DŮM ZAHRANIČNÍ SPOLUPRÁCE

Co-funded by the Erasmus+ Programme of the European Union

Innovative Training Module for Startup Initiatives

2021-1-CZ01-KA220-VET-000028157

The main aim of the module is developing the role of VET in entrepreneurial ecosystems.

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Who is this module for?

The training module will increasing the quantity and quality of digital entrepreneurial skills and talent of ICT Students and increase the knowledge of VET teachers about about digital startups and SMEs, starting business, cross sectoral opportunities with ICT industry. Moreover, an entrepreneurial mind-set will be developed and ICT entrepreneurship will be promoted among ICT Students

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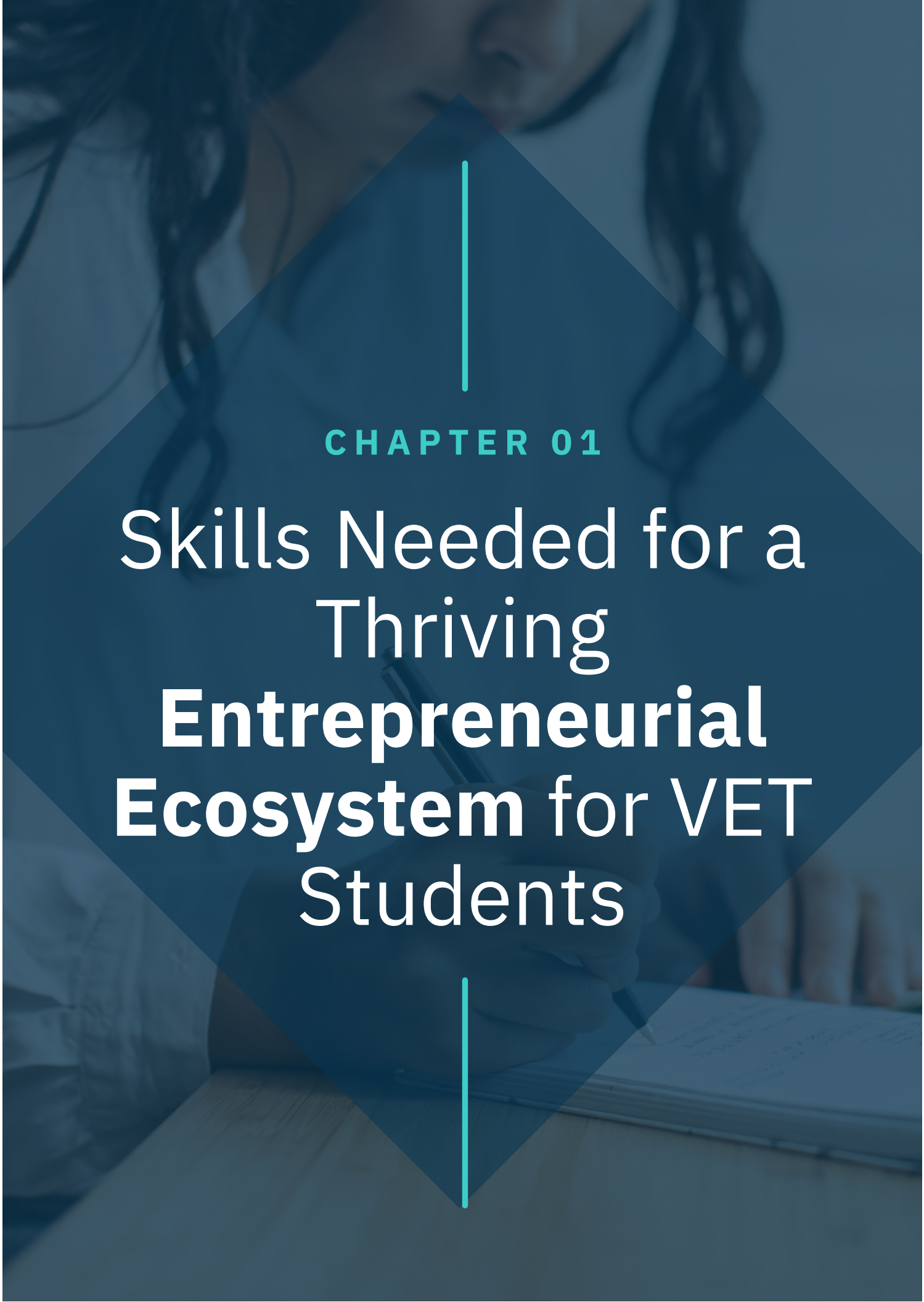

CHAPTER 01

Skills Needed for a Thriving **Entrepreneurial Ecosystem** for VET Students

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Chapter 1 Skills needed for a thriving entrepreneurial ecosystem for VET students

1.1-Recognizing the significance of entrepreneurial capability development best practices in entrepreneurial will be researched

Changes in economies, career options and in workplaces present challenges to educational policy and organisations and have been a focus for intensive discussion for some time. In particular, the increasing importance of fostering 'entrepreneurial skills' has been raised by researchers and more recently incorporated into many statements of education and/or innovation policy.

The EU 2020 strategy highlights the need to embed creativity, innovation and entrepreneurship into curricula and proposes a number of actions to unleash Europe's entrepreneurial and innovative capabilities through the flagship initiatives "Youth on the Move", "An Agenda for New Skills and Jobs" and "Innovation Union". Also, in the work programme of DG Education and Culture (Education and Training 2020) enhancing innovation and creativity, including entrepreneurship, at all levels of education and training is one of four strategic objectives.

Within primary and general lower secondary education. In these phases, entrepreneurship education is typically an extra-curricular activity, often involving visits to businesses or by employers into schools and framed within a theme of 'understanding the world of work'. More focused activities or projects involving mini-company type schemes tend to be rare. Generally speaking, entrepreneurship education is least prominent in the primary phase. 3 Responsibilities vary substantially. For example, in some countries local authorities have powers in relation to the curriculum whilst in others it can be minimal, limited for example to school buildings and non-teaching staff. At upper secondary level, entrepreneurship education also takes place as an extracurricular activity, but elective courses become more prominent and subjects such as business and economics can include entrepreneurship as an important component. Organised real company or mini-company experiential learning is prominent. In school-based initial vocational education and training (IVET)4 , entrepreneurship education is often incorporated into the curriculum through economics and business studies.

http://antonioviader.com/phocadownloadpap/userupload/toni/Innovation_Policies/EU_SME_Support/EC%20Guidebook%201%20Entrepreneurial%20Mindsets.pdf

Teacher training is clearly a vital component in supporting teachers to deliver effective entrepreneurship education.

There is a need to invest in raising the standards within the teaching professions and to attract high calibre graduates into the profession.

Investment is needed in both initial teacher training and to support continuing professional development, not least for teachers who are already in post but who as yet do not teach entrepreneurship education.

In Finland, where entrepreneurship education was introduced relatively early (1994) and is incorporated across disciplines, pre-service training in entrepreneurship education for teachers is compulsory in three teacher education institutes (Kajaani Department of Teacher Education of the University of Oulu, crafts teachers' programmes in the Rauma Department of Teacher Education of the University of Turku and the Vaasa Department of Åbo Akademi University) and elective in several others. In addition, measures have been taken to recruit more people into teacher training with a background in entrepreneurship and with personal experience of entrepreneurship. All universities providing teacher education offer entrepreneurship education as elective studies for teacher trainees. These are generally on offer in faculties of economics and administrative sciences and the focus is on entrepreneurship and business know-how.

In Cyprus, secondary teachers receive compulsory initial training at the University of Cyprus, where the programme includes 10 teaching periods on Entrepreneurship Education. Optional seminars are offered by the Cyprus Pedagogical Institute to teachers, school administrators and policy makers. These are organised by the Ministry of Education in cooperation with other organisations, i.e. universities. Where appropriate, trainers draw upon cooperation with industry to ensure courses are highly relevant.

In Poland, "Dynamic Entrepreneurship" is a national programme for enhancing entrepreneurship training in Higher Education Institutions. Initiated in 2004 its aim is to develop methodologies and tools for teaching entrepreneurship courses at the academic level in Poland. The teaching methods, tools and case studies were first tested at the Leon Kozminski Academy of Entrepreneurship and Management (business school) during an EU-funded project for 120 students from 32 higher (mostly nonbusiness) institutions in the Mazovia Region. This led to the preparation of a textbook "Dynamic Entrepreneurship. How to Start Your Own Business", published in 2006 and addressed to the academic community.

In Slovenia, the Centre for Vocational Education has introduced training to teach entrepreneurship for teachers from secondary vocational and professional schools. Teachers are trained through workshops focusing on how to use active learning methods and different activities in order to 'encourage and develop entrepreneurial mindsets'. In order to achieve this goal, attention is centred on the structured processes grounded on creative problem solving and critical thinking in order to trigger learning by doing, imitation and fruitful exchange of opinions.

The main learning outcome of these techniques when applied in the classroom is to develop in learners an entrepreneurial spirit and corresponding skills, in the sense of individuals' general ability, with the intention to increase their efficiency both in their professional and private life.

Entrepreneurship is understood as stimulating those personal abilities which are the foundation for entrepreneurial activity. Cooperation with secondary teachers has so far resulted in a number of teaching materials and handbooks on: "enterprising in the world of vocational education"; "the option of being selfemployed"; "understanding the entrepreneurial way of life" and a guide for teachers on the introduction of entrepreneurship into secondary vocational and professional education.

In Austria the Initiative for Teaching Entrepreneurship (IFTE)(f) has been created to develop and provide teacher training and each year it runs a Summer School for Entrepreneurship in Kitzbühel. The course runs for one week in July and is intended for teachers from both vocational schools and colleges, and general secondary education tracks. The programme is broad, and topics include entrepreneurship in the context of educational philosophy, business ethics, and ideas creation, along with practical work on implementation, and how to use change management processes to create innovative educational organisations. There is a strong emphasis on experiential learning. The course team is drawn from across business, universities and schools, reflecting the fact that the IFTE is backed by a range of sponsors from the public and private sector

Businesses are a vital component of entrepreneurship education strategies: they are the source of the real-life examples and experiences that are so essential for students' learning. Dialogue between entrepreneurs and educationalists is central to ensuring that entrepreneurship education is relevant and to raising students' awareness of the scope and nature of enterprise activity both in general and in their local vicinity or region. However, business involvement has been patchy and unstructured, and this is reflected in the starting point in the progression model. There are a number of barriers to business participation, notably a lack of time and resources, a lack of incentives for engagement and an unclear understanding as to how they could most usefully become involved with entrepreneurship education. One way in which participation might be increased is through the promotion of the corporate social responsibility aspects, recognising that the development of enterprising people serves the whole of society – business included.

Participation can also bring profile and publicity benefits. Businesses also underpin the work of the many private associations and organisations (e.g. JA-YE and EUROPEN) which have played such an important role in the development of practice to date; these bodies have strong private sector backing and are able to draw directly on concrete business practices and make them available to schools and teachers as opportunities for practical, experiential learning. To date, however, schools' and teachers' use of the expertise available from private associations and organisations has been largely ad hoc. In aiming to ensure the availability of entrepreneurship education for every student, the progression model will entail a major scaling up of demands on businesses and private associations and organisations. Business participation is voluntary and is unlikely to support the required increases without:

(i) a greater degree of structured involvement and the establishment of long-term, sustainable relationships with schools, as envisaged in the progression model and

(ii) the development of innovative approaches for engaging businesses including the wider use of local partnerships and the development of brokerage functions by local business organisations (an easier task in countries like Germany with wellestablished organisations like chambers of commerce).

Equally, it is important that business organisations are involved in strategy development and implementation at national level. Business associations and organisations, such as chambers of commerce, have valuable expertise and experience to bring to bear in introducing entrepreneurship education, and in ensuring schools and teachers take appropriate account of business needs. There are a number of areas where the role of businesses can be developed to support the development of entrepreneurship education.

Businesses are contributing to entrepreneurship education in a variety of ways and have been doing so for many years. One of the most powerful approaches is to bring students into contact with real entrepreneurs and businesses

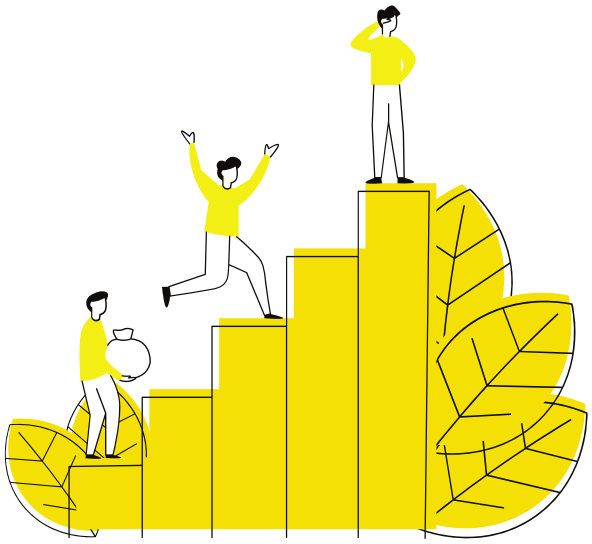
DREAM(h) is a youth project in Belgium for 16-19 year olds that enables volunteer entrepreneurs or employers to share their experiences in the classroom or workplace. It has been developed and organized by the small business department of Brussels Management School (part of the Institut Catholique des Hautes Etudes Commerciales), known as ICHEC-PME. The four goals of DREAM are to:

1. encourage young people to think about what job they want to do, or really 'dream' of;

2. provide advice on the skills necessary to make their dream happen;

3. stimulate and teach an entrepreneurial spirit and attitude and

4. reinforce contacts between schools and business communities.



In Slovenia, the "Design Thinking School" or d.school initiative led by JAPTI, the public Agency for Entrepreneurship and Foreign Investments, brings together interdisciplinary groups of students, teachers and innovative companies to provide solutions to real business problems. As well as regular visits to the school by mentors from firms, students also visit participating companies, where they 18 http://eduscol.education.fr/pid23542-cid45666/ semaine-ecole-entreprise.html 51 are given an introduction to the business and presentations of its products and technologies. The companies also offer their research infrastructure to the students, to help them to make prototypes. A further example of this 'hands-on' approach comes from the Netherlands where, in 2004, Groningen University together with ID Media developed an educational internet game for students in preparatory intermediate and intermediate vocational schools. The goal of the "Starting Entrepreneur Game" (KvK Startersspel) is to inform students in a playful manner about the steps needed to start a business as well as to direct them to the proper organisations that have a role in business creation, such as the chamber of commerce. The game was first tested in 2005 by five schools and can now be used by all schools in the Netherlands; currently around 80 schools are registered. Last year 5,000 people visited the site19 where they can play the demo-version of the game.

The ultimate goal of the progression model is for every school at every level to be involved in entrepreneurship education.

Key Elements in Developing a Local Entrepreneurship Education Ecosystem
• Creating experiential learning environments (often additional to and/ or complementary with 'traditional' classroom-based educational settings)
• Developing clusters, partnerships and wider relationships to embrace all levels of education and a wide range of stakeholders
• Developing local and regional support centres

Creating Experiential Learning Environments. An informative example of how experiential learning environments can be created is provided by the Italian "Impresa Formativa Simulata" (IFS) ("Educational simulated firm") system. The IFS is being used to introduce a new type of entrepreneurship education, based around purpose-built software that facilitates virtual simulation of the business environment, including government agencies, banks and chambers of commerce. Some 731 schools and 370 firms have participated so far in this initiative. Fifteen regional centres have been established in cooperation with a number of Italian regions in order to support the implementation of the system at the local level. The new training model emerging from this teaching method focuses on the development of entrepreneurial and innovation skills and capacity within and among schools. It also demonstrates the benefits of establishing alternatives to the traditional classroom model. The IFS key features are that it promotes a learning strategy based on 'learning by doing'; it uses a simulation laboratory to bridge the gap between the classroom and enterprises, and requires co-operation between schools and businesses, establishing educational paths that focus on clearly identified learning objectives.

Clusters, Partnerships and Wider Linkages In countries which have a comparatively long tradition of entrepreneurship education, the development path in some localities has led schools to develop their own clusters, perhaps leading later on to the development of education-business partnerships under the auspices of local authorities and business organisations.

In some parts of Europe, regional action has been significant. At this scale a wider range of players can potentially be brought into the equation, including higher education and regional sector bodies, as shown below. In Spain, for example, the Institute for Small and Medium-sized Enterprise of Valencia (IMPIVA) and the Valencia Foundation for University and Enterprise (ADEIT) have joined forces to offer Technical and Educational Institutes in the area improved access to the business community. The scheme involves a consortium of business people from the city which aims to promote entrepreneurship in schools and universities. This is primarily achieved through the delivery of training and targeted activities financed by the consortium of companies. An example is a summer school which aims to train university teachers to motivate students in entrepreneurship. This programme features a classroom 'workshop' as well as online training.

Further good practice examples :
good practices have been selected from the EU SME Policy good practices catalogue, which can be found at :.
https://ec.europa.eu/growth/tools-databases/sme-best-practices/SBA/index.cfm?fuseaction=welcome.detail

1.2-Building entrepreneurial skills through VET

Entrepreneurship refers to the capacity to act upon opportunities and ideas, and to transform them into values for others. It is based on creativity, critical thinking and problem solving, taking initiative and perseverance and the ability to work collaboratively in order to plan and manage projects that are of cultural, social or financial value.

The EntreComp framework that can be seen in this picture proposes a shared definition of entrepreneurship as a competence, with the aim to raise consensus among all stakeholders and to establish a bridge between the worlds of education and work. The framework can be used as a basis for the development of curricula and learning activities fostering entrepreneurship as a competence. Also, it can be used for the definition of parameters to assess learners' and citizens' entrepreneurial competences.

https://www.cedefop.europa.eu/files/background_paper__entrepreneurship_competence_in_vet.pdf

Entrepreneurship and enterprising behaviour are important objectives for education and lifelong learning policies in the European Union (EU) as a whole (European Community, 1999) as well as in individual member states. It is seen as a source of flexibility and innovation, as a creator of jobs for the economy and, at the same time, as an interesting possibility for individual development, fulfilment and citizenship.

Hard Skills; Financial sales, marketing, IT, Management

Entrepreneurial competence or expertise is the structured and integrated ability to perform entrepreneurial activities adequately and to solve entrepreneurial problems.

Competence relates to the individual performance of professionals, entrepreneurs or employees. It denotes the complete range of occupational or entrepreneurial problems that professionals or entrepreneurs are equipped to handle. A competent entrepreneur must be able to use knowledge, attitudes and skills in such a way as to be able to deal effectively with tasks, problems, dilemmas and contradictions resulting, for example, from heavy competition or the changing demands of customers. Based on the International Consortium for Entrepreneurship Education (ICEE, 1998), Gibb (1998) and Tolentino (1998), the following competencies can be distinguished.

A first important competency is the ability to recognise and analyse market opportunities. It consists of a specific combination of handling risk, content and market. Entrepreneurs must redefine 'risk' as an opportunity to use their expertise, rather than as a possible reason for failure. They can 'find' opportunities looking for better ways to accomplish a task through inventions, new services, and new approaches – or through exploring a segment of the population which could respond to a new (or new version of a) product targeted to lifestyle or needs, delivering a cheaper product or service than that which is currently available, applying a new technology to solve customer problems in a different way or finding a business location which is more convenient for customers.

A second competency is the ability to communicate, identify mentally, persuade and discuss with customers, clients, suppliers, competitors, service providers and other stakeholders in the business environment, thus better comprehending their needs, expectations, apprehensions and requirements. Stakeholders are not the only context of direct market relationships; there is the wider societal environment (Gibb, 1998).

An entrepreneur needs to act responsibly with regard to the social environment and community. Responsible entrepreneurial governance is a precondition and basis for a society in which self-regulation of entrepreneurial activities can take place.

