

**Understanding Incubation and Entrepreneurship**  
**Prof. Manoj Meena**  
**Department of Engineering Design**  
**Indian Institute of Technology, Bombay**

**Module - 08**  
**Tech Entrepreneurship SINE**  
**Lecture - 18**  
**Start – up Success Story Atomberg**

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Yes; so, I will not take much time briefly I would like to more share my experiences. And maybe I would like to this make the session more interactive right, the students I was also a student almost now 10 years time flies very fast in 2011 I got graduation right. So, before starting the story I briefly tell about what we do.

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## Who we are?



A customer-obsessed **digital-first consumer durable** brand with deep expertise in **motor technology** and **design**.



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## Team



 **Manoj Meena**  
IIT Bombay



 **Sibabrata Das**  
IIT Bombay

So, the firm name is Atomberg technology, post my graduation 2011 from IIT B. So, I did my B. Tech and M. Tech integrated program from Electrical Engineering from IIT B. And I was very much keen in starting entrepreneurship and during college days also I used to participate a lot in tech fest, technical activities not only in IIT, but also other colleges. So, that was a passion which was driving me toward entrepreneurship, and there were certain companies also which were part of SINE and ideaForge is one of them.

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**ideaForge  
Technology Pvt. Ltd.**

UAV based security and  
surveillance solutions

<http://www.ideaforge.co.in/>

So, I was and those guys were senior; so, I was also fascinated to understand how to start company. But the ecosystem was there, direction was there, guidance was there; with that we were able to get it registered in SINE within a year in 2012. But, during that time frankly tell you I had no idea in what area I need to start my company yeah.

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We as a part of passion we got into making various projects for IITs, BARC, DRDO, ISRO those were technology projects. And we were kind of assisting research laboratories mainly and these were scientific projects because the kind of interest we had was totally into electronics, robotics, programming. And we started you know that journey thought that within a year things will change we would be able to make a good business model.

So, we had not started anything with business model; we learned it late it was a hard learning for us. So, it is the right time for you to understand the basics of making a good lean business model; identifying right problem statement, identifying the right solution to that, do a proper assessment, if you want to fail then fail fast.

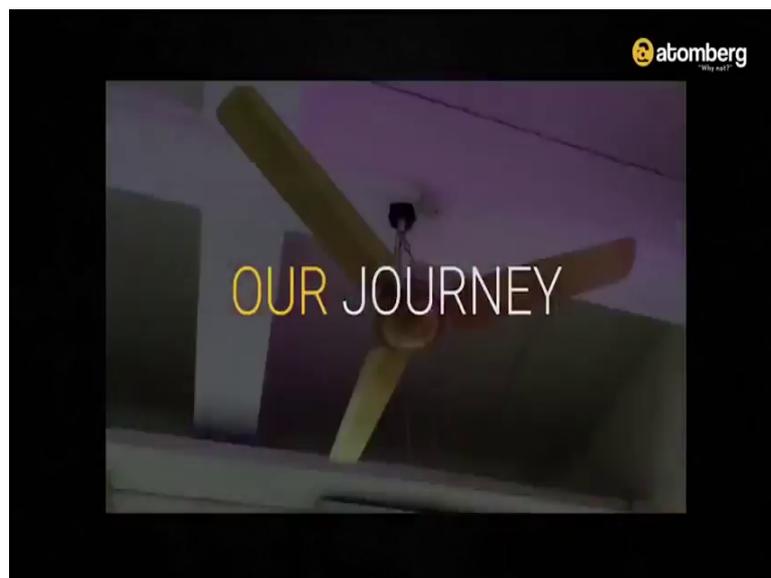
So, failing fast is also important within my journey I would say; I would have experimented almost 4 to 5 ideas before getting into what we are doing today. So, those were 4 5 failures,

but every failure taught something interesting which was very much important to you know proceed for the next failure.

So, failing is not bad, but the thing is you need to understand if you are stuck with some idea you need to understand what time you should put a full stop right you need to understand if it is not working out there is no harm in perverting the idea.

So, Sibab is the co-founder, he was again a IIT Bombay, he was my junior during college days. And he joined him in 2015, when we finally started into got into home appliances yes. So, today what we do is we make energy efficient and smart home appliances and we started our journey in home appliance with ceiling fan.

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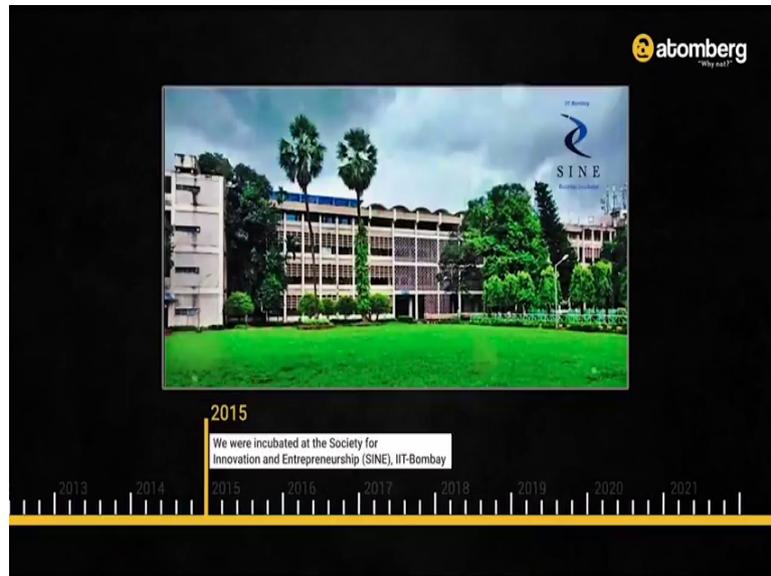
**atomberg**  
"Why not?"

**2012**

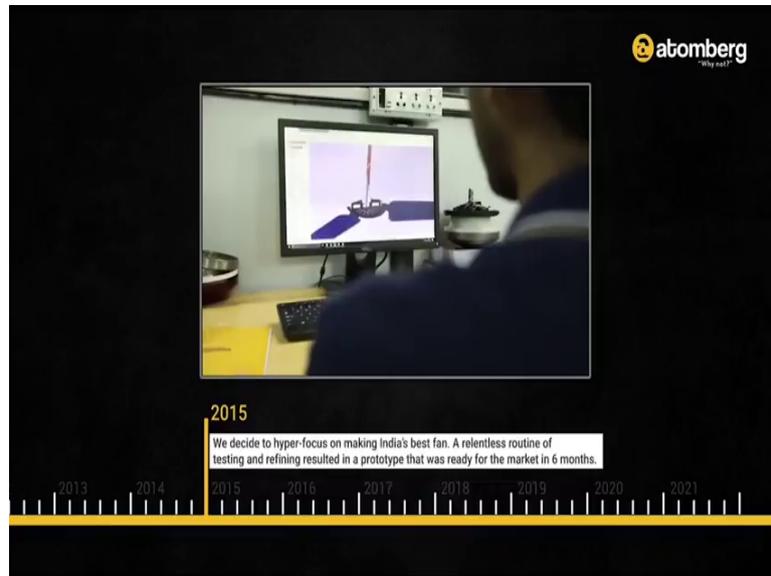
We begin focusing on building world-class products for the Indian home.

