

**DETERMINANTS AND OUTCOMES
OF INNOVATIVE ENTREPRENEURSHIP
IN A TURBULENT CONTEXT**

The case of post-revolution Tunisia

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The case of post-revolution Tunisia

A study by the Technische Universität Berlin &
Alexander von Humboldt Institute for Internet and Society

AUTHORS

Meryem Masmoudi ¹, Lubna Rashid ²

^{1,2} Technische Universität Berlin, 10623 Berlin, Germany

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Amidst rising recognition of entrepreneurship's potential for sustainable development, governments and practitioners have been adopting Silicon-Valley-like approaches to fostering innovation ecosystems and high-growth technology startups. However, the motivational factors behind the engagement in such entrepreneurial activity and the suitability of those strategies as context-relevant, holistic, and long-term solutions for challenges faced by transitional and turbulent warrant further investigation. This paper qualitatively explores the determinants (and outcomes) of entrepreneurial activity in Tunisia following the aftermath of the 2011 uprisings that overthrew the previous regime and the subsequent establishment of national innovation policies. The study models entrepreneurship determinants as a complex interplay of individual and environmental motivational factors guided by the eclectic theory of entrepreneurship and the self-determination theory. Semi-structured interviews with entrepreneurs, ecosystem leaders, and state actors, following an abductive analysis approach, indicate that startups are highly driven by a desire for self-realization and personal development, facilitated by regulatory structures, entrepreneurship education, socioeconomic conditions, and community support. Nevertheless, it is observed that this entrepreneurial model may be inaccessible to the majority, a contributor to the exclusion of vulnerable groups, and an exacerbator of inequality and social division in an already fragmented society. A detailed discussion on those findings and implications for scholarship and practice is provided, urging focus on the interplay of governance, local context, and inclusive innovation.

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SUMMARY HIGHLIGHTS

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Purpose: This paper qualitatively explores the motivations of Tunisian entrepreneurs to launch new ventures amidst fragility and in a challenging environment characterized by socioeconomic and political turmoil, answering the question “how is the motivation to pursue entrepreneurship shaped amidst political turmoil and socioeconomic instability?”. Furthermore, this study inductively sheds light on the outcomes and impacts of digital startup ecosystems in such contexts.

Results/findings: The research identifies person-related motivational factors as the main drivers for the decision to launch a venture. Entrepreneurs also appear to be motivated by their perception of their environment, namely through opportunities and resources yielded by their institutions, economic milieu, and a high community endorsement. However, entrepreneurial activity within the digital startup ecosystem appears to also exacerbate inequalities and may be accessible to the underprivileged majority.

Practical implications: The paper provides suggestions for entrepreneurs and governments in contexts of fragility to embrace a South-South perspective and develop microecosystems in the form of community networks in an attempt to rebalance disparities. Practitioners must engage in several reforms including improving access to funding, easing administrative procedures, and alleviating state interventions.

Theoretical implications: The study shows that the motivation of Tunisian entrepreneurs is rather autonomous than controlled, discrediting the idea that entrepreneurs amidst fragility are unempowered, necessity-driven individuals. This research is unique in expanding the application of the eclectic theory of entrepreneurship to fragile contexts through adding qualitative methods, primary data, and triangulation of different experts' perspectives. This paper responds to Welter et al.'s [1] call to diversify entrepreneurship research through more inclusive and heterogeneous studies. It robustly explores entrepreneurship motivation by expanding and building on recent quantitative findings in a turbulent context [2], integrating pragmatic philosophies and incorporating modern sociological, economic, and psychological theoretical constructs [3–5].

Future research direction: Further contextualization of fragile environments beyond international indices and rankings is primordial. Future research can build on the emerging themes in this study and expand them to measure their interrelations e.g., the interplays of democracy and entrepreneurship, the motivation and context, and silicon-valley-like business models in the global south.

INTRODUCTION

Determinants and outcomes of innovative
entrepreneurship in a turbulent context

1. INTRODUCTION

The need for innovative, market-based, and bottom-up strategies for sustainable development, particularly in turbulent environments, has become widely recognized amongst scholars and practitioners [6–8]. Indeed, entrepreneurship has been shown to contribute to establishing peace, facilitating post-turbulence transition, and reducing poverty and inequality [9–11], in addition to economic growth and wealth generation. Particularly, digital tech entrepreneurship is being more and more hailed as a solution for sustainability and global challenges [12,13].

This has translated to various strategic attempts to foster technological innovation and entrepreneurial ecosystem development around the globe, often embracing the Silicon Valley entrepreneurship model where high-tech, venture-backed, explosively growing gazelles and unicorns are seen as the epitome of entrepreneurial role models. However, the effectiveness of this approach has been highly questioned in recent literature [1,14], particularly regarding its applicability to transitional and fragile economies [15,16] and its contribution to truly sustainable development where social and ecological value creation is balanced with economic goals [17–20].

Accordingly, a deeper understanding of the drivers and determinants of entrepreneurial activity in the midst of those increasingly popular entrepreneurship support mechanisms and environments is needed, in addition to an understanding of the impacts and consequences of such entrepreneurial ecosystems. Generally, little is known about the motivations behind startup decisions in environments characterized by social, economic, and political turmoil, and entrepreneurship researchers still largely focus on researching entrepreneurial intention rather than motivation as an antecedent of entrepreneurial activity [21,22]. Even then, research on entrepreneurial determinants outside of stable, advanced economies often reduces entrepreneurial phenomena to simplified dichotomies (e.g. necessity versus opportunity), thereby overlooking context and deeming a majority of entrepreneurial activity less interesting [1]. Thus, knowledge on innovative, technology-based entrepreneurship in turbulent contexts is limited [23,24], with the few existing narratives highly emphasizing its potential for positive transformation rather than providing a differentiated image of its multiple, sometimes less desirable, facets [25].

Accordingly, this paper aims to answer the following research question: “how is the motivation to pursue entrepreneurship shaped amidst political turmoil and socioeconomic instability?”, following a qualitative approach to uncover the factors influencing individuals’ decision to start businesses in a fragile environment. Additionally, the impacts of widespread support mechanisms for innovative entrepreneurial ecosystem development are investigated. To understand the motivations of Tunisian entrepreneurs and incorporate the theories and findings, this study is qualitative and explanatory. It employs semi-structured interviews and triangulates data with a snowballing approach involving various experts, including startup founders, support organization managers, and decision-makers at the national policy level. Tunisia is chosen for this research as an ideal case to explore the drivers behind the entrepreneurial effervescence trying to disrupt the status quo since the Arab Spring revolution of 2011. The country is characterized by a post-colonial

identity rooted in Arab-Muslim values, cyclical social uprisings fragilizing its hard-won democracy, and ongoing structural reforms.

This qualitative case study extends a quantitative analysis of entrepreneurship motivation that involved a systematic literature review, quantitative data collection, and exploratory factor analysis in the Syrian context [2], which identified *self-realization*, *supportive institutions*, *economic milieu*, and *community influence* as key motivational constructs in a fragile context (see Appendix 1). Such a comprehensive analysis in a sensitive setting required the integration of sociological, psychological, and economic perspectives on entrepreneurial motivation and determinants. The eclectic theory of entrepreneurship was found to perfectly match these criteria [4], modeling motivation as an interplay of the perceived opportunities at the individual level, such as environmental conditions and personal characteristics like resources, capabilities, personality, and individual preferences. Additionally, the Self-Determination Theory (SDT) was incorporated considering the importance of psychological needs in motivating productive entrepreneurship [3,26], as well as the entrepreneurial determinants model of Wagner & Sternberg [5].

The following sections provide a theoretical background and literature overview, followed by a discussion of the methodology, and finally a presentation of the findings and their implications.

ENTREPRENEURSHIP

in Transitional Economies
and Fragile Democracies

2. ENTREPRENEURSHIP IN TRANSITIONAL ECONOMIES AND FRAGILE DEMOCRACIES

Global estimates indicate that by 2050, over 3.3 billion humans will be dwelling in contexts in which states are unable or unwilling to satisfy the basic needs of the majority of residents [27]. Indeed, “since the global financial crisis of 2008, the international situation is rapidly deteriorating, warmongering is back in vogue, and military expenditure is ballooning [28].” As a result, consequences of environmental disasters, violent conflict, and resource scarcity, accompanied and powered by the rise in potent technologies, are likely to exert a higher toll on countries already lacking stable democracies, trust in governance structures, and a tight social fabric [e.g. 29,30].

Traditionally, common approaches to development and crisis mitigation in such fragile environments mostly comprise a top-down nature, in which (corrupt) governments are key recipients of aid money, overlooking the importance of gradual and evolutionary rather than revolutionary approaches to institutional and social change [31–33]. However, a recent shift towards bottom-up, market-based strategies focus on the entrepreneur as a developmental agent [7,34,35], with the hope of circumventing issues such as disempowering dependence on foreign support, governments becoming more accountable to donors than own citizens, and the perpetuation of (post)colonial dynamics.

Evidence shows that those entrepreneurship-focused developmental approaches could indeed have several benefits. Entrepreneurs in states of transition create jobs, constraint market power, supply consumer goods, establish reform momentum and thereby produce welfare profit [36–38]. Contextual constraints may in fact promote creativity and innovative behavior [39,40], hence allowing entrepreneurs to generate important processes and products. In such settings, the entrepreneur may target and reach marginalized populations more efficiently than the public sector, thanks to their ability to identify opportunities and willingness to handle the associated risks [34]. Entrepreneurs may ultimately contribute to institutional reform and the sustainable transition towards stability through the reduction of (youth) unemployment which in turn reduces criminal activity and terrorism, the extension of markets to include members of marginalized groups, and the facilitation of a nation’s participation in the global economy [10,38].

Nevertheless, optimal benefits of innovative entrepreneurial activity cannot be expected to be reaped when promoted with little regard of local context and needs [41]. In the words of Herrmann [42], “if economic actors across economies behave alike, this behavior tends to result into different outcomes because of how national institutions channel their behavior”. Therefore, common approaches to building and promoting entrepreneurship through Silicon-Valley-like programs (e.g., accelerators, pitch competitions, etc.) and innovation policies and incentives may not necessarily result in desired outcomes [14,19,43]. This is largely due to the fact that such approaches are designed to catalyze the commercialization of knowledge investments, whereas “the fundamental problems confronting many [...] developed countries are less characterized by an inability to take advantage of costly investments in new knowledge

and human capital but rather a paucity of such knowledge investments and human capital in the first place, resulting in problems of social and economic inclusion [14].

Additionally, local psychosocial and cultural contexts yield varying definitions of “success”, “innovation”, and “desirable” outcomes, which may not mirror the goals of copy-pasted start-up support programs that were initially developed in and for completely different environments [44,45]. Finally, those approaches which primarily focus on fast and efficient growth and scalability are often unrealistic in turbulent contexts with limited internationalization options for the entrepreneurs, for instance due to travel restrictions and the lack of open trade agreements [46].

