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Exploring the Polish Startup Ecosystem: Five Types of Founders and Their Approach to Innovation and Risk¹

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Abstract

The article presents a qualitative, empirical analysis of the Polish startup ecosystem by establishing a five-component typology of founders and assessing their relationship with critical venture dimensions. The research defines a startup as a young, unstructured, high-risk entity operating under conditions of high uncertainty in the digital economy, focused on achieving rapid scalability through an innovative business model. Drawing on sociological frameworks, the derived typology includes: a) the Hacker type (motivated by ideals and social impact), b) the Innovative type (focused on patents and R&D), c) the Pirate type (characterized by a high propensity for risk-taking and pivoting), d) the Hipster type (viewing the startup as a lifestyle for self-affirmation), e) and the Serial Entrepreneur type (driven by the pragmatic goal of running successive tech businesses). Although founders acknowledge the necessity of a global mindset for achieving sufficient

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scale, the study highlights a significant cultural deficit in failure tolerance within the Polish entrepreneurial sphere, where failure is often seen as a fundamental defeat rather than an essential learning experience. The conclusion suggests that support programs must be tailored to this diverse founder heterogeneity, as the combination of innovation and risk propensity is inherently linked to achieving the greatest growth potential.

Key words: start-ups, ecosystem of startups, innovation, technology companies, entrepreneurship

1. Definition of start-ups

One of the fastest growing sectors of the economy is new technologies, and therefore companies established and operating in this sector are attracting the interest of other companies, investors, politicians, the media and the public, and are also becoming the subject of analysis and scientific research. According to the accepted definition, a start-up is a venture whose goal is to establish a business model within the framework of innovative activities related to the use of new technologies, conducted in the digital economy sector. These companies play a special role in the economies of individual countries, although due to their global nature, their impact is transnational. By introducing new, innovative products or services, as well as expanding their activities into new markets, they respond to new needs and challenges. They have an impact on breakthrough technologies, digital transformation, but also on social change, which concerns a revolution in communication methods, changes in consumption habits, and the emergence of new professions and entire sectors of the economy.

Start-ups represent a fraction of the companies starting their business in Poland, and among other micro-enterprises. According to calculations by the Central Statistical Office (GUS), over 370,000 companies were established in Poland in 2022, while according to data from the Startup Poland Foundation, start-ups represent a group of only about 3,000 entities. However, due to their dynamic growth, innovation, correlation with research and development activities and the possibility of foreign expansion, and above all, taking into account their contribution to economic development, they are considered an important element of the Polish economy. On the other hand, these ventures are fraught with high risk, the temptation to introduce imitations rather than innovations to the market, and exposure to growing compe-

tition from companies in other regions, especially Western Europe, Silicon Valley, Israel, and thus places where the startup ecosystem works most efficiently.

In her research assumptions, the author assumed that the development potential of start-up ventures is virtually unlimited due to the use of modern technologies, and that innovations and technologies have a significant impact on contemporary economies and societies. At the same time, we are dealing with a rather limited resource of empirical and theoretical materials, including publications and conclusions from empirical research exploring the subject of start-ups and their ecosystem, mainly due to the novelty of the topic and the relatively recent emergence of research problems of this type. It is therefore justified to undertake a thorough examination of the research area related to start-ups and their ecosystem, as well as to conduct empirical research with start-up founders and representatives of the start-up ecosystem, which, I hope, will complement the literature on the subject and the scientific achievements in this field.

The concept of a start-up has many meanings, which means that there is no clear, unambiguous definition of this type of venture. There is much discussion in the literature on the subject regarding the definitional approach, but also regarding the identification of specific features and characteristics of such entities. The thesis conducts a survey of definitions based on foreign literature on the subject and Polish scientific achievements, and the achievements of institutions (including PARP, Global Entrepreneurship Monitor, European Commission).

Our own definition of a start-up is as follows: it is a young, unstructured company in the early stages of operation, functioning in a situation of uncertainty, as a high-risk venture, yet capable of changing its business model or profile, learning from its mistakes, easily and frequently pivoting², with a specific organisational culture based on networking³, responsibility for people and time. A start-up may not be profitable, but it operates very efficiently and has the potential to achieve success, significant growth and scalability in a short period of time (it can serve a larger market in a relatively short period of time), by introducing breakthrough technology and innovation (in terms of products, technology and processes) to the market, while at the same time building real intellectual value that is not available on the market, based on innovative technologies and operating in prominent industries that have an impact on the economy.

The constitutive features of a start-up are: **business model** (in the context of searching for a business model and its uniqueness), **innovation, change, new product**,

² *Pivot* means a change in a start-up's business model.

³ *Networking* refers to the exchange of contacts, knowledge, information, resources, etc. between individuals within a network of contacts.

service, new technologies (as a business operating with the use of new technologies), **rapid development, scalability** (expansion beyond national borders), **uncertainty, risk and relationships** (start-ups are based on relationships, as well as the division of tasks and work, and ultimately passion and determination). These categories are consistent with the definition presented above and also become a starting point for deeper analysis.

2. Typology of start-up founders

The list of personality characteristics presented below, compiled by J. Schumpeter, F. Znaniecki and R. Merton (Table 1), will serve as a starting point for developing our own typology of entrepreneurs who undertake to set up start-ups.

Table 1. Typologies and personality characteristics according to J. Schumpeter, F. Znaniecki and R. Merton

J. Schumpeter – types of entrepreneurs	<ul style="list-style-type: none"> „Ruler”* „Conqueror”* „Creator”* 	<ul style="list-style-type: none"> „Inventor” „Innovator” „Imitator of innovation”
F. Znaniecki – personality typologies	<ul style="list-style-type: none"> Fun-loving person Workaholic Well-mannered person The deviant 	<ul style="list-style-type: none"> „Philistine” „Gypsy” „Creative personality”
R. Merton – individual adaptation type	<ul style="list-style-type: none"> Conformism Innovation Ritualism Withdrawal Rebellion 	

*Author's terms for categories proposed by J. Schumpeter.

Own work based on Schumpeter (2009, 1960); Znaniecki (2001); Thomas, Znaniecki (1976); Merton (2005).

The typology discussed here is not an *explicit* reflection of the above characteristics, but rather a compilation of them. It was developed as a result of analysing the conclusions of our own research, which consisted of: a detailed analysis of narrative interviews, as well as an analysis of the literature on the subject, desk research and participant observation.

Taking into account the properties and characteristics, particularly with reference to Merton's types of individual adaptation, Schumpeter's definition of an innovator, and Znaniecki's personality typology, the original typology of start-up founders includes the following types: 1) hacker type; 2) serial entrepreneur type; 3) innovative type; 4) hipster type; 5) pirate type.

The hacker type refers in its name to the proposal by Castells and Himanen (2009). It refers to a category of people for whom starting a start-up is associated with self-fulfilment and the realisation of a higher idea, which is also their motivation for action. The main motivation for these people is the desire to change the world for the better. They most often set up impact start-ups, responding to social or environmental problems in their activities. They are visionaries.