2012 2013 2014 2015 2016 2017 2018 2019

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atomberg  
"Why not?"

2013 2014 2015 2016 2017 2018 2019 2020 2021

**2015**

We decide to hyper-focus on making India's best fan. A relentless routine of testing and refining resulted in a prototype that was ready for the market in 6 months.

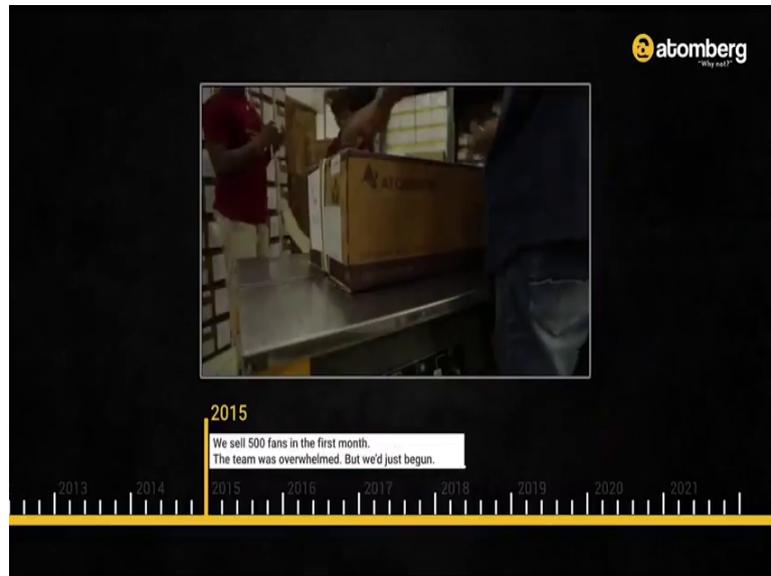
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atomberg  
"Why not?"

2013 2014 2015 2016 2017 2018 2019 2020 2021

**2015**  
Aarti Chemicals believes in our vision,  
and gives us funding to set up a plant in Navi Mumbai.

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The image is a screenshot of a video slide. In the top right corner, there is the Atomberg logo, which consists of a yellow gear icon followed by the word "atomberg" in white lowercase letters, with the tagline "Why not?" in smaller text below it. The main content of the slide is a video frame showing a warehouse or factory setting. A person in a red shirt is visible on the left, and a large cardboard box with the Atomberg logo is on a metal table in the center. Below the video frame, there is a timeline with years from 2013 to 2021. The year 2015 is highlighted with a yellow bar. A text box is positioned over the 2015 bar, containing the text: "2015 We sell 500 fans in the first month. The team was overwhelmed. But we'd just begun."

atomberg  
Why not?

2013 2014 2015 2016 2017 2018 2019 2020 2021

2015  
We sell 500 fans in the first month.  
The team was overwhelmed. But we'd just begun.

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The slide features the Atomberg logo in the top right corner with the tagline "Why not?". On the left, there are two logos: IDFC LIMITED and IDFC PARAMPARA EARLY STAGE OPPORTUNITIES FUND - SERIES 1. To the right of these is a photograph of a factory floor with workers and stacks of boxes labeled "KAANAR". At the bottom, a timeline spans from 2013 to 2021, with a vertical line and callout box highlighting the year 2016. The callout box contains the text "We also get funded by IDFC Parampara".

atomberg  
Why not?

IDFC LIMITED  
IDFC PARAMPARA EARLY STAGE OPPORTUNITIES FUND - SERIES 1

KAANAR

2013 2014 2015 2016 2017 2018 2019 2020 2021

2016  
We also get funded by IDFC Parampara

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The slide displays the 2017 National Entrepreneurship Awards. On the left, there is a poster for the awards with the text "2017 NATIONAL ENTREPRENEURSHIP AWARDS" and "CHAMPIONS OF CHANGE" below a group photo of winners. On the right, a certificate is shown with the text "National Entrepreneurship Awards 2017" and "Ministry of Entrepreneurship and Small Business Development". The Atomberg logo is in the top right corner. At the bottom, a timeline from 2013 to 2021 is shown, with 2017 highlighted and a callout box stating "We win the National Entrepreneurship Award given by the Government of India".

atomberg  
"Why not?"

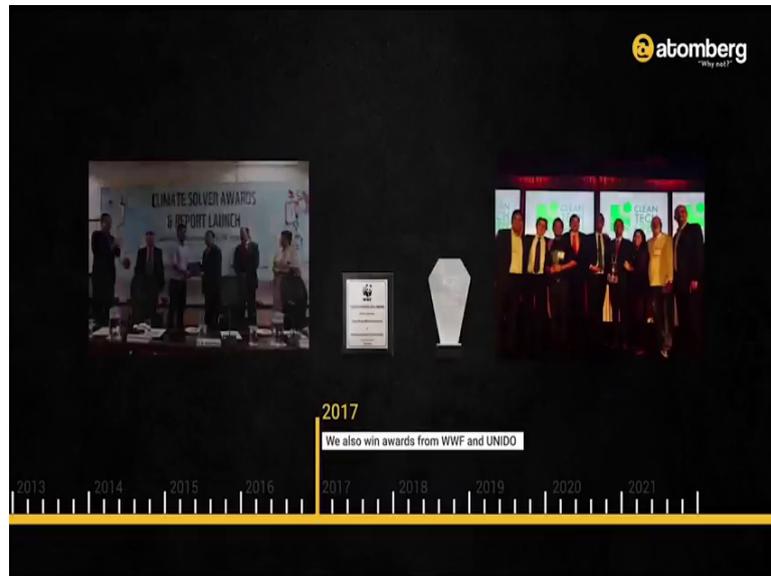
2017 NATIONAL ENTREPRENEURSHIP AWARDS  
CHAMPIONS OF CHANGE

National Entrepreneurship Awards 2017  
Ministry of Entrepreneurship and Small Business Development

2013 2014 2015 2016 2017 2018 2019 2020 2021

2017  
We win the National Entrepreneurship Award given by the Government of India

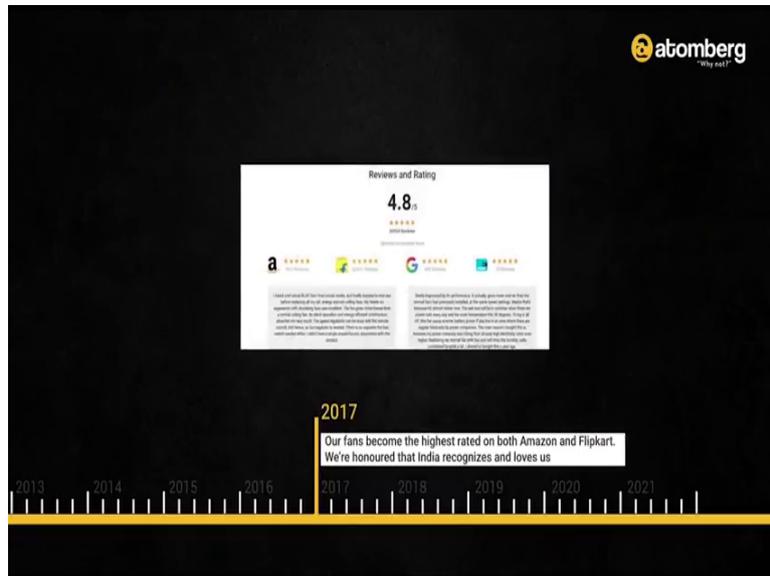
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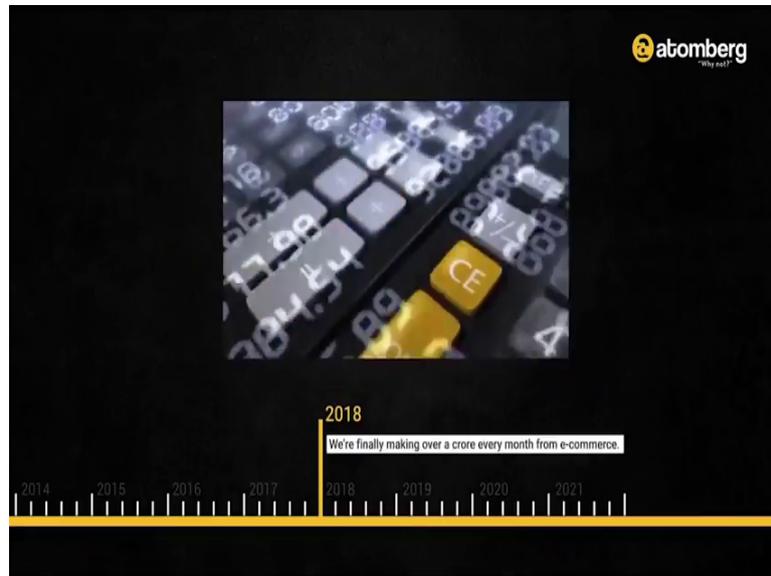
atomberg  
"Why not?"

KALED

2018  
We enter the retail space across cities.

2014 2015 2016 2017 2018 2019 2020 2021

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atomberg  
"Why not?"

CHARGE OF THE EV BRIGADE...  
INDIA  
Forbes  
30 UNDER 30

Forbes  
30 UNDER 30

2018  
Our founders get featured in the Forbes '30 under 30' list

2014 2015 2016 2017 2018 2019 2020 2021

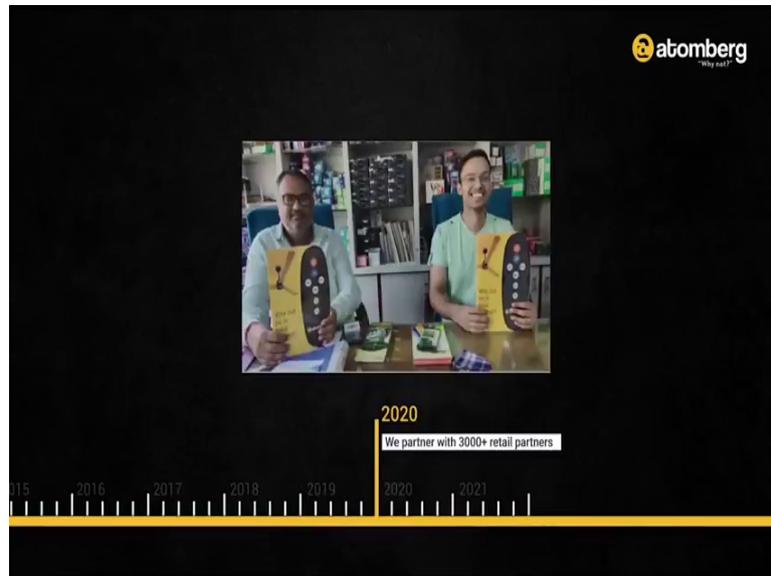
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The image displays a video player interface. In the top right corner, the Atomberg logo is visible with the tagline "Why not?". The main video frame shows a man in a dark suit and tie speaking at a podium. The podium has a sign that reads "The Economic Times STARTUP AWARDS". In the top left corner of the video frame, the hashtag "#ETStartupAwards" is displayed. In the top right corner of the video frame, the letters "ET" are shown. Below the video frame, there is a timeline with years from 2015 to 2021. A vertical yellow line highlights the year 2019. A text box next to the 2019 marker contains the text: "ET Startup Awards 2019: Atomberg Tech wins the 'Best on Campus' award".

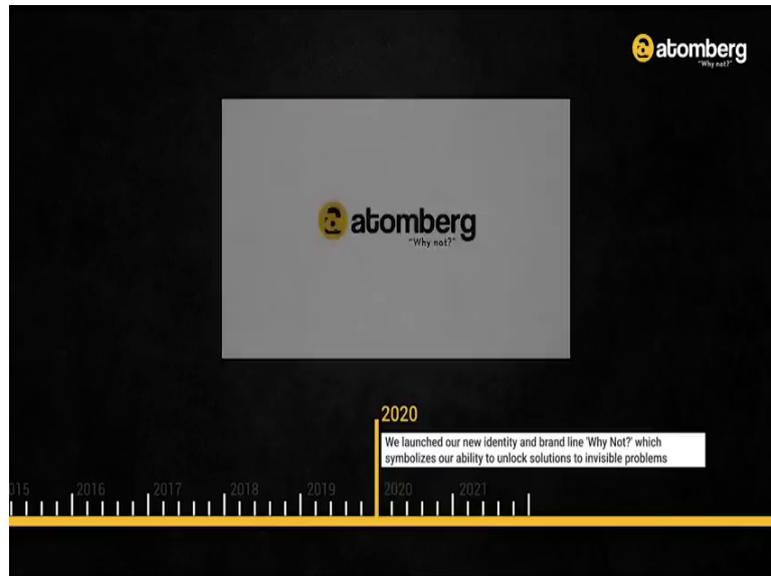
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The image displays a collage of news articles from various sources, including 'The Economic Times', 'YourStory', 'Outlook', and 'The Economic Times' again. The articles consistently report that Atomborg Technologies has secured ₹70 crore in Series B funding led by A91 Partners. The central article from 'Outlook' provides more detail, mentioning that the funding was led by A91 Partners and also saw participation from Trifecta Capital and Narayana Partners, the family office of the Varun Karji group. It states that the Series B fund raise of ₹70 crore was used for amplifying distribution networks across all major metro and semi-metro cities, and also for building brand awareness.

