphering the factors contributing to their massive success

Dragons

(continued)

Table 2.

New entrepreneurial evolution	Future research
Lame ducks	<ul style="list-style-type: none"> <li>- <i>Business model evolution</i>: understanding how business models of ventures labeled as lame ducks evolve over time and if there were missed opportunities for adaptation or innovation</li> <li>- <i>Employee perspective</i>: gauging the morale and perspective of employees working in lame duck ventures and how talent acquisition and retention are affected</li> <li>- <i>Revival strategies</i>: investigating strategies that have been successful in reviving “lame duck” ventures and whether mergers, acquisitions or partnerships are viable paths for resurgence</li> <li>- <i>Economic and societal impact</i>: assessing the impact of “lame duck” ventures on local economies, especially in cases where they were once major employers and explore the ripple effects on associated industries and stakeholders</li> <li>- <i>Comparative analysis</i>: contrasting the characteristics of “lame duck” ventures to those of financially robust and influential ventures in similar sectors</li> <li>- <i>Economic impact</i>: evaluating the economic implications of phoenix ventures on the broader market, especially concerning creditor confidence and financial stability</li> <li>- <i>Ethical considerations</i>: investigating the moral ramifications of phoenix ventures. Is the practice inherently deceitful or can it be a genuine tool for business recovery?</li> <li>- <i>Case studies</i>: delving into instances where phoenix ventures were used either for genuine restructuring or fraudulent activities. What lessons can be gleaned from these cases?</li> </ul>
Phoenixes	
<b>Source(s):</b> Own elaboration	



Main topic	Research avenues
Inter-species dynamics and ecosystems	<ul style="list-style-type: none"> <li>- Analyzing the competitive, complementary and cooperative dynamics between various entrepreneurial species and their combined effect on the ecosystem</li> <li>- Investigating the potential for ventures to transition from one species category to another based on changes in their strategic direction, market positioning or external factors</li> <li>- Delving into mutualistic relationships and synergies between different species that drive innovation and market expansion</li> </ul>
Entrepreneurial life cycle and evolution	<ul style="list-style-type: none"> <li>- Examining how ventures evolve across different species categories over their life cycle. For instance, how might a “Gazelle” transform into a “Camel” or a “Unicorn”?</li> <li>- Identifying the key inflection points in a venture’s growth trajectory that signal a potential transition between species categories</li> <li>- Studying the external factors, such as market dynamics or regulatory changes that influence a venture’s movement within the entrepreneurial ecosystem</li> </ul>
Scaling strategies and growth barriers	<ul style="list-style-type: none"> <li>- Assessing the unique challenges each species faces when scaling and the strategies employed to overcome them</li> <li>- Investigating the barriers to growth that prevent certain ventures from transitioning to another species category</li> <li>- Evaluating the role of capital allocation, market demand and innovation in scaling strategies for different species</li> </ul>
Ecosystem Health and Diversity	<ul style="list-style-type: none"> <li>- Understanding the balance needed in the entrepreneurial jungle to ensure a healthy ecosystem. Does an overabundance of one species potentially stifle the growth or emergence of others?</li> <li>- Examining the role of policy, regulations, and institutional support in fostering a diverse and thriving entrepreneurial ecosystem</li> <li>- Investigating the potential risks of a homogenized ecosystem and the importance of maintaining diversity among entrepreneurial species</li> </ul>
Entrepreneurial impact and legacy	<ul style="list-style-type: none"> <li>- Assessing the broader societal and economic impacts of various entrepreneurial species on local and global communities</li> <li>- Exploring how different species contribute to job creation, innovation and economic stability</li> <li>- Investigating the legacy and long-term contributions of entrepreneurial species, especially those that might not fit the traditional molds of rapid growth or high valuation</li> </ul>
Adaptation and resilience amidst change	<ul style="list-style-type: none"> <li>- Studying how various entrepreneurial species adapt to sudden changes in the market, regulatory shifts or global crises</li> <li>- Analyzing the strategies that enhance resilience among certain species and enable them to navigate uncertainties better than others</li> <li>- Exploring how different species might pivot their business models or strategies to ensure longevity and sustained impact</li> </ul>