Referring to the conclusions of the study on entrepreneurship by Gardawski and his team (2013), **the serial entrepreneurship type** can also be distinguished among start-ups. For this category, the goal in itself is to run a company or business, which is why these individuals focus mainly on this activity. They have so much experience and competence in this area that it does not matter to them whether it is a technology company or another type of company.

The creation of new combinations, and in fact the practical introduction and implementation of inventions in one's own company, is characteristic of innovators as defined by Schumpeter (2009). This is also the starting point for describing **the innovative type**. Except that the search for new solutions, innovations and patents and their introduction to the market should take place in the area of new technologies, ITC and the digital economy. These are people equipped with business intuition, but above all, they have the right skills and charisma. They cannot imagine any other occupation than working with start-ups.

Start-ups as an emanation of fashion, lifestyle, but also the need for affirmation and building high self-esteem are the main characteristics of the next group – **the hipster type**. So-called “start-uping” is a phenomenon that consists of activities around start-ups caused by their popularity, especially among students (Matuszczyk, 2009). In turn, representatives of this group are often active and involved in startup ecosystem initiatives and are active in this environment, playing an important role as ecosystem animators.

The last type in the author's typology is **the pirate type** (cf. Appelo, 2019). It refers to people for whom each successive start-up is only a stage in their lives, and whose main goal is to participate in projects whose domains are uncertain and unstable. At the same time, it is a venture mitigated by financing from VC funds and public funds (cf. Mazzucato, 2016). The pirate type has a high propensity for risk-taking, a high readiness to *pivot*, and their company is managed in an *agile* (variable) manner, quickly adapting to the environment.

The links between the author's categories (Column A) and the types and characteristics from classical sociology (Column B) should be read as the author's interpretation.

The author's intention was to conduct an analysis based on behaviour in specific conditions and a specific environment, in accordance with medium-range theory, and the proposed ideal types are intended primarily as objects for further analysis and research, particularly in the context of the following questions. What attitudes towards risk and innovation determine the actions and choices of start-up founders? What assumptions about the development and expansion of start-ups do start-up founders in Poland adopt? What types of behaviour and strategies towards their environment do start-up founders adopt, and where do the differences in this approach come from?

Table 2. Matrix of relationships between the categories of the author's typology and the theories of Schumpeter, Znaniecki and Merton

A. Categories of the author's typology:	B. Personality types and characteristics according to:		
	J. Schumpeter	F. Znaniecki	R. Merton
Hacker type	Inventor Creator	Well-mannered person/ Creative personality	Rebellion
Serial entrepreneur type	Imitator of innovation	Hard worker / Philistine	Conformism
Innovative type	Innovator	Deviant	Innovation
Hipster type	Ruler	Fun-loving person	Ritualism
Pirate type	Conqueror	Gypsy	Withdrawal

Own work.

2.1. Characteristics of start-up founders in Poland – conclusions from our own empirical research

The main research focus of the study was original research in the form of narrative interviews with representatives of the ecosystem (i.e. a group of investors, accelerators, industry organisations, incubators, *venture capitalists*, etc.). They also served as an expert panel. Primarily, in-depth interviews were conducted with the founders of start-ups. The IDI (Individual In-Depth Interviews) comprised 30 conversations, but after preliminary analysis, it was decided to include 13 interviews from the start-up group and 11 interviews from the ecosystem group in the further, extended analysis. All quoted statements by participants in the empirical study are anonymised and appropriately marked in the text (e.g. Interview S01, Interview E10). They have been deliberately left unedited to preserve the natural style of the respondents.

The analysis of the personalities of start-up founders is based on the proposed types: hacker, serial entrepreneur, innovator, hipster and pirate – in relation to the dimensions and proposed research questions. The dimensions: idea, innovation, success, network/ecosystem, and risk, *pivot*, and failure were chosen for several reasons. First, they are elements of many definitions of a start-up, including the above-mentioned definition. Second, in macroeconomic terms, concerning the start-up ecosystem, they are part of research, rankings, and reports. Thirdly, and most importantly, they were an intrinsic part of the empirical research, especially the narrative interviews, and formed the core of the stories told by the respondents.

Research dimensions and questions subjected to further analysis:

1. **Idea:** How important is the idea behind starting a start-up? What is the motivation behind this type of venture? Does the start-up have a specific mission?
2. **Innovation:** Is the start-up innovative, does it introduce innovation to the market, a new product or service? What does the innovation process look like?
3. **Scalability:** Does the start-up have the potential to be successful in the country and abroad? What are the plans for scalability and growth in other countries?
4. **Network/ecosystem:** Is the founder of the start-up involved in building a network of contacts and ecosystem activities? How important is the start-up ecosystem?
5. **Risk, *pivot*, failure:** Is the venture risky? Does the founder see themselves as risk-taking? Do they see themselves as courageous people?

Additionally: is the entrepreneur ready to change the business model? And what is his/her attitude towards failure?

The first element of the analysis of the research material and, at the same time, the starting point for further exploration is the topic of the establishment of the enterprise. What are the reasons behind starting a start-up? Was this decision dictated by personal choice or external factors?

2.1.1. Motives for establishing a start-up

The reasons for establishing start-ups by the respondents were very diverse. Among them, we can mention, among others, the need for independence, the desire to make individual decisions, the reluctance to have a boss, curiosity, the desire to create and build new things. In addition, as one of the interviewees put it, there is a lot going on in start-ups. There is a sense of dynamism and constant change.

That's why I'm attracted to start-ups, because there's just a lot going on there, there's dynamism, there's change, every week, every month, every quarter, you're doing something different, and I'm a bit restless by nature, so everything interests me, I'm everywhere, so I think that's what attracts me to start-ups, that there's a lot going on.

(Interview S07)

One of the motivations, especially for hackers, is a desire to learn about the industry in which they plan to operate. There is also a need for self-fulfilment, resulting from fatigue with their current job elsewhere.

I was tired of my job and wanted to change something, so I decided to start a company that would be related to my professional experience and would design solutions for [industry description here – anonymised]. At the same time, I expected that for this to happen, I would need a lot of experience, which I do not have at the moment. Since my experience and education are simply in mechanics and the construction of structural materials, I decided to start a transport service company, thanks to which I will be able to verify this key design assumption and get to know the entire market from the inside out.

(Interview S01)

Plans to start a start-up are linked to shared values within the hacker community. One of the founders spoke in the study about a coincidence and meeting her business partner in a private situation, at her child's school. In this case, the pandemic turned out to be a good moment to make a joint decision to start a new venture.

I discovered this streak in myself. (...), that I always wanted to try something new. (...) Because the first months [of the pandemic – note by M.A.] were very drastic and we went through it cruelly. However, there was immediate space for new projects, so I went back to the person [anonymised] and said, listen, I have time, what shall we do? So we met and started working together, and that's how the start-up was created.

(Interview S06)

People experienced in running their own businesses or working in corporations, representing the type of serial entrepreneurship, often decided to start a start-up for pragmatic reasons. For them, it was the best possible solution to further their business.