Below the articles is a timeline from 2015 to 2021. The year 2020 is highlighted in yellow, and a text box above it states: "We receive a ₹ 70 Cr. Series B funding from A91 Partners".

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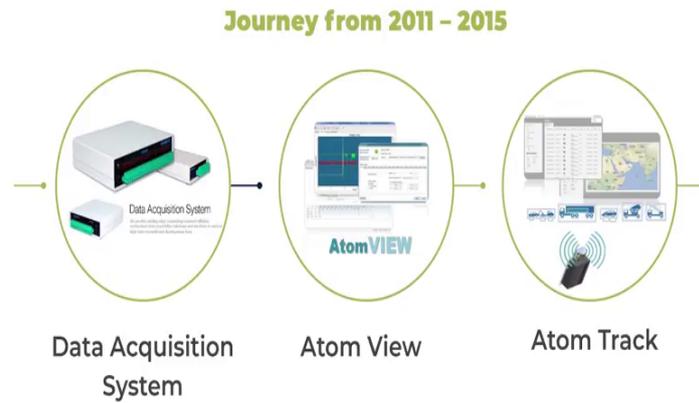


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Today on our portfolio we have exhaust fan, wall mounts, pedestal. We are also launching mixers and grinders this November like we are preparing for the launch by the way. And air cooler and hair dryer are the two new products which we are working on right now.

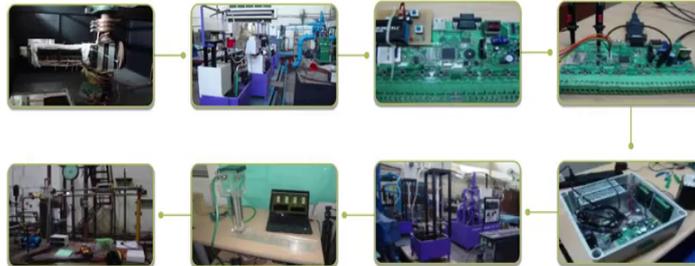
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Yeah; so, these are some of the snapshots from old story 2011 to 2015, where we experimented all these different ideas, data acquisition was one of the products which we were selling to IITs, BARC, DRDO, etcetera.

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### Journey from 2011 - 2015



We also did a pilot for Amul Dairy, Mother Dairy, Domino's; so, it was mainly for a cold chain monitoring of their referments. So, that also we tried in 2012 and 13; and these were certain projects for done for DRDOs and BARC and certain laboratories also within IIT. So, some of the lab's snapshots are from IIT Bombay laboratories itself.

So, that time you know the passion was definitely doing the technology stuff solving problem. But, somehow we were deep inside not very much satisfied because see technology learning is one thing, but we I personally believed that if a larger problem is not solved right, then the technology is of no use. So, whatever I have learned whatever I have experimented during that time, it should be reached out to mass market.

And consumers was something very much I was fascinated about, but I had no clue how to get into that and home automation lot of things people were talking about. So, there we

identified that you know the appliances when we studied from the competition be it your ceiling fan.

So, we have not seen any innovation right for last many decades for last 30 40 years ceiling fans are dull running on old technologies, energy inefficient not looking cool and all other appliances like your washing machines, refrigerators they have evolved a lot. So, there was a big gap between the evolution of certain categories like ceiling fan, mixer grinders, and other kitchen home appliances.

So, that was a wonderful opportunity we thought, why not make appliances smart? So, the idea clicked and since we had a lot of expertise by then in by 2015 into motors and control systems. So, we thought it would be a wonderful opportunity to apply that expertise of motors and control systems into that; because, most of your appliances are actually running on some kind of motors.

And that was the opportunity we made a small prototype, tested it, results were amazing like it was consuming only one third electricity right. So, you could run 3 atomberg fans within the same power which your traditional fan takes; so, that was a big breakthrough for us and a big realization about the opportunity. So, the thing is you know it took me almost 4 to 5 years to identify the right opportunity for us yeah.

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### A \$10B category ripe for disruption

#### Consumer Insights

- Increasing disposable **income**
- Increase in **premiumization**
- Increase in **consumer aspirations**
- Digitally influenced sales are expected to grow from 30% to **63% by F.Y. '24**

#### Category Insights

- E-com channel contribution is expected to grow at 25% CAGR to reach **30% channel share by F.Y. '25**
- No **meaningful innovation** in the last few decades
- No **Aspirational brands** in the category

So, now what we are doing is we are focusing a consumer appliance category, it is a big market overall market size. So, we made a right business model by the way finally, right in 2015 after having all these failures. So, making right business model helps, because that actually gives you a lot of insights which you are not able to see from your making a PPT to make to impress investors.

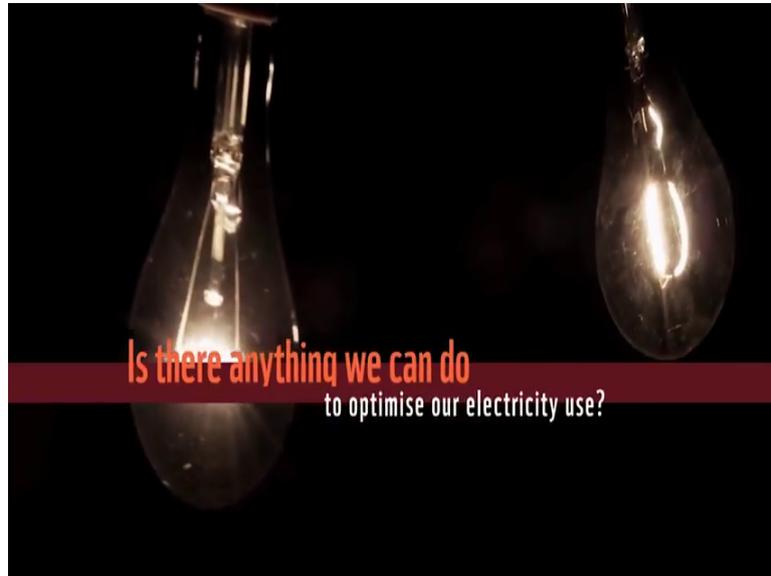
Getting some detailed understanding of the metrics profitability P and L is really important, to understand you that what kind of funding requirement will be there. As of finance is something we should not take lightly right, without right finance, right finance model things will not fall in place.

You might end up into a financial crunch, you might end up making a wrong product may be which is not getting a right value from the consumer. So, getting a right business model done is really important at right at the very beginning of the idea.