ENTREPRENEURSHIP DETERMINANTS

An Interplay of Micro- and Macro-Level Factors

3. ENTREPRENEURSHIP DETERMINANTS: AN INTERPLAY OF MICRO- AND MACRO-LEVEL FACTORS

To understand the roles and impacts of entrepreneurial activity amidst political transition and institutional fragility, an in-depth, contextualized, and multi-level understanding of the determinants and drivers of innovative entrepreneurial behavior is needed. Several entrepreneurship researchers have sought to develop and synthesize more complex and holistic models of motivation. Some consider the personal and business environment, personal goals, characteristics, and the business idea in their model of entrepreneurship motivation [47]. Others identified a mix of personal goals, push factors, community, and societal drives as elements of entrepreneurship motivation [48]. Wagner & Sternberg [5] consider that the motivation to start a business is influenced by personality traits and external factors synthesized by the individual's perception. Wahlgrén & Virtanen [49] distinguish between economic, psychological, and social motivation for entrepreneurship, and others have uncovered passion, education, financial gain, and individual experience as motivational drivers [50].

The eclectic theory of entrepreneurship, developed by Verheul et al. [4], comprehensively models entrepreneurial activity not only from an economic perspective but also from the level of individual choices by drawing upon insights from psychology and sociology. The theory defines the choice of business ownership over other employment or unemployment options as the outcome of the process of weighing the risks and rewards, of these alternatives while considering both individual characteristics (resources, ability, personality, and preferences) and environmental factors (opportunities). As such, demand is comprised of entrepreneurial opportunities as influenced by macroenvironmental factors (e.g., government regulation, market need, policy incentives). Supply consists of entrepreneurs who can seize the available opportunities, and it depends on external resources such as financial capital, educational programs, and social networks (environmental factors) that support entrepreneurs in developing assets needed to seize entrepreneurial opportunities, as well as internal resources/characteristics such as personality, ability, behavior, and preferences.

From a psychological perspective, The SDT models motivation on a scale of controlled (extrinsic) to autonomous (intrinsic) [26]. It similarly views human motivation to behave and act, extending beyond that related to entrepreneurial engagement, to be a result of a combination of intrinsic and extrinsic factors. Intrinsic motivation is the inherent tendency to seek out novelty and challenges, to extend and exercise one's capacities, to explore, and to learn, while extrinsic motivation is that which results from environmental pressures and rewards.

Schools of motivation theories have long been in conflict with one another with some rooted in economics and others in psychology [51], and although progress in the interdisciplinarity in viewing entrepreneurship determinants has been made, contextual considerations and adaptations are still needed. Indeed, although the above-presented models are interesting, comprehensive, and highly sophisticated, they lack extensive validation and expansion in contexts of fragility [2]. Consequently, Rashid's work [2] attempted to combine those theoretical perspectives into a model

of entrepreneurship motivation that was then quantitatively tested in a turbulent context, namely that of Syria.

According to Rashid [2], entrepreneurial motivation is viewed in terms of extrinsic and intrinsic factors, namely a synthesis of the individual's analysis and perception of opportunities and external resources, personality characteristics, capabilities, and preferences. Following an exhaustive, systematic review of 82 peer-reviewed papers on entrepreneurship motivation and determinants, a 44-item questionnaire was constructed, with each item representing a variable that has recurred more than once across the reviewed articles. The questionnaire was validated with external experts and translated into Arabic before it was provided to Syrian entrepreneurs, ultimately obtaining 139 completed, usable surveys. The responses were then modeled using exploratory factor analysis [52], an abductive statistical approach commonly employed to reduce large amounts of data and variables to their key explanatory dimensions. The result was four motivational factors summarizing 22 out of the original 44 questionnaire items (i.e. variables) that were found empirically relevant for the examined context, as detailed in Appendix 1. Those factors are deemed *self-realization*, *supportive institutions*, *economic milieu*, and *community influence*, and are therefore considered highly relevant for explaining entrepreneurship motivation amidst fragility.

Self-realization represents "person-related factors in a combination of innate individual characteristics, attitudes and desires [...]. Components of this factor can be summarized as innovativeness, self-confidence, passion, talent, achievement, self-development, and endurance and highly relate to personality and preferences [2]." As for *supportive institutions*, the entrepreneur's perception of the regulatory and educational environment, such as entrepreneurship education, the academic system, tax cuts and incentives, as well as the legal system is considered. The *economic milieu* factor represents the entrepreneur's perception of the market needs, financial opportunities and support, as well as economic stability and international prospects, while *community influence* represents the impact of the entrepreneur's social group on their entrepreneurship motivation. The latter includes family and friends support, social networks, and community values. Building on and extending those findings, those factors have been employed to structure the foundation of the qualitative research at hand.

MATERIALS AND METHODS

4. MATERIALS AND METHODS

Inspired by the four motivational factors uncovered by Rashid's [2] analysis, an interview guideline was created (Appendix 2) to employ for semi-structured interviews in the context of this study. Framing the analysis according to a clear theoretical background enables deep and thorough explanations of phenomena in a structured manner while expanding existing theories. This deductive approach was also combined with open questions, as well as providing the interviewees with the room to improvise and express themselves beyond the predetermined, theory-driven questions. In other words, the analysis follows abductive reasoning, in which new relationships and explanations are uncovered while also contributing to the expansion and refinement of existing theories and frameworks [53].

Therefore, the interview guideline was formulated containing open and semi-open questions on the motivation to pursue entrepreneurship corresponding to each of those motivational factors, as well as included additional questions that are more specific to the study context (see section 4.1). In addition, questions on the impact and perceived success of entrepreneurship and associated initiatives were added, slightly customized to fit a wide range of interviewees, including entrepreneurs, enablers of entrepreneurial activity, as well as experts from the ecosystem.

4.1. Study Context

Tunisia was selected as an empirical case to investigate the determinants and outcomes of entrepreneurship amidst fragility and transition following the uprisings that occurred in 2011, which led the country to become the "Arab Spring success story" [54]. In its transition to democracy over the last ten years, Tunisia has witnessed its capacity for economic resilience drained by years of indecisive public policymaking and continuous deterioration of its public services [27]. Since the 1950s, Tunisia has been subject to a series of events that led to an accumulated dissatisfaction with its system and authoritarian regime [55]. Ultimately, liberalization policies in the 1990s attracted foreign investments and reinforced integration in European markets, and later in the 2000s, service and specialization sectors emerged, which led to notable growth in the country's GDP. However, this was insufficient to bury the country's palpable issues, such as disparities in wealth distribution, corruption, and high levels of youth unemployment.

This led to nation-wide uprisings that resulted in the downfall of the authoritarian regime which had been in place since 1987. By adopting a new constitution in 2014, along with pluralistic governance, free elections, a process of transitional justice, and unprecedented compromises between the secular and Islamist parties, Tunisia succeeded to achieve democratic standards [56]. Nevertheless, persistent socioeconomic inequalities and public mistrust in institutions have caused its newly born democracy to remain fragile [57]. Furthermore, the so-called first "Muslim democracy" desperately tries to combine its pro-Western ideology with its identity as an Arab-Muslim country, revealing new avenues for international cooperation while being compelled to align with "big powers" owing to its relative instability [58,59].

Audretsch & Moog [20] argue that democracy and entrepreneurship are inevitably tied as they are phenomena exhibiting the same underlying forces: freedom of thought, decision-making, and action. With the ongoing democratization dynamics, a shaky regional environment, and the shifting support of international powers, Tunisia offers an interesting case study with a potential for learnings that can be extended to other turbulent contexts. This paper allows understanding how the portrayed complex environmental factors, identity, and culture feed into the decision of the entrepreneur and their subjective perceptions of priorities and goals. The long history of Tunisia's blended identity of foreign and local influences with a pro-Western ideology shaped by long years of colonization, a democracy attached to its Arab-Muslim values, and a growing idealization of the Silicon Valley model pose compelling contextual factors in this exploration of entrepreneurship motivation [16].

As a result, the Tunisian government has made entrepreneurship a primary policy focus to strengthen its ecosystem and make the country a startup destination. Since the uprisings and, more specifically, starting from 2015, indicators show an increase in the entrepreneurial activity, among which is the takeoff of many support initiatives mobilized by different players, including entrepreneurs, tech hubs, and other support organizations. One of the results of the movement is the *Startup Tunisia* [60], a national program aimed at making Tunisia a country of startups at the crossroads of the Mediterranean and Africa. The movement was launched in 2019 and is composed of the following four pillars:

- **Startup Act:** A unique legal framework dedicated to startups launching or settling in Tunisia.
- **Startup Invest:** A new investment framework dedicated to startups built around the ANAVA Fund of Funds with a target size of 200 MC and supported by an incubator (management company) as well as a Guarantee Fund for Startups.
- **Startup Empower:** A support framework for an inclusive ecosystem through the support organizations and startups, focusing on funding, animation, and international connections.
- **Startup State:** A framework to support innovation in the public sector, including two main programs: The 'Startup Lab' and the 'State Startups'.

Hence, Startup Tunisia (تونس الناشئة) is a national initiative launched by the Tunisian State in collaboration with civil society, the private sector, and international partners to develop a dynamic ecosystem of startups from Tunisia. The Startup Act is an innovative legal framework for startups and represents a steppingstone of the fulfillment of the rest of the initiative's pillars. The Startup Act is based on a label of merit and a set of advantages and incentives favoring entrepreneurs, startups, and investors. The Startup College is a body deciding on the innovative and scalable nature of candidate projects for the "Startup Act label" that was created under Article N°6 of Law N° 2018-20. Its composition, prerogatives and operation are set by Decree. It is a body made up of a chairman and eight (08) members, all volunteers, and voluntarists, from the public and private sectors and civil society in connection with Startups, entrepreneurship, innovation, investment, and support.

To obtain the Label, the Startup complying with the labeling criteria fills out an *online application* form. Those who have not yet created their companies can apply to the “pre-label”. If the innovation and scalability criteria are met, the candidate is awarded a 6-month pre-label to finish the procedures for creating the company and to comply with the criteria of age, size, and independence of capital before getting the Startup label. The selection criteria for the label and pre-label are as follows:

- **Age:** The company must be less than 8 years old since its legal incorporation.
- **Size:** The company must have less than 100 employees and less than 15M TND (millions of dinars) of total balance sheet or annual turnover.
- **Capital independence:** More than 2/3 of the company's capital must be held by individuals, regulated investment organizations (investment funds, etc.) or foreign startups.
- **Innovation:** The company's business model must be innovative e.g., provide an interesting and differentiated solution to a given problem. This often implies a technology-based business.
- **Scalability:** The company's target market must be large and homogeneous, the solution provided must be adapted to the market, the product must have a minimum level of progress (POC) and the team in charge must be able to implement the project properly.

