

CHOTUKOOL:

INNOVATING AT THE BOTTOM OF THE PYRAMID

A case study in creating inclusive business

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‘Seeing the invisible and understanding the latent’ is the essence of leadership! The story of Chotukool is built on this essential foundation of Visionary Leaders for Manufacturing (VLFM) Program orchestrated by Prof. Shoji Shiba.

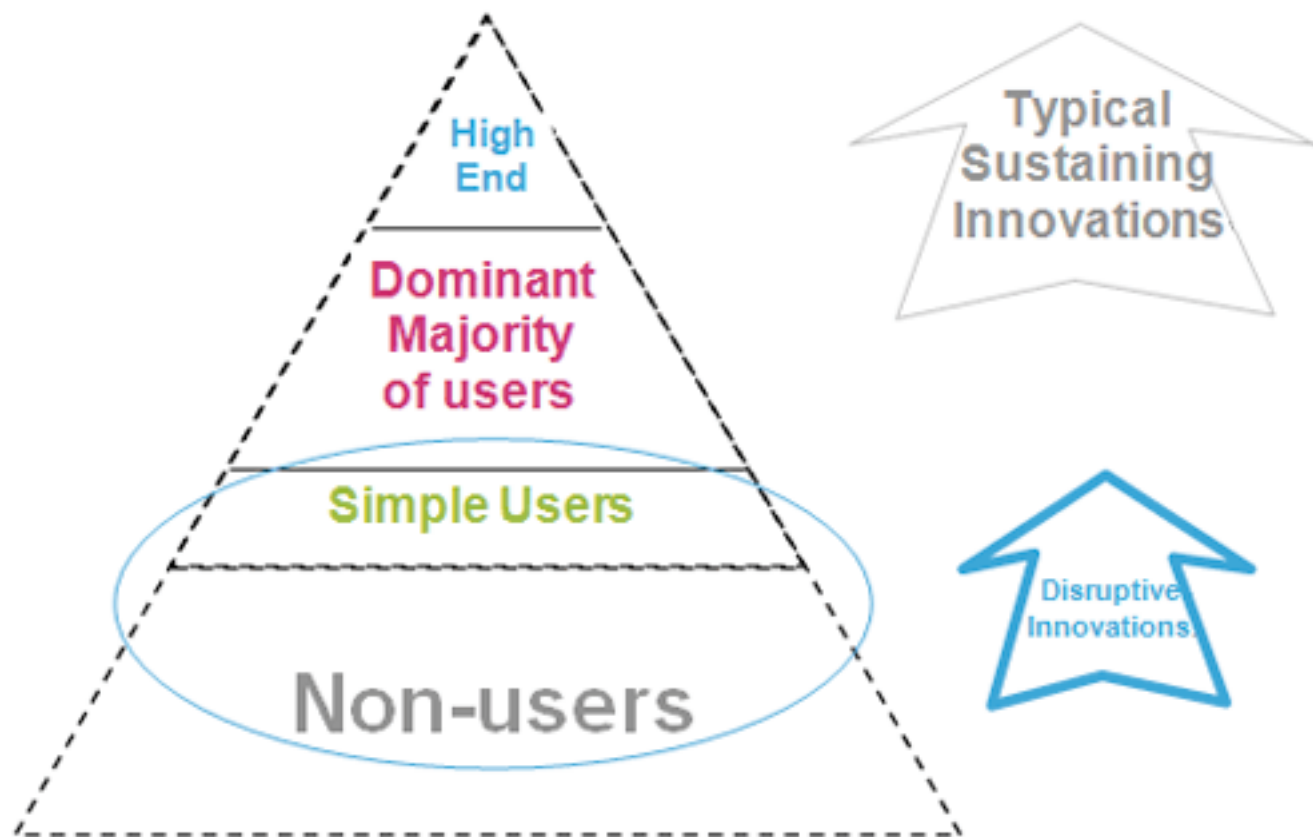
Over 80% of the population of India does not use refrigerators. The entry level refrigerators in India cost Rs 6000+. The billion plus people at the Bottom of the Pyramid (BOP) cannot afford this money. Many do not have even access to grid power. Yet their daily life can significantly improve, if they can store some milk, daily vegetables and fruits without spoiling and get half a dozen bottles of cold water. Is it possible to make this ‘essential luxury’ affordable and accessible to the people at the Bottom of the Pyramid?

Disruptive Innovations

Chotukool was born with this inspiration and vision. The idea was conceptualized based on the principles of Disruptive Innovation developed by Prof Clayton Christensen. Typically technology continues to improve to cater to the needs of the segment of most demanding customers by a series of incremental and radical innovations. Though

the satisfaction of the customers on the average increases this pursuit of 'sustaining innovations' leaves several consumers at the level of basic needs overshoot! For example a person who only wants to read emails hardly needs several GHz of processing capacity in the computer.

Disruptive Innovations address the basic needs of the simple customers with easy, simple and affordable solutions. Disruptive innovations open up the untapped market of the non-users.



Consumer Insights and Latent Needs

The Chotukool team in the early phase of the project spent long time in the field to gain deep consumer insights and learn about the habits and life of the people in the rural India and BOP families. The team found that most of the people purchase their needs for a day or two at a time. The people live in small dwellings of 150 sqft. The living room turns into the bed room in the night. Space is a luxury! BOP is also a migrant population.

