

Ram Lal is a 65-year-old farmer living in one of the states of India.



Even after a good seasonal cash crop sale

The farmer isn't satisfied.

Due to **lower motor efficiency** of the exiting equipment's and products used in **farming** and irrigation , the **overall cost of functioning rises substantially!** 



But **is there any solution** for Ram Lal **to decrease** the overall electricity consumption?

Reason being the **expensive electricity bills** and **high watt consumption** of the equipment's.



Inefficient electric motor designs which consume more power.



If There is power Exorbitant electricity bills due to inefficient Electric Motor Designs.

#### **Problem Statement's**



High transmission loss cost due to high power consumption (proportionately).



Lot of power shortage due to high consumption.



Lot of inconvenience due to frequent power cuts.

Cost of using a normal fan

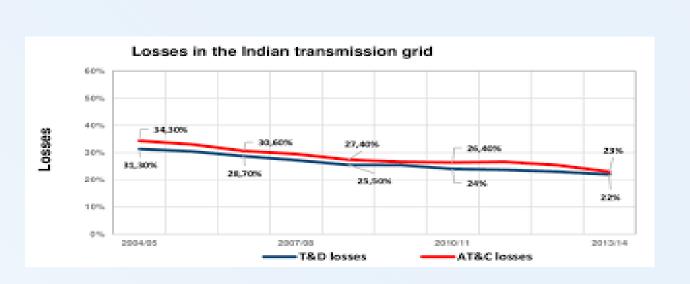
To run a fan, the average cost of the costs

~11- ~14 INR per day.

The Yearly cost of running a fan could be ~3500 to ~4500 INR.



## India's power consumption problem:





Just like Ram Lal, millions of farmers and households worldwide are paying electricity bills caused by higher watt consumption of the equipment's in use!





India's first cost effective **Brushless Direct Current Fan Technology** with in-build batteries for power backup and reduced power consumption of only 12 to 18 watts!

## **Executive Summary**



We have developed a motor that come's under **BLDC section** and has a USP of working at an **efficiently lower power Input**.



The power requirement is in between **12 to 18 watt.** Hence, by virtue of this, our system is **4 to 5 times more power efficient** when compared to conventional motor and fan system.



By virtue of this Efficiency, we incorporate a small battery unit of 60 to 70 watt, giving us a **power back up 4 to 5 Hrs.** 



Also, the motor that we developed gives us a cost advantage as it is **20 to 25% cheaper** than the existing BLDC Motor systems in the market.



## Why do we Exist?

We are establishing ourselves as revolutionary flag bearer for the **development of low power consuming rotary devices for mechanical work and transducing.** 

Just like the LED bulb industry has changed the luminous industry via delivering adequate output by consuming fewer watts ( ~ 9 to 15 watts). We want to create a revolution in motor industry via our advanced motor technology.

#### Our Operational Nitti-Grittiest!

At early stage we have our vendors for supplying essential raw materials necessary for production like blades, cover, fan body, Microcontroller, circuits etc. for fan manufacturing.

We are also serving as manufacturer for our CNF and Dealers, from dealers to retailers and consumers.

#### **Our Core Values!**

Our **core values** lies in providing the **latest technology at affordable prices.** As the already existing products with the same technology in the market are expensive and complex.

We are solving the problem and **coming with the solution of cost effectiveness and better efficiency** at same with less complexity. Also, the power backup feature that we are offering is **not being given by any of our competitor**, as a result they are unable to compete with our cost.

## Product, Technology and IP Strategy

#### **About the Product**

STACK CORE AXILE FLUX motor, a special variety of motor which has static magnet rather than electromagnets found during a conventional induction motor. THIS motor has important advantages over induction motor like low electricity consumption, lesser noise generation and better lifespan.

The electronics contain a driving algorithm that drives the motor might be an electrical motor that keeps running on the provision of electrical power. In these motor, **there's the straight relationship amongst current and torsion or angular rotation** moreover within the between voltage and rate of stack core axile flux motor.

#### **About the Technology**

BLDC technology, in general, has been in the market for a couple of decades and it is widely implemented in industries needing high torque motors. But the things that missing is that its application or implementation in various sectors and this delay is also due to its complexity and high development cost because its not manufactured in India.

The key components of Our technology are Controller ,Motor and Battery.

#### **About the IP Strategy**

We are going for IP on controller and Stack Core Axile flux system that we developed for our motor.