Below are some of the benefits granted to the Startup:

- **Startup Portal:** Thought to be the point of interaction for the startup to apply for the Startup Act label and benefit from the associated advantages. The Portal will evolve to integrate other functionalities to facilitate the administrative operations of the startups.
- **Special account in foreign currency:** Any startup has the right to open a special account in foreign currency which can freely be fed by contributions in capital, quasi-capital, turnover, and dividends in foreign currency. The startup invests, freely and without authorizations, the assets of this account to acquire tangible or intangible assets, create subsidiaries abroad and take shareholdings in companies abroad.
- **Corporate income tax:** Startups are exempt from corporate tax.
- **Technology card:** The amount allowed on the Technology Card is raised to 100k TND/year for startups.
- **Authorized Economic Operator:** Startups are considered Authorized Economic Operators under the Customs Code.
- **Homologation:** Startups are exempted from CERT (Telecommunication Studies and Research Center) approval and technical control procedures on import operations.

The label additionally benefits the Startup founders with Life Grants/Stipend, a leave of absence for creating the Startup and support in insurance. No explicit incentives are provided to startups for contributing to social or ecological goals. As of August 2020, there are 157 support actors in the Tunisian entrepreneurial ecosystems and 327 startups have received the label “Startup Act”, which form the target population for our study.

4.2. Sampling

Only startups that have received the “Startup Act” label and stakeholders involved in the associated startup ecosystem have been considered for the study. The selection criteria of the interviewees consisted of (1) being currently engaged as an entrepreneurial actor (e.g., founder, co-founder, serial entrepreneur), enabler (e.g., advisor, investor, regulator), or connector (e.g., incubator manager, program manager, former founder) in the Tunisian startup ecosystem, (2) if an entrepreneurial actor; having benefited from support provided by enabling and/or connecting structures and/or legal framework (3) being based in Tunisia and (4) having started after 2011; organization’s age should not be superior to 10 years. All the startups are considered technology companies. Using this criteria, a list of the startups, ecosystem enablers, and support organizations was established through the *Entrepreneurs of Tunisia* and *Startup Act* platforms as well as online searches via LinkedIn.

A list of 36 eligible participants was generated and contacted through LinkedIn, of which 9 individuals agreed to be interviewed, and snowball sampling was then employed to recruit additional participants. Using this approach, a total of 17 interviews was conducted. The participants comprised eight entrepreneurs, five support organization managers, and four enablers, hence triangulating the data sources for a more holistic investigation [61,62]. Many participants had more than one role in the entrepreneurship ecosystem, for instance, support program managers being or having been a former founder, a serial entrepreneur, or simply active at different levels of the ecosystem simultaneously.

Out of those 17 interviewees, 15 were based in the capital, Tunis, which is to be expected since the *Startup Act* support system and associated startups are mostly concentrated in the capital, as discussed in the previous section (some of the impacts and related considerations are discussed in 5.3). Also, since snowballing was employed to collect the data, many of the interviewees already knew each other. However, this would have likely been the case even if random sampling had been employed, since the ecosystem is quite young and interconnected. The findings of the study are therefore limited by these boundary conditions. Nevertheless, we consider the analysis to be representative of the newly established Tunisian (tech) startup ecosystem as a whole.

Following the saturation perspective presented by Saunders et al. [63], no additional interviews were needed as additional data would not have led to new emergent themes. The themes have become recurrent and the data stagnated after 6, 4, and 4 interviews with entrepreneurs, support organization managers, and enablers respectively. However, we have deemed it necessary to go further than the saturation rate for validation purposes which was confirmed with the remaining interviews where again no new emergent themes were depicted. Table 2 displays an overview of participants.

CODE*	ROLE	FIRM AGE	GENDER	FIRM TYPE	SECTOR	OBJECTIVE
EA-1	Co-founder, CEO	6 years	Male	Startup	Consumer services	Community platform to share opinions and experiences about Tunisian businesses
EA-2	Co-founder	6 years	Male	Startup	Construction	Matchmaking platform between consumers and suppliers
EA-3	Co-founder, CEO	3 years	Male	Startup	Retail, food supply, blockchain	Provider of organic and eco-friendly goods directly from farms
EA-4	Co-founder, COO	2 years	Male	Startup	IOT, medical devices	Smart bracelet for early epilepsy detection using AI
EA-5	Co-founder, CEO	2 years	Female	Startup	Apparel, fashion	Eco-friendly platform for second hand-clothing
EA-6	Founder, CEO	2 years	Female	Startup	Transportation	Transportation service provider for enterprises
EA-7	Co-founder, CEO	1 year	Female	Startup	Apparel, fashion	Eco-friendly design of swimsuits
EA-8	Founder, CEO	2 years	Male	Startup	Transportation	Community-based platform for carpooling
EN-9	Coach, serial entrepreneur	3 years	Male	Incubator	Various	Free 6-month support for pre-seed and seed-stage startups across industries
EN-10	Advisor, serial entrepreneur	13 years	Female	Co-working space, international NGO	Crafts and tourism	Ecosystem support through various initiatives including own business
EN-11	Advisor, program manager	5 years	Female	Ministry, entrepreneurship program	Various	Entrepreneurship education program manager in collaboration with ivy league university
EN-12	Advisor, CMO	1 year	Male	National program	Various	National program to boost entrepreneurship activity through various programs
C-13	Co-founder, CEO	6 years	Male	Co-working space	Various	Co-working space for entrepreneurs
C-14	President, CEO	13 years	Female	International NGO	Various	Investing in student entrepreneurship and building academic social entrepreneurship projects
C-15	Advisor, serial entrepreneur	5 years	Male	International NGO	Various	Support structure for national entrepreneurship through international funds
C-16	Program manager, entrepreneur	5 years	Male	Incubator	Various	Support for pre-seed and seed-stage startups across industries
C-17	Program coordinator	3 years	Male	Incubator	High-Tech	Support for pre-seed and seed-stage startups in the tech industry

TABLE 2.: OVERVIEW OF INTERVIEWEES.

*EA entrepreneurial actor, EN enabler, C connector.

4.3. Data Collection and Analysis

The interviews, which lasted an average of 60 minutes, were conducted remotely via Zoom following a semi-structured format between April and May 2021. Interviews were conducted in the native Tunisian dialect to eliminate potential language barriers for better rapport-building and increased accuracy and authenticity [64]. The research was conducted with transparency and reflexivity about the researcher's ethics and experiences. Additionally, the researcher articulates and attempts to present a political reflexive work to accurately identify valuable knowledge, unpack the structural dynamics and mechanisms of marginalization, and support efforts to decolonize knowledge [65].

The interview recordings were then transcribed and translated, yielding 186 pages for analysis. As the study includes the participation of different ecosystem players, the interview guide was adapted to explore each interviewee's perspective. The interview guide is composed of (1) a preparatory section with an introduction and summary of the research objectives, (2) questions to the background and experience of the participants, (3) open-ended questions on the participants' drivers to engage in and support entrepreneurial activity, and (4) further questions on their views regarding the outcomes and impacts of contextual conditions as well as (5) ecosystem actors' role in financing, networking, connecting, and supporting entrepreneurs. A full overview of the interview questions is given in Appendix 2.

For validation purposes, the interview guide was reviewed by two researchers in Tunisia and Berlin. A pilot test was run on two interviews to check for understanding of the questions and time-frame adequacy. The analysis procedure followed the six-step procedure described by Creswell [61] after uploading the transcripts to the software Atlas.ti. The first step consisted in preparing and organizing the data for analysis. Second, the data was scanned to generate an extensive sense of its overall meaning. Then, the process of text coding was launched after having organized the transcriptions, highlighting the paragraphs and sentences, clustering topics, and providing suitable labels and terms deductively guided by the four motivational factors [2].

As an additional step and as the coding process progressed, other context-specific categories evolved inductively, particularly when analyzing the open-ended questions. This could be considered open coding [66]. More patterns were then identified, and additional insights were condensed to be presented in the findings and discussion (5.3). Finally, themes were interlinked, and overall results unfolded into conclusions which were then conferred and interpreted. Overall, the findings reflect the perspective of diverse ecosystem players, including entrepreneurial actors, enablers, and connectors.

RESULTS AND DISCUSSION

5. RESULTS AND DISCUSSION

5.1. Internal characteristics and person-related motivational factors

The analysis indicates that the pursuit of entrepreneurship as a career choice in Tunisia is highly driven by endurance, passion, and a sense of achievement, which is highly associated with intrinsic motivation [3]. Many described the Tunisian entrepreneur as a “warrior, committed, and motivated” (EN-10), “very resourceful” (EN-12), and with a “strong personality” (EN-10). Interviewees appear to perceive personal characteristics and internal motivation as key to not only take the decision to launch but also to push forward and thrive especially in Tunisia’s fragile context. Most entrepreneurial actors appear strongly believe in their business idea and perceive this belief as a prerequisite to launch and survive in Tunisia’s turbulent environment, indicating their resilience and optimism.

“And so, the Tunisian entrepreneur is so strong, a warrior, committed and motivated, and it takes a strong personality and a lot of patience to keep thriving in spite of these obstacles, especially the administration.” (EN-10)

“However, we tried to turn a blind eye on this, and we tried to be optimistic as much as possible.” (EA-7)

This kind of motivation is associated with diligence, commitment, high-quality performance, satisfaction, and well-being [67–69]. This also supports previous scholarly works that emphasize that personal attributes support overcoming environmental challenges while themselves being shaped by the environment [70–73]. Interestingly most interviewed entrepreneurs expect to re-engage in entrepreneurial activity even after a failure, and following the launch of start-ups, most entrepreneurial actors see that the natural process would be serial entrepreneurship. This shows general confidence in success and a passionate drive towards entrepreneurialism.

“So, I have my startup as a job, and even if it fails, I will launch another project.” (EA-8)

“a dynamic, a small snowball that is built little by little, and what is good for the ecosystem is that there are many motivated and inspired young people.” (EN-12).

In addition, intrinsic motivation may be associated with productive and persistent prosocial behavior [74]. Evidence for this is indeed present in this study, where interviewees have stated “I was always passionate about entrepreneurship and especially social entrepreneurship with sustainable development goals” (EA-5), as well as “I discovered social entrepreneurship in the 90’s and became passionate about this world” (EN-10).

For the most part, entrepreneurial activity has been portrayed as a challenge that many times is referred to as also personal, as the opportunity to test their limits and to solve pressuring issues. This is also in alignment with the self-determination theory, where intrinsic motivation is seen as “the inherent tendency to seek out novelty and challenges, to extend and exercise one’s capacities, to explore, and to learn” [67]. The entrepreneur’s passion for the topic is additionally intertwined with a search for autonomy and independence. Entrepreneurial actors enjoy the activity and the associated creativity process to the extent that they are willing to accept additional workload and responsibilities.

