

## Company name: Dev4Env

### Founders:

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### About us:

At Dev4Env, we believe that technology can be a powerful tool for positive environmental impact. That's why we're dedicated to developing software solutions that help protect and preserve our planet.

Founded in 2023, Dev4Env is a software development company with a mission to create sustainable and environmentally conscious solutions. Our first application, SnapTrash, allows users to report trash in their communities and help coordinate cleanup efforts. With this app, we aim to reduce the negative impact of litter on our environment and promote responsible waste management.

But our work doesn't stop there. We're committed to developing innovative and practical software solutions that address a range of environmental challenges, from reducing carbon emissions to protecting biodiversity. Our team of experienced developers, designers, and environmental experts work collaboratively to create products that are both effective and user-friendly.

At Dev4Env, we believe that sustainability should be at the core of every business and every product. That's why we're dedicated to making a positive impact through our work and helping to build a better, more sustainable future for us all.

## 1. Industry/branch description

### Market Description:

The market for environmental software development solutions is growing rapidly due to the increasing awareness of environmental issues and the need for sustainable solutions across various industries. There is a growing demand for software solutions that can help businesses and organizations reduce their environmental impact, improve sustainability, and comply with regulations.

### Solution Description:

Dev4Env is an environmental software development company that specializes in developing customized software solutions to help businesses, organizations and governments reduce their environmental footprint and improve sustainability. Our solutions are tailored to the unique needs and requirements of our clients and are designed to address a wide range of environmental issues, including energy management, waste reduction, carbon emissions tracking, and sustainability reporting.

Our software solutions are designed to be user-friendly and intuitive, with features that enable easy data input, analysis, and reporting. We work closely with our clients to understand their specific needs and goals, and we provide ongoing support and maintenance to ensure that our solutions continue to meet their evolving needs.

Overall, Dev4Env offers a range of software development solutions that help our customers achieve their sustainability goals, reduce costs and comply with regulations and involve citizens to ensure a cleaner environment.

## 2. BUSINESS MODEL

<b>Needs/advantages for the customer</b> <ul style="list-style-type: none"> <li>- Cleaner environment</li> <li>- Easy reports of trash</li> <li>- Receiving rewards for reported trash</li> <li>- Better mindset/mental condition</li> </ul>	<b>Image (Company image)</b> <ul style="list-style-type: none"> <li>- Innovation, sustainability, and community engagement</li> <li>- Positioning us as a leader in the field of environmental sustainability</li> <li>- Making a positive impact on the planet</li> </ul>
<b>Customers/customer groups</b> <ul style="list-style-type: none"> <li>- Municipalities, cities, governments</li> <li>- “Ecologic” people, but also other citizens</li> <li>- “Green” associations</li> <li>- Waste companies</li> </ul>	<b>Products/Services</b> <ul style="list-style-type: none"> <li>- Application for easy trash reporting</li> <li>- Other software solutions for a positive impact on the environment</li> <li>- Merchandize</li> <li>- Providing platform for connecting people with associations</li> </ul>

## Mode of operation

Dev4Env's mode of operation involves consulting with clients to understand their specific needs and goals, designing customized software solutions that are user-friendly and intuitive, and providing ongoing support and maintenance to ensure that the software continues to meet the client's evolving needs. Dev4Env monitors the performance of the software solution and provides regular reports to clients and works to continuously improve the software over time to ensure that it is effective, efficient, and up to date with changes in environmental practices or regulations. The company's focus is on providing tailored solutions that enable clients to achieve their sustainability goals, reduce costs, and comply with regulations.

## Resources

### Physical

- Full time employers: 1 project manager, 1 secretary, 1 support, 1 marketing, 3 software developers
- Part time employers: lawyer, accountant
- $\geq 150\text{m}^2$  Office with space for 10 working stations
- 10 working stations (laptop, screen, internet access, additional equipment like mouse, phones...)
- Servers for storing data
- Office equipment (desks, chairs, printers...)
- Financial resources: Funding from investors or loans

### Intellectual

- Intellectual property: patents, trademarks, copyrights and trade secrets
- Information resources: market research reports, industry trends and customer insights
- Industry knowledge: Understanding of environmental regulations or emerging technologies
- Motivation
- Prior experience

### 3. Market segmentation

#### Customers

##### Segment 1: Municipalities and local governments

Description of the target group:	<b>Geographic:</b> Cities and municipalities across the target country (Oulu, Finland as a start)
	<b>Demographic:</b> Government officials and employees responsible for waste management and keeping public areas clean
	<b>Psychographic:</b> Environmentally conscious, concerned about the impact of waste on the environment, seeking ways to improve their sustainability practices.
	<b>Behavioral:</b> Looking for cost-effective and efficient waste management solutions, seeking ways to reduce the environmental impact of litter, interested in adopting new technologies to improve their waste management practices.
The needs of the target group:	The ability to efficiently manage waste in public areas, real-time data on where trash is accumulating, and cost-effective solutions
The amount/size of the target group:	Varies by city or municipality

## Segment 2: Businesses and organizations

Description of the target group:	<b>Geographic: Nationwide (Finland)</b>
	<b>Demographic: Business owners and managers across various industries.</b>
	<b>Psychographic: Environmentally conscious, interested in supporting local environmental initiatives, seeking ways to improve their sustainability practices.</b>
	<b>Behavioral: Looking for ways to encourage employees and customers to take action in their local communities, interested in adopting new technologies to promote their own sustainability practices, seeking ways to support local environmental initiatives.</b>
The needs of the target group:	<b>A tool to encourage employees and customers to take action in their local communities, a way to support local environmental initiatives, and a platform to promote their own sustainability practices.</b>
The amount/size of the target group:	<b>Varies by industry and region/location</b>

### Segment 3: daily users

Description of the target group:	<b>Geographic:</b> Urban and suburban areas with high population density and a visible litter problem.
	<b>Demographic:</b> Age range could vary, but typically younger adults and teens who are tech-savvy and socially conscious, living or spending time in urban and suburban areas.
	<b>Psychographic:</b> Environmentally conscious, concerned about the impact of waste on the environment, interested in taking action to improve their local community.
	<b>Behavioral:</b> Actively looking for ways to reduce litter and improve waste management in public areas, seeking a user-friendly and convenient solution to report trash, motivated by the potential to earn small rewards for their actions.
The needs of the target group:	A convenient, user-friendly and accessible way to report trash and contribute to a cleaner environment, and the opportunity to be recognized and rewarded for their efforts.
The amount/size of the target group:	The size of this target group can vary depending on the location and the popularity of the app, but in areas with a significant litter problem, there could be a large number of daily users.

