

JOURNEY OF A STEM ENTHUSIAST: FROM SCHOOL TO BECOMING A SUCCESSFUL ENTREPRENEUR



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Mr. Rajendra Pethe is a renowned expert in the areas of business excellence, lean, kaizen management, strategy formulation, and its execution. He has been responsible for the management of green field initiatives within the automotive sector. He has experience operating on a global scale in Germany. He has enhanced the productivity, floor space utilization, inventory turnaround, ergonomics, and safety of numerous industries.

Mr. Rajendra Pethe shared his journey from school to becoming a successful entrepreneur during a conversation with Mr. Dinesh Joshi, an editorial board member of ENTECH Magazine.



WHAT INSPIRED YOU TO PURSUE A CAREER THAT COMBINES SCIENCE, ENGINEERING, AND ENTREPRENEURSHIP?

My father encouraged me to read many books, including some on science. However, my interest was more inclined towards the application of scientific principles. I loved experimenting and building things based on what I learned. One of my favorite projects was creating a model of a mini hydropower station.

As someone who has always been passionate about reading, I found great inspiration in the autobiographies of Kirloskar, Jamshedji Tata, Garware, and many others. Their stories fueled my ambition to become an entrepreneur. Despite facing challenges in the 1990s, when the Indian economy was not as open, I attempted to establish a company that produces electronic weighing machines. Although this endeavor failed, it stopped before it started. I learned valuable lessons from the experience. I decided to temporarily set aside my entrepreneurial ambitions and focus on my job, aiming to gain as much knowledge and expertise as possible.



How did your background in science and engineering shape your approach to business?

I come from a middle-class family. In my neighborhood, I saw that many of the wealthy families were either doctors, lawyers, or businessmen. After observing a big government civil hospital and a district court nearby, I decided that I didn't want to pursue a career in medicine or law. Instead, I found inspiration in the small business owners who operated fabrication shops, machine shops, and trading units. During the holidays, I admired their success and spent time observing them from a distance. I always felt that these owners were the kings of their small kingdoms. My childhood aspirations led me to believe that to own a business, I needed to understand machines, and becoming an engineer seemed like the best way to achieve this goal. Looking back, this process was not as simple as it may seem now for me.

As a role model for aspiring scientists and engineers, what advice would you give to young individuals looking to follow a similar path?

I deeply regret giving up on my business idea of creating electronic weighing scales. If only I had pushed my perseverance and risk-taking abilities further, I could have been a pioneer in that industry in Maharashtra. I allowed my fear of failure to steer me away from pursuing my passion, opting for a safer job instead.

Despite facing challenges, I didn't give up. I left my job and embarked on the journey of starting our own company with like-minded friends. We are committed to creating cutting-edge technological solutions for diverse industries.

Therefore, I urge young individuals aspiring to be entrepreneurs in the STEM field not to give up prematurely. It's critical to seek out mentors, discuss challenges, and prepare fallback plans for every potential obstacle. Books, platforms like Quora and Investopedia, university professors, and various blogs can all serve as valuable sources of mentorship and guidance.



How do you balance the innovative mindset required in STEM fields with the practical aspects of running a successful business?

It's crucial to strike a balance between creativity and pragmatism, merging the innovative spirit of STEM fields with the practical aspects of running a successful business.

Continuous Learning: Embrace the latest scientific advancements and business trends to make well-informed decisions that cater to technological innovation and market demands.

Strategic Planning: Establish clear goals and devise a roadmap for achieving them, marking key milestones for product development and business expansion.

Collaboration: Engage with a diverse team of experts to incorporate varied perspectives and skills, leading to more innovative solutions and effective problem-solving.

Risk Management: Embrace and manage the risks associated with innovation through thorough research and contingency planning.

Customer Focus: Understand your customers' needs and challenges in order to ensure that your innovations are both cutting-edge and user-friendly.

Financial Acumen: To ensure that investments in innovation pave the way for a sustainable business model, monitor the business's financial well-being.

Flexibility: Be ready to adapt when necessary, as the ability to respond to new information or market changes is vital for long-term success.

Patience and Persistence: Introducing an innovative idea to the market can be a lengthy process. Stay steadfast in your vision, even in the face of obstacles.

By integrating these elements, one can create an environment where innovation flourishes while upholding a viable business operation.

Can you share a specific moment in your journey where your passion for science or engineering directly influenced a business decision or innovation?

Originally, we designed one of our products, a truck-mounted crane, exclusively for land operations. However, my West Sales zonal manager was unable to generate the targeted revenue. During one of my reviews with him, I suggested that since the Mazgaon dock fell under his sales territory, the tugboats, maintenance, and supply ships must be using pedestal cranes. I proposed that we should target that market segment. We converted our truck-mounted crane into a pedestal crane that conformed to all offshore crane norms. This decision resulted in very good revenue at a high premium.



What are some key lessons you've learned from your experiences that young STEM enthusiasts should keep in mind as they pursue their goals?

Remember, the journey of learning and discovery is a marathon, not a sprint. Enjoy the process as much as the outcomes.

Curiosity is Key: Always ask questions and seek to understand how things work. This innate curiosity will drive your learning and innovation.

Embrace Failure: Don't be afraid to fail. Failure is often the stepping stone to success and a valuable learning experience.

Persistence Pays Off: Challenges and setbacks are inevitable. Persistence in the face of adversity is often what separates successful innovators from the rest.

Collaboration is Crucial: No one achieves great things alone. Collaborate with others to expand your knowledge and capabilities.

Ethics Matter: As you push the boundaries of science and technology, always consider the ethical implications of your work.

Communication Skills: Being able to effectively communicate your ideas is just as important as having them. Work on honing your communication skills.

Vision and Goal Setting: Have a clear vision of what you want to achieve and set specific, measurable goals to help you get there.

How do you stay updated with the latest trends and technologies in the ever-evolving fields of science and engineering?

The pursuit of knowledge is a lifelong journey, especially in rapidly changing fields like STEM. Never stop learning. Enrolling and actively participating in various forums is essential, as is staying updated with the latest research papers and case studies. Adaptability is crucial, as the STEM fields are constantly evolving. It's important to be prepared to adapt your skills and knowledge to stay relevant. Additionally, balancing theoretical knowledge with practical application is key to fostering understanding and driving innovation.

In what ways do you give back to the STEM community or support the next generation of scientists and engineers?

As a Factory Head at various organizations, I always strived to inspire STEM students to enroll as interns in my plant. I carefully selected challenging projects and collaborated with them to develop innovative technical solutions that were also economically viable.

I am passionate about sharing my knowledge and experience with deserving STEM students. Our organization is currently collaborating with students from a prestigious college in Pune to develop a technological solution for a persistent industry problem.