“So, you tell yourself, if I can sacrifice some years and I put all my resources into creating value, then why not! So, for sure at the beginning there is this passion, and you believe that it’s a changemaker.” (C-16)

“I work in an average of 15 hours per day, but it’s a profession that I love” (EA-3)

The search for autonomy and flexibility, whether through creating and implementing their ideas freely, taking decisions, having a flexible schedule, and being their “own boss” (EA-5), also appears to influence their decision majorly. Therefore, the analysis challenges predominant notions regarding the reign of disempowered, survivalist entrepreneurs in turbulent environments, building on findings by other scholars [e.g. 76–78].

5.2. Perception of the Environment—external resources & opportunities as motivators

In addition to intrinsic drivers, the impact of the contextual environment on entrepreneurial decisions and motivations appears to be quite considerable. When it comes to supportive institutions, referring to education and training, legal systems, and regulatory incentives, interviewees reach a consensus in their recognition of the emergence and impact of various initiatives on (their) entrepreneurial activity. They mostly welcome the enforcement of the legal framework Start-up Act and the attempt to regulate and ease the start-up creation process, yet stand with reservation towards existing regulatory, legal, and administrative frameworks.

“I think we would not have launched without the “Founder Institute”. We didn’t know where or how to start. The fact of having the support of the “Founder Institute” pushed us in some way and helped us in meeting people who gave us valuable feedback.” (EA-1)

“What Startup Act did was to map and frame startups, we now can talk about startups creation, the rights and support that entrepreneurs need. And so, it made them the mainstream, and that’s what I consider the biggest achievement. Adding to that the fact that having a frame encourages entrepreneurs to further come up with project ideas and to take risks.” (EN-10)

The interviewees' perception of the state and its associated structures is rather negative, and all generally prefer to avoid interactions with either. For instance, administrative, legal, and regulatory procedures had been described as "unnecessary" (EN-12) "a waste of time" (EA-4), and "archaic" (EA-5).

"The investor, entrepreneur, and even the citizen in general, simply need to be freed from the restrictions imposed by the state, and the state must understand this. We can use the "informal" sector as an example. It is a creative response to a problem of restrictive laws. If we stop bothering people, there would be fewer parallel markets." (EN-12)

"There is a positive ecosystem that we can be optimistic about. The state and politics, however, seem like they're on another planet. The state is totally disconnected from the reality" (EN-10)

The Start-up Act itself has been viewed by the interviewees an endeavor resulting from the vision, pressure, and lobbying of some grassroots initiatives and local players that must be saluted and has been described "decent" (C-17), "very helpful" (EA-8), and a "promising framework for entrepreneurs" (EA-2), but most importantly as having "unlocked some of the barriers that exist" (C-15). Most benefits that have been praised are financial ones such as salary grants, tax cuts, and access to foreign currency, though some also mentioned that the Start-up Act label has given them more subtle advantages such as "a certain level of credibility, so that companies and potential investors believe in your project" (EA-7). Nevertheless, The Start-up Act is seen more as a "workaround" (EA-1), a "minimum viable text" (EN-9), and as having "treated the symptoms, but not the cause" (C-15). Other statements emerge with a more skeptical view of having a legal framework to regulate start-ups, claiming that "free entrepreneurship must be protected in Tunisia" (C-14).

"It taught me how to pitch and how to become more confident in front of a jury and an audience. It allows you to understand entrepreneurship through a practical perspective. You learn to prototype and to present. From this experience I learned that I really wanted to launch something on my own. It motivated me a lot." (EA-7)

"I think there's a big difference between someone who integrated an incubator for example and someone who didn't. It boosts your confidence, and you gain experience from the situations and obstacles you need to get through. And confidence guides you through the journey of becoming an entrepreneur." (EA-8)

"For instance, when we pay a salary we would not have to pay for Social Security anymore as the government is taking charge of that. In terms of credibility, it did not contribute much since we were an already established brand in Tunisia. It also helped us with the "technological card" especially considering that we were very limited in our ad

investment. We were also exempt from tax payment. For the investors, it was also beneficial. These are the main areas where the "Startup Act" was most valuable." (EA-1)

This differs regarding privately owned and managed support structures (e.g., incubators, accelerators, and co-working spaces) or internationally funded initiatives, which are generally met with a positive attitude. Nevertheless, many feel that "the entrepreneurship value chain is incomplete" (C-14). For instance, interviewees criticize the lack of diversity, contextualization, and specialization of those players, calling the programs to showcase "local success stories" (EN-9) and support context-relevant, sector-specific start-ups (e.g., agriculture).

"Of course, in fact there is more show off to innovative entrepreneurship than elsewhere. There's an expression I use saying that we do a lot of „Porn and Pershing‘‘ In Tunisia, so we show off start-ups that don't really have a huge potential, because that's how incubators sell their business to the youth and that's their branding, and sometimes there are start-ups that pitch for 3 to 4 years without concretizing anything, since it feels that the show is more important than the impact itself, and that's what bothers me in the current system, for example there are influencers whose negative impact is more than the positive one. We need to diversify the entrepreneurial landscape, because there is only this type of entrepreneurship that is present abroad, that even the funders who come to work on entrepreneurship are biased, and focus exclusively on that, while there is a great potential that is not even explored." (C-15)

Interviewees acknowledge that civil society and international support organizations have "created this movement towards entrepreneurship" (C-14) yet recognize the need for more relevant and accessible support systems. Those findings highlight the lack of public trust in existing political and regulatory structures, an expected consequence of prolonged subjection to fragile conditions and a state's inability and/or unwillingness to fulfil its residents' needs [75–77]. Consequently, entrepreneurs appear to have more faith in private actors and international support organizations, but those in turn appear disconnected from realities.

"The economy attains a state of inertia where the money is available but does not move. This is the major issue that startups face in Tunisia." (EA-2)

"The ecosystem was completely absent before the revolution. We could not talk about entrepreneurship at that time. When I was a student back then, this whole thing around entrepreneurship and the word entrepreneurship did not exist in Tunisia." (C-16)

"After the revolution, even if there are political issues and instability, there are many factors discouraging investment but if you launch you

have the guarantee that nobody will steal it from you... Nobody was daring to launch before, and nobody was willing to risk. The Tunisian relationship to risk has also evolved since the political situation is now different.” (EA-4)

With regards to the economic and political milieu, all interviews concord to affirm that the uprisings of 2011 mobilized entrepreneurial activity in the country, which was “void” (C-15) before that. Entrepreneurial actors who launched directly after the uprisings say that it gave them the impulse to launch, while the rest perceive it as having brought positive influences on their business’s decisions, with statements such as “the revolution brought us everything. It brought us freedom; freedom of speech, freedom of decision, and of doing business” (EA-4). This is explained by a diffuse feeling of fear since the “previous government and those in power had full control over all sectors” (EN-9), which has been lifted following the uprisings. Additionally, there is an acknowledgement of the role of reverse migration and Tunisians who returned to their home country from abroad after the revolution in stimulating and supporting the emergence of the startup ecosystem.

“After the revolution, even if there are political issues and instability, there are many factors discouraging investment but if you launch you have the guarantee that nobody will steal it from you... Nobody was daring to launch before, and nobody was willing to risk. The Tunisian relationship to risk has also evolved since the political situation is now different.” (EA-4)

“There is a will that we observe... And the good news is that everyone is willing to help especially after the revolution to make an impact in Tunisia” (EN-11)

“There is definitely the effect of those who came from abroad and wanted to change something.” (EN-16)

“After 2011, there was a community of superheroes—people who believed in entrepreneurship. At different points in the ecosystem, some people were changemakers. Able to leverage on the funding and to understand the needs of the entrepreneurs, to convert it into execution.” (C-16).

Enablers and connectors agree that this lift has triggered additional positive outcomes such as the mobilization of funds and international organizations which “created a dynamic of endorsement of entrepreneurship” (C-14). Those findings mirror those of other scholars regarding the link between entrepreneurship and democracy, where political freedom is seen as intangible from the autonomy and creativity associated with entrepreneurialism [20,78]. However, many regarded Tunisia’s economy as “closed” (EN-9) and being managed by “cartels” (EN-9) and “conglomerates” (EN-9). The closure has been attributed to the control of currency and the creation, protection,

and “exploitation of privileges” (C-15), referring to a state of corruption with a misappropriation of public funds.

“Corruption does not stop up from executing, it made us waste a lot of time.” (EA-4)

“All the money that was mobilized from international organizations was to finance the survival of the governments. Each is trying to survive by alternating mode each period to embellish their image and party’s image.” (EN-9)

“Of course, when you create entry barriers, people try to get around them, and that’s what creates corruption... And so, we are creating opportunities for corruption more than we are creating opportunities for entrepreneurship.” (C-15)

“What we lack is the creation of a committed entrepreneur. We make his life so complex from the start that he no longer trusts the state.” (C-15)

Interviewees emphasized the deteriorating macroeconomic situation and highly criticized the rigidity of financial structures. Nevertheless, entrepreneurs are seen as optimistic individuals who “have insights which enable them to navigate and create opportunities” (C-15). In their own words “if there is a crisis, we try to move forward” (EA-6). Interviewees acknowledge that the contextual climate has opened doors to new opportunities “to innovate to not interfere with the big heads like the classical sectors.” (C-13). The market has been described as a “box of opportunities” (C-15) or a “market of opportunities” (EA-3) which is “unexploited” (EA-7) with many “promising sectors” (C-14). Most of them claim that they found a “need” (EA-5), “niche” (EA-3) or a “gap” (EA-6) which they addressed with their solutions.

“Yes, I think it’s different. Those who start now are those who want to create change. When we were in 2013, the change was already there, and we wanted to work on it and take advantage of it. I think that’s why so many startups have exited now. The entrepreneur comes with many good intentions and with that “I can make it” attitude,

then reality hits you in the face then deception... After launching and after this hype comes down, reality happens.” (EA-2)

Enablers perceive a growing demand for their incubation or acceleration programs, especially from technology-based start-ups. Nevertheless, entrepreneurial actors acknowledge being in their own “bubble” (EA-3) and that “it’s a market that is very resistant to innovation.” (C-16). One of the experts acknowledges this issue, saying that “if we focus only on technology that is disconnected from the field, the reality and the value chains, we will not have an economy of knowledge, since

we do not work on improving these aspects.” (C-15). This is exacerbated by the fact that most experts referred to Tunisia as a “testing market” (C-17) or a big lab where the goal is to scale and access international markets, usually Europe. Therefore, participation in innovation-driven entrepreneurship might open doors to brain drain and loss of local talent, rather than promote growth and development in a context-supportive manner. This appears in alignment with findings in other fragile democracies and transitional contexts, such as Pakistan [46], Russia [79], and several sub Saharan African countries [16].

