fab CONNECT her

Future Female Innovators In STEAM

Your Business in STEAM

PHASE 1: IDEA DEVELOPMENT & PLANNING

Co-funded by the European Union

www.fabconnecther.eu

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WELCOME

Did you know that women currently represent just 28% of the workforce in science and engineering fields? But thankfully, entrepreneurship within these areas shows much more promising growth. Women entrepreneurs in STEAM (Science, Technology, Engineering, Arts, and Mathematics) are increasingly pioneering innovative ventures that integrate technology, science, and the arts and creating businesses that fill market gaps and also inspire more women to enter and reshape the landscape of traditionally male-dominated fields.

Entrepreneurship involves starting and growing businesses that focus on new and innovative solutions. New STEAM businesses emerge when women want to

1. **Create New Solutions**: Inventing or improving products, technologies, or services in STEAM fields. This could be anything from creating practical gadgets that overcome kitchen challenges e.g. a smart spice dispenser that measures precise quantities for a recipe or a mobility solution for a person with limited access like a compact, affordable wheelchair that easily navigates tight spaces
2. **Make a Difference**: Many women are drawn to STEAM entrepreneurship because they want to solve important problems and make a positive impact on the world, like creating renewable energy solutions or educational tools.
3. **Leverage Diverse Expertise**: The drive to start new businesses in STEAM often comes from recognizing a need that can be uniquely met by integrating diverse skills. Women in STEAM are particularly adept at blending technology, science, and the arts to develop holistic solutions that tackle complex issues.

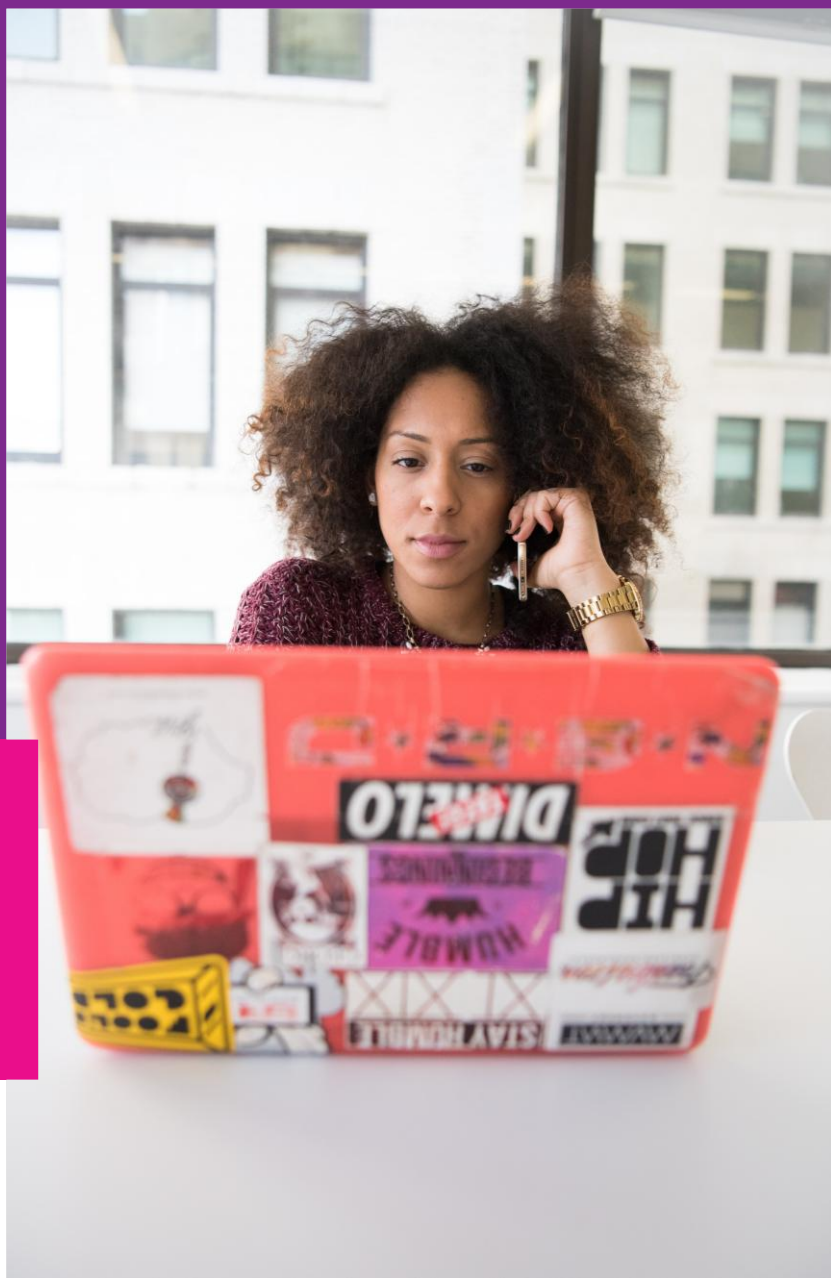
However, starting a STEAM business can be expensive because it might involve research or buying high-tech equipment. **This is where Fab Labs come into play.**

Fab Labs, or fabrication laboratories, offer access to the tools and technologies needed for creating and testing prototypes and production, which can significantly reduce the initial costs and barriers to entry for new entrepreneurs. And they offer so much more. They are creative collaborative spaces where women can connect with other entrepreneurs, share ideas, and gain training and mentorship.

UNIT 01

INTRODUCTION TO ENTREPRENEURSHIP IN STEAM

Future Female Innovators In STEAM



Duration

Each module or activity is designed to take approximately 2-4 hours to complete. However, the duration may vary depending on how deeply you choose to engage with the research, exploration, and refinement processes. This flexibility allows you to move at your own pace, revisiting our content and exercises as your concept evolves.

Materials

For this phase, you'll need **simple creative tools** such as paper, pens, sticky notes, markers, and access to digital brainstorming tools (e.g. Miro, Canva, or similar). You may also wish to use online research resources to explore user needs, trends, or sustainability themes related to your idea.
No specialist Fab Lab equipment is required at this stage — the focus is on *thinking, mapping and planning* rather than making.

FabLab Connection

While you won't yet be prototyping, the **Fab Lab mindset** already begins here. Phase 1 encourages you to think like a maker, to be curious, experimental, and open to iteration. As you shape and validate your idea, note which aspects could later be explored or tested in a Fab Lab. This preparation will help you transition smoothly into **Phase 2 – Building and Developing the Business**, where you'll start transforming your concept into something tangible.

What is Different about FabConnectHer Your Business in STEAM course?

We are inspired by the Beta Tech Mentality Model, and it is really fascinating.

WHAT IS IT?
The Beta Tech Mentality Model, developed by Katapult, is designed to cultivate a mindset that embraces technology, innovation, and adaptability, particularly within the STEAM fields. It's ideal for women entrepreneurs who are eager to navigate the rapidly evolving technological landscape while developing their ventures. This model promotes a synergistic relationship between real-world business challenges and continuous learning, ensuring that female entrepreneurs are well-prepared to lead and innovate in their industries.

In our **FabConnectHer Your Business in STEAM, Women Innovation Programme**, it will be really helpful to identify your Beta Tech persona through an introductory quiz. This persona will guide your journey through the course, tailoring your learning and activities to best fit your entrepreneurial style and objectives. You will be categorized as one of five personas: **Innovator, Social Implementer, Creative Maker, Explorer,** or **Doer**. Each persona offers a unique approach to integrating technology, creativity, and social impact into your entrepreneurial projects.

Personas Overview:

- **Innovators:** Often at the forefront of technology, Innovators are adept at leveraging new tools to create marketable solutions and drive technological advancements. They thrive on creativity and are keen on using technology to address future challenges and business opportunities.
- **Social Implementers:** Motivated by the potential of technology to create significant societal change, Social Implementers focus on ventures that have a clear social impact. They integrate technology into solutions that improve lives, aiming to see tangible benefits from their entrepreneurial efforts.
- **Creative Makers:** Creative Makers excel in turning ideas into reality, bringing a strong artistic flair to technological projects. They are motivated by the challenge of creation and problem-solving, often exploring how their innovations can meet societal needs through sustainable and impactful designs.
- **Explorers:** Curious and always learning, Explorers are valuable in industries where technology intersects with various applications. They are keen to understand and harness diverse technological applications, making them versatile and adaptive entrepreneurs.
- **Doers:** Pragmatic and hands-on, Doers excel in environments where technology is applied to practical, real-world challenges. They focus on creating products and services that are not only innovative but also functional and user-friendly.

