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**A holnap versenyképessége az újonnan formálódó start-up korszak?
Vegyes módszertanú kutatás másodlagos adatok és interjúk felhasználásával**

**Does tomorrow's competitiveness roots in the emerging start-up era?
Mixed method research using secondary data and interviews**

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Abstract

Competitiveness today is in the hands of – among others – the USA and Singapore, but competitiveness in the future can be much more divided, depending also on the ability of the countries to adapting the accelerating competition between nations, which also includes the wounded development of the Startup ecosystem. Globalization becomes faster and larger scale every day, and with its increasing importance on the national and corporate levels, competitiveness is more important than ever. Therefore, competitiveness plays a crucial role in the comparison of nations, sectors, or corporates. Start-ups are rapidly emerging worldwide, and their presence significantly supports and promotes a nation's economy. The research objective was to reveal and introduce if startups and competitiveness impact each other, and if yes, then in what ways. The paper is mixed-method research by combining primary and secondary data. Several databases were processed, and more than 100 startups were directly connected, completed with the interviews. Researching these two aspects served with a new perspective of analyzing the competitiveness of nations or regions and analyzing the start-up ecosystems delivered significant conclusions mainly in political, but partly also in a managerial context. Based on the literature review of *competitiveness* and *startups*, and the analysis of the competitiveness ranking and the startup ecosystem of the chosen countries, it was concluded that there is a connection between competitiveness and the startup ecosystem of a country. The analysis of certain countries showed that investing in the advancement of the startup ecosystem can significantly enhance the competitiveness of the country and that strong competitiveness attracts startups, reviving the startup ecosystem. The paper was also extended by international interviews, in which Asian entrepreneurs were interviewed from Singapore to further validate the key findings of the analysis of the countries by providing data on the mechanisms of the startup ecosystem. The findings of the interviews include several significant aspects like regional competitive advantage, market outlook, and governmental support to the startup economy. The interviews validated that startups and competitiveness work together, if one develops, then it impacts the other. Based on these conclusions it can be stated that the indicator of competitiveness and the startup ecosystem of a country are in a reciprocating relation.

Key Words: *competitiveness, startups, startup ecosystem*

JEL Classification: M13, F12, F62

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*“If you don’t have a competitive advantage,
don’t compete.”*

– Jack Welch, 2015

1. Introduction

The significance of this study unfolds from various intriguing angles, not least of which is the ever-expanding and quickening wave of globalization. In this dynamic landscape, competition emerges on both national and corporate levels, set against the backdrop of a burgeoning and evolving startup ecosystem. Furthermore, researching future economic trends, aims to unveil the untapped global potential, focusing not just on the well-researched economic giants like the USA but also on the emerging powerhouses across Asia, a field of untapped investment opportunities. (StartupBlink, 2023)

The roots of my scholarly interest are nourished by my academic experiences at the Singaporean National University and the exploration of diverse Asian landscapes. These regions stand ahead of remarkable technological development, housing local startups and serving as prime targets for global entrepreneurial ventures. A detailed examination of competitiveness, exemplified by, for instance, Thailand, not only offers a glimpse into the complicated mechanisms of these economies but also holds the key to defining future economic trends that will shape the course of these nations in the medium and long term. The aim of researching competitiveness is particularly vital since it remains the ultimate challenge for startups, making this research instrumental in charting a path for future entrepreneurial ventures. (QuickBooks, 2023)

Amid the startup explosion, with thousands of new ventures founded globally every day, it's intriguing to note that a substantial 60% of them initiate from the comfort of home, and only 40% eventually manage to turn a profit. While about half of the unicorn startups – companies worth at least 1 billion dollars – are based in the USA, signaling its dominance, it also shows the global playing field's open nature. The underutilized potential in Asian nations, in particular, includes huge economic promise. By mapping and examining the complicated relationship between startups and competitiveness, with a keen focus on these emerging markets, this research not only facilitates comparisons with established players like the USA but also affords the ability to project future trajectories based on insights derived from more mature economies that have navigated this developmental phase. (Rubin et al., 2015; Firstsiteguide, 2023)

The paper's core objective is to dissect and contrast the economic landscapes of the USA, Israel, Philippines, Thailand, and Singapore. The analysis is based on widely recognized metrics stemming from the Global Competitiveness Report, which evaluates countries based on over 340 diverse criteria, and the Global Startup Ecosystem Index/Report, which offers one of the

most comprehensive annual assessments from a startup perspective. Besides several other statistics and studies, these two databases give a set base for a comprehensive economic analysis and enable one to derive conclusions and compare how countries could and can take advantage of focusing on development with the fueling of the startup ecosystem.

Related to the structure of the paper, it first focuses on the literature review on competitiveness and startups by highlighting the most relevant sources and literature related to the topic. It is followed by the research method and design. Following that, the data collection is discussed, with an introduction of the two main secondary data sources. That part is followed by the data analyses, in which different countries will be analyzed from the relevant aspects. Key findings of data analysis are discussed after that, in the results part, in which the findings of primary data analysis – findings of the interviews – are also included. The paper is closed with the conclusion part which includes a general conclusion, the contribution of the research, and limitations as well.

2. Literature Review

2.1. Research Panorama

The library and online library, together with *ResearchGate* and *EBSCO* were used to search for literature, and recommendations were also given from the academic consultant regarding the most reliable and quality sources.

Regarding the selection criteria, it was important to focus on possibly actual sources and only use reviewed literature like academic journals, also focusing on English-written sources and primary research studies. For some parts also Hungarian sources were used. The most used keywords in the selection were *competitiveness*, *economic competitiveness*, *startups*, and *startup ecosystem*. Besides the English-written sources, the competitiveness part of the study is also founded on the Journals written by Almadi (2018, 2021) which are used mostly to define and research the context and topic of competition on different levels.

During the search, it became clear that few journals and reviewed literature focus on competitiveness itself in most cases they are related to a certain country or region. Worth mentioning that any literature that researches the correlation between the startup ecosystem and the competitiveness of countries was not found, which further acknowledges the significance and existence of the research.

After secondary selection 11 pieces of literature were chosen for the first part of the research, The authors who are represented more time are *Szentes* and *Almadi*, and the other sources come from all around the world, including Brazil, Indonesia, and China.

2.2. Competitiveness

Competitiveness drives the national economy, and as startups are becoming an even bigger part of the economy and a quite new phenomenon, these two affect each other. As the fastest growing companies nowadays are startups, just like unicorns, it can be concluded that startups with their innovative solution can lead sectors, or even countries to better international performance from the economic point of view. Countries aim to develop economically at an international level, and startups aim to grow huge – and usually fast –, and as the two work together, it can be conjectured, that there is a straight parallel between the two concepts and phenomenon.

Competitiveness is not just one of the most significant, but also one of the most complex terms in the economic world. According to Almadi (2021) and Szentes et al. (2005), the first noteworthy mention of competitiveness stems from the 80s, and the concept itself is not rigidly meant to defeat someone in a competition, participation in it is crucial as the economy develops and smartens because of constant market competition.

Even if the study of competition goes back for tens of years, there is not one widely accepted definition of it: 1) According to the European Union Lisbon Strategy (2001) defining competitiveness faces challenges 2) According to Palánaki (2001) it is a complex measurement number 3) similarly, Horváth (2003) meant it is a collection term; and 4) according to Éltető (2003), in itself it is comprehensible if competitiveness of countries is discussed. These terms and different definitions show clearly that studying competitiveness is challenging as it requires taking care of several different factors, which is why using comprehensive databases that include hundreds of factors can create a reliable base for the analysis.

During competitiveness, the aim is the increase in effectiveness and achieving success in a certain period: It can be also the rise of market share, the expansion of customers or products, increasing profitability, or just the development of production which results in a decrease of costs. These goals can occur in several different levels, and all these levels are different in size and scope: According to Almadi (2021) and Szentes et al. (2005), there are 7 different, widely accepted levels where competitiveness can be observed: The highest is the international and

world economy level, which includes every competition – mainly economical, but also e.g., sports competition –. It is followed by the regional integration level, then the nation-economy level – both of them at the macro level –. The fourth one is the regional and regional integration level, which includes the sectoral level, hence it is smaller in size and has a more focused scope. The sixth level is the level of corporations, followed by the smallest level: the level of submarkets.



Figure 1. - The levels of competitiveness

Own editing based on Figure of Almadi (2020) and Data of Szentes et al. (2005)

For a deeper and more complex understanding of competitiveness, it is crucial to dig deeper into its meaning and how the different levels of competitiveness bond together, to analyze competitiveness at different levels. Introduction of the levels in more detail also needed to make it clear which levels can be analyzed and researched in the most appropriate way in connection with the startups:

The level of submarkets – as was mentioned earlier – is the smallest category of them all, which means that it is the most focused level, so at this point products can be introduced as examples, and case studies of different products – or even services – serves as the way of introduction of this level. These products or services can be almost everything, for example, a car. It is just needed to narrow the scale as much as possible, and so the competitiveness at this level can be measured easily, with different indicators like the utility of the product for the customers, the price the customer pays (or is willing to pay), or the different before- and after-sales services offered by the seller, which also includes marketing, warranty, and the value of the certain brand. (Almadi, 2020)

The corporate level of competitiveness can be characterized by the long-term success of a certain company, by fulfilling its goals and so generating growth. This growth can serve as a measurement of competitiveness, and these indicators rely also on external and internal factors and can result in different final indicators, which depend also on the characteristics of the company and on the characteristics of the market in which it operates. Nowadays, as the market is not perfect and it is ruled nationally by different laws and regionally by different standards it can be described as an imperfect market, where the competitiveness not entirely depends on the company itself, but also the different regulations. (Almadi, 2021)

The classic concept of sector-level competitiveness comes from Porter (1990), who identified the competitiveness of countries not based on the low budget deficit or the devalued national currency, but rather on factors like the prosperity and the standards of living in different countries. The competitiveness of the branches can rely on several external factors, just as the natural assets and resources, or the different attributes of the branches, for instance, whether it is a capital or a labor-intensive sector.

