

## Rural Energy Network Enterprise (RENE)

### Concept Note

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#### About Us

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IFMR Ventures, a wholly owned subsidiary of IFMR Trust, is an Asset Management Company (AMC) that has the mission of ensuring access to finance for every enterprise in India, with a particular focus on enterprises in remote rural India. It currently manages the Network Enterprises Fund™ and operates the IFMR Incubator.

Rural Energy Network Enterprise (RENE) is an incubatee company focused on identifying the key missing links that complete rural supply chains and towards such aims analyses, designs and pilots specific interventions across the country. Once these interventions are proven to be scalable and economically viable, it will be considered for equity investment by the Network Enterprises Fund™ managed by IFMR Ventures.

#### Context Background

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Considering ~70% of India lives in rural areas, there is great interest in enabling distribution of capital goods in these locations. These capital goods are technological products that have a visible cash flow effect for the end consumer.

It is widely acknowledged that for enabling last-mile access for such capital goods, a local village based entrepreneur is the key. However, these enterprises have unique advantages and risks.

RENE has been focusing on identifying interventions that would eliminate and mitigate the risks faced by these enterprises by leveraging their unique advantages and developing innovative processes.

#### Concept / Model

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RENE through extensive ground operations has identified and developed two interventions - (i) A **backend** web platform that serves as a necessary infrastructure for multiple entities within the sector and (ii) an **enterprise-in-a-box (EIB)** distribution channel that follows a sequence of standard process for last mile access of these capital goods.

The Backend is a web based marketplace that aims to bridge information asymmetry in the sector and the EIB is an operating model that aims to enable physical access in remote rural villages.

The capital goods are focused on improving cash flows for end consumer and are often based on new technological innovations. It becomes necessary for such products to visibly demonstrate their impact so that the customer builds sufficient trust to invest in them. This makes the need for a village based entrepreneur very apparent.

Such an entrepreneur will take on the responsibility of demonstrating the cash flow effect to his fellow villagers either by being a direct user of the product or by identifying influencers who would use the product first.

Though a village based entrepreneur for sale of such products is not a new concept and several organisations have tried this, many such efforts have not been successful. There have been three major deterrents:

- 1. Market Size:** Given these are durable goods, the product has a thin market per village. This implies a village based entrepreneur dependent on the sale of these products would not be able to make sufficient income to meet his costs and earn profit. This has been the reason why FMCG products have a retail presence up to a village while consumer durables have penetration only up to the town.

RENE has tackled this issue by structuring the channel similar to a multi-level marketing network. This enables the retailer to earn revenues from sale beyond just his village.

**2. Product Selection:** There has been no structured form for selecting and identifying products that actually work as claimed. The village entrepreneur or the intermediary entity by itself does not have the technical capabilities to duly review products and their performance. Without the products providing sufficient cash flow effects, the market size for the entrepreneur shrinks. It also affects future sale potential of genuinely good products.

It is to ensure only those products that have proven to have had this cash flow impact and met customer expectations that RENE has developed GoScale, a web based portal. The portal uses feedback from customers, consumer behaviour experts and technology experts to review product performance.

**3. Product Fit:** Even after selecting a genuinely good product the possibilities that it is not the right fit for a customer's requirement is highly probable. All of these capital goods are standard products that are designed to perform at its best, given certain conditions. For e.g. a solar light is designed to provide 50 lumens of light within a 1 sqm radius or a energy efficient improved cook stove is designed to emit no smoke when dry wood is used. If a customer requires light beyond the radius the product is designed for or uses wet wood instead of dry, the performance of the product is below par.

It thus becomes highly necessary to ensure the product features match customer requirements. RENE's distribution model has established process to identify ideal product requirements and assessment of customer needs. This reduces the number of product mismatches and increases customer satisfaction.

### Backend - GoScale

[www.goscale.in](http://www.goscale.in) is a web-based portal that aims to bridge the information asymmetry on performance of capital goods in rural India. It uses customer ratings, technologist and sector expert reviews to verify if products perform as advertised.