Source(s): Own elaboration

**Table 3.**  
Future research avenues for the entrepreneurial jungle as a whole

The entrepreneurial jungle is diverse, with a rich array of entrepreneurial species not investigated in articles in the Special Issue. The primary research themes for these species, largely based on our scientific understanding, can be summarized into three main themes. However, for a more detailed view, refer to [Table 2](#).

(1) *Growth vs Stability:*

- *Camels vs Unicorns:* The juxtaposition between camels, known for their resilience and ability to withstand difficult conditions, and unicorns, which focus on rapid

expansion, is fascinating. Research in this domain should explore how different ventures navigate the spectrum between growth and stability.

- *Shift in mindsets*: As the market dynamics change, there is an increasing shift in focus from pure growth to resilience and longevity. How are ventures transitioning in their strategies, and how does this influence their long-term success?
- *Transitions*: Not all unicorns maintain their high valuations. Understanding the dynamics that lead ventures to transition from a unicorn to a donkey status is pivotal. What factors contribute to these shifts, and how can they be mitigated?

(2) External influences:

- *Capital and market size*: Funding plays a crucial role in the strategies and success of ventures. Investigating how different entrepreneurial species like camels and unicorns approach and utilize funding and the influence of overall market size can provide insights into their growth trajectories.
- *Regional characteristics*: Different regions come with their unique challenges and opportunities. How do regional characteristics influence various entrepreneurial species' emergence, strategies and success?
- *Economic downturns and global challenges*: Ventures, especially those like camels, have to navigate economic downturns. Researching how these downturns impact different species can shed light on their resilience and adaptability.

(3) Internal dynamics:

- *Decision-making processes*: Internal decisions can make or break a venture. For instance, how do camel ventures decide when to pursue growth versus when to maintain stability?
- *Organizational cultures*: Every entrepreneurial species has its unique cultural characteristics. Mice ventures, for example, are known for their strong value-driven organizational cultures. How do these cultures influence venture operations, strategies and overall success?

These themes form the bedrock of the multifaceted entrepreneurial jungle. Researchers delving into [Table 2](#) will find a more detailed breakdown of the questions that can be addressed.

#### 4.2 Future research on the entrepreneurial jungle as a whole

In the vast expanse of the entrepreneurial jungle, the dynamics between different species of ventures weave a rich tapestry of interactions, strategies and outcomes. This section delves into the future research prospects encompassing this entrepreneurial jungle as a cohesive entity, aiming to understand the interplay and overarching patterns that influence the ecosystem's evolution and growth. [Table 3](#) outlines the research avenues for understanding the complex entrepreneurial jungle under six themes.

- (1) *Inter-species dynamics and ecosystems*: dissecting the competitive, complementary and cooperative dynamics among various entrepreneurial species and assessing how these interactions impact the broader ecosystem. Moreover, research on this theme should aim to comprehend ventures' potential to shift across species categories due to strategic adjustments, market positioning or external pressures. A thorough exploration of the

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mutualistic relationships that foster innovation and fuel market growth is also crucial to this investigation.