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A third competency is networking, the ability to establish linkages with other business persons and other stakeholders for mutual learning, collaborative undertakings and other joint activities, aimed at achieving common objectives. Entrepreneurs have their own community of practice (Gielen et al, 2003). An essential point is the development of a global orientation and a feeling for the world as a potential working field and an influence on business (Gibb, 1998).

According to Gibb, entrepreneurs will be confronted, at the level of society, with developments like the extension of the international market, growing competition, extension of communication technology, internationalisation of quality standards, a broader and more complex range of work process technologies, the need of the consumer for more differentiation, innovation, services and added value and the strong influence on international trade by a limited number of corporations.

A fourth competency, stressed by Gibb (1998), integrates enterprising key skills with the fundamental ability to deal with the life world of entrepreneurship. Entrepreneurs must be able to live with daily insecurity and even enjoy that situation. The entrepreneur has to develop personal entrepreneurial behaviour and characteristics, learning effectively from and in business interactions and the personalisation (knowledge circulation in personal and Internet/email supported networks) of global information.

A further series of competencies is connected to the development of entrepreneurial and learning organisations, management of business developmental processes and of networks of stakeholders, and a flexible strategic orientation.

At the level of the organisation, entrepreneurs have to deal more often with more responsibilities and insecurities as a result of restructuring, downsizing and decentralisation of organisations. The greatest challenge is managing stakeholders at a national and international level, in combination with a large degree of insecurity and unpredictability. On top of that, they have to take into account the growing number of small- and medium-sized businesses and, with new configurations of specialist skills and services, they have to be more competitive, opening up new opportunities at the same time.

According to Tolentino (1998), this is why building a team is so important for a starting entrepreneur. Delegating responsibilities to a team of employees or even external consultants enables the entrepreneur to focus on his own core competencies but it also opens up ways to improve efficiency and generation of creative ideas in management. A ‘smart’ entrepreneur organises a varied, compensating and synergetic competence base.

https://www.researchgate.net/publication/228728181_Entrepreneurship_and_Vocational_Education/link/54256ad10cf26120b7ac97f6/download

1.3-How to develop entrepreneurial capabilities

The Personal Characteristics of an Entrepreneur

Do you have the mindset to be a successful entrepreneur? For example, entrepreneurs tend to be strongly innovative in outlook, and they may take risks that others would avoid.

Examine your own personal characteristics, values and beliefs, and ask yourself these questions:

Optimism	Are you an optimistic thinker? Optimism is an asset, and it will help you through the tough times that many entrepreneurs experience as they find a business model that works for them.
Initiative	Do you have initiative, and instinctively start problem-solving or business-improvement projects?
Drive and persistence	Are you self-motivated and energetic? And are you prepared to work hard, for a very long time, to realize your goals?
Risk tolerance	Are you able to take risks, and make decisions when facts are uncertain?
Resilience	Are you resilient, so that you can pick yourself up when things don't go as planned? And do you learn and grow from your mistakes and failures?

Entrepreneurial Interpersonal Skills

As an entrepreneur, you'll likely have to work closely with others – so it's essential that you're able to build good relationships with your team, customers, suppliers, shareholders, investors, and other stakeholders.

Some people are more gifted in this area than others, but you can learn and improve these skills

Leadership and motivation	Can you lead and motivate others to follow you and deliver your vision? And are you able to delegate work to other people? As an entrepreneur, you'll have to depend on others to get beyond the early stages of your business – there's just too much to do by yourself!
Communication skills	Are you skilled in all types of communication? You need to be able to communicate well to sell your vision of the future to a wide variety of audiences, including investors, potential clients and team members.
Listening	Do you hear what others are telling you? Your ability to listen and absorb information and opinions can make or break you as an entrepreneur. Make sure that you're skilled at active and empathic listening.
Personal relationships	Do you have good "people skills"? Are you self-aware, good at regulating your emotions, and able to respond positively to feedback or criticism?

Negotiation	Are you a strong negotiator? Not only do you need to negotiate favorable prices, but you'll also need to resolve differences between people in a positive, mutually beneficial way.
Ethics	Do you deal with people based on respect, integrity, fairness, and trust? Can you lead ethically? You'll find it difficult to build a happy, productive business if you deal with staff, customers or suppliers in a shabby way.

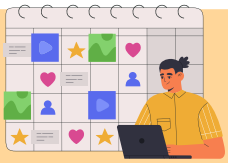
Critical and Creative-Thinking Skills for Entrepreneurs

As an entrepreneur, you need to come up with fresh ideas, and make good decisions about opportunities and potential projects.
Many people think that you're either born creative or you're not. But creativity is a skill that you can develop, and there are many tools available to inspire you.

Creative thinking	Are you able to see situations from a variety of perspectives to generate original ideas? Tools like the Reframing Matrix can help you to do this.
Problem solving	You'll need sound strategies for solving business problems that will inevitably arise. Tools such as Cause & Effect Analysis, the 5 Whys technique and CATWOE are a good place to start.
Recognizing opportunities	Do you recognize opportunities when they present themselves? Can you spot a trend? And are you able to create a workable plan to take advantage of the opportunities you identify?

Practical Entrepreneurial Skills and Knowledge

Entrepreneurs also need solid practical skills and knowledge to produce goods or services effectively, and to run a company.

		
Goal setting	Planning and organizing	Decision making
Setting SMART goals (Specific, Measurable, Achievable, Relevant, and Time-Bound) will focus your efforts and allow you to use your time and resources more effectively.	Do you have the talents, skills and abilities necessary to achieve your goals? Can you coordinate people to achieve these efficiently and effectively? Strong project-management skills are important, as are basic organization skills. And you'll need a coherent, well thought-out business plan, and the appropriate financial forecasts.	Your business decisions should be based on good information, evidence, and weighing up the potential consequences. Core decision-making tools include Decision Tree Analysis, Grid Analysis, and Six Thinking Hats.

You need knowledge in many different areas when you're starting or running a business. Be sure to include:

			
Business knowledge	Entrepreneurial knowledge	Opportunity-Specific Knowledge	Venture-Specific Knowledge
Ensure that you have a working knowledge of the main functional areas of a business: sales, marketing, finance, and operations. If you can't fulfilll all these functions yourself, you'll need to hire others to work with you, and manage them competently.	How will you fund your business, and how much capital do you need to raise? Finding a business model that works for you can require a long period of experimentation and hard work.	Do you understand the market you're attempting to enter, and do you know what you need to do to bring your product or service to market?	Do you know what it takes to make this type of business successful? And do you understand the specifics of the business that you want to start?

You can also learn from others who've worked on projects similar to the ones that you're contemplating, or find a mentor – someone else who's been there before and is willing to coach you.

References:

[1] Forbes (2021). Pandemic Fuels Global Growth Of Entrepreneurship And Startup Frenzy [online]. Available here. [Accessed May 23, 2022.]

1.4-The reasons of Start-up failures

In this section, examples of failure will be examined. Thus, a general sample will be provided about why startups are not successful.

Start-up is a temporary status or term for an organization whose vital objective is to launch a new business model or open up a new market.

Most of the start-ups fail, especially the did after the pandemic situation. Competition is one of the biggest challenges for the survival of start-up businesses.

The fact is that initiating business is risky, which means the businessman should seize a strong business plan and risks management [3]. The first failure of start-ups usually appears on day 120 [2].

Planning and research are crucial in establishing a start-up. It ensures the business idea is feasible, the price is competitive, and there is an adequate return on investment.

Start-ups require a carefully thought-out business plan that has to be realistic and erudite projections for the future.

Businesses that fail to seek professional advice may find their financial troubles worsening.

If a business lacks capital and a contingency plan, it will be unable to develop. Having a quality team of people to work alongside is paramount to the success of the business.

Recruiting requires careful consideration to ensure each employee brings up a new skill to the business. Utilizing all marketing channels, such as professional websites and social media, will drive the business forward. Insurance is a common oversight, but so many businesses can be crippled. By protecting the business with the correct insurance, it can avoid failure

Case 1

Scott Ferber created Videology in 2007. The objective of Videology was to find promoters to put their advertisements on to the digital platforms to attain their target consumer. It also provided the video's efficiency rate tools. It held total funding of $201 million. Videology's idea was too futuristic for its time, with the result being that the industry was not proficient in applying the ideas. Videology, in turn, was not capable of adjusting to the condition and ended up failing. Another problem that has arisen is the advertising policy of Google and Facebook, which disallowed foreign companies to buy advertisements. All of it had to be obtained from Google.

Case 2

Exec was an online cleaning service. Its main job was house cleaning, but the employees would do any task at a rate of $25 per hour. Exec gained $3.3 million initially and managed their finance: the main cost for software engineers, 30% for overhead costs, and $25 per hour, 80% for the team member on duty, and the remaining for the company.

The fault was that the company offered refunds toward employees' mistakes, and it rapidly consumed the profits. In addition, too high costs on software engineers. Exec should get software development costs at a reasonable price

Case 3

Jawbone is one of the highest failed start-ups. It produced electronic gadgets, such as headsets, fitness trackers, and so on. It gathered $930 million in venture capital and started glory in 2016 when it stopped selling fitness trackers. The overfunding led the company to the abysm. It caused inconsistency between the appearance and the actual values. In addition, products of Jawbone lacked product-market fit

Case 4

Lytro was a technology company that developed light field imaging technology and gained $215.8 million in funding. Unfortunately, the technology never suited the photographers' needs. So Lytro swapped to virtual reality and repeated the same mistakes, which was a lack of good quality product need recognition

Case 5

The Hoop was a successful start-up launched in 2016 by a group of thoughtful parents. They developed a platform to link local events and families, such as dancing class, creative workshops, etc. The Hoop was a success until it ran into hardships in 2020. It was affected in severe by the pandemic because during quarantine periods, family activities became hugely obsolete. In order to survive, Hoop introduced a new offer which was kids' online activities. Unluckily, it did not cover the losses until the app closed for good

The five representative start-ups reveal that the primary failure of start-ups is lack or over of funding and not fulfilling the market needs. This study listed the top three founder reasons of failed companies.

Why do start-ups fail ?

Some factors why start-ups fail are no market need (42%), running out of cash (29%), and not the right team (23%). Moreover, the other reasons are lack of customer focus, a poor product, lousy timing, or poor marketing.

But there are other reasons :

A start-up needs a well-organized task, roles, and rules for each member.

The business model is the basis for the formation of a business. The strength of a business model determines the success and failure of a start-up. Existing businesses should continue to review their business models regularly to respond to changing trends and challenges in the future.

Securing funding: To secure the funding, the start-up needs to research the most appropriate funding route for the business, the funding venture, and tailor the promotion to them.

Financial planning: A common mistake that start-ups make is poor financial planning. Underestimating start-up costs and ongoing expenses, mispricing a product/service can paralyze a start-up.

Understand the realities of costs in detail about all the expenses from the start: Then look at the pricing structure to make sure it will cover costs and make a profit.

The people and talent: The people within the start-up will significantly influence the success or failure of the business. Open collaboration and communication with the team is the key to the success of a start-up.

Competition can be the biggest challenge for a startup, but it also can be a massive advantage if the business can innovate and differentiate itself from the competitors. Competition stimulates creativity, innovation, and good quality product.

Leadership: Becoming a leader requires vision and making sure the team is headed in the same direction. Leadership is not a solo performance but a partnership between a leader and a team. Leadership is about working to implement innovative strategies to solve problems, make a productive work environment.

Market demand: The lack of demand for products or services is one of the challenges faced by start-ups. Researching the demand for the problem is trying to solve is key to avoiding this problem. A start-up needs to make sure there is an audience for the product/service and a way to drive revenue from its delivery, penetrate the market and achieve measurable growth.

Planning: Having a plan helps start-up makes better decisions and prevents them from making quick decisions. A good business plan not only helps entrepreneurs focus on the specific steps needed to make a business idea successful but also helps them achieve both shortterm and long-term goals.

Scaling the business: Moving from a small operation to a business scale is often a critical point for many start-ups. It is important to improve distribution, customer service, and other critical business functions to drive growth.

Mentors and top-level guidance: A start-up may need help making the right business decisions or focusing on the right areas of the strategy to scale the business. Reaching out to a business mentor can provide valuable insight and support. A start-up can also access knowledge in other ways, such as podcasts, articles, and books written by business experts.

Conclusion: Most start-ups do not succeed because cannot find market needs, run out of cash, and are not the right team. Being an entrepreneur requires being prepared for every challenge and making the right decisions every time.

CHAPTER 02

Startup Ideas in **ICT Sector**

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Chapter 2 Startup ideas in ICT sector

The ICT sector is a rapidly growing industry, driven by technological advancements and an increasing demand for digital solutions in various fields. Startups in the ICT sector can be broadly classified into software-based startups and hardware-based startups.

Software-based startups can be focused on developing new applications or improving existing ones. Some possible ideas in this space could include developing innovative software solutions for industries like healthcare, education, or finance. For example, a startup might create a platform that helps hospitals manage patient data more efficiently, or a mobile app that provides personalized financial advice to users.

Hardware-based startups, on the other hand, may focus on developing new hardware technologies or improving existing ones. This could include developing new types of devices or sensors that can be used in industries like agriculture, manufacturing, or transportation. For example, a startup might develop a new type of IoT (Internet of Things) sensor that can be used to monitor soil moisture levels in a farm, or a new type of robotic arm for use in manufacturing.

In software-based startups is emerging area of interest in AI (artificial intelligence) and machine learning. Startups in this space might focus on developing new algorithms or building intelligent systems that can learn from data and make predictions or decisions. For example, a startup might develop an AI-powered chatbot that can help customers troubleshoot issues with a product or service, or a machine learning system that can detect fraud in financial transactions.

Here are some other software-based startup ideas in the ICT sector:

Mobile App Development	With the increasing usage of smartphones, the demand for mobile apps is increasing day by day. A startup in mobile app development can focus on developing innovative apps for different sectors such as health, education, entertainment, and e-commerce.
Cybersecurity	With the increasing number of cyber attacks, cybersecurity is becoming more important than ever. Some cybersecurity startup ideas include developing antivirus software, firewalls, and security analytics software. Various solutions include network security, threat detection, and incident response.
Cloud Computing	Cloud computing is a rapidly growing field that involves delivering computing services over the internet. Some cloud computing startup ideas include developing cloud storage solutions, cloudbased software, and cloud-based infrastructure. For example, startups in cloud computing can develop compete solution that can help businesses to store and process large amounts of data securely.

Overall, there are many exciting opportunities for startups in the ICT sector, and the possibilities are virtually limitless. The key is to identify a problem or need that can be addressed with technology, and then develop a solution that is both innovative and practical.

2.1 Opportunities for VET in the entrepreneurial ecosystem

Entrepreneurship is an opportunity for education and vocational education and training (VET) provides learners with essential skills enhancing their employability, supporting their personal development and encouraging active citizenship. VET boosts enterprise performance, competitiveness, research and innovation. VET systems in Europe rely on a well-developed network of VET stakeholders.

The ICT sector offers a range of opportunities for vocational education and training (VET) in the entrepreneurial ecosystem. Here are some examples.

Digital skills training	VET providers can offer training programs to help entrepreneurs and startup teams develop the digital skills needed to succeed in the ICT sector. This might include training in programming languages, cloud computing, web development, data analysis, or cybersecurity.
Incubator and accelerator programs	VET providers can establish incubator and accelerator programs that provide startups with access to mentoring, funding, and networking opportunities. These programs can be tailored to the specific needs of ICT startups and can help to create a supportive environment for entrepreneurship.
Collaborative spaces	Collaborative spaces can be established by VET providers, such as coworking spaces, that provide ICT startups with access to shared resources, including office space, equipment, and technology. These spaces can also facilitate networking and collaboration among startups.
Industry partnerships	Partnerships are established among VET providers and industry organizations, such as technology companies or industry associations, to provide startups with access to industry expertise, resources, and funding. These partnerships can also help to ensure that VET programs are aligned with industry needs and trends.
Internship and apprenticeship programs	VET providers can set up internship and apprenticeship programs that provide ICT startups with access to a pool of talented and motivated students or recent graduates. These programs can help to create a pipeline of skilled workers for the ICT sector and can provide startups with valuable talent.

Overall, the ICT sector offers a range of opportunities for VET providers to support entrepreneurship and innovation. By providing training, mentoring, funding, and networking opportunities, VET providers can help to create a vibrant and supportive entrepreneurial ecosystem that supports the growth and success of ICT startups.

2.1.1 Opportunities for VET in the entrepreneurial ecosystem in Czech Republic

The Czech Republic has a well-developed vocational education and training (VET) system that encourages work-based learning in companies, supporting the school-to-work transition of graduates.

In the Czech Republic there are several institutions that deal with opportunities for VET in the entrepreneurial ecosystem in the Czech Republic.

National Institute for Technical and Vocational Education	The National Institute for Technical and Vocational Education (NÚOV) is a research and development institution that focuses on vocational education and training. They offer a range of programs and services to support vocational education and training in the Czech Republic.
National Training Fund	The National Training Fund (NOZV) is a non-profit organization that provides support for vocational education and training in the Czech Republic. They offer a range of programs and services to support vocational education and training, including training courses, seminars, and workshops.
CzechInvest	CzechInvest is the investment and business development agency of the Czech Republic. They offer a range of programs and services to support entrepreneurship and innovation in the Czech Republic, including support for vocational education and training.

2.2 Opportunities for specific sectors

Vocational education and training providers can offer a wide range of training programs and resources tailored to specific sectors. By equipping entrepreneurs with the skills and knowledge needed to innovate in their industries, vocational education and training providers can help to create a vibrant and supportive entrepreneurial ecosystem.

2.2.1 Healthcare

The use of ICT in healthcare has opened up new opportunities for improving patient care and outcomes. The advantages of these new technologies can be summarized in the following main areas: increasing quality in the patient assistance, improving the efficiency of the healthcare sector, and empowering patients, healthcare providers, and managers with the information and tools they need to manage and strengthen health systems, deliver better care, and improve treatments and survival rates.

Technologies such as augmented reality (AR) and 3D printing are already commonly used in medicine today.

Augmented Reality technologies are being used in healthcare to provide doctors with immediate access to patients, assist first responders with treatment instructions, diagnose a patient's current medical condition, and interface directly with EMS. AR applications in healthcare aren't limited to AR glasses. Today, physicians are using AR very effectively during interventional procedures

Medical training	AR is being used to provide medical students and healthcare professionals with realistic and interactive training experiences. With AR, medical students can practice procedures and techniques in a virtual environment, allowing them to gain experience and confidence before working with real patients.
Surgical planning	These days is AR used to assist with surgical planning and visualization. Surgeons can use AR to project digital images and information onto a patient's body, providing them with real-time visual guidance during surgery.
Medical imaging	AR can really improve medical imaging and diagnostics. AR can provide doctors and clinicians with a better understanding of complex medical images, allowing them to more accurately diagnose and treat medical conditions.
Rehabilitation	In physical rehabilitation AR assist in better care. AR can provide patients with interactive and engaging exercises that are tailored to their specific needs and abilities, helping them to recover from injuries or illnesses more quickly.
Patient education	AR is being used to educate patients about medical procedures and treatments. AR can provide patients with interactive and immersive experiences that help them to better understand their medical conditions and treatments, improving their overall health outcomes.

3D printing is revolutionizing healthcare by improving surgical techniques through the development of organ models, bone and joint implants, and precision instruments. 3D printers are used to manufacture a variety of medical devices, including those with complex geometry or features that match a patient’s unique anatomy.