This platform can be utilized by any entity that has or is establishing a distribution channel in rural India. It obviates the need for every such entity to identify products that are appropriate in their geography and meets customer expectations. By undertaking this activity for multiple products and providing this service to various distributors, GoScale's cost is lower than what it would have cost an independent manufacturer or distributor.

Stake Holders	Roles / Responsibilities
<p><b>Owners</b> - RENE and IIT Madras' Rural Technology Business Incubator (RTBI) have jointly developed this platform.</p>	<p>RENE has conceptualised the solution, provided industry linkages and driven the efforts towards a tangible result. RTBI has provided the technology and operating resources.</p>
<p><b>Operators</b> - GoScale is currently being operated within RTBI. The team is now expanding and would eventually become an independent entity.</p>	<p>End to end management of the web portal, business development and day-to-day operations.</p>
<p><b>Service Providers</b> - GoScale has tied up with Uniphore; IFMR's Centre for Development Finance (IFMR-CDF) and InnerWorlds (IFMR-InnerWorlds) research teams; a team of professors across IIT</p>	<p>Uniphore provides the technology for automated voice based survey of customers.</p> <p>IFMR's research Centres provide expert product reviews based on 4-6week observatory research of a single user</p> <p>Team of IIT professors individually use the product and provide technical feedback on product performance</p>

<p><b>Customers:</b> Manufacturers of capital goods and entities (NGOs, MFIs, etc.) with access to a rural network. Others could also include investors, government agencies etc.</p>	<p>Manufacturers register their product online and provide customer database. They are users of the ratings and customer reviews.</p> <p>Distributors register and view product details, ratings and reviews. They utilise this information for selecting appropriate products for their network.</p> <p>Others could utilise the information on product performance for specific purpose including funding of manufacturers, policies etc.</p>
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### Process:

1. Product Manufacturer ---> register's product details for free on GoScale ---> Display of product specifications for public view
2. Product Manufacturer / Distributor ---> Requests for customer ratings of a product ---> GoScale receives payment from initiator, contacts manufacturer for customer database and undertakes a phone based survey using Uniphore's services ---> Consolidated customer ratings including ratings for individual parameters are displayed on GoScale for public view ---> initiator who has paid for the service will privately receive individual customer feedback including audio clips on open ended questions.
3. Product Manufacturer / Distributor ---> Requests for in-depth review of the product ---> GoScale receives payment from initiator, collects product sample from manufacturer, co-ordinates with IFMR's research centres and IIT professors for the review ---> Review reports are sent privately to the initiator and summary feedback displayed on GoScale.

### Unique Features:

RENE's GoScale is one of its kind and it has certain features that makes it a unique intervention within the sector.

1. **360 degree review** - A single product is reviewed from multiple perspectives. Even though customers are best placed to provide feedback on product performance, it has sometimes been observed that customer expectations might be above what a product is designed to do. This mismatch in customer expectation and improper design should not be viewed as a failure in product performance, especially if the product is doing all that it is designed to do.

The technical review by technologists is intended to give a perspective of what the product is designed to do and the realistic expectations on its performance. The review by IFMR's research centers focus on the customer and their expectations from the product. Thus, such a 360 degree review provides a holistic view on the product and its performance.

2. **Automated voice based survey** - Customer survey is collected using a unique telephone based technology provided by Uniphore. This enables GoScale to contact customers from any corner of the country as long as they have a mobile connection.

Further, as the entire system is automated with no human intervention during the survey, there is no scope for fudging. Only if a customer has actually answered and provided feedback, will it get recorded. Thus, there is greater credibility on the ratings.

3. **Market Insight** - GoScale's operating model provides immense scope to aggregate market intelligence. Actual customer needs and design inputs for manufacturers can be provided.

GoScale, thus, is an example of a specific problem - information asymmetry between players in the supply chain - identified through RENE's ground experience and a scalable intervention designed to fix it.

## Enterprise-In a-Box (EIB) – Last mile distribution

This is the last mile distribution channel that connects existing rural customers with products that have a direct positive impact on their cash flows.

This distribution model has been developed by RENE through intensive ground operations over a period of two years across villages in Pattukotai Taluk, Thanjavur district, Tamil Nadu.