## **8 End User/Customer Interviews.**

### **Interview model:**

Question 1: Tell us about yourself briefly.

Question 2: What pains about environment do you have?

Question 3: How urgently do you need them to be resolved?

Question 4: Would you be willing to pay someone to solve your pains for you?

Question 5: How do you solve these pains now?

Question 6: Give us ideas for a solution.

Question 7: To close our interview, what are your thoughts on an application that allows users to upload photos of abandoned waste with location information to help municipalities clean it up?

**Note:** The last question was asked at the end of the interview for a small feedback. Noone knew about our project before asking the questions.

**Interviewee: Lara**

**Age: 22**

**Background: Student in Environmental Science**

**1. Tell us about yourself briefly.**

My name is Lara, and I'm currently studying Environmental Science. I'm really passionate about the environment, and I want to make a positive impact in my community and beyond.

**2. What pains about the environment do you have?**

I'm really concerned about the impact that human activity is having on the planet, including climate change, pollution, and habitat destruction. I think these issues are urgent and require immediate action.

**3. How urgently do you need them to be resolved?**

I think these issues need to be resolved as soon as possible, because the longer we wait, the more difficult it will be to address them. We need to act quickly and decisively to protect the environment and ensure a sustainable future.

**4. Would you be willing to pay someone to solve your pains for you?**

Yes, I would be willing to pay for solutions that address environmental issues, as long as they are effective and affordable. I think it's important to invest in sustainable technologies and practices, even if it requires some financial sacrifice.

**5. How do you solve these pains now?**

I try to live a sustainable lifestyle by conserving energy, reducing waste, and supporting environmentally-friendly products and services. I also participate in activism and advocacy efforts to promote environmental protection.

**6. Give us ideas for a solution:**

Some potential solutions could include investing in renewable energy, implementing policies that reduce greenhouse gas emissions, and promoting sustainable land use practices. We could also work to reduce waste and promote more efficient use of resources, and prioritize conservation efforts to protect threatened species and ecosystems.

**7. What are your thoughts on an app that allows users to upload photos of abandoned waste with location information to help municipalities clean it up?**

I think an app like that could be a useful tool for reporting abandoned waste and helping municipalities identify problem areas. It could also raise awareness about the issue of littering and inspire people to take action to keep their communities clean. However, it's important to ensure that the app is secure and user-friendly, and that it's part of a larger strategy to address environmental issues.



**Interviewee: Lorenzo**

**Age: 25**

**Background: Not interested in environmental issues**

**1. Tell us about yourself briefly.**

My name is Lorenzo, and I'm 25 years old. I'm not really interested in environmental issues, but I'm happy to talk about it.

**2. What pains about the environment do you have?**

To be honest, I don't have any pains about the environment. I know that there are issues like climate change and pollution, but they don't affect me personally, so I don't really think about them.

**3. How urgently do you think environmental issues need to be resolved?**

I don't really have an opinion on this, since I'm not really interested in environmental issues. I think it's important to take care of the environment, but I don't have a sense of urgency about it.

**4. Would you be willing to pay someone to solve environmental issues for you?**

I don't think I would be willing to pay for solutions to environmental issues, since I don't really see it as a priority. I would rather spend my money on other things.

**5. How do you address environmental issues in your daily life?**

To be honest, I don't really do anything to address environmental issues in my daily life. I know that there are things I could do, like conserving energy or reducing waste, but I don't really think about it.

**6. Give us ideas for a solution:**

I don't really have any ideas for solutions, since I'm not really interested in environmental issues. Sorry about that.

**7. What are your thoughts on an app that allows users to upload photos of abandoned waste with location information to help municipalities clean it up?**

I think an app like that could be useful for people who are interested in environmental issues, but it doesn't really appeal to me personally. I think it's important to keep our communities clean, but I don't think an app is necessary to do that.

**Interviewee: Nick**

**Age: 23**

**Background: Football player**

**1. Tell us about yourself briefly.**

My name is Nick, and I'm a 23-year-old football player from Belgium. I'm passionate about the sport and love to spend my time playing and training.

**2. What pains about the environment do you have?**

As a football player, I'm concerned about the impact that climate change could have on the sport. Rising temperatures and extreme weather conditions could make it difficult or even dangerous to play, and that's something that worries me.

**3. How urgently do you think environmental issues need to be resolved?**

I think environmental issues are very urgent and need to be addressed as soon as possible. We're already seeing the effects of climate change, and we need to take action to prevent it from getting worse.

**4. Would you be willing to pay someone to solve environmental issues for you?**

I would definitely be willing to contribute to efforts to solve environmental issues, but I don't think it's something that can be solved by just throwing money at it. It's important for individuals and governments to take action and make changes to address these issues.

**5. How do you address environmental issues in your daily life?**

In my daily life, I try to be conscious of my energy use and reduce waste whenever possible. I recycle, turn off lights when I'm not using them, and try to use public transportation or carpool whenever I can.