The regional and regional integration level of competitiveness is a broader scale compared to the earlier ones, and this can include more nations and countries in a certain region. Competitiveness refers here also to an economic point of view, and this competitiveness can rely also on factors that were introduced earlier. The different regions have different competitive advantages, and these advantages can arise from the attributes of the region, it can be poor from the agrarian point of view but be filled with precious metals which attracts multinational companies to simplify their value- and supply chain. Furthermore, regional competitiveness on an international scale highly depends on the depth of integration in the world economy. (Szentes et al.,2005)

The nation-economy level is already quite a wild and complex level where competitiveness can be measured. This level describes the competitiveness of a certain nation, and it requires deep research, as the nation-level competitiveness is based on several different factors. According to Almadi (2021) and Szentes (2005) the research on national competitiveness needs to include not just economic, but also infrastructural and social factors because all these are connected and to set the level, all these factors need to be included in the equation. Besides these, the value of national brands also plays a crucial role from an economic point of view. According to Nagy and Almadi (2018), the national brand can mean a very definite competitive

advantage in certain sectors, for example, if style and gastronomy (Italy and France), beers (Czech Republic), or electronic devices (Germany and Japan) are discussed.

The international and world-economy level of competitiveness defines the ability of a country or nation in the scope of the world economy. The difference is that at this point not competitiveness with other nations is measured, but the basis of measurement is just the ability of a certain country or nation to integrate into the world economy and trade, while it also increases the standards of living inside the country. The core difference is that the measurement of world-market competitiveness is a much less complex process – it is also widely accepted around the globe – while the measurement of world economic competitiveness is more challenging, and there is no accepted way of measuring it. (Szentes, 2005; Almadi 2018, 2021)

The many-times-mentioned measurement of competitiveness can be divided into two groups according to Almadi (2021): the first is the measurement with simple indicators and the second is the measurement using complex indicators. The former can be divided further into 3 different groups: the performance indicators of export and import, the indicators of supply, and the competitiveness indicators of demand. At this measurement, the same indicators can be compared between the two chosen countries/regions/sectors/products, while at the complex measurement, more than a hundred indicators can be included in the measurement, to get a much more detailed picture of the long-term competitiveness. As it was mentioned earlier, such a complex way of measurement is the World Competitiveness Yearbook, as it includes more than 340 different indicators. It is also crucial to decide what is the most suitable measurement of competitiveness, which can be used as most optimal in the study.

In the study, this competitiveness index will be used as a way of measurement when countries are compared based on competitiveness and the existing startup economy in the country. The yearbook uses hundreds of different factors, so it can be assumed that from year to year, the difference in positions can be changed just slightly. On the other hand, it should be also mentioned, that if a certain country achieves some success, it can also have an effect on several different factors, with other worlds in several different indicators, so beneficial trade agreements, efficient exploiting of competitive advantages can heavily affect its position from the competitiveness point of view. Studying the competitiveness yearbook makes it clear, that the place countries take in the index is quite unstable. It is also common that the difference between two years and the position of the same country is almost 10%, which means 6 places difference.

As highlighted earlier the second part of the paper will focus on discovering opportunities by analyzing the countries from the competitiveness point of view and the existing startup economy in certain countries, and these countries will be some of the most important countries by economic aspects like Israel or the USA, and Thailand, Singapore, and the Philippines. These countries are among the 64 most competitive countries in the world (World Economic Yearbook, 2023), so these are included in the index which makes their analysis straightforward. In the analysis, the focus will be on the national level, and the comparison will also be centered on certain countries and the research of the same indicators in the chosen countries. The paper is destined to unfold a new aspect that helps not just the analysis of competitiveness on a national level, but also serves with conclusions that are prevalent in the long run.

2.3. Introduction of Startups

The highly volatile business environment, the accelerating globalization, and the fast-changing customer needs are shaping the culture of corporates to a significant degree, and as the companies must keep abreast of the new trends and directions, the way they work, and function have changed a lot in the last years. According to Schumpeter (1942), innovation can also be a competitive advantage, which refers to the state that if one competitor can serve the demand in a better way than another – it can be seen from the point of view of costs, or the added value of the customer –that’s more than enough to get a promising place in the competition.

The highly competitive market encourages the need for innovation, and as more and more companies emerge in every sector, the competition just gets stronger. Everyone aims to take advantage of the globalized world, and a newly emerging startup can serve not just the local, but several parts of the world through the developed supply- and value-chains and cheap ways of transportation. Schumpeter (1942) already pointed out more than 70 years before, that innovation can also include disadvantages, like the term “creative destruction”, which refers to the process, in which new and innovative solutions get better as old practices, and as time passes they also replace them, so causing a collapse in the routine process: nowadays one of the most essential innovation is fintech and the fintech companies, which at the beginning just started to innovate the banking sector and services, but as later on it is also possible that they will replace them. Agarwal et al. (2013) and Sadyrova et al. (2021) also pointed out, that innovation is not just an essential driver of competitiveness but also significant to the survival of new firms, without the innovation itself – also its competitive advantage – it would not be able to survive,

and even knowing this, most of the startups fail. According to Erdogan and Koohborfardhaghighi (2019) and Gauthier et al. (2019), the failure rate of startups is very high, around 90%. After digging deeper, it can be observed that time is a significant measurement indicator of the success rate of startups. Based on the research of Cerdeira and Kotashev (2021), 20% of startups fail already in the first year, another 50% go bankrupt in the first 5 years, and 70% of startups don't even exceed 10 years of operation.

Startups aim either to replace existing products or services with innovative ones or to enter niche markets to serve the needs of customers. The main fields of startups are financial, healthcare, and artificial intelligence, in which the number of emerging startups shows a constant and rapid increase every year based on the research of Szmigiera (2021). The categories of startups cannot be specified always exactly, as the utilization of Artificial Intelligence and its implementation in different sectors can challenge the differentiation of certain sectors. AI (Artificial intelligence) can be implemented in several different sectors, and by optimizing the working process of the food industry, simplifying surgical operations, analyzing patient data to discover future possible illnesses in the healthcare industry, or replacing the employees in banks – just to focus on the mentioned top industries of startups –, AI can be used to the infinite number of possibilities.

The implementations of startups are common not just in B2C – business to business – but also in B2B, as they may also aim to innovate the already existing working and manufacturing processes of companies. According to Demandsage (2023), 61% of startups offer B2B solutions, while only 39% offer B2C solutions. Latter can also result in a more effective way of production, so the decrease in cost and increase in the value added to customers. Nevertheless, even if startups are an innovative solution, several aspects need to be researched before studying the relationship between competitiveness and startups, for instance, the crucial factors of startups, starting from the idea, through the aimed market and the team, and closing with the final result, whether it ends as a success or as a failure.

2.3.1. Spread and Types of Startups

As the paper aims to introduce the phenomenon of startups before researching the connection between the competitiveness of startups and nations, this section will focus on a deeper understanding of startups and introduce them from different aspects. Statistics play a crucial role, and case studies will be introduced also at the national level – for example, Israel and how

they revived their economy with the heavily supported startup economy, and also at the sectoral level with commonly used strategies, like the Blue Ocean strategy.

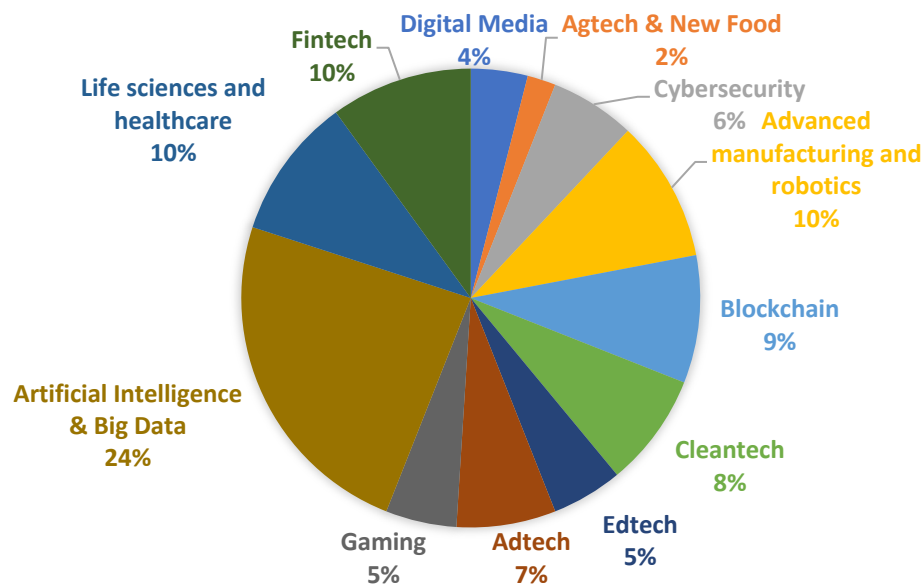


Figure 2. - Distribution of VC-founded Startups worldwide – 2022

Own editing of the author based on data from Statista

As it was mentioned, startups can emerge in every sector, and innovation can be found everywhere, but some sectors represent a higher proportion. According to Statista (2023), almost a quarter of the startup companies are present in the AI and Big Data sector, which is understandable based on the fast-changing business environment and the possibilities regarding data. It is widely accepted that in the future the real value will be the information itself, and the results of the competition will depend on who can utilize the information and in what ways. It can be about customers, businesses, or products themselves.