Stake Holders	Roles / Responsibilities
<p><b>RENE</b> - Develops the standard operating procedures for each process in the system and owns the IP for the model</p>	<p>Identifies district level distributors as franchisers for replicating the model.</p>
<p><b>Product Manufacturer</b> - Manufacturer of capital goods who has registered in GoScale and his products have been rated and reviewed.</p> <p>These are products that have visible cash flows either in the form of reduced expenses or direct increase in revenues for the end-user.</p>	<p>Sell products to the distributor at the wholesale price or sell directly to retailer, using the distributor as a stockist working for a commission.</p> <p>Provides training to the distributor’s technical person on installation and service support</p>
<p><b>Distributor</b> - The distributor is a district level franchise of RENE.</p> <p>He has three employees, a warehouse for stocking and a vehicle for transportation.</p> <p>Of the employees, one focuses on pre-sale activities, one on post sale activities and another is technically qualified to repair and service products.</p>	<p>Appoints new retailers based on a standard psychometric assessment tool developed by RENE.</p> <p>Stocks products at his warehouse and supplies them to village based retailers.</p> <p>Informs retailers on product features and performance metrics.</p> <p>Assess each potential customer to confirm product meets customer expectation using a best-fit template developed by RENE.</p> <p>Provides repair service for the product and management support to retailers, if required.</p>
<p><b>Retailer</b> - A village based entrepreneur who is preferably a user of the product and has shown interest to market and sell these products.</p>	<p>Access their existing social networks and relationships to market these products.</p> <p>Refers interested customers to the distributor.</p> <p>Refers others as retailers for the product and earns a commission on sale made through them - similar to a multi-level marketing network.</p>
<p><b>Financial Institutions:</b> Sale of product to customer through retailer may be on cash or credit basis.</p>	<p>Credit support, either to end customer or to retailer, is provided through financial linkages with local financial institutions.</p>

### Process:

1. RENE ---> appoints district level distributor as franchisee ---> RENE collects upfront consultancy fee and enters into a three year revenue sharing agreement with distributor ---> handholds distributor to adopt the model and provides required management support

2. Distributor ---> selects product from GoScale ---> contacts product manufacturer ---> collects stock from product manufacturer ---> maintains a warehouse, employs staff and appoints retailers
3. Product manufacturer ---> registers product on GoScale ---> gets product rated and reviewed --> supplies product to distributor ---> trains distributor's staff on technical aspects
4. Retailer ---> identifies potential customer ---> markets product features and benefits, seeks distributor's field staff support, if required ---> informs customer interest to distributor
5. Distributor ---> survey's potential customer using RENE's assessment template ---> confirms product features meet customer expectations ---> informs retailer of product fit
6. Retailer ---> purchases product from distributor ---> sells to potential customer ---> contacts distributor for installation support
7. Customer ---> uses the product ---> contacts retailer for after-sale support ---> retailer coordinates with distributor for answering customer complaints

### Unique Features:

RENE's last-mile distribution model has several unique processes that differentiate it from existing efforts on rural distribution.

1. **Product Selection:** Extensive due-diligence on the product is first undertaken through GoScale to ensure every product selected has been proven to perform as advertised. Also, not all products that have been developed to serve the BoP market is chosen, rather only those products that give clear visibility into cash-flows for end customers are selected.
2. **Retailer Selection:** Following the network marketing structure of referrals ensures there is no pressure on the distributor to identify new retailers on their own.

Further, it utilizes psychometrics for entrepreneur selection. The retailer is not expected to be a super human capable of being efficient in multiple tasks from marketing, management of operations and technical support. Rather, each retailer's strengths are utilized and support is extended by the distributor to fill gaps in skills. The distributor and retailer thus work as a functional whole.

3. **Needs Assessment:** Standardized products are designed to function optimally only under specific conditions. When customers who do not meet these conditions use the product they are dissatisfied. This dissatisfaction is not due to the product performing badly but is due to the mismatch in customer requirements and what the product is designed to do. To avoid this, a needs assessment is undertaken for every customer to ensure the product is right for them. This also provides valuable market intelligence for new product requirements.
4. **Access to Finance:** By ensuring only those products that have visibility into cash-flows for end customers are selected, it has enabled direct end-consumer finance for these products purely based on inherent cash-flows from the product.