Research is also underway to use the technology to manufacture medications, skin tissue, and organs

3D printing technology is transforming the healthcare industry in many ways. Here are some examples of how 3D printing is being used in healthcare:

Customized prosthetics	3D printing is being used to create customized prosthetics that fit patients' unique needs and anatomies. With 3D printing, prosthetics can be created quickly and at a lower cost than traditional methods.
Surgical planning	3D printing is great at creating models of patients' organs and tissues to help with surgical planning. Surgeons can use these models to practice complex procedures and develop personalized surgical plans that are tailored to each patient's unique anatomy.
Dental applications	Dental implants, crowns, and orthodontic appliances can be also created with 3D printing methods. With 3D printing, dental prosthetics can be created quickly and at a lower cost than traditional methods.
Medical devices	Medical devices such as hearing aids, surgical instruments, and drug delivery systems can be quickly developed on 3D printer. With 3D printing, medical devices can be customized to fit each patient's unique needs and requirements.
Tissue engineering	3D printing is being used to create three-dimensional tissue constructs that can be used for research and regenerative medicine. Researchers are using 3D printing to create tissues such as bone, cartilage, and skin that can be used for transplant and regenerative therapies.

Overall, 3D printing technology is revolutionizing the healthcare industry by providing new opportunities for customized, cost-effective, and personalized healthcare solutions. As 3D printing continues to advance, it has the potential to transform many more areas of healthcare in the future.

2.2.2 Mobility

Modern mobility has opened up new opportunities for improving transportation systems with modern information technologies. The suggested taxonomy is based on a literature review and the survey regards scientific papers about policies and technologies for Urban Mobility and Smart Mobility, especially in European cities.

ICT is loosening the bond between activities and fixed locations and times, which has expanded the ways of engaging in activities including simultaneous time use, multitasking, etc. As a result, the notion of temporal and spatial boundaries is changing. The integration of information and communication technology (ICT) into mobility is transforming the transportation industry in many ways, creating new opportunities for innovation and growth.

Autonomous vehicles	The development of autonomous vehicles, which use ICT to navigate and operate without human intervention, is creating new opportunities for transportation services and infrastructure. Companies that specialize in software, sensors, and other components of autonomous vehicles are poised for growth as this technology becomes more widespread.
Smart transportation systems	The use of ICT to create smart transportation systems is creating new opportunities for improving the efficiency and safety of transportation networks. Companies that specialize in traffic management systems, predictive analytics, and real-time data analysis are wellpositioned for successful business.
Ride-sharing and mobility-as-a-service (MaaS)	The growth of ride-sharing services, which use ICT to connect riders with drivers and coordinate transportation, is creating new opportunities for companies that provide ride-sharing platforms, data analytics, and other related services. MaaS platforms, which integrate different modes of transportation into a single service, are also creating new opportunities for innovation and growth. These services also bring improvements in ecology.

Electric vehicles	Electric vehicles really rely on information technologies to manage battery charging, monitoring, and other functions, is creating new opportunities for companies that provide EV charging infrastructure, software, and other related services.
Connected vehicles	The integration of ICT into vehicles is creating new opportunities for connected services, such as in-vehicle entertainment, navigation, and safety features. Companies that specialize in these areas are well-positioned for growth as the demand for connected vehicles continues to grow.

Overall, the integration of ICT into mobility is creating new opportunities for innovation and growth in the transportation industry. As technology continues to evolve, there will be many more opportunities for companies that specialize in software, sensors, data analytics, and other related areas.

2.2.3 Communication

Information technologies in communication create new opportunities for innovation and growth in the communication industry. As technology continues to evolve, there will be many more opportunities for companies that specialize in software development, data analytics, information security (including cybersecurity), information and knowledge management and other related areas.

Social media management	The growth of social media platforms, which rely heavily on ICT to connect people and facilitate communication, is creating new opportunities for companies that provide social media management services, analytics, and other related services.
Instant messaging software	The popularity of instant messaging apps, such as WhatsApp and Facebook Messenger, is creating new opportunities for companies that specialize in messaging software and other related services.
Video conferencing	Remote work and virtual collaboration are a new part of our life. So, our situation creates new opportunities for video conferencing services, which rely heavily on ICT to facilitate real-time communication and collaboration.
Cloud-based communication	All the mentioned communication utilities are dependent to cloud storages and services. The growth of cloud computing is creating new opportunities for companies that provide cloudbased communication services, such as email, messaging, and collaboration tools.
Internet of Things (IoT)	The growth of IoT is really huge. Each small object is connected every day to the internet and enables communication between them, servers and cloud storages. All of this creates new opportunities for companies that provide IoT devices, software, and other related services.
Unified Communications	Unified communications (UC) technologies, which integrate voice, video, messaging, and other communication tools into a single platform, is creating new opportunities for companies that provide UC software and related services. People use these platforms every day in personal life and even in work, so popularity and inquiry will grow.

The world as we know it is driven by communication, but the evolution of new technology in recent years has led to a change in the way communication is happening, both in terms of human connection and industry verticals. Digital transformation is at the core of future communication technology. The technology allowing for the constant transfer of data and information is changing the way we communicate and interact with each other.

2.2.4 E-commerce

Information and Communication Technology (ICT) has revolutionized the way businesses operate, and e-commerce is no exception. The growth of e-commerce is primarily dependent upon the boost in ICT infrastructure. The Smartphone market and Internet diffusion have proved to be a catalyst for the growth of the e-commerce industry.

ICT has enabled businesses to reach out to a wider audience, and e-commerce has made it possible for businesses to sell their products and services online. E-commerce has opened up new opportunities for businesses to expand their reach and increase their revenue.

In 2021, the E-commerce and Digital Economy Programme continued to deliver on the mandate to assist developing countries to enhance their readiness to engage and integrate into the digital economy.

E-commerce platforms	The growth of e-commerce platforms, such as Shopify and WooCommerce, is creating new opportunities for companies that provide these software platforms, web design, and other related online services.
Mobile commerce	The increasing use of smartphones and other mobile devices for online shopping is creating new opportunities for companies that develop mobile commerce solutions, such as mobile shopping apps and mobile payment systems.
Data analytics	The use of data analytics in e-commerce is really important. Ecommerce requires so much analysis. It brings new opportunities for companies that provide data analytics software and services, including predictive analytics, customer segmentation, and sales forecasting.
Supply chain management	The growth of e-commerce is creating new opportunities for companies that provide supply chain management software and services, including inventory management, order fulfilment, and shipping logistics.
Customer experience	Customer experience in information technologies creates new opportunities for companies that provide customer experience software and services, including personalization, chatbots, and virtual assistants. These technologies also create e-commerce for customers easier.
Digital marketing	E-commerce is creating new opportunities for companies that deal with digital marketing services, including search engine optimization (SEO), social media marketing, and email marketing. Companies use these services on daily basics in order to increase profit and awareness.
Cybersecurity	E-commerce creates a potential space for attackers. It brings new opportunities for companies that provide cybersecurity software and services, including fraud detection, secure payment processing, and data protection.

2.2.5 Tourism

The advancement of ICT influences the growth of the travel and tourism industry in every kind of business. Multimedia is a way to promote the travel industry, such as Instagram, Facebook, and TripAdvisor. Information technologies can create photo and graphic designs which tourism suppliers need to advertise their products.

However, ICT use can also significantly disrupt tourism experiences and challenge well-being goals for the tourists and those around them. The relationship between ICT and well-being is thus not only crucial in everyday contexts but especially on vacation.

Online booking and reservation systems	The growth of online booking and reservation systems, such as Booking.com and Airbnb, is creating new opportunities for companies that provide development of these services, web design, and other related online and cloud services.
Mobile apps	The increasing use of smartphones and other mobile devices for travel planning is creating new opportunities for companies that provide mobile apps for tourism, such as travel guides, language translation, and location-based services.
Virtual reality	Virtual reality can be helpful in tourism. So, it creates new opportunities for companies that provide virtual reality experiences, such as virtual tours of destinations, virtual reality theme parks, and virtual reality museums.
Data analytics	The use of data analytics is almost same like in any other branch of business. In tourism data analytics create new opportunities for companies that provide data analytics software and services, including predictive analytics, customer segmentation, and personalized recommendations.
Smart tourism	Smart tourism technologies, such as Internet of Things (IoT) and Artificial Intelligence (AI), is creating new opportunities for companies that provide smart tourism solutions, including smart hotels, smart planning apps, smart cities, and smart transportation and travelling.
Digital marketing	Tourism is creating new opportunities for companies that provide digital marketing services, including search engine optimization (SEO), social media marketing, and email marketing. Tourism is not special in digital marketing. It requires same digital methods of promoting like any other business.
Sustainable tourism	The use of ICT in sustainable tourism is creating new opportunities for companies that provide sustainable tourism solutions, including eco-friendly hotels, responsible tourism practices, and carbon footprint reduction technologies.

2.2.6 Education

Information and Communication Technology (ICT) has revolutionized the way education is delivered and received. The use of ICTs in education has the propensity to improve the education sector and its outcomes by attracting those that are out of school, reaching those learners who are in remote and far to reach areas as well as improve educational content.

ICT tends to expand access to education. Through ICT, learning can occur anytime and anywhere. Online course materials, for example, can be accessible 24 hours a day, seven days a week. Teleconferencing classrooms allow both learner and teacher to interact simultaneously.

ICT has the potential to improve the quality of education by making it more interactive and engaging. ICT can help teachers to create more engaging and interactive lessons, which can help students to learn more effectively. ICT can also help students to collaborate with each other and with their teachers, which can help to improve their learning outcomes.

ICT can also help to reduce the cost of education. By using ICT, schools and universities can reduce the cost of textbooks and other learning materials. ICT can also help to reduce the cost of travel and accommodation for students who need to attend classes in person.

Examples of opportunities in ICT in education:

Online learning platforms	Online learning platforms, such as Coursera and Udemy, are becoming more popular than ever before. So, this situation creates new opportunities for companies that provide online learning software, web design, and for creators of online materials.
E-learning resources	The increasing use of online learning platforms and other technology for education is creating new opportunities for companies and individual creators that provide e-learning resources, such as digital textbooks, e-learning apps, and online educational games.
Learning management systems	The growth of e-learning is creating new opportunities for companies that provide learning management systems, including course management, student tracking, and grading management. Over the time traditional schools use more management systems to simplify their systems of evidences about students, exam results and much more.
Educational software	The use of educational software in the classrooms is increasing. Students and teachers require modern solutions for modern education. It is creating new opportunities for companies that provide educational software solutions, including virtual labs, digital whiteboards, and collaboration tools.
Virtual and augmented reality	Virtual and augmented reality bring to schools new ways for getting information in many nontechnical subjects. This situation in schools creates new opportunities for companies that provide virtual and augmented reality experiences, such as virtual field trips, augmented reality textbooks, and virtual reality simulations.
Digital assessment tools	E-learning is creating new opportunities for companies that provide digital assessment tools, including online quizzes, exams, and assignments.

2.3 Analysing the Existing Market with unmet demand under specific sectors

2.3.1 Healthcare

Startups are leveraging technology to provide innovative solutions for medical education and training in Europe. By offering online courses, training programs, and other learning resources, these startups are helping healthcare professionals to improve their skills and knowledge, ultimately leading to better patient outcomes.

Medic Creations is a digital health education platform based in Sweden that provides online courses for healthcare professionals. The platform offers courses in several areas, including medical coding, clinical research, and patient safety.

360Medics is an education platform for medics estabilished in Spain that provides online training courses in areas like anatomy, radiology, and cardiology.

Medmastery is a medical education platform from Austria. They provide online courses for healthcare professionals. The platform offers courses in emergency medicine, cardiology, radiology.

Meducation is a medical education platform based in the UK that provides online learning resources for medical students and professionals. The platform offers resources in anatomy, pharmacology, and clinical skills.

Open Medical Institute is a medical education platform estbilished in Austria. They provide online courses and training programs in cardiology, gastroenterology, and oncology.

InSumu is Czech startup that's using AI to improve medical diagnostic education. The company has developed a platform that can help medical students and professionals learn how to diagnose medical conditions more accurately.

Medicus AI is from Austria. Startup using AI to help people understand their health data. The company has developed an app that can analyze health data and provide personalized health insights.

Turkish startup Meditopia is using meditation and mindfulness to improve mental health. The company has developed an app that can help people reduce stress and anxiety.

2.3.2 Mobility

These startups are using modern technology to provide innovative solutions for mobility education and training in Europe. By offering online courses, training programs, and other learning resources, these startups are helping professionals in the mobility sector to improve their skills and knowledge, ultimately leading to more efficient, sustainable, and safer mobility and transportation systems.

EasyMile Academy is a startup lockated in France that provides training and education courses for professionals working in the autonomous vehicle industry. The platform offers courses in areas like vehicle technology, safety, and maintenance.

In Germany was estabilished startup called CodeMob. They provide coding and programming courses for mobility professionals. The platform offers courses in several areas, including mobile app development, software engineering, and web development.

Netherlandish startup Hyperion Robotics provides robotics education and training courses for professionals working in mobility and automatization. The platform offers courses in areas such as robot design, programming, and automatization.

Urban Mobility Academy is a startup based in Belgium that provides online courses and training programs for professionals from the urban mobility sector. The platform offers courses in several areas, including sustainable mobility, smart cities, and public transportation.

2.3.3 Communication

Startups from area of communication provide innovative technology solutions for language education and communication mostly in Europe. By offering online courses, tutoring services, and other learning resources, these startups are helping people to improve their language skills and better communicate with others, ultimately leading to greater opportunities and success in their personal and professional life.

Duolingo is a startup estabilished in the United States, but it operates also in Europe and on other continents. Duolingo provides language learning courses for people of all ages. The platform offers courses in several languages, including English, Spanish, French, German and much more.

There are some other startups specializing in language learning for adults: Speakly form Estonia, Lingoda and Babbel from Germany,

2.3.4 E-commerce

E-commerce startups using modern technology to provide innovative solutions for ecommerce education and training. These startups are helping ecommerce professionals to improve their skills and knowledge by offering online courses, training programs, and other learning resources. E-commerce can ultimately lead to the most successful businesses and a thriving ecosystem in Europe.

Ecommerce University is a startup from the Netherlands that provides online courses and training programs for professionals working in this branch. The platform offers courses on topics such as online marketing, customer service, and logistics.

In Ireland was established startup called Kooomo Academy. It is startup that provides ecommerce education and training courses for business owners. They offer courses in several areas, including ecommerce strategy, platform management, and online sales.

Spain Ecommerce Institute is a startup based on providing online courses and training programs for everyone working in ecommerce. The platform offers online marketing, web design, and ecommerce technology courses.

Ecommerce Training Academy is a startup from the United Kingdom and provides ecommerce education and training courses for business owners and ecommerce professionals. Ecommerce strategy, online marketing, and website optimization are main topics of all their courses.

Ecommerce Mastery is a startup located in Germany that provides for business owners and ecommerce professionals education and training courses in areas such as online sales, customer service, and logistics.

2.3.5 Tourism

Startups are helping tourists to better understand local cultures and customs, and ultimately leading to more authentic and meaningful travel experiences all over the world.

TrekkSoft is a startup based in Switzerland that provides online booking and management software for tour and activity operators. The platform also offers a range of educational resources, including blog articles, webinars, and online courses.

Netherlandish startup Withlocals provides a platform for tourists to book local experiences and tours with local hosts. They also offer educational blog articles and videos about local cultures and customs.

Welcome Pickups is a startup that provides personalized airport pickup and travel experiences for tourists. Startup was estabilished in Greece ans offers a educational resources such as travel guides and destination recommendations.

GetYourGuide is German startup. Their goal is provide a platform for tourists to book tours, activities, and experiences around the world. In the platform they also offer travel guides and destination recommendations.

In France exists startup called TourScanner that provides a search engine for blogs with tourism articles and guides for activities around the world.

2.3.6 Education

Innovative solutions for education and training in Europe are really popular areas for establishing startup. These startups have in common offering online courses, educational resources, and tools and features to help educators and institutions improve their teaching and recruitment efforts, these startups are also helping to improve access to education and training for learners and professionals across Europe.

FutureLearn is a UK-based startup that provides online courses and materials from leading universities and institutions around the world. Everyone can find course in interested area. The platform offers wide range of subjects, from computer science and business to history and literature.

In France was established startup EdTechX. They develop platform for educators to discover and share educational resources and teaching materials. The platform also offers a range of tools and features to help educators create and deliver engaging and effective online courses.

Code Institute, an Irish startup, provides online coding bootcamps and training programs for individuals and businesses. Their platform offers courses about several traditional programming languages and even about web development tools.

StudyPortals is a startup from the Netherlands that provides a platform for students to discover and compare study options around the world. The platform offers information about wide range of programs, from undergraduate degrees to postgraduate research opportunities.

Estonian startup DreamApply provides an online web service for universities and educational institutions to manage their student applications and admissions processes. The platform also offers a range of features to improve their student recruitment efforts. World Mastery is a Spain startup that's using education to improve the sports industry. The company has developed a platform that can help people in the sports industry learn new skills and improve their existing skills.

Examples of startups in digitalization

We will compare startups founded by our students and graduates. Startups are technically oriented and also solve problems of marketing in e-commerce.

Vertical Production

A startup Vertical Production is a business that provides a range of creative services, such as photo and video production, animation, graphic design, and audio production. The goal of Vertical Production is to produce high-quality multimedia content for various clients, including businesses, non-profits, and individuals.

The team of a multimedia studio startup typically includes students, graduates and professionals with diverse skills. Everyone specializes in some part of development such as videographics, animation, graphic design, audio engineering, web design, and project managers. The team works collaboratively to develop creative concepts, produce multimedia content, and deliver high-quality final products to clients.

To start a multimedia studio startup, you need to have a strong understanding of the industry, knowledge of the latest trends and technologies, and a passion for creativity. You'll also need to invest in equipment and software that is necessary for your services. Networking and building relationships with potential clients and industry professionals are also essential for building a successful multimedia studio startup.

Overall, Vertical Production is dynamic and exciting startup that requires a lot of creativity, hard work, and dedication to producing high-quality multimedia content.

200solutions

Web and application development startup 200solutions specializes in creating websites and web, desktop and mobile applications. As the world continues to rely more heavily on technology, there is a growing demand for businesses to establish an online presence. This has led to an increase in demand for web development and automatization services.

Starting a development startup requires knowledge of many development technologies, project management skills, and a strong understanding of the market.

Conclusion

Technical startups can play a significant role in helping SMEs (Small and Medium Enterprises) with digitalization efforts. SMEs often struggle to keep up with the rapid pace of technological change and may not have the resources to invest in the latest technology or hire dedicated IT staff. Technical startups can fill this gap by offering a range of digital solutions and services that help SMEs streamline their operations, improve customer experiences, and stay competitive in their markets.

Here are a few ways that technical startups can help SMEs with digitalization efforts:

Cloud-based solutions	Technical startups can provide SMEs with cloud-based solutions that enable them to store and access data and applications securely over the internet. This can help SMEs reduce their IT infrastructure costs and improve their scalability and flexibility.
E-commerce platforms	Technical startups can help SMEs set up and manage their e-commerce platforms, allowing them to sell their products and services online and reach a wider audience.
Digital marketing	Technical startups can offer SMEs digital marketing services, such as search engine optimization (SEO), social media marketing, and pay-per-click (PPC) advertising, to improve their online presence and attract more customers.
Mobile apps	Technical startups can develop custom mobile apps for SMEs that enhance their customer experiences and enable them to reach their customers on-the-go.

Furthermore, technical startups can offer SMEs access to cutting-edge technologies, such as artificial intelligence, machine learning, and blockchain, that can further enhance their digital capabilities. This can help SMEs gain a competitive advantage and improve their overall performance.

In summary, technical startups can provide SMEs with the expertise, resources, and technologies necessary to successfully navigate the digital landscape. By partnering with technical startups, SMEs can benefit from improved efficiency, increased profitability, and enhanced competitiveness in their respective industries.

Digital transformation of startups and SMEs in Czech Republic

Like many other countries, startups and SMEs in the Czech Republic are undergoing a digital transformation. This shift towards digitalization involves the integration of technology into business processes, with the aim of improving efficiency, increasing productivity, and driving innovation.