“I don’t like politics and I don’t have political affiliations. I don’t care about what’s happening on the side and in the government. I have a wheel that I need to get rolling. I don’t care about the rest. That’s a detail. I go forward without caring about what’s happening on the outside. I am in my bubble. Although it is not evident, we face corruption on a daily basis. You have to always say no. At the beginning it bothered me but at the end I got used to it.” (EA-3)

“It does not bother me. It will not change. As an entrepreneur, independently of the project and the idea, it will have the same impact. That is, you will not be more subject to corruption as an innovative entrepreneur.” (EA-4)

“I always considered Tunisia as a small lab where you could experiment many things. It is a market on which you can build some things, but I don’t think it’s a market where you can build a Unicorn. I always thought that Tunisia is a very good starting point because you can manage failures way better and you have a relatively fast response from the market when testing an idea. This allows you to launch a business with less capital, you can test your idea with 2000 dinars, and it allows you to advance at your own pace without running behind kpis. It’s an excellent market to test and validate the ideas but at a later stage to export the know-how as they were doing in Carthage.” (EA-2)

“Every time there’s a new project idea that is proposed on us, we always explain that it is a testing market, so you basically need to look outside of the tunisian market, because there’s a competition in whatever domain, the market potential is so weak, on 12 million residents, the rate of consumers is so low, which makes the revenues non recurrent. And so they have to have a clear vision that after 4 years, until the project has solid basis, they have to do a study and start thinking about foreign markets.” (C-17)

“This unhealthy discourse like „If you want to become an entrepreneur, you have to create an innovative technological startup, and if you want to succeed and be a celebrated role model you have to have an international

outlook right from the beginning". On the contrary, you have to create a balance by diversifying the types of startups. And you can work with products with territorial roots, and expand your market little by little. And even according to the notion of startup, it's testing, and so it's better to test a population that you master, afterwards when you refine your product, you enlarge your customer base, and there you call for internationalization. And so while we could have created a branding of an innovative nation, after exporting our innovations abroad, we are exporting directly our products without recovering neither the branding nor the benefits of the innovations that are created by our startups." (C-15)

Additionally, personal savings and support from family and friends appear to be the dominating sources of financing for all interviewed entrepreneurs, indicating that tech-based entrepreneurship is primarily accessible to those from privileged backgrounds. Start-ups appear limited by the online banking system and online payment that is not democratized for local transactions and extremely regulated for foreign ones. This clashes with the increasing technology-based and platform-based solutions that are on the rise. Interestingly, financial gain and necessity were not mentioned in the interviews are potential drivers for entrepreneurship, which provides further evidence for the intrinsic, opportunity-seeking nature of the start-up ecosystem while recognizing its potential exclusivity to those actually in financial need.

"My family has supported me a lot and comforted me in this idea, for example, my dad was always pushing me to launch and always promised support." (EA-7)

"There are many things that we can offer but it is not sustainable, and it is very complex. The complexity can be because of culture and our relationship standards. The complexity is also due to the difficulties in payments and in the financial system. The payment models are really limited, the online payment is not democratized because the bank fees and commissions are too high. The technological tools that we have are not up to date. Also 12 million people is not much to cover. It is only possible to target 12 million people if tomorrow we have a law in place obliging people to use their smartphones for online payment for example. This is of course impossible." (EA-1)

In terms of community networks, interviewees deemed support and influence from family and community essential to navigate the rigidity of the financial, administrative, and legal structures, as well as to access funding through trusted persons. According to some enablers and entrepreneurial actors, the Start-up Act has further increased this community notion and established further networks. Indeed, entrepreneurial actors reveal that they have been exposed to a network that motivated them before launching their business, which may promote their engagement in meaningful business activity "because a sense of membership increases

the likelihood of individuals to engage in action to support the collective in which they are members” [80].

“You can’t make it on your own. There is no chance that you make it on your own and even less in Tunisia.” (EA-2)

“This is what is triggering an entrepreneurial culture. Young people are fed up, they don’t have visibility with their employment. Many people resigned from their jobs to do something they love. That’s it. This is what is changing in Tunisia.” (EA-6)

Interestingly though, community views and norms may have negative influences on ecological sustainability, as one interviewed entrepreneur stated “when I talk about second hand, ecology and the planet, people don’t understand. Although, I give a more sustainable and affordable option for clothing. Tunisians, even the poorest, still choose fast fashion.” (EA-5). This demonstrates that even entrepreneurs that exhibit sustainable leadership may be hindered in their performance and impact if operating in a non-supportive environments [81].

Nevertheless, when asked about entrepreneurial culture, opinions differed significantly. Some think that clearly an “entrepreneurial culture that has been established” (C-14) catalyzed by mechanisms such as the Start-up Act and the growing support ecosystem. Others, however, believe that it is too early to talk about an entrepreneurial culture. One enabler’s statement might explain the duality in opinions which is put as follows: “Yes, well there is no start-up culture, but there’s an entrepreneurial culture” (EN-12). This indeed provides further evidence for the different culture-specific definitions of innovation [44] and the necessity to include and support various types of entrepreneurship that may have positive impacts on the local context [16,82–85], beyond strictly tech-based, high-growth focused forms that may not be accessible to, relevant to, or understandable by all.

Some have attributed the start-up phenomenon to a worldwide effect that translated into “a trend and a new thing” (C-13). They perceive that Tunisia is naturally following this trend, especially with the democratization of social media. The attitude towards this differs among participants. Some see it as positive, while others as an attempt to emulate the Silicon Valley model with little adaptation to Tunisia’s realities. Furthermore, an enabler thinks that this effect has diluted start-up value as there are many copycats in the market shifting the focus from value creation to mere competition.

That’s the startup hype. It’s a worldwide effect. It’s the digital world that has created this. It’s coming from social media. It’s also the culture and lifestyle of the Tunisian, that is we are usually followers. It’s an international phenomenon as well. (EA-4)

“And it was systematic that we wanted to emulate „Silicon Valley“ everywhere, we created the „Technopole Ghazala“, „Technopole Manouba“, „C-17 organization name“, „Technopole Sousse“. We have always insisted

that startups are High tech, but there is what we call Low tech, or technology that is related to other sectors such as tourism, agriculture, energy, or construction. But when you want to emulate a “Silicon Valley” ecosystem in the south, but you don’t have the means, whether it’s universities or other ecosystem players, it’s like trying to plant a land that isn’t ready yet. Or looking for an anchor with value chains of high potential sectors, which we haven’t really tried to do.” (C-15)

“I was reading some time ago an article about “Station F” and how “Station F” is not following the Silicon Valley model because the system is not the same and the variables are different. Most importantly, the launching time is not the same. The other parameter is that we are in Tunisia, an African country, where we cannot take the European dynamics to transpose them. When you look at the “French Tech” available in many French cities, in Tunisia we do not have the necessary decentralization where you can count on clusters in different cities. It would be better to create an ecosystem that is closer to our needs and our identity rather than copy-cats such as Silicon Valley.” (EA-2)

5.3. Beyond Motivation—Entrepreneurship for development, with clear exceptions

Though beyond the initial scope of the paper, namely developing an understanding of the determinants behind entrepreneurship in a turbulent context such as Tunisia, we believe it is worthwhile to share some additional findings that emerged throughout most of the interviews and amongst all expert groups regarding the impacts and forms of emerging startup activity. A topic that has been recurrently highlighted was selective entrepreneurship, implying that entrepreneurship is not fully inclusive, is to some extent elitist, and may fuel underlying disparities, which in turn may create an imbalance and a supply chain breakdown. All groups of experts concur that entrepreneurship opportunities and support actors are largely concentrated in the few privileged regions of the country, accentuating existing regional disparities. In fact, accessibility to support programs seems to be tied to a particular set of privileges, such as living in the capital, speaking French or English, having community financial support, and having a strong educational background. Along these lines, participants across various interviewee groups believe that specific initiatives such as the Start-up Act have further nurtured these privileges and that the circle has been just enlarged.

“Along with the days I went to certain regions, I found young people with huge potential and innovative creations, and they can’t participate in such programs because they can’t speak English or French fluently, or because they don’t know how to fill in a form.” (EN-10)

“As if we have a falling building and architecture where we made renovations to one apartment, but one day or the other the building will fall.” (EA-1)

“the ecosystem is a box of opportunities, and the opportunities are present in Tunis and not in other regions” (C-15)

“students from disadvantaged regions come to Tunis, can network with business leaders, politicians, and it develops their soft skills, their confidence, and it helps them evolve out of the box, seeing that there’s nothing in their regions.” (C-14).

Some participants, mainly entrepreneurs and enablers, additionally highlighted that the overall dynamics of the current entrepreneurial ecosystem have evolved towards being disconnected from local market realities and needs. The realities of entrepreneurs who are not all privileged and of a market that does not have the necessary infrastructure to deliver unicorns or to be a copycat of foreign ecosystems, which appears in alignment with other studies in African tech startup ecosystems [16].

“In my case, my family can support me, and I do not have to worry about an income, food and having a roof over my head. Even if I don’t have an income, my parents give me pocket money until today. Others don’t have this luxury. They have a family, kids, and no car. There was a guy with us in my cohort who was coming from Nabeul (a city in the coastal side of Tunisia, 200km away from the capital) who had a family to nourish and kids. At some point, he could not come anymore.” (EA-5)

“First of all, I think that we need to work on the underprivileged regions. I think that there are disconnected people, and we need to encourage and supervise them, but above all, we need to inspire and provide them with the tools. For example, I remember when we were to

Kasserine, they didn’t even have computers to apply for our program, and the teacher would take them to one of the labs in the university to do that. And so, there is a great disparity between regions, and we have to work on that.” (EN-11)

Many support programs and organizations have tied success to the start-ups’ capabilities of international expansion and legitimate forms of entrepreneurship with a high level of innovation and growth orientation. Consequently, this has led to an insufficient integration of other forms of entrepreneurial activity. Indeed, high-growth, innovation-heavy entrepreneurial activity may be perceived as inherently contrasting to transformative social innovation [86].

“We have not created an attractiveness, a branding for Tunisia, for startups since our startups that succeed must go through foreign ecosystems.” (C-15)

Support programs appear to be emulating projects not adapted to certain regions without integrating innovation into local value chains. This seems to have created an “elite” (EN-9) more connected to the West and disconnected from the Tunisian realities, as previously mentioned. Thus, experts call for recontextualization and the need to inspire a new generation with more local roots so that innovation serves the territory with “a vision and a more inclusive strategy” (C-15). Many demand the integration of these different regional realities and acknowledge that it takes several different but complementary ecosystems to do so, not one that fits all ecosystems. The mentioned disparities are a continuity of foundations set by previous regimes and inherited from the long years of colonization. The desperate desire to please the West with the image of the “good student” in an unstable region and achieve the strict growth performance required by international funds to be thereby accepted as a “soft autocracy” while muting criticism on injustices and ever-lasting inequalities.