By understanding and embracing your Beta Tech persona, you'll engage in activities that harness your strengths and interests, enhancing your capacity to navigate the entrepreneurial landscape. This personalized approach ensures that every learning experience is relevant, engaging, and directly aligned with your goals as a woman entrepreneur in STEAM.

TAKE THE QUIZ NOW.

You can also take the quiz manually – see Resource 1

Innovative and Entrepreneurial Mindset

"Innovation starts with seeing the potential in the ordinary. It's about looking at everyday problems and dreaming up simple solutions that can make a big impact."
Jane ní Dhulchaointigh, the Irish inventor of Sugru*

Innovation, particularly in the context of entrepreneurship, is about seeing the potential in everyday situations and using creativity to solve problems in novel ways. For underrepresented founders, innovation is about leveraging their unique life experiences and insights to craft solutions that meet the needs of a broader audience. Jane Ní Dhulchaointigh's journey with Sugru is a prime example of this. She transformed a simple idea—mouldable glue that could fix and improve everyday items—into a global product. This invention addressed common practical problems and promoted a culture of repair over disposal, thus contributing to sustainability.

Innovation involves creating new products or services by innovating the ways we think about and address social or cultural challenges. And an entrepreneurial mindset is actually not only about starting a business, it is a way of thinking that enables people to overcome challenges, leverage opportunities, and drive innovation. Let's look at the key mindset characteristics:

- **RESILIENCE- The ability to adapt and thrive in the face of challenges and setbacks.** For women in STEAM, resilience embodies perseverance, creativity, and the determination to innovate despite obstacles. In environments where they are often underrepresented, resilience becomes a crucial component of women's entrepreneurial journey. Resilience for women in STEAM is more than persisting through difficulties; it can involve taking on systemic barriers and stereotypes. Women in STEAM frequently encounter specific barriers, e.g. gender biases in funding. Resilience here means building networks, sharing knowledge, and creating a supportive ecosystem that empowers more women to enter and thrive in these fields.

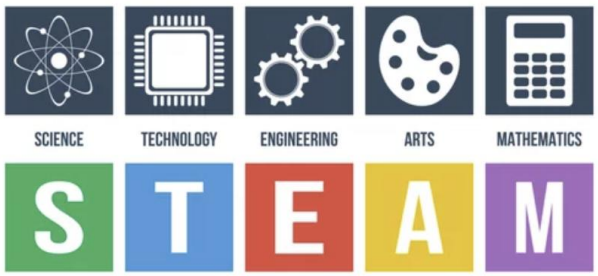
- **ADAPTABILITY- The ability to adjust to new or changing circumstances rapidly and efficiently.** The capacity to respond effectively to new challenges and evolving environments. For women in STEAM, adaptability is crucial in leveraging resources such as Fab Labs to their advantage. Fab Labs provides low-cost access to advanced tools and technologies, enabling women to experiment and iterate on their projects rapidly. This access helps them swiftly adapt their products or services to meet market demands and emerging trends, fostering a culture of innovation and responsiveness.

- **INITIATIVE: The ability to assess situations independently and take proactive steps toward solutions.** For women in STEAM, taking initiative often means leveraging spaces like Fab Labs where they can independently start and progress their projects. Fab Labs provide a supportive environment equipped with the necessary tools and resources, enabling women to initiate prototypes, conduct experiments, and develop new products without waiting for external approval or resources.

** Jane Ní Dhulchaointigh, the inventor of Sugru, made significant strides in her business despite facing challenges. Sugru, known for its mouldable glue celebrated as one of the top inventions by Time magazine, was acquired by Tesa, a German adhesives company. This acquisition came after a challenging period financially for Sugru, as they struggled to expand their reach in retail stores like Target and B&Q, which ultimately led to the sale at a loss. siliconrepublic.com*

Today, Jane focuses on supporting other entrepreneurs in the emerging field of Regenerative Entrepreneurship. She continues to impact the creative and repair industries by promoting sustainable and life-centred ways of business, drawing on her extensive experience and her roles in various organisations focused on creative and sustainable practices designcouncil.org.uk en.wikipedia.org

What does a STEAM enterprise look like?



Science-based businesses

Span a wide range of fields, incorporating both high-tech innovations and natural world applications. Some examples….

- **Biotechnology**: Companies in this sector develop products and technologies that improve lives by harnessing cellular and biomolecular processes. They work on medical innovations, agricultural enhancements, and environmental bioremediation.
- **Pharmaceuticals**: These enterprises focus on the discovery, development, and manufacturing of drugs and therapies that treat or prevent diseases. This includes traditional chemical drugs as well as newer biological treatments.
- **Environmental Science**: Firms in this field work on solutions to environmental challenges. This includes water quality management, air pollution control, and ecological conservation efforts that protect natural habitats and biodiversity.
- **Renewable Energy**: Companies that specialize in developing technologies to harness wind, solar, and other renewable energy sources. They focus on making these technologies more efficient, affordable, and accessible.
- **Agri-science**: These businesses work on improving agricultural output and sustainability. They develop new agricultural technologies, pest-resistant crops, and techniques for increasing food production.
- **Marine Sciences**: Enterprises here explore and utilize ocean resources. This includes development of new materials from marine organisms, and sustainability solutions to fishing practices.
- **Neuroscience**: Companies in this sector are involved in researching the brain and nervous system. They develop treatments for neurological disorders and technologies to enhance brain function.
- **Materials Science**: These businesses develop new materials with enhanced properties for various applications, such as stronger metals, biodegradable plastics, and nano-materials.
- **Astrophysics and Space Science**: From companies that build satellites and space probes to those engaging in the commercial spaceflight sector, these businesses push the boundaries of what's possible in space exploration.

Where are the opportunities? Innovative areas in science field where women are leading exciting ventures, pushing the boundaries of scientific inquiry and offering practical solutions to real-world problems. Women are pioneering in

- Genomics and Personalized Healthcare, developing solutions that customize treatment plans based on individual genetic information. This field is particularly promising as it combines cutting-edge science with potential widespread impacts on health outcomes.
- Neurotechnology and Brain Health: Women-led enterprises are exploring the interfaces between technology and brain science, developing products that can help in the treatment of brain diseases, mental health disorders, and enhancing cognitive function.
- Sustainable Biotechnology: In the realm of environmental science, women are pioneering bio-based solutions to create sustainable alternatives to chemical-intensive agricultural, energy, and manufacturing processes. This includes the development of biofuels, bioplastics, and biochemicals that reduce environmental footprints.
- Synthetic Biology: This innovative area involves redesigning organisms for useful purposes by engineering them to have new abilities. Women-led startups are at the forefront, creating synthetic biology solutions that range from making sustainable consumer products to developing new medical treatments.

CHECK OUT THESE INSPIRATION WOMEN IN SCIENCE CASE STUDIES
- Women in Science: The Female Entrepreneurs Paving the Way

Technology-based businesses

Each leveraging advancements in technology to innovate and solve problems. Some examples….

- **Software Development:** Companies that create, maintain, and publish software applications or frameworks. This includes everything from operating systems and desktop applications to web and mobile applications.
- **Hardware Manufacturing:** Businesses involved in the design, development, and production of physical tech products, such as computers, consumer electronics, and mobile devices.
- **Cloud Computing:** Companies that provide on-demand computing services and infrastructure over the internet, offering everything from applications to data storage and processing power.
- **Artificial Intelligence (AI) and Machine Learning:** Enterprises that develop technologies which allow machines to learn from data and perform tasks traditionally requiring human intelligence. This includes AI for healthcare, finance, customer service, and more.
- **Internet of Things (IoT):** Businesses that develop connected devices that can communicate and interact over the internet and can be remotely monitored and controlled.
- **Cybersecurity:** Companies that provide products and services to protect systems, networks, and data from cyber-attacks. This includes threat detection and response, antivirus software, and firewall technologies.
- **Blockchain:** Firms focused on developing blockchain technology, which underpins cryptocurrencies and has applications in various industries such as finance, supply chain, and healthcare.
- **E-commerce:** Businesses that sell products or services online. This sector includes both retail giants and niche markets, as well as platforms that facilitate the buying and selling of goods and services.
- **Data Analytics and Big Data:** Companies that focus on the analysis of large data sets to uncover hidden patterns, correlations, and insights, often using sophisticated software tools and algorithms.
- **Fintech:** Technology firms that aim to improve and automate the delivery and use of financial services. This includes everything from mobile banking and peer-to-peer payment platforms to cryptocurrency and investment apps.
- **Health Tech:** Companies that use technology to improve healthcare delivery by developing medical devices, health apps, telehealth services, and more.
- **Educational Technology (EdTech):** Businesses that develop technology solutions to improve educational outcomes. This includes learning management systems, e-learning platforms, and educational apps.
- **Green Tech:** Companies focused on sustainable technology solutions that help mitigate or reverse the impacts of human activity on the environment. This includes renewable energy technologies, pollution control, and sustainable manufacturing processes.