One of the key drivers of digital transformation in the Czech Republic is the growing availability of digital tools and technologies. This includes cloud computing, artificial intelligence, data analytics, and the Internet of Things (IoT), among others. These technologies offer new opportunities for businesses to streamline operations, automate processes, and gain insights into customer behavior.

Another factor driving digital transformation in the Czech Republic is changing consumer behavior. With the rise of e-commerce, mobile devices, and social media, consumers are increasingly looking for digital experiences when interacting with businesses. Startups and SMEs that are able to leverage digital tools to deliver personalized, convenient, and seamless customer experiences are likely to have a competitive advantage in the market.

The government of the Czech Republic has also recognized the importance of digital transformation for startups and SMEs. In recent years, it has implemented various initiatives to support the adoption of digital technologies, including funding programs, tax incentives, and support for research and development.

Despite these positive developments, however, some challenges remain for startups and SMEs in the Czech Republic as they undergo digital transformation. These include issues such as data privacy and security, limited access to skilled technology talent, and the high cost of implementing new digital systems and processes.

Overall, digital transformation is an important trend that is shaping the future of startups and SMEs in the Czech Republic. By embracing digital technologies and finding ways to leverage them for competitive advantage, businesses can improve their chances of success in the dynamic and ever-changing market.

The fears and benefits of digital transformation

Digital transformation brings both fears and benefits for startups in the Czech Republic. While there are certainly challenges associated with the shift towards digitalization, there are also many opportunities for startups that are able to successfully leverage digital tools and technologies to their advantage.

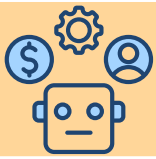
FEARS

Job losses

One of the biggest fears of digital transformation is that it will lead to job losses. Automation and artificial intelligence have the potential to replace certain jobs, and some employees may worry about their job security.

Cybersecurity risks

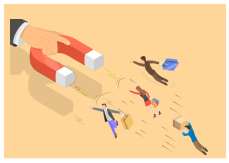
As businesses become more digital, they also become more vulnerable to cybersecurity risks. Startups may worry about the potential for data breaches, hacking, and other cyber attacks that could harm their reputation and financial stability.



Implementation costs

Implementing new digital systems and processes can be expensive. Startups may worry about the costs associated with upgrading their technology, and whether they will be able to afford it.

BENEFITS

				
Increased efficiency	Improved customer experiences	Access to new markets	Increased agility	Improved data insights
Digital transformation has the potential to streamline operations and increase efficiency. This can result in cost savings and higher productivity for startups.	Digital tools can help startups to better understand their customers and deliver personalized experiences. This can improve customer satisfaction and loyalty.	By going digital, startups can expand their reach and access new markets. This can help them to grow and scale their business.	Digital transformation can help startups to be more agile and responsive to changes in the market. This can be a competitive advantage in today's fast-paced business environment.	Digital tools can help startups to collect and analyze data more effectively. This can provide valuable insights into customer behavior, market trends, and business performance.

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Vertical Production

A startup Vertical Production is a business that provides a range of creative services, such as photo and video production, animation, graphic design, and audio production. The goal of Vertical Production is to produce high-quality multimedia content for various clients, including businesses, non-profits, and individuals.

The team of a multimedia studio startup typically includes students, graduates and professionals with diverse skills. Everyone specializes in some part of development such as videographics, animation, graphic design, audio engineering, web design, and project managers. The team works collaboratively to develop creative concepts, produce multimedia content, and deliver high-quality final products to clients.

To start a multimedia studio startup, you need to have a strong understanding of the industry, knowledge of the latest trends and technologies, and a passion for creativity. You'll also need to invest in equipment and software that is necessary for your services. Networking and building relationships with potential clients and industry professionals are also essential for building a successful multimedia studio startup.

Overall, Vertical Production is dynamic and exciting startup that requires a lot of creativity, hard work, and dedication to producing high-quality multimedia content.

200solutions

Web and application development startup 200solutions specializes in creating websites and web, desktop and mobile applications. As the world continues to rely more heavily on technology, there is a growing demand for businesses to establish an online presence. This has led to an increase in demand for web development and automatization services.

Starting a development startup requires knowledge of many development technologies, project management skills, and a strong understanding of the market.

Conclusion

Technical startups can play a significant role in helping SMEs (Small and Medium Enterprises) with digitalization efforts. SMEs often struggle to keep up with the rapid pace of technological change and may not have the resources to invest in the latest technology or hire dedicated IT staff. Technical startups can fill this gap by offering a range of digital solutions and services that help SMEs streamline their operations, improve customer experiences, and stay competitive in their markets.

Here are a few ways that technical startups can help SMEs with digitalization efforts:

Cloud-based solutions	Technical startups can provide SMEs with cloud-based solutions that enable them to store and access data and applications securely over the internet. This can help SMEs reduce their IT infrastructure costs and improve their scalability and flexibility.
E-commerce platforms	Technical startups can help SMEs set up and manage their e-commerce platforms, allowing them to sell their products and services online and reach a wider audience.
Digital marketing	Technical startups can offer SMEs digital marketing services, such as search engine optimization (SEO), social media marketing, and pay-per-click (PPC) advertising, to improve their online presence and attract more customers.
Mobile apps	Technical startups can develop custom mobile apps for SMEs that enhance their customer experiences and enable them to reach their customers on-the-go.

Furthermore, technical startups can offer SMEs access to cutting-edge technologies, such as artificial intelligence, machine learning, and blockchain, that can further enhance their digital capabilities. This can help SMEs gain a competitive advantage and improve their overall performance.

In summary, technical startups can provide SMEs with the expertise, resources, and technologies necessary to successfully navigate the digital landscape. By partnering with technical startups, SMEs can benefit from improved efficiency, increased profitability, and enhanced competitiveness in their respective industries.

Startups in Czech Republic

The Czech Republic has emerged as a hotbed for startups in recent years, with a thriving ecosystem that is attracting entrepreneurs, investors, and talent from around the world. The country's central location in Europe, coupled with its highly skilled workforce, low operating costs, and supportive government policies, have made it an attractive destination for startup founders looking to launch and grow their businesses.

In recent years, the Czech Republic has seen a significant rise in the number of startups operating in a wide range of industries, from technology and e-commerce to biotech and energy. This growth has been fueled by a number of factors, including the availability of funding, the presence of world-class research institutions, and a vibrant community of entrepreneurs and innovators.

Despite its relatively small size, the Czech Republic has produced some notable success stories in the startup world, including Avast, a leading provider of cybersecurity solutions, and Kiwi.com, a fast-growing travel tech company. These and other startups have helped to put the Czech Republic on the map as a hub for innovation and entrepreneurship.

Overall, the startup scene in the Czech Republic is vibrant and dynamic, with plenty of opportunities for entrepreneurs and investors alike. Whether you are looking to launch a new venture or invest in one, the Czech Republic offers a supportive and welcoming environment that is well worth exploring.

Failure of startups and SMEs in Czech Republic

Like any country, startups and SMEs in the Czech Republic also face challenges and failures along their journey. Some of the common reasons for failure include lack of market demand, insufficient funding, poor management, and competition from larger companies.

One of the biggest challenges facing startups and SMEs in the Czech Republic is access to funding. While there is a growing number of investors and venture capitalists interested in supporting startups, many companies struggle to secure the necessary funding to scale their businesses. This can make it difficult for startups to attract top talent, invest in research and development, or expand into new markets.

Another common issue is a lack of experience or expertise among company founders and management teams. Many startups are launched by entrepreneurs with little or no prior experience in running a business, which can lead to poor decision-making and mismanagement. This can ultimately result in the failure of the company.

In addition, the Czech Republic's small market size can also make it challenging for startups and SMEs to succeed. With a population of just over 10 million people, the domestic market is relatively small, which means that many companies need to expand into international markets to achieve sustainable growth. Despite these challenges, there are many successful startups and SMEs in the Czech Republic, and the government has implemented various initiatives to support entrepreneurship and innovation. These include funding programs, tax incentives, and support for research and development. Overall, while failures do occur, the startup and SME ecosystem in the Czech Republic remains vibrant and dynamic, with many opportunities for success.

Main reasons for failure of startups and SMEs

Lack of market demand	One of the most common reasons for startup failure is a lack of market demand for the product or service being offered. This can occur if the startup fails to identify a gap in the market, misjudges consumer needs, or faces stiff competition from existing players in the industry.
Insufficient funding	As with many startups and SMEs around the world, securing adequate funding is often a challenge for businesses in the Czech Republic. Limited access to investment, loans, or other financial resources can make it difficult for startups to scale their operations or invest in research and development.
Poor management	Inexperienced or ineffective management can also contribute to the failure of startups and SMEs in the Czech Republic. This can include issues such as inadequate business planning, poor decision-making, and a lack of focus or direction.
Competition from larger companies	Established companies with more resources and market share can pose a significant challenge for startups and SMEs in the Czech Republic. These larger players may have more brand recognition, economies of scale, or established distribution channels, making it difficult for smaller businesses to gain a foothold in the market.
Limited domestic market size	With a population of just over 10 million people, the domestic market in the Czech Republic is relatively small. This can make it challenging for startups and SMEs to achieve sustainable growth without expanding into international markets.

While these factors can certainly contribute to startup and SME failure in the Czech Republic, it's important to note that many successful businesses have also emerged from the country's vibrant and growing entrepreneurial ecosystem.

Which startups and SMEs find less success in Czech Republic?

In general, there are no specific types of startups or SMEs that are guaranteed to find less success in the Czech Republic. However, there are some industries that may be more challenging to break into due to factors such as competition, regulations, or market demand.

For example, industries that require significant capital investment, such as biotech or clean energy, may face more challenges in the Czech Republic due to limited funding sources and competition from established players. Similarly, heavily regulated industries such as finance or healthcare may also pose more obstacles for startups and SMEs.

In addition, startups that rely heavily on local market demand may face more challenges in the Czech Republic, given the relatively small size of the domestic market. This may include companies that specialize in niche products or services that may have limited appeal outside of the Czech Republic.

However, it's important to note that there are many successful startups and SMEs in a wide range of industries operating in the Czech Republic. With the right combination of innovation, market demand, and management expertise, businesses in any industry have the potential to thrive and succeed in the Czech Republic's dynamic entrepreneurial ecosystem.

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CHAPTER 03

Needs of **SMEs** in Digital Technologies

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Digital transformation is the incorporation of computer-based technologies into an organization's products, processes, strategies, and models in order to better engage and serve their workforce and customers and thus improve their ability to compete. Digital Transformation has become a big challenge for SMEs, meaning the readaptation of business strategies in order to innovate themselves to satisfy new markets demands. According to OECD, only 60% of SMEs took up new digital technologies during the COVID-19 crisis.

Among others, digitalization reduces transaction costs, and communication between staff, suppliers, and customers. In addition, digitalization adds value to customers, improves efficiency, boosts innovation, and most important finds new opportunities to generate income.

Digital business transformation is considered an effective business strategy that appears to have gained attention since the enterprises are challenged to continuously improve their business practices as well as capabilities. The use of digital technologies could reduce the influence of external crises and could introduce massive changes in business operations by providing better business models. Moreover, adopting digital technology can influence both economic sustainability and social value of enterprises and can improve regional socio-economic conditions. There are few recent studies on how technology can empower enterprises at different phases of growth and sustainability;

3.1-Needs for digitalization according to strategi leadership, products, operations, culture, people, governance and technology

A basic strategy along with the fitting technologies can help you digitize or digitalize your business, but transformation requires the correct mindset and guidance. Hence, strategy combined with the right leadership is the first and most crucial component of an effective digital transformation strategy.

Visionary leadership with the correct digital transformation strategy can lead to a better, smoother, more cost-effective and time-effective plan to transform your business, while keeping your business' North Star in mind.

It is imperative to ensure that your company's north star is clear while drafting the strategy so that your goals can be achieved without any hurdles in the later stages of the digital transformation process.

Therefore, you must ensure you form or hire the right team with courageous leaders helmed by disruptive executives to formulate your business' digital transformation strategy.

Some qualities that transformational leaders have are:

Change-agile leaders	With the digital landscape changing so rapidly, a successful leader must be willing to try new technologies and become more adaptable and flexible in their approach. Leaders must nurture a culture that embraces the change.
Purposeful change makers	Leaders who can answer the question “why" of digital transformation are more apt to bring their businesses along. The successful digital leaders must have all the reasons ready why they should be rethinking the way they do business. It shouldn’t be like that, ‘we are adding technology just to say we have new technology’ instead it should be ‘we are utilizing technology to remain competitive and push us towards innovation’.
Forward looking vision	The most successful leaders must not just have a clear vision about the future of the company, but also, they would be proactively willing to commit the resources and implement the changes needed to make the vision happen. This is possible with a clear, coherent digital transformation strategy which outlines organization’s need of the hour and forward-looking vision.
Risk-takers and Experimenters	A risk-taking is quintessential for a successful digital leader. The biggest risk is not taking risk at all. In this ever-changing world, innovation of any kind is impossible if leaders are incapable of taking risks. Change-agile leaders and risk-takers or experimenters are the ones who establishes opportunity for experimentation and innovation.
Striving for partnership	An agile leader proactively embraces partnership. You can have people and most innovative technologies working for you but without partnership and collaboration, your competitiveness will suffer.

ALONE WE CAN DO SO LITTLE; TOGETHER WE CAN DO SO MUCH”. - HELEN KELLER.

Well now, let’s move on to the next and most important component of digital transformation strategy that often determines it success or failure.

Culture Change and Communication

Be ready for a massive culture shift. Usually, clients and employees of a company are reluctant towards major changes, which makes it difficult to execute any transformation. Culture is the key cornerstone of any successful digital transformation program. Hence, it will be helpful if you prepare your employees for it in advance. Effective communication can help you achieve this.

- Talk to your employees about the digital transformation strategy and how it will benefit every stakeholder.
- Conduct training sessions with your employees to prepare them beforehand.
- By showing how necessary it is to align culture with new initiatives you will be able to prepare your employees ahead of time.

Form clear training schedules, provide regular updates and be consistent with your efforts to reassure them. Communicate as much as you can even at the risk of over communication!

Every business involves numerous processes and operations which can be transformed to make workflows smoother and easier.

Hence, you must keep business process optimization in your mind while formulating the digital transformation strategy.

The strategy must ensure business process optimization while meeting the goals set for customers as well as for the internal team. All interconnected business processes must be covered in the digital transformation strategy, so that maximum output can be achieved.

Along with business process optimization, you must also make good use of data you have gathered over the years.

Data analysis and integration can help you to identify them. Many times, people select their preferred technologies before analyzing their data while creating transformation strategies. This is not how it should work. If you don't analyze data, you may know what loopholes to cover at your internal team's end, but you may still miss out on the loopholes that your customers have to deal with regularly.

Data analysis and circulation of its results can help your team identify the best solutions to problems, thus lead to drafting a better digital transformation strategy and making the best of the transformation process.

Technologies to be Implemented

Identifying fitting technologies for your business is one of the most crucial steps while drafting the digital transformation strategy. Implementing technologies into your company will require a lot of financial investment. Hence, to avoid the need of extra funds, it must be done correctly.

Any effective digital transformation strategy will always include some options along with their budget requirements in order to make the best decision.

Whether you are dealing with updating legacy systems, application modernization or implementation of entirely new digital systems, you must find the most fitting technology.

Some new-age technologies that must be embedded in your digital transformation strategy are:

1. Cloud and Distributed Platforms

Cloud and Distributed Platforms will be prevalent technologies in forthcoming years. Gartner predicts By 2025, most cloud service platforms will provide at least some distributed cloud services that execute at the point of need.

Also, companies are making strategic choices by embracing technological solutions based on API. By preparing both culturally and strategically, to create and consume APIs is essential to achieve business agility, accelerate the new ideas to the market and unlock new value in the existing assets.

Furthermore, pandemic has accelerated the digital transformation in many areas, especially via the use of next gen technologies such as blockchain or distributed ledger technology.

2. Data Analytics & Artificial Intelligence

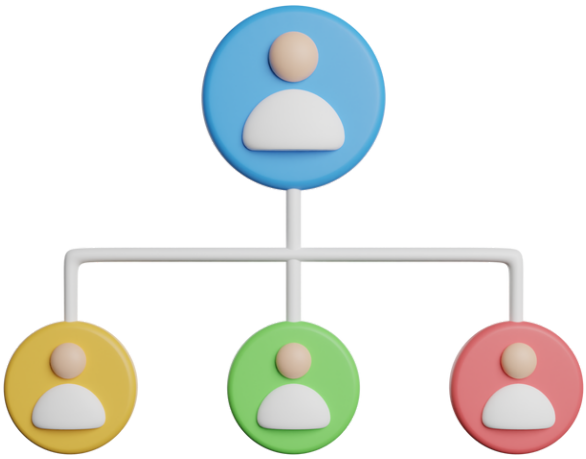
Data has taken center-stage of any Digital Transformation Strategy as it helps us in eliminating assumptions and deal with facts. With ML assuring to overhaul enterprise decision making and operations these tools and techniques are helping organizations turn growing volumes of data into a future-ready foundation for a new era in which machines will not only augment human decision-making but will make real-time and at-scale decisions that humans cannot in order to remain nimble.

3. Digital Experience and Digital Reality

The world's largest unplanned work-from-home experiment continues. An intelligent composable business will pave a way for redesigning digital business moments, automated operational activities, new business models and last but not the least new products, services and channels. By unleashing the power of these next-gen interfaces, smart displays which are enriched with intelligent algorithms and technologies like IoT, organizations are optimizing individual and team performances, customize the customers' experience through personalized recommendations. Such intelligently woven organizations are becoming better decision-makers by accessing better information and responding more skillfully.

Being clear about your technology implementation in the digital transformation strategy will help you to:

smoothly carry out the transformation process.
ensure that you invest within your constraints.
overcome flawed processes and build a future-ready business



Team Structure

Digital Transformation is not about tools, is about people says Harvard Business Review. Hence structure of the team is a determining factor delivering outcomes according to your Digital Transformation Strategy.

The team structure should be decided according to the size of your project. Your Digital Transformation Initiative should be well-balanced and must comprise of:

Pack of Leaders	With digital business model in mind and well-thought implementation plan, your team must have an agile leader as torchbearer who can be Chief Digital Transformation Officer or Chief Digital Officer or Chief Digital Innovation Officer or Chief Technology Officer or Chief Information Officer etc. for accountability.
Business Ninjas	The core digital experience team are the hands-on practitioners of different technologies and business verticals. Few designations that come under core digitalization team are Product Managers, Program Managers, Customer Experience Leaders, Customer Success Engineers, Solution Architects and Senior Managers of Business and Technical teams.
Cast of Coders and Designers (CoDe)	Having the proficiency and skills in areas of development, designing, coding and data science and to provide finesses to the DT program, your team must have contribution from all the stakeholders be it developers, designers, visualizers, data scientists, AI and ML engineers etc.

The methodology you choose will also influence your team structure. For example, if you opt for the agile methodology, then you would need a bigger team with several smaller sub-teams with specific objectives. You must ensure that you form a team from within your existing talent pool / hire a team with experienced members for seamless transformation. Your end goal is to create high performing teams where everyone is accountable for the team's and organization's success. It is essential that the leader and project managers are effective, promote teamwork and are good communicators. Role of the leader is to remove the bottlenecks so the team marches towards the common goal.

Digital Transformation Strategy

The results of your company's digital transformation will be strongly influenced by the way you outline your digital transformation strategy.

Results will always differ according to the practices you choose and the technologies you implement. You must take initial results into account and plan long-term strategies to scale the digital transformation as well as meet new ends as your business grows.