“The fact that there are influencers who have normalized this idea, most of whom were returning from abroad, where they discovered the innovation ecosystem. And so they brought back a reality that does not fit at 100%. Also, they have seen potential abroad, so, when accompanying startups, they advise them to have a look at the international potential. It is a question of blindness or bad contextualization of reality, and therefore we have created an elite more connected with the West, disconnected from the Tunisian realities that differ geographically. We have been inspired by nations that cannot be applied in our country. We must then recontextualize, and create a new generation with more local roots so that innovation serves the territory. Abroad, we no longer speak at the scale of a nation, we speak of regionalization of development, or even a municipalization of development, aspects that we lack here in Tunisia, we are even far from creating the nationalization of development, we still advise startups to go directly to the international market, and therefore we do not recover much impact in terms of ownership of innovation. This lack of anchoring for startups has hurt us, and will hurt us even more if we miss the ship.” (C-15)

The strategy of both autocracies following the independence was to invest in infrastructures in the capital or coastline at the cost of the economic integration of the southern and interior regions. Thus, as mentioned by C-15, “When you want to emulate a Silicon Valley ecosystem in the south, but you don’t have the means, whether it’s universities or other ecosystem players, it’s like trying to plant a land that isn’t ready yet.” (C-15). Finally, and interestingly, one connector particularly notices a higher presence of women in support positions than in entrepreneurial activities of launch.

MOTIVATING FACTORS



Passion and
endurance



Financial and moral
support from family



Network
and clusters



Quality academic and
entrepreneurship education



Governmental initiatives
and incentives

BARRIERS



Corruption



Language barrier



Regional disparities



Loss or delay of funds
and limited investment



Rigid administration and
bureaucratic procedures

ENTREPRENEURSHIP IN FRAGILE ENVIRONMENTS

IMPLICATIONS

6. IMPLICATIONS

6.1. Contributions to theory

This study makes a distinctive contribution to entrepreneurship motivation research by redirecting the focus on contexts of fragility and analyzing factors stemming from environmental (external supply and opportunities) and personal (internal characteristics) dimensions. Several researchers have sought to develop and synthesize more complex models of entrepreneurship motivation beyond these divides, however further validation, and expansion in contexts of fragility was needed [47,48,87]. Hence, this research appears unique in expanding the application of the eclectic theory of entrepreneurship in fragile contexts through adding qualitative methods, primary data, and the triangulation of different experts' perspectives.

The motivational constructs identified by Rashid [2] provided a set of macro and microsocial factors which were tested and explored in the Tunisian context. The most important theoretical contribution relates to the self-realization factor which is a purely intrinsic dimension capturing the extent of "the inherent tendency to seek out novelty and challenges, to extend and exercise one's capacities, to explore, and to learn" [3]. The analysis of the perspectives of the various ecosystem players captured that the pursuit of entrepreneurship as a career choice is primarily driven by self-realization factors, namely endurance, passion, a sense of achievement, and autonomy. This is in line with Deci & Ryan's [3] description of self-determined behaviors where the individual performs an activity to satisfy their psychological needs of autonomy and competence, which is associated with growth and engenders effort, commitment, and high-quality performance. Particularly, this finding challenges the perceived negative relationship between economic development and necessity entrepreneurship in contexts of instability, fragility, and transition [88].

Indeed, across Africa, other entrepreneurs also proved to be mainly intrinsically motivated, and reported being driven by independence as well as the satisfaction of having an impact and "creating something" [16]. Outside the continent, the finding corroborates other empirical results showing that in hostile and unstable contexts, entrepreneurs prove high levels of adaptability, creativity, flexibility, and self-motivation [73]. Across literature and independently from the disciplines, autonomous motivation is usually correlated with positive outcomes. It proves not only to predict venture growth [89], but also that intrinsically motivated entrepreneurs intend to start high-growth ventures thereby further stimulating economic resilience and development [69,90].

The findings also show the importance of (likely internalized) extrinsic motivational factors in promoting entrepreneurship in Tunisia. This also contributes to literature on entrepreneurial resource use and acquisition and generally on literature regarding sustainable development in the global south. The extension of the eclectic theory of entrepreneurship to the Tunisian context also enables a theory-driven identification of the supply and demand factors that determine entrepreneurial activity in a turbulent context. The study hence clearly identifies various aspects of economic, cultural, community, and educational support systems that promote (digital) entrepreneurship amidst fragility. Meanwhile, the study also extends and confirms recent scholarly findings that criticize commonplace, western approaches to promoting entrepreneurship in less

privileged contexts through pushing heavily technology-based, fast-growth business models that do not necessarily fit, and sometimes exacerbate, local sustainability needs and priorities.

6.2. Contributions to practice

This study adds value to a variety of ecosystem players, including founders, investors, program managers, regulators, and policymakers by building on the dimensions of support institutions, economic milieu, and community influence explored in this study. For founders, this study should contribute to relieving the reported distress of not benefiting from published research by fostering relatedness and representation where entrepreneurs are not just reduced to “subjects” and “data” [65].

In terms of public policy, it is trivial that policymakers be informed by the drivers of entrepreneurship, local institutional conditions, and context-specific variables. It is even more important in the case of Tunisia where entrepreneurship has been integrated into the national strategy to prevent an economic collapse [88]. Understanding the motivation factors of Tunisian entrepreneurs allows policymakers and ecosystem players to recognize specific areas of improvement and facilitate the transition to venture creation. Although most of the participants salute the emergence of considerable initiatives over the years and welcome the attempt to regulate and ease the startup creation process through enforcement of the Startup Act, they view the effort as a workaround that does not fully alleviate the hostility of the regulatory, legal, and administrative frameworks. This means that further bottom-up mechanisms need to be implemented and more favorable structures provided. This requires easing administrative procedures and state interventions in the market to foster economic development, and to determine the productivity path of entrepreneurship. The driving intrinsic motivation of entrepreneurs would highly contribute to such initiatives since, particularly in developing countries, entrepreneurs are not passive actors under challenging institutional frameworks but work actively to change them [33]. Hence, entrepreneurs should be allies of the reforms and not the inverse as primarily perceived by the participants in this study. Additionally, entrepreneurship support initiatives should be designed in a specialized and differentiated manner to focus on the particular sustainability aspects and societal needs of the local context [91].

Another important condition to sustain entrepreneurial activity appears to be the access to finance which has been reported by the participants as limited, restricted, and unevenly distributed. This is therefore a call to improve the effectiveness of the assistance to fragile environments and to reallocate the large portions of aid money towards support structures and programs fostering entrepreneurial activity such as incubators, accelerators, and independent investment funds. Providing funds to corrupt governments such as in the case of Tunisia is puzzling and unsustainable. But corruption is not the only problem emerging from aid. Receiving aid from Western organizations such as the World Bank has traditionally been conditional on the adherence to neoliberal economic policies, which proved to leave many countries in Africa worse off and Tunisia is no exception [92].

Additionally, it is not only Western aid that proves to be inefficient but also Western ideals of entrepreneurial activity. Many participants noted that the current programs and dynamics of the ecosystem are simply trying to emulate the Silicon Valley model with little adaptation to the local context. This has nurtured a privileged notion of entrepreneurship which accentuates the inherited north-south disparities. Program managers should acknowledge these inequalities and their biases and together with policymakers should promote a south-south perspective both internally by developing adequate infrastructures in the south and externally by encouraging business expansion within the continent rather than outside of it. This could be extremely valuable to achieve the intended economic progress through entrepreneurship.

At this stage, it appears that the return on investment for Tunisia is rather low since as shown in this research many entrepreneurs measure success by their capability to scale to Europe and perform their exit outside the country. Therefore, program managers are encouraged to find adequate domestic agendas away from the subscribed Silicon Valley ideas. They should privilege the startups viability and sustainability impacts over the roadshow to achieve certain thresholds: a loop which was qualified by a couple of experts as "Startup Prostitution". One way towards a more context-specific agenda would be to foster community networks outside the capital since as shown in this study, in times of uncertainty, community provides information about available resources and to some extent creates a cluster effect. As advanced by Friederici, Wahome, & Graham [16] "African contexts are incomparable to Silicon Valley and no African ecosystem will become like Silicon Valley at any point in the future. Although common patterns and issues are discernible, African contexts are on distinct development paths, and comparisons to Silicon Valley 'best practice' are, at best, a distraction from efforts to do what works locally". In conclusion, there is certainly a better way for entrepreneurship in Tunisia and the African continent.



- Reduce state interventions and procedures requiring government approval
- Consult entrepreneurs and consider them as allies for reforms
- Reallocate aid money towards support structures such as incubators, accelerators, and independent investment funds
- Develop adequate infrastructures in the South and encourage business expansion within the African continent
- Foster community networks outside Tunis and the costal area
- Customise agendas to local needs and realities rather than importing Western entrepreneurship models
- Emphasise local and industry-specific success stories to create role models

**RECOMMENDATIONS FOR POLICY MAKERS
AND PROGRAM MANAGERS**

LIMITATIONS AND FUTURE RESEARCH

7. LIMITATIONS AND FUTURE RESEARCH

According to reported feedback from participants, the main reason for the reticence is the overwhelming solicitation of entrepreneurs in such studies and the lack of practical implications and tangible outcomes following these. The snowballing naturally led to the growing participation of experts within the same ecosystem and with similar privileges (living in the capital, speaking a foreign language, and being highly educated). On the one hand, this helped focus the analysis, while on the other hand only two out of the 17 participants were outside the capital, Tunis. This reflects and somehow represents the disparities within the ecosystem between the capital and coastline (north), and interior and southern regions (south), especially in terms of accessibility to support structures.

Given this palpable regional imbalance and considering Tunis as the most dynamic startup scene, the generalization of the results should be handled with care. Nevertheless, the interviews were conducted in the native language (Tunisian Arabic) to eliminate potential language barriers and ensure accuracy and authenticity [64]. Future research could address the issue from theoretical angles such as frugal innovation and bricolage [see 85,93] which may be more inclusive to innovators and entrepreneurs that truly operate under resource scarcity within the context of study. Additionally, measurement and further analysis of the links between entrepreneurship and democracy is needed [20], since this study identified a significant drive between the uprisings of 2011, political stability, and entrepreneurship motivation.

Furthermore, although our study involved various groups of stakeholders in the analysis, the study relies solely on interviews, hence data collection followed a similar approach for the entire sample. Further research could compliment this with additional data sources such as development reports, news articles, and observations from events, which would enrich the contribution through triangulating data types and sources as well as analysis approaches.

Additionally, this study is limited to digital tech startups operating in the formal economy, and it is recommended to expand the study to further types of entrepreneurial activities such as informal entrepreneurship, particularly since an estimated 53% of the Tunisian total labor force works in the informal economy [94]. This would contribute to shrinking the gap between marginalized and privileged entrepreneurs.