Healthcare and fintech are also present with a proportion of 10%, like robotics and advanced manufacturing, but all the other sectors have less than 10%. As it was mentioned above, the direct category in which a startup operates cannot be determined always clearly, especially concerning AI and Big Data startups, as these can aim and operate in any other sector, or different sectors simultaneously. According to Statista (2023), the main player from a startup point of view is North America, which is the home of 182 unicorns, while South Africa counts only for 2, just like Africa, and Oceania possesses even less, just 1. In the second place, there is Asia with 91 unicorns, which clearly shows the difference between Europe, which is only home to 27 unicorns. (Statista, 2023)

2.3.2. Existence of Startups

Startups are the new generation of firms, and these new firms aim to transform entrepreneurial judgment into profit. (Spender, 2014). These companies have a lot of advantages and disadvantages, for instance, there is a lack of tangible and intangible assets inside the company, which makes it challenging as they must outsource some processes, but on the other hand, they also have to manage fewer things on their own (Wymer and Regan, 2011). According to Bogers (2011) and Spender et al (2015), the lack of human and financial resources means further challenges from the development point of view, and the adaption of open innovation (OI) practices is a necessity for them, to counteract their smallness and newness.

It was partly mentioned that their existence can arise from different factors and aim for different opportunities: some of them provide innovative solutions to existing markets, and some of them intend to create a whole new market. In this section, these two examples will be introduced in detail, highlighted with real-life examples:

Firstly, it is worth researching the first scenario, in which they aim to compete in an existing market and an existing sector. This can be also divided into different categories. The founders may think they discovered a niche market and start to offer a new product or category to fill the gap, or it can also happen that because of the fast-changing business environment, the market changes in a favorable way. It happens usually, as the market is imperfect, and its mechanisms depend on several external factors, e.g., government and international policies. Such a scenario happened in 2018 in the USA, where the market was hardly hit by the trade war with China. Trump and the regulations of his administration have highly affected the market of the U.S., and as the import of some goods from China was decreased artificially, they needed to replace the amount missing. As the imports from other countries increased, the startup ecosystem in these countries also strengthened, and according to NBC (2019), the tech startups in Vietnam can be mentioned as beneficiaries of the U.S.-China Trade war. This shows clearly that Vietnam could take advantage of the decreasing amount of U.S. imports from China in the category of *Electrical and electronic equipment* and achieve a 327% increase in exports to the U.S. just in 3 years, and also after the Phase One agreement which partly softened the Trade War, Vietnam could maintain a 30% increase in term of cumulated exports. (Ribai, 2022)

The other way that enables startups to be successful in the long run is the creation of new customer needs, or entirely new markets, which usually can mean just a slight change in the existing product, that results in a new product or service. The Blue Ocean Strategy was

introduced by Kim and Mauborgne (2004) in the Harvard Business Review, and it represents a competitive strategy, that was used already at the time of the Ford T model, even if Henry Ford was unaware of it. The Blue Ocean strategy means, that companies – or individuals – choose not to beat the competition in an existing market, but rather eliminate the competition by entering a whole new market, in which they are alone, so they don't have to compete with everyone. Basically, in the strategy, there is the Red Ocean, which is a normal Ocean but polluted with the blood of the competitors who compete, and there is the Blue Ocean which is clear because of the only company in it – naturally, as time passes more players are expected to enter that market, and the Blue Ocean becomes red –.

Blue ocean strategy	Red ocean strategy
Create uncontested market space	Compete in existing market space
Make the competition irrelevant	Beat the competition
Create and capture new demand	Exploit existing demand
Break the value/cost trade-off	Make the value/cost trade-off
Align the whole system of a company's activities in pursuit of differentiation and low cost	Align the whole system of a company's activities with its strategic choice of differentiation or low cost

Figure 3. - Differences between Red Ocean and Blue Ocean strategy

Own editing of the author based on data from Harvard Business Review

These innovations and discovered Blue Oceans are mostly not driven by technological pioneering, but rather by value pioneering. The Ford T model is mentioned as a first example – from a chronological point of view –, and in this example, the value derived by the T model was, that it was a mass-produced good, and in a few years, it became available for almost everyone, and it transformed the whole industry with assembly lines and fewer choice, regarding, for example, the color of the vehicle. Such other Blue Oceans were in the field of automobiles when Japan entered with fuel-efficient cars, or when Chrysler entered the market with minivans, which meant a whole new class of cars. (Harvard Business Review, 2004)

Blue Oceans are next to us every day according to Kim and Mauborgne (2004), as the focus is not on creating a new product, but the discovering what value the customers looking for and will look for in the future. The paper also supports this statement by mentioning that several industries did not exist 20 years ago, and following this pattern – as it acknowledged that such

a shift was always present in business, and this process accelerated lately – proves that 20 years later there will be several industries and sectors which don't exist today, therefore focusing on customer needs and how to serve them can be beneficial in the form of creating Blue Oceans.

Furthermore, the paper also introduces the case study of Guy Laliberté, who leads the Cirque of Soleil, which is a circus, but he was able to revive it, even against the constant declining demand for circuses. The paper introduces in detail, that the circus animals are one of the biggest cost factors, and as they don't play such a significant part in the circus experiment – partly because of the lobby against using animals for entertainment purposes – eliminating them from the show can decrease costs a lot, while not affecting the participation rate significantly. Besides that, Guy intended to replace animals with show elements that also attract people who usually don't go to circuses, and by finding these kinds of elements he could widen the circle of customers. He discovered that theatres are an essential part of entertainment, and opening in that way could be beneficial to the circus. He added a story, and instrumental obbligato to the shows, and so created a Blue Ocean, the golden path between circuses and theatres. He also discovered that the circus tent plays a significant part in the experience and atmosphere, therefore he innovated it and created a tent that fascinated the audience not just with its appearance but also with its comfort. All this resulted in the growth of revenue and profit, in a market which showed a constant decline in the past 10 years. (Harvard Business Review, 2004)

This example shows clearly, that with slight changes in existing products/services, it is possible to achieve growth and beat not just the competitors – by avoiding competition – but also to beat the market. Comparing the red and Blue Oceans can also support the understanding of why most startups are looking for niche markets, where they with innovation can earn high profits in a shorter period.

The Figure derived from the original paper perfectly summarizes the differences between the two introduced strategies, and this can also be viewed from the startup point of view, as many of them focus on these factors: entrepreneurs aim to create a new market space, make the competition irrelevant and this way capture new demand and earn high profits. (Harvard Business Review, 2004)

The Blue Ocean strategy and the example of Vietnam in the Trade War introduce the roots of the existence of startups and highlight 2 different aspects that played an essential role in their evolution. The paper will include several further case studies and examples, and the ones

mentioned in this section can also appear later on to support and strengthen other ascertainties.

2.3.3. Economic Impact of Startups

According to La Rocca and Snehota (2014), the network structure, and the innovation processes shape each other, as the actors of the network – in this case, customers – must accept the process and the innovation itself. These actors and their actions can be shaped, but this phenomenon is especially important in the case of the establishment of new ventures, as it will inevitably change the processes of the network when entering. Furthermore, companies' alliances can also affect the long-term success rate: According to Neyens et al. (2010), long-term alliances of startups with customers, competitors, or suppliers can have a positive effect, while a short or mid-term alliance affects them negatively. If all these things succeed, startups can have a significant economic impact on a region or a country, which will be introduced in this section.

Startups do not just foster technological advancements and reshape industries, but they are also pivotal drivers of economic growth, therefore their economic impact is manifold and worth researching on different levels. This impact can be understood physically, in ways that affect the business environment in the short term and with hands-on changes, and can be observed also as a phenomenon that starts and fuels economic changes in the long run, with for instance reviving industries and sectors.

The many consequences startups have locally start with job creation and employment opportunities. Kerr et al. (2017) also mention that startups can lead to job growth and decrease unemployment in the long run. Also, it is worth mentioning that startups not only can create whole new positions, but they can also balance the jobs that were lost by incumbent firms. Furthermore, they can also lead to a vibrant local economic environment, just like it was in Vietnam in the above-mentioned example as a consequence of the Trade War. Acs and Audretsch (2010) also highlight that startups can influence the economic vibrancy and economic growth within a certain community.

Besides all these, startups play a significant role in the transformation of the market, and also in the so-called disruption of the market, just like in the case of the discussed creative disruption, in which the innovative solutions replace the existing – old – ones, which vanish entirely as time passes, so transform the market from positions and processes point of view as well. The

technological and innovational advancements are also crucial, as startups emerge mostly as innovation-driven companies, that provide innovative solutions, this way they also fuel further innovation through their research and development processes. Another aspect that could be a mentioned phenomenon, which has rather a long-term consequence and is also hard to measure is the regional spillover effect. This effect was also highlighted by Kerr et al. (2017) who focused on the effect of startups in the region: their functioning also affects the neighboring regions, as they use the resources and fuel economic development in the region.

2.3.4. Pitfalls of Startups

The failure rate of startups is high, therefore, to understand their working mechanism it is also necessary to introduce some of the main causes of failure. These are aspects that should be managed – either on the individual or regional level – to secure the competitiveness of startups and so the competitiveness of a country. As it was introduced earlier, the total failure rate is around 90% in the long run (Erdogan and Koohborfardhaghighi 2019; Gauthier et al. 2019), 70% do not survive the first 10 years, 50% fail in the first 5 years, and 20% report bankruptcy already in the first 12 months (Cerdeira and Kotashev 2021).