- (2) *Entrepreneurial life cycle and evolution*: emphasis on the metamorphosis of ventures as they navigate through different entrepreneurial species throughout their lifecycle, such as the transformational journey of a “Gazelle” into a “Camel” or even a “Unicorn”. This also encompasses recognizing the pivotal junctures in a venture’s growth journey and the external determinants, like market dynamics or regulatory amendments that steer its path within the entrepreneurial maze.
- (3) *Scaling strategies and growth barriers*: identifying the challenges individual species face during scaling, the impediments that hinder growth and transition between entrepreneurial species, and the assessment of capital deployment, market demands and inventive strategies suited for the various species.
- (4) *Ecosystem health and diversity*: gauging the equilibrium necessary for sustaining a vibrant entrepreneurial environment, pondering whether a particular species’ dominance could jeopardize others’ well-being. Here, the impact of policies, regulations and institutional backing in nurturing a diverse and dynamic entrepreneurial realm is also vital, as is understanding the risks of a stagnant ecosystem.
- (5) *Entrepreneurial impact and legacy*: evaluating the extensive societal and fiscal repercussions of different entrepreneurial species on both local and global scales and their role in spurring job opportunities, pioneering innovations and buttressing economic resilience. The contributions and enduring influence of diverse entrepreneurial species, especially those defying conventional growth or valuation standards, warrant attention.
- (6) *Adaptation and resilience amidst change*: understanding of how entrepreneurial species acclimate to abrupt market disruptions, regulatory shifts or global adversities. The analysis of tactics that enhance resilience in certain species is essential, allowing them to navigate uncertainties with more agility and possibly reinvent their business models to ensure sustained relevance and efficiency.

The entrepreneurial jungle presents numerous research avenues, each potentially refining our understanding of entrepreneurial species dynamics. As we navigate this multifaceted terrain, it becomes imperative to combine theory and practice, ensuring that insights gleaned drive both entrepreneurship and societal advancement. In all its diversity and complexity, the entrepreneurial jungle awaits our continued exploration and comprehension.

## 5. Concluding remarks

Entrepreneurship often draws upon metaphors to decipher complex business landscapes. The *entrepreneurial jungle* metaphor we propose draws inspiration from [Lakoff and Johnson \(2003\)](#), who highlight the power of metaphors in molding realities. This metaphor is a compass in the entrepreneurial realm, guiding founders, investors and other stakeholders in charting enterprise trajectories. This simplifies intricate notions, fosters meaningful connections and enhances communication ([Koptelova and Panyovkina, 2020](#)).

Assessment of entrepreneurship generally mirrors exploring a jungle, rich in diversity, multi-layered patterns and interactions. Beyond the restrictive confines of a “zoo” where entities are isolated, the “jungle” metaphor depicts businesses as actively adapting and interacting in their most organic states ([Abatecola et al., 2020](#)). As researchers, we view our role as explorers, venturing into this entrepreneurial jungle to discern these species’ true

essence and myriad interactions. Embracing this approach will not provide a genuine understanding. Still, it will also pave the way for scholars to delve deeper into the complexities of entrepreneurial species and their interconnections, pushing the conversation beyond the confines of mere venture capital and media discussions.

As the entrepreneurial landscape evolves, studying these entrepreneurial species holds promise for blossoming into a distinct research frontier. This is not merely an academic fascination, it is an imperative. By immersing in the complexities of these species, we can better understand current market dynamics and anticipate emerging trends. Their behaviors, interactions and evolutionary trajectories weave a compelling narrative that can augment traditional entrepreneurial theories. We believe that this research stream on “entrepreneurial species” will prosper in the years to come, carving its significant niche in academic and industry discussions, thereby enriching a deeper understanding of the evolving entrepreneurial ecosystem.

**Matteo Cristofaro**

*Department of Management and Law, University of Rome Tor Vergata, Roma, Italy*

**Johan Kask**

*Center for Research on Digitalization and Sustainability,  
Inland Norway University of Applied Sciences, Elverum, Norway and  
School of Business, Örebro University, Örebro, Sweden, and*

**Jeffrey Muldoon**

*Emporia State University, Emporia, Kansas, USA*

#### Note

1. This emerged in the Professional Development Workshop of the Management History Division at the *Academy of Management 2023* entitled “Unicorns and Other ‘Fantastic’ New Ventures: *Lights and Shadows of Entrepreneurial Evolutions*”. Details of the event are here: <https://my.aom.org/Program2023/SessionDetails.aspx?sid=13050>

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