**6. Give us ideas for a solution:**

One idea for a solution is to invest in renewable energy sources like wind and solar power. By reducing our reliance on fossil fuels, we can decrease greenhouse gas emissions and slow the effects of climate change. It's also important for individuals to make changes in their daily lives, like reducing their use of single-use plastics and conserving energy.

**7. What are your thoughts on an app that allows users to upload photos of abandoned waste with location information to help municipalities clean it up?**

I think an app like that could be very helpful in addressing issues with waste and pollution. It would make it easier for people to report abandoned waste and for municipalities to locate and clean it up. It's important for everyone to do their part in keeping our communities clean and healthy.

**Interviewee: Sarah**

**Age: 18**

**Background: Finnish with an interest in makeup**

**1. Tell us about yourself briefly.**

My name is Sarah, and I'm an 18-year-old Finnish girl who loves everything about makeup. I'm fascinated by how it can transform people's appearances and boost their confidence.

**2. What environmental issues are you most concerned about?**

While I don't have a deep knowledge of environmental issues, I'm concerned about the excessive use of plastic in the beauty industry. It's alarming to see how much packaging is used for products that are often only used once and then thrown away.

**3. How urgently do you think environmental issues need to be resolved?**

I think environmental issues are incredibly urgent, and we need to take action now to prevent further damage. We need to be conscious of the impact our actions have on the planet and do our part to reduce our carbon footprint.

**4. Would you be willing to pay more for makeup that's environmentally friendly?**

Yes, I would definitely be willing to pay more for makeup that's environmentally friendly. It's important to me that the products I use aren't harming the planet.

**5. How do you address environmental issues in your daily life?**

I try to be conscious of my impact on the environment in everything I do. For example, I use reusable bags when shopping, recycle as much as possible, and try to conserve energy whenever I can.

**6. Give us ideas for a solution:**

One idea for a solution is for makeup companies to use biodegradable or recyclable packaging. This would help reduce the amount of plastic waste generated by the beauty industry. Additionally, companies could explore using more sustainable ingredients in their products.

**7. What are your thoughts on an app that allows users to upload photos of abandoned waste with location information to help municipalities clean it up?**

I think an app like that would be great. It would make it easier for people to report abandoned waste and for municipalities to locate and clean it up. It's important for everyone to take responsibility for their waste and work towards creating cleaner and healthier communities.

**Interviewee: Susanna**

**Age: 42**

**Background: Cashier at a grocery store with 2 kids**

**1. Tell us about yourself briefly.**

My name is Susanna, and I'm a 42-year-old cashier at a grocery store. I have two kids who keep me busy outside of work. I enjoy spending time with my family and taking walks in nature.

**2. What environmental issues are you most concerned about?**

As someone who works in a grocery store, I'm concerned about the amount of food waste we generate. It's heartbreaking to see how much perfectly good food is thrown away every day.

**3. How urgently do you think environmental issues need to be resolved?**

I think environmental issues are incredibly urgent and need to be addressed as soon as possible. The health of our planet is essential for our survival, and we need to take action to protect it.

**4. Would you be willing to pay more for environmentally friendly products?**

As a consumer, I would be willing to pay more for environmentally friendly products if they are of good quality and do the job I need them to do. However, as someone with a limited budget, I would appreciate it if companies made eco-friendly products more affordable.

**5. How do you address environmental issues in your daily life?**

In my daily life, I try to reduce my waste by using reusable bags and containers, buying in bulk, and composting food scraps. I also conserve energy by turning off lights and unplugging electronics when not in use.

**6. Give us ideas for a solution:**

One solution to food waste could be for grocery stores to donate unsold, but still edible, food to local charities and food banks. Additionally, stores could provide education to customers on how to reduce food waste at home, such as meal planning and proper storage techniques.

**7. What are your thoughts on an app that allows users to upload photos of abandoned waste with location information to help municipalities clean it up?**

I think an app like that would be beneficial in addressing the problem of abandoned waste. It would make it easier for people to report and locate waste, and hopefully, encourage municipalities to take action in cleaning it up.

**Interviewee: Albert**

**Age: 61**

**Background: IT teacher at German university**

**1. Can you tell us about yourself briefly?**

Yes, of course. I am a 61-year-old professor of IT at a university in Germany. I have been teaching for over 30 years and have published several research papers in my field.

**2. What pains about the environment do you have?**

As someone who has studied and worked in technology, I am concerned about the negative impact that technology can have on the environment. The production and disposal of electronic devices can create a significant amount of waste and contribute to pollution.

**3. How urgently do you need these pains to be resolved?**

I believe that these issues need to be addressed urgently. The rate at which technology is advancing means that the amount of electronic waste is increasing rapidly, and we need to find sustainable solutions to manage this waste.

**4. Would you be willing to pay someone to solve your pains for you?**

As a professor, I do not have a personal budget to pay someone to solve my pains. However, I do think that companies and governments should invest in research and development of sustainable technologies that can help reduce electronic waste.

**5. How do you solve these pains now?**

I try to be mindful of my own electronic consumption and dispose of electronic devices responsibly. I also support organizations that are working towards sustainable solutions for electronic waste management.

**6. Can you give us ideas for a solution?**

One idea is to create incentives for consumers to recycle their electronic devices, such as discounts on new devices for those who recycle their old ones. Another idea is to develop more sustainable materials for electronic devices, such as biodegradable or recyclable materials.

**7. What are your thoughts on an app that allows users to upload photos of abandoned waste with location information to help municipalities clean it up?**

I think this is a great idea. Technology can play a positive role in addressing environmental issues, and an app that allows users to report and track abandoned waste could help municipalities more efficiently manage and clean up waste. It would also increase awareness and encourage individuals to take responsibility for the environment.

**Interviewee: Antonio**

**Age: 56**

**Background: Mayor of a small village in Italy**

**1. Tell us about yourself briefly.**

My name is Antonio, and I'm 56 years old. I'm the mayor of a small village in Italy, and I've been in this role for the past 8 years. Outside of work, I enjoy spending time with my family and working on my garden.

**2. What environmental issues are you most concerned about?**

As the mayor of my village, I'm most concerned about the impact of climate change on our community. We've seen more frequent and intense floods and droughts, which have caused damage to our infrastructure and affected our agriculture.

**3. How urgently do you think environmental issues need to be resolved?**

Environmental issues need to be addressed as soon as possible, especially in small communities like ours that rely on natural resources. We need to take action to protect our environment and ensure the well-being of our residents.

**4. What actions have you taken as mayor to address environmental issues?**

As mayor, I've implemented a recycling program in our village, installed solar panels on public buildings, and encouraged residents to use public transportation instead of personal vehicles. We've also worked to preserve our local forests and promote sustainable agriculture.

**5. What further actions do you plan to take to address environmental issues?**

In the future, I plan to work on reducing our village's carbon footprint by increasing the use of renewable energy sources, promoting eco-friendly practices in local businesses, and incentivizing residents to make sustainable choices.

**6. Give us ideas for a solution:**

One solution could be to introduce an eco-tax on non-renewable energy sources and products that contribute to pollution. The revenue generated from this tax could be used to fund environmental projects and incentivize individuals and businesses to adopt more sustainable practices.

**7. What are your thoughts on an app that allows users to upload photos of abandoned waste with location information to help municipalities clean it up?**

I think an app like that could be a helpful tool for our village in addressing the problem of abandoned waste. It would make it easier for residents to report waste and for the municipality to locate and clean it up. However, we would need to ensure that the app is user-friendly and accessible to all residents, including those who may not be tech-savvy.

**Interviewee: Damien**

**Age: 57**

**Background: Manager of a carpentry company**

**1. Can you tell us a bit about yourself and your background?**

Sure. I'm Damien, 57 years old, and I'm the manager of a carpentry company in France. I've been working in this industry for over 30 years, and I've seen a lot of changes and challenges in that time.

**2. What environmental issues concern you the most?**

One of the biggest concerns I have is deforestation. As a carpenter, I use a lot of wood in my work, and I know that if we don't manage our forests sustainably, we could run out of this precious resource. I also worry about the impact of our industry on the air and water quality, and the amount of waste we produce.

**3. How urgently do you think these issues need to be resolved?**

I think they're extremely urgent. We need to take action now to ensure that we're not depleting our natural resources and damaging our environment. If we don't act quickly, we could be facing a very bleak future.

**4. Would you be willing to pay someone to solve these environmental issues for you?**

Yes, I would. As a business owner, I have a responsibility to ensure that we're doing our part to protect the environment. If that means investing in solutions that can help us reduce our impact, then I'm willing to do that.

**5. How do you currently address these environmental concerns in your work?**

We've taken a number of steps to reduce our environmental impact. For example, we use certified sustainable wood whenever possible, and we've invested in energy-efficient equipment to reduce our energy consumption. We also recycle as much of our waste as possible, and we've implemented water-saving measures in our facility.

**6. Do you have any ideas for solutions to these environmental issues?**

Yes, I believe that investing in sustainable forestry practices and using renewable energy sources are key solutions to addressing these issues. I also think that implementing stricter regulations on industries that have a high environmental impact could help to drive change.

**7. What are your thoughts on an app that allows users to upload photos of abandoned waste with location information to help municipalities clean it up?**

I think it's a great idea. Abandoned waste is a serious issue, and anything we can do to help municipalities identify and clean it up is a step in the right direction. This type of app could also help to raise awareness of the issue and encourage people to dispose of their waste responsibly.

**Develop Persona Description(s).** Create and enclose a Persona Description for your End Users and Customers (if different).

## PERSONAS

PERSONA NAME	Sarah	SECTION 1: WHO?
BACKGROUND Job? Career path? Family?	Sarah is a 26-year-old marketing coordinator who lives in an urban area with a high population density. She is single and lives alone in a small apartment. She has a bachelor's degree in marketing and is currently pursuing a master's degree in sustainability.	
DEMOGRAPHICS Male/female? Age? Income? Location?	Female, 26 years old, €50,000 annual income, lives in Oulu, Finland.	
IDENTIFIERS Demeanor? Communication preferences?	Sarah is outgoing and passionate about environmental issues. She is active on social media and frequently shares articles and tips about sustainable living with her followers.	
	SECTION 2: WHAT?	
GOALS Primary goal? Secondary goal?	Sarah's primary goal is to reduce her environmental impact and help improve the sustainability of her community. Her secondary goal is to earn rewards for her sustainable actions.	
CHALLENGES Primary challenge? Secondary challenge?	Sarah faces limited time and resources to devote to environmental causes, as well as a lack of convenient and accessible solutions to report trash and improve waste management.	
WHAT CAN WE DO ...to help our persona achieve their goals? ...to help our persona overcome their challenges?	Dev4Env can offer a user-friendly and intuitive app that enables Sarah to easily report trash in public areas and earn rewards for her actions. They can also leverage social media to promote the app and encourage Sarah to share her experiences and promote the app to her followers.	
	SECTION 3: WHY?	
REAL QUOTES About goals, challenges, etc.	"I want to make a positive impact on the environment, but it can be overwhelming and difficult to know where to start."	
COMMON OBJECTIONS Why wouldn't they buy your product/service?	Sarah may be hesitant to use the app if she doesn't feel it is convenient or if she doesn't see immediate benefits from using it.	
	SECTION 4: HOW?	
MARKETING MESSAGING	"Join the movement to create a cleaner and more sustainable community with Dev4Env's	