Your team must be flexible enough to look at the results and undertake changes if required. Agility is the key to success of your digital transformation strategy. You must follow the detailed strategy you have formulated, but you must also be open to changes if it doesn't work out the way you expected it to work.

Digital transformation strategy is about taking care of the pre-requisites. By formulating an effective, clear and robust digital transformation strategy, you will be able to ensure that your company undergoes digital transformation as seamlessly as possible. Digital transformation strategy is like a personalized map to bring about huge modifications in your business operations. It requires a lot of financial investment, time and technical expertise. It always helps to ensure that your teams are being led by highly qualified and experienced technical leaders to reduce risks.

Advantages of digitizing processes

Digitalization can improve processes by providing new methods and opportunities for the business. New digital tools for design, project management, and sales combined with access to customer data will enable companies to create or reinvent products and services with specific customer needs, making the process infinitely more efficient.

They reduce operational costs:	It can help small and medium-sized enterprises (SMEs) integrate into global markets, through reductions in costs associated with transport and border operations and it significantly enhances the scope to trade services.
They boost innovation:	Innovation is recognized as the economic growth driver of the future, with a wide range of new technologies acting as an accelerator. Today, many impactful innovations are being created by a new generation of businesses that have no physical offices, they operate entirely digital. These companies are taking advantage of technology to create more sophisticated products and services, changing the competitiveness landscape
They reduce operational costs:	It can help small and medium-sized enterprises (SMEs) integrate into global markets, through reductions in costs associated with transport and border operations and it significantly enhances the scope to trade services.

Digitalisation is a critical component of the European Union's response to the economic crisis brought about by COVID-19. The pandemic has illustrated how digital skills sustain both economies and societies. The need for Information and Communication Technologies (ICT) skills in coping with COVID-19 challenges within companies is also highlighted in a report by the Learning and Knowledge Development Facility (LKDF) of the United Nations Industrial Development Organization (UNIDO) and the European Training Foundation (ETF). As shown in Figure 1 of the report, 76.2% of 105 companies surveyed felt that their need for improvement is mainly in ICT skills, followed by design thinking and creative approaches.

Thus, digital or ICT skills are increasingly important for both work and life.

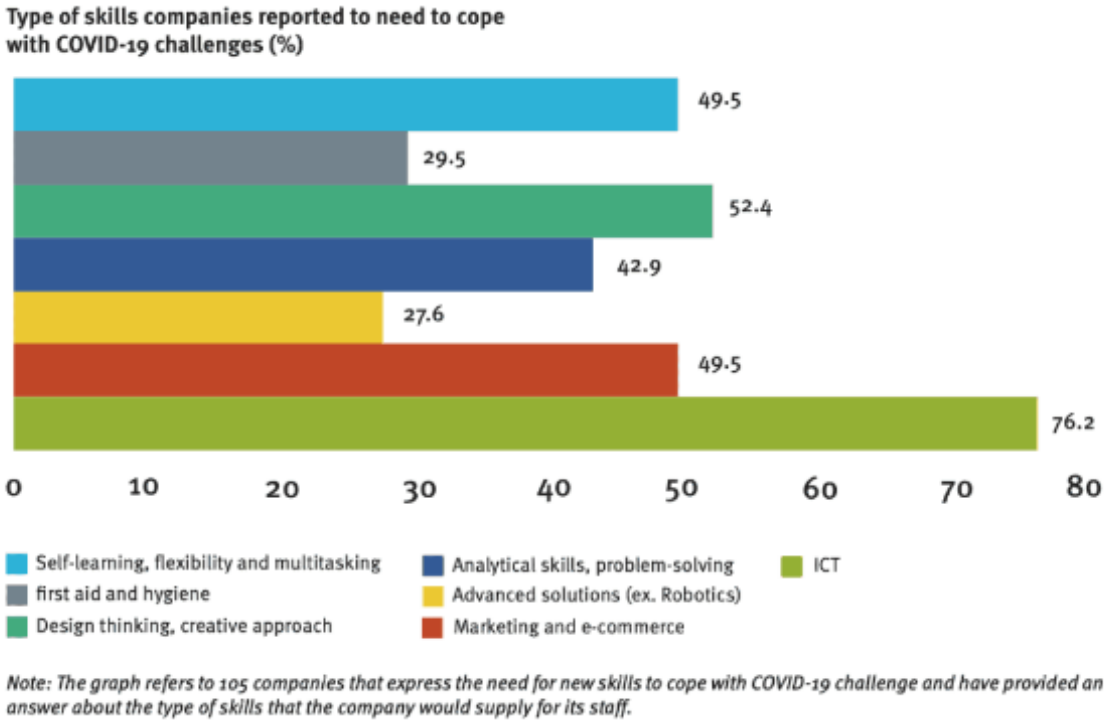


Figure 1. Changing needs for skills development because of COVID-19

Digital skills range from basic usage skills that enable people to participate in the digital society and consume digital goods and services, to advanced skills that empower the workforce to develop new digital goods and services. These skills can be acquired in different settings such as at work or privately, and at different life stages, for example, in schools for younger learners, or as an adult or senior citizen.

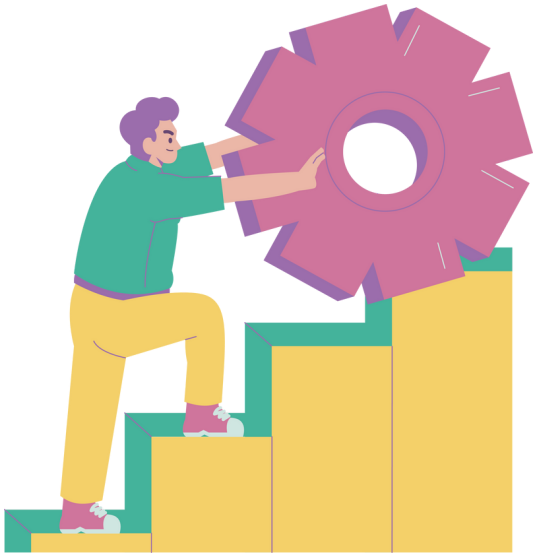
In recent years, enterprises are providing more and more training to their personnel to develop or upgrade their ICT skills. Findings from a global survey of enterprises, published by the International Labour Organization in 2021 revealed the following: In 2018, 24% of enterprises provided ICT training for their personnel. When looking at company size, 70% of large enterprises actively provided the training, while only 23% of SMEs did so. Thus, among SMEs, there are fewer ICT trainings provided. As SMEs are the backbone of the economy and digital skills are increasingly connected to how business is conducted, it is important to facilitate both the teaching and learning of digital skills among SMEs.

In developing countries, digital skills can be seen as even more crucial. As outlined in an article by Ms. Cristina Duarte, Under-Secretary-General and Special Adviser on Africa to the United Nations Secretary-General, there is a chance to leapfrog Africa's development through digitalisation. Harnessing innovation and raising the level of ICT competencies among citizens in countries like Nigeria has enabled emerging economies to develop quickly capacities for the digital economy of the future and achieve international recognition as a tech hub.

Challenges to digital skills development in SMEs

Digital skills can be taught in different ways: online, offline or blended. According to UNESCO, approximately half of the world's population (some 3.6 billion people) still lacks an internet connection. However, the digital divide is not the only obstacle that SMEs face in the acquisition of digital skills.

Based on the 2019 European Commission report Digital Skills New Professions, New Educational Methods, New Jobs, from an operational standpoint, the greatest barrier to providing digital skills training to SME employees is a lack of time. Further obstacles relate to the availability of training programmes, with cost, inflexible timetables and distance indicated as the main obstacles to participation, as well as an inability to fully understand the content of the training from the limited information provided. More barriers are outlined in Figure 2 below, which is found in the 2019 Skills for SMEs report co-produced by DIGITAL SME, Capgemini Invent, and Technopolis.



The Report on European Educational and Training Landscape and Training Needs for Citizens and SMEs for the Digital SkillUp project suggest that efforts should be made to explain emerging technologies in a simple and accessible way, providing practical and real-life use case examples. The experts contributing to the report also stressed the importance of obtaining certification and having detailed information on course quality. These two aspects would enable individuals to access learning that is better suited to their needs and select their own learning paths.

3.2-Requirements for performing digital trasnformation

Successfully tackling the digital challenge for the benefit of European citizens will require more than regulation and investment. Europe's digital transformation must also be guided by a set of European values that will serve as a compass and guardrails for the Fourth Industrial Revolution.

Building on the achievements of the DSM, the EU could strive for a European way of doing digital policy that is human-centric and founded on respect for fundamental rights and European values, one that constitutes a "third way", balances between state-led development and laissez faire.

This set of defining principles would enhance trust and privacy while promoting an inclusive digital society and sustainable economy as a basis to build the next competitive advantage for European companies acting worldwide in the digital age.

European initiatives could build on four societal objectives that can benefit from digital technologies and guide their development and adoption. Building and deploying digital solutions for societal challenges

Digital technology can be a key lever to improve European quality of life and tackle some of our most pressing societal challenges.

For example, connectivity will be a key enabler for many, if not most, climate solutions, by creating new and sustainable value chains and reducing the amount of natural resources used in the production process.

Many solutions already exist in energy, buildings, transport, security, agriculture and food. Europe can now promote and accelerate the deployment of these solutions at a global scale.

At the same time, the ICT sector itself must recognise its own role in societal challenges and contribute to addressing them. For example, the ICT sector should act in order to reduce its footprint in terms of the resources it consumes, whether energy or rare materials.

Reinvigorating democracy, trust and cultural diversity Technology has reduced the distance between people and decision makers and given everyone the tools to share their opinions instantly. However, left unchecked it can weaken the fabric of society, for example by allowing the rapid spread of disinformation, interfering in election processes or leading to cultural uniformity.

The EU can respond to this trend by promoting a human-centric approach to digital, for example by encouraging transparency of and trust in public institutions through easily accessible and intuitive digital public services, offering citizens equal access to digital technology and credible information, promoting high-quality EU digital media content or digital tools and services that enable EU citizens to participate in politics. Securing digital technological sovereignty and cybersecurity .

Digital technologies and data are becoming strategic societal assets whose control could become a condition for both prosperity and sovereignty. Europe is currently dependent on foreign-developed and owned technology assets for a significant part of its digital economy. As all sectors are on the point of being radically reshaped by the combination of connectivity and data, and as digital technology is at the heart of this transformation, Europe may want to reduce its dependency on foreign technology.

To reverse the trend, the EU can take immediate steps to increase its support for key enablers of the digital economy (e.g. connectivity, semiconductors, hardware, data access and sharing, cybersecurity), particularly where its place in the supply chain is weak or fragile.

Boosting Europe's competitiveness Digitisation is a unique opportunity for European industries to create the next generation of innovative products and services, retain jobs and create new ones. To capture this potential, the overall objective should be to create a strong digital ecosystem in Europe that starts with high-quality education, world-class research facilities, an innovative legislative framework that encourages entrepreneurship, experimentation and innovation, start-up and scale-up support across the entire EU, and financing and promoting industrial clusters for growth. Fuelling this competitiveness is data, with much of the economic potential for innovation and the development of new business services depending on the availability of large amounts of quality data and the necessary infrastructure and know-how to curate and process it.

Resources

https://www.ospi.es/export/sites/ospi/documents/documentos/Sstudy_Shaping_the_digital_transformation_in_Europe_Final_report_202009.pdf

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CHAPTER 04

Startup Business Models

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What is Startup?

Organizations have a life cycle into their existence. A startup is a company that is in the initial stages of business. These companies are often small and are designed to grow quickly. Many startups are focused on developing innovative products or services in order to establish themselves as leaders in their industry. Because startups are often small and have limited resources, they may be more agile and able to respond quickly to market changes. However, they also have a higher risk of failure than more established companies (Čalopa, Horvat & Lalić, 2014).

The organizational life cycle refers to the stages of development that a company goes through from its founding to its eventual dissolution. These stages may include the startup phase, growth phase, maturity phase, and decline or exit phase. During the startup phase, the company is focused on getting off the ground and establishing itself in the market. This may involve developing a product or service, finding customers, and building a team. The growth phase is characterized by rapid expansion and an increase in revenue. The company may add new products or services, enter new markets, and hire more employees. In the maturity phase, the company has established itself as a market leader and may experience slower growth. This phase may involve streamlining operations and focusing on efficiency. The decline or exit phase is characterized by declining revenues and market share. The company may consider restructuring, downsizing, or exiting the market altogether (Jawahar & McLaughlin, 2001).

According to Maurya (2012), start-up companies throughout their life cycle go through three stages of development. The first stage is the Problem/Solution Fit which investigates whether the market even has a problem that needs to be solved. Problem/solution fit refers to the extent to which a startup's product or service successfully addresses a specific problem or need for a target customer. Achieving problem/solution fit is important for startup companies because it helps them to validate their product and ensure that it is meeting a real need in the market. There are several ways that startup companies can work to achieve problem/solution fit:

1. Customer development: This involves actively seeking out and talking to potential customers to understand their needs and problems, and testing the product or service with them to see how well it addresses these issues.
2. Lean startup methodology: This approach involves quickly building a minimum viable product (MVP) and testing it with a small group of customers to gather feedback and iterate on the product.
3. Market research: Startups can also conduct market research to identify potential problems and needs in their target market, and develop their product or service to address these.

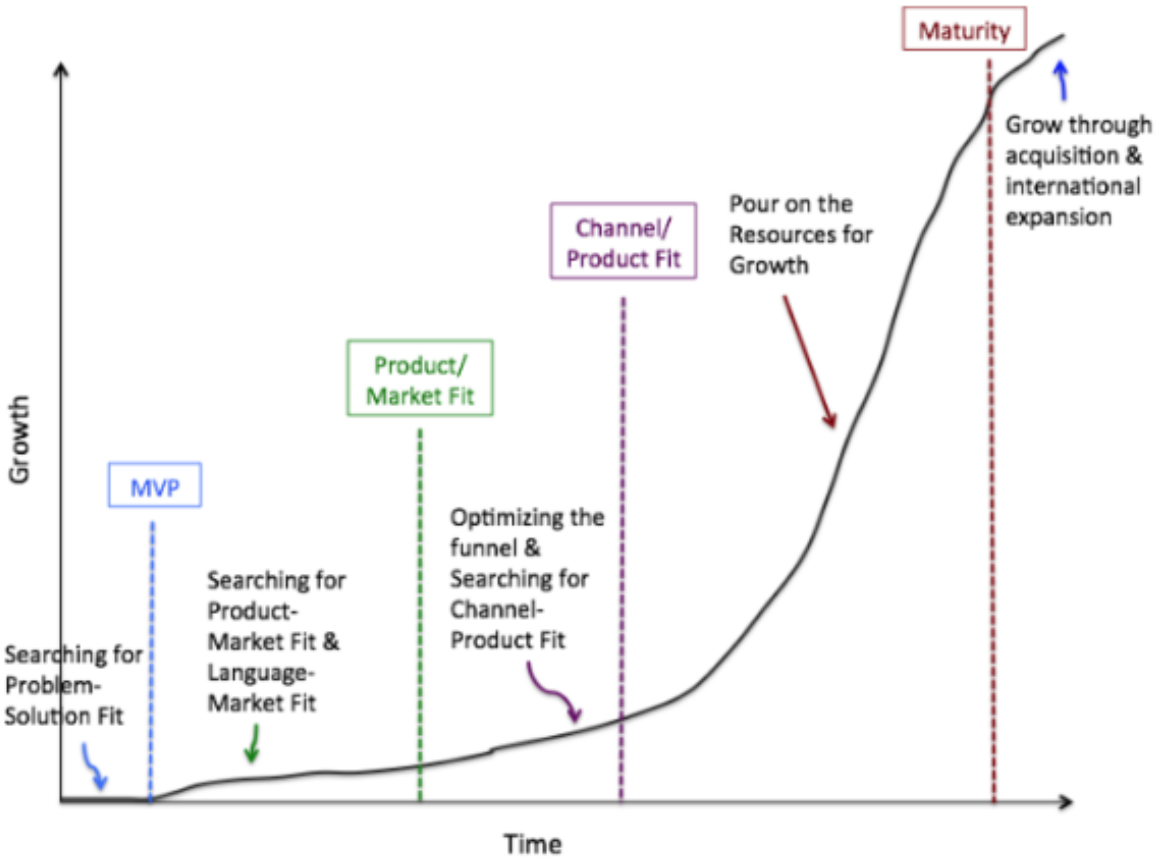


Figure 1: Startup Life Cycle

Achieving problem/solution fit is critical for the success of a startup, as it helps the company to develop a product that customers actually want and need, and ensures that it is targeting a viable market. The second phase Product/Market Fit has to answer the question of whether the implemented idea is really what the users need. Product/market fit refers to the degree to which a product satisfies the needs and wants of a particular market. It is an indicator of how well a product is meeting the needs of its target audience and is considered an important factor in the success of a product. A product that has a strong product/market fit is one that is widely adopted by its target market and is able to generate significant demand and revenue. On the other hand, a product with poor product/market fit may struggle to gain traction and may eventually fail in the market. The third phase is Scale and it involves the expansion and growth of start-up companies, which leads to an increase in the number of employees, to an increased market shares or to higher income. The scale phase is a stage of a startup company's development in which the company is focused on rapidly growing its customer base, revenue, and operations. This is often the phase that follows the growth phase, and it is typically characterized by a strong focus on efficiency and maximizing profits.

During the scale phase, a startup may invest in marketing and sales efforts to drive demand for its product, as well as in infrastructure and processes to support its growing operations. The ultimate goal of the scale phase is to establish the company as a dominant player in its market and achieve long-term sustainability (Čalopa, Horvat & Lalić, 2014).

Nurcahyo, Akbar and Gabriel (2018) explain specifically that startup companies generally follow a similar life cycle to other businesses, but they may go through the stages at a faster pace due to their focus on rapid growth. The specific stages of the startup life cycle may include:

Idea	This is the initial stage where the founder has an idea for a product or service and begins to validate it through market research and customer feedback.
Development	In this stage, the startup begins to develop its product or service and build a prototype. The team may also start to put together a business plan and secure funding.
Launch	Once the product or service is ready, the startup begins to sell it to customers and establish itself in the market.
Growth	If the product or service is successful, the startup will experience rapid growth as it scales up operations and expands into new markets.
Maturity	Eventually, the startup may reach a point of maturity where it is a well-established player in its industry. At this stage, the focus may shift to maintaining market share and maximizing profits.
Decline or Exit	If the startup is not able to sustain its growth or adapt to changes in the market, it may enter a decline phase or decide to exit the market altogether.

Startup company is a company in the early stages of its operation (Gürel & Sarı, 2015). Starts up company try to enter an existing market or sometimes open up a new market with innovative products or services. However, there are more and more start-up companies in traditional industries and business sectors. At the international level, there is more and more research associated with the importance and ways of financing entrepreneurial ventures (formal and informal), especially in the period of intense globalization. According to Nurcahyo, Akbar and Gabriel (2018) startup company is the organization in its earlier phase. This kind of organization has some characteristics. They classify those characteristics into 4 dimension: Organization (the character of the startup organization), Ownership (characteristics of owner, decision making, and supervision), Strategy and Innovation, and Financial.