It started with us operating in the technology industry, having one company with its own programming team, graphic designers, a complete team for implementing pro-

gramming and mobile projects, and so on. So, when the idea of start-ups came up, of playing with these types of solutions, ready for rapid scaling, it was actually very close to my heart. The subject matter was very close to my heart, as if finding these solutions was within our reach, technically, so we started to think about it in business terms as well. We saw it as a business opportunity for a big leap forward, a breakaway from the service company structure, which unfortunately is burdened with the problem of low margins depending on many factors.

(Interview S10)

It is worth adding that these are often successive ventures (in the case of the interviewee, there were eight in total). The type of serial entrepreneurship is represented by people who are constantly involved in successive business projects; start-ups are their way of life, and this is also how they fulfil themselves.

There were about eight such start-ups in total, including the current ones. In two of them, I was not the founder, but a partner, a consultant, working very closely with the founders. And currently, we have three open threads. We have three start-ups, we are still developing them, working on them and trying to commercialise them. The other five had very different stories, but in most cases we were always looking for some pivot. If we saw that it wasn't quite working, something was falling apart, or, for example, the founder was losing interest. Because the time and money invested, in order to find some other outlet, some other solution to push it further, to find a place for this business on the market.

(Interview S10)

A start-up can also be a coincidence rather than a deliberate intention. The founders may search for information about it on the internet ("I googled what a start-up is and what I need to do, and so on").

In 2016, I founded my first one, and now I have a second one. (...) It's a more interesting story because, you know, it's serial entrepreneurship. So we went with this idea to a VC, who said, "Wow, great idea, go for it! Start a startup." So I thought, what is a start-up, I always work in a corporation, suddenly they tell me there's a start-up, I googled what a start-up is and what I need to do and everything. Okay, so I have a start-up.

(Interview S09)

People who are innovators and seek new solutions often associate the beginning of their business with an unconventional story. One of the founders admitted that the idea for the start-up came about as a response to a situation involving his partner, which was due to a mistake by the service provider. Together with his partner, they

decided to find a solution to the problem they had diagnosed. Today, the company is a scale-up with services for over 100,000 business customers worldwide.

That was when I started looking at this market. And I simply saw what solutions were available on the market, what it looked like in general. It turned out that most companies had nothing to run their business with, and if they did, it was quite old-school. It was also a time when cloud-based solutions were coming in. The standard was rather stationary solutions, installed on a computer, and not necessarily cloud-based. At the time, I was also running another business with my business partner X [anonymised], and I consulted with him on this topic. X [anonymised] did his research on the technical side. And it turned out that what was available on the market was indeed of poor quality, and most businesses did not have or use anything. And basically, I didn't think about it for long, we thought to ourselves, we're in our third year of university, what's the harm, let's give it a try. It wouldn't cost us much. X [anonymised] knew how to code, I was always easy-going and found it easy to establish relationships with people. So X [anonymised] started writing, and when he wrote something, I started trying to sell it (...).

(Interview S11)

The beginnings of involvement in technology companies for people from the start-up environment date back more than 20 years and are associated with the first companies established at the turn of the 20th and 21st centuries (three selected statements below). The experience they have gained over the years is very broad and related to technology. It can be said that “they are constantly in the industry and working for the industry,” which also demonstrates a certain consistency and determination in this regard. However, their current role has changed from that of an active entrepreneur to that of an investor, mentor or advisor.

My relationship is quite long, as it began in 1999 when I was creating one of the first X [anonymisation – industry] in Poland, which was called XX.pl [anonymisation], and after a year, investors came knocking on our door, specifically the company XYZ [anonymisation] in the form of its CEO, Mr. AB [anonymisation], with a proposal to buy out virtually the entire company, I think 96%. We eagerly agreed. And then we continued for a while as a management team overseeing the business. After that, I kind of lost hope that the internet would ever be anything cool, and that technology and these start-ups would ever amount to anything, because the NASDAQ crashed and things started to look bleak. I wandered around the market for a few years and it wasn't until around 2001 that I managed to get involved in a project run by X [company name, anonymised] in Warsaw, which was also something of a start-up from a corporate per-

spective. And then, somehow, my life took a turn and I started creating my own smaller and larger entities, advising, selling, investing. And for the last 15 years or so, I have been actively observing the market.

(Interview E05)

I have been involved in the Polish technology industry since the late 1990s, because I started quite early. I was still a teenager when I created my first projects on the internet. Later, I worked for some companies or, generally speaking, for the technology ecosystem. Over the years, my contribution to the start-up community has also grown. First through some start-up initiatives in the late 2000s, and later through a number of initiatives or supporting teams through some initiatives (...), barcamps.

(Interview E14)

I have always been an entrepreneur, and in the very early years, you could say – someone jokingly said in a conversation recently that I was the first start-up entrepreneur in Poland. However, at the turn of 1987/91, I did indeed set up eight different companies, some of which survived, developed and still exist today. I no longer have a stake in them because I sold them and some of them failed. Well, that's how it is with start-ups. But the fact is that I didn't focus on just one, but on several different ones in different industries.

(Interview E11)

There were also purely material reasons and the need to work for oneself, as summarised by the respondent representing the hipster type, whose statement is quoted below: "Having a start-up is a really cool thing":

So why did I want to, why did I decide to start a start-up: first of all, because I worked for quite a long time and I still work full-time, and the situation [that] I have worked in four companies so far and in each of these companies I was very annoyed by working for someone else, in the sense that, for example, the company makes a lot of profit, but I don't get anything out of it. My salary is fixed, it's very easy to get rid of someone like that, which was also my case. I used to work hard, and then, after a month, it turned out that I wasn't really needed. And so it turned out that it wasn't said to me directly, but well, you started it. No, maybe you should find another job, and it started to annoy me a little.

(Interview S02)

On the other hand, people with a pirate type personality, for whom the opportunity to take a risk was an important argument, responded directly that this was their main motivator.

I decided that because it's now or never, I'm 33, I don't have children, so I can take the risk. I'll earn a little less, but with a chance for more.

(Interview S03)

Two situations should be noted in the respondents' narratives. The first is related to their social advancement and their lack of connection to any form of entrepreneurship, but rather their use of the opportunities offered by emerging technology. As one of the respondents noted, "the internet offered great opportunities". In the interviews described, the reasons for this life change can be found in an interest in information technology, but above all in a very thorough education.

When I started, I didn't have any friends who were setting up start-ups, and most people didn't have access to the internet. Like me, I was just starting to play around with the internet, and when I logged on for the first time, most of the other users were adults, and I was just a kid. I mean, I was a teenager, and most of them were people who were already in college or were PhD students and so on. They were the first people to use the internet at all. Computers with internet access at home were a rarity. Computers were also a rarity (...). I come from a poor family, from the countryside, as they say, from a poor family. And for me, access to a computer was accidental. (...) But once I had it, I don't know, 5 or 6 years later, that computer was an inseparable desire to explore. And the computer transitioned to the internet, because that was the next stage of access, and later the internet itself simply created a lot of opportunities. Certainly, today there are more opportunities to do things than there used to be. There was no such option, and in the past there was the internet, i.e. Neostrada or a modem even earlier.

