

Xtrawrkx with Aventose Energy

Featuring Vilas Tank

Interviewer: Please tell us a little bit about yourself and Aventose

Vilas: I am Vilas Tank, Founder and CEO of Aventose. With 25 years of global experience, I have successfully established and managed R&D, manufacturing and business operations with full P&L responsibilities across US, Europe, and India. Spending a decade in the USA, Europe and my extensive background in the Indian automobile industry has enabled us to create a highly differentiated electric two-wheeler startup Aventose.

Aventose is an acronym and stands for "A VENTURE TO Save Earth" which is also the mission statement of the company. As a high-adoption electric mobility startup, we aim to tackle the problem of low electric two-wheeler adoption. As the name itself suggests, we are looking for high scalability, you cannot save earth from climate change with a 5%-6% adoption rate. We hope to capture 10% electric 2-wheeler market share by 2030.

Interviewer: You started in 2019, with the pace you're working at right now and how other companies around you are progressing, do you think you'll be able to achieve your goal in the next seven or eight years?

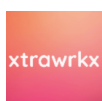
Vilas: Yes, it's been five years of dedicated effort. We need to understand the difference between a software company and an electric automobile company. Automobile development involves a complex process of user case studies, design, prototyping, testing, debugging, and certification. Skipping steps, reverse-engineering imported products, or taking shortcuts leads to unsafe, low-quality vehicles that fail to achieve product-market fit, contributing to the current low 6% adoption rate.

Also, you can't achieve high scalability with a single product hence we have been working on 4 product platforms to target multiple segments for high adoption which is taking time.

Interviewer: I see. You mentioned that you built your product from scratch. What do you think is the difference between starting something from scratch versus taking an existing idea, improving it, and making it better? What approach do you think is better, especially for people like me who are still learning?

Vilas: There is nothing wrong with taking a concept and improving it. It's a smart way of working. But success lies in choosing the right concept and making it relevant. You can't sell an improved papaya to someone who wants a potato. Have we tried to understand what Indian customers really want?

Launching products which lack product market fit, with high prices, poor quality and service support has resulted in low adoption. In order to artificially increase adoption extensive



marketing and heavy discounting was done which resulted in high burn rates. Low adoption and high burn rates is driving customers and investors away from the electric 2 wheeler industry. This is not how it is supposed to be if the right time is taken to develop and test the products.

Interviewer: Okay, I get your point now. It makes sense. What do you believe are the key factors that have contributed to Aventose Energy's success so far?

Vilas: India has historically lacked automobile R&D expertise and depended on partnerships with global players to develop products for India. Unfortunately, this worked in the past as well as in the present with the internal combustion engines, but the electric vehicle domain is new and even the global players are learning so the technology and products are not readily available to import at the right price for the Indian market.

Our key differentiator is our passionate, multi-talented, hands-on team with over 130+ years of global experience. With strong expertise across market research, design, development, manufacturing, supply chain, automotive, sales, marketing, and finance, our team forms the backbone of our success. This depth of knowledge enables us to create innovative solutions tailored for India while being globally exportable.

Interviewer: EV is a new industry, there is very little talent in the industry, even within the OEMs. Whatever talent is there is constantly moving every few months, which doesn't provide stability to do continuous, steady product development. How do you manage to retain your team?

Vilas: Yes, your observation is correct. Our team at Aventose has all the expertise in-house, and we have lost only one person in the last five years. That gives us a strong edge.

Interviewer: Why do you think others face such high turnover, especially in startups? Do you think your ability to hold your team together is a differentiator?

Vilas: We have a small team of 14 members. Everyone is experienced and they understand what makes a good company and a good product. They also understand a good development thought process when they see one after all their years of experience.

As founding members of the company, they've seen the product development process from scratch. They were involved when we went out to talk to people for market research (voice of customer). They've seen products start from the drawing board as concept to the first vehicle assembly and test runs. So they've been part of this journey from the very beginning, and now they want to see their 'baby' come to fruition in the market. There's a lot of satisfaction in that; it's more than just money.

Interviewer: So, you think they believe in the product, which is why they've stuck around until the end?



Vilas: Exactly, you hit the nail on the head. Our team believes in the product because they see firsthand how people respond to it during testing. When we're out, people stop us to ask about the vehicle and share their needs. And the best part? What they're asking for is exactly what we're delivering. This confidence in creating a product that genuinely resonates with the market keeps the team motivated and committed.

Interviewer: You have made products for the U.S, Europe and Asia. The road conditions in India are obviously quite challenging, unlike the better roads in other regions. Do you think the process of making the product differs because of the conditions, such as roads or climate?

Vilas: In my previous roles the products we were developing for Europe, Asia, and the U.S. were not electric vehicles (EVs). I was working on a completely different product line. But there are some basic principles of new product development that apply across all products and regions. When you design a product, you need to do detailed market research, user case study and gather feedback from the market. Ask them what kind of product they need, what they are currently using, what problems they face, and what they want to improve.