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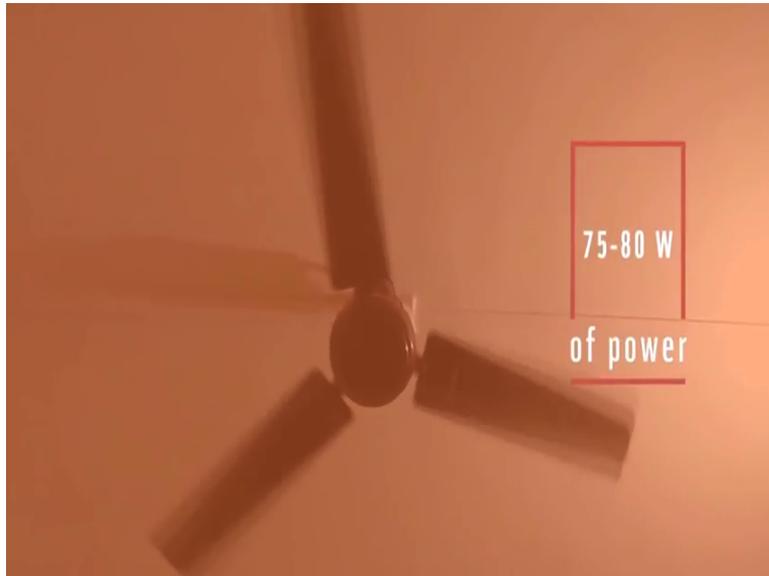
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Electricity bills are increasing year on year, is there anything we can do to optimize our electricity use. India is one of the largest market of ceiling fans and with ever growing population the market is expanding. Every year a lot of electricity that we produce is actually consumed in running ceiling fans. A conventional ceiling fan consumes 75 to 80 watts of power and 50 to 55 watts in case of 5 star B labelled fans offering same air delivery.

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Heavy energy losses lead to high electricity bills due to friction between moving parts inside the motor of a conventional fan. Atomberg Technologies has developed an innovative solution the Gorilla fans.

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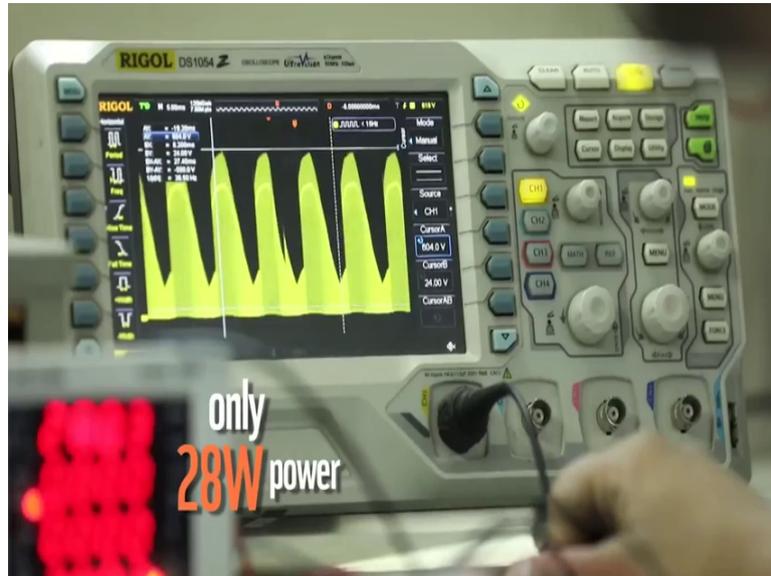


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The gorilla fans minimize the losses caused by AC induction motor based fans through the use of brushless direct current technology which consumes significantly low power and generates less heat.

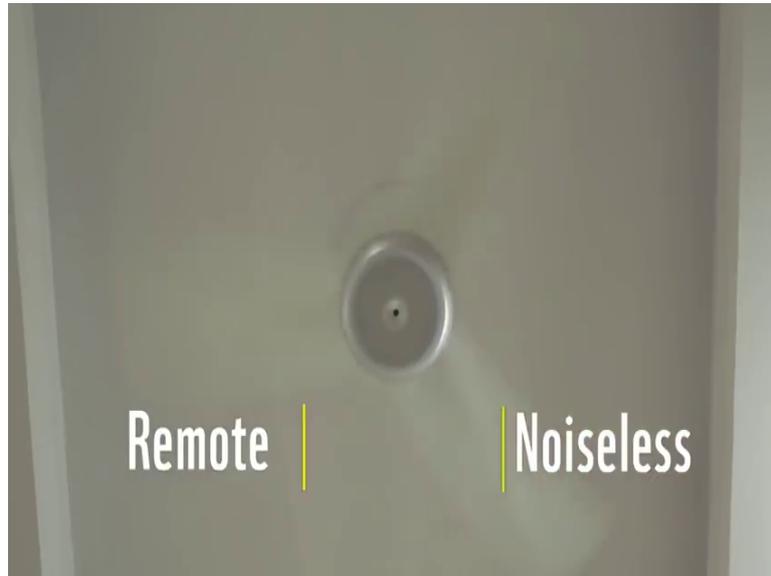
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Gorilla fan consumes only 28 watt power, less power consumption and great experience both at the same time. Also, it comes with a remote and is noiseless. Atomberg has developed a smart motor tuning algorithm called atom sense. This along with the optimized design of motor for reduced vibration leads to a longer lifespan of the fan.

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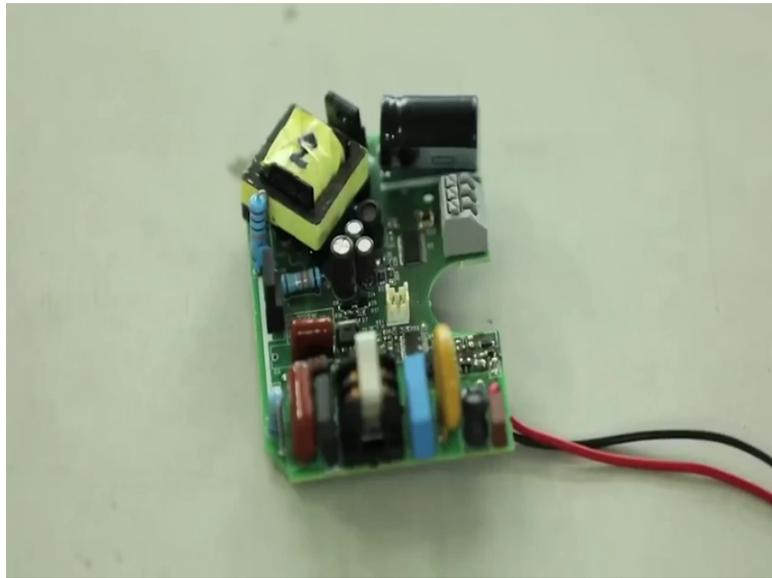


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Besides, optimized aerodynamic design further leads to enhanced air delivery. In fact, people if they use start using this new technology which is 65 percent efficient, they can start saving about 1000 to 1500 rupees per fan every year on their electricity bill. If a commercial place like a railway station has 300 fans replaced with gorilla fans it can save around 70000 units of electricity in a year.

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And a demand side management we motivate consumers to exchange their inefficient appliances with highly efficient appliances. And ceiling fan is which is widely used and continue to consume energy throughout the day and night. So, we concentrated on ceiling fans and we rolled out a very innovative program of brushless DC ceiling fan technology.

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I have been using this BLDC high tech gorilla brand fan since last over of 6 months period. And we have been viewing and realizing the fabulous results in terms of economy, the electricity bills are highly cut off.