(Interview E14)

Education and "access to knowledge democratised the desire to create technology companies" – these are the two main reasons for the greatest development of this type of company, in which education and the appropriate level of qualifications, skills and, ultimately, knowledge are the main factors in the development opportunities of start-up founders.

Access to knowledge has democratised the desire to create technology companies. Because in the past, how could you know that someone had developed something interesting at Stanford? If you weren't at Stanford, you didn't know, but today there is such wide access to the flow of knowledge that if you are willing to learn and discover new things, it increases the likelihood that you may want to take a risk and create your own company

or start-up. And then there's the snowball effect, where someone on the left has built or is building something: Well, maybe I will too.

(Interview E14)

I think that in my personal case, my parents hurt me a little, because I am a programmer and sociologist by education. Now I am finishing my doctorate, just like you. (...) During my studies, I worked full-time, studied two majors at once, and had an individual teaching mode. In my fourth year, I started lecturing at [university – anonymised], where I created, at that point, I think six of my own courses, which I wrote from scratch: engineering, bachelor's, master's, postgraduate and others. So the students are completing the courses that I created. A year after graduating, I wrote my first book and during my studies I worked as a programmer in one of the start-ups [anonymised], where I met my colleagues, with whom I later founded our start-up [anonymised] in 2011, and in July 2013, we decided that it had to be something more advanced and more product-focused (...) we complemented each other very well with our different skills. I think this has stayed with us to this day, as we have been working together for 11 years now. A lot is being done at the level of social agreement, and we are pushing this cart forward all the time, and I think with good results, in order to be effective and efficient in the context of the global fight against many things

(Interview S05)

Another motive for starting a business is related to “inheriting” a predisposition to running a business from parents, who are role models and main inspirations when choosing a career path. Respondents talk directly about the capital they received at the start, not only in terms of experience but especially in terms of financial support. This capital also served as a safeguard against the risks that start-up founders faced at the beginning of their business. As one of the respondents put it, he “took entrepreneurship from home”. And one of the start-up founders runs the company with her parents.

I mean, I knew I was going to have my own company (...) I just chose the technology sector, but I knew I was going to be an entrepreneur because I learned it at home. And I think this is also something that is worth considering in the context of scientific work. Home has an incredible influence, and the fact that I grew up in a family and X [anonymised], my partner, also grew up in an entrepreneurial family. It was natural for us to run our own businesses. Some of the problems we heard about at home were no longer problems for us, but simply the way things are and how they work. And it's not really a problem, it's just natural. And now, when I talk from the perspective of someone who has some experience with people who want to start a business and (...) I'm guessing, it's a child, in the sense of an adult, but the child of two, for example, academics, or an

engineer and a doctor, whatever. What a gap these people still have to overcome, a path to understand what I got at the start. And the second thing is also worth talking about, and it also causes complexes among young people, that it was easier for us, we had wealthy parents and we knew that if we slipped up, we had somewhere to go back to and we didn't take any risks. I mean, we risked coming back and having to tell our parents that we had lost their money. OK, fine, here's the fridge, there's your bed. Everything will be fine, right, because it wasn't something that could have killed our parents financially, because it was clear that we borrowed all the money and then paid it back. It wasn't an investment where you know that the money was invested, but I also see, for example, how young people sometimes depreciate where they came from.

(Interview S11)

And when I look back, I think that my environment had a big influence on this, generally my family, my dad was an entrepreneur. He started his own business at a mature age. I was also mature enough to observe him taking those first steps, how much fun he had building something from scratch. Because at some point, his career took a complete 180-degree turn. And so, observing this, I guess I just naturally absorbed it and at some point I made the decision to start my own business.

(Interview S12)

In turn, a representative of the start-up ecosystem divided the group of start-up founders into two categories in terms of their level of experience: young entrepreneurs who want to try and be independent, and people who have extensive experience, are aged 35-50 and identify a problem they want to solve.

In my opinion, there are two main groups that set up start-ups and create technology companies. Firstly, there are people who want to become entrepreneurs and see, especially at a young age, that they want to try, perhaps be independent, but want to try to build something and set it up. The second group of people are usually in this age group, which, from the point of view of success, is much more likely, i.e. people aged 35 to 50 who start a company because they want to be more independent, but above all, they already see a problem that they may want to solve. Another question is whether this is the right problem, but some kind of professional or life experience makes them see a problem to be solved and they decide to build a company around it.

(Interview E13)

In summary, the motivations for starting a start-up are the result of the goals that entrepreneurs set for themselves. The “entrepreneurial gene” is the result of both the origin and inheritance of this type of predisposition from parents, and individual choice,

which is supported by education and experience. However, what distinguishes start-ups from other businesses is often an idea, a concept, a desire to solve a problem, which is the main determinant for starting this type of business. The next part of this paper will analyse the dimensions that have been identified as specific to start-ups: idea, innovation, network/ecosystem, scalability, risk, *pivot* and failure.

2.1.2. The idea behind the creation of start-ups

The empirical research sought answers to the following questions: How important is the idea behind starting a start-up? What is the motivation behind this type of venture? Does a start-up have a specific mission?

Most of the respondents indicated that their startup has a mission to bring about a certain social change (“My company has a mission, and it is something that can change Poles, namely, it will open Poles to other cultures and new people,” Interview S02). However, only a few respondents pointed to the idea of sustainable development as the main factor in the creation of this type of company. These were mainly people who could be classified as hackers, as they attached the greatest importance to values and the implications their activities would have for their surroundings, the environment and what kind of employer they would be. This is where they see the main meaning of their work. At the same time, they observe a clear growing trend of interest in this topic.

Sustainable development, or eco-sustainability, is the only right direction, the only possible direction for the development of cities, so that in 10 years' time it will be possible to live in these cities at all. Of course, this must be complementary to other initiatives that will prevent climate change and reduce waste, limit gas emissions and the burning of fossil fuels. But this is undoubtedly one of the factors that will increase the awareness of people who are observing this trend, electromobility.

(Interview S01)

Impact start-ups are thus becoming a new form, a new solution, combining the characteristics of a start-up with the need to respond to environmental, social and educational problems. There is a clear group of people who plan their business activities this way.

In my opinion, there has never been a better time in the history of the world to set up impact start-ups. This is because, over the last two years, public opinion has suddenly become extremely educated. First of all, people started talking about things like impact start-ups, that I have a model where there is 50% profit and 50% impact. One without the other simply won't work. If we give up profit and only have impact, then we are an NGO, and that is no longer interesting to me. But if we are just profit, without impact, then we are just a startup that caused the moment we are in today in the world. So for me, this approach [50% profit and 50% impact – note by M.A.] goes hand in hand, and we simply started to implement this impact approach.

(Interview S04)

People involved in such start-ups also point to the negative phenomena of so-called “impact-washing” and “female-founders-washing”. The first concept refers to the fact that funds are looking for impact startups but are not interested in non-financial results. As one participant in the evaluation of such funds anonymously says: “Our main impact fund, where I participate in the process of signing the agreement and so on. There is no mention of impact in the indicators they build. The agreement contains purely financial, possibly market indicators at the end of the year.” On the other hand, one of the founders of startups pointed out what support for *female* founders should not look like, citing a situation that affected her directly, in which someone publicly asked if she “would like to receive money for her pretty eyes,” which is an example of “female founders washing.”