As the reasons and the solutions for them are in favor of not just the entrepreneur but also in the interest of the certain country in which it intends to operate, several research was made to discover the most common reasons behind the failures of the startups. Besides other resources, the book of David Feinleib (2012) *“Why Startup Fails and How Can Yours Succeed”* will be used as the primary source for this section.

The first part of the book describes the main problems that can arise from the product or the entrepreneur itself. If the product is bad, or it isn't designed well for the market then it will lead to failure. Even if someone finds a niche market, finds a way to fill it, and comes out with an innovative idea, filling the idea with passion and success is a challenging exercise. Finding the right product-market fit is one of the things most startups must face, sometimes it requires time after launching, and sometimes they find it right out of the gate, just like in the case of Facebook. Close to this segment, the other basic problem can arise from the entrepreneur itself, more precisely from the individual who reckons herself/himself an entrepreneur. Being an entrepreneur requires a lot of characteristics which is not possessed by anybody, just as being able to take risks, sacrifice money and time, and think in the long run with precious planning and straight motivation.

The next part focuses on the business point of view, in detail on sales and marketing. The research carried out before writing the paper included several resources, and many of them emphasized the importance of timing, also regarding the product itself, and also regarding sales and marketing. It is crucial to plan when and how to carry out sales activities, starting from the invested money in advertisements and closing with the different channels that will be used as primary and secondary sales channels. The challenges arising from this aspect are divided into 3 groups which are *losing money on every sale*, *investing in sales and marketing too early*, and *invisible startups*. Latter means that several startups served with essential innovation, but as no one knew about it, they failed. It enucleates perfectly, that having the right product (with the right product-market fit) is just one side of the coin, being able to sell it is the other.

Going further, the third part studies the execution itself. One of the most essential parts of building a startup is communication. Most startups start as a one-man-dream, and usually, it arises as a challenge to share the vision with the ones in and outside the company. Communication is also a manifold question, depending on the individual the hardest part can be the communication of the vision, the setting of expectations, or just the leading of meetings and communication with the employees or partners. One further aspect is known as *not getting started*, which is a challenge mostly faced before even creating the company, and it is understandable: starting a company requires a lot of things, just like the needed financial background. Surviving the lack of capital – at least as long they find an angel investor or VC – can be a deterrent. Because of financial, administrative, or personal reasons, *not getting started* or *failing to execute* – as the last aspect in this part – are common and usually lead to the failure of startups.

Lastly, some factors which arise from the capital and liquidity of the startups will be introduced. This pitfall can be divided into two categories, first is getting the needed financial support and second is managing it. Successful investors commonly sacrifice everything they have – Elon Musk also invested all their money in his startups, and at some point, he and his companies were close to bankruptcy (CNBC, 2023) – as the world of startups and their growth is incalculable. After getting money from angel investors, VC, or public fundraising, managing it is the next challenge, which is also the 11th chapter of the book under the subtitle *Managing Liquidity*. At the end of the book, the key takeaways and highlights are summarized, inter alia the importance of motivation, the consequences of friction, and the importance of preserving personal mental and physical health, even if people want to implement their dreams. The main

focus should be on the long-run goal, and the people must precisely plan the steps that will lead to that goal.

2.3.5. Characteristics of Startup Ecosystems

The startup ecosystem itself is the network in which the relevant factors are connected dynamically. It plays a crucial role already before the funding of the startup and also during its existence, therefore its significant parts needed to be introduced for the in-depth analysis of the topic.

The first and foremost factors are the entrepreneurs themselves, as they are the emerging power that creates and then fuels the startup itself. They have to possess a strong vision and be risk-takers with managing uncertainty, through all the challenges that were introduced in the earlier section of the paper. An investor can support the company also in product development, in the process of market expansion and operational scaling, not to mention the everyday mechanisms like outsourcing the work and leading the team. Rubin et al. (2015) also emphasize the importance of incubators in the early stages of startups which can bridge the gap and provide them with knowledge besides the capital.

Other relevant factors in the ecosystem are the external capabilities that can arise from the characteristics of the region or the artificial environment. Porter's Diamond model also mentions that factors just as local competition and related industries affect the innovation potential regionally, and a strong innovation ecosystem fuels the transfer of knowledge from academic institutions to the startups, which drives the growth also on the level of the startup and the country. Such external factors can be also the infrastructure and the supportive ecosystem which is essential according to Audretsch and Belitski (2017), who emphasize the importance of startups to access skilled and talented labor and also to research centers to implement their ideas.

Besides founding – that was introduced earlier – another external factor is the political environment and the governmental policies. The most well-known case study is the example of Israel, which could achieve a so-called “Economic Miracle” by putting emphasis on startups and supporting them. Israel could achieve one of the highest GDP growths in the last years, and its example perfectly enucleates the way that governmental support, developing education, and collaboration between industries and academia can result in a booming startup culture. (Senor and Singer, 2009)

2.4. Competitiveness of Startups

Startups can be differentiated by their value proposition and their differentiation's success – or failure –. If the certain startup operates in a Red Ocean environment and must compete with other players in the market, then emphasizing a unique value proposition helps the company to succeed, just as was mentioned already by Porter (1985), who highlighted how a competitive advantage should be used to achieve and maintain superior performance. In a startup operating in a Blue Ocean environment, the focus is not on beating the competitors, just on winning the customers, as was introduced in the Blue Ocean Strategy. (Kim and Mauborgne, 2004).

Furthermore, the competitiveness of startups can arise from different aspects, which play significant roles in their success. Innovation is a core element, and the competitive advantage of several startups should be maintained, which is crucial to delivering innovative solutions and reshaping the industry or at least partly affecting that. This phenomenon was also highlighted by Christensen (1997) who researched the effect of innovative solutions and that they are also able to fail great firms.

Adaptability and strategic market positioning also accede to the deeper measurement of startups, and their successful implementation supports the company in several different aspects. The most used indicators regarding startup companies are their growth potential and scalability of them. Profits in the case of startups start to get essential just later on time, as at the beginning reinvesting is needed also from the capital and the profit side. Achieving rapid scalability – the capacity to handle growth smoothly – is a desired goal of entrepreneurs, which is only achievable if the company develops dynamically.

2.5. Relation between Startups and Competitiveness

The relationship between the competitiveness of startups and the country in which they operate is connected in a complex manner. This relation is reciprocal, which means that they affect each other constantly, and therefore the impact of the two can be researched together. The development in a tangible and non-tangible sense is also the interest of the country and the startups themselves, and the predisposition to innovation and entrepreneurial activity can depend on regional characteristics. This agility can be supported – as it was in the case of Israel – and its consequences have long-term impacts too. The human capital and the educational system are the fuel of the startup economy, and the transfer of knowledge is a necessity for creating a strong entrepreneurial society. It was highlighted by Acemoglu and Zilibotti (2001)

that the education system contributes highly to creating talented and skilled labor, which is essential in a successful startup economy. As mentioned, the two are connected reciprocally, the advancement of startups, which supports the basic development of infrastructure, and the business environment also fuels the development of the educational system.

The business environment and the implemented advancements are also considered necessities for building a competitive environment, because the startups are increasing the competitiveness of the certain country itself, through their network, consumption, and alliances, which are – in a favorable case – also supported by the governmental side. This case study stands close to the example of Israel, which is usually cited as a startup nation. The successes of startups are closely connected to the success of their home country, and recognizing this relation can help us to observe different patterns regarding competitiveness. Vietnam still stands before a huge development opportunity, but the Trade War – and how they used the situation – made it clear that taking advantage of external factors and investing in the startup ecosystem locally can result in the growing competitiveness of the country itself.

3. Research Methods and Design

The study aims to research whether the development of start-up ecosystems in certain nations can correlate with their competitiveness, unfold potential economic opportunities for the future, and how these two fields affect each other.

The other objective of the research is to conduct a comprehensive analysis of the future trends and basic dynamics, studies within the topic of startup landscape, and international competitiveness.

Qualitative sources, particularly academic journals will be used, which provide in-depth insights into the various researched aspects regarding startups and competitiveness. Besides that, these sources are valuable and relevant for the depth of knowledge they represent on subjects connected to innovation, entrepreneurship, and different business dynamics. The knowledge and conclusions derived from the literature review, and used in the analysis of the countries summarize also the investigations and studies which was conducted by the cited authors, and the most relevant expertise of them was integrated into the study mainly regarding innovation, types, and funding of startups and common challenges faced also by emerging countries and startup ecosystems.

In addition to the qualitative sources, the analysis and comparison of countries will highly depend on quantitative data. The in-depth utilization of quantitative data sources such as the Global Startup Ecosystem Report and the World Competitiveness Yearbook assist in confirming the study with empirical and statistical evidence. Integrating these two quantitative sources in the study aims to validate and quantify the key findings regarding the analyzed countries and also regarding the assigned dynamics and trends.

Combining both the qualitative and quantitative sources the paper aims to provide the most up-to-date and accurate answer to the research question, and with this dual-pronged approach, the study can ensure a well-balanced investigation of the international competitiveness, startup ecosystem, and the relationship between the two in the case of the USA, Israel, Philippines, Thailand, and Singapore.

Furthermore, to validate the conclusions that were derived from the secondary data, primary data collection can further deepen the research. To collect primary data, two methods are used: through a questionnaire, more than 100 startups are connected directly to collect the most profound data regarding their operations and the advantages/disadvantages of operating in Singapore, which is a highly competitive country. In case of a low ratio of responses, the questionnaire will be complemented by deep interviews with Singaporean Startupper to provide on-hand experiences and data for the research. Both ways of collecting data are handled with high sensitivity, and ethical aspects are inevitable, therefore collection of data is anonymous.

