

Client: Margo

Margo is an early stage company that has a rural electrification model. It has been in discussions with us for helping them to reach operational scale.

Information provided by Margo

Overview

- *Margo is setting up rural electrification businesses in semi-urban and rural areas.* It is currently providing basic lighting solutions to households under a Pay As You Go Model (PAYG). It prices its solutions against the use of kerosene, which is the dominant source of night/ evening time lighting in un-electrified rural parts of India.

Current Operations

- Margo's business model and offering is based on the following premise: The average spend on kerosene (for lighting) by a rural household is Rs. 150 for five liters of kerosene which produces approximately six hours of lighting per night. As an alternative to this, Margo provides two high-luminosity light points operating 7 hours per night for Rs. 100 – 120 per month – this is a fixed amount, split into weekly payments.
- Currently Margo is operating 1500 plants with a mix of performance levels. 1000 plants are performing sub-optimally in terms of collection efficiency or utilisation, while 500 plants are operating optimally. The company is working to get the sub-optimally running plants upgraded to efficient or relocate them.
- Currently, Margo has an average monthly revenue of Rs. 1.7 million per month with seasonal variations of upto 50% (+/-). Despite seasonal variations, Margo generates a gross margin at a plant level. Currently, it has about 20,000 customers.
- Based on the operational efficiencies being targeted by Margo, it estimates that it would cover fully for its costs, depreciation and Corporate Overheads once it reaches 140,000 customers. This is doable within 38 – 40 months of efficiencies being achieved.
- Funds raised so far – USD 2.6 million (which has been utilised to fund plants, startup expenses and operating losses).

Future outlook

- The company is looking to raise another USD 2 million of equity, which will allow it to reach about 2000 additional plants and 50,000 additional customers. Optimisation of existing sites will add another 10,000 customers. Hence it expects to reach 80,000 customers after raising equity (20,000 present + 10,000 from optimization + 50,000 by deploying new equity). It is looking for debt of about 2.5 million to reach breakeven customer levels (i.e. reach a customer base of 140,000+) and scale from there.

- The overall untapped market in India stands at about 78 million unserved households. In this background, the company is seeking to emerge as a leading DRE Company and expand into higher value segments like solar home lighting.

Economics of a single plant

- Cost – USD 1000 (about Rs 65,000)
- Customers served – 25 (max)
- Utilisation efficiency – 90%
- Price per week per customer – Rs 30
- Collection efficiency – 97% (primarily because of lean seasons for solar production as well as rural incomes)
- Operating expenses - (see below)
- **Payback claimed – 4 years** (you may or may not accept this figure)

Objectives

1. Based on the data provided by Margo, examine the unit economics of a Margo plant and comment upon their payback
2. What are the key drivers for Margo's business? Can you justify it with some analysis?
3. Build a projection for Margo at a company level

Additional data

Organizational structure

The operations are organised as follows:

Unit	Number	Staff	Other costs
Plant	25 customers	-	Repairs and maint – Rs 140 / month
Cluster	25 plants	1 operator Salary 7500 Rs/ month	-
Branch (physical unit)	Upto 6 clusters	3 maintenance technicians (salary 7500/ month) 2 Staff (salary 10,000 per month)	Opex – 15000 per month
Area/ region	Upto 12 branches	10 field and managerial staff (salary 20,000 per month)	Other overheads – 20% of salary

Corporate overheads are about Rs. 1 million per month, and are expected to grow to Rs. 1.5 million per month at breakeven level.

Abridged financial indicators provided by the company

	Current	Estimated on reaching breakeven
Plants	1500	6000
Investment (cumulative) (USD)	2.5 million	7 million
Equity (USD)	2.5 million	4.5 million
Debt raised (USD)	-	2 million
Customers (nos.)	20,000	140,000
Revenue (Rs. Million per month)	1.7 per month	20.0 per month
Cost (before overheads) (Rs. Million per month)	1.3 per month	5.5 per month
Overheads (Rs. Million per month)	1.0 per month	1.5 per month

- 2000 plants per annum deployed post breakeven
- 12 months to reach desired customer level post deployment (80% of desired level in 3 months)