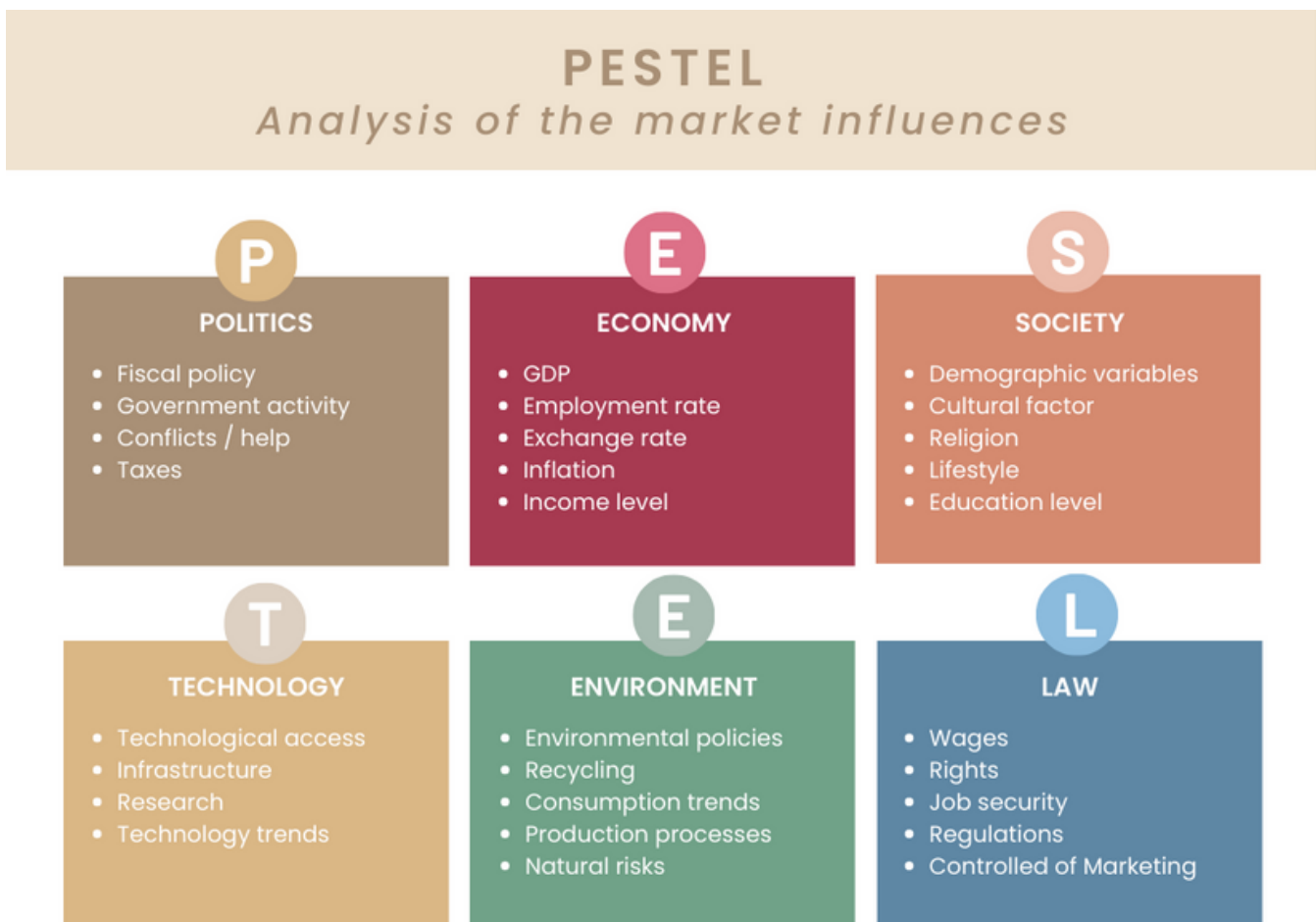# Module 4 How to develop a business plan and choose a research-based business model?

When it comes to research-based businesses, there is usually a lot of analysis to be done after the idea is conceived, a lot of consultation with mentors or the market, and a number of evaluations to see if the solution can be relevant and viable in the market. In this section, we will discuss some of the steps that can help a team to successfully evaluate the potential of a solution.

The first thing to note is that the market is very broad and a market study can be carried out to understand its nuances. A market study can take a PEST analysis as a first step, and then further develop the PESTLE analysis and additional steps.

