The Biogas Milk Chiller provides milk cooling on-farm, allowing small holder dairy farmers without access to a (reliable) electricity grid to get more value for milk by maintaining, delivering and selling the highest possible quality of raw milk, using biogas - generated from the manure of their cows - as a source of energy.
Customer Experience Map
The ideal user: a small holder dairy farmer with 2-10 cows, living in East Africa without (reliable) electricity access

Ms Grace Massao

- Dairy farmer with 4 dairy cows
- 35 years old, lives with her husband and 3 children in rural Tanzania
- No access to a (reliable) electricity grid
- Owns a SimGas biogas digester since 2013 for cooking energy.

Grace delivers most of her milk (8 L from morning, 5 L from evening) to her local milk collection center (5 km away from her house) while 2 L is left for home consumption. A couple of times last week her evening milk was rejected at the collection centre because it had gone sour overnight. She has no option to maintain the milk quality by cooling, so she is left with two options: either she could try to sell the evening milk to neighbors at a potentially lower price or take the time and the risk of delivering the evening milk in the pitch dark, dangerous route to the milk collection center.

As an active member of the local dairy cooperative, Grace receives a text message from the cooperative notifying her on the newest development: a new device that provides on-farm, off-grid milk chilling will be launched soon! Exciting! Maybe she can find out more at the milk collection center where she delivers her morning milk. Indeed, one of the center’s representatives is handing out invitations to the demonstration of the ‘biogas milk chiller’ next week!
SimGas offers a package deal: lease-to-own financing, installation, training and after-sales service

2 EXPERIENCE
Grace arrives at the dairy cooperative; the launch and demonstration of the ‘biogas milk chiller’ has just begun. She sees a man with a ‘SimGas’ T-shirt - the same company of her biogas system! He’s showing the crowd how the device works and let’s Grace open the lid, put in milk churns, and push the ‘on’ button. She asks him about the costs, whereupon he makes a quick, tailored cost-benefit calculation for her, and offers to make an appointment for her with a SimGas sales agent.

3 CONTRACT
The appointment with the SimGas sales agent is at the office of Grace’s dairy cooperative. Together they discuss various payment options. Grace chooses for the lease-to-own option, which allows her to pay off the biogas milk chiller by installments through every milk sale made to the milk collection center. This way, it will take Grace one year to pay off the system. She signs the sales contract, payment agreement and servicing agreement.

4 INSTALLATION & TRAINING
A SimGas Call Center rep calls Grace to make an appointment for delivery and training. Is tomorrow afternoon OK? It is! Two SimGas guys deliver the brand new biogas milk chiller and Grace tells them where they can place it. They connect the device to the family’s biogas digester and do a thorough quality control check. Who will handle the milk chiller, they ask. I will! says Grace. In the next half hour, Grace is given a full training on the use and maintenance of the device.
Customer Experience Map
With the sale of every Litre of milk, customers pay off their biogas milk chiller

5. CHILLING MILK

It’s 5 PM: milking time! After milking her four cows and filling up the two milk churns, Grace puts the milk churns into the milk chiller device, closes the lid, and presses the ‘on’-button. The milk chiller immediately starts chilling the milk. In three hours time, the milk will be 4°C, and will stay at that temperature throughout the night! She can lay back now and relax – there’s no need to deliver the evening milk to the collection center, she can wait until tomorrow morning!

6. MILK DELIVERY, MILK SALE & PAYMENT

It’s 7 AM: milking time again! After milking her four cows and filling up more milk churns, Grace takes out from the milk chiller device the churns that contain the chilled evening milk from yesterday. She then delivers her four milk churns all at once at the milk collection center. They are impressed with Grace’s milk: what a superb quality! Good quality comes with a good price! With the sale of her milk, she makes her first payment for the device.

7. AFTER SALES SERVICE

It’s been a week since she first started using the biogas milk chiller when Grace receives a call from the SimGas call center: Is everything working out with the biogas milk chiller? Grace tells them that the device is working well, and that all of her milk has been accepted! Her neighbors have already come to visit to check out her new device and want one too! Can you take care of that please? Sure! Should you have any problem in the future, please call and we’ll fix it. Sawa!