## **Market Research Analysis!**

**4 Cr** ceiling fans are sold per year.

**5.5 Cr** of fans are sold per year.

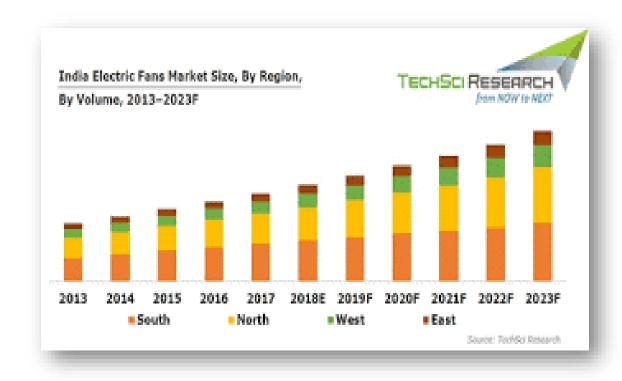


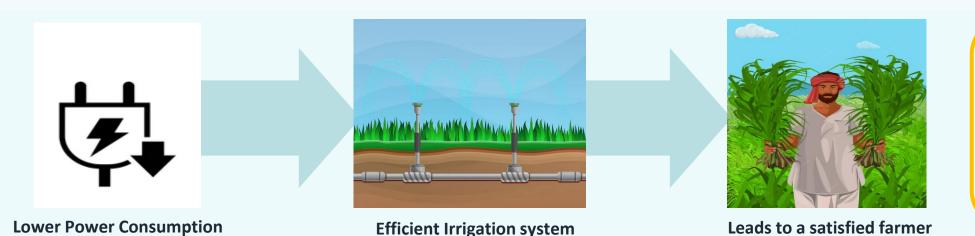
Table fan cover market share of 15 to 20% and demand is increasing by rate 7 to 8% every year.





## Our Solution for Farming & Irrigation

Reduced power consumption In Irrigation to helping the farmers get the best optimal results without thinking much on the power consumption bit.



Through our advanced motor technology, We can reduce the overall cost of solar installation up to 80 to 85 %.



**Generally,** if a farmer installs a **1hp pump,** it consumes **1000 to 1200 watt** of energy and as a result they must install **1kw of solar panel costing Rs. 1.23 lakh.** 



But **if we implement this motor,** it will **only consume 180 to 200 watt** and your work can be done with the installation of only **200 - watt panel**. Leading to a **savings of 85 to 90 thousand rupees** on every system.

## Our Solution for house holds is BLDC Based machines with battery backup



Our electric machines are power efficient, Consistent, convenient, multipurpose and economically viable.

Average Cost for a day is 8 – 12 INR.









Overall cost decreased to 2850 – 3700 INR.



Huge Power Savings.



## Benefits of using Insta on fan











Reduces Power Consumption

**Save Electricity** 

**Saves Money** 

**Best Experience** 

**Best in Looks** 

## **Comparison Sheet**

#### **Normal Fan**

#### Insta on fan

Power Consumption 50 Watt.

Normal bill per day 11 – 15 INR.

**Yearly Bill 3500 - 4500 INR.** 

Power Consumption 15 – 18 Watt.

Normal bill per day 2 – 6 INR.

**Yearly Bill 720 - 1800 INR.** 









#### Meet our team

With a 7 years hands-on experience in product innovation. Aditya holds a degree in B tech, EEE branch.

Ashish is a Qualified CA and holds around 15 + years of experience in the fan manufacturing industry.

Currently looking at the cost and product sustainability.

Parasar has developed his own "wood computer numerical control" that we leverage. He holds 12 years of experience in electronics ckt fabrication.

Brindaban brings in the value to the organization with his deep industry networks. He is also an industry veteran with 20 + years of extensive experience.



**CEO** Aditya Ranjan Sinha



Marketing Strategist

Ashish Sharma



**Fabrication**Parasar Sathpathy



**Operations**Brindaban Dalbehra

#### **Business Model Canvas**



#### **KEY PARTNERS**

- CNF Agents
- Distributors
- Online Platforms
- Offline Stores
- Individuals



#### **KEY ACTIVITIES**

Delivering most power efficient products to cater day to day needs.



#### **KEY RESOURCES**

- Networks of distributors.
- Word of mouth marketing.