Where are the opportunities?

Exciting opportunities in technology for the near future are centered around several key trends, which promise significant impacts across various industries:

- **Generative AI**: This technology is revolutionizing how content is created, automating processes that range from writing and image creation to complex decision-making systems. The evolution of AI tools is expected to further permeate industries, enhancing creativity and productivity.
- **AI in Cybersecurity**: As cybersecurity threats evolve, AI and machine learning technologies are becoming crucial in developing more dynamic defense mechanisms. These technologies are not only improving threat detection but are also automating responses to security incidents.
- **Advanced Robotics**: The integration of AI with robotics is creating more autonomous, efficient, and safer systems. These advancements are particularly impactful in manufacturing, logistics, and even in service industries where robotic systems collaborate with humans.
- **Quantum Computing**: Although still in the early stages, quantum computing is set to revolutionize areas such as cryptography, materials science, and complex system simulation. The technology offers processing power far beyond current capabilities, promising breakthroughs in various fields.
- **Sustainable Technologies**: With a growing emphasis on sustainability, technology focusing on energy efficiency, waste reduction, and resource management is gaining traction. Innovations in these areas are crucial for building a sustainable future.

These emerging technology trends often benefit from having a technology-related academic qualification, but they are increasingly accessible to those without formal education in the field.

CHECK OUT THIS INTERVIEW WITH Iris Braun, a visionary entrepreneur and the Co-Founder and Chief Product Officer at share GmbH in Berlin. She epitomizes the intersection of social entrepreneurship, business acumen, and sustainability, https://www.ericsalmon.com/the-voice-of-female-leaders-9/ .

Engineering-based businesses

Again, a broad spectrum of industries and specialties, each focusing on applying scientific and mathematical principles to solve problems and create practical solutions.

- **Civil Engineering**: These firms focus on the design, construction, and maintenance of infrastructure projects like roads, bridges, and buildings. Civil engineering businesses often work closely with public and private sector clients to develop urban and rural areas sustainably.
- **Mechanical Engineering**: Businesses in this sector specialize in designing and manufacturing mechanical systems. This includes everything from automotive parts to heating and cooling systems, and even robotics. Mechanical engineering companies are essential in industries ranging from automotive to aerospace.
- **Electrical Engineering**: These companies work on the development and implementation of electrical systems. This can involve power generation and distribution, electronic device fabrication, and the creation of control systems for machinery.
- **Chemical Engineering**: Focused on turning raw materials into usable products, chemical engineering firms might work in industries like pharmaceuticals, food and beverage, and petrochemicals. They often strive to make processes more efficient, cost-effective, and environmentally friendly.
- **Biomedical Engineering**: These businesses combine engineering principles with medical and biological sciences to design and create equipment, devices, computer systems, and software used in healthcare. From prosthetics to advanced medical imaging systems, these companies are at the forefront of healthcare innovation.
- **Software Engineering**: Although sometimes categorized under technology, software engineering firms focus on designing, developing, testing, and maintaining software applications. This is crucial across all sectors as businesses and consumers increasingly rely on digital solutions.
- **Environmental Engineering**: These companies address environmental challenges such as water and air pollution, waste management, and sustainable development. They work to develop technologies and processes that improve or maintain the health of our planet.
- **Industrial Engineering**: Industrial engineers work to optimize complex processes, systems, or organizations. This can involve services or manufacturing processes aiming to increase productivity, efficiency, and safety, often using the principles of systems analysis and integration.

Where are the opportunities?

Opportunities in engineering are vast and continue to expand, particularly as new technologies and societal needs emerge. Women in engineering are leading and innovating within some promising areas:

- **Renewable Energy Engineering**: As the world shifts towards sustainable energy sources, there is a growing need for engineers who can design, implement, and manage solar, wind, and other renewable energy solutions
- **Biomedical Engineering**: This field is booming with innovations in health technology, including prosthetics, wearable health monitors, and biomedical devices that improve patient care.
- **Software Engineering for AI and Machine Learning**: With the surge in data-centric technologies, software engineering that focuses on AI and machine learning offers significant opportunities.
- **Environmental and Civil Engineering**: There is a continuous need for engineers who can design infrastructure that combats the effects of climate change, such as flood defense systems and sustainable urban development.

For women in the EU seeking networks in engineering and technology, there are great resources available, check out

WiTEC (European Association for Women in Science, Engineering, and Technology): With a long history of promoting studies and activities related to empowering women in these fields, WiTEC provides information on projects, activities, and news reflecting women in Science, Engineering, and Technology. It also offers a membership program that provides access to resources and networking opportunities. Find more details at WiTEC./ .

Arts-based businesses

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Mathematics-based businesses

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- **Environmental and Civil Engineering**: There is a continuous need for engineers who can design infrastructure that combats the effects of climate change, such as flood defence systems and sustainable urban development (e.g Brussels' new tool brings the 10-minute city closer to reality – Eurocities)

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Unit 02

SKILLS TO DEVELOP YOUR BUSINESS IDEA

Future Female Innovators In STEAM

Skills to develop your business idea

Introduction

Welcome to Unit 2: Skills to Develop Your Business Idea. This unit is all about helping you transform your creative thoughts into practical, viable business ideas within the STEAM fields. You will explore creative thinking, identify key problems in STEAM, and apply structured approaches to develop solutions that can form the foundation of your business.

Throughout this unit, you'll engage in activities that resonate with your specific interests and strengths. By identifying with one of five personas—**Innovators, Social Implementers, Creative Makers, Explorers,** or **Doers**—you will participate in tailored exercises that align with your unique approach to technology and entrepreneurship.

In this unit, you will:

- **Develop Innovative Ideas:** Learn and apply creative thinking techniques to generate unique business ideas.
- **Identify and Analyze Problems:** Discover how to pinpoint and analyze challenges within the STEAM fields that your business could address.
- **Refine Your Solutions:** Use structured problem-solving approaches to turn your ideas into feasible and impactful business solutions.

Through hands-on experiences, especially in FabLab spaces, you'll not only generate and refine ideas but also gain confidence in your ability to turn these ideas into successful ventures. By the end of this unit, you'll have a well-developed business idea, ready to be taken forward in the STEAM fields.

Let's dive in and start bringing your ideas to life!

Duration

Each module or activity is designed to take approximately 2-4 hours to complete. However, the duration may vary depending on how deeply you choose to engage with the research, exploration, and refinement processes. This flexibility allows you to tailor the activities to your own learning pace and the level of detail you wish to pursue.

Materials

You will need basic brainstorming materials such as paper, pens, sticky notes, and digital tools for mind mapping and design. Depending on the activity, access to the FabLab for resources like 3D printers, prototyping tools, or other relevant technology may be required.

FabLab Connection

The FabLab provides a hands-on environment where you can experiment with your ideas, test prototypes, and refine your solutions. Whether you use the FabLab briefly or extensively, it plays a key role in bringing your concepts to life.

Background information and additional resources

To support your learning and help you dive deeper into the concepts covered in this course and activities, we've provided a selection of background information and additional resources.

These materials will give you a solid foundation in key topics, enhance your creative processes, and guide you in effectively using the FabLab tools.