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Given the climate change challenges such innovations as gorilla fan are the need of the hour. Every bit of energy we save will contribute to a better planet. If this system is implemented globally it can mitigate 4 million tonnes of greenhouse gas emissions by 2026.

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So, now why we are winning in this particular category which is your smart and efficient home appliances. So, one thing is all of our product are very differentiated and the high differentiation coming from the core technology. One is your motor electronic technology which is making the product superefficient. At the same point in time we are able to make product smart so efficiency and smartness goes very well hand to hand together to make a complete product and look attractive.

Then making product beautiful is also important aesthetic point of view. And our technology has enabled us to make the product more beautiful I will briefly cover that part. Because, it is really important to you to understand that see starting something is important a good beginning is important. But, at the same point of time you need to understand what are your competitive advantages going to be in future.

How you are going to ensure that your product is differentiated 1 year down the line, 2 year down the line. You need this window of opportunity very well defined when you are able to differentiate your valuable proposition into the market right. This is important it should not happen that you launch the product and it is very vulnerable people are copying it and then you are nowhere 1 year down the line.

[FL] We have ensured that evolution on the product was done and today also we are evolving our products. Final thing which is very much helpful for most of the new generation start up is that digital strategy. [FL] Today most of our sale happens 50 percent of our sale happens through E com and I would like to share you that almost 15 percent market share is owned by Atomberg across ceiling fan category. Havells, Orient if you check their market share will come after that.

So, it is a big validation from the market that your product is accepted. You are able to understand consumer feedback and read your consumer from reviews how they are liking the product and those things are really important. See whatever we do today we ensure that we know our consumer best; we will never go to consumer door and we will say that you will look for blue colour, white colour this kind of blade design, this kind of motor design.

We will try to understand what their aspirations are. What is their perception of smartness, what is their perception of efficiency right. And then we will fuel our engineering learning to ensure that that aspiration is met and we will try to surprise them from with the products. So, we would not follow because see you all you can do is you need to meet your consumer you need to read your consumer from reviews from meeting online, from collecting data from retail counters distributors.

But, you need to really understand who your consumer are what their aspirations are. They would say that make a fan, LED, a lot of led where add LEDs on the blade, they will add speaker integrate, speaker within the fan. They will say n number of things which might not be feasible one consumer might like other might not like.

You need to only understand what they are trying to say, what is their understanding of smartness, what is their aspiration. And then it is your job as an engineer to solve that, but today we have a very strong team of 80 member which are working on pure technology overall teams like that Atomberg today is around 550.

And we do a pretty thing like starting from product conceptualization, prototyping, validation we follow a proper seven stage program to deliver any product. And we are also running our own manufacturing line, sales activities, marketing activities everything we are owning.

And that has given us a wonderful strength, basically when we are owning all the things we are able to experiment we do a lot of experiment on digital and marketing communication as well which was not possible if we were outsourcing these things.

So, many times whatever is required for you to ensure that competitive advantage can be met you should own that. If something is available outside, some service is available outside which is a commodity you can definitely partner with right agency and and get things fast because speed is important.

But, things which are niche where you can differentiate; it could it may not be only product, it would be your logistic strategy, it could be your digital strategy, sales marketing strategy anything. Wherever you find because you need to have more competitive advantages then you need to explore more areas not only the product technology capabilities.

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This is a portfolio today as I said you know the fan; we have tried to redefine the fan the way they are manufactured. In IITs the product is very similar to the traditional fan which was our initial model. But, soon in 2018 and 19 we rolled out very compact motor fan the second, product is called Renessa this is world's most compact ceiling fan motor. And here you will see the diameter of the motor is just half of your traditional motors the fun factor is super compact.

And nowadays people are looking for minimalistic designs they are appreciating more minimalistic design. And people are moving toward you know the perception is very different like just to give you an example how we understood you know how we got design direction. [FL] we have by the very strong team, one of the guy Uthkarsh is Professor Chakravarthy's student he is doing wonderful job.

[FL] ID is really important Industrial Design is really important, we do a lot of detailing and it is fusion of you know ID thoughts and the engineering thoughts to bring this product. [FL] we studied your ovens microwave ovens which are new, your modular kitchens which are coming up, your refrigerators everything is getting into acrylic electronic minimum minimal LED elements will be integrated within that.

So, that it should look modern, it should look new age right. So, this is what we try to do in Renessa series that is the most loved series into the in this home appliance category ceiling fan especially. When we launched this in 2019, a lot of negative sentiments also came from the market that the motor is small people might not like it, it was coming from retailers and distributors.

But, we were sure because we knew our consumer more than any retailer or any distributor. [FL] we took this challenge they told us that fans should look big if motor is big it means that it is more bulky or it is more.

More powerful.

Yeah.

Yeah.

So, that was just you know many times you will get wrong feedback, wrong reviews; so, you have to double ensure that do you really know your consumer well right. So, we rolled this thing out this and it is a hero model more than 50 percent market share is coming from Renessa today and that has given us direction.

And if you see all competition is now trying to follow the same design language which Atomberg has said we are very well respected across the whole industry. And this is what we really want wanted we want ceiling, fan exhaust fan is there in the market wall pedestal.

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### We have Built 'Motor Expertise'

- Core expertise in **BLDC motor**, filed multiple patents
- Proprietary **Atomsense Algorithm** is trade secret
- Unique and **Differentiated** designs
- Evolving** technology



**4th Gen, 2015**  
65% energy efficient  
Manual assembly



**2nd Gen, 2017**  
5% cost reduction  
Semi-automated assembly



**3rd Gen, 2018**  
10% cost reduction  
Volume reduced to 1/3rd  
Smart compatibility  
Introduced new materials



**4th Gen, 2020**  
10% cost reduction  
Volume reduced to 1/2  
Performance improved by 2W  
Simplified assembly  
Introduced new materials

Now, this slide is really important, this is showing that how we evolved from generation 2; generation 3 is something where Renessa is based out; half the motor, one third the volume, one third the weight yeah. And we also try to use the different grades of material, the whole industry in ceiling can never evolved themselves to use any plastic or ABS or PP grade material right.

Because the heating in the traditional motor is huge right, they are consuming three times more power than Atomberg fans. It means the power is actually going to heat and you cannot touch the traditional fan with your bare hands after few minutes of operation. So, the whole industry was restricted to use a certain material like aluminum casted and sheet metal. So, the new technology, energy efficient technology disabled all those barriers to us and we explored different materials.

So, you also need to understand see BLDC motors are definitely efficient, energy efficiency is only one part of the value not all consumers are fascinated about the energy saving; they also look for better finish a smartness. So, we exploited the BLDC technology since heating is not there; so, we can make the motor super compact, we can use different grades of material which will give more flexibility to our design team to meet the consumers aspiration to make it more new generation and new age.