4. Data Collection

4.1. World Competitiveness Ranking

The World Competitiveness Yearbook (WCY) is made by the IMD, more precisely by the World Competitiveness Center, and was first published in 1989, as a comprehensive annual report and a reference point used worldwide on the competitiveness of countries. The extensive research also includes statistics and survey data, and it mainly analyzes and ranks countries according to their capabilities to utilize their competencies and the ability to create value in the long term. As was mentioned, competitiveness and its analysis are comprehensive, GDP is not enough for measurement, and the political, social, and cultural aspects and indicators are also considered through the process of ranking the countries.

The Yearbook includes extensive coverage of 64 countries and economies, based on the available international statistics and the collaboration with the Partner Institutes, which enables the usage of reliable and accurate data. In the report of 2023, there have been partners in 57 countries who contributed to the yearbook.

The World Competitiveness Ranking 2023 is based on 336 different competitiveness criteria from the mentioned field of life – economic, social, political, and cultural –, and sources also include regional, international, and economic literature, just like feedback from academics, government agencies, and business communities. (IMD, 2023)

Summarizing all this, the WCY is the most appropriate source for analyzing the competitiveness of different countries, which if researched together with the Startup Ecosystem Report can serve with a reliable picture of how the competitiveness and the startup ecosystem of certain countries correlate. The IMD World Competitiveness Ranking 2023 was released on 20th June, a few months before the research was carried out, therefore the deductions of the paper are highly up to date, supported by the most current data.

4.2. Startup Ecosystem Report

The Global Startup Ecosystem Report was released on May 30, 2023, also a few months before the research. Startupblink as a global startup map and research center includes 1000 cities and 100 countries in the report, in 11 industries and dozens of sub-industries. The report was first released in 2017, and for the creation, Startupblink also uses qualitative and quantitative data, which also include interviews and surveys, and partnerships with government agencies in locations where the available data is limited.

The Report also serves with industrial and trend analysis besides the comparison of the 100 included countries, and with more than 100 partners they also support the development of the startup ecosystem. All the 100 included countries are analyzed separately on 3-4 pages, which includes the place of the country in the global and regional ranking, the most significant cities in the certain country, the crucial city and industry insight, and also a startup ecosystem overview, with the most notable startups in the country. All these data enable the reader to get a profound picture and also understand the ecosystem of startups, and also to get to know the ecosystem of startups in the researched countries. (Startup Ecosystem Report, 2023)

This database is also highly professional, and as it is also very comprehensive, the research will only include the main points and takeaways. The deep analysis of the almost 400-page

Startup Ecosystem Report and the analysis of the more than 130 pages long World Competitiveness Yearbook can be the basis of further research, this paper is destined to study the relationship between the two with the research of chosen countries.

5. Data analyses

The analysis of the chosen countries will follow the same structure to enhance the transparency of the paper and the comparison. Firstly, the common competitive analysis will take place by presenting the essential data and statistical outcomes of the World Competitiveness Yearbook regarding a certain country. After the short introduction of the chosen country with the relevant parameters, the challenges of 2023 for the certain country will be highlighted as well, just like with the past data regarding its place, so drawing interference will also be possible regarding the past development of the country from a competitiveness point of view.

After analyzing the countries from a competitiveness standpoint, the next part of the analysis focuses on the existing or developing startup era and ecosystem in the country. To avoid false interpretations, statements will be supported by quantitative data that derives directly from the WCY or the Startup Ecosystem Report. In this aspect, the key factors and indicators will be highlighted, and further research is possible also by deepening the research or by focusing on another aspect besides the correlation between the competitiveness and startup ecosystem of certain countries.

The last part of the separate country analysis will focus on researching whether there is a connection between the performance of the country on the two different rankings, and based on the key points of both, what direction could be determined as a possible future trend or conclusion.

As was highlighted in the introduction of the paper, the countries are chosen based on the untapped potential in the developing countries, and also based on the personal bonding and experiences in the different countries, which made clear that as their economies stand in front of huge steps, so paying attention to these countries will be lucrative in the mid and long-run. The first country as a superior example is the United States, followed by Israel as a leading and significant example in the research based on its successes, which will be followed by 3 Asian countries, which either developed significantly or are considered to be potentially successful in

the long run. As a successful and widely known example of the topic, Israel will also take place in the analysis.

5.1.USA

The USA is known as a major player from several points of view: it is one of the leading powers in the world from a political and economic standpoint and influences international trade with its presence. As a determinative player, it is not a surprise that the USA takes place in the top 10 countries based on competitiveness. It takes 9th place, and there is a slight increase – 1 place – in its position compared to 2022, which is mainly due to the robust performance from the aspect of economic performance, from this point of view the USA ranks second. Even if it ranks 6th in infrastructure, it only achieves the 25th place in government efficiency.

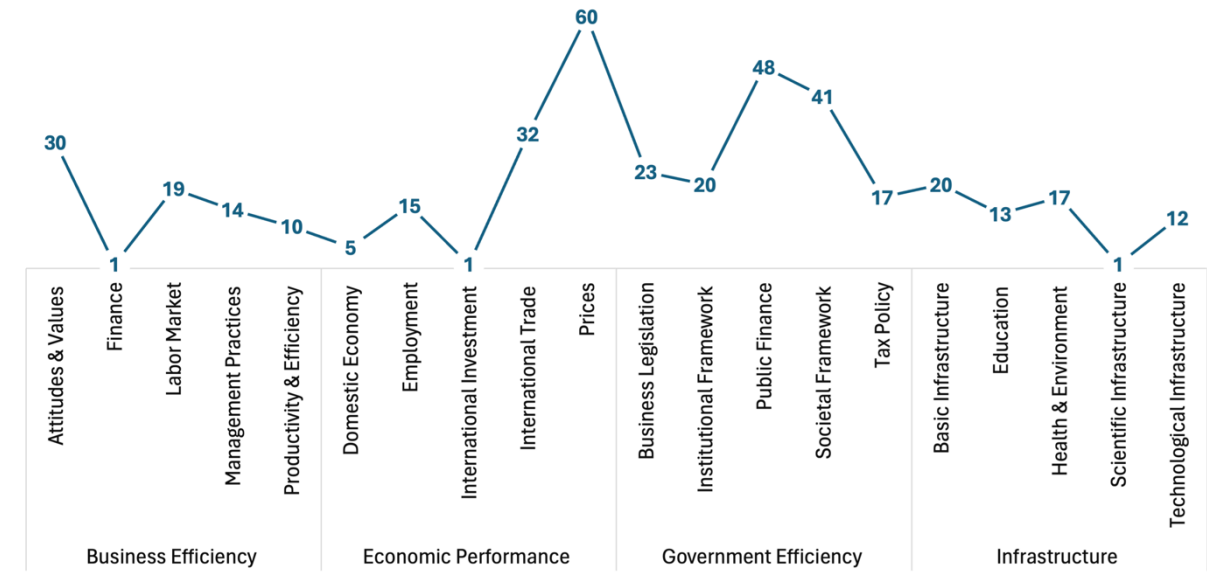


Figure 4. - Competitiveness Landscape of the USA 2023
Own editing of the author from data of World Competitiveness Yearbook 2023

Besides the mentioned factors, the USA has a lot to develop in some categories, even if it's the first in finance and scientific infrastructure, from the prices and public finance aspect it is at the bottom of the list. Most of the factors are close to 10, which explains why the country ranked 10th. Also, it is worth mentioning that from the point of view of unemployment, the USA has a lot to develop, with 5,04% it is ranked 32nd among the 64 countries. Regarding competitiveness, it can be stated that the USA shows stagnation, it was ranked 10th from 2020 to 2022, and in 2023 it could just increase its position by 1.

From the startup ecosystem aspect, the position of the USA is way more immovable. It has a total score of 198.080, which is extremely high if it is compared with the second (UK) which has 51.218. The USA is the first globally and also in North America and has held its position since 2020. The most significant cities are San Francisco and New York, these two are also the first and second best ranked globally. The USA is the top business-friendly country in the world, and another factor that shows its dominance is that 34 out of the top 100 cities are US cities.

According to the Ecosystem overview, one thing remained constant, which is the global influence and dominance of the US startup ecosystem. The dominance of English and the US version of the free market with a high-risk tolerance and a lot of investors, just like the laws supporting the startup ecosystem with supporting talents with visa programs and strengthening the semiconductor industry – attracts an enormous number of foreign investors. The US Startup Visa allows foreign nationals to set up and operate a startup enterprise in the US. The US offers two types of investment visas: the E-2 visa and the EB-5 Investment visa. These visas allow startup entrepreneurs to establish a business in the US, but with significant differences. (Wise, 2024) Some of the most notable startups in the US are OpenAI which just became known worldwide with the introduction of ChaptGPT 3.5 and 4, and Epic Games, these serve more than 100 countries as huge US Startups. Both companies are unicorns. (Startupblink, 2023)

5.2. Israel

Israel was mentioned already several times in the paper; therefore, it is essential to discuss