Explore the following resources to enrich your learning experience:

What is ideation in Design Thinking?
Creative techniques
Problem solving
Fab I Can Statements
Welkom | FabLabs – learn more about FabLabs and where you can find them.
Empathy map templates – on Miro
Storyboarding templates – create your own storyboard on Canva
SDG Impact Assessment tool – A learning tool that visualises the results from an assessment of how an activity, organisation or innovation affects the SDG's.

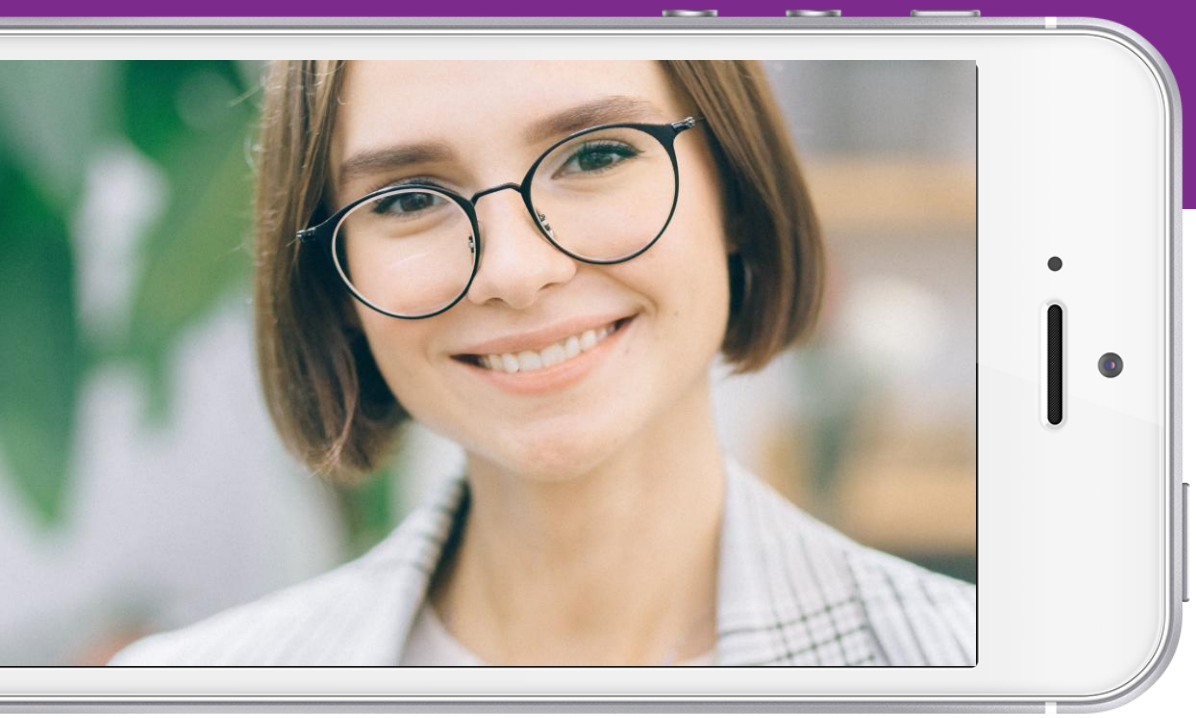
Skills to develop your business idea

1. Start with a problem/challenge - creative solutions for real challenges

In the world of entrepreneurship, especially within the STEAM fields, success begins with the ability to identify real-world problems and generate business ideas to come up with solutions. By understanding the challenges and opportunities around you, and viewing them from fresh perspectives, you can develop ideas that address these challenges but also push the boundaries of what's possible. This dual focus on problem identification and creative ideation is the driving force behind true innovation and the foundation for a strong business.

When you combine a deep understanding of the problems at hand with imaginative thinking, you unlock the potential to create products or services that meet the needs of today's world. This integrated approach ensures that your ideas are both relevant and impactful, setting the stage for business success in the competitive and ever-evolving landscape of STEAM industries.

But what does that look like?



Let's bring back our Beta Tech Mentality Model

1. Innovators

Approaches to innovation-driven problem solving for Innovators

Every business starts with a problem worth solving. As a female founder in STEAM, you're uniquely placed to notice unmet needs, overlooked inefficiencies, and challenges you choose to solve can fall into many categories —technical, creative, scientific, or human-centred. Remember, the kind of problem you want to solve doesn't have to be big and complicated. It just has to matter — to you and your potential customers. Start by immersing yourself in the latest trends, what is happening in the fields of STEAM. Some ideas...

Tech That Doesn't Work Well
You might notice something that's clunky, slow, or just doesn't work the way it should. You want to fix it or make it smarter and easier to use. Example: You use a tool at work that crashes all the time or takes too long to do its function. You decide to build a simpler version that just works — fast, lean, and made to make that task easier for the user.

Everyday Tools That Aren't Inclusive
You want to make something more accessible or user-friendly for people with different needs or abilities. Example: You realise most kitchen timers are hard to read or use for people with arthritis or visual impairments. You design a chunky, tactile timer with a single "one-twist" setting and a friendly chime — easy to see and hear.

Work That Takes Too Long
You see tasks at work or school that could be done faster or with less hassle. You want to save time, effort, and frustration. Example:. You notice that prepping materials for your weekly art workshop takes longer than the workshop itself — hunting for glue sticks, sorting scraps, trimming paper. You create a rolling "Art Bar" — a compact, portable trolley with compartments that auto-sort and pre-measure supplies, ready to wheel out and go.

Gaps in the Market
You spot something that people need — but no one's offering it (yet). You could be the one to fill that gap. Example: You keep hearing friends complain about how chaotic it is to store chargers, cables, and earphones when travelling. You create a "Tech Taco" — a fun, fold-up organiser with labelled pockets, cable rollers, etc..

People-Focused Problems
You want to help solve real issues like mental health, education, or community wellbeing. Example: You know how stressful job interviews can be, especially for young people. You design a simple web app that helps them practise answering questions and boosts their confidence

Planet-Focused Problems
You're passionate about sustainability and want to help reduce waste or protect the environment. Example: You're tired of throwing out half-used herbs every week. You create a compact kitchen gadget that dries, crushes, and stores leftover herbs, keeping flavour and cutting waste.

Mixing STEAM: Arts + Science
You love combining creativity with science, tech, or education in unexpected ways. Example: You design a public art piece that changes colour based on local air quality — turning pollution data into something visual that gets people talking.

For Innovators .. Approaches to innovation-driven problem solving

CAPTURE THE IDEA -

What's Happening in the World Right Now? Things are shifting fast — new discoveries, tools, and materials are changing how we live, work, and create. Your role isn't to catch up. It's to spot what's coming next.
Start by looking across three layers

1. People	2. Technology	3. Culture & Planet
What are people talking about? **What are they struggling with or excited about?** **What's trending in lifestyle, health, work, or education?**	**What tools, materials, or inventions are emerging?** **What's becoming easier, faster, or cheaper to use?** **What's just becoming possible that wasn't five years ago? AI is an obvious one here**	**What do people care about now — sustainability, identity, safety?** **What shifts are happening in schools, fashion, cities, or climate?** **What stories are gaining attention in media or politics?**
Example: More people are working remotely — but many feel isolated. Could you design a product that brings connection or focus into their workspace?	**Example: 3D printing is now more accessible. Could you create a custom-fit, print-at-home product — like ergonomic handles or wearable tools?**	**Example: People are tired of fast fashion but want to express themselves. Could you build a customisable upcycling tool or community fashion kit?**

Where to Look for Inspiration

- Pinterest / Instagram / TikTok - What DIY hacks or clever products are going viral?
- STEAM Blogs and Trend Reports - all great for inspiration, spotting gaps, and staying current..
    - TrendWatching – Global consumer trend insights and innovation ideas
    - Springwise – Daily innovations and business ideas from around the world
    - Dezeen – Design, architecture, and tech with a strong arts and innovation focus
    - Wired – News and analysis on future tech, science, and digital culture
    - MIT Technology Review – Research-backed insights into emerging technologies and their impact
- Fab Lab Noticeboards — What's being made around you? What conversations are happening?
- Your own life — what are you or people around you struggling with, fixing, or hacking together?
- Conversations — Ask your community what they wish existed. Often, the opportunity lives in the phrase "I wish there was a…"

Trend Spotting Activity

Grab a notebook or open a doc, and spend 15 minutes writing down:

- 3 things people are struggling with right now
- 2 interesting new products or tools you've seen
- 1 thing you wish existed

Then look at your list and ask: ❓ Is there something only I would think to make from this?