According to a research study conducted by the Startup Genome Report, a large majority (over 90%) of startup companies fail. Out of 3200 respondents, only a small fraction (about 8%) were able to successfully introduce their product or service to the market and continue to grow and profit. Many entrepreneurs struggle to achieve business success and may require guidance on how to navigate uncertainty in order to achieve their goals. New theories, methods, and ideas are constantly being developed to provide guidance for entrepreneurs and help them increase their chances of success (Zlatarek, 2012)

Types of Startup

There are various ways to classify startups, and the specific types of startups will depend on the criteria used for classification. Some common ways to categorize startups include (Conti, Thursby & Thursby, 2013; De Haas, Sterk & Van Horen, 2022; Lee & Noh, 2014) :

Stage of development: Startups can be classified based on their stage of development, such as early-stage, growth-stage, or late-stage. Startups can be classified based on their stage of development, which refers to the phase of growth and expansion that a startup is currently in. Some common stages of development for startups include: Early-stage: Early-stage startups are typically those that are in the process of developing their product or service and may not yet have a minimum viable product (MVP). This stage is also known as the "idea stage," as the startup is focused on defining and refining its concept. Growth-stage: Growth-stage startups have developed an MVP and are focused on growing their customer base and revenue. This stage is also known as the "product-market fit stage," as the startup is working to establish itself in the market and demonstrate its value to customers. Late-stage: Late-stage startups have achieved significant growth and are preparing for the next phase of their development, such as an IPO (initial public offering). This stage is also known as the "scale stage," as the startup is focused on expanding its operations and increasing its market presence. The specific stage of development for a startup will depend on its progress and goals, and startups may move through these stages at different rates.

Industry: Startups can be classified by the industry in which they operate, such as tech, healthcare, or energy. Startups can be classified by the industry in which they operate, which refers to the sector or market in which the startup does business. Some common industries for startups include Tech startups are those that operate in the technology industry and may offer products or services related to software, hardware, the internet, and other emerging technologies. Healthcare startups are those that operate in the healthcare industry and may offer products or services related to the diagnosis, treatment, or management of health conditions. Energy startups are those that operate in the energy industry and may offer products or services related to the production, distribution, or consumption of energy. Finance startups are those that operate in the finance industry and may offer products or services related to banking, investing, or financial management. Retail startups are those that operate in the retail industry and may offer products or services related to the sale of goods or services to consumers. There are many other industries in which startups can operate, and the specific industry of a startup will depend on the products or services it offers and the market it serves.

Business model: Startups can be classified based on their business model, such as B2B (business-to-business) or B2C (business-to-consumer). Business model refers to the way in which a startup generates revenue and profits. Some common business models for startups include B2B (business-to-business). B2B startups sell their products or services to other businesses rather than directly to consumers. B2C (business-to-consumer) startups sell their products or services directly to consumers. P2P (peer-to-peer) startups facilitate transactions between individuals rather than between businesses or between a business and a consumer. Freemium startups offer a basic version of their product or service for free, with the option to upgrade to a paid version with additional features or benefits. Subscription startups offer their products or services on a subscription basis, with customers paying a regular fee to access the product or service. The specific business model of a startup will depend on its products or services, target market, and revenue goals.

Size: Startups can be classified by their size, such as small, medium, or large. Startups can be classified by their size, which refers to the number of employees, revenue, or other measures of scale. Some common size categories for startups include: Small startups are those that are in the early stages of operation and may have a small team and limited revenue. Medium startups have achieved significant growth and may have a larger team and higher revenue than small startups. Large startups have achieved even greater growth and may have a significant market presence and a large team. The specific size of a startup will depend on its stage of development and level of success, and startups may change size as they grow and expand.

Funding: Startups can be classified based on their funding status, such as bootstrapped (self-funded), venture-backed, or crowdfunded. Startups can be classified based on their funding status, which refers to the sources of capital that a startup has access to in order to finance its operations and growth. Some common funding categories for startups include: Bootstrapped startups are self-funded and do not have external investors. These startups may rely on the founders' personal resources, revenue from sales, or other sources of capital to finance their operations. Venture-backed startups have received investment from venture capital firms in exchange for equity in the company. These firms provide funding in exchange for a stake in the startup's future success. Crowdfunded startups raise funds from a large number of individuals, typically through an online platform. Investors may receive rewards or equity in the company in exchange for their contribution. The specific funding status of a startup will depend on its needs and goals, and startups may access multiple sources of funding over the course of their development.

Geographic location: Startups can be classified based on the geographic location of their headquarters or target market. Some common ways to categorize startups by geographic location include: Domestic startups operate within the boundaries of a single country. International startups operate in multiple countries and may have a global focus. Regional startups operate within a specific region or geographic area, such as a city, state, or country. Local startups operate within a specific local area, such as a neighborhood or community. The specific geographic location of a startup will depend on its target market and business goals, and startups may operate in multiple locations or expand to new markets over time.

At the same time, there are many other ways to classify startups, and the specific types of startups will depend on the specific characteristics being used to differentiate them. For instance according to Marmer, Hermann, and Berman (2011) conducted a study on over 650 web-based startup companies in the United States and identified three main types. The first type, called "The Automizer," is characterized by a focus on customers, fast performance, automation of manual processes, use of new technologies, strong technology-oriented development teams, and the ability to compete in a large market. A subtype of this type, called "The Social Transformer," includes start-ups that have a critical mass of subscribers, rapid growth, and a focus on networking. These start-ups often create new ways to connect people and may require more capital. This type of startup may also have more frequent meetings among business people and teams compared to IT-oriented startups (Čalopa, Horvat & Lalić, 2014).

"*The Integrator*" is a type of startup that prioritizes security and profitability, often targeting small and medium-sized enterprises and smaller markets. These startups may keep small teams even as they grow and expand. "The Challenger" is another type of startup that is defined by high sales, customer dependence, and operating in complex and rigid markets with repeatable sales processes. These startups may need more time and capital to be successful and may have teams that are more focused on business strategy (Čalopa, Horvat & Lalić, 2014).

Startup Business Models

Definition of the Business Model

Depending on the needs and background of the company, Startup business models adopted may vary. Before presenting in-depth clarification on the startup business models, it essential to explore what business model is. Business model is building, distributing and obtaining value of an organization depending on the reasonable ground (Osterwalder and Pigneur, 2011). It is about critical decisions, to produces values to make money. It is related to discovering the needs of the costumers, value approach, value chain and cost structure of the company. It includes four dimensions, namely "who", "what", "how" and "value" (Elana S., 2022).

Figure 2: Dimensions of a Business Model

"Who" dimension is about the intended costumer and their needs, "what" dimension is about value proposition, "how" dimension is about the resources and distributing the value and "value" is about adopted revenue model and generating value (Elana S., 2022).

Types of the Business Models

“Digital transformation, already a defining feature of our world, is being accelerated by the COVID-19 pandemic, changing customer demands, expectations of digital inclusion and exponentially evolving technology. Most large companies have made incremental strides in digitizing their core offerings, such as creating a digital sales channel or using digital tools to improve internal operations” (WEF, 2021, p.2). The literature covers various kinds of startup business models. According to Ponomarev (2019), startup business models consist of “marketplace, aggregator, on-demand, reverse auction, crowdsourcing, and traditional software product”. On the other hand, Tomaro (2016) states 9 startup business models. Even though some of them similar to the models expressed by the Ponomarev (2019), some are different. Accordingly, Tomaro (2016) the models consist of middleman (AKA The "Warby Parker" Model), virtual good, marketplace, the subscription, freemium, customized everything, the modernized direct sales, on-demand, and reverse auction. In addition to that, University Lab Partners (2019) points out the startup models as “disintermediation model, on-demand model, marketplace model, subscription model, virtual good model, freemium model, and reseller model”. In line with the University Lab Partners (2019) startup business models, detailed information about each model is presented at the following.

Marketplace Model

Marketplace business model is a virtual market bringing seller and buyer together. In line with the nature of the model, it includes computerized system and online network (Annisya, & Rochman, 2020). An online marketplace is a platform that connects vendors and their customers. In simple words, it works like this: a vendor displays its goods at a third-party platform (a marketplace) and a customer purchases these goods (Nikonenko, 2022). Marketplace business model may include one-sided, two or more-sided platforms. It depends on the nature of the company which platform suits the company (Syrotkin, 2017). As Marketplace business model is an online and aims at associating buyers and sellers, adopting such a model has many advantages. The figure presented below summarizes these advantages (Clockwise Software, 2022).

Figure 3: Advantages of Executing an Online Marketplace Business Model

As it is clear from the figure, from the perspective of the sellers employing Online Marketplace business model covers advantages on hiring developers, employing a website, expenditure for the advertisement, possessing current the buyers. From the perspective of the sellers, it presents various brands in a platform, includes accessible communication, payment and transfer advantage and pivotal audit system (Clockwise Software, 2022).

On-demand model

Maselli, Lenaerts, & Beblavy, defines this model as “the expansion of the on-demand economy puts huge pressure on regulators to adapt it to the existing frameworks for labour and taxation. The rapid growth of the sector also divides experts: it is seen by many as threat for working conditions, and by others as an incredible opportunity” (2016, p.1). True to its name, on-demand business model focuses on instantaneous meeting the request of the consumers. It is a type of business model based on delivery and production of value via innovative online platforms (Priem, Wenzel, & Koch, 2018; Taeuscher, & Laudien, 2018). It is the result of the namely “technological advancements, investor interest & access to capital, changes in consumer behavior & demand, and new methods of supplying services” (Service, 2015). On Demand model with instant is determining the time for delivery of the service or product. This time is usually between 15-45 minutes. The time of the service or product may also be scheduled for the future by the consumer (Juggernaut, n.d.). Services provided in this model consist of categories such as “Transportation, Home Care (Repair & Maintenance, Cleaning) & Design, Health, wellness & beauty, Food Delivery, E-Learning & Home Tutors, etc” (Murgai, 2022, p.39). Scooters, taxi services such as Uber, grocery shopping and food delivery such as “getir” in Türkiye and “grap” in Singapore are examples of on-demand business model.

Disintermediation model

According to Cambridge Dictionary (2022), the term “Disintermediation” means “the situation in which sellers and buyers of financial products deal directly with each other, rather than using banks, etc.” in finance sector. In commerce, it means “the situation in which manufacturers sell directly to consumers, rather than through stores, etc.” (Cambridge, 2022). In line with the definition of the term, disintermediation occurs "where one or more existing intermediary functions are circumvented by providers and consumers" (Wang and Heng, 2017, p. 3240). “Disintermediation Model” possess various meaning. In social terms, it means excluding one or more persons from a supply chain, transaction, managerial status to reduce the costs or accelerate the delivery pace. In financial terms, it means excluding third parties, brokers or banks to increase personal autonomy on transaction and investment.

(Hayes, 2022). It may provide advantages on in value chains and elevated transactions. Huge commission, inconsistency of price and cost, iterative transactions for the alike services are among the main reasons for the existence of this model (Ladd, 2022).

Subscription model

Subscription Model is “the shift from a traditional pay-per-product model to recurring payments for ongoing goods and services” (Fanfarillo, Carlson, Fally, & Kelley, 2022, p.1). The model dates back to 17th and 18th century however expanded a lot recently (Schuh, Wenger, Stich, Hicking, & Gailus, 2020). The number of the companies executing this model also increased in recent years. It may provide great benefits for the costumers via on time availability and convenience (Holm, & Westin, 2021). The model also contains benefits to the retailers via contributing the income planning and improving the loyalty of the customer (Bertelsmann, n.d.).

Freemium model

Another type of business model is “Freemium model” which one of the four free business models. Before exploring “Freemium model”, it is better to clarify other free business models. If costumer pays cost of the product or service at the end, this is called “Direct Cross-subsidies” model. If income is indirectly generated by the services provider via advertisements, it is “Three-party Market” model which is frequently employed nowadays. The third one is “Nonmonetary Markets” which has various forms. The last one is “Freemium model” (Anderson, 2009). Online, Web 2.0 and free are the key words mainly defining this model. Its more comprehensive definition is as follows: Proving free of charge service, potentially including advertisement, to obtain costumers through networks, marketing investigation and orally. After that, providing value-added services with premium prices to the costumers (Avc, 2006). This model not demands only constantly obtaining new users but also retention of the users. Hence it is essential for a company to constantly produce value to keep the relationship with the costumers (Sanitra, & Jiang, 2019). One of the best examples of this model is “Skype” and “Spotify”. Each of the platforms provide free service for costumers (Reime, 2011). Even though costumers do not directly pay the cost of the product or services, income is indirectly generated by the services provider.

Virtual good model

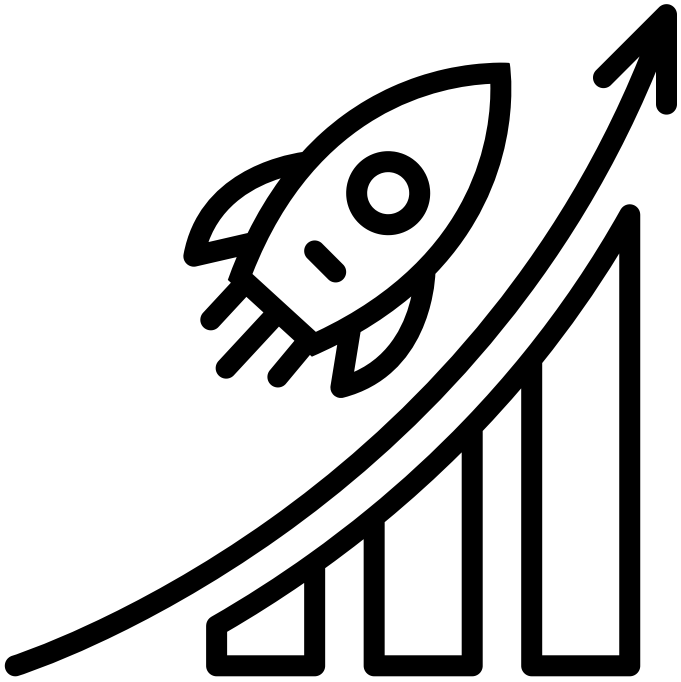
“Virtual good model” is one of the models of online business. Before exploring the model in detail, it is essential to clarify what virtual good is. A virtual good is an abstract service or product traded in a virtual environment. Virtual goods cover nonphysical things. Value of the nonphysical virtual goods are only decided by the users who are volunteer to pay it (Fernando, 2022). Sundelin (2009) defines virtual goods as “non-physical objects (i.e. rights) that are purchased and exchanged on the Internet represented by pictures, animations or three-dimensional objects inside online platforms, communities and games, controlled by rules”. In line with the nature of this model, the goods are only presented in the virtual environment. One of the best examples of this models are virtual games. Products and services related to gamification is only presented in a virtual space. Virtual goods may also cover avatars, gifts and currencies (Spacey, 2015).

Reseller model

In line with the name of the model, “Reseller of business model” includes buying the products from the seller/suppliers and selling them to the buyers. One of the best examples of this model is electronic retailers. While reselling electronic products, they have the advantage of arranging the price and promotions (Hagiu, & Wright, 2015). Amazon and Gome are among the examples of this model (Tian, Vakharia, Tan, & Xu, 2018).

Startups: Historical Background

Even though the term startup has been recently pronounced a lot, the first known use of start-up in 1845 (MerriamWebster, 2022). Venture and entrepreneurs in the recent centuries, such as General Electric company of Edison, present lots of examples of startup. In the 20th century, the term startup is related with the “Silicon Valley” which includes technological companies around Stanford University in 1970. The location of the “Silicon Valley” extended in 1980 and included Sunnyvale and Mountain View. The real increase in the number of startups occurred with the companies like Amazon and Netscape in the 1990s. Technological advances and widespread use of the internet has accelerated the occurrence of startups (Magalhães, 2019). Following the Millenia, 21st Century, companies such as Air Bnb, Facebook, Tasla and Dropbox which are global now, established. The companies provided business opportunities and influenced business sector (Minnalearn, 2022). In addition to that Global Pandemic, Covid 19, which caused lockdowns, decrease in human mobility and interaction resulted in the use of more digital tools and products. This contributed to the acceleration of startup formation. The most obvious example of this is that platforms such as Zoom, which provide virtual interaction, have become more attractive recently. It also influenced the costumers in a positive way. The increase in possibilities and opportunities has also increased competition and offered price and access advantages to customers.



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CHAPTER 05

Startup **Establishment** and Finance

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Chapter 5: Startup Establishment and Finance

Customer discovery, customer validation , customer creation

The origin of the Customer development and the Lean startup movement

In the process to realise a start up project, a first analysis structure usually takes into account key factors like: resources, partners, value of the product/service on the market (advantages and disadvantages), customers target, costs and revenue, distribution channel etc.

However, it is necessary to go deeper in understanding customers, to outline needs and problems of the customers, because they are responsible for a product/service success.

The **Customer development model** suggests to consider the customer at the centre of a startup development process, instead of focusing only on the "traditional" product development. The methodology is designed in a few steps. Every phase is made up of several customer – related activities to reach some objectives. For example the first phase is dedicated to understanding the customers and it should focus on verifying whether the product/service proposed might represent a solution for the customers, and the start up should be able to give solutions (product/services) more and more in line with needs and problems of the customers.

Moreover, a phase of customer validation it's critical to develop a replicable sales model collecting the necessary feedback, in order to build a "Minimum viable product"(a very early prototype of a product) that will change and improve, step by step, in a process of **"Agile engineering"**, to meet the needs of customers.

To do this, every step can be, and usually is, iterated. All the activities are executed in a "discovery and learning" process, that is replicated with adjustment in every phase until the success of the activities allows the start up team to achieve the following step.

Steve Blank was the creator of this methodology, about 30 years ago, but even today the system has proved to be very effective, especially for the development of startups, and it is considered one of the fundamentals of the so-called **"Lean startup movement"**.

The main idea is that a start up can't behave as a "small company", because it doesn't have its business strategy, it has to find its repeatable and scalable business model.

From the beginning of the project the startup team needs to understand that constant changes are the engine in the development process, following the so-called **"Build – Measure – Learn"** feedback loop, to decide where it is necessary to make a change in the assumptions of the starting path, or whether to continue the same way. This modification is called "pivot" and it can happen more than once in the process to improve the product/service based on the customer feedback.

The best solutions for a startup should come from combining Customer development methodology with the Agile methodology, that promotes a continuous interaction between development and testing. Testing should be carried on during the whole product/service creation phase.

This combination represents one of the main principles of the customer development provided by Blank as guidelines for startup entrepreneurs. From the **Customer Development Manifesto**:

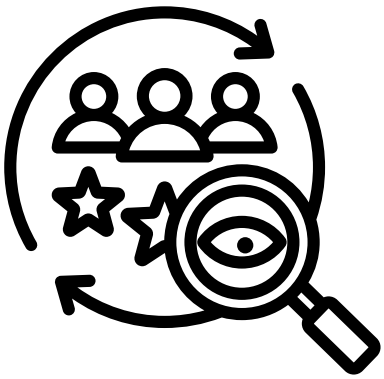
1. There are no facts inside your building, do get outside
2. Pair Customer Development with Agile Development
3. Failure is an integral part of the search
4. Make continuous iterations and pivots
5. No business plan survives first contact with customers so use a business model canvas
6. Design experiments and test to validate your hypothesis
7. Agree on market type. It changes everything
8. Startup metrics differ from those in existing companies
9. Fast decision-making, cycle time, speed and tempo
10. It's all about passion
11. Startup job titles are very different from a large company's
12. Preserve all cash until needed. Then spend.
13. Communicate and share learning
14. Customer Development success begins with buy-in

Customer discovery, customer validation and customer creation are the first crucial steps of the Customer development methodology and they are the ones to be conducted from the initial informal start up team.

Customer discovery

The first and the most important phase of the Customer development is the Customer discovery.

It is a process to develop hypotheses about the potential customers of a proposed product/service, by identifying which is the problem the product/service can solve, and who are the people that need to solve this problem to meet a specific need.



A list of **potential customers** that could become the early-adopters to test the product/service is needed, it is a phase to collect information in order to **make hypotheses** about the customers. These people can be listed from the entrepreneur's network or from different sources. For example, they can be found after a preliminary definition of a so-called **"Buyer persona"**. It is a profile of the ideal customer, built up by collecting data and interviews. The Buyer persona should be defined starting from what is known about who could be the users, thinking about the product/service, and then going deeper to collect data about them in terms of tastes, habits, age, level of education, job, interests, expectation, which are their favourite online channels etc. This could be done with research, surveys, interviews, but there are also some online tools available to do it.