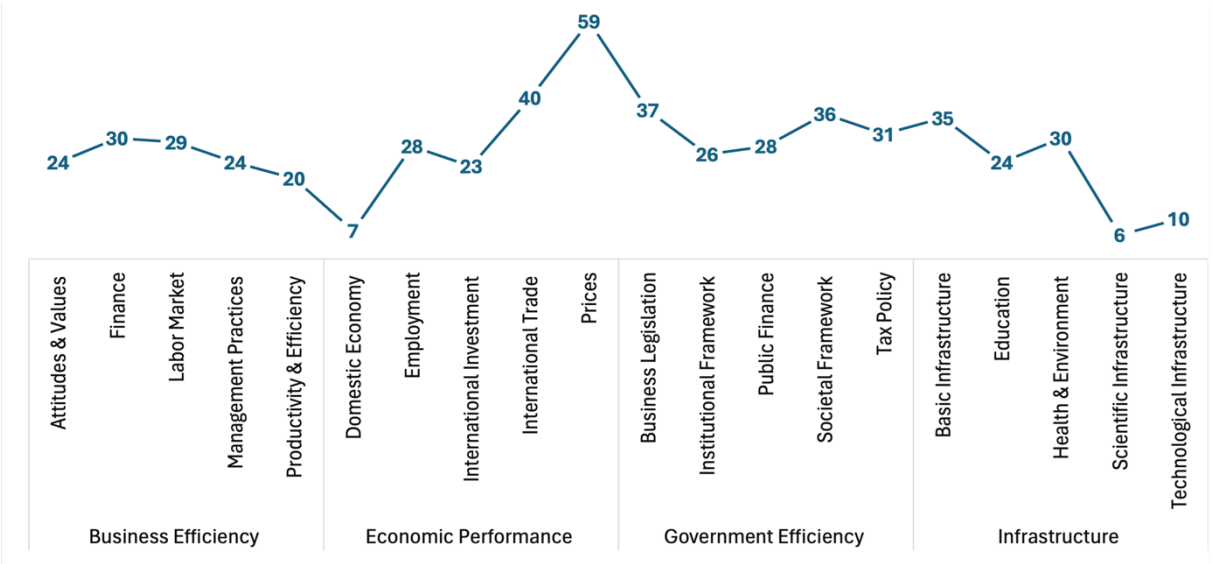


Figure 5. – Competitiveness Landscape of Israel 2023
Own editing of the author from data of World Competitiveness Yearbook 2023

how it could be called a “Startup Nation”, it will be also introduced where it is ranked globally.

In 2023 Israel was ranked 23rd globally from a competitiveness point of view. It is just 14th place behind the USA, and it is also noteworthy that it has passed Austria(24th) and the United Kingdom (29th) and is just one place behind Germany, which is ranked 22nd. Israel takes place in a quite noble environment at the ranking, and this rank comes from the mentioned and discussed factors:

Israel is in the top 10, based on Domestic Economy, Scientific Infrastructure, and Technological Infrastructure. From other aspects, Israel is in the middle, but it can be seen that these factors in which it performs highly effectively can counteract the ones in which it has a much lower rank.

From a startup ecosystem point of view, Israel is a leading nation, more precisely it is ranked 3rd globally and first in the Middle East and Africa, it holds its position in the last 4 years. It could decrease its relative gap from the US, and it has a 4.8 times higher score than the UAE – which is ranked 2nd regionally – so it is unlikely that Israel would lose its position shortly. On the business score, Israel is only ranked 21st, which is a clear sign that the startup ecosystem success was despite the business environment, not as a consequence of it, as it was for instance in the case of the USA. Based on this, the rank of Israel and its performance is even more fascinating, not to mention that Israel transports not just a high number of startups but also brilliant brains: there are over 80 Israeli unicorns that operate in the US. Their location can be explained by the aim of being close to clients. As a part of the full picture, the controversial proposal for a judicial overhaul seems to break the trust between the country and its entrepreneurs, and knowing the fact that Israeli entrepreneurs are targeting customers globally, they can easily relocate the business and so affect and set back the country. (Startupblink, 2023)

5.3. Philippines

The Philippines is a unique example, as it is the 8th from a market size point of view with a population higher than 111 million, but it is not even in the top 50 countries from a competitiveness point of view. In real GDP growth, it is the 6th with a 7.6% increase, but in GDP per capita it is almost the last, in the 62nd place with \$10 351, just to compare, the USA has a GDP per capita which is almost 7.5 times higher than the Philippines'. All these let it be concluded that there is a significant and unfold potential in the Philippines, but so far it hasn't been used entirely. The analysis also emphasizes that so far, the Philippines has been mainly driven by tourism, but as COVID-19 hit them hard new ways of developing should be found.

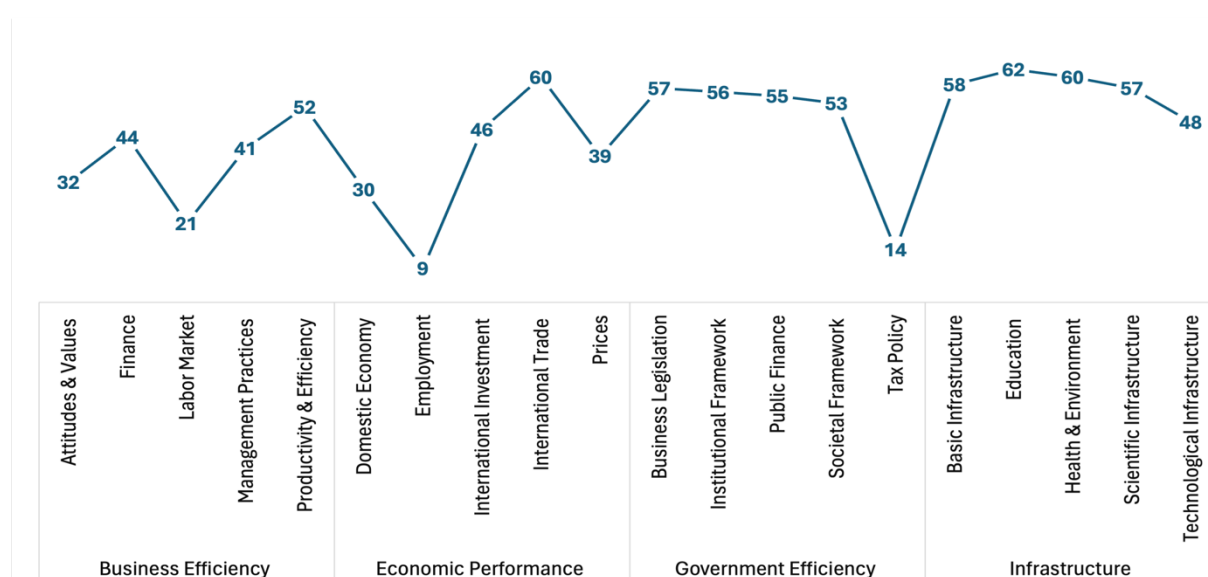


Figure 6. – Competitiveness Landscape of Philippines 2023
Own editing of the author from data of World Competitiveness Yearbook 2023

The Philippines also has some indicators, in which they achieved a noble rank – for instance employment and tax policy – but most of the indicators fall around 50. The infrastructure of the city is deliberately underdeveloped, which also affects and setbacks the development of the country and hinders its competitive development. The state of infrastructure can be seen by the expressively low ranks in the infrastructure category, and the dependence on tourism can be observed by the low rank of international trade.

The state that the Philippines stands before a development opportunity can also be observed from the startup ecosystem of the country, which is not developed. As a consequence of poor infrastructure, building and strengthening the startup ecosystem is challenging. The government introduced different programs to attract entrepreneurs and encourage them (for instance the

QBO Innovation Hub and the P3 Program), and as the country attracts more and more digital nomads, it has a chance to use that potential to ground its startup ecosystem. The Philippines ranked 59th globally in 2023 and in Asia Pacific the 13th, but the country could also produce unicorns, one of them operates in property and real estate, and the other in the financial sector. (Startupblink, 2023)

5.4. Thailand

Thailand is slightly like the Philippines, but as it is more developed, it is worth mentioning where the conscious advancement in the Philippines can lead. Thailand is ranked as the 30th most competitive country globally, which is noteworthy considering for example the low GDP per capita, from which aspect the country ranked 52nd. The main difference between the Philippines is, that even if education and healthcare are underdeveloped, the country achieved a higher rank in basic infrastructure and technological infrastructure.

Employment and Tax Policy also achieved a higher rank, and several other factors are around 25th place, which made Thailand possible to be ranked 30th, which is a 3-place development compared to 2022. Thailand must face challenges like insufficient skilled labor in service sectors the handling of geopolitical risks, and the political uncertainty after the general elections of 2023.