For Innovators .. Approaches to innovation-driven problem solving

Try these 2 Activities to Unlock Creative Ideas

SCAMPER Technique

Think about a product or trend you've spotted, then play with it using these actions:

- Substitute something (a material, user, tech element)
- Combine two ideas into one
- Adapt it for a new use or audience
- Modify the shape, function, sizePut it to another use it wasn't designed for
- Eliminate a step, part, or friction point
- Reverse the idea — what happens if it does the opposite

Example: Someone made a smart fitness tracker — could you flip that into a "rest tracker" for overworked women? A stylish bracelet that vibrates when you haven't taken a break?

Blue Ocean Strategy

Instead of competing in crowded markets (a.k.a. the "red ocean"), imagine a whole new space that only you are entering.

Think:

What do people wish existed?

What's something people need but don't even realise yet?

What's never been combined in this way before

Example: There are STEM kits and art kits — but what about a monthly "science + storytelling" box that blends both?

2. Social Implementers

Our FabConnectHer Social Implementors are women who care deeply about people and impact. They may not initially feel like technology is "for them," but they're motivated by creating positive change and want to use STEAM in a way that makes a difference.

From Social Need to Solution
Social Implementers are driven by real-life human needs, especially where there's inequality, inaccessibility, or missed potential. *What Motivates You? "How can I make life better for someone who's been left out or overlooked?"*

Step-by-Step: Turning Social Impact into a STEAM Business Idea

Step 1: Find a Real Human Need
Start with people, not products.

- Who's struggling with something in your life, family circle, community or network?
- Who often gets overlooked in society, be that in design, education, healthcare, work, or public services?
- What group or issue do you care deeply about?

Ask *"What small problem do you face every day that no one has solved yet?"*

Begin by identifying key social or environmental challenges that resonate. Focus on understanding these challenges in depth by analyzing their root causes and impacts. Once you have a clear understanding of the problem, think about how STEAM approaches can be applied to create meaningful solutions that address these challenges.

Identify core challenges and analyze impact:

- Start by defining the scope of the problem. Is it a local, national, or global issue? Who is most affected by it, and what are the immediate and long-term impacts on the community or environment?
- Use techniques like **the 5 Whys** to dig deeper into the underlying causes of the problem. The 5 Whys is a simple and powerful problem-solving technique used to explore the root cause of a problem by asking **"Why?" five times** in a row (or as many times as needed).

  Example: Problem: Fewer women are attending the local Fab Lab workshops.
  1. **Why?** Because the sessions are mostly held in the evenings.
  2. **Why are evening sessions a problem?** Because many women have childcare responsibilities then.
  3. **Why don't they bring their kids?** Because there's no space or supervision for children at the Fab Lab.
  4. **Why hasn't that been addressed?** Because the Fab Lab didn't know this was a barrier.
  5. **Why not?** Because no one asked the women directly about their needs.

- Understanding these causes will help you design more effective solutions that target the root, rather than just the symptoms, of the issue.
- Assess the potential impact of addressing this problem. Consider the social, economic, and environmental benefits of solving this challenge. What difference could a solution make in the lives of those affected?

Step 2: Explore What Already Exists
You don't need to reinvent the wheel. Look for existing products or services that almost work. **Ask**: Who are they built for? Who's missing out? Explore what's working well in other places that haven't reached your area yet.
Example: Some Fab Labs operate with family-friendly hours or child-friendly maker spaces, but those ideas haven't made it to your area. What could a more inclusive, flexible Fab Lab setup look like?

2. Social Implementers

Step 3: Use Creative Tools to Design for Real People
Let's now bring your people-first problem into a creative space.

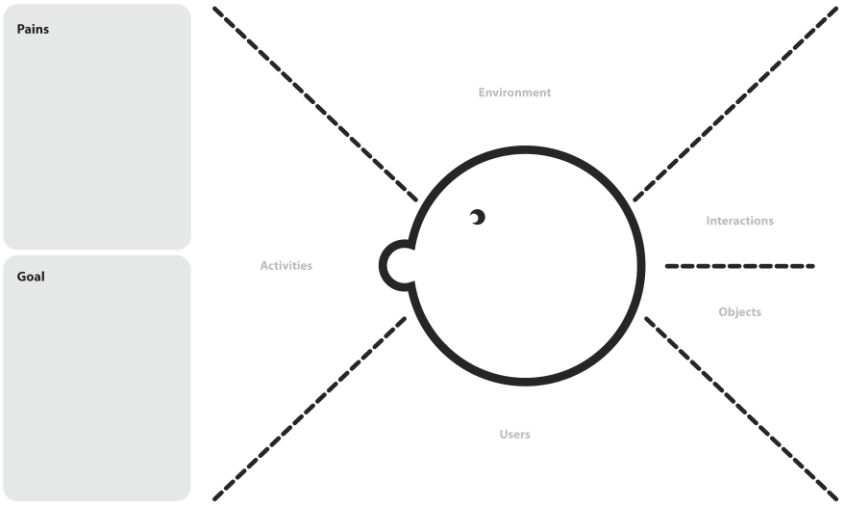
SCAMPER for Social Implementers
- **Substitute**: Could you replace something expensive with a cheaper version?
- **Combine**: Could you bring two tools or services together?
- **Adapt**: Could you tailor an idea to a specific group (like parents, seniors)?
- **Modify**: Can you change the shape, size, or setting of something to make it more accessible?
- **Put to another use**: Could you take something designed for fun and use it for education or support?
- **Eliminate**: Could you remove steps that make a process hard to follow?
- **Reverse**: What happens if you give control to the user instead of a system?

Generate Solutions with Empathy and Creativity: Try these 2 Activities to Unlock Creative Solutions

- **Empathy Mapping**

Create a simple empathy map to understand what your users:
- **Think and feel**
- **Hear and see**
- **Say and do**
- **Struggle with or wish for**

This helps you move beyond assumptions and design something *with* your audience, not just *for* them.



- **Reverse Brainstorming**

Sometimes to find a business idea, it helps to go the wrong way first.

- **Start by asking: "How could we make this problem worse?"**
- **List out all the silly, awful, or extreme answers.**
- **Now flip them: what would be the opposite?**
- **What does that tell you about what's needed?**

Example: If the problem is "not enough women feel welcome at the Fab Lab" → **How could we make it worse?**
By using only technical jargon, having all-male staff, offering no flexibility or support, designing the space with zero personal touches (cold, industrial, uninviting), don't include any examples that reflect women's experiences or interests, and assume everyone already knows how to use the tools.
Now reverse each point and generate positive, practical solutions.

3. Explorers

Explorers are curious, open-minded, and multi-passionate. They're often drawn to learning by doing, especially when the path ahead isn't fully clear yet. For FabConnectHer Explorer women, they

- Aren't afraid to get hands-on, make mistakes, and ask "what if?
- Are natural problem solvers, experimenters, and creatives
- Use STEAM in a way that reflects who they are and what they care about
- Love blending science, tech, arts, or education in playful, unexpected way
- Often feel like they're still figuring it out — and are loving the journey

Step 1 Dive into Discovery

- Start by exploring the STEAM fields that spark your curiosity — robotics, environmental science, digital arts, biotech, data storytelling, or something else entirely. This is about what energises you. Follow your interests, even if they don't seem "businessy" yet.
- Spend time reading, watching, testing, or tinkering.
- Follow rabbit holes online or in your Fab Lab. Don't rush to choose one — jump between ideas and let patterns emerge

Step 2: Connect Ideas

Across STEAM fields, Explorers thrive when ideas collide. As you explore, look for ways to mix disciplines — digital art + ecology, or science + storytelling Ask yourself: What happens if I bring these two ideas together?

Explorer Activities and Creative Techniques:

Cross-Pollination

- Deliberately combine ideas from different STEAM areas.
- Could environmental data inspire a digital art installation?
- Could wearable tech be used to teach human biology through performance?
- Could robotics help solve a challenge in community gardening? This is where bold, hybrid ideas are born.

Mindstorming

- Let your thoughts run wild.
- Set a timer for 5–10 minutes and jot down every idea that comes to mind — no judgment, no editing.
- What would you create if anything were possible?
- What patterns or themes pop up after you've written them down? This messy middle often leads to your clearest direction.