This immersion is the 'Fish Bowl' principle taught by Prof Shiba. We can not understand the life of fish in the water, unless we dive into the fish bowl! Observation and interview skills learned from VLFM program were used to gain deep insights of the BOP consumers in their natural habitat.

The team found the second hand refrigerators used by a few people largely empty – there was nothing to keep except water! These insights were processed using Five Step Discovery Process learned from Prof Shiba in VLFM. Chotukool was conceived and created based on many of these latent needs and almost invisible insights.

Chotukool



Chotukool is a 43 L solid state cooler that uses no compressor or refrigerants. It operates on 12V DC –can work on battery, inverter or even solar power. It is 7.8 Kg, in weight and easy to move. It keeps daily need food fresh and cool between 5°C to 15° C in the typical ambient in the house. It is priced between Rs 3250 and Rs3500 in the market.

The Larger Vision for BOP

Chotukool is NOT a refrigerator! It is a different category! Different in technology, size, structure, performance and value proposition to consumers! Hence we had to have breakthrough approach to market the product. We approached the potential consumers through women micro entrepreneurs through NGO "Swayam Shikshan Proyog" (SSP). The women are close to the community to facilitate diffusion of idea. These women also earned commission money by selling. In effect, Chotukool impacted the Living standard, Livelihood and Life style of these women at the bottom of the pyramid. This slowly developed into our 3Lvision for the BOP!

The pilot launch was in a village in Maharashtra where six hundred women gathered to learn about Chotukool. The product was unveiled in a traditional rural palanquin amidst religious songs sung by women. The entire event was co-created with the consumers and we got many insights. We also started the commercial sales.

The pilots have now spread in a few other villages and the response remains very favorable. We also got deep feed back on the product. These insights are now incorporated in the product design iteration as we are about to begin the national launch in the next festival season.

Making a wide impact at BOP

During the pilots, we discovered that Chotukool made an impact to the BOP in more than one ways. It certainly improved the living standard of those who used the product. It brought smiles in their daily life and improved the productivity of the bread winners in BOP homes. Those women entrepreneurs who demonstrated and sold Chotukool earned supplementary income.

For several small businesses like flower selling, snacks vending and small kiosk shops, Chotukool became an earning asset. It could enhance shelf life and reduce waste while stored. For some small shops, it provided additional earning by giving opportunities to vend cool water and soft drinks.

The business model for Chotukool systematically attempted to involve BOP communities in many aspects of business by co-creation and transfer some value add back to the BOP community. We involved BOP members in marketing, training, service delivery and part of logistics. And finally we have a dream that some day in future, Chotukool like products will help deliver vaccines to the children at the BOP in wide spread rural hinterland where there is limited healthcare infrastructure, electric grid power and transport.

Challenges at BOP

But the path to BOP is not an easy one. It poses several challenges. Chotukool project faces the challenge of thinly spread market, low earning power of the consumers, limited awareness of users and vast cultural diversity. We addressed these challenges by being humble to learn and adapt from these insights. We also consciously remained frugal –focused on low cost to end user, worked with small teams and kept investments very low. This enables us to continue our experiments for learning which we reinvest in the business as improvements.

Insights and Lessons we learn from Chotukool

VLFM has been a foundation course for us to learn the essential breakthrough skills. Markets that do not exist cannot be analyzed. We can learn about it only by being with them and experimenting. This is the essence of 'Fish bowl' principle taught by Prof Shiba We have

systematically learned and applied the observation and interview methods, language and image processing skills and reflective thinking ability through five step discovery process (5SPD). The fundamental note taking, reflection and conceptualizing skills allowed us to integrate the frameworks of several other domain experts.

Personally, I had the benefit of learning these skills closely from Prof Shoji Shiba when I was selected as module director. I have been fortunate to work with Prof Shiba and experience a transformation in my leadership approach. I am grateful to my company Godrej to give me this opportunity of life.

Symbolic Example of Inclusive growth

Chotukool is more than a breakthrough product or business. It could become a symbolic example of an approach to address the larger issue of Inclusive Growth. The enclosed system dynamic model summarizes the essence. Incidentally, we learned the skills to build system dynamic model through Five Step Discovery process in VLFM.



Specifically designed BOP products with appropriate technology and business model, low cost market development, skill development and embedded earning opportunities are essential for Inclusive Growth. The vision and aspirations of the BOP can be met only through deep consumer studies and breakthrough thinking. No doubt, there are challenges at the BOP. Building skills in people at the BOP, creating income for them and driving affordability will remain a formidable challenge!

Opportunities for Win-win collaboration!

From our experience, we learn that we can solve many of these problems through collaborations. The challenge of BOP is a global challenge – the solution will also come through global cooperation in technology development, product design and research! We look forward to ideas, feed back and inputs from many well wishers in Japan that can help in this noble cause.

As we continue our journey, we discovered the ‘Noble Mind’ that Prof



Shiba imbibed in the VLFM program. As the president of USA Roosevelt once said, *"The test of our progress is not whether we add more to the abundance of those who have too much.... it is whether we provide enough for those who have too little"*

It is through cooperation and collaborations, the problems of the society would be ultimately addressed!