#### VALUE PROPOSITIONS

Reliable technology with efficient output.

With our continuous R&D we have developed few rotary devices that are 4 times more power efficient compared to the current existing products.

- Inbuilt battery for power backup.
- Power efficient technology.
- Higher affordability and availability.



#### CUSTOMER RELATIONSHIP

- Justify needs
- Maintain retail relationships.
- Word of mouth popularity.



#### **CHANNELS**

Starting with offline to fulfill short term revenue and parallelly work on online mode as well.



#### CUSTOMER SEGMENTS

- Households
- Farmers
- People living in Tier 1 & 2 Cities.
- People with lower income group.



#### **COST STRUCTURE**

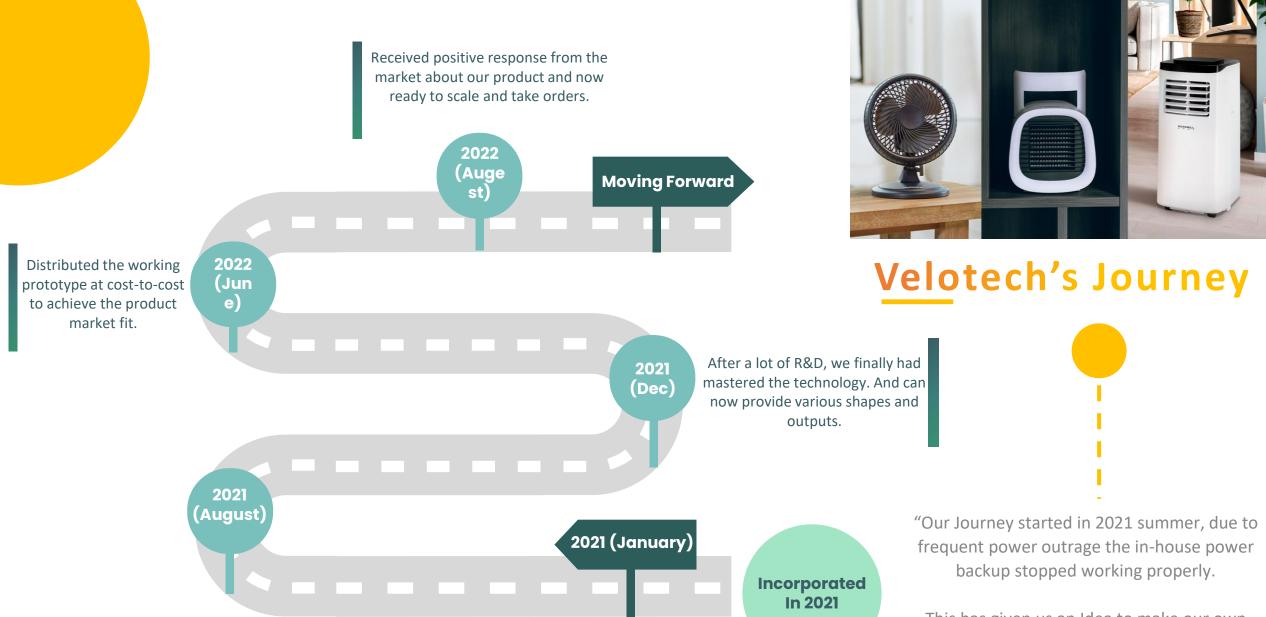
- Raw material cost around Rs 1300 to 1500 with battery , Labour & infrastructure charges of Rs. 250.
- Selling price of basic units is Rs 2200 and MRP is Rs 2800.



#### **REVENUE SOURCES**

- Fan Selling.
- Controller & Motor Selling.
- Selling Products with inbuild battery backup.





Witnessed frequent power

outrage and decided to make

a product of our own.

After facing a lot of failures, we

were able to make our first

prototype after 8 months.

This has given us an Idea to make our own product that can solve these centralized issues.



## **Product Roadmap Ahead**



2022 - 2023

We are determined for the production and selling of ~15000 fans. 2

2022-2023

Parallelly continue our R&D on further product line.

Further in lined products are Cooler and AC's.

2023-2024

**2023:** Planning to go for market testing with few units of manufacturing.

**2024**: Catering the market with AC and Coolers.

4

2025-2026

2025: Catering the B2B segment with motor solution.

2026: Setting up one distributor in every state of India.



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# Let's Work TOGETHER



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