Guiding Questions- Use these to guide your creative process:

- Which STEAM fields interest you the most, and why?
- What real-world challenges or gaps have you spotted while exploring?
- What are the root causes or ripple effects of these challenges?
- How can you combine elements from different fields to create something fresh?
- What new concepts emerge when you apply Cross-Pollination or Mindstorming?
- How do these STEAM fields inform and inspire each other in your thinking?

What You'll Walk Away With

By the end of this activity, you'll have:

- A creative map of the STEAM topics that interest you most
- A wide mix of early-stage business ideas — sparked by exploration, not pressure
- A clearer sense of where your curiosity leads
- Plenty of raw material to refine, prototype, and shape in the next modules

4. Doers

Doers are hands-on, practical thinkers who love turning ideas into real things — quickly and efficiently. They are often tinkerers, builders, fixers, or creatives who learn best by *doing* rather than planning endlessly. For FabConnectHer Doers, they:

- Are energised by creating things with their hands
- Love solving everyday problems in simple, smart ways
- Are not interested in overthinking — they want to *make it work*
- Thrive on seeing real, immediate results
- Prefer physical or step-by-step actions over abstract theories

Step 1: **Spot Tangible Problems**
Start by identifying everyday issues or tasks in STEAM that you know could work better. These could be things you've experienced yourself — something clunky, awkward, slow, or wasteful. Look for problems that are:
Visible and easy to describe
Impacting your day-to-day work or community
Waiting for a simple, effective solution

Ask your peers what bugs them when they work with certain tools, kits, or systems

Step 2: Break It Down
Once you've picked a problem, strip it back to the basics. Ask: What exactly is going wrong here? What's causing the friction? Is this a tool problem? A process issue? A materials mismatch? Break it into small, fixable parts. The goal is to find one part you can solve with a hands-on, buildable idea.

Step 3: **Generate Practical, Hands-On Solutions**

- **Practical Brainstorming:** Think of ideas that you could actually test this week. These don't have to be perfect — just functional enough to learn from. Ask:
  - What's the quickest, easiest version of this idea I can try?
  - What would I need to build it?
  - Can I reuse or repurpose something that already exists

- **Storyboarding:** Map out your idea visually, step by step — from the problem to the solution. What happens first? What materials are involved? Where could the process go wrong and how can you plan for that? What does "done" look like? You can draw this by hand or use a whiteboard. Keep it rough and real — the aim is clarity, not perfection.

Guiding Questions for Doers
- What everyday problems in STEAM could be solved with a practical product or fix?
- What's causing those problems — and what's the simplest way to address them?
- How can I turn this idea into something real, quickly and cheaply that others will want to buy?
- What tools and materials do I already have access
- What role can a Fab Lab play?
- How can I make sure this solution is easy to use, maintain, and share

What You'll Walk Away With
By the end of this activity, Doers will have:
- Identified practical, real-world problems in STEAM
- Designed clever, hands-on solutions that are simple but effective
- Storyboarded the process from idea to test
- A ready-to-build concept that can be prototyped and improved straight away

Build & refine

Turning ideas into impactful solutions

You've started with an idea — now it's time to shape it into something real, useful, and ready to make an impact.

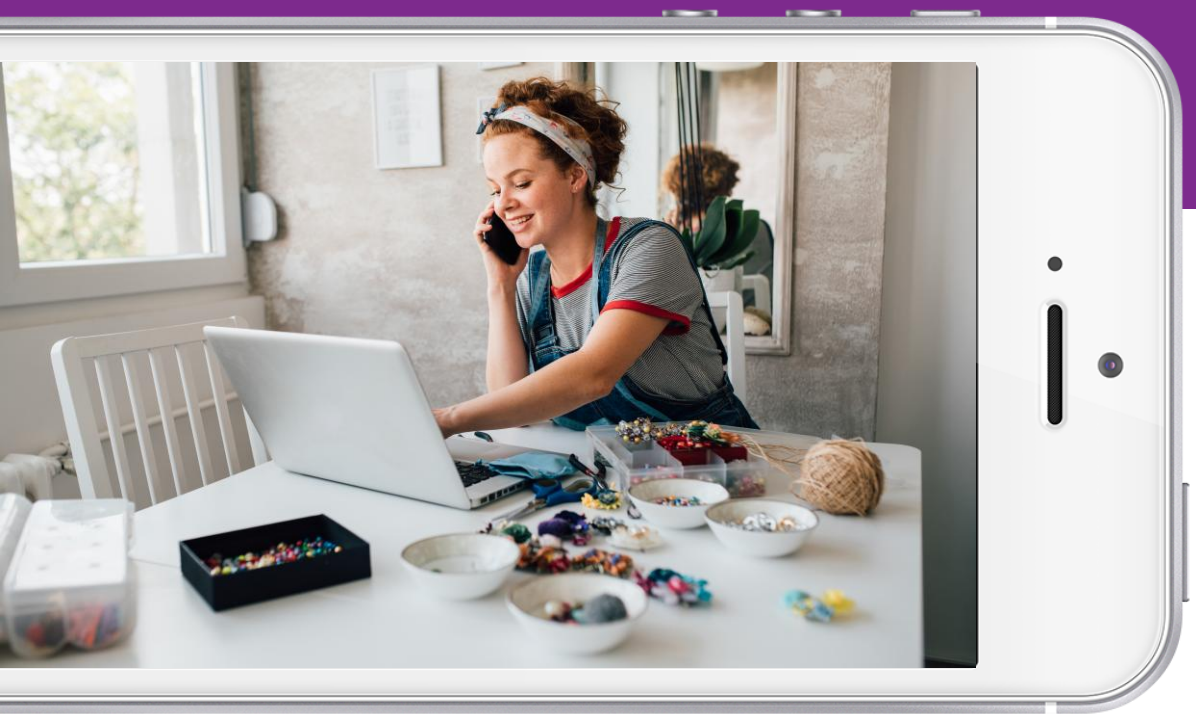
This phase is all about refining your idea. That means:

- Testing your assumptions
- Getting user feedback
- Thinking through how it will actually work
- Making smart improvements, one step at a time

Each Beta & Mindset (B&M) type will approach this stage differently, and that's exactly the point:

- Innovators may focus on applying new technologies in bold, industry-shifting ways
- Social Implementers will want to ensure the solution truly works for the people it's meant to help
- Explorers are still testing and shaping their direction — this phase helps them focus and iterate
- Doers are already hands-on — now it's time to streamline and plan for building something solid

In this part of our course, we'll guide you through tools and techniques that suit your style of working. By the end, you'll have a clearer, sharper version of your idea, one that's actionable, impactful, and ready for the next phase.



Turning your ideas into impactful solutions

Refine. Test. Strengthen. Get ready to build something real.
Now that you've developed your initial idea, it's time to shape it into a solution that works and makes a difference. This phase of your journey is about digging deeper, stress-testing your concept, and sharpening your idea until it's ready to go out into the world.

Depending on your B&M mindset, you'll approach this stage differently. You might want to disrupt an entire market, create social impact, build a practical prototype, or test your concept with users. This section gives you five pathways — choose the ones that best fit your idea.

1. Disruption Potential - Big Ideas That Shake Things Up!

- **Your goal**: Find out how your idea could stand out in the market and spark change, and not just slot into what's already out there
- **Who it's for**: Perfect for **Innovators** ready to challenge the status quo or do something that's never been done before.
- **What you'll do**:
    - Ask: What's broken or boring in this space — and what would a fresh take look like?
    - Use a SWOT analysis to check where your idea is strong, what needs work, where the big opportunities lie, and what could get in your way.
    - Think about trends: is your idea aligned with something people are ready for?

Tools to assist – SWOT

- Create a new SWOT Analysis Canvas - Canvanizer— Simple, visual, and free. Great for quickly mapping your thinking.
- Use the power of AI to work on your SWOT - https://swotbot.ai/

2. Social Impact & Partnerships

- **Your goal**: Build a solution that's rooted in real-world needs and creates meaningful change
- **Who it's for:** Perfect for Social Implementers who want their idea to make a positive difference in people's lives or help protect the planet. You're creating a product AND you're creating purpose.
- **What you'll do**
- Ask: Who is this helping, and how do I know it really helps?
- Use a simple Theory of Change to map out how your idea leads to impact, what changes, and why it matters.
- Think about partnerships: What community groups, NGOs, local services, or public bodies could support your idea or bring it to life?
- Get early feedback from people in those communities or the people your idea is meant to serve.

Tools to Assist

- **Theory of Change Builder:** A step-by-step guide to help you map the impact journey of your idea from activity to outcome – https://www.theoryofchange.org/library/what-is-theory-of-change/.
- **Partnership Canvas** (Collaboration Toolkit from Nesta) – https://www.nesta.org.uk/toolkit/partnership-canvas/ A great way to visualise and structure a partnership plan with groups or organisations that share your values
- **Impact Management Project (IMP)** – https://impactfrontiers.org/ Get frameworks and examples for measuring impact in creative, practical ways, even as a small venture.

Turning your ideas into impactful solutions

3. Shape It Around Real People – Design Thinking & User Feedback

- **Your goal:** Make sure your idea actually fits into real people's lives by listening, testing, and improving it based on what users really need.
- **Who it's for:** Ideal for Explorers and anyone who wants to stay open and responsive. Remember, you're not looking for a perfect plan; you're building by learning, step by step.
- **What you'll do**
  - **Ask:** Who is this for and how would they actually use it? Apply design thinking to work through the steps:
  - **Empathise**: Understand what users experience
  - **Define:** Pinpoint what they need
  - **Ideate:** Brainstorm solutions
  - **Prototype:** Build a simple version
  - **Test:** Get feedback, improve, repeat. Test your idea with real users — this could be through informal chats, quick demos, surveys, or observing someone trying out your prototype.

Tools to Assist

- **IDEO Design Kit** – https://www.designkit.org/methods A free, beginner-friendly collection of activities and tools to apply design thinking — made for real-world problem solving.
- **Miro Empathy Map Template** – https://miro.com/templates/empathy-map/ Map what your user sees, hears, thinks, and feels. Super useful for founders who want to walk in their users' shoes
- **Typeform or Google Forms** – https://www.typeform.com/ and https://forms.google.com Create simple and friendly surveys to get early user feedback.

4. Feasibility analysis and interdisciplinary integration

Who it's for: Ideal for those developing cross-disciplinary solutions.

What you'll do:

- *Feasibility Analysis:* Evaluate the practicality of your idea by assessing technical feasibility, costs, resources, and time requirements. Identify any obstacles and plan how to overcome them.
- *Interdisciplinary Integration:* Ensure your idea effectively integrates concepts from multiple STEAM fields. Reevaluate how different disciplines contribute to the overall solution.
- Refine your solution to ensure it is both practical and cohesively integrates insights from different fields.

5. Market Validation

Who it's for: Great for those ready to bring their ideas to market.

What you'll do:

- *Market Validation:* Test your idea with potential customers or end-users. Use surveys, focus groups, or small-scale trials to gather feedback on demand, practicality, and user satisfaction.
- Use market feedback to adjust your idea.

Guiding Questions Across All Options:

- *What are the key challenges or opportunities your idea addresses?*
- *How does this approach help refine your solution to be more feasible, impactful, or user-centered?*
- *What steps are necessary to bring your refined idea closer to implementation?*
- *How can the insights gained from this activity enhance the success of your idea?*

Unit 03

BUSINESS PLANNING FOR STEAM VENTURES

Future Female Innovators In STEAM

Understanding different business models

Starting a business requires a clear vision not only of what you want to achieve but also of how you plan to achieve it. This is where understanding different business models comes into play.

A business model is more than how a company makes money—it's about the entire system of how value is created and delivered to customers and how revenue is generated from those operations. Starting a STEAM venture needs a strategic understanding of how to effectively deliver value and generate revenue. A business model in STEAM encompasses the methods and strategies used to operate within these specialized fields, focusing on how unique offerings in science, technology, engineering, arts, and mathematics can meet market needs and sustain a business. Understanding different business models is a crucial aspect of what starting a business entails.

- **Product-Based Model in STEAM**: This model is common in engineering and technology sectors where the business creates and sells physical or digital products. **EXAMPLE**, a company might develop educational kits for learning robotics or sell licensed software for scientific analysis.
- **Service-Based Model in STEAM**: Many STEAM professionals offer their expertise as a service. This could include engineering consultancies that design infrastructure projects or tech companies that provide IT services. The key is that revenue is generated through the expertise and labor provided, not physical products.
- **Subscription Model in STEAM**: Especially relevant in the technology and digital arts sectors, businesses might offer ongoing access to a software platform or regularly updated data sets used by researchers and professionals. This model ensures a steady revenue stream and can help build long-term customer relationships.
- **Freemium Model in STEAM**: This approach is popular with startups in tech and digital arts, where basic services or products are offered for free with charges for advanced features. For instance, a data analysis app might offer basic features for free trial while charging for high-powered analytical tools or additional storage. **EXAMPLE:** Natural Cycles (Sweden) - Founded by Dr. Elina Berglund, this app offers a hormone-free birth control method using a unique algorithm, exemplifying the freemium model where users can access basic features for free or opt for a subscription for full functionality.-
- **Franchise Model in STEAM**: While less common, some educational and training services in STEAM might be franchised. For example, a successful coding bootcamp or science workshop series could license its brand and teaching model to operators in different regions.
- **Marketplace Model in STEAM**: Platforms that connect freelance STEAM professionals with clients, or marketplaces for bespoke engineering parts, are examples of this model. The platform facilitates transactions and earns revenue through fees or commissions. **EXAMPLE:** Vinted (Lithuania) - Founded by Milda Mitkute and Justas Janauskas, Vinted is an online marketplace that allows people to sell, buy, and swap clothes, integrating community aspects with technology.
- **Peer-to-Peer (P2P) Model in STEAM**: This model can be applied in areas like tech gadget rentals or shared laboratory spaces where individuals or businesses lease access to expensive equipment and facilities on an as-needed basis. **EXAMPLE:** A platform where individuals can list their own artworks available for rent to businesses or individuals, facilitating a sharing economy within the art world.

Choosing the Right Model: Entrepreneurs in the STEAM fields should select a business model that not only aligns with their operational capabilities and market positioning but also adapts to the rapid changes in technology and customer expectations typical of these industries. Flexibility to evolve and integrate multiple business models may be necessary to fully capitalize on emerging opportunities in STEAM.

Positioning is Key

Now you have analysed market trends, conducted feasibility analysis and market validation and explored various business models, it is essential to understand your competitive landscape.

Competitor Analysis

Identify and evaluate direct and indirect competitors, focusing on how their offerings compare to the unique attributes you bring to the market.

ACTION

Analyse competitors' strengths and weaknesses against your own, focusing on areas where your unique strengths can give you a competitive advantage.

Market Analysis

Conduct a thorough analysis of the industry to identify trends, size, growth, and the economic, social, and technological factors that could impact the market.

ACTION

Use analytical tools like a SWOT analysis to align market opportunities with your personal motivations and the unique strengths you've identified.

Customer Segmentation

Define your target audience more precisely based on the motivations and strengths that resonate with specific customer segments. Customer segmentation involves dividing a market into smaller groups of buyers with distinct needs, characteristics, or behaviours that might benefit from separate marketing strategies or products.

Key Segmentation Criteria

- Demographic Factors: Age, income, gender, education level.
- Geographic Factors: Urban vs. rural, local vs. national.
- Psychographic Factors: Lifestyle, values (e.g., environmental consciousness), and attitudes towards health and sustainability.
- Behavioral Factors: Purchase patterns, consumption rates, brand loyalty, and feedback.

ACTION

Conduct deep market research to understand potential customers' preferences and pain points, particularly those that align with your strengths and business values.

Value Proposition and Positioning

Equipped with personal strengths, market analysis and market research, define the specific niche or segment where your business will have the most impact. Positioning might focus on areas where your background or experiences provide unique insights or solutions. It is about carving out a space where your products or services can stand out and meet specific needs that are not being fully addressed by others.

Barriers to Entry and Strategic Positioning

Assess any barriers to entry in your chosen market, considering how your unique perspective and skills can help overcome these challenges.

ACTION

Develop strategies that leverage your personal and business strengths to navigate or dismantle these barriers effectively.