Through needs assessment and extensive due-diligence on product performance, the retailer's risk of selecting inappropriate products has been removed. The customer is also willing to pay a premium to the retailer for providing a product which increases his cash-flows. This makes the retailer and the distributor's business economically viable and enables debt financing from local financial institutions.

Further, enforcing repossession of products in case of default by customer is now possible since sale has happened through local entrepreneurs who have identified customers within their social networks and can leverage their existing social equity.

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## Summary

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Thus, 'What' RENE's distribution model does is similar in concept to existing distribution of any FMCG or consumer durable. Both models source quality products, appoint distributors who identify retailers and sell through them. The difference is more on 'how' RENE's distribution model does these activities.

The advantage that products distributed by RENE has, over any FMCG or consumer durable, is that they are not a pure consumption good but is an asset. RENE only distributes those capital goods that either contributes to visible increase in income or reduces expenses. Once this cashflow effect is clearly established there is a pull in the market for these products. So the entire model is structured only around this - how best to establish the cash flow effect at minimum cost.

GoScale ensures only those products that have this feature and has proven it in other locations are selected for distribution. The distributor appoints only those retailers who can adequately convey this message at least cost. The retailer earns income from sale beyond his village due to the multi-level marketing approach enabling him to sustain his local presence, despite the thin volume within his village. Finally, every customer's requirement is assessed to ensure the product will deliver this benefit sufficiently to them.

RENE would function through franchisees who would be district level distributors. It is possible for franchisees to not understand the need for following many of the steps in the model. Some of the steps might seem to be a stretch especially when compared to traditional approach where it is non-existing. This is why RENE, after helping the franchisee to establish the network for 6 months, would continue to monitor the Franchisee for next 3 years at least.

After this time, either these practices would be so well entrenched that they occur by default or the distributor has a portfolio of well established products where the need for following RENE's approach would disappear such that morphing into the traditional approach would be more efficient.

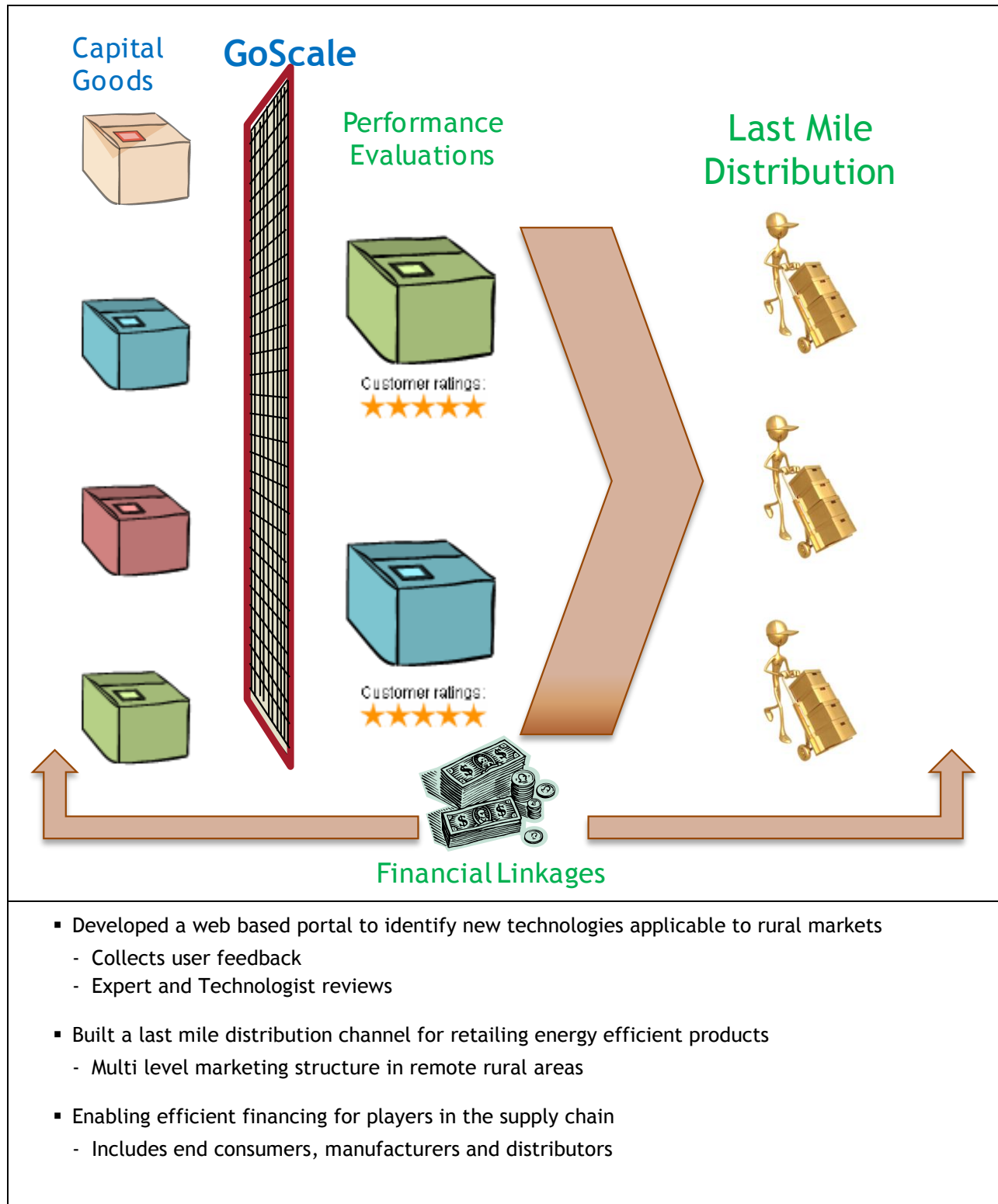
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## Annexure

