

## Hot Start-up: Forging ahead with perseverance

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While in school, he always dreamt of being an entrepreneur someday.

During his first year in college, he sensed that internet-based businesses would be the future. He started learning web development and created websites.

In the third-year of his college, he started developing SaaS products as 'Cloud' seemed to be the buzz at that time.

But it was an internship at the world's largest vaccine maker, [Serum Institute](#), where it dawned on him that his enterprise would be biotechnology-oriented as he was greatly motivated by Serum's work.

"I decided not to sit for placements and started my company right away," recalls Mr Pawan, the 25-year-old founder of Eumentis Informatics, a biotech analytics and consulting [start-up](#) incorporated in 2014.

Eumentis is a [data analytics](#) start-up providing analytics service and develop data-driven products in the field of Biotechnology, Life Sciences and Agriculture.

Mr Pawan is from [IIT-Delhi](#), holding both his Bachelor's and Master's degree in Biochemical Engineering and Biotechnology.

So far he has self-funded the company with an [investment](#) of Rs 3 lakh, and has received support from Venture Center, Pune.

After his degree, he was carrying out his research work at IIT-Delhi, and at International Centre for Genetic Engineering and Biotechnology (ICGEB), New Delhi.

Both he and his batch-mate, