WU IdeaLAB
Wien Energie Challenges



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Who we are

Wien Energie – New Business and Ventures

- We are the New Business Unit of the Wien Energie
- We focus on societal change, emerging customer needs and future markets in the energy sector
- **Future Ready:**

We develop scalable digital business models for the future that contribute to the Wien Energie strategy and the energy transition, and anticipate societal change!



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Challenge 2

- Vienna now averages around 35 days above 30°C per year and cooling is becoming a basic need rather than a luxury
- Around 78% of Vienna households live in rented apartments and have little say in the choice of cooling method
- Traditional air conditioning is often expensive, regulated, or difficult to access

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Challenge 2 – Cooling as a Service

Show us the business model, not the gadget

- How can cooling be made accessible to as many people as possible without everyone having to buy their own air conditioner?
- We are interested not only in the technology, but in the business model behind it.





Your Task:

Design a Cooling-as-a-Service offering for Vienna: residents pay for cool hours, not for hardware.

Think about these questions:

- Who are the customers?
- What exactly is being sold?
- How it is delivered, installed and serviced across a short summer season?
- How it is priced so that lower-income households can also afford it?

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WIEN ENERGIE

WIENER STADTWERKE GRUPPE

DIE ENERGIE VON WIEN



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Challenge 2 - Cooling as a Service: Design a Cooling-as-a-Service offering for Vienna

Summary

The Starting Point:

- Vienna is experiencing increasingly frequent and intense periods of extreme heat. The city now averages around 35 days above 30°C per year, approximately five times as many as in the late 1950s. As a result, indoor cooling is becoming less of a luxury and more of a basic need for health, comfort and quality of life.
- However, access to effective cooling remains unequal. Wien Energie's district cooling network currently supplies around 300 large buildings, but most residential households cannot access this infrastructure directly. At the same time, approximately 78% of Viennese households live in rented apartments.
- For tenants, installing a conventional fixed air-conditioning system can involve significant barriers. These may include landlord approval, façade permits, high upfront investment, limited installation options, ongoing maintenance requirements and potential noise for neighbouring households.
- As a result, many residents rely on fans, temporary solutions or no cooling at all. The households most affected by heat are often also those least able to afford conventional air-conditioning equipment or major structural changes to their homes.For an energy provider such as Wien Energie, the question is therefore not only which cooling technology is technically possible. The decisive question is how cooling can be transformed into an accessible customer offering, a practical operating model and an economically viable business..

The Challenge:

- How can Wien Energie provide cooling as an affordable and convenient service for Vienna's rental market, without requiring residents to purchase and own expensive equipment?
- The objective is to develop an innovative Cooling-as-a-Service concept in which customers pay for the benefit they receive, such as cool hours, a defined comfort level or a guaranteed indoor temperature, rather than paying primarily for hardware.
- The solution should respond to the specific realities of Vienna's rental market. It should minimise upfront costs and complexity for residents, while addressing questions around landlord approval, installation, maintenance, seasonal demand, energy consumption and operational scalability.
- The concept may involve physical devices, digital services, building-level solutions, partnerships or combinations of different technologies. However, the primary focus should be on the customer value proposition and the business model, not on developing a new cooling device.

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Challenge 2 - Cooling as a Service: Design a Cooling-as-a-Service offering for Vienna

More Details

The Task:

Develop a concrete Cooling-as-a-Service concept for Vienna. In particular, address the following questions:

- What is the customer problem? Which specific cooling-related problem does the concept solve? Consider factors such as indoor comfort, heat exposure, affordability, installation barriers, limited living space and the specific needs of people living in rented apartments.
- Who is the customer? Is the paying customer the tenant, the property owner,the property management company, the housing association, the municipality or another stakeholder? Who uses the service, who decides whether it is installed, and who ultimately pays for it?
- What exactly is being sold? Define the service customers receive. Is the offering based on a cooling device, a certain number of cool hours, a guaranteed room temperature, a subscription, a defined comfort level or another measurable outcome?
- How is the service delivered? Explain how the solution is ordered, installed, activated, operated and removed or stored if necessary. The delivery model should take into account that the main cooling season in Vienna is relatively short and that demand may increase rapidly during heat waves.
- How are maintenance and customer service organised? Who is responsible for repairs, cleaning, replacement, technical support and ongoing maintenance? Consider how service quality can be maintained if the concept is rolled out across thousands of households.
- How does Wien Energie make money? Identify possible revenue streams. These might include subscriptions, usage-based fees, payments per cooled hour, service packages, contracts with property owners or housing providers, or a combination of different revenue models.
- What does the offering cost? Consider the relevant costs for hardware, electricity, transportation,installation, maintenance, storage, digital infrastructure, customer acquisition and support. Explain how the cost structure changes as the offering scales.
- How is the service kept affordable? Develop a pricing model that could also work for lower-income households. Consider social tariffs, cross-subsidisation, pay-per-use models, support from building owners or municipalities, or partnerships with social housing providers.
- How does the concept address energy consumption and peak demand? Cooling can create additional electricity demand during the hottest hours of the year. Explain how the concept could use efficient technologies, smart controls, demand management, renewable energy or flexible operation to reduce its impact on the energy system.
- Which partners are needed? Identify relevant partners such as device manufacturers, installers, property management companies, housing associations, technology providers, logistics companies, municipalities or social organisations. Describe the role each partner would play.
- How does the concept become scalable?