Investors are not interested in this change in the world. They are only interested in whether there will be a market for it, so they look at it from a very marketing perspective. For example, it is fashionable to deal with carbon footprints, everyone is talking about it, so we will also do something in this area. But now, will it have an impact? And how can they scale it up and what will it change in the world? There is no such thinking.

(Interview E11)

On the one hand, there are start-ups in areas directly related to sustainable development: ClimateTech (circular economy, decarbonisation), HealthTech (improving the quality of preventive healthcare), and EduTech (an educational platform for teachers), FoodTech (food system) – these are examples of start-ups whose founders took part in the study. And the voices of experts from the ecosystem confirm the growing importance of these topics (“There is a lot of talk about ClimateTech, 5 years ago there was no mention of it at all”). On the other hand, there are opinions that investors expect high returns on their investments.

One of my founders puts it nicely when he says that yes, we want to do it, but the patient has to survive. That is, we can start by saying that we are changing the world, but if we don't generate Reve [revenue – note by M.A.] in six months. Then we'll just change the world for six months and then it will be over, so we prefer not to change the world for six months and wait two years, but then we can change it for good.

(Interview S07)

I don't think there is such a mindset at all. Start-ups are simply an idea for making big money. And elements of sustainable development, or generally caring for resources that are running out, if the founders don't have that mindset, if the founders don't want that area, then whether we're talking about a start-up, a foundation or an association, it doesn't really matter. It's a shame, because in terms of this kind of attitude in a start-up, it's actually good material. Because a start-up, by definition, takes on what is difficult, by definition takes on something that doesn't exist today, something for which there is no solution. So, in fact, it should be (...) a model that is privileged to seek solutions to civilisational problems. However, I suspect that it is often the case that managing civilisational problems is not necessarily easy to commercialise.

(Interview S10)

The founders admit: "I built the best place to work, a place I myself want to come to, and that's how we defined it" (Interview S11), or: "We do social campaigns or plant forests, we get involved in various things, education, ecology, we do it partly for content reasons, i.e. we want to be up to date." (Interview S13). Both groups, startups and the ecosystem, admit that startups could play a more involved role in impact issues, problem solving and influencing sustainable development – due to their defining characteristics, primarily innovation and openness to new activities, searching for new solutions and implementing them, and finally, the ability to take risks.

Everyone has a different definition of good. Every person has a different definition of good, and perhaps this definition divides certain values between different people. But the definition of good is always on an individual level. If someone decides to build their own start-up company, they may have different reasons for doing so. These reasons may be more or less opportunistic, i.e. someone simply wants to make a lot of money. There are people like that. Someone else might say they want to change the world with their solution. And someone else might say they just want to try something new that might solve a problem for people like them. But there is no vision of changing the world behind it, no impact on the world, but not one that turns it upside down or, for example, changes it permanently. If the definition of a start-up is taking business risks and using

technology to solve or minimise those risks, then not everyone needs that grand vision to make it happen. After all, not every company needs such a vision to make it happen.

(Interview E14)

One of the theses that should be rejected here is the belief that startup founders are more involved in impactful issues, sustainable development and want to “change the world for the better” in social or environmental terms. Empirical research shows that this statement applies only to people representing the hacker type; in the case of the innovative or hipster types, it may or may not be relevant. It does not determine the start-up. The other types, on the other hand, do not pay attention to the mission of their venture and, importantly, do not consider this aspect to be relevant in the start-up environment.

2.1.3. Innovation versus imitation

Another dimension analysed is innovation and an attempt to answer the questions: is a given start-up innovative, does it introduce innovation to the market, a new product or service? What does the process of creating innovation look like? And finally, to what extent does the profile of the start-up founder influence innovation?

In this regard, an innovative type has been identified, whose representatives are characterised by a strong focus on technology, inventions and patents, as can be seen in the following statements.

And we are very keen to ensure that what really sets us apart is technology. In this context, we have our own database systems, which are among the fastest in the world. In this context, we have our own IT solutions when it comes to AI and other such things. Therefore (...) such are the narratives of market competition, (...) because someone can always come along who will do a better job of exposing and translating certain technologies. (...) [We must] pursue these innovations all day, all the time, day after day.

(Interview S05)

I have my own R&D, but we cooperate. We don't have a full laboratory, we work with the Institute of Chemistry. Sorry, with the Institute of Chemical Processing of Coal, and we cooperate with the Krakow University of Technology, from which we also borrow various things, and they also do research, but apart from that, we also have our own team.

(Interview S04)

It is a very science-based product. We have our own scientific council of professors in some clinics, our own laboratory.

(Interview S07)

The respondents indicate that the solutions they are introducing are already or will soon be subject to patent protection, industrial or intellectual property protection, as utility models, and ultimately patents. However, there were industries, especially SaaS, whose tools, despite being innovative, can easily be protected by patent law.

I think that in the SaaS industry, it is difficult to obtain patents at all due to the nature of these businesses. And also the technologies you use, which are largely simply open source. In fact, they are mainly open source. It is difficult to think about patents here. As far as innovation is concerned, there were no such tools on the Polish market at the time. As we explored foreign markets, we saw similar projects that basically covered exactly the same needs, but we were the first in Poland because we automated the distribution part.

(Interview S12)

Among the respondents were people who are close to technological determinism and the belief that start-ups are a vehicle and source of innovation. According to the respondents, economies and countries that invest in innovation are also investing in development.

I believe in technological determinism, that there is a part of knowledge and science that can have a positive impact on the world and global achievements. Everything that contributes in some small way to the advancement of science and technology has an important mission, and we are working on it. They then resonate with other disciplines related to medicine and the like, the development of algorithms. Personally, I am fully convinced that if today we build the economic advantage of individual countries on these technologies, then I think this is something that will always change society for the better.

(Interview S05)

Opposing this view are all those who do not opt for patents, due to limitations, but also the imitative nature of the product or service. The serial entrepreneurship types are presented below.

We deliberately do not apply for any patents because many specialists advised us against it many years ago, and we encounter this on a daily basis, so we have created our own blue ocean. All devices are proprietary, and even if we had them patented, it would be

enough to change 30% of a given component in the design, which is very simple, and the patent would no longer be valid. (...) We prefer to be flexible. We prefer to simply bring things to market faster than to play around with patents, which are very expensive for a start-up and do not cover all markets.

(Interview S08)

I believe that of all these projects, there was only one innovation that was groundbreaking because it was based on technology that was just emerging; these solutions did not exist in the world. They were just being created, and we were simply one of the pioneers creating this technical solution. The other things, the other projects, were innovative in terms of the definition of innovation, whether in our country, sometimes on a European scale, but even as an insider, it was a bit of a combination of things. Having a certain process and combining it with technology resulted in a nice benefit, a nice value, for example, in the end, but in terms of assessing whether it was groundbreaking, it was not groundbreaking, because it was not an innovation such as artificial intelligence or machine learning, but combined with a process in a given industry, it created new value.

