Diffusion of Solar PV in Kenya

Optimizing the value proposition for the commercial market

Addressing climate change will be this generation's most important challenge and the energy transition is key. What motivates companies to invest in solar PV in Kenya? The answer might be surprising: motivation comes primarily from cutting costs and not so much from a sustainability shift.

The effects of climate change are getting ever more severe, especially on the African continent. Actions towards the UN Agenda 2030 for sustainable development are becoming crucial, and one part of this is the energy transition. Africa has some of the world's best conditions for solar PV and hence it is a viable option for electricity production in Kenya.

The aim of the thesis was to understand the challenges and opportunities for this diffusion to happen with regards to sellers and buyers of commercial solar PV. It has been accomplished through semi-structured qualitative interviews with the help of Miale Solar Inventions' customers and staff based on the value proposition canvas, as well as a literature review.

Cost savings has been identified as the main reason for solar PV adoption among businesses while sustainability aspects have been of small importance. The reliability and price of electricity on the Kenyan national grid has surfaced as the main pains for customers causing them to look for cheaper and more reliable options.

To enable investments in solar PV systems, financing has appeared to be a key enabler for technology diffusion. In fact, the financing can be considered both a service, a gain creator, and a pain reliever.

All in all, a good match has been identified between what customers want and what Miale, the case company, offers. However, other growth challenges have surfaced which need to be further explored by the company.

As it turns out, the major challenges with technology diffusion faced by the company stemmed from a too heavy reliance on the company's CEO. Building capable and independent business units by introducing more formal structures and processes to the rapidly growing company is another key finding.

The outcome of the study better equips solar PV companies to understand commercial customers in Kenya and grow, to further solar power diffusion, and to drive the sustainability efforts to reach the Agenda 2030.