How should you describe your solution to your personas?	<b>user-friendly trash reporting app. Report litter and earn rewards for your sustainable actions!"</b>
<b>ELEVATOR PITCH</b> Sell your persona on your solution!	<b>"Are you tired of seeing litter in your community and want to make a positive impact on the environment? Dev4Env's trash reporting app makes it easy and rewarding to report litter and improve waste management in your community."</b>

<b>PERSONA NAME</b>	Ehtu	<b>SECTION 1: WHO?</b>
<b>BACKGROUND</b> Job? Career path? Family?	Ehtu is a Sustainability Manager. He is responsible for overseeing the sustainability initiatives of their municipality or local government. He has a background in environmental science or policy and has been working in their current role for 5 years. He reports directly to the Mayor or City Manager and works closely with other departments such as Public Works and Planning.	
<b>DEMOGRAPHICS</b> Male/female? Age? Income? Location?	He is 34 years old, holds a bachelor's or master's degree in environmental science or policy, and earns a salary of 69,420€. He works in a local government office located in the city center.	
<b>IDENTIFIERS</b> Demeanor? Communication preferences?	He is detail-oriented, data-driven, and passionate about sustainability. He communicates professionally, often through email and phone, and prefers a straightforward and analytical approach.	
	<b>SECTION 2: WHAT?</b>	
<b>GOALS</b> Primary goal? Secondary goal?	The primary goal of the Ehtu is to implement sustainable practices throughout the municipality or local government. This includes reducing energy consumption, decreasing waste, and promoting sustainable transportation options. His secondary goal is to educate and engage the community in sustainable practices.	
<b>CHALLENGES</b> Primary challenge? Secondary challenge?	The primary challenge for Ehtu is securing funding for sustainability initiatives, as budgets can be limited. Another challenge is getting buy-in from other departments and stakeholders within the municipality or local government.	
<b>WHAT CAN WE DO</b> ...to help our persona achieve their goals? ...to help our persona overcome their challenges?	Dev4Env can provide customized software solutions that help Ehtu track and analyze data, communicate progress to stakeholders, and engage with the community through education and outreach.	
	<b>SECTION 3: WHY?</b>	
<b>REAL QUOTES</b> About goals, challenges, etc.	"We want to be leaders in sustainability in our region, but we need the right tools to track our progress and communicate our successes to the community."	
<b>COMMON OBJECTIONS</b> Why wouldn't they buy your product/service?	"We don't have the budget for new software solutions"	

	<b>SECTION 4: HOW?</b>
<b>MARKETING MESSAGING</b> How should you describe your solution to your personas?	Dev4Env's software solutions help municipalities and local governments achieve their sustainability goals by providing easy-to-use tools for tracking and analyzing data, communicating progress, and engaging with the community.
<b>ELEVATOR PITCH</b> Sell your persona on your solution!	Dev4Env offers customizable software solutions that help Ehtu and other Sustainability Managers track and analyze data, communicate progress to stakeholders, and engage with the community. With Dev4Env, municipalities and local governments can achieve their sustainability goals and be leaders in their region.

## 4. USP

### **Value Proposition.**

For End Users:

“Join the movement towards a cleaner world with our citizen-involved software.”

For Customers (Municipalities and Local Governments):

“Innovative software solutions that simplifies environmental sustainability.”

### **Slogan.**

Coding a **greener** Tomorrow (Slogan for company)

A Snap a day keeps trash away. (Slogan for app)

## 5. Describe your earning models.

Annual subscription for companies: Dev4Env can earn revenue by offering an annual subscription model for companies that use their customized software solutions. This revenue model can provide a steady stream of income and ensure ongoing support and maintenance for the software.

Merchandise sales: Dev4Env can also generate revenue through merchandise sales such as branded t-shirts, hats, and other environmentally friendly products. This revenue model can help increase brand awareness and create additional revenue streams.

Donations and grants: Dev4Env can seek donations and grants from individuals and organizations that are interested in supporting their mission to reduce environmental impact. This revenue model can provide additional funding to support ongoing research and development efforts.

Sponsorships from cities and governments: Dev4Env can partner with cities and governments to offer sponsorship opportunities for their customized software solutions. This revenue model can provide additional funding for ongoing development and support.

LIFE Funding from EU: Dev4Env can also explore funding opportunities from the European Union's LIFE program, which supports environmental and climate action projects. This revenue model can provide significant funding to support ongoing research and development efforts.

## 6. Core Strategy Tools:

### The Competitive Analysis

Current competitors:  3-5 worst competitors	Competitor's strengths	Competitor's weaknesses	Your notes
Social media apps	Established brand recognition and customer base  Large user base with high levels of engagement  Free or low-cost access to their services  Ability to quickly pivot and adapt to changing user needs  Potential for viral growth through social media sharing	Limited focus on environmental issues and sustainability  Lack of customization and tailoring of solutions to specific business needs  Limited support and maintenance for their solutions  Potential for privacy and data security issues  Difficulty in tracking and analyzing environmental impact data.	They could use their current features and combine them in order to provide similar features.
Software developing companies	Established reputation, wide range of products and services, strong focus on sustainability	High prices, limited geographic reach, limited scalability	They could see our success and start implementing similar features with the knowledge they already have
Waste collection companies	Established relationships with	Limited focus on sustainability	They can create their own app

	<p>municipalities and local governments</p> <p>Direct access to data on waste generation and disposal</p> <p>Existing infrastructure and resources for waste management</p> <p>Established brand recognition and customer base</p> <p>Potential to bundle environmental software solutions with existing waste management services</p>	<p>beyond waste management</p> <p>Limited customization and tailoring of solutions to specific business needs</p> <p>Potential for conflict of interest between waste management and sustainability goals</p> <p>Limited support and maintenance for their solutions</p> <p>Limited expertise in software development and data analysis.</p>	<p>with the same features of us just for the people living in the area they operate</p>
<p>To differentiate from the competition, our company will focus on providing a user-friendly and gamified platform that incentivizes users to participate in waste collection and environmental conservation efforts. We will also offer a range of features, including real-time tracking of waste collection and rewards for responsible waste disposal, that are not currently available in the market.</p> <p>One of the competitor weaknesses we can exploit is their limited technology and lack of gamification to encourage participation as well as the high prices they have. We can also leverage our partnerships with municipalities and local governments to establish a strong network of waste collection and disposal systems.</p> <p>To be successful, we will need to overcome the competitor's strengths, such as their established brand reputation and large market share. We will address this by focusing on our unique value proposition and highlighting the benefits of our platform, including environmental impact and community engagement.</p>			

Companies/products that succeed well in the market are those that offer a unique value proposition and are responsive to changing consumer demands. They also tend to have strong branding and effective marketing strategies.

Our competitors that are growing and developing the fastest are those that have strong partnerships with local governments and have established a reputation for effective waste management.

The international competition is likely to focus on improving their technology and expanding their partnerships with local governments and waste management companies. They may also focus on implementing sustainability and waste reduction initiatives to stay ahead of changing regulations and consumer preferences.

Our competitors use various marketing strategies, including advertising, public relations, and social media marketing, to reach their target audience.

To take market share away from our competitors, we will focus on offering a more engaging and user-friendly platform that incentivizes waste collection and responsible waste disposal. We will also leverage our partnerships with municipalities and local governments to establish a strong network of waste collection and disposal systems.

Our competitors may respond by improving their technology and offerings or by establishing their own partnerships with local governments and waste management companies.

Our current competitors target a range of customers, including individuals, households, and businesses. Some focus on serving the mass market, while others target a specific niche or geographic location.

Competing businesses may be scaling back their operations due to changing regulations or increased competition. This presents an opportunity for us to expand our market share and establish ourselves as a leader in the industry.



If competitors drop out of the marketplace, we will focus on expanding our operations and strengthening our partnerships with municipalities and local governments.

If new competitors enter the marketplace, we will focus on maintaining our unique value proposition and improving our technology and offerings to stay ahead of the competition. We will also leverage our existing partnerships to establish a strong network of waste collection and disposal systems.

## SWOT Analysis Worksheet

<b>Strengths</b> What do you do well? What unique resources can you draw on? What do others see as your strengths?	<b>Weaknesses</b> What could you improve? Where do you have fewer resources than others? What are others likely to see as weaknesses?
<p>Innovative solutions: Dev4Env's trash reporting app is a unique solution that addresses a real-world problem in an innovative way. This could set the company apart from competitors.</p> <p>Social impact: Dev4Env's mission to help municipalities and local governments keep their public areas clean could appeal to customers who value social responsibility and environmental sustainability.</p> <p>Strong partnerships: Dev4Env could leverage its partnerships with municipalities and local governments to establish credibility and gain access to potential customers.</p> <p>Expertise: If Dev4Env's team includes experts in waste management, technology, and/or environmental issues, this could be a valuable asset that sets the company apart from competitors.</p> <p>User engagement: Dev4Env's rewards program for users who report trash could help drive engagement and usage of the app.</p> <p>Cost-effective: Compared to traditional waste collection methods, Dev4Env's solution could be more cost-effective for municipalities and local governments, which could be a selling point for the company.</p>	<p>Limited brand recognition: As a new company, Dev4Env may not yet be well-known or established in the market, which could make it harder to attract customers and compete with more established players.</p> <p>Limited resources: As a startup, Dev4Env may have limited financial and human resources compared to larger competitors, which could constrain its ability to scale and compete effectively.</p> <p>Dependence on external partners: Dev4Env relies heavily on external partners such as waste collection companies, any disruptions in these relationships could create significant challenges.</p> <p>Technology challenges: Developing and maintaining complex software solutions can be challenging and expensive, and Dev4Env may face technical difficulties or bugs that could impact the user experience.</p> <p>Regulatory and legal hurdles: Depending on the geographic scope of its operations, Dev4Env may face legal or regulatory hurdles related to data privacy, waste management, or other issues.</p> <p>Limited market demand: While there may be demand for sustainable waste management solutions, it is possible that the market for</p>

	Dev4Env's services may be limited or slow to develop.
<b>Opportunities</b> What opportunities are open to you? What trends could you take advantage of? How can you turn your strengths into opportunities?	<b>Threats</b> What threats could harm you? What is your competition doing? What threats do your weaknesses expose you to?
<p>Increasing awareness and concern about environmental issues presents an opportunity for Dev4Env to promote its solutions and attract more customers who are interested in making a positive impact on the environment.</p> <p>The growing trend of corporate social responsibility (CSR) could create opportunities for Dev4Env to partner with companies that are looking to improve their environmental performance and demonstrate their commitment to sustainability.</p> <p>Government initiatives and regulations aimed at reducing waste and promoting sustainability can create opportunities for Dev4Env to work with municipalities, local governments, and other public entities.</p> <p>The increasing use of technology and mobile devices creates opportunities for Dev4Env to develop innovative solutions that are convenient and easy to use for customers.</p> <p>The availability of funding from various sources, such as grants and investment opportunities, presents an opportunity for Dev4Env to expand its operations and improve its solutions.</p>	<p>Competition: Other companies or organizations may enter the market with similar products or solutions, potentially taking away market share.</p> <p>Changes in regulations: Environmental regulations or policies could change, affecting the demand for Dev4Env's solutions or increasing compliance costs.</p> <p>Technological changes: new technologies or innovations could emerge, making Dev4Env's solutions less relevant or less effective.</p> <p>Economic factors: Changes in the economy, such as recessions or inflation, could affect consumer spending and demand for Dev4Env's solutions.</p> <p>Natural disasters or climate change: Extreme weather events or other effects of climate change could impact the availability and accessibility of waste disposal facilities or disrupt operations.</p>