And we have been continuously evolving and this evolution is really important [FL], we are not worried about what competition is doing. So, many times we also get dragged what competition is doing; so, this is also we do not do. We know that who our consumer are and how we have to evolve the technology, you have to keep investing on the R and D; we need to keep you know do better innovation on the product year on year.

So, this is keeping us ahead we have so, 4th generation is something we launched in 2020. And there are certain new exciting things we have working on, we are also working on fiber blades you would have seen all the fans which are your sheet metal blades.

So, that limits you to again do more yeah [FL] here the new designs by the way there is a prototype you can see the actual image. It is 5 blade fan under light LEDs ABS it is just a prototype 3D printed prototype within our factory the actual product might look much better yeah now which is on the right side.

So, idea was to make quietest fan possible; so, making a low noise fan is also a big opportunity for us and industry has not addressed it. So, from outside you will see that there are many player, lot of competition is there, established brands are there, but thing is are they really focusing to solve consumer problem.

So, there are empty problems which are there which are not solved or addressed by the players. [FL] consumer centricity is really important if you want to become a good brand and this is what also we are ensuring from day one that we are there to solve problem. That is our

core thing and that drives all the innovation which I think the competition is not focusing maybe yeah.

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### Fan Launches Planned '21

#### Features

- Quietest (Low RPM fiber aero-foils)
- Powerful air flow (305 CMM AD)
- Smart
- IOT enable & App control
- Thermostat/ AC communication
- Voice control



We are also working on a lot of IOT, thermostat, AC communication, voice control features. So, one of the development we are doing is that you do not need any remote, by the way all of our fan are remote control fan and some of them are Alexa compatible IOT enabled fans come along with app. But, we are also making it a smarter in terms of voice command integration; so, you do not need any Alexa do not need any WIFI at your home, it would be a standalone voice recognizing module.

So, one prototype has been done we are integrating all different accent different age groups kids, old age recording their voices, making a lookup table libraries; so, that our hit rate is better; so, all these things are going on.

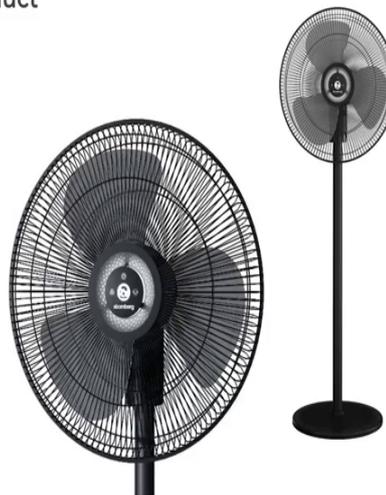
So, whole idea is to make the users life better and we will not any smart feature which is not adding value like, see smartness people there is no limit, but you have to ensure that whatever feature you are adding is consumer is going to use that; that is really important. So, any fancy [FL] is really bad to add in your product; so, this sometimes distracts; so, we ensure that whatever we are going to integrate is adding a utility that is really important.

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### Pedestal Fan – New Product

#### Features

- Inverter BLDC technology
- Up to 65% more efficient
- Smart & compact
- Front mount motor concept



Pedestal also the motor you will see that the motor is integrated within the fan blade. So, the motor is super compact and we have in your traditional fans you will see that motor is on the backside. So, there is a back hump and that again limits your design flexibility and there is a switchboard a big switchboard on the stand at the mid of the stand [FL] you would not find any big you know junction box or switchboard at this the design is very sleek the down rod is very sleek, and all the interface and the motors integrated within the center part of the blade.

So, again it is it was possible to us only because of the technology, so technology was there BLDC motor was there. But, a value to consumer was not only the energy efficient thing, it was exploiting the form factor motor, exploiting the different grade different material which low heating motor can offer. Then it is also enabling us to integrate the interface within the motor [FL]; all these things has played a significant role to pack the complete product.

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### Mixer Grinder – New Product



USP	Remarks
Intelligent & efficient inverter motor	50% less power/ Low heating
Best rating	Motor ON rating
Disruptive ID in cluttered space	Minimalistic and Smart
Electronic knob control	Smooth electronic potentiometer No mechanical rotary knob
Smooth & controlled grinding (safe & friendly)	Less vibration, initial jerks, and splashing Better texture (E.g. coconut chutney)
Slow grinding (5000 RPM)	Control algorithm (RPM control close loop system) No heating in chutney making
Noise (very less @ No load)	With load, 10-15dB lower
Safety	Overload & overheat protection
Easy clean (IPX rating)	No vent or active cooling required

Mixer grinder is something which we have been working for last 2 years, we are about to rule this out. There are many interesting features then we are expecting that this is going to disrupt more than ceiling fan by the way. One of the key features here is that it is a low noise a low vibration product. BLDC motors are by deferred very low noise and very low vibration, and it is India's first inverter or BLDC based a mixer grinder again we are launching.

The mixer grinder also industry has not tried to solve consumer problem, it is still running on a universal motors traditional universal motors for last 30, 40 years. [FL] these are the gaps right from again I am emphasizing the fact that from outside you will find that opportunities are not there.

But, when you deep dive do you need to only understand is user happy, is anything new you can offer to user that will you know give you direction to any idea be it your home appliance or any other yeah. These are the certain prototypes we do all this electronic card which is not by the way part of your traditional motors or your BLDCs motors require a intelligent motor drive which here in the image.

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#### Mixer Grinder – Updates

- Lab testing - WIP
- Tooling WIP
- T0 samples in August 2021
- Launch in Q3, FY22



Chopper Jar Introduction  
INALSA @ 1800/-

There is the chopper jar, it is from one of the brand INALSA, I have kept it only to show you that the chopper jar chopper it is a separate product and with our BLDC motor we are able to

do a chopping feature within mixer grinder. So, mixer grinder we are offering three jars, a regular jar, chutney jar, dry grinding jar, and a blending jar along with a chopper jar.

See chopper requires a low RPM, for motor can be operated at low RPM and can deliver high torque. So, that is enabling chopping feature and that is only provided like that is only available here with Atomberg mixie, no other brand was able to do that an idea is idea was to make it multifunctional. Consumer has limited spaces in their kitchenary. So, they will never like to have a separate chopper jars, separate mixie, separate atta kneading, and separate juicer.

So, the idea is to make a multi utility product and with more compact forms by the way this is a compact mixie not having a larger footprint, does not require much space and a consumer can definitely flaunt because it is a beautiful. It has LED ring around it to indicate a lot of fault feature, and the knob is not like traditional tick tick noise making knobs it is a smart knob very similar to your oven or a washing machine.

So, all of these things matters a lot to consumer when they are touching and feeling the product. So, end to end consumer experience starting from low noise, vibration, a smooth operation of knob, better indication of LED, compactness all these things and then multifunctionality have is differentiating this product very well in this space.

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Now, this is not the end we at Atomberg we always keep a vision of 2 to 3 years and this is really important that you are always ready with what is next. When we were working on generation 1 in 2015, we had no idea what we were going to do in generation 3.