You also need to understand through observation what external factors beyond the product itself—like the quality of the roads, charging infrastructure for example. The basic principles of product development remain the same. And this was a key differentiator for us. We started with market research and the voice of the customer to develop products suitable for India.

Interviewer: What are the barriers for high adoption of electric 2 wheelers in India?

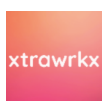
Vilas: There is a major trust deficit regarding the EV industry. When EVs first came many years back people were excited, but their experience was far from satisfactory. The 2 main root cause barriers are lack of product market fit and poor quality of vehicles. Of course, then we have domino effect resulting in product failures, fires, poor service, high price, heavy discounting, high marketing costs resulting in high burn rate, losses which eventually leads to trust deficit in customers and investors.

Interviewer: So, the main barriers are low-quality products and poor product-market fit?

Vilas: Yes, exactly. For example, the largest selling vehicle in India is the Honda Splendor, and the largest segment is the 100-110cc motorcycle. But how many companies are launching products that fit close to that segment?

Our first product, the S110, was designed to cater to that segment, benchmarked against the best in the segment Hero Splendor. But during our voice of the customer research, people said they liked the Splendor, but they wished it had a step-through design like a scooter, so women and older people could also use it. That's why our first product S110 is the best of both worlds, scooter and motorcycle.

Interviewer: So, the S110 is mass market and S125 is for the aspirational market? Can you please explain your product portfolio?



Vilas: All our products are high-quality, reliable, durable, efficient mass-market products which is 85% of Indian 2-wheeler market. You cannot achieve high adoption with smaller segments such as high price aspirational or low price low speed light electric scooters.

S stands for scooter, and the 110 indicates it's the equivalent of a 110cc 2-wheeler. So the S110, S125, M125, and M150 are all mass-market vehicles. S110 scooter but equivalent to a 110cc motorcycle, while the S125 is a proper scooter. The M125 is an equivalent of a 125cc motorcycle and the M150 has more like an upcoming retro or classic, the Java/Yezdi.

We chose these segments based on their market size in India, Africa, Europe, Latin America, and Southeast Asia. We designed our products to cater to these regions as well.

Interviewer: So, you plan to go international at some point?

Vilas: Yes, we've designed our portfolio, chosen components and suppliers accordingly, with quality and regulatory standards for international markets in mind. Our vehicles are designed from scratch, keeping the global market in mind.

Interviewer: You've partnered with suppliers, but what happens if another company comes to you and asks to use your R&D? The EV ecosystem is still developing as a whole, and no single company can do it all. Would you be willing to share your work and your expertise with others to help the environment and the ecosystem grow, or do you think it's better to have healthy competition?

Vilas: This is an interesting question. We are always open for collaboration if it's in line with our vision of building a stronger EV ecosystem. We can collaborate in certain domains and still have healthy competition in another as healthy competition is a driving force for innovation. So, if the right opportunity arises to collaborate for the greater good of the ecosystem, we will consider.

Interviewer: And what about testing, do you test your parts in house, or do you send them out for testing because testing can be quite expensive.

Vilas: Testing is a very important step of product development which many companies cut short. Testing should be done extensively at the OEM end but currently is happening at the customer end in the after sales market. We do the component testing at the supplier's end, in-house as well as at 3rd party facilities. Extensive 5-year product level simulation and testing has been done by us in-house as well as with 3rd party companies like ARAI.

Interviewer: When do you plan to go PAN India?

Vilas: Our first product S110 is ARAI certified, and we are currently raising funds to fulfill pre-orders. As soon as we raise funds, within 4-5 months we will start sales. We have about 500 dealers pan India waiting for our product. We will first launch the product in a small, controlled region, solve the teething issues and once the problems are taken care of, then we will go pan India. Don't want to have service complaints from all over India and not be able to solve them.



Interviewer: What are your thoughts on strengthening supply chain and local partnerships?

Vilas: Not just supply chain partnership but for any partnership to succeed including with employees it has to be long-term. There needs to be trust between the OEM and the suppliers, employees etc. The lack of continuity hinders product and technology development; without stable partnerships, you can't achieve that level of quality or continuous improvement over time.

Interviewer: Any advice or any closing comments for our readers?

Vilas: Prevalent perception in the industry is that the Indian 2-wheeler market is overcrowded. This is a myth. Firstly, the Indian market is so big it can accommodate many players. Secondly and more importantly, if you look at the adoption rate, it is just 6% despite major OEMs, giant startups having launched their products with a lot of marketing, subsidies and heavy discounting. But if you look at the electric 3-wheeler segment, you don't have many major players but many smaller players, almost no or lesser discounts and marketing and yet the adoption rate of 10%-30% depending on the segment. So why is it like that? The reason is better product market fit in the 3-wheeler industry for the use case.

There is a big gap in the electric 2-wheeler industry which we are trying to bridge through our reliable, durable, cost effective and efficient 4-product portfolio. We are an aggressive team hoping to capture 10% of the overall 2-wheeler market share by 2030 to fulfill our mission statement.