(PESTEL)

Factor	Opportunity	Threat
<b>Political</b>	Changes in environmental regulations and policies More funding for environmental initiatives	Increased bureaucracy and red tape Political instability or changes in government that could impact environmental policy
<b>Economic</b>	Growth in the sustainable development industry	Economic downturn leading to decreased funding for environmental initiatives Competition from cheaper, less sustainable alternatives
<b>Social</b>	Increasing awareness and concern for environmental issues Potential for increased demand for sustainable products and services	Resistance from consumers who prioritize convenience over sustainability
<b>Technological</b>	Advancements in renewable energy and green technology Potential for increased efficiency and cost-effectiveness	Rapid obsolescence and high development costs Competition from other heavily investing companies
<b>Environmental</b>	Increasing public concern for environmental issues Growing demand for environmentally friendly products and services	Natural disasters and other environmental hazards
<b>Legal</b>	Changes in environmental laws and regulations Opportunity to be a leader in compliance	Risk of legal action for non-compliance or environmental harm

	and sustainable practices	
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## Choosing the Right Generic Strategy



Choosing the Differentiation Focus Strategy for Dev4Env can be a good fit as we have identified a specific niche or segment of customers that have unique needs and are willing to pay a premium for a product or service that meets those needs. By focusing on this specific group, we can create a differentiated product or service that caters to their specific needs and preferences.

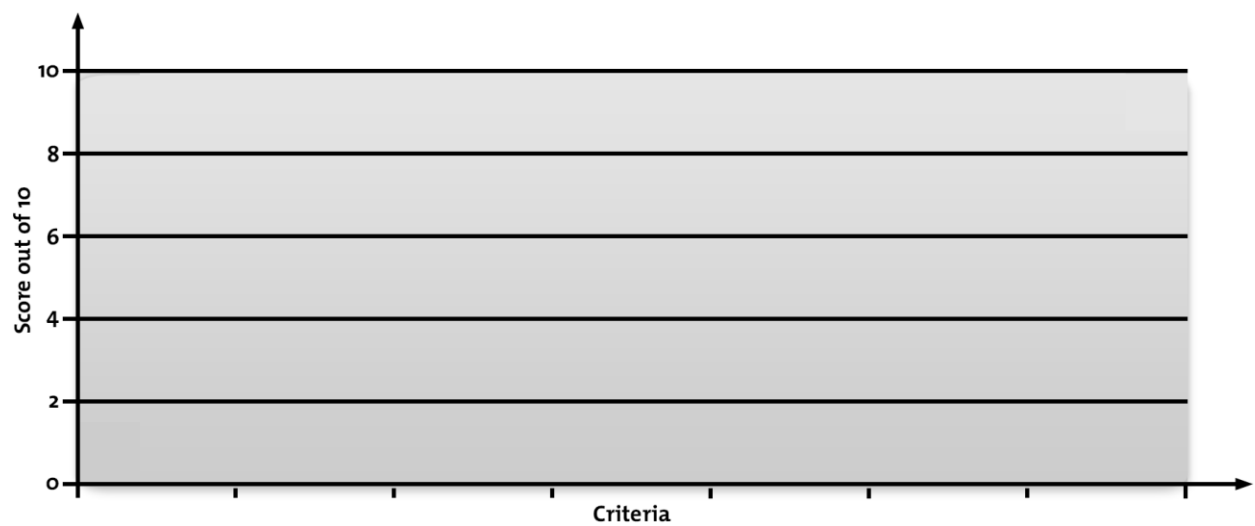
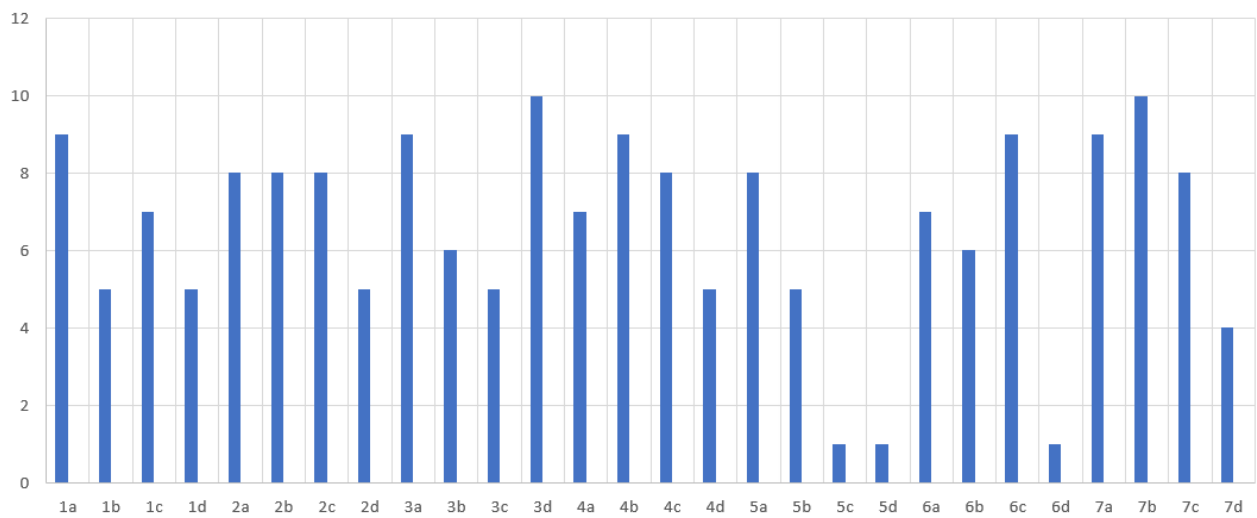
This strategy can work well for Dev4Env, which is targeting environmentally conscious customers who are looking for sustainable waste management solutions. By offering a specialized service that emphasizes eco-friendliness and sustainability, Dev4Env can differentiate itself from competitors and attract customers who are willing to pay more for this type of service.