CONCLUSIONS

8. CONCLUSIONS

This study presented a qualitative exploration of entrepreneurship determinants and outcomes in the emerging innovative startup ecosystem of post-revolution Tunisia, providing a distinctive contribution to entrepreneurship literature through redirecting the focus on contexts of fragility and analyzing entrepreneurship determinants holistically through incorporating environmental (external supply and opportunities) and personal (internal characteristics) dimensions. Incorporating modern sociological, economic, and psychological theoretical constructs [3–5], this paper responds to Welter et al.'s [1] and Audretsch's [14] calls to diversify entrepreneurship research beyond idealized Silicon Valley models and dichotomous distinctions as well as Fischer et al.'s [95] call to advance understanding of the impacts and dynamics of innovation ecosystems outside of advanced economies.

This paper qualitatively explores entrepreneurship motivation in an integrative manner building on Rashid's [2] study in the Syrian context. The research primarily identifies intrinsic motivation as the main driver for the decision to launch a venture, while also showing that Tunisian entrepreneurs are also driven motivated through opportunities and resources yielded by their institutions, economic milieu, and community. However, entrepreneurial activity within the digital startup ecosystem appears to also exacerbate inequalities and may be accessible to the underprivileged majority. Hence, the study not only contributes to the literature streams of entrepreneurship motivation, contextual entrepreneurship, and sustainable development, among others, but it also provides valuable insights to practitioners, decision-makers, and entrepreneurs alike.

QUESTIONNAIRE ITEMS

VARIABLE LABEL

EXTRACTED FACTORS

I would like to start a business ...		Self-Realization	Supportive Institutions	Economic Milieu	Community Influence
		1	2	3	4
... because I am innovative and enjoy working with original concepts	Creativity	0,868			
... because I am confident in my success as an entrepreneur	Confidence in Success	0,779			
... because I am passionate about my business idea and/or field of work	Passion	0,752			
... to make the best use of my natural talent in this field	Talent	0,593			
... to feel that I have accomplished something	Sense of Accomplishment	0,577			
... because failure does not scare me and I can handle difficult situations well	Endurance	0,544			
... to improve my personal skills and knowledge	Self-Improvement	0,504			
... because I was motivated by the availability of entrepreneurship training opportunities provided specifically to my community	Community training opportunity		0,938		
... because I was motivated by the availability of general entrepreneurship training opportunities in my city/country of residence	Entrepreneurship training availability		0,717		
... because I was encouraged by benefits such as tax cuts and easy bureaucratic procedures	Regulatory incentives		0,701		
... because I personally received entrepreneurship training and/or education that motivated me to do so	Entrepreneurship training experience		0,597		
... because I was encouraged by the legal and ethical work laws and structures (or lack of them)	Institutional integrity		0,547		
... because I was motivated by the general education level in my place of residence	Educational System		0,461		
... because there is a growing demand for companies that provide my service/product in the country/ city where I live	Market need/opportunities			0,696	
... because I can secure funds from my friends, family, or acquaintances	Community financial support			0,484	
... because it is easy to expand my company abroad and work internationally	Expansion options			0,438	
... because it is easy to access funds in my country of residence (for e.g. through banks)	Access to financial resources			0,402	
... because of the economic stability (or lack of it) where I live	Macroeconomic situation			0,597	
... because it is common in my circle of friends, family members, or acquaintances to do so	Community entrepreneurial culture				0,941
... because entrepreneurship is so common in my culture and heritage	Entrepreneurial culture of origin				0,580
... because I have friends, family members, or acquaintances who can help advise and support me to start or run the business	Community extended networks				0,552
... because of certain values and social obligations within my community	Community values and obligations				0,406

Appendix 1: A pattern matrix summarizing the key drivers behind entrepreneurship motivation in fragile contexts from Rashid [2]. The results are derived from exploratory factor analysis using the principal axis factoring method with Promax rotation. The top four extracted factors are shown, and the numbers indicate the factor loading of each variable with its associated factor. Only variables that have a correlation equal or more than 40% with a specific factor are considered constituents of that factor. Each variable corresponds to one questionnaire item.

Appendix 2: Interview questions

Self-Realization

1. Can you take me back to the time you had your business idea and tell me about how it all started?
2. What were you intending to gain from becoming an entrepreneur?***
3. Optional: What do you recall being needs (desires) or personal achievements that you wanted/want to gain or fulfill by becoming an entrepreneur?***
4. To what extent do you think that your motivation to start a business was intrinsic?***
5. If you would not have been an entrepreneur, what other options would you have considered? How would you have felt about this scenario?***
6. What is the main goal/are the main goals of your support program/institution?*
7. What do you think is the entrepreneur intending to achieve when joining your support program?*
8. How is the relationship between the entrepreneur and you triggered?*

Economic Milieu

1. According to you, to what extent does the Tunisian market display unique business opportunities and how does it apply to your business solution?
2. Considering both formal (e.g., banks) and informal (e.g., microlending, rotating savings and credit associations, etc.) financing, can you walk me through your journey in funding your business and your access to financial support?
3. According to your experience and perspective, which are the main sources of capital for entrepreneurs?*
4. How is your organization supporting entrepreneurs in accessing (formal and informal) financial resources?*

Support Institutions

1. Following what you have mentioned. I would like to discuss with you the role of support institutions in giving entrepreneurs counseling on funding availability and the extent of its accessibility. For instance, support can be in the form of tips about what promotional

programs are available to help your project or background expertise on the types of finance available.

2. Optional: With this in mind, to what extent were you supported in your financing journey and how easy was it for you to access these support systems?***
3. Tunisia for instance has launched in 2018 the Startup Act, which is a legal framework dedicated to Startups. This framework is designed to facilitate the launch and development of Startups in the country. For instance, it is also aimed to shrink the potential gap between investors and startups while enabling visibility for both.
4. Have you been able to benefit from the startup act?***
5. – No: Are you planning to and why?
6. – Yes: How did it contribute to the success of launching your business?
7. How did you benefit from this growing ecosystem and what programs have you been able to take part in?***
8. How important is it for you to have such programs in place to actually launch your business?***
9. Part of the support actors as shown in the graph are university programs (e.g., Enactus, Open Startup, etc.), entrepreneurship events (e.g., salon de l'entrepreneuriat) and training programs offered independently or through the mentioned enablers.
10. Do you recall being introduced to entrepreneurship through such programs or the education system itself before becoming an entrepreneur?***
 - No: Would you have preferred to and why?
 - Yes: How do you think it motivated you to launch your business?
11. Optional: On a more general note, past experience also includes professional background. How would you describe the necessity of having professional experience (e.g., working in a startup or the industry, having accumulated years of expertise, etc.) to launch a business and succeed in this endeavor? How does this apply to you?***
12. When thinking about the political and economic situation in Tunisia, how did these circumstances influence your decision to become an entrepreneur?***
13. What role did the revolution play and how did it impact your decision?***
14. How do you think the corruption or instabilities that might have resulted from the revolution impacted your business decision?***
15. What about democracy?***
16. What do you think are the main triggers of the proliferation of these ecosystem players and growing number of enablers?*
17. How do you think this translates in the entrepreneurial activity during the first 5 years after the revolution and the last 5 years?*
18. How do you think this ecosystem should be optimized?*
19. When thinking about the political and economic situation in Tunisia, how did these circumstances influence your decision to become an entrepreneur?*
20. What role did the revolution play in the creation of this ecosystem?*
21. How do you think the corruption or instabilities that might have resulted from the revolution impacted your business decision?*

Community Influence

1. To what extent have you been surrounded by people (your circle) who have themselves launched their businesses before starting your own?***
2. How important do you think it was for you as an entrepreneur to have access to these networks before and after launching your business?***
3. How suitable do you find these different spaces and programs in which entrepreneurs can get to know each other and network?*
4. How important are these networks in incentivizing entrepreneurial activity? How does this apply to your organization?*
5. To what extent can you recognize a similar dynamic in Tunisia, and can you recognize being motivated by such a cluster or entrepreneurship trend?
6. Do you think we can talk today about an entrepreneurship culture in Tunisia?
– Yes: How would you describe the dynamics of this culture?
– No: What do you think are the next steps to clearly talk about an entrepreneurial culture?
7. How do you think our Tunisian culture (impact of religion or traditions) impacts startups or startup launching decisions?.
8. What recommendations do you have to enhance the startup motivations of Tunisians?
9. If you had to start over again, what would you do differently?***

* Questions asked to Ecosystem players only.

*** Questions asked to Entrepreneurs only.

Appendix 3: Findings overview

MOTIVATIONAL DIMENSION	KEY FACTOR	SUMMARY	FINDINGS	SELECTED QUOTES
Internal characteristics & person-related motivational factors	Self-Realization	The analysis of the perspectives of the various ecosystem players captured that the pursuit of entrepreneurship as a career choice is highly driven by self-realization factors, namely endurance, passion, and sense of achievement.	<p>Entrepreneurs in Tunisia are driven by endurance, passion, and the need for a sense of achievement. Intrinsic motivation and confidence in success are key to launch a venture and to navigate through Tunisia's fragile structure.</p> <p>Entrepreneurs are naturally optimistic and perceive the very complex" (EA-1), "discouraging" (EA-4), and "difficult" (EA-2) Tunisian market as an opportunity to learn and to acquire competences.</p> <p>In the scenario of a potential failure most interviewed entrepreneurs aspire to re-invest in entrepreneurial activity in the future (serial entrepreneurship).</p> <p>Entrepreneurs fetch for a sense of "heroism" (C-16) and accomplishment by launching and thriving in a complex environment.</p> <p>Entrepreneurs are in an active search for independence and autonomy through entrepreneurship despite additional workload and responsibilities.</p>	<p>"First of all, it meant that as a simple citizen I could create value and have an impact on society through the service or the product that you are selling." (EA-5)</p> <p>"Before I even had my business idea, I always wanted to launch my own project." (EA-7)</p> <p>"So, I have my startup as a job, and even if it fails, I will launch another project." (EA-8)</p> <p>"However, we tried to turn a blind eye on this, and we tried to be optimistic as much as possible." (EA-7)</p> <p>"Well, we are taking risks. I prefer to take risks to have a better life and earn a more decent salary than simply accepting what has been given to me." (EA-7)</p> <p>"It's a personal challenge too. To challenge yourself, I think there's a bit of that too." (C-16)</p> <p>"And so, the Tunisian entrepreneur is so strong, warrior, committed and motivated, and it takes a strong personality and a lot of patience to keep thriving in spite of these obstacles, especially the administration." (EN-10)</p>

DETERMINANTS AND OUTCOMES OF INNOVATIVE ENTREPRENEURSHIP IN A TURBULENT CONTEXT:
THE CASE OF POST-REVOLUTION TUNISIA

Women entrepreneurs perceive young age and their single marital status as an impulse to take risks and engage in entrepreneurial activities.
Natural talent and inborn characteristics appear less relevant in privileging a self-employment option.