Then the entrepreneur needs **feedback about his hypothesis of customer problem**, so it's necessary to propose a **presentation** of the idea realised on the hypothesis to those identified potential clients, and collect as much feedback as possible. It can be done through interviews and people should know that the aim is not to persuade them, but understanding the problem they need to solve and how important it is to them. Starting with open-handed questions, it is also possible to go deeper to talk about their everyday life and habits and with some more specific questions, such as: what could be other similar products they use, what is the budget they spend for them, what they think is lacking in the proposed solution, what makes it difficult to find a new solution, and so on.

From this feedback the entrepreneur can outline a **more specific problem for a more specific target market** and combining this information with a research on potential competitors he can learn a lot to eventually modify his hypothesis.

While taking in consideration the feedback, he could understand that his idea is too far from the customers needs and **decide not to proceed** with the development of his project, otherwise the entrepreneur with the start up team can provide a new product hypothesis with specific modifications based on their analysis. Subsequently a **new presentation** to have new feedback from their network, to verify and , eventually, repeat.

Customer discovery can bring an idea closer to reality. It can define the market and it should be executed by the entrepreneurs themselves, not in outsourcing, as suggested by Steve Blank, because they are able to change the strategy if needed, so they are the ones who have to listen to the feedback of customers first, to write a business and product plan.

Customer validation

This is the second phase of the Customer development process and should provide the **evaluation of the solution proposed** for the customers problem to satisfy their need, that has been defined in the first phase.

Here the startup team should **prepare to sell the product and write a business model**, activating the customers and producing a viable product.

A viable product is an early prototype, **the Minimum Viable Product (MVP)**, which undergoes early- adopters' assessment.

This is a test with real users to made with the previous research, and can give many more accurate and specific information about the target market, the product itself and the customer problem.

After the early- adopter have known the MVP, the **analysis** can start with surveys and interviews, but this time the questions should be more oriented on the experience of people with the product and their expectations, to understand how it works, and questions about the characteristics of the product, their favourite aspects and what they don't like, what is missing, whether they shared it with someone else, etc.

All the information and insights coming from a wide customer validation process are the elements needed to take decisions about the product and to iterate it. If it doesn't work, better to go backward to the beginning of the phase and make changes.

During this phase, the product **positioning** starts to be developed as well. An analysis of the perception about the start-up and the product on the market, to find a definition of what are the product differentiations, or special innovations, to which type of market they match, and to let the customers have a specific idea about them.

Customer creation

In this phase the start-up proceeds, after first sales' success, with adjustments to improve the product/ service to keep customers' fidelity and get more customers to try the product, and verify whether it is sustainable. The aim of this phase is to **create an end-user demand**. During this process the start-up could become a scalable company.

Through several steps, the first objectives, the **market type** (existing market, or new market makes the difference) and the position of the product should be well studied and defined.
Later it's possible to prepare a strategy for the **launch** of the product/service and execute it.

Only after the market type has been accurately verified and the launch done, it comes the time to finally **create the demand**, to attract more buyers by developing a good demand creation strategy and measurements.

As in every other phase, it's necessary to verify if the next step is achieved, or it's better to go backward to the beginning of the phase and iterate. Sometimes the whole process can come to en **Exit** with the **sale of the investors' shares** to a larger company.

The last phase of the Customer development process is called Company building, and it comes when the startup built around the "learning and discovery" system turns into a more formal organisation with specific departments, dedicated to different missions, that can face its new challenges in the marketplace.

Feasibility considerations

Startup and innovative projects are not free of risk and the probability of failure is high. So, how to understand if a good idea for a new product or service has the chance to survive?

The entrepreneur who is willing to start a new venture needs first to undertake research and studies to analyse the viability of his project, to decide whether spending time, resources and money to proceed with it.

The first step for an idea owner to understand whether to implement a venture project that can have the possibility of continuity, is the feasibility study. It consists in a detailed and comprehensive examination of all the critical aspects of a project, in order to determine the likelihood of its success.

During a feasibility analysis, a proposed plan or project is evaluated in terms of practicality. The feasibility analysis is used to determine the possibility to realise an idea, such as whether the project is economically justifiable, organizationally and logistically manageable, or whether it is legally and technically feasible.

An investment plan is necessary to the start of any business. Feasibility studies are one of the most common methods to provide the information needed to make a business plan, and understand if a project is worth the investment. The project success can be then defined in terms of Return On Investment (ROI).

Advantages of a feasibility study

Despite calculations and good reasons to justify the proceeding of the project, the feasibility studies cannot eliminate the risk completely. However, the identification of risk factors before the start of the project implementation, such as what are the difficulties the project could face, who are the competitors on the market, what is the fund needed to begin, gives the idea owners the opportunity to be aware of the adventure they are facing and to make accurate decisions.

Other important benefits of conducting a feasibility analysis are, for example:

identifying opportunities for the business , for example by collecting information about existing successful business models;
finding aspects that differentiate the proposed product or service from competitors;
understanding which are the challenges of the project and which are the success factors, by evaluating different parameters;
identifying good reason to go on with the project;
taking strategic decisions;
focusing on the entire process related to the project;
using the final assessment to persuade potencial investors.

The main components of a feasibility analysis

A feasibility study usually starts with a detailed description of the proposed product or service and the customer target it will be offered.

Then a more in- depth analysis is needed that involves different crucial factors to understand how and where the new venture will work: which are the possible obstacles and the possible competitors, and whether it is sustainable. The analysis is developed through research and assessment of the market for the concept proposed, interviews to appropriate stakeholders, estimations of the financial aspects, evaluations of the available resources and the management team .

Different components of the feasibility analysis have to be studied to complete the evaluation of all the crucial factors.

Market Feasibility Analysis. This study should determine the market of the product/service purposes, to understand whether the product fits it and to define the target market. It involves:

evaluating the demands of the market, its size and grow prospects, its saturation;
defining the location and the reachability of the potentially interested customers/users.

Market can be segmented not only by geography, but, for example, also by customer different characteristics. By studying market surveys or directly interviewing groups of potential customers, it is possible to outline a profile of the ideal customer /user.

A market feasibility analysis also involves research about competitors, and it could be conducted exploring their business models, especially of those companies with similar products/services that have had a good performance on the market for five years or more.

This part of the study helps the entrepreneur to understand how to differentiate his product/service from other offers, finding its position in the market and what the correct pricing could be. Moreover this study completes a basis for the planning of an effective market strategy.

Financial Feasibility Analysis. This is a very important step in planning a business. Starting from the evaluation of the funds needed at the beginning, it leads to the evaluation of the economic potential return of the investment and, for example, it helps the entrepreneur to understand, through the correct calculations, when the business comes to a break even (the exact point where revenue covers costs) and starts to give adequate incomes.

In a financial feasibility analysis factors like revenue and expenses are studied, in more than one given period of time, to produce a projection of a financial structure of the venture, and try to find a balance between profit and risk. Moreover, collecting information about fixed costs (costs that do not vary based on the amount of sales) and variable ones, the entrepreneur can calculate the breakeven point.

Organisational feasibility. It is about understanding whether the non–financial resources are sufficient. It consist in:

a) evaluating the competences of the management team, for example using a self-assessment model, in terms of area of interest, passion for the business idea, educational background, professional experience;
b) evaluating other non-financial resources to bring the product or service to the market, such as office space, collaboration of high-quality employees, eventually needed licenses, connections, etc.

Conclusions

Market feasibility, financial feasibility and organisational feasibility are the most important and first considerations before starting a new venture. The suggestions listed here are tools that can answer questions about the sustainability of a start up in terms of market position, competitors, risk, revenue, potential profit and growth. An introduction to understand what are the advantages of having a planning structure and where to start.

However, other components of a wider feasibility analysis contribute to help the entrepreneur on his path, such as:

- technical feasibility (assessment of the technical resources available ,
- schedule feasibility (timing to complete the project),
- legal feasibility and analysis of risk management issues (Licenses, permits, insurance, certifications needed).

While developing all the steps, the entrepreneur , most of the times with the help of a consultant or with tools available online, should be able to outline the structure of the project and to highlight its strengths and potential problems. Subsequently, they can intervene with correct action and needed corrections, and prepare for another phase of their project, which is trying to persuade financiers and banks to invest money into their new venture.

DEVELOPING THE BUSINESS AND MARKETING PLAN

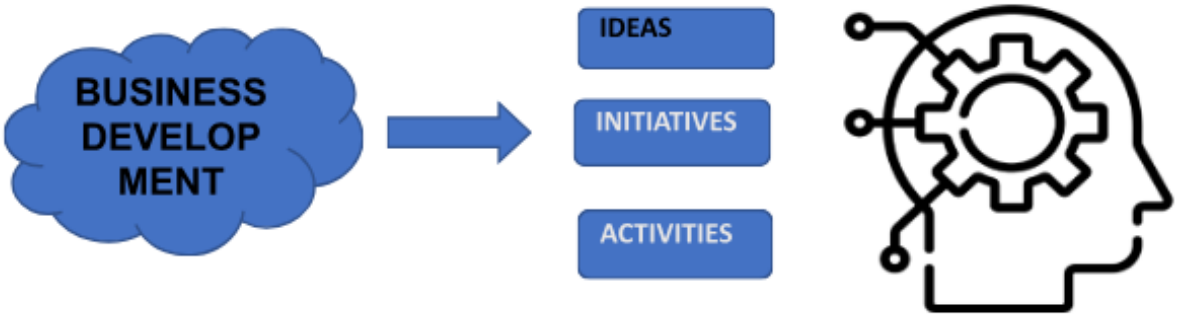
Introduction:

Today, innovation performance is a crucial determinant of competitiveness and national progress. Moreover, innovation is important to help address global challenges, such as climate change and sustainable development. But despite the importance of innovation, many OECD countries face difficulties in strengthening performance in this area. Indeed, many OECD countries have seen little improvement in productivity performance in recent years despite the new opportunities offered by globalisation and new technologies, especially the information and communication technologies.

The rise of platform economies has led to new perspectives on business. In particular, the introduction of startups as a new business concept has radically altered established understandings of the business world. A platform economy refers to an economic system where digital platforms facilitate transactions and interactions between producers and consumers of goods and services. Platform economies are characterized by the use of digital technologies to connect individuals, businesses, and organizations in a networked environment. Startups are part of the new business approach emerging in platform economies. Startups can take various forms, such as online marketplaces, social media networks, sharing economy platforms, and crowdsourcing platforms. These platforms provide a range of services, including e-commerce, advertising, data analytics, and logistics.

Business Development

In a basic way, business development can be describe as the ideas, initiatives, and activities that that help make a business better. This includes increasing revenues, growth in terms of business expansion, increasing profitability by building strategic partnerships, and making strategic business decisions. According to Forbes, business development is “the creation of long-term value for an organization from customers, markets, and relationships.” That’s a simplistic definition, and it still faces the hurdle of capturing the enourmous range of responsibilities that BD (Business Development) entails.



Generally, business development refers to the processes and strategies that organizations use to create and capture value. It involves identifying new opportunities, building relationships with potential customers and partners, and developing and executing plans to achieve growth and profitability. Business development can encompass a wide range of activities, including market research, product development, sales and marketing, strategic planning, and mergers and acquisitions. The ultimate goal of business development is to create sustainable and profitable growth for the organization. The definition of business development typically depends on the type and strategy of the company.

Business development is associated with the companies expansion. It entails enhancing collaborations, capturing the market, and ultimately establishing good relationships with clients. Business development is a long-term strategy for establishing a company and achieving its objectives.

Effective business development requires a deep understanding of the market, customer needs, and competitive landscape. It also requires strong leadership, collaboration, and communication skills to build relationships and align teams around a shared vision and strategy. A good business development process consists of certain components. These components are shown below:

Project: Business planning is the process of developing and documenting a plan intended to foster firm growth. One of the most important components of the business development process is project design. Without project design, startups can't set a direction in line with modern marketing strategies.

Investment: Investment for startups can be crucial to their success and growth. Obtaining investment for a startup can be challenging, and it's essential to be persistent and patient throughout the process. Be prepared to answer tough questions and demonstrate a deep understanding of the business and industry.

Research: Investing in startups requires a combination of research, analysis, and intuition. By considering these key factors and conducting due diligence, you can increase your chances of identifying promising startup investment opportunities. Here are some key steps to keep in mind:

- Identifying the investment goals and risk tolerance,
- Evaluating the management team,
- Looking at the product or service,
- Assessing the financials,
- Considering the investment terms,
- Conducting due diligence.

Strategy: Strategy refers to a plan of action designed to achieve a particular goal or objective. It is a systematic and structured approach that involves analyzing the current situation, setting goals, identifying the resources required, and determining the steps needed to achieve the desired outcome.

<u>Some tips for a good strategy:</u>

- Defining vision and mission,
- Identifying target market,
- Creating a detailed plan for the products and services,
- Embracing innovation,
- Building a strong team,
- Focusing on customer acquisition and retention,
- Attend industry events, join startup communities.

Marketing: Marketing is the process of creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large. It involves understanding customer needs and wants, developing products or services that meet those needs, and promoting and selling them to the target audience. Marketing also includes branding, advertising, public relations, market research, and other activities that help a company to build and maintain relationships with its customers and stakeholders. The goal of marketing is to build strong relationships with customers and create a loyal customer base that will continue to buy from the company and recommend it to others. Effective marketing can help a company to increase sales, improve its reputation, and achieve long-term success.

Innovation: Innovation and startups are closely related concepts, as startups are often formed with the goal of bringing innovative new products or services to market. Innovation refers to the process of developing new ideas, products, or services that provide value to customers or society. Startups are new businesses that are typically characterized by high levels of innovation, risk-taking, and agility.

Successful startups often rely on innovative ideas, business models, and technologies to disrupt existing industries and create new markets. They are often founded by entrepreneurs who are willing to take risks and pursue bold new ideas, and who are able to attract funding and build teams of talented individuals to help them bring their ideas to life.

Plan: A plan is a detailed proposal for achieving a specific goal or objective. It typically includes a sequence of steps or actions to be taken, along with timelines, resources, and other necessary details to ensure successful completion of the goal. Plans can be created for a wide range of purposes, from personal goals like losing weight or learning a new skill, to professional goals like launching a new product or expanding a business. They can also be short-term or long-term, depending on the scope of the goal and the timeline for achieving it. Having a plan is important because it provides a roadmap for achieving your goals and helps to ensure that you stay focused and organized throughout the process. It also enables you to track your progress and make adjustments as needed to ensure that you are on track to achieve your desired outcome.

IManagement: Management is the process of planning, organizing, directing, and controlling resources (human, financial, material, etc.) to achieve specific goals and objectives in an efficient and effective manner. It involves making decisions, delegating tasks, and coordinating the efforts of individuals and teams to achieve the desired outcomes. Management is essential in both business and non-business organizations, including government agencies, non-profit organizations, and educational institutions. Successful management requires a variety of skills, including communication, leadership, decision-making, problem-solving, and strategic thinking.

Marketing Plan:

A marketing plan is a comprehensive document that outlines a company's overall marketing strategy, goals, and tactics for promoting its products or services to a target audience. It serves as a roadmap that helps businesses to identify their target audience, understand their needs and behaviors, and create effective marketing campaigns to reach and engage with them.

A typical marketing plan includes an analysis of the market and competition, a description of the target audience, a positioning statement, an overview of the company's strengths, weaknesses, opportunities, and threats (SWOT analysis), a detailed plan for the marketing mix (product, price, place, and promotion), and a set of metrics and key performance indicators (KPIs) to measure the success of the plan.

A well-designed marketing plan helps businesses to allocate their resources effectively, optimize their marketing efforts, and achieve their business objectives. It is an essential tool for any company looking to grow its customer base, increase sales, and improve its brand image.

A marketing plan for startups typically includes the following elements:

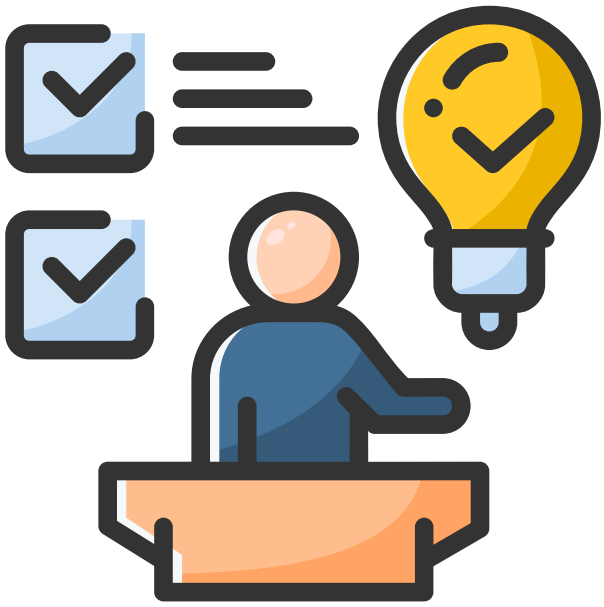
- Define your target audience: Identify the people who are most likely to use your product or service, and tailor your marketing efforts to their needs and preferences.
- Establish your unique value proposition: Determine what sets your startup apart from the competition and why potential customers should choose your product or service over others.
- Set marketing goals and objectives: Decide on specific and measurable goals that you want to achieve with your marketing efforts, such as increasing brand awareness, generating leads, or driving sales.
- Develop your brand identity: Create a distinct and recognizable brand identity that conveys your startup's values, personality, and messaging.
- Create a content strategy: Develop a content strategy that provides value to your target audience and aligns with your marketing goals, such as blog posts, social media content, videos, and infographics.
- Choose marketing channels: Select the marketing channels that are most likely to reach your target audience and align with your marketing goals, such as email marketing, social media advertising, search engine optimization, and influencer marketing.
- Set a marketing budget: Determine how much you can afford to spend on marketing, and allocate your resources accordingly to maximize your return on investment.

Measure and optimize your results: Continuously track your marketing efforts and measure your results against your goals, and adjust your strategy as needed to improve your performance.

Conclusion:

This project, carried out within the scope of E-VET, presents the problems faced by startups in their business development processes and the information and recommendations needed to solve these problems. It also focuses on the contribution of vocational education to the promotion of a sustainable business approach. Business development is about understanding your customers' needs and providing them with the right solution. It involves proactively asking for their opinion and implementing changes that will make them happy to choose your product. For this reason, business development and business planning helps startups survive in a challenging market environment.

To sum up, under the background of "mass startups and innovation", relying on the school-enterprise cooperation platform to carry out the cultivation of startups and innovationtalents is conducive to promoting the employment and entrepreneurship of students in vocational school, and deepening the production and education of vocational school. Integrate and meet the needs of social enterprises for talent. Vocational schoolshould strengthen their emphasis on vocational education, change their concepts, and actively integrate innovation into the whole process of talent training. , and truly realize the benefits of schools, governments, enterprises, society and students.



What is startup funding?

Start-up financing is the general name for the different ways in which a new business can raise the capital it needs to get started. These sources of finance provide the financial resources needed for a start-up business to run its operations, develop new products, finance marketing activities, launch a product under development and grow the business.

Series investment in startups is usually a three-stage process and includes the following steps:

Seed Stage: At this stage, the entrepreneur or startup team is still in the process of developing their product or service. At this stage, investors usually provide the funds needed to realize the idea and work on the business plan. Investors usually invest at this stage through equity or equity investments.

Early Stage: In this stage, the entrepreneur or venture team is preparing to launch the product or service. At this stage, investors provide funding to develop the product or service, develop marketing strategies and expand the customer base. At this stage, investors may choose investment types such as equity or equity investments, venture capital or mezzanine financing.

Growth Stage: At this stage, the entrepreneur or venture team has established itself in the market and is raising the financing needed to grow. At this stage, investors typically provide financing to help the venture grow, either through equity investments, venture capital, mezzanine financing, debt or IPOs.