Furthermore, focusing on a specific niche or segment of customers can also help a company to develop deep expertise and knowledge in that area, which can further enhance its competitive advantage. This can help Dev4Env to establish itself as a leader in sustainable waste management solutions, which can help to attract more customers and strengthen its market position over time.

## Competitive advantage

### USP Analysis Worksheet

Criterion	A: Dev4Env	B: Social media apps	C: Software development companies	D: Waste collection companies
1. Customized software solutions that can help municipalities and local governments effectively manage waste.	9	5	7	5
2. Innovative technology that utilizes artificial intelligence and machine learning to identify patterns and optimize waste management processes.	8	8	8	5
3. Strong focus on sustainability and environmental impact, with a mission to create a cleaner, healthier planet for future generations	9	6	5	10
4. Partnership with local businesses	7	9	8	5
5. Rewards program	8	5	1	1
6. Flexibility of products and services	7	6	9	1
7. Scalability	9	10	8	4



USP Statement
Dev4Env: Innovative software solutions for a cleaner, more sustainable world.



## 7. Vision and goals

### **Vision**

At Dev4Env, we have an optimistic vision of becoming a global leader in software development, with a focus on environmental sustainability and impact. Our goal is to be recognized as a key player in developing customized software solutions that help our clients achieve their environmental goals while increasing their efficiency and engagement.

We envision a diverse portfolio of successful projects, each one making a significant impact in different environmental areas, such as waste reduction, energy management, or carbon footprint reduction. We take pride in our expertise in sustainability and environmental impact, and we strive to attract a talented team of professionals who share our passion for making a difference in the world.

We are committed to continuous innovation and the development of cutting-edge solutions that address the most pressing environmental challenges of our time. Our solutions are designed to be used by businesses, governments, and individuals worldwide, making a significant impact in the fight against climate change and environmental degradation.

Overall, our optimistic vision is to be a leading force in the global movement towards sustainability, leveraging technology to create a more sustainable and prosperous world for future generations. At Dev4Env, we are excited to work towards this vision, and we look forward to the positive impact that our solutions will bring to our clients and the environment.

### **Goals**

- Maintain a profitability margin of at least 20% each year.
- Attain a market share of 10% in the waste management software industry in the targeted geographic area within two years.
- Expand the company's services to at least two new market areas within three years.
- Develop and release at least two new environmentally focused software solutions within the first year, after that one per year and providing support for previous solutions.
- Expand the team by hiring at least five new employees over the next year, with a focus on attracting top talent in software development and sustainability.
- Achieve a 90% customer satisfaction rate for our software solutions, as measured by customer feedback surveys.

## 8. Risk analysis

**Note:** In the table there are just the corresponding numbers of the risks visible below.

Probability\ Impact	Insignificant	Minor	Moderate	Major	Catastrophic
Certain	12	13	6		
Likely	11	14	4	8	
Moderate		17	10, 15	3	1
Unlikely		5, 16	7, 19	2, 18, 20	
Rare				9	

- Lack of Funding:** Moderate to likely – major to catastrophic  
As a startup, Dev4Env may face challenges securing adequate funding to support ongoing development and operations. This could impact the company's ability to attract and retain talent, as well as the speed of product development.
- Regulatory or legal compliance issues:** Unlikely to moderate - moderate to major  
Developing environmental software solutions may involve navigating a complex landscape of regulations and legal requirements. Failure to comply with these requirements could lead to legal or financial consequences for the company.
- Security breaches:** unlikely to moderate – major to catastrophic  
As a technology company that handles sensitive user data, Dev4Env may be vulnerable to cyber-attacks or data breaches. This could result in reputational damage, loss of user trust, and legal or financial consequences.
- Competition:** likely – moderate  
There may be other companies or startups developing similar environmental software solutions, which could impact Dev4Env's market share and revenue potential.
- Environmental or technological changes:** unlikely – minor to moderate  
External factors such as changes in environmental regulations or advancements in technology could impact the viability or relevance of Dev4Env's products and services.
- Technical issues:** Likely to Certain – Moderate to Major  
As a technology company, Dev4Env may face technical issues such as software bugs, hardware malfunctions, or system downtime. This could impact the user experience, lead to lost revenue, and damage the company's reputation.
- Talent retention:** unlikely to moderate – moderate to major  
Dev4Env's success depends on its ability to attract and retain skilled talent. If the company is unable to provide competitive salaries, benefits, and growth opportunities, it may struggle to retain

employees and maintain momentum in its development efforts.

8. **Market adoption:** likely - major

Dev4Env's success also depends on the adoption and use of its products and services by the target market. If users or organizations are hesitant to use or adopt the company's offerings, this could impact revenue potential and market share.

9. **Natural disasters:** Rare – major

Dev4Env's operations and development efforts could be impacted by natural disasters such as hurricanes, earthquakes, or wildfires. This could result in delayed product development, operational disruptions, or loss of equipment or data

10. **Changing market conditions:** unlikely to moderate - major

As with any industry, the market for environmental software solutions could be impacted by changing economic, political, or environmental conditions. This could impact revenue potential, growth opportunities, and the viability of Dev4Env's products and services.

Specific examples:

11. A typo in a blog post that is quickly corrected: likely - insignificant
12. A minor bug in the app that doesn't affect user experience: certain– insignificant
13. A few users report a technical issue that is easily resolved: certain - minor
14. A delay in launching a new feature by a few days
15. A temporary outage of the app's servers affecting a small number of users
16. A delay in responding to a user support inquiry resulting in a negative review
17. A data breach that only affects non-sensitive user information
18. A prolonged outage of the app's servers affecting a large number of users
19. A severe bug in the app that causes significant data loss for a small number of users
20. A major security breach compromising sensitive user information