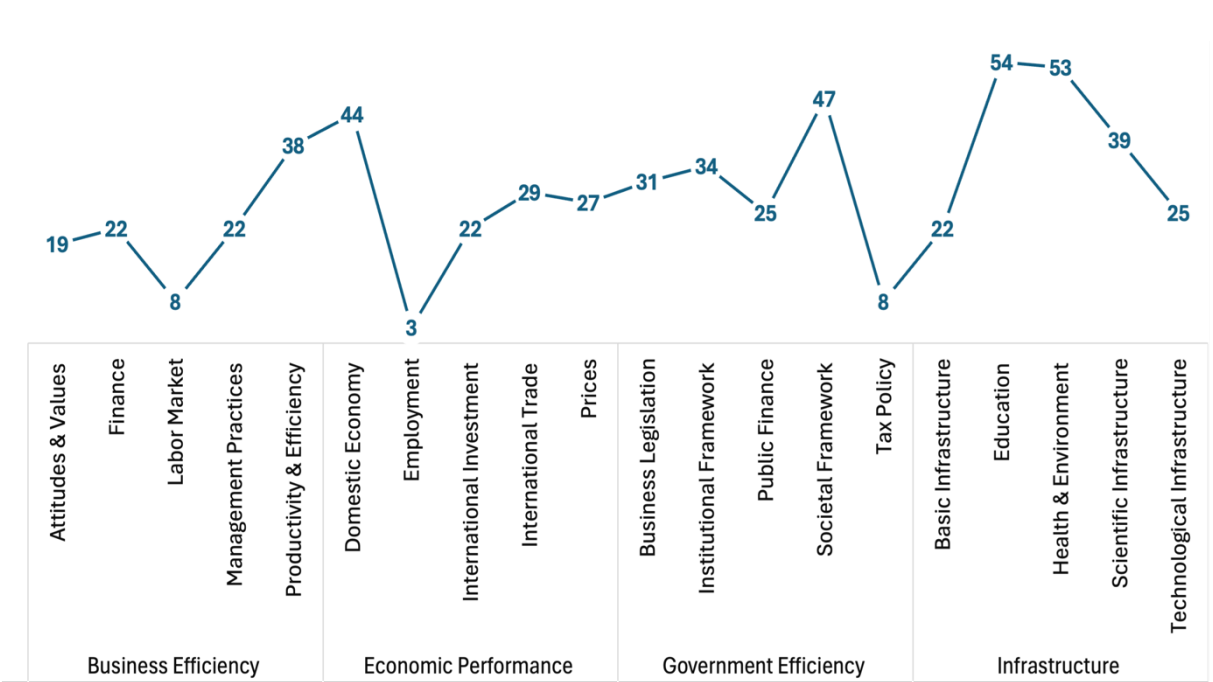


Figure 7. – Competitiveness Landscape of Thailand 2023
Own editing of the author from data of World Competitiveness Yearbook 2023

From a startup point of view, Thailand has a slight advantage compared to the Philippines. It is ranked 52nd globally and 11th in Asia Pacific, but an interesting point is that Bangkok is almost alone responsible for that. It has a 23.9 times higher point compared to the second city (Chiang Mai), which on one hand shows that one city in itself can have a heavy impact on the country, but also means that with further development of other cities, the country could achieve even higher score and ranking. Thailand could develop through multiple reforms and social innovation, and COVID-19 and its consequences on the service sector also fueled the support of the startup ecosystem. The country aims to attract more and more digital nomads, and as time passes to connect local and foreign entrepreneurs. Thailand can also show more unicorns, in fintech, logistics, and also in the ecommerce sector. (Startupblink, 2023)

5.5. Singapore

Spending half a year in Singapore made it possible to derive conclusions, on how such a small nation could be ranked so high. Singapore is highly competitive, and children are also raised based on that, so it's not a surprise that the nation itself is also in the top 5 most competitive countries globally. In the aspect of GDP per capita, it is the 3rd country in the comparison, and the other indicators are also fascinating. In such a developed country that attracts enormous FDI (Foreign Direct Investment), the only indicator that is ranked low is the prices, which is understandable as one of the smallest countries of the world attracts one of the most FDI, which results in the high prices of properties and goods. Compared to Hungary for example, the everyday goods are almost 3 times higher, and housing is almost 4 times higher.

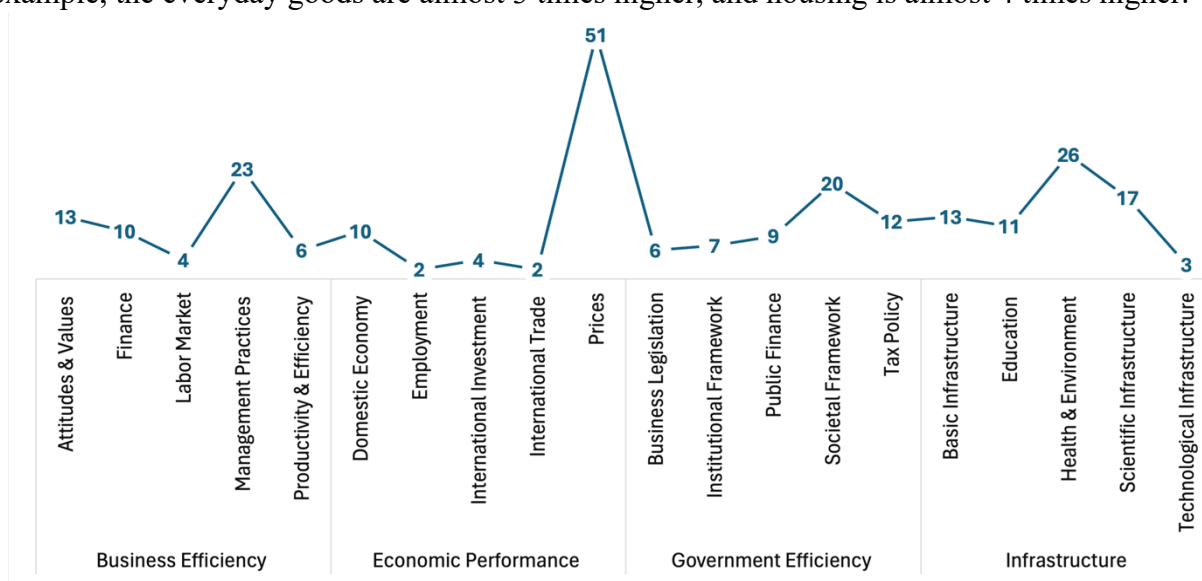


Figure 8. – Competitiveness Landscape of Singapore 2023
Own editing of the author from data of World Competitiveness Yearbook 2023

It can be concluded that Singapore has a highly effective economy, not just government efficiency but also business efficiency, which is ranked significantly high. The nation fuels education, which fuels the business environment and encourages entrepreneurs.

The mentioned factors and the ranking of the country also foreshadow its place in the Startup Ecosystem Report, in which it also ranked at the top: globally Singapore is the 6th and, in the Asia Pacific, it is the 1st for 3 years already. On a global scale, Singapore also bypasses Germany by one spot, and as Singapore is a city-state, such a high score is truly remarkable. Widely accepted that Singapore is a model for innovation and that small countries can beat the major ones, and if it is compared with Japan, it can be seen that its score of Singapore is almost double the score of Japan, which is the closest Asian contender. Based on these indicators it is not a surprise that Singapore can also show up more unicorns, and as it attracts more and more talent and investment, it is starting to replace Hong Kong as a favorite gateway to Asia. (Startupblink, 2023)

6. Results

6.1. Secondary Data

From the economic and political point of view, the USA is a leading nation. The startup ecosystem is booming in the country, and from the aspect of competitiveness, it's also at a noble rank. Further improvement of the startup ecosystem is always possible – it already has a marked advantage – but development from the social point of view and correction of prices can result in a better rank from the standpoint of competitiveness. The country's major role is unquestionable and based on its score in 2023 it's the best place to start a business, and it can also provide a quite competitive environment.

Country (UNCTAD Code)	Competitiveness Ranking	Startup Ecosystem Ranking	Relatedness
USA (842)	9	1	The USA's consistent top-ranking in competitiveness, bolstered by its robust economic performance and dominant startup ecosystem led by cities like San Francisco and New York, underscores its enduring global influence and attractiveness for investors, facilitated by supportive policies such as the US Startup Visa program, while notable startups like further solidify its position as a leader in innovation and entrepreneurship on the world stage.
Israel (376)	23	3	Israel's impressive ranking as the 23 rd most competitive nation globally underscores its status as a "Startup Nation," notably leading in Domestic Economy, Scientific Infrastructure, and Technological Infrastructure, positioning it as a global hub for innovation despite challenges in its overall business environment, highlighting the need for sustained efforts to maintain its entrepreneurial momentum and attract investment amidst potential setbacks posed by proposed judicial reforms.
Philippines (608)	52	59	Despite ranking as the 8 th largest market, the Philippines lags in competitiveness, highlighting the untapped potential and the urgent need for infrastructural development to support initiatives like the burgeoning startup ecosystem, as efforts to attract entrepreneurs and digital nomads signal a pathway toward unlocking the country's economic strengths.
Thailand (764)	30	52	Thailand's 30 th global competitiveness ranking underscores the pivotal role of its advanced startup ecosystem, particularly in Bangkok, indicating the potential for further development through reforms, social innovation, and addressing challenges like skilled labor shortages.
Singapore (702)	4	6	Singapore's remarkable competitiveness, evidenced by its top-tier global ranking and dynamic startup ecosystem, underscores the symbiotic relationship between a highly efficient economy, fueled by robust education and entrepreneurship, and its ability to attract talent and investment, positioning it as a leading innovation hub and a formidable contender on the global stage.

Figure 9. – Summary of findings on the relatedness of competitiveness and startup ecosystem

Own work of the author (2024)

The comparison of the global competitiveness of Israel – with a strong focus on the categories in which it is in the top 10 – and considering its advancements in the field of startups enucleates that startups and their developments can have a significant impact on the country itself, and as a very efficient indicator can counteract other ones, Israel could achieve a noble rank in the Global Competitiveness Yearbook. Conscious investment and promotion in startup ecosystems serve with a well-deserved place from a competitiveness point of view, and further investment – attracting FDI and enhancing entrepreneurial ability – can result in further improvements at the national level.

In the case of the Philippines, it can be concluded that a deliberate and mindful approach to the advancement of the country, encompassing the support and facilitation of a robust startup ecosystem, holds the potential to bolster the economic trajectory of the nation profoundly. Drawing inspiration from the remarkable case of Israel, the implementation of a strategic roadmap focusing on the medium-term enhancement of infrastructure stands poised to exert a transformative impact, not merely on the domestic growth dynamics but also on the country's stature within the global arena of competitiveness.