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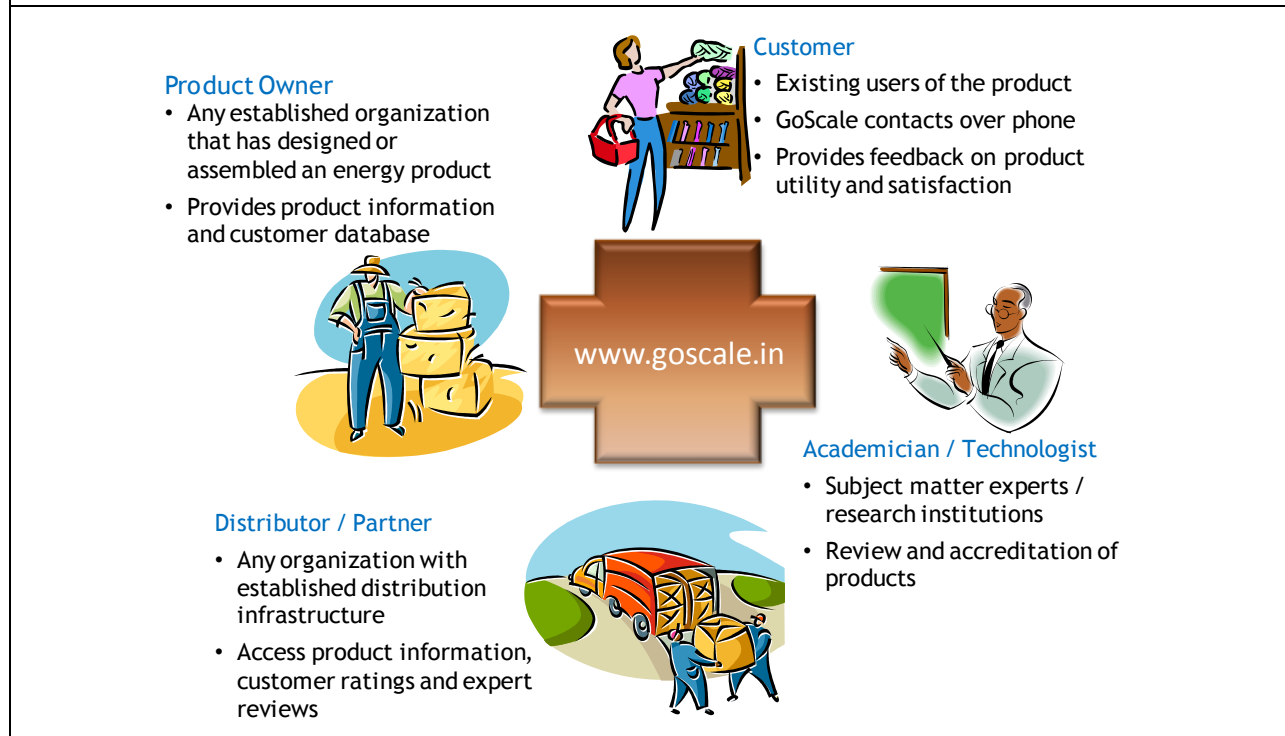
1. RENE function overview diagram
2. GoScale process diagram
3. Distribution model process diagram
4. Sample needs assessment metrics
5. Sample entrepreneur psychometric assessment