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Hobby Lobby - Challenges for the WU Hackathon



Initial Situation

- **One in four children** in Europe is at risk of poverty
  - No access to informal, extracurricular education due to **high costs**
  - lack of networks, fewer opportunities for s**ocial participation**
  - higher probability of **dropping out** of schooling
  - Lack of skills: fewer opportunities to learn **important social skills**

! Child poverty and its consequences cost the state **17.2 billion euros** per year.

70%

of knowlegde is aquired in informal settings



VISION

Our **vision** is a world where education takes place **anytime, anywhere**.

Every child has the **same opportunities** to discover and realize their **potential.**

Hobby Lobby in Numbers

254.012
Childcare-Hours

20.582
Course-Spots

10.547
Children

1.441
Hobby-Courses

775
Voluntary Course-Leaders

254
Youth Leaders

29
Awards

15
Locations

3
Countries

21.27€

An SROI study by **WU Vienna** found that **every euro** invested in the Hobby Lobby creates €**21.27 of social value**.

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The Challenges

1 Equal Opportunities Beyond the Classroom

- Many children who would benefit are not being reached - why?
- Known barriers: language, cultural or family reservations, lack of knowledge
- Identify further barriers and where they hide; develop ideas to remove them
- Thinking beyond - what other ideas for equal opportunities with low barriers can you develop?

2 Rethinking Voluntary Engagement

- Volunteering with vulnerable groups needs regular, meaningful exchange
- Direct conflict with busy schedules of modern life
- Rethink volunteering so it fits the needs of all sides - reliability, dependency, flexibility...
- What kind of support is needed from an organisations side?

3 Lasting Impact: Bridging the Gap after the YL Programme

- One-year programme afterwards gap until adulthood
- Develop a perspective and model for alumni to stay connected and shape their next chapter after the programme that offers responsibility, growth, and fun without overloading life plans

Challenge 1 -
Equal Opportunities Beyond the Classroom

Hobby Lobby offers more than 100 free courses across 15 locations, yet not every child who could benefit actually takes part. Barriers such as longer commutes, language, cultural or family reservations, and a lack of knowledge about local leisure structures might be some of the reasons why children who need it most are not yet reached by the program.

What other barriers can be identified?
Where do these barriers hide?
How could they be removed, and which incentives or institutional partnerships could help?
Any solution must work without additional financial burden for families.

Challenge 2 -
Rethinking Voluntary Engagement

Hobby Lobby's free courses are led by volunteers who share their passion with children and teenagers on a weekly basis. But many people who are eager to support the cause of Hobby Lobby cannot commit to a fixed weekly slot because of varying reasons.

This is a problem that many organizations relying on the work of volunteers face - people who might be eager to volunteer have problems committing to regular engagement, or simply cannot be reached. But volunteering with vulnerable groups often requires meaningful exchange on a regular basis in order to create positive relationships and lasting impact.

Develop approaches, programs and ideas how volunteering with vulnerable groups can be rethought and restructered to fit needs from all sides. Identify requirement for organizational work, recognition and relationship-building (with the target group and the organization).

Challenge 3
Lasting Impact: Bridging the Gap between the Youth Leaders Program and Adulthood

In Hobby Lobby's Youth Leaders Programme, former Hobby Lobby course participants can take on real responsibility as co-course-leaders, develop their skills while being a role model for younger children, and receive support and mentoring during the one-year programme. But once the programme ends at ages 14-16, school, training, place of residence, and available time often change, and many young people drift away from the community.

How can they stay connected to Hobby Lobby and actively shape their own next chapter within it? Develop a perspective for Youth Leader alumni and a model that works even when young people cannot yet predict how much time they will have after transitions in their education. The solution should offer genuine responsibility, personal growth and fun without overloading their life plans with obligations.