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Diving into the Entrepreneur's Mindset

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Making a vehicle is a challenge in itself. It requires 1 % innovation and 99% perspiration. Another challenge is to take the vehicle to the market. The mindset you need to have is the most crucial because it determines how you take responsibility for the coordination of 300 young and terribly optimistic team members. That mindset has to be like the one of **Tarun Mehta**, who is the CEO of Ather Energy (also known as 'Tesla of India') which sells smart, intelligent, connected and electric scooters in Chennai and Bengaluru.



Ather 450

The Leap of faith

Ather Energy officially started in 2013 when 2 IIT Madras (IITM) graduates of Mechanical Engineering (Dept. of Engineering Design) -Tarun Mehta and Swapnil Jain left their jobs to research at IITM, the place where they had put the company's concept on paper. In their second year, they had started calling themselves "Ather Energy".

"We did try to look at different things like testing of construction equipment etc. We were looking for something to spend 20 years of our life. So, we needed at least 1-2 years to figure out what exactly we will do."Both of them did a lot of projects in their college life including publishing a miracle patent- the one which will solve our problems of electric vehicles(Charging, Efficiency), it was Swappable Battery Packs.

In 2012, Mehta joined Ashok Leyland, and Jain, General Motors. But Mehta did not stop thinking about battery packs for electric scooters. Simultaneously, he was trying to convince Jain to leave his job and work on this idea. "Every month or so, I would go to Chennai (from Bengaluru) to spend time with him (Jain) to convince him to quit his job," says Mehta.

Meanwhile, a batchmate of Mehta's allowed him to use his lab space for "experiments." "Every Friday night, I would come to the lab, sleep, and wake up on Saturday morning to start working. We used to research and work until Sunday evening, and go back home on Sunday night," he recalls. In those six months, he got a lot of time to read about EVs in India and China. He also kept "close track" of companies like Tesla, other Indian companies in the EV space, and developments in battery technology.

China had more considerable publicity and govt support, so it sold 30 million vehicles of these specs annually. On the other hand, India sold very less units since debut in 2007.. In 2009 it crossed about 100 thousand, but later it remained 150 thousand annually. The early adopters wanted good speed, looks, ergonomics, so we can't compromise on these factors, nor could they ban petrol, to mandate EV in a big way. They looked at

super cool Tesla very inspirationally. So, Tarun and Swapnil, after all this said to professors-"look, we are fairly interested!". Two professors gave Tarun and Swapnil research projects, to work in labs and stay on campus.

The first 6-8 months were spent only to try to understand what it means to make an excellent electric vehicle. "We bought a whole bunch of electric scooters—unscrewed and unwrapped them, collected data, and eventually came up with our view of what an electric scooter should be like" We first looked at the battery and then the entire vehicle. Then we went to the same people with whom we took our specs.

In October 2013, they got Rs 85k funding from one of the professors. It wasn't precisely seed funding but the genesis of the company. They met Dr. V Srinivasan, co-founder of big data startup Aerospike, and an angel investor, "who was very keen to put money because he liked our passion." The investor suggested they start a Kickstarter campaign and get a few thousand orders first. Instead, Mehta met 50 people who owned EVs, trying to understand what they disliked about the electric scooters.

"We then wrote a spec sheet about what a good electric scooter could be—75 kmph for our top speed and 60km as the range. We wanted to price this at ₹1 lakh". This sketch and the original spreadsheet became the starting point for Ather Energy as it's known today.

EV Scooter sold at- (Details noted by Tarun in October 2013)

| Top Speed 25km/hrNot good enough | Projection 3X speed |
|---------------------------------------------------|--------------------------------------------------------------|
| Low 250W, Heavy battery Range-5000kms, No storage | At least 20X power+10X battery 3 times lighter, More storage |
| 6-8 hours charging time | 8X charging speed |
| Cost - Rs 65K, Also for petrol +75K for 3 years | Rs 85K, maintenance cost for 9 years 75k |

Later, several other professors at IIT invested in their capacities, ranging from ₹30,000-85,000. We collected around ₹5 lakh," says Mehta. The angel investor gave them ₹25 lakh, and the two co-founders formally took up an incubation program at IIT Madras. "They (IIT, Madras) gave us another ₹15 lakh, which lasted for a year," So, they got Angel investment of 40 lakhs. Ather was a team of 12 people who started building a bunch of things.

Making Ground-Up

Tarun wanted Vertical Integrated OEM(Original Equipment Manufacturer), not classical automotive OEM approach, because it was tough to get the right vendors for everything. Then they thought of increasing the gestation period and gain more control. Vertically integrated means that every component like suspensions, battery pack, dashboard, BMS, etc are both made and assembled by the company, instead of ordering the parts from other companies and just assembling it.

Sachin and Binny Bansal put a big pet by 1 Million investment. Mehta likens them to "saviors" because they were almost out of money. Tiger Global invested 12 Million as Series A funding. In series B, we raised 30 Million. With these funds in its arsenal, Ather Energy has made much progress not only in increasing interest in its electric scooters but also in introducing more innovation in the manufacturing and distribution processes.