## 1. RENE Function Overview Diagram:

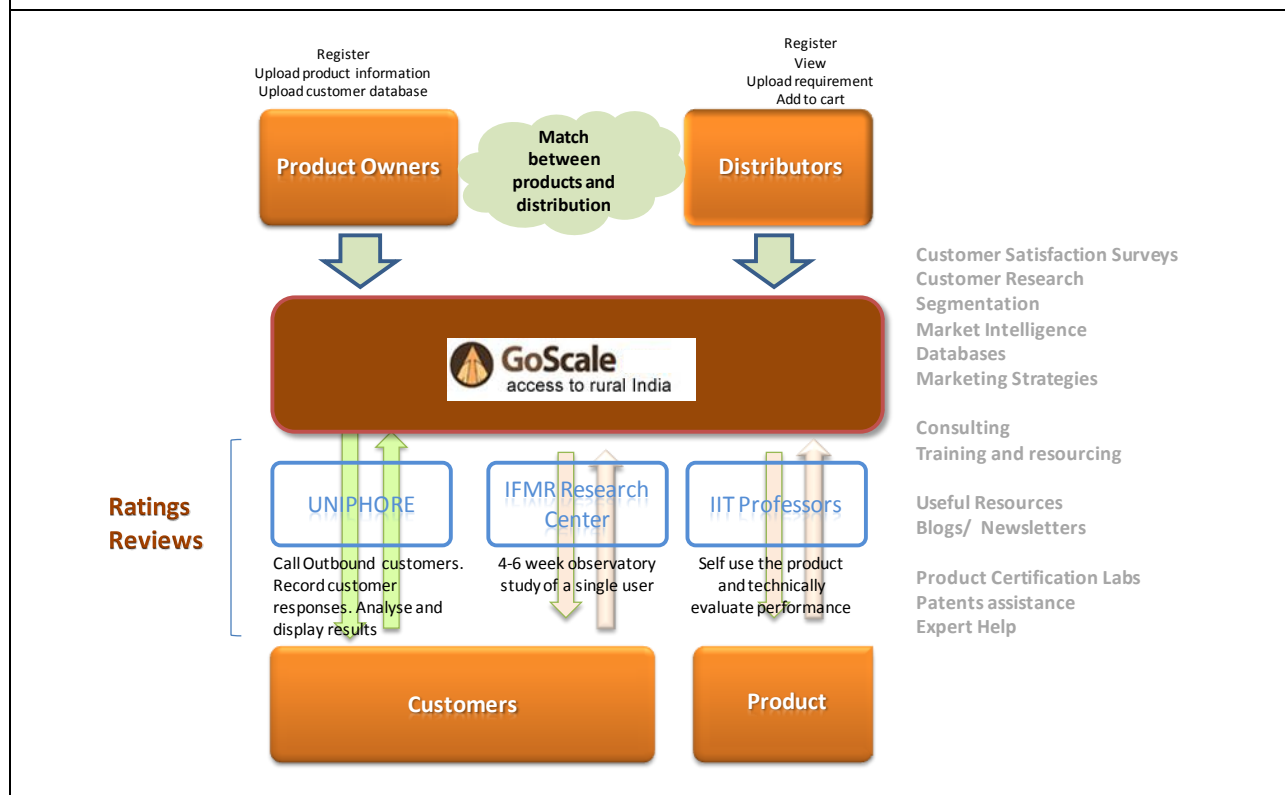


## 2. GoScale Process Diagram:

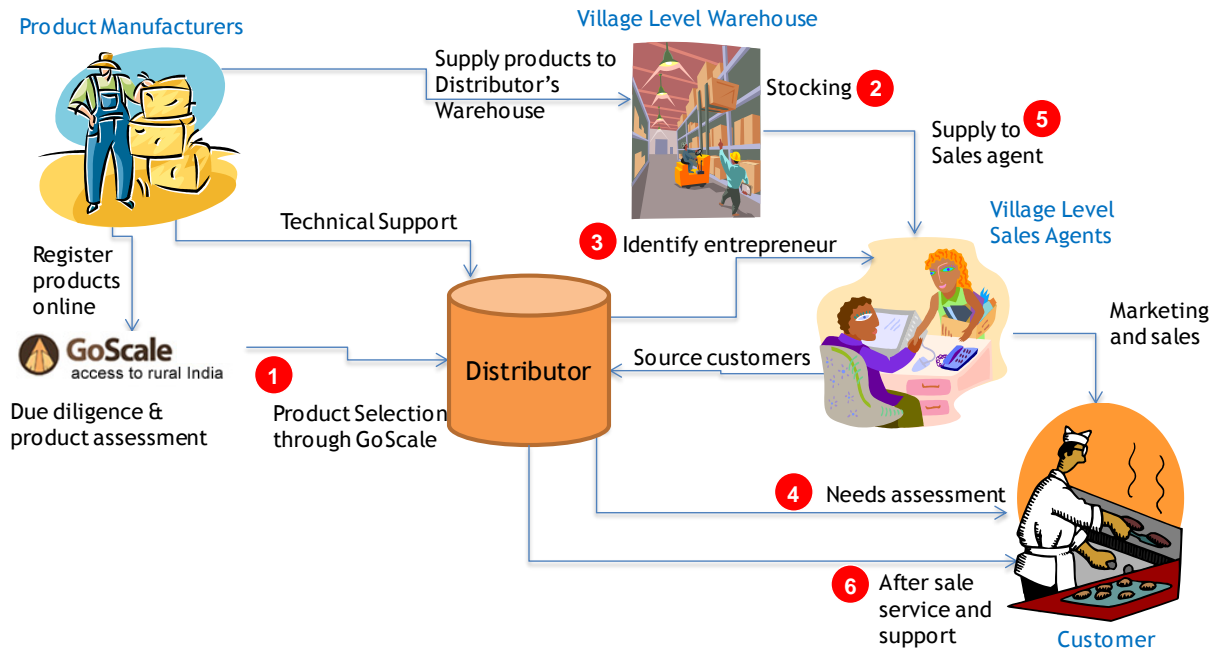
### What is GoScale?



### How it Works?



### 3. Distribution Model Process Diagram:



## Case Study - Commercial Cookstoves

- Distributor uses Go Scale ratings



to identify **SIPL**

- Distributor informs local retailer of the product and its features.



He identifies a relevant client.