PESTEL
Analysis of the market influences

P

POLITICS
- Fiscal policy
- Government activity
- Conflicts / help
- Taxes

E

ECONOMY
- GDP
- Employment rate
- Exchange rate
- Inflation
- Income level

S

SOCIETY
- Demographic variables
- Cultural factor
- Religion
- Lifestyle
- Education level

T

TECHNOLOGY
- Technological access
- Infrastructure
- Research
- Technology trends

E

ENVIRONMENT
- Environmental policies
- Recycling
- Consumption trends
- Production processes
- Natural risks

L

LAW
- Wages
- Rights
- Job security
- Regulations
- Controlled of Marketing

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The PEST analysis consists of analyses of the political, economic, socio-cultural and technological environment. For depth, a PESTLE should be carried out consisting of political, economic, socio-cultural, technological, legal and environmental environments. STEEPLED extends the PESTLE to an additional level of analysis through ethical and demographic issues. Also, once the analysis has been carried out in depth, it is finally recommended to carry out a SWOT to check your strengths, weaknesses, opportunities, threats. As each section unfolds, it is appropriate to discuss:

- Political environment. Government stability and likely changes; Bureaucracy; Corruption level; Tax policy (rates and incentives); Freedom of press; Regulation/de-regulation; Trade control; Import restrictions (quality and quantity); Tariffs; Competition regulation; Government involvement in trade unions and agreements; Environmental Law; Education Law; Anti-trust law; Discrimination law; Copyright, patents / Intellectual property law; Consumer protection and e-commerce; Employment law; Health and safety law; Data protection law; Laws regulating environment pollution.
- Economic environment. Growth rates; Inflation rate; Interest rates; Exchange rates; Unemployment trends; Labor costs; Stage of business cycle; Credit availability; Trade flows and patterns; Level of consumers' disposable income; Monetary policies; Fiscal policies; Price fluctuations; Stock market trends; Weather; Climate change.
- Socio-cultural environment. Health consciousness; Education level; Attitudes toward imported goods and services; Attitudes toward work, leisure, career and retirement; Attitudes toward product quality and customer service; Attitudes toward saving and investing; Emphasis on safety; Lifestyles; Buying habits; Religion and beliefs; Attitudes toward green or ecological products; Attitudes toward and support for renewable energy; Population growth rate; Immigration and emigration rates; Age distribution and life expectancy rates; Sex distribution; Average disposable income level; Social classes; Family size and structure; Minorities.
- Technological environment. Basic infrastructure level; Rate of technological change; Spending on research & development; Technology incentives; Legislation regarding technology; Technology level in your industry; Communication infrastructure; Access to newest technology; Internet infrastructure and penetration.
- Legal environment. Anti-trust law; Discrimination law; Copyright, patents / Intellectual property law; Consumer protection and e-commerce; Employment law; Health and safety law; Data Protection.
- Environmental setting. Weather; Climate change; Laws regulating environment pollution; Air and water pollution; Recycling; Waste management; Attitudes toward green or ecological products; Endangered species; Attitudes toward and support for renewable energy.
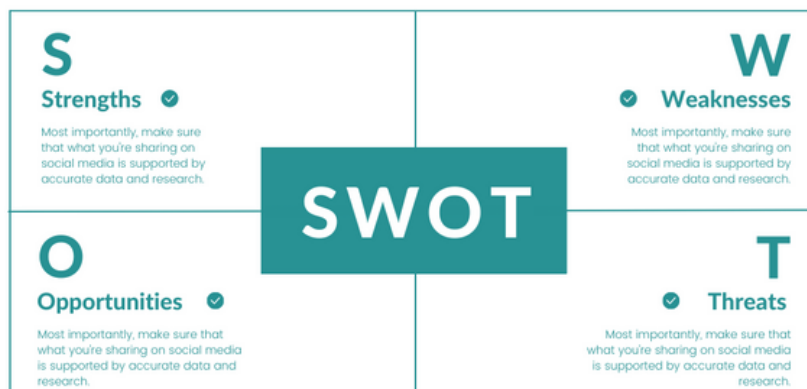
- Ethical environment. Ethical advertising and sales practices; Accepted accounting, management and marketing standards; Attitude towards counterfeiting and breaking patents; Ethical recruiting practices and employment standards (not using children to produce goods).
- Demographic environment. Population growth rate; Immigration and emigration rates; Age distribution and life expectancy rates; Sex distribution; Average disposable income level; Social classes; Family size and structure; Minorities.

When we develop innovative solutions, this analysis can give us a very good indication of where we need to work, where we are particularly strong or, for example, where we are going to encounter certain disruptions. For example, the legal environment and regulation are very important when innovating, so it is particularly important to look at whether the legal framework is in place or whether we need to look at creating a new legal framework, both in terms of assessing the feasibility of the idea and the financial attractiveness. In this way, as we move through each environment, unexpected angles of innovative solutions can be discovered.

SWOT Analysis

S Strengths ✓
Most importantly, make sure that what you're sharing on social media is supported by accurate data and research.

W Weaknesses ✓
Most importantly, make sure that what you're sharing on social media is supported by accurate data and research.

SWOT

O Opportunities ✓
Most importantly, make sure that what you're sharing on social media is supported by accurate data and research.

T Threats ✓
Most importantly, make sure that what you're sharing on social media is supported by accurate data and research.

Once a detailed analysis has been carried out, the next step is the Canva business canvas. However, in contrast to students, for academic and non-academic staff we suggest using a modified Lean Canva business canvas. This canvas reveals the next useful steps in the process of refining an innovative solution. It also fundamentally changes the starting point, i.e. the approach to the solution itself.