Thailand has a slight advantage compared to the Philippines, but it can be concluded that there is a huge space to develop. The direction is right, encouraging and supporting the startup ecosystem will benefit local entrepreneurs and its impact will be seen also in the competitiveness of the country. As unskilled labor is a challenge that Thailand must face, investing in education and developing the talent pool of the country can result in an advantageous position in the long run in the World Competitiveness Yearbook by attracting startups not just because of the prosperous business environment – for insurance favoring tax policies – but also because of skilled and talented labor.

The case of Singapore demonstrates that with strategic investment, planning, and a forward-thinking approach, all nations have the potential to achieve substantial development. Singapore's vibrant startup community is flourishing, and as a prominent economic powerhouse, it consistently ranks among the top five countries in terms of competitiveness. This underscores the relevance of Singapore's example, not only for Asian nations but also for countries worldwide aspiring to replicate its success and elevate their growth trajectories and global competitiveness through similar strategies.

6.2. Primary data – International Interview

By utilizing the experience and new connections that were collected while living in Asia, the thesis is being expanded with findings of the research of the Singaporean ecosystem, which was carried out by contacting Singaporean startup founders or specialists directly or indirectly. First of the key findings is that as it is known, the Singaporean community is closed, and it is also true in the case of the business community. Conducting the research mainly depends on Singaporean connections who operate in the world of startups, and even though several companies were reached out directly (more than 100), the responsiveness was extremely low, without personal business connections the conduction of the research would face serious challenges. Because of this, the research was supported by deep interviews, data was handled with high sensitivity.

The interviewed people supported the research with key findings from his own and the research was supported further by collecting data from 4 other businesses during an indirect interview. The key entrepreneur's business operates in e-commerce, notably in the Fitness Apparel industry. Based on the findings, most startups – mainly before stepping into the international market – consist of few people. The interviewed entrepreneur is self-employed and works alone in a startup and the other ones have also less than 50 employees. The main reason behind this phenomenon is that most startups focus on optimizing operational processes, this way as small a labor force as possible, also decreases operation costs. The second key finding is, that globalization – besides the numerous advantages – also hits the startups hard. As all the collected data shows, the competitors are mixed, not just local but also global brands/firms harm influence the competitiveness of growing local companies. An example of limitless globalization from Asia is *Temu*, the Chinese e-commerce platform, which could grow globally, multiply its customers by ten, and increase its customer base from 10 million to 100 million (globally) in just 7 months. (Businessofapps, 2024). This data further validates the findings, that these days startups have to face global competition, already from day 0 of operation. Further questions contained also the positioning of the companies, which led to the conclusion, that startups aim to conquer the local market, and in most cases, they focus on premium, by using a product leadership strategy.

The next section of the findings drives conclusions regarding the entrepreneurial atmosphere of Singapore. Key findings include that the fast and unique development of Singapore in recent times is also perceptible in the business environment, as even if Singapore is a highly regulated

country, it firmly believes in and supports innovation. Agile solutions are always welcomed, and Singapore's centrally located position brings startups to foreign markets just a touch away, borders can be crossed easily. The competitive advantages derived from operating in Singapore derive from different aspects: the research findings are mainly the ease of operation and the low taxes, which also explain why several multinational companies located their HQs in Singapore. Further findings of the most advantageous aspects of operating in Singapore: strategic location, tech-forward policies, developed fintech ecosystem, educational excellence, and digital readiness. All these are advantages, which can benefit companies in different sectors. Findings led the research to discover a variety of favoring development: Singaporean economic environment serves different ways of supporting the entrepreneurs: the Monetary Authority of Singapore (MAS) promotes growth and innovation. MAS is partnering with the startup sector mostly to assist innovations in the financial sector. Besides these, Startup Founder SG Grant from ESG helped one of the contributors to the research, which meant \$ 25,000 in funding.

The last section of the research and the findings aimed to discover what are the future perspective of startups that arise from Singapore. The key findings of the data collected during the research revealed that the significant potential lies in countries of Southeast Asia, especially the Asian Tigers. These countries include Malaysia, Vietnam, Thailand, and the Philippines, which not just mean potential markets because of their closeness to Singapore, but also as a consequence of setbacks compared to Singapore, from digital, infrastructural, and general development points of view.

The findings of the interviews supported the research not just by widening the scope of knowledge included in the study, but also by validating the key results of the data interpretation part earlier. The key findings of the interviews validated that one of the drivers of development and increasing competitiveness is to support the startup ecosystem and promote innovation, help entrepreneurs, and contribute to long-term success, which also benefits the government.

7. Conclusion

7.1. General Conclusion

The introduction of competitiveness and the different levels enabled us to understand where competitiveness derives from and what forms are the most common. Even if competitiveness does not have a straight and widely accepted interpretation, the measurement of it can be used widely including all the relevant factors. As the competitiveness of a country or a startup does

not depend on only a few indicators, considering all the relevant factors from political, cultural, economic, and social points of view enables the creation of a comprehensive ranking, just as it is in the case of the World Competitiveness Yearbook.

With a deeper understanding of startups and the way they operate, it is possible to see how and why they can influence a country's economy and competitiveness. Deep analysis and literature review of startups can serve not just wider knowledge but also put in context how certain nations could change and revive their whole economy with the significant help of startups and the developed startup ecosystems. Israel is the leading example of the effects of successful implementation of startups into the economy of a country, and with Singapore, both stand as examples before other countries, mainly before the ones that are right ahead of development, such as Thailand and the Philippines. The USA was also a useful example as it shows that implementing startups in an already well-functioning economy can further strengthen it and that its effect cannot just be seen economically, but also in several aspects like the development in social and cultural fields, which further fuels the competitiveness of the country.

It can be concluded that there is a straight correlation between the advancement of the startup ecosystem and the competitiveness of the country. On a global scale, the two rankings were always close to each other, being highly ranked from a startup ecosystem point of view also meant a higher rank in the competitiveness of the country, at least in the case of Thailand and the Philippines, where the more developed startup ecosystem in Thailand meant also more developed infrastructure. Investing in the development of infrastructure will also result in the long-run strengthening of the startup ecosystem, just like in the USA or Singapore, and also, investing in the startup ecosystem will in the long run also result in the development of infrastructure, as it becomes more and more advanced, and it affects more and more foreign direct investment, as it was in the case of Israel, which couldn't just achieve significantly high competitiveness but which is widely known as an “economic miracle”.

Stating that startups are the major way of progression may be an overstatement, but as an innovative way of doing business, it has an essential impact on the environment in which it operates. Based on the research, the analyzed literature, the databases, and the interview it can be concluded that forming a long-term strategy of developing the country with emphasis on fueling the startup ecosystem can be highly advantageous, and as other countries – Israel and Singapore – already proved the *raison d'être* of it, questioning this direction is unfathered. It is

worth mentioning that as all countries have different competitive advantages, implementing and developing the startup ecosystem is challenging, but as the innovation itself can be a competitive advantage, combining innovation with the basic competitive advantage can result in the country's reviving with an empowered global position and increased competitiveness. Based on the findings of the international interviews it can be concluded that conclusions were validated, at least in the case of Singapore. Several aspects of startups were also discussed before, and precisely in the primary data results part, and it can be concluded that Singapore promotes entrepreneurs, and this way indirectly impacts its development in the long run.

7.2. Contribution of the Research

The study aimed to research almost untouched fields of research on the relationship between competitiveness and startups. Startups are becoming more and more essential in everyday life, and they not only provide innovative solutions but also have huge economic impacts, like FDI, the number of workplaces, and national income. The research contributed in the short term to introduce and study the impact that startups and competitiveness have on each other and contributed to the long run by providing a strong basis for future study on the relationship, and also enables research whether in the long run, startups has a higher impact on competitiveness, or competitiveness attracts the startups. The contribution of the research also includes the expansion of international interviews and implementation data from overseas research.

The study provided political contribution according to the increase of national competitiveness: this process is self-impulsive, and once it starts, the two sides will affect each other in various ways. The case study of Israel can be utilized in other nations too, by supporting the startup ecosystem in various ways, which can exploit the unique competitive advantages of the nation at a higher level.

Furthermore, the study provided party managerial contribution. Firstly, the deep analysis of startups and the literature review of them from several different aspects serves as a profound introduction, which was completed with the international interviews, that enables it to connect the theoretical conclusions with empirical evidence.

7.3. Limitations of the Research

Some limitations have been faced during the research, mostly regarding the literature and the datasets. The literature review was challenging as some specific texts – the most appropriate ones – were only accessible in Hungarian and sometimes in the English language which meant

different scopes and contexts. Competitiveness itself is not a popular research topic, during the research it became clear that most sources focus on competitiveness regarding a country or specific company. The process of data collection was a comprehensive, several-month-long process as data was collected from datasets, literature, and also individually, through interviews.

The data collection was two-sided: on one hand, the usage of the World Competitiveness Ranking and the Global Startup Ecosystem Index provided hundreds of statistics and data, therefore it was a reliable source as the basis of the comparison. On the other hand, these two databases are so complex and widespread, that comparing just one or two indicators of countries would setback the research, as the mentioned two sources included everything – more than a hundred indicators –, it was significant to get a full perspective about the studied field.

The limitation of using the data just to draw a parallel between Startups and Competitiveness comes from the nature of the study and the aim of the research. This limitation can be eliminated in the future by expecting either the scope of this study with extra factors and indicators in the analysis, or by using and implementing the study in another with using the conclusions and the collected and summarized quantitative analyses.

As it was mentioned earlier, one significant limitation of the research – notably the interviews – was the closeness of the entrepreneurial society. Personal connections contributed significantly to the success of the interviews, which validated key findings of the thesis. Further improvements of the paper are recommended to follow the development of the researched countries also by competitiveness and startup point of view. Mid-term reevaluating of the development of the countries can validate the conclusions of the paper in the long run.

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