- Distributor conducts a need assessment survey client to determine best fit



with potential

- Distributor contacts **SIPL** for installation technical assistance



and

#### 4. Sample Needs Assessment Metrics:

Sl. No	Name	Location	Items made	Yrs	Avg. Daily Income	Avg. income per customer	Fuel Costs Per month	Fuel Costs Per Week	3 Month Installment	% of fuel cost	Daily income multiple	Required Product
1	Annamalai R.	Papanadu	Tea / coffee, fried dishes, idly, variety rice	0.6	Rs. 500	Rs. 1.67	Rs.9,000	Rs.2,250	Rs.3,760	42%	7.5x	Tea / coffee maker with 10ltrs milk & 50ltrs water
2	Lakshmanan N.	Aladikumulai	Tea / coffee, fried dishes, parotta / dosa, idly	25	1,000	5.00	5,950	1,488	3,760	63%	3.8x	Tea / Coffee maker with 5 ltrs milk and 15 ltrs water
3	Subramanian V.	Enathi	Tea / coffee	20	200	2.00	1,800	450	3,760	209%	18.8x	Tea / Coffee maker with 7 ltrs milk & 25 ltrs water
4	Udayappan S.	Uthaya - suriyapuram	Tea / coffee, idly	15	500	2.50	6,600	1,650	3,760	57%	7.5x	Tea / Coffee maker with 5-7 ltrs milk and 25 ltrs water
5	Balamurugan M.	Pattukotai	Tea / coffee, fried dishes	0.9	500	5.00	4,800	1,200	3,760	78%	7.5x	Tea / coffee maker with 7ltrs milk & 25 ltrs water
6	Periasamy L.	Enathi	Tea / coffee, fried dishes, parotta / dosa, idly	60	500	3.33	9,300	2,325	3,950	42%	7.9x	Frying stove with capacity to contain 10ltrs oil
7	Suman Doss	Pattukotai	Fried Dishes	60	4,000	20.00	9,000	2,250	3,950	44%	1.0x	Frying stove
8	Ravi-chandran	Palayam	Tea / coffee, fried dishes	26	1,000	1.67	11,800	2,950	3,950	33%	4.0x	Frying Stove
9	Rakesh Sharma	Tirumalai - chamutr am	Tea / coffee, fried dishes, rice meals, tandoor items	1	2,400	12.00	51,375	12,844	4,230	8%	1.8x	Tava Stove
10	Rajendran G.	Uthaya-suriyapuram	Parotta / dosa	20	500	3.33	2,250	563	4,230	188%	8.5x	Tava Stove

## 5. Sample entrepreneur psychometric assessment



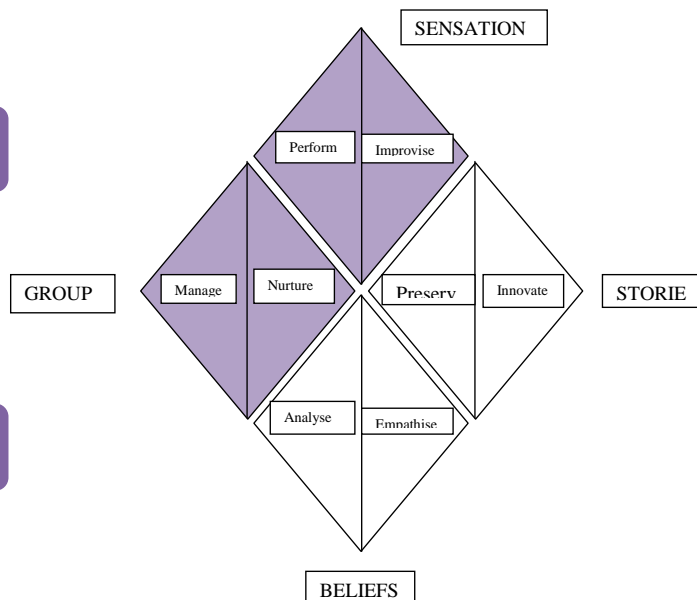
### Shaktivel / 40 Years / Thondaraampattu

#### Interview

- Conducted By: Preethi K.
- Date: September 10, 2010
- Location: Thondarampattu, Orathandau

#### Comments

- Sakthivel is currently running a small restaurant
- He has a high presence in the **Sensations** and the **Group** worlds



#### Summary / Recommendations

- Since he is an outgoing and confident person, he would be able to explore new areas, generate leads.
- His network is a huge resource, a path that he has paved to carry out these operations.
- Though he is focussed on people, connections and relationships, it is likely that he would not compromise on the payments or the business as it is balanced enough by his task focus.
- People to him are a highly valuable resource, when it comes to business
- Whereas, it is not in his nature to easily follow processes / procedures regularly. He would require help in terms of documentation and reporting procedures.
- With this person, taking up the dealership is a win-win situation: Will be useful for RENE's business and will have some personal benefit: in terms of money and reputation (which is highly important to him).