(Interview S10)

On the other hand, people who take risks, the pirate type, see opportunities in both innovation and imitation. Although they believe that “no two start-ups are the same, you can always do something differently.”

(Interview S07)

You ask for innovation or imitation. Cool question. I think both. I mean, a start-up has work to do in both cases. If you've come up with something that didn't exist before, that's great, but on the other hand, you have a huge problem ahead of you in educating the market and convincing them that what you've come up with makes sense at all, because people will be distrustful. In short, you have to get your timing right. I think that some of my projects didn't work out because they were a little ahead of their time or behind their time. It varies sometimes, if you come in too late or too early, but not at the right moment.

(Interview S07)

In summary, innovation and openness to innovation may be commonly associated with the attitudes of start-up founders. This is a misconception. The analysis showed that only the innovative type, as the name suggests, has the greatest attribution in introducing this type of solution. In turn, the pirate type is very open to innovation, but not necessarily to the development of technology, R&D, etc. In the case of the hacker type or serial entrepreneurship, the attitude towards innovation is neutral, while the hipster type does not need such solutions at all.

2.1.4. Scalability and development of start-ups

In terms of scalability, the following questions were asked: does the start-up have the potential to succeed in the country and abroad? What are the plans for scalability and growth opportunities in other countries?

The myth of “miracle brands and start-ups that made their owners obscenely rich overnight” (Napiórkowski 2019, p. 112) is very easy to debunk. All you need to do is ask how long it took on average for individual start-ups to make their first profit, or how many of them returned their investors’ funding. Primarily, success is inextricably linked to the scalability and development of start-ups abroad. As one representative of the start-up community said: “The bar set by the competition is very high, because you can compete with the whole world” (Interview E14).

In this case, it is an important element for both the innovative, hipster and pirate types, but none of the identified types define this aspect as key. This is a counterexample to start-ups from the US, Israel or even Estonia, which start their activities with such declarations. One of the founders describes his understanding of the response to the highly competitive environment. The start-up is currently valued at PLN 260 million.

You have to be very determined to be able to compete with the biggest players in the world. And if you asked me what is important? Well, first, we have a rule that every three months we try to visit the best companies in the world for a proverbial meeting. Where we try to measure, more or less, how innovative we are. So we fly to Microsoft, to Google, our teams talk to each other and we are more or less able to sense whether we are behind or ahead, whether we think we have a good product, whether we think we have good systems and things like that.

(Interview S05)

The founders of start-ups speak directly about ways to achieve global reach by adopting specific strategies: a distributor serving foreign markets, an English-language tool, designing the company for global operations, and international customers.

To guarantee ourselves this global reach right away, or to think that way, we partnered with a distributor that does not sell in Poland at all. Only sell to Western Europe and the United States.

(Interview S04)

English is the first language we have communicated in from the very beginning. We create the tool and only then do we translate it from English.

(Interview S06)

Since its inception, our company has been designed as a global product, which is also a function for investors and VCs. It's also about whether your product seems scalable to someone, which is one thing, but whether it is really scalable is another.

(Interview S07)

Anyway, we already had our first companies, which were not only based in Poland, quite the contrary. It was a company whose headquarters were in Germany, but with branches in Poland, Romania and somewhere else, in 8 different countries. So we served them too, so it's like, you know, it's worth being global from the very beginning and thinking about it, because otherwise you won't pass a certain revenue threshold.

(Interview S09)

For many start-ups, the aspiration to go abroad ends with foreign subsidiaries or branches, but success is to be achieved at home.

We wanted to become a monopoly in Poland and we wanted to have some foreign traction, and that was our ambition.

(Interview S11)

Among the stories of foreign expansion, those that ended successfully were organic in nature. They were backed by bold decisions to expand the business – determination and courage, but above all, focus on the goal.

There came a point when we felt that we lacked the cash to implement our ideas and scale up further. We already knew that here in Poland, we had verified this market need, we have customers here, both large and small, and everything is growing, and we know how to further develop this product, we listen to their needs, we learn everything at our own pace, which is also adequate to the possibilities at the time. And then came the moment we decided we had to try our hand at these foreign markets. We had already started to explore them slowly, and it wasn't possible at the time without securing a larger round of funding. And that was another milestone, closing a larger investment round for almost PLN 5 million. Today, it is no longer a large round, but at the time it was one of the biggest. It was 2015, if I remember correctly, or 2016. And these funds allowed us to prepare the application, a product for scaling outside Poland, expand the

team, develop competencies and start testing scaling methods. Then another two years passed, and through trial and error, we simply arrived at certain, repeatable tactics for acquiring customers.

(Interview S12)

The author of the above statement also admitted that she would never have considered a traditional business because she already had such a company and saw the limitations of this type of enterprise. The only chance to scale a service company is to hire more and more people, and this model is repeatable.

"At some point, there's not much left for you there in terms of development. And I wanted to break away from that. That was my motivation too. And plus, I realised what I had and how I could use it. And that's why it happened."

(Interview S12)

Two conclusions can be drawn from the history of successful Polish start-up ventures present on global markets: openness and readiness for international success, and the certainty that this is the path a start-up should take. In the case of scale-ups, this process took place through organic growth (and additional financing) and mergers with other companies. As one representative of the ecosystem notes: "The differences, if I were to put it bluntly, are at the level of execution, which is why mindset [point of view – note by M.A.] – it's a terrible word and they won't let you get away with it either. But the mindset should be that we are doing something globally and trying to find customers in 50 different countries right away, not in two years."

(Interview E13)

2.1.5. Network and ecosystem

In the case of networking and the start-up ecosystem, the following issues were considered in the analysis. Are start-up founders involved in building a network of contacts and the activities of the ecosystem? How important is the start-up ecosystem?

Although there are many references to networking and involvement in the ecosystem in the statements of both startup representatives and ecosystem representatives, only the hipster type describes this dimension as very important. As one of the respondents put it: "lifestyle and you're just a startup founder because it's sexy"

(Interview S11)

Having a start-up is a really cool thing, if only for networking, it gives you a lot of networking opportunities and it's also a really interesting experience that I've always wanted to have. (...) Poland is a really cool country, there's a lot going on here in terms of start-ups, there are a lot of events.

(Interview S02)

In this situation, a wide network of contacts is mentioned as something that the start-up ecosystem in Poland needs and what is most needed in it. It is used, among other things, to recruit employees – a much-needed resource.

I contacted the person and always had the impression that I would love to work with them. What cool talents you have, I would like to use them... If I do nothing to rally these people around me so that we can work together.

(Interview S02)

Some founders disagree, comparing startup events to beauty contests.

We didn't want to go to conferences. We decided we wanted to do our job, and that's not what happens there, it's more like a beauty contest. So it was important for us to do it. We didn't want to be such professionals that we were only at conferences and not at work.

(Interview S03)

And they admit directly that is not their style of doing business.

I don't like that kind of thing, you know, jumping around at conferences, high-fiving each other, you know, drinking until three in the morning at the after party. That's not my style, I'm very pragmatic.

