

Lapee – the female urinal bringing gender equality to concerts and festivals

The vision

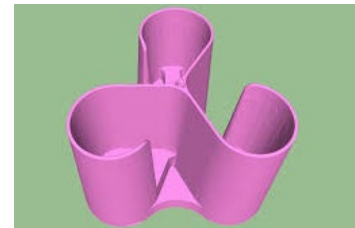
We live in a world designed by men for men, and as a result, women struggle handling everyday tasks in a society that is just not built for them. This is what we want to change! Lapee has a vision to increase gender equality (SDG 5) by ensuring proper access to sanitation facilities (SDG 6) for women. Our beachhead market is festivals and large outdoor events where sufficient access to toilet facilities constitutes a challenge, especially for women. Once we have tested and validated our solution, we plan to expand to Third World countries, e.g., refugee camps or large cities lacking access to toilet facilities for a.o. salespeople working on the streets.

The problem

At festivals, concerts and other large outdoor events, the toilet infrastructure is often insufficient for women. Traditional toilet carts are expensive to rent, slow to use and takes up much space relative to urinals, which are 6x faster to use, but only serve men. Hence, women spend much time waiting in toilet queues, missing parts of the event and spending less money on drinks, as it will put them right back in the toilet queue.

Our solution

Lapee is a female version of the traditional urinal for men. Lapee is movable, uses no water or power and is adapted to the toilet rental industry by being stackable and liftable by pallet lifter or forklift. It is produced in rotational molded polyethylene which is durable and fire resistant, graffiti can be removed easily, and the urinal is easy to clean with a high-pressure washer. The large tank size (1100L) minimizes the frequency of emptying.



Value-proposition

With women being a completely new target group for urinals, a new design is required. Hence, Lapee is specifically adapted to the female anatomy. The curved design offers a private peeing experience. As females are squatting when peeing, the urinal floor is elevated to prevent outsiders from looking in, while at the same time giving users a sense of security by being able to see what happens outside. Using the Lapee urinal is six times faster than a traditional toilet cart. Lapee offers women a fast, safe, and hygienic way to answer the call of nature, thus significantly reducing the time spent waiting in line.

Our paying customers will be suppliers of mobile toilets. For them the Lapee urinal offers a new way of providing toilet services for women in an easy and cost-effective way, with minimal maintenance and installation costs.

Business model

Mobile toilets are owned by rental companies such as GO Toiletudlejning (DK), Toi Toi & Dixi (DE). The rental companies purchase Lapee for 3000 EUR/unit (sold in bundles of 10 units). The production costs for one Lapee unit is 1000 EUR, giving us a revenue of 2000 EUR/unit.

Market & Competition

With our beachhead market being large outdoor events, we will initially target European toilet rental services, comprising a market of approx. 50.000 units (based on an expectation of a 1:1 ratio between male & female urinals). To size the market, we have interviewed management from 15 larger events, who expressed an initial interest in installing one female urinal per 10 male urinals. Based on conversations with toilet rental companies, we know that there are approx. 3000 male urinals available on the Danish market today, giving us an initial TAM of 300 Lapees sold to rental companies in DK, equal to a turnover of EUR 900.000. In Y2 we will target Sweden and Norway with an exp. TAM of 600 units (SE) and 400 units (NO). In Y3 we plan to enter the German and French markets with exp. TAM of 5000 Units (DE) and 4200 (FR). For our secondary market, we see enormous potential in Third World countries where access to proper toilet facilities is scarce. We have been in dialogue with India Plast Pvt., a producer of portable sanitation solutions in India, who estimates a total addressable market of 10 mio units in India alone.

There are currently no female urinals on the market. Our main competitors are:

Traditional mobile toilets (Portapotty) can only service one user at a time and take up a lot of ground space. The price is 1000-1500 Euro/ unit, but they are more expensive to transport (not stackable) and require more maintenance. With a smaller tank size, frequent emptying is necessary.



Vacuum toilets are an expensive solution priced at 10.000 Euro/unit and requires both power and water to function. The tank is bigger, requiring less frequent emptying, but maintenance costs remain high.



Traction

Festival X, Y and Z have each committed to renting 50 Lapee units for the coming season, for a price of 200.000 DKK/ per festival. Further, we have LOIs from Copenhagen Rental and ToiletRentals*R*us, indicating that they are willing to purchase the final product once it has been tested by the festivals, and offer it as part of their product catalogue. We have a patent pending and a design registration for the Lapee design. To validate the need for our solution, we have gathered feedback on our MVP from 50 women in the festival-user segment. All were positive in terms of using the product in a real-life peeing situation, but with some concerns about the extent of privacy necessary for the user to feel comfortable. We have adjusted the design accordingly.

Team

Gina, CEO; Architect specialized in computational design. Gina is driven by the vision of empowering women through gender-equal sanitation. Ginas main responsibility will be the 3D modelling of the first prototype.

Alexander, COO; Architect specializing in Art and Architecture. With experience in sales, he is eager to bring Lapee to a commercial market to make an actual impact on gender inequality. Alexanders main responsibility will be to analyze the market and lead product and business development tasks.

Current status and Roadmap ahead

Currently, we have the first prototype built in construction foam. We apply for a grant to build the first fully functional prototype to test and showcase to customers, planned for Tech BBQ in September this year.

Budget & Roadmap

	Q2 - 2024	Q2 - 2024	Q4 - 2024	Q1- 2025
Product Development activities	<ul style="list-style-type: none"> ● Purchase materials ● build and test prototype 	<ul style="list-style-type: none"> ● Prototype test at TechBBQ. 	<ul style="list-style-type: none"> ● Finalize production design based on feedback from the TechBBQ test 	<ul style="list-style-type: none"> ● First products launched and rented out to festivals
Business Development activities	<ul style="list-style-type: none"> ● Recruit test group ● Book event organizers for presentation in Q3 	<ul style="list-style-type: none"> ● Prototype is presented for large event organizers + media 	<ul style="list-style-type: none"> ● Preorders are closed before production is launched 	<ul style="list-style-type: none"> ● Toilet rentals invited to festivals to see final product in action and buy.
Budget	Construction foam: 20.000DKK Laser cutting (100m): 13.000DKK Resin & glass fibre: 7000DKK Hoses, water joints and tools: 2500 DKK	Transport of prototype: 4000 DKK	Last iterations on production design: 7200 DKK	
	SUM: 42.500DKK	SUM: 4000 DKK	SUM: 7200DKK	
			Total amount applied for	53.700 DKK