- The problem. This section asks for a maximum of three problems, or if a PEST, or PESTLE analysis has been carried out, one main problem can be defined. This is a basis for further action and the search for an effective solution. The problems shall be formulated in terms of a question, clear, specific and justified. In addition to the problem, additional information can be provided to justify the depth of the problem.

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- Customer segments. The second important step is to identify who is affected by the problem, as well as to assess the scale of the problem and which group will be affected by the solution. Customers can be either individuals or companies, but they need to be described in as much detail as possible in terms of demographic and social characteristics. This will allow the proposals to be shaped from the customer's perspective.

- Unique value proposition. It is usually said that a product or service will stand out in terms of price, availability or accessibility. However, unique value is also a competitive advantage, additional elements of a product or service that sometimes the customer may not expect. That is why they will choose your solution. Unique value can be made up of one or several elements.

- Solution: a short and clear solution statement says that you have to define the main features, and the characteristics that will solve the existing problem and be acceptable to the customer. Usually, the solution should fit into 5 sentences, but if we follow the Lean Canva canvas we see that it should be stated in one sentence. The more specific the solution the clearer it is for investors, partners, colleagues and others.

- Channels. This part is where the important point of reaching your target customer remains. The question of how to reach investors or other interested parties can also be raised. However, it should be specified which means will be used.

- Challenges: this section asks you to justify the risks involved and what needs to be addressed during implementation.

- Cost structure. Essentially detailed calculations are to be considered when assessing the attractiveness of a solution and the feasibility of the envisaged solution. It should include a detailed calculation of both the cost of developing the solution and the potential costs and revenues, wages and other components.

- Key indicators: this part provides a very realistic definition of how it will be recognised that the idea has been realised and has already reached reality. What every developer should pay attention to.

- Unfair advantage: this part asks what the solution has that cannot be copied, what will be the key element that will set the solution apart from other solutions.

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Moving from the Canva business canvas to the Canva Lean business canvas, it is important to note that several elements change and help the solution to find a stronger justification, to discover its points of contact with the problem field, to highlight competitive advantage and subtly analyse the same business processes but through the addition of a solid foundation. The Canva business canvas is more suitable for existing businesses, where it is possible to assess both the current situation and prospects.

Problem	**Solution**	**Unique Value Proposition**	**Unfair Advantage**	**Target Group**
What is the problem? What kind of problem: organisational, national, global?	Describe the proposed solution in three sentences?	What will change as a result of your proposed solution? And what additional value can you offer?	What do you think will create an advantage for your solution?	Please describe the target group as much as possible: demographic, social characteristics, etc.
	Key Metrics		**Channels**	
	Describe how you will measure the benefits of the solution to be implemented?		How will you communicate your solution to your target audience?	

Cost Structure	**Challenges**
How much do you need to spend to implement your decision? How much can the necessary tools cost? Wages? And others?	What difficulties will you face before implementing the solution? When implementing the solution? After implementation?

When completing the Lean Canva canvas, please note:

- Answer questions concretely, with facts, figures, clear sentences, bullet points;
- The questions are intended to guide you through the Canva Canvas, they are indicative and can be modified according to the specifics of the analysis;
- Lean Canva is a one-page business plan with all information and should be presented on exactly one page;
- Present the proposed solution as specifically as possible, with its disclosures

Assignments
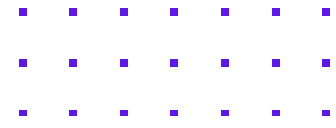
1 assignments

Choose your innovation and describe it according to Lean Canva and the main idea refinement task.

Problem	Solution	Unique Value Proposition	Unfair Advantage	Target Group
	Key Metrics		Channels	

Cost Structure

Challenges

5 Point Main Map Infographic

A wonderful serenity has taken possession of my entire soul, like these sweet mornings of spring

Main Idea — A wonderful serenity has taken possession of my entire soul

Research — A wonderful serenity has taken possession of my entire soul

Priority — A wonderful serenity has taken possession of my entire soul

Relation — A wonderful serenity has taken possession of my entire soul

Scale Up — A wonderful serenity has taken possession of my entire soul

#1   Questions for the discussion?

1. Who do you think is the target group of your research?
2. What problems do you think your scientific research solves?
3. Did you have to prepare a business plan?
4. What do you think is the most difficult thing to prepare a proper business plan?
5. If you wanted to implement your ideas, what difficulties do you think you would encounter?

#2   Useful links

- https://leanstack.com/lean-canvas
- https://strategicmanagementinsight.com/tools/pest-pestel-analysis/
- https://www.smartcapitalmind.com/what-is-the-difference-between-a-pest-and-pestle-analysis.htm
- https://medium.com/@steve_mullen/an-introduction-to-lean-canvas-5c17c469d3e0
- https://www.researchgate.net/publication/354167961_Application_of_the_PEST_Analysis_for_Strategic_Planning

#3   Become a co-author

This handbook is unique in that we invite everyone to co-author it. If you are an expert and work in the field of entrepreneurship, if you want to share useful information with the readers, if you are a creator of unique tasks and believe that you can contribute to entrepreneurship in one way or another, we invite you to share your information and we will add a new chapter to the handbook that you have created.

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