(Interview S11)

However, such statements are exceptions because, as already mentioned, ecosystem initiatives and networks play an important social role in start-ups, allowing for the exchange of experiences, but also connecting people.

You won't get very far on your own. You simply need people, you need contacts, and the network is basically the foundation of all activities.

(Interview S04)

In networking, relationships, and sharing knowledge, I actually love connecting the dots, connecting people, making introductions, keeping my fingers crossed for them, watching them succeed together, and it's amazing.

(Interview S06)

There are also voices of people involved in the ecosystem, creating initiatives and working on their behalf, which is consistent, as already described in Chapter 3, with the principle of "pay it forward".

I've been in the ecosystem for eight years. Seeing certain ideas for supporting entrepreneurs and innovators in other countries or at the national level, I decided to get involved at the local level as well to support this innovative entrepreneurship.

(Interview S10)

An engaged person can perform many functions: provide knowledge and contacts, be a source of finance, or even be someone who listens to problems. Therefore, as the respondent quoted below adds, "success in business (...) depends on the ability to build interpersonal relationships".

What is missing is this mental matching, finding people who can be a support, a genuine support for a start-up entrepreneur. Even in what I said at the beginning, that you have to be a provider of knowledge and contacts, and perhaps finances and a psychotherapist at times.

(Interview E11)

The network and ecosystem is one issue, but for many people participating in the research, it is not the network but the team that plays the leading role.

[Success factors are – note by M.A.] the ability to build a team, because I don't believe in one-man shows. It's impossible to have all the skills, so the ability to build teams and deliver results is important. You know, it's easy to raise PLN 2 million and spend it all. However, it is actually using these funds to make good decisions, to hire people you are missing in your team, to be open to certain suggestions from your environment, and here I am often talking about investors. We know how certain things work and we often see that the boat is sailing in the wrong direction, but there is simply no one listening on the other side. Remember that as a minority investor, a shareholder, we cannot force them, and sometimes, like a parent, we have to watch as our child makes mistakes. It's

not so bad if they learn from them. Unfortunately, they don't always learn from their mistakes, so I think it's important to choose a valuable, competent team, and to be able to listen and draw conclusions.

(Interview E07)

In many ways, being a team player and having good leadership qualities are more important than networking skills. Empirical research shows that neither of these dimensions are mentioned as key factors by startup founders themselves.

You just have to be a team player, and even if you start a start-up on your own, you are on your own at the beginning, you have to be prepared to share the shares in the company and you will need co-founders. However, it is easier to share problems with more people, and sometimes subcontractors and employees are not always the solution. In my opinion, you need to look for someone who will share the responsibility and who will be able to help the company grow. And I think there is no other way. Solo companies are very difficult, in the sense that even if one founder stands out, like the media and is drawn to being on the cover of Forbes, there will always be two or three people who make sure that everything works. So here, too, complementarity is quite important.

(Interview E12)

However, as people from the start-up ecosystem point out, a company cannot operate solo. Cooperation, complementarity and teamwork are the main aspects of this type of enterprise, even if, as one of the respondents said, "an entrepreneur is lonely in life"

(Interview E10)

2.1.6. Risk, *pivot* and failure

The last dimension analysed is the issue of risk, but also the approach to *pivoting* and failure. In this area, the research questions concerned the following: is the venture risky? Does the founder see themselves as risk-prone? Do they perceive themselves as courageous people? Also: are entrepreneurs ready to change their business model? And what is their attitude towards failure?

The greatest importance in the need to take risks is for the pirate type, i.e. people who seek activities that can bring them a "challenge", "adrenaline", the need to "show courage".

I came back from the States and started a completely new group, so I was doing entrepreneurship in the company, intrapreneurship, only I didn't have a stake in it. So there's

something in me that likes to build. I like to build and I have a slightly skewed risk assessment, according to people. I mean, I think it's low risk, where most people think otherwise, what are you risking... And I think I assess it better and that's why I try to get involved in something like this.

(Interview S03)

Courage is a kind of antithesis to risk, because it causes people who get involved in a start-up to start thinking not so much about the decisions or actions they take as having specific consequences, but to treat it as an ability to withstand all kinds of adversity.

You need to have a lot of patience and courage until the very end, because many companies withdraw and cannot withstand the pressure that is built up on them, and I think these were the factors. You have to be very courageous and, I think, very consistent and patient in what you do.

(Interview S03)

Often, taking risks also involves understanding how difficult and challenging the path is and what fears come with running businesses that are burdened with a much greater stigma of failure. Thus, the myth of startup success is again debunked.

We are struggling, so I can admit that we have promising customers with whom we are waiting for implementation and with whom we are in the process of negotiations. However, this is still the moment when you wonder if we will definitely survive.

(Interview S06)

Starting a start-up is not that easy. First, a start-up is a business. So the perception that millions of customers are waiting for you, that your product will sell in thousands of subscriptions, is detached from reality.

(Interview S10)

Criticism is levelled at the so-called “entrepreneur’s job”, i.e. basing your business idea solely on external financing from an investor, with no risk on the part of the founders.

Sometimes, when you ask such people, you hear something like this: “I decided that I would not invest my private money in this venture.” And then you wonder, but wait a minute, where is the entrepreneurship here? So, he shifts all the risk onto others, and from today I will be starting a start-up and learning with other people’s money. For

example, I can imagine this at university, because university salaries are often very low compared to business. And that's where it is, even if it's just entrepreneurship, not that someone is giving up market remuneration to do interesting things at university and is aware that they would earn more outside of university. But for some reason, they take it on, but again, that's more of an investor's perspective, but I think that feeling will be a lifestyle and you're just a start-up entrepreneur.

(Interview S11)

An important topic related to start-ups is the ability to manage change and openness to change in general.

In the technology industry, a lot is changing, so getting used to change is normal, it's just a normal part of how a business operates. In traditional business, it's usually the case that the less change, the better. But it is impossible not to change in the technological process; technological progress continues whether we like it or not. So if you operate in the technology business, this change accompanies you constantly, so understanding that change is constant is much greater and the risk of tolerating failure is much greater.

(Interview E14)

This change is mainly embodied in a change in the business model, *a pivot* that start-ups experience very often.

Definitely, our business model has changed, especially in terms of the nature of responsibility in a more amateurish, individual entity, to an activity that is supposed to lead to mass production. We are focusing more on creating a product line that we will sell and offer to our customers. Whereas at the beginning, the original vision was to produce to order for a specific customer, this change gives us much more opportunity to scale the business.

(Interview S01)

So I joined them then and now I'm here. And then we just made that pivot in the meantime, once we had identified the right problem in the market, and then we just focused on what we're doing today.

(Interview S04)

We pivoted in the meantime, which of course cost us a lot of team work time and financial resources.

(Interview S06)

The path of a start-up is generally a path of pivots, even within the same start-up. We've been working on our project for six months, we've already made 15 mock-ups, no, and each of them was a little different, showing the same product a little differently, telling its story differently.