LET'S GET PRACTICAL. Is your business going to be viable?

You have a great idea for a business, you have researched the market, are happy it has potential, and you have the support of those around you. Before you invest your time, energy and resources, you need to figure out whether it's a viable business venture. Viability measures your business' ability to start, grow and survive. Can you make a profit at a price that your customers will be happy to pay for?

Pricing, costs and making a profit - HOW TO SET YOUR PRICE?
There are 3 key factors you need to consider..
- There must be a clear need for your product or service (or you must create one). This is the OPPORTUNITY.
- That need must have sufficient potential to create a DEMAND.
- There should be sufficient €€ REWARD €€ within your idea to be able to support your business needs
Many businesses fail (and fail quickly) because they have not determined or miscalculated the REWARD aspect of their business proposition.

Without truly knowing your costs, you cannot know if you are going to make a profit or not. Many start up entrepreneur's mistake turnover for profit. ***Let's be clear…***

Cost – the amount it takes for you to produce the product or service for sale	**Turnover is the amount of money you take into the business (generated by sales)**
Price is the selling price per unit customers pay for your product or service. So, when customers ask, "How much does it cost," your answer is your price.	**Profit** is what is left when you have covered all your costs

COST
The cost is a monetary valuation that needs to reflect and reward your
1. Effort
2. Materials
3. Resources
4. Time and utilities consumed
5. Risk incurred and opportunity forgone (if you were working elsewhere how much would you have earned?)

The purpose of costing
Is to control cost **To fix your price** **To identify your most profitable sales**

Working out costs for a physical product is straightforward. Your cost is the amount of expenditure it takes to make a product. It includes 3 elements:

MATERIALS + LABOUR + OVERHEADS

1. The cost of your materials including packaging
2. Labour – the cost of your time in making and selling the item
3. Overheads – the costs of being in business – e.g. rent, transport, marketing costs

LET'S GET PRACTICAL. Is your business going to be viable?

Fixed: **Fixed costs remain the same, no matter how much you produce e.g. rent, loans on equipment.**

Variable: **Variable costs relate to the amount of goods or services you produce. They are directly linked with changes in activity e.g. materials, stock, packaging, utilities. The more you sell, your variable costs increase. For example, you produce 3D art pieces for a cost of €100 each. If you produce 50 units, your variable cost will be €5,000.**

Back to fixed costs, -if your rent is €100 per month, then that does not change if you sell 10 3D art pieces or 50 art pieces .

PRICING AND MAKING A PROFIT

Pricing your product or service is one of the most important business decisions you will make. You must offer your products for a price your target market is willing to pay–and one that produces a profit for you–or you won't be in business for long! Your pricing must take into account your costs, but it also needs to consider the effects of competition and the customer's perception of value.

Bundle - Combining products and services can be a way of increasing the up-front price (and therefore profit) by offering added value that costs you nothing in the short term. For example, maintenance and support packages sold when goods are bought.

THERE ARE 2 MAIN WAYS OF COSTING/PRICING

1. **TOTAL COST APPROACH**

- **Calculate all costs for a product**
- **Determine number of units - how many can you make and importantly how many can you sell (there is a difference!)**
- **Divide total costs by number of units**
- **Add profit figure - the magic number generating the price to customer**

What we know so far

We have compiled and analysed all feedback from our MVP, which encompasses both qualitative insights from customer interactions and quantitative data such as cost of product, production or service inputs and even sales figures. We are beginning to see how our business model stacks up against industry norms and our initial expectations. This allows us to pinpoint the most effective areas of our business and those that require strategic adjustments. You have got some understanding of business models. Have you picked the best fit model for your business? Based on user feedback, we're prioritising feature enhancements and quality improvements that directly enhance user satisfaction and product functionality.

We have come so far, but the road is long. As you stand at this juncture, reflecting on your progress and looking toward the future, it's important to recognise the milestones you've achieved and the hurdles you've overcome.

- **It's not too early to celebrate your achievements.**
  Detail the key milestones achieved in your journey so far, such as successful MVP development, critical feedback integration, and initial market penetration.
  Highlight the valuable lessons that are shaping your emerging business strategy and growth. Own and recognise how these lessons are pivotal in preparing for the challenges ahead.

- **Acknowledge Current Obstacles.**
  Identify the significant challenges currently facing the business, such as scaling operations, diversifying product lines, or penetrating new markets.
  Craft how you are going to overcome these obstacles, including innovations in product development, enhancements in customer engagement, and strengthening of operational capacities.

- **Go back to your WHY.**
  Remember your emotional foundation, the moment this idea was born, the challenges that moved you, and the vision that inspired you to start. Reiterate the long-term vision for the business. How does the company see itself evolving in the next five years? What impact do you aspire to make in your industry or community?

Simon Sinek's
Start with WHY is a great watch.

Simon is an unshakable optimist. He believes in a bright future and our ability to build it together. Described as "a visionary thinker with a rare intellect"

WATCH
https://youtu.be/Oh2KRQPaKOU

Simon has devoted his professional life to help advance a vision of the world that does not yet exist; a world in which the vast majority of people wake up every single morning inspired, feel safe wherever they are and end the day fulfilled by the work that they do.

Wrapping up Phase 1- from idea to action

WYou've now explored your strengths, shaped a business idea grounded in real needs, and tested how it might work in the world. You've clarified your *why*, refined your *what*, and started to glimpse the *how*.

This completes your **Idea Development & Planning** phase (although it is never over, it needs to happen very consistently as you business evolves).

The next step is to bring your idea to life: to design, prototype, and test it in a Fab Lab environment where ideas become tangible.

In **Phase 2 – From Concept to Creation**, you'll:

- Translate your idea into an early product, service, or prototype
- Experiment with tools and technologies available in Fab Labs
- Explore collaboration, testing, and user feedback in real settings
- Start preparing for your business model and go-to-market strategy

Always remember, your concept doesn't have to be perfect; it just has to *begin*. This is where design, technology, and entrepreneurship truly connect.

.

Please share your feedback so far:

https://forms.gle/Vqrb8HHSrRrKKjBy6

What is your Beta Tech Mentality Persona?

1. When you think about technology, what excites you the most?

A) The potential to create innovative solutions and change the world.

B) Using technology to help others and solve social problems.

C) The challenge of building and making things with my hands.

D) Exploring new tools and figuring out how they work.

E) Trying out different things to see what I'm good at.

2. How do you prefer to learn new skills?

A) By experimenting with new ideas and pushing boundaries.

B) By understanding how my work can make a positive impact on others.

C) By getting hands-on and building or creating something tangible.

D) By exploring different possibilities and seeing what interests me the most.

E) By practicing with tools and seeing immediate results from my work.

3. What is most important to you in your work?

A) Being recognized for my innovative ideas and contributions.

B) Making a meaningful difference in society or the environment.

C) The satisfaction of completing a practical task or building something.

D) Discovering new things and learning about different technologies.

E) Doing something that feels meaningful and productive, even if it's simple.

4. How do you feel about working on complex, long-term projects?

A) I'm excited by the challenge and the potential to innovate.

B) I'm interested if the project has a clear social benefit.

C) I prefer short, hands-on tasks that I can complete quickly.

D) I'm open to it, but I like to explore different options before committing.

E) I'm okay with it as long as I see the practical outcome of my efforts.

5. What role do you see yourself playing in a team?

A) The idea generator who pushes for innovation.

B) The advocate for social impact, ensuring our work benefits others.

C) The hands-on builder who turns ideas into reality.

D) The explorer who experiments with different approaches to find the best one.

E) The doer who focuses on getting tasks done efficiently.

Scoring:

- **Mostly A's:** You are an **Innovator**! You thrive on creativity and innovation, and you're motivated by the potential to make a big impact with your ideas.
- **Mostly B's:** You are a **Social Implementer**! You are driven by the desire to use technology for social good and making a difference in the lives of others.
- **Mostly C's:** You are a **Doer**! You prefer hands-on work and enjoy the satisfaction of completing practical tasks that result in something tangible.
- **Mostly D's:** You are an **Explorer**! You enjoy discovering new tools and technologies and figuring out how they can be applied in different contexts.
- **Mostly E's:** You are a **Creative Maker**! You love working with your hands to create and solve challenges, often focusing on the creative process rather than the final recognition.

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