“So, you tell yourself, if I can sacrifice some years and I put all my resources into creating value. Then why not. So, for sure at the beginning there is this passion, that you believe that it's a changemaker.” (C-16)

Entrepreneurial actors, enablers, and connectors perceive of the state and its associated structures (legal and administrative) negatively, and all generally prefer to avoid interactions with either.

“It was very positive, there is more freedom that we gained, because before the revolution, if banks didn't fund you, you don't have any other sources, but now, You have access to international funds like “US Aid”, or from incubators and accelerators could invest in your business, “Institut française”. And even cloud funding exists now, though it's still in its start, like “chagaga”, and so there are alternatives to financial solutions. But certainly, it's not accessible to everyone, and you've got to have an expanded network with powerful contacts. So the revolution opened new gates.” (EN-10)

Perception of the Environment (Resources & Opportunities)

Supportive Institutions

A combination of quality academic and entrepreneurship education (external resources) with regulatory incentives (opportunities) appears to support launching decisions and influence entrepreneurship motivation.

The legal scheme composed of many layers with a “weak” (C-16) government leading to highly bureaucratic procedures and unharmonized flow of information which is impeding entrepreneurial activity. Initiatives to enhance entrepreneurial activity such as the Startup Act process collapse

“The investor, entrepreneur, and even the citizen in general, simply need to be freed from the restrictions imposed by the state, and the state must understand this. We can use the “informal” sector as an example. It is a creative response to a problem of restrictive laws. If we stop bothering people, there would be fewer parallel markets.” (EN-12)

The available support programs are most suited for seed-stage or early-stage entrepreneurial activity.

Entrepreneurial actors join a support program to access either funds or networks

Entrepreneurial actors who have been active during their school years in extracurricular activities related to entrepreneurship or in an organization entailing an entrepreneurial aspect report that these support programs such as incubation or acceleration have not been a primary driver for the launch of their venture.

Support programs are influencing entrepreneurial activity at different levels of the individual's development and also at the education level through student organizations.

The entrepreneurship ecosystem is relatively small, but dense and not diverse. Support programs have similar objectives (e.g., incubation with little specialization).

The content of the support curriculums need to include more "local success stories" (EN-9) and sector-specific approaches.

"I think we would not have launched without the "Founder Institute". We didn't know where and how to start. The fact of having the support of the "Founder Institute" pushed us in some way and helped us in meeting people who gave us valuable feedback." (EA-1)

"It is important to have role models and success stories. Entrepreneurship has always existed; the only difference is that now it is branded and structured." (EA-5)

"What Startup Act did was to map and frame startups, we now can talk about startups creation, the rights and support that entrepreneurs need. And so, it made them the mainstream, and that's what I consider the biggest achievement. Adding to that the fact that having a frame encourages entrepreneurs to further come up with project ideas and to take risks." (EN-10)

"The Startup Act has unlocked some of the barriers that exist, but it has not opened up the game. Which means that it doesn't hinder entrepreneurship, but at the same time it's not an absolute good thing. Because it has treated the symptoms, but not the cause." (C-15)

Entrepreneurial activity is in correlation with the “effervescence of the ecosystem” (C-14) not only through entrepreneurship-specific programs such as incubators and accelerators but also through civil society and international support organizations which have “created this movement towards entrepreneurship” (C-14).

“It does encourage entrepreneurs to launch. I believe that the philosophy of a startup does not need any legal framework. However, we are in a country driven by the rule of law.” (EA-4)
 “There are still reforms that need to be implemented in order to improve the entrepreneurial climate further.” (EA-9)

Economic Milieu

The current financial structures remain unattractive to the entrepreneur, although they might be driven by expected financial or non-financial gains. This, however, does not exclude the attractiveness that the macroeconomic situation plays by offering market opportunities that were nonexistent before the uprisings.

Despite the deteriorating macroeconomic situation and the rigidity of financial structures, the Tunisian market is perceived appealing and offering many opportunities.
 The uprisings mobilized entrepreneurial activity in the country, which was “void” (C-15) before 2011.
 The uprisings have opened doors to international organizations and funders to invest in entrepreneurial activity in Tunisia which slightly optimized the accessibility to financing.
 There is a challenge in supplying startups with the required funds due to a slim available portfolio allocated for growth and the rest being inadequately distributed.

“I started together with my co-founder collecting money from some friends and family members.” (EA-1)
 “What is actually missing is funds available at every stage of the startup to support.” (EN-9)
 “There is a will that we observe...And the good news is that everyone is willing to help especially after the revolution to make an impact in Tunisia” (EN-11)
 “All the money that was mobilized from international organizations was to finance the survival of the governments. Each is trying to survive by alternating mode each period to embellish their image and party’s image.” (EN-9)

Although usually regarded as negative, the attitude towards the macroeconomic situation remains optimistic primarily thanks to Self-realization factors rooted in the notion of self-efficacy and the entrepreneur's aptitude to detect opportunities.

Time to fund is additionally a hurdle to financial access which is a major slow-down to the start-ups expected growth and scalability as well as a loss of opportunities.

The entrepreneurial actors who have launched right after the uprisings agree that it gave them the impulse to launch while the rest perceive it as having brought a positive outcome that influenced their decision

Enablers and connectors agree that this lift has triggered additional positive outcomes such as the mobilization of "funds that were oriented towards employability and employment rate" (C-15) and "many international organizations penetrated the ecosystem" (C-14) which "created a dynamic of endorsement to entrepreneurship" (C-14).

The uprisings also appear to have contributed to the perceived failing macroeconomic situation notably through the "normalization of corruption" (EN-10) and the fact that the "informal sector has exploded" (EN-9) which generated a "risk-averse" (EN-9) attitude especially from investors.

"What we lack is the creation of a committed entrepreneur, we make his life so complex from the start that he no longer trusts the state." (C-15)

"This diaspora now came back and created new opportunities for Tunisians...This is what the revolution changed." (EA-4)

"Corruption does not stop up from executing, it made us waste a lot of time." (EA-4)

"After the revolution, even if there are political issues and instability, there are many factors discouraging investment but if you launch you have the guarantee that nobody will steal it from you... Nobody was daring to launch before, and nobody was willing to risk. The Tunisian relationship to risk has also evolved since the political situation is now different." (EA-4)

"We have not created an attractiveness, a branding for Tunisia, for startups since our startups that succeed must go through foreign ecosystems." (C-15)

Enablers perceive a growing demand in their incubation or acceleration programs in general and especially from technology-based startups, however with relatively low specialization and diverse offers.

Tunisia is regarded as a “testing market” (C-17) or a big lab where the goal is to scale and access international markets, usually Europe.

Banks and investors have a risk-averse attitude where they prefer to invest in industrial products with better risk-return rates than start-ups.

Entrepreneurs lack trust and feel of vulnerable towards investors as small investment is often given in exchange for high and uneven returns or shares.

The primary source of capital to launch businesses is love money (family and friends) or personal savings.

Startups appear limited by the online banking system and an online payment that is not democratized for local transactions and extremely regulated for foreign ones which clashes with the increasing technology-based and platform-based solutions that are on the rise.

The expected financial gain is not mentioned as a primary driver for the launch of a startup nor is poor employment.

“The economy attains a state of inertia where the money is available but does not move. This is the major issue that startups face in Tunisia.” (EA-2)

“The banking system is a commercial sector, and not a service one...” (EN-10)

Community Influence

Community influence motivates individuals in Tunisia to pursue entrepreneurship by providing extrinsic microsocial resources. Being part of a community, having a friend, family member, or acquaintance engaged in entrepreneurship is highly encouraging. Especially in times of uncertainty and in the face of lack of capital, it provides information, resources, and support influencing the launch and the vitality of the startup over time. The community networks, present environment, and community entrepreneurial culture contribute to driving the entrepreneurial activity to a certain extent.

After the uprisings of 2011, the diaspora, foreign associations, international organizations, and funders have spotted an interest in Tunisia and have “created new opportunities” (EA-4) and a “movement towards entrepreneurship” (C-14).

Entrepreneurship is the outcome of a “cluster-effect” (C-16), a “viral ecosystem” (EN-9), and qualified entrepreneurial activity partially as a “social phenomenon” (EA-4).

The democratization of entrepreneurship on social media has influenced Tunisian entrepreneurs too.

Community networks appear are influential in the launch decision and vital for the success of the startup, especially to navigate the rigidity of the financial, administrative, and legal structures

Word Of Mouth seems is an essential component in referring entrepreneurs to suitable support structures and programs.

The Startup Act has further increased this community effect and established further networks.

Entrepreneurial actors reveal that they have been exposed to a network that influenced them before launching their business both intentionally and unintentionally.

“The people active in Silicon Valley did not use to come to Tunisia and now they are considering creating business opportunities between both.” (EA-4)

“I was encouraged by a friend who launched his startup, and I followed his path. He is the one who encouraged me.” (EA-6)

“You can’t make it on your own. There is no chance that you make it on your own and even less in Tunisia.” (EA-2)

“There is definitely the effect of those who came from abroad and wanted to change something.” (EN-16)

“it’s more trending to launch and implement organizations in Tunisia nowadays.” (C-14)

“It was definitely a cluster effect. You find clusters of small groups of people, but they are much engaged and willing to change things. They start moving and executing and gather people around them. Little by little that cluster gets bigger. They trust each other and are willing to change.” (C-16)

Mechanisms such as the Startup Act and the current support ecosystem

Support from family members, friends, and acquaintances is primordial in launching a new venture.

Tunisia appears to have an entrepreneurial culture but not yet a Startup culture.

“I also think that they recognize themselves more and more in the entrepreneurs who are succeeding. There is a proximity.... This proximity gives them a chance. It can be fueled by local or international stories. If you look at a teenager who launched their business at the age of 19 and succeeded, it gives them a leap of hope and a possibility to do the same.” (EA-2)

“Yes, I think it's different. Those who start now are those who want to create change. When we were in 2013, the change was already there, and we wanted to work on it and take advantage of it. I think that's why all so many startups have exited now. The entrepreneur comes with many good intentions and with that “I can make it” attitude, then reality hits you in the face then deception...After launching and after this hype comes down, reality happens.” (EA-2)

“This is what is triggering an entrepreneurial culture. Young people are fed up, they don't have visibility with their employment. Many people resigned from their jobs to do something they love. That's it. This is what is changing in Tunisia.” (EA-6)

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AUTHORS

Meryem Masmoudi – meryem.masmoudi@msb.tn

Lubna Rashid – lubna.rashid@campus.tu-berlin.de

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Französische Straße 9

10117 Berlin

info@hiig.de

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