(Interview S07)

Pivoting is a natural part of a startup's development, but an equally important element that is part of startup culture is the phenomenon of failure. The approach to this topic certainly divides representatives of traditional companies and startups, because for many startups it is simply an important part of their identity, but also a "school of life" and a lesson for the future. For traditional companies, it is simply the end of business.

I don't think I'm a good example, because looking back, I think we weren't aggressive enough, because I don't have enough spectacular failures, and I think it's simply not possible that we didn't mess up properly anywhere, because they should be there, so that gives me a signal that there should be more. I believe that these failures and difficult situations certainly temper us founders and enable us to learn. But I also don't buy into the idea that you have to have three failures to have a chance at starting a start-up. That's not the way to go, because it's not failures that build you up, but having a few failures definitely makes your ego so good, so well tempered.

(Interview S11)

People who have experienced failure consider it one of the most valuable experiences in their professional careers. Not only did it not cause them to change their life choices, but it also confirmed that it is worth continuing on their chosen career path. And "the culture of learning, even making mistakes, but drawing conclusions from them, makes sense"

(Interview E13)

We are the best failure ever. You know, it was a bit of a failure that we lost some time, but on the other hand, it's hard to say that we lost, because we learned an incredible amount.

(Interview S04)

I mean, I don't like the word failure, I don't think so, I look at my various projects that could have been done better, but they weren't failures. They were great projects and today I am proud of them. Thanks to them, you know, I do each subsequent project better and I think that's what professional development is all about, that you go into a new project and use your failures.

(Interview S07)

What respondents most often point out in narrative interviews is the specific approach to failure in Polish entrepreneurial culture, which has not yet matured to the point of perceiving this phenomenon as an important life lesson.

I remember when Google Campus tried to launch Fuck-up Night [an event dedicated to presenting failed ventures – note by M.A.] and it didn't work out. Because no one wanted to talk about their start-ups, because it's a series of successes and we don't have a culture of sharing failure, we don't have a culture of saying that something didn't work out for me, that I need help. It's not working out for me here, it's not working out for me there, every start-up is a success here. That's how we sugarcoat it, that's how it happens. (...) [In the US] there is this language of failure and success in such a mass culture, and we don't have it because there were no such stories, not now, I'm just starting such entrepreneurship.

(Interview S09)

I think failure is very poorly classified in Polish culture. Failures may not necessarily be a source of pride, but they are certainly very good material for future successes. I always try to classify them that way.

(Interview S10)

People for whom a start-up is part of their life, and whose passion, convictions and values are inextricably linked to that start-up (the hipster type), cannot admit to failure. These people cannot admit to failure or give up on their idea because it is part of their identity. In the narrative about the lack of understanding of how important failure is in the experience of people setting up a start-up, the “start-up myth” appears once again: incredible success, quick money, crowds of customers.

In Poland, failure is not tolerated because it is treated as a fundamental failure. This is in contrast to Anglo-Saxon culture, where much is forgiven and there are things that are obvious, and to fail means to learn, to take a lesson, to understand and to do something better. (...) Here, we love examples of such daredevils who build something from nothing overnight and then come into some incredible fortune. They are beautiful and young, of course, they have a great education and have earned billions of zlotys by the age of 20. And sure, it's all artificially inflated, but people want to believe in such fairy tales. No one talks about it openly. If there is a conference, meeting or event, everyone thinks that you should, of course, do something right the first time. When you are young, no one understands the correlation between life experience, reflection and the ability to connect the dots.

(Interview E05)

The phenomenon of mythologising start-ups is very detrimental to the start-up community, not only because it is far from the truth. It causes a loss of trust and a lack of seriousness towards such ventures. Presenting authentic stories, with experiences of various kinds, both successes and failures, is the best method for developing this community and ecosystem when building a narrative about start-ups. Following the example of Western ecosystems, coming to terms with failure, honesty and authenticity in creating stories about one's experiences is an important element in building a mature ecosystem.

It is worth adding that, by definition, a start-up is a high-risk venture, which is why a lack of the right attitude among the founders of such companies and a lack of acceptance of this risk, and thus also of *pivots* or failures, precludes any possibility of achieving full success in such ventures.

3. Dimensions of the analysis of types of start-up founders

In summary, the types of startup founders proposed in the empirical research should be understood as examples of “ideal types” describing categories of people involved in startup ventures. During the analysis, the key dimensions presented in Table 3 were linked.

Table 3. Dimensions of the analysis of types of start-up founders

Types of startup founders	Dimensions				
	idea	innova-tion	scalability	network/ ecosystem	risk <i>pivot</i> failure
Hacker type	++	+	+	-	-
Serial entrepreneurship type	+	+	+/-	+/-	+
Innovative type	+	++	+	+	+
Hipster type	+	-	+	++	-
Pirate type	-	+	+	+/-	++

Scale of importance of individual dimensions for people in specific types: ++ very important, + important, +/- neutral, - little or no importance

Own work.

To sum up, the hacker type consists of people who are mainly very committed to the values of their businesses. The companies they create can be described as impact start-ups. Innovation and scalability of the company are partially important to them, while building a network or involvement in the ecosystem are not important. Thus, this is a type of person for whom neither risk nor failure determines their venture. The most important thing is the idea around which the start-up is created.

The serial entrepreneur type has an ambivalent attitude towards all the defining dimensions of a start-up. These are people who run successive companies in series, and it so happens that these are technology companies, unlike the innovative type, for whom all dimensions are important, especially innovation and its introduction to the market. This is crucial from the perspective of their business. The exception is the network and ecosystem, unless we are talking about employees and building a competent and complementary team. This is also the type of business activity that is closest to the definition of a start-up.

The hipster type refers to people for whom a start-up is a very fashionable, very prestigious venture, and the goal they want to achieve is self-affirmation. To do this, they need a network of contacts and attend conferences. A start-up is a lifestyle, it determines choices and specific behaviours, but it is not an end in itself; hence, innovation is not important, but scalability is, because a presence abroad brings the appropriate prestige. These are most often stories that turn into “start-up myths” and are definitely not representative of this environment.

The last type, referred to as pirate, is equally close to the definition of a start-up, because both failure and *pivot*, and, equally importantly, risk, are crucial for this type of enterprise. At the same time, these individuals focus on scalability and innovation, putting the ecosystem in the background, but the idea around which the start-up was created is completely irrelevant to them, which is how they differ mainly from the innovative type.

In summary, the multitude of types of entrepreneurs starting businesses in technology companies shows that the start-up environment is very diverse. Referring to the theories of Schumpeter, Znaniecki and Merton, certain characteristics specific to each type can be identified. Not everyone, despite identifying with the definition and concept of a start-up, equally emphasises the defining dimensions of start-ups, i.e. the idea, innovation, scalability, network and ecosystem, and risk, *pivot* and failure. This does not mean that these people cannot be classified as such. Rather, the conclusion concerns the broad need to understand the complexity of the start-up community and to adapt tools, instruments and programmes to different types of entrepreneurs. It is worth noting that a focus on innovation and a propensity for risk-taking, altho-

ugh not commonly found in the Polish start-ups surveyed, are inherent characteristics of the type of entrepreneurs who achieve the greatest growth potential.

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