Making of the MVP

Tarun recalls that his ambition wasn't clear when he started. He looked at better quality and other existing parameters, but we believed in the audacity of zero. And so, we included none of these current parameters was in USP. Tarun needed a very new USP, which wasn't discussed in others' brochures, and basically, others' are not good fundamentally in that. So instead of us playing a game of catching up, now others' have to play catch up, and you automatically go ahead with just a tiny step forward. We got a

digital dashboard, smart motor controller, and digital remote control. Ather's story evolved around that. Ather meant a smart vehicle, not just another vehicle.

Tarun wasn't precisely a big fan of pivots or changing the business models. Lean startup is being fluid, and there is a slippery slope he believed. Instead of marginally improving on parameters like speed, accelerating power was not his hypothesis. His hypothesis was a different parameter! To step above and don't compare Ather with other companies at all."You are already better at something because no one is even competing."

Although some things did change significantly in the journey like "Swappable battery packs," but it wasn't because of vision change. Just the approach turned toward the same vision. The long term model was the belief that Vertical Integration is interesting. Tarun believed adding modules adds a fair degree of redundancy. As the industry starts, it becomes harder to go vertical. Apple and Tesla went vertical when there was no competition. Better UX or better cost isn't enough, and you need DFMA experience.

Tarun believed in having his thesis before building. The typical writing "Move Fast and Break Things" was valid only for execution. He crossed "Break Things" because he believed in having a solid and definite view of futures. Tarun's co-founder believed in that strongly too. They didn't want to ship and then figure out what sticks.

"Get one line thesis to bet your life on. Find out what section of economy you want to change. If you don't have traction, then how will you convince investors to put money in your startup?" Crowdsource funding is your only way to build something.

Launch and Unveiling

Ather launched in late 2014 and unveiled its 340 model in 2016. We took the time to make sure we sell right. Also, the investor's excitement forces you to be out there a little

early. Manufacturing is more painful than expensive. Tarun did underestimate a lot of production time. Churn grunt works out. Tarun focused on cream with the team.

Also, the company has to phenomenally great differentiation like Apple for always being vertical. Next was about giving ESOPs to early employees. Most startups and entrepreneurs believe in it.

"One must also reiterate their vision every week."

Challenges:

Every business plan begins with a set of assumptions. The first challenge is when you build an organization to test these assumptions systematically. The second challenge is to perform its rigorous testing without losing sight of the company's overall vision!

Human beings are innately talented learners when given a clear and objective assessment. In regular meetings and to address in a scheduled and structured way, the teams must be motivated to identify assumptions clearly and to think more rigorously! Decisions require having a clear-eyed and objective mindset.

Recruiting campaign:

Save an Engineer: To identify the diamonds in the rough and adopt them! Recruit quiet dedicated and who work with a great deal of patience. They focused on recruiting ones with passion and willingness to work hard. Entrepreneurs can raise too little (or too much) money, hire the wrong people at the wrong time or enter into partnerships that later prove fatal. According to Tarun, this was the hardest part. Hiring people who have experience in building in a chaotic and uncertain atmosphere was a big fair struggle for Tarun. It's hard to build from scratch when you don't have an existing structure. Everything is redone and rethought. Tarun recalls it to be a pretty oscillating journey. You have to accept it; Initially, Tarun thought of 3 million investment, 12 months, and a

team of 3, but it is now 50 million, 4 years, and a team of 300(in R&D only!). Organizing fundraising is always hard. But like all good entrepreneurs, he did not give up prematurely.

You also have to resist temptation ("Pursuit of Opportunity without regard to resources being controlled") and manage the volume you get. You have to develop a brand feel like a new automotive player. You also have to earn some respect. Having Hero as an investor helped in creating a vendor supply ecosystem. So, Tarun decided to invest enough in one city before expanding. The doorstep service and Experience Centres, Online Orders without dealers, allows Ather to connect to customers and learn. "Mainstream customers have different requirements than early adopters and are much more demanding!" 5-6 family members were getting Ather as their primary vehicle instead of the 18-25 age group; it was 25-30 age group, which was mostly buying. They were enjoying the display, google maps tie-up, upgrades, light efficient, and strong engine.

When they opened in Chennai, they invited proud owners of Bengaluru to convince and pitch! Also, the EMI and lease models are unique to Ather. Ather is continuously innovating and fixing bugs, issues, and cost structure and experimenting.

The Government of India looking at pollution levels across the country, especially Delhi, has started policies for low GST for e-vehicles and e-bikes(YULU, smartbike for last mile connectivity in metros), the future is e-vehicles. Also, as a mechanical engineering and mobility enthusiast, Ather Energy gives me positive light to work hard and hope and belief. The Social Economic factors contributing to Product Gap of e-vehicles has a lot of scope of new mobility designs and solutions. And inspirationally, one can "live the dream" as shown by Tarun Mehta.

Tarun Mehta's talks really motivate me to do projects and innovate in the direction which will create some difference in the society. I think Tarun could have started last mile connectivity in metro as test/experiment phase to get more feedback. This would

have increased support from the government as well. And also publicity would have increased.

On the generalisation part, I definitely believe that all bike and automotive startups focusing on beauty, technology of the main product have similar learning journey like Ather. Entrepreneurial traits can be learned from "hands dirty building" and innovating and improving product incrementally like 3G Data card, 7 inch dashboard, upload documents, 5 upgrades in 3c months, they can do rapid developments, customised commodities, lights, proprietary sound you love, charger on board, charging on any 5 Amp socket, 0 to 40km/hr in 3.9 secs which is better than 100cc scooters. 5.3 IW peak, continuously 3.3kW.

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