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### We have Built 'Motor Expertise'

- Core expertise in **BLDC motor**, filed multiple patents
- Proprietary **Atomsense Algorithm** is trade secret
- Unique and **Differentiated** designs
- Evolving** technology



**1st Gen, 2015**  
65% energy efficient  
Manual assembly



**2nd Gen, 2017**  
5% cost reduction  
Semi-automated assembly



**3rd Gen, 2018**  
10% cost reduction  
Volume reduced to 1/3rd  
Smart compatibility  
Introduced new materials



**4th Gen, 2020**  
10% cost reduction  
Volume reduced to 1/2  
Performance improved by 2W  
Simplified assembly  
Introduced new materials

And then in 2018, we had no idea what we are going to do in generation 4. So, it is exploration basically you need to just keep your efforts in evolving the technology keep exploring what is next this is really important. And on our road map we have two more things on our roadmap at this point in time.

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### What's Next?

#### 5<sup>th</sup> Gen | 2021

##### HV Single Phase Motor

- Electronics cost reduction by 40%
- BOM cost reduction of 15%
- Height reduced by 30%



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### What's Next?

#### 6<sup>th</sup> Gen | 2021

##### Atom-Axial Motor

- No CU, No Steel (Commodity price ↑)
- Simplified process – No Winding
- Leaner supply chain
- Mass manufacturable with almost 0 rejection



We are working on one is a single phase motor which is much more superior version than generation 4. We will roll that out in 2021 and this is something very different I think not only in appliances in general whole in general motors people have not done it right. So, this is generation 6, we call it atom axial motor it is our own name which we will register definitely for this technology. [FL] here in traditional motors you use your steel, copper, magnets and those things to make a complete motor, but here we are replacing all these things with a printed circuit board.

So, on the right side this is nothing but a motor actually, only few companies around the globe are working on it; we have took this challenge to make this technology affordable in a product like ceiling fan yeah. So, this is a something which we are very much sure and 2021

we will have the prototypes ready few are done 2022 we will roll this out; so, this will change the way motors are manufactured.

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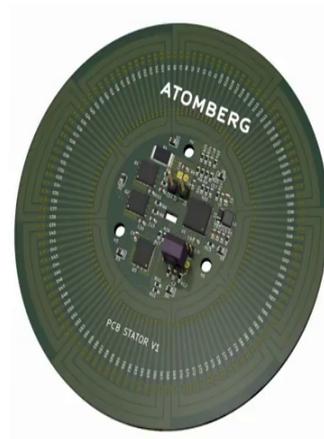
### What's Next?

#### 6<sup>th</sup> Gen | 2021

##### Atom-Axial Motor

- BOM cost reduced by 20%
- Motor Height reduced by 60%
- Weight reduced by 50%
- Greater than 92% efficiency

- **Advanced FOC algorithm**
- **Powerful driving solution**
- **High torque axial flux**



And it will it is really flat motor very flat motor all electronics is integrated. So, the idea is to hide the center part of the ceiling fan completely right the motor part it should be very well integrated and it was not possible by the way in traditional technology yeah.

So, these are the front looking technologies which we are working on; not only that it is going to help us in others products this is Atomberg current firm factor. [FL] you can imagine we will make it super flat only 40 percent firm factor in coming time with the new motor with generation 6.

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### Food Processor

#### Features

- Battery operated cordless
- High torque at wide RPM range (100 - 10000)
- Multiutility (Slow juicer to wet grinder)
- Modular attachment design



A complete battery operated mixie, because the consumption is not much; so, you can ideally use a battery batteries in it for 30 minute operation. So, it will become make it portable; otherwise, you will keep hunting for a power socket in your kitchens whenever you have to use the mixie.

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[FL] in future we have today some of the products ready, till mixer grinder we are now working on air coolers, hair dryers. In our pipeline we also wish to enter into washing machines or air conditioners or vacuum cleaners at right point in time. So, we are preparing ourselves we are increasing our team, our muscles to ensure that we are ready for that.

Today in current scenario we have been manufacturing roughly one and a half lakh unit a month right. And which means annually we are crossing roughly 18 to 20 lakh units depending on the growth rate a month on month.

And the revenues we are generating at this point in time monthly around is 30 [FL] that is a monthly revenue. And with this monthly revenue this financial year we are trying to we are sure to close the a revenue of 350 [FL] this year. And it is only from ceiling fans next year

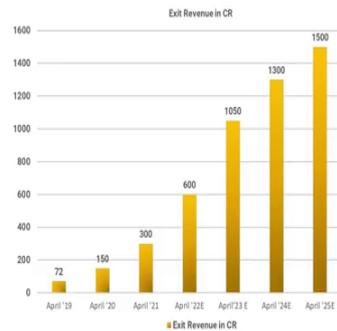
once mixer grinders is launched and a air conditioner is ready and we are hoping that we will be able to double the revenue.

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### Performance and Projection

#### Category Insights

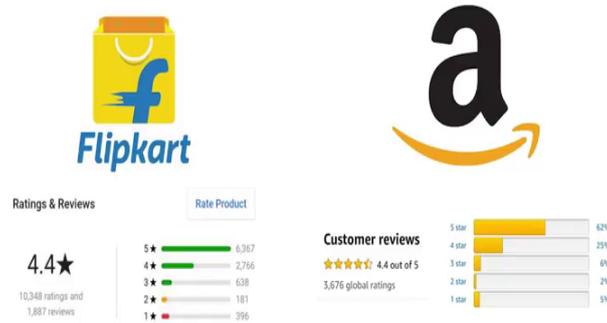
- More than **15% market share** on E-commerce platform
- Projecting **profitability** in FY '22
- Selling through **>7K** offline retail touchpoints with presence in **>100 cities**
- **Best selling product** E-commerce platform



So, this is the how we have been growing year on year almost every year we were able to try we are able to double the revenues this is April 21 number. [FL], we estimated 300, but we are doing more than 300 as I said 350 is something we will end up.

Next year also we are instead of 600 we will definitely cross 750. So, whatever story we make in a business model, see this is really important that whatever we predict we are able to meet the numbers. This is really important to ensure that the confidence level in your investors, and in your partners, your vendors within your team consider all scenarios good case, bad case. So, this is something we have been demonstrating that whatever we pitch we are able to deliver; so, that is really important.

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And on if you check us on reviews online, you will find a Atomberg best rated products and among top 10 you will find 4 to 5 Atomberg fan always in the priority list. So, online is one channel of course, in offline we are available on almost 7000 outlets. Now, the 7000 is actually 10000 outlet across India.

And yeah and the profitability something we have hit now it took us almost 2 to 3 years to ensure the profitability. Because, hardware is little tough business because you have to also ensure efficiencies in your manufacturing. So, and though at a volume only you are able to realize the profit good profits if you are also doing the manufacturing. So, thank you; thank you all for giving me opportunity yeah to share my experience yeah.

Thank you for coming in and you know we are you know very very proud and also you know very happy that you could you know come and talk to us thank you so much Manoj.