These stages can be different for each venture and vary depending on factors such as the size of the investment, the type of investment and the return on investment.

Start-up financing can vary depending on the size and stage of the business. Financing from the equity of the business founders is one of the most cost-effective ways to meet working capital needs. However, this method provides a limited source of finance and may limit the growth of the business. Following seed capital, businesses often move on to a "series" round of investment.

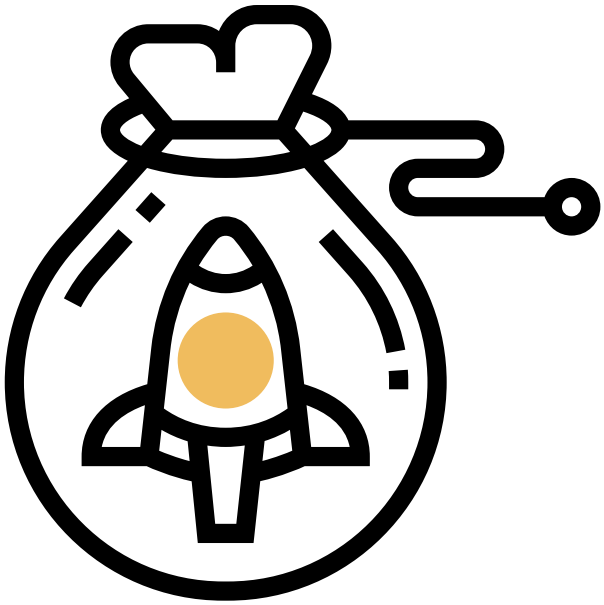
***Series A*:** investment round is a stage where the business implements its business plan and generates profits. This round provides the capital needed to accelerate business growth, enter new markets and acquire more customers. This round is usually provided by venture capital firms.

Series B: investment round is used to further increase the growth rate of the business. This round provides the capital needed for the company to expand its product range, enter new markets or increase the scale of the business. A Series B investment round is usually provided by Series A investors, private equity firms or institutional investors.

Series C: investment round is used to help the business grow rapidly and provide investors with greater returns. This round is used to finance large investments for the company to expand worldwide, make large-scale acquisitions or increase its competitive advantage. A Series C investment round can be provided by private equity firms, large institutional investors and hedge funds.

Public-held is when shares are traded on a general stock exchange and sold openly to investors. This allows the business to grow on a large scale and raise financial resources. However, going public requires a large legal, financial and regulatory process.

While this is a summary of typical start-up financing rounds, each business may have different financing needs and funding sources may vary. Some businesses may resort to alternative sources of financing, such as crowdfunding or borrowing before taking venture capital investment.



Which Funding is Available for Startups?

There are several ways to get funding for a startup or new business. Here are some common methods:

Bootstrapping: This means using personal savings or revenue from the business to finance the startup. It is a low-risk approach, but it may limit the amount of capital available for growth.

Friends and Family: This is a common option for entrepreneurs who have a personal network that is willing to invest in their business. However, it is important to have a clear agreement and communicate any risks involved.

Crowdfunding: This is a method used to finance a project, a product or an idea by raising small amounts from many people. Unlike traditional financing methods, this method provides financing through a platform that is open to a wide audience.

Crowdfunding has become popular in recent years thanks to the widespread use of the internet. Through internet-based platforms, entrepreneurs and creators who want to finance their projects, products or ideas raise small amounts from potential investors, supporters or fans. This method allows those who want to invest to invest in many different projects with a small amount of investment. Crowdfunding also provides an opportunity for entrepreneurs and creators to test whether their product or idea will be accepted and whether it will be of interest to their target audience. Crowdfunding is used in many fields. For example, it can be used to finance many different projects, such as the development of a new product, art projects, music albums, movie productions, social aid campaigns and philanthropic activities.

Compared to traditional financing methods, crowdfunding requires fewer formalities. However, this method also involves certain risks. Investors may lose their investments if the projects fail. Also, crowdfunding projects may not be regulated in terms of financial regulations, which may increase the risk of fraud. Crowdfunding platforms like Kickstarter, Indiegogo, or GoFundMe allow entrepreneurs to raise oney from a large number of people who believe in their product or idea.

Angel Investors: An angel investor is an individual investor who provides capital and experience to a venture or startup company, usually a new or early-stage startup. Angel investors invest in entrepreneurs because they believe in their ideas and business models.

Angel investors are usually high net worth individuals who, along with their investments, also bring their business experience and knowledge to entrepreneurs. Therefore, angel investors provide more than just a source of financing for entrepreneurs.

Angel investors assess the potential of entrepreneurs' business ideas and invest in ventures that they believe will succeed. These investments are often used in combination with funds from other sources, such as family, friends and business partners, as well as equity.

Angel investors can invest in companies operating in many sectors. These include sectors such as technology, healthcare, software, marketing and e-commerce. Angel investors also offer ideas and suggestions on the business model, business plan, revenue model and marketing strategies of the startups they invest in.

Angel investors' investments are usually used to develop a business plan, product or service that entrepreneurs present to larger investors or venture capital firms in order to make it successful in the market. These investments provide the entrepreneur with financial resources, as well as opportunities to develop the business plan and grow the business.

You can use different ways and resources to reach angel investors. These may include the following:

- Attending events where angel investors are present: Angel investors are often present at entrepreneur events, investment conferences, business accelerator programs, startup fairs and similar events. You can attend such events to meet angel investors and pitch your business or idea.

- Applying to angel investor groups: Angel investors usually invest in groups. By applying to these groups, you can present your business or idea and get investment.

- Online investment platforms: There are online investment platforms where angel investors post their ads or startups looking for investment post their ads. Through these platforms you can reach angel investors and pitch your business or idea. For example, AngelList, Gust and Seedrs bring angel investors and entrepreneurs together.

- Joining investment networks: Angel investors can learn about investment opportunities by joining investment networks. Therefore, by connecting with investment network members, you can present your business or idea and get investment.

- Social media: Social media platforms are another way to connect with angel investors looking for investment for your business. LinkedIn, Twitter, Facebook and similar platforms can help you connect with angel investors looking for investment for your business.

Venture Capital: Venture Capital (VC) is a type of investment that provides financing to startups with high growth potential, usually through early-stage investment. This type of investment supports startups with innovative business ideas and growth potential in their growth and development processes.

VC firms are usually organized as private investment funds and invest in startups by examining their business plans, financial statements and strategies in detail. VC firms may have a say in the management of the startups and aim to achieve returns on investment such as dividends or equity.

Receiving VC investment not only provides startups with financial resources, but also offers them business experience, sector knowledge and industry connections. Therefore, VC investment not only provides startups with funding, but also helps them to grow their business and market it successfully.

VC investments are generally considered high-risk investments and investors assume the risk that they may lose part of their investment. However, in the event of great success, VC investors often realize high returns.

Work with Venture Capital firms: Venture Capital firms typically invest in startups with high growth potential. These investments can usually be in the form of stock purchases or partnerships. However, some Venture Capital firms may also provide financing in the form of loans. You can get in touch with suitable Venture Capital firms by checking their websites and learning about their investment criteria. In Europe, Venture Capital firms are quite common and invest in many startups.

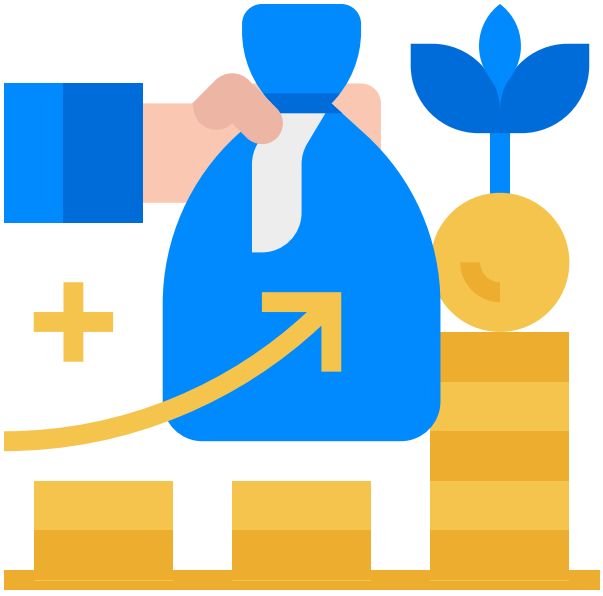
- **Accel Partners:** Based in the UK and the US, Accel Partners invests in technology startups. The company has invested in companies such as Facebook, Dropbox, Etsy, Slack and Squarespace.

- **Balderton Capital:** London-based Balderton Capital invests in tech startups in Europe and the US. The company has invested in companies such as Citymapper, GoCardless, Revolut and The Hut Group.

- **Creandum:** Sweden-based Creandum invests in technology, mobile and internet startups. The company has invested in companies such as Spotify, iZettle, Kahoot and Tink.

- **Index Ventures:** Switzerland-based Index Ventures invests in startups in technology, healthcare, fintech, consumer and other sectors. The company has invested in companies such as BlaBlaCar, Deliveroo, Farfetch, King and TransferWise.

- **HV Holtzbrinck Ventures:** Germany-based HV Holtzbrinck Ventures invests in startups in technology, healthcare, e-commerce and media. The company has invested in companies such as HelloFresh, SumUp, Scalable Capital and Zalando.



Small Business Administration (SBA) Loans: The SBA provides loans to small businesses that may not qualify for traditional bank loans. These loans typically have lower interest rates and longer repayment terms.

The best option depends on the stage of the business, the industry, and the goals of the entrepreneur. It is important to research and carefully consider the options available before choosing a funding source.

In the beginning of business, every startup needs a sufficient financing to start. You have certainly tried the basic model of initial financing, which is the 3F model. However, funding from friends, family and fools is often not enough, and other means of funding need to be looked at.

Credit facilities for startups may differ from credit facilities for other businesses. Because startups are often new ventures, they may not have some of the criteria that traditional lenders look for in order to lend. However, some lenders offer programs and services specifically to provide loans to startups.

Some steps to access credit facilities for startups:

Apply for government-backed loan programs: Some countries offer government-backed loan programs to support startups. Through these programs, eligible startups can receive low-interest loans. To apply for these programs, you may need to contact your country's ministry of economy or development. Government-backed loan programs for startups in Europe vary between different countries and regions. But here are some examples:

1. European Investment Fund (EIF): The European Investment Fund is an investment instrument created by the European Commission and the European Investment Bank. The EIF provides financing for SMEs, especially technology-based and innovative enterprises. The EIF offers SMEs different financing options such as loan guarantees and venture capital.
2. European Enterprise Network (EEN): The European Enterprise Network is a service of the European Union for businesses. EEN provides support to SMEs in Europe in innovation, international cooperation and financing. EEN offers various services to facilitate SMEs' access to government-backed credit programs.
3. KOSGEB: As a support organization for SMEs in Türkiye, KOSGEB offers government-backed loan programs to encourage the establishment of new businesses and the growth of existing businesses. KOSGEB offers SMEs different financing options such as interest-free loans, grants, technology development support and training programs.
4. Italian National Innovation Fund (FNI): One of the government-backed loan programs for startups operating in Italy is the Italian National Innovation Fund. FNI provides financing for innovative and technology-based businesses. FNI offers different financing options such as grants, loans and equity investments.
5. Horizon Europe: Horizon Europe is the European Union's program for research and innovation. It provides funding to support European businesses to innovate and grow. Horizon Europe offers grants and loans to SMEs to finance their innovative projects.
6. Explore alternative sources of financing: Apart from traditional banks, alternative sources of financing can also provide loans for startups. For example, peer-to-peer lending platforms or online lenders can offer loans for startups. By researching these alternative financing sources, you can find suitable loan options for your startup.
7. Apply for business credit cards: Some banks provide financing to startups through business credit cards. These credit cards can offer benefits such as cash advances, low-interest loan options and payment flexibility.

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What are the European Commission funds for startups?

The European Commission provides a number of funds to support the development of start-ups within the European Union (EU). These funds aim to encourage the competitiveness and growth of start-ups in EU countries. These include:

1. Horizon Europe: The European Union's largest research and innovation program for 2021-2027, Horizon Europe is designed to support technological innovation, finance innovative businesses, stimulate innovation and make the European Union more competitive.
2. COSME: The European Union offers a range of financial instruments designed for Small and Medium-sized Enterprises (SMEs). It has developed the COSME program to increase SMEs' access to finance, facilitate their access to European markets and support their exports.
3. European Innovation Council (EIC): The EU has launched a program called the European Innovation Council (EIC) to promote innovation and support creative ideas. This program aims to finance and support businesses and entrepreneurs with creative ideas.
4. European Investment Fund (EIF): The European Investment Fund (EIF) is a European Union institution that provides financial instruments to increase access to finance for SMEs. In particular, the EIF provides venture capital, venture capital and mezzanine financing for new businesses and entrepreneurs.
5. European Regional Development Fund (ERDF): The ERDF is a fund of the European Union designed to implement regional policies and support economic development. It provides financial support for regional development projects in EU countries and encourages businesses to play an important role in regional development.

These funds offer many opportunities to meet the financing needs of start-ups in the European Union. However, each fund has its own specific conditions and requirements, so it is important to carefully vet start-ups and select the appropriate funds.

Startup Funding Rounds

The European Commission provides many different programs and funds for startups, and startup amounts can vary between these programs. Some programs can provide smaller amounts of startup support, while others can provide millions of euros.

For example, the EIC Accelerator Program offered by the European Innovation Council (EIC) is designed to support large-scale and high-risk innovative projects. This program includes many different types of support and offers different types of funding, such as grants, investments and mentoring.EIC The Accelerator Program provides higher amounts of start-up support than many other existing programs, with total funding for 2021 amounting to €1.5 billion.

On the other hand, the European Commission's COSME program also provides financing to small and medium-sized enterprises and includes different types of financing such as microloans, business loans and guarantees. The COSME program provides lower amounts of financing as start-up amounts, but together with the different supports of the program, it can be beneficial for businesses to grow and develop.

Therefore, the initial amounts of the European Commission's support for startups vary across programs and projects. More detailed information and starting amounts can be found on the relevant pages of the websites of the programs to which applications are to be submitted.

If you would like to learn more about the European Commission's support for startups, the following links may help you:

- European Innovation Council (EIC): https://eic.ec.europa.eu/
- COSME: https://ec.europa.eu/growth/smes/cosme_en
- Horizon Europe: https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme_en
- European Investment Fund: https://www.eif.org/home/index.htm
- European Bank for Reconstruction and Development: https://www.ebrd.com/
- European Investment Bank: https://www.eib.org/

These websites provide more detailed information about the European Commission's support for startups and include more detailed information about applications and programs. There is also information in the "Contact" or "Support" section on each website, where you can get in touch with a team to help you.

What Do Investors Consider When Investing in Startups?

Investors pay attention to many factors when investing in startups. Some of the key factors for the success of the business are:

- Management team: Investors pay attention to the experience, expertise and leadership skills of the business's management team. A good management team is critical to the growth of the business and investors often evaluate the cohesion and capabilities of the team.

- Market potential: Investors consider the size and growth potential of the business's target market. A sufficiently large target market is important for the business to grow and for investors' returns to increase.

- Product/Service differentiation: Differentiation of a business's product or service from other similar products or services can provide a competitive advantage. Investors evaluate the uniqueness and differentiation potential of the business's product or service.

- Revenue Model: Investors evaluate the revenue model of the business. The potential of the business to generate revenue is critical for investors' return on investment.

- Growth Strategy: The growth strategy of the business may be of interest to investors. Investors evaluate the growth strategy and the resources required for growth.

- Financial Performance: Investors evaluate the financial performance and potential of the business. The revenues, profitability, cash flow and costs of the business are important factors for investors' investment decisions.

- Risks: Investors assess the potential risks of the business and how they plan to manage them. By identifying the potential risks of the business, investors can take these risks into account when making investment decisions.

When investing in a startup, investors evaluate the above factors and conduct good research to minimize risks.

How to Make it Easier for Startups to Get Funding?

Securing funding for startups can often be a challenging process. However, some tactics can make it easier for a business to get funding. Here are a few tactics to help startups get funding more easily:

- **A well-crafted business plan:** Investors are known to scrutinize startups' business plans. A well-crafted business plan can attract investors by explaining the business's ideas, goals, marketing strategies, financial plans and potential risks.Yatırım ağlarına katılma: Girişimcilik ekosistemi giderek büyüyor ve startuplar, yatırımcılara ulaşmak için birçok farklı yatırım ağına katılabilirler. Yatırım ağları, işletmelerin yatırımcılarla doğrudan iletişim kurmalarını sağlar.

- **Targeting the right investors:** Startups can use their time and energy efficiently by targeting the most suitable investors for their business. Investors may specialize in different industries, different sizes and different investment strategies. By researching investment networks and the businesses they invest in, startups can identify the most suitable investors for their business.

- **Seek the right sources of funding:** Startups can benefit from investment networks, government support, angel investors, venture capital firms and other funding sources. By choosing the most appropriate funding source for them, businesses can make it easier to receive funding.

- **Develop presentation skills:** Startups can present their business and ideas in face-to-face meetings with potential investors. A good presentation can attract investors' attention and make it easier for businesses to get funding. Startups can participate in trainings or mentoring programs to improve their presentation skills.

- **Building a good team:** Investors pay attention to the qualifications and skills of a startup's management team. A good team can boost the success of the business and attract investors

Legal Arrangements

The legal regulations that startups in Europe need to pay attention to in order to receive investment support may differ between countries. However, in general, the legal regulations that startups in Europe should pay attention to in order to receive investment support can be listed as follows:

- Establish a Company: The startup needs to be registered as a company. Company formation is carried out by different organizations in different countries. For example, Companies House in the UK, Chamber of Commerce in France, Local Court in Germany are authorized for company registration.

- Capital Structure: The startup must have an appropriate capital structure to be attractive to investors. For this, issues such as the distribution of shares, shareholders' rights, the structure of the board of directors and the supervisory board need to be determined.

- Legal Agreements: Legal agreements should be prepared to protect the startup against any scenario that it may encounter during the investment process. It is important to prepare documents such as investment agreement, stock purchase agreement, confidentiality agreement, employee agreements.

- Tax Regulations: The activities of the startup must comply with the tax laws of the country. Having information about the tax laws applicable in the country where the startup operates will enable the startup to act in accordance with the tax laws.

- Data Protection and Privacy: Customer data and personal information may be collected during the activities of the startup. Protecting and ensuring the confidentiality of this data is important for the credibility of the startup. EU data protection regulations such as GDPR must be complied with.

- Investment Support: Many countries in Europe offer different investment programs to support startups. In order to benefit from these programs, the startup must meet certain criteria. These criteria may vary by country, but generally factors such as innovation, growth potential, economic impact are taken into account.

Conclusions

The key takeaways from this chapter are as follows:

- Startups can turn to a variety of funding sources to launch or grow their business. These include angel investors, venture capital firms, crowdfunding, government-backed funds and bank loans.

- Startups need to build a strong business plan and revenue model to attract the attention of potential investors. A good team, a proven market and a scalable business model are also important.

- The European Commission provides many funds and programs to support startups in Europe. To apply for these funds, the company must be based in a member state of the European Union.

- Angel investors usually provide funding in the early stages of startups and often help the company with consulting and business development.

- Crowdfunding is when many people invest small amounts of money to finance a specific project or business. This is often used by new businesses to raise start-up capital.

- Venture Capital firms typically make larger investments and usually invest in more mature companies.

- Startups need to comply with many legal regulations in order to obtain financing. These include tax, investment treaties, intellectual property rights, copyrights, privacy and consumer protection laws.

- To establish a successful business and secure funding, it is important for startups to build a strong network and actively communicate with investors. In addition, a strong leadership team and business model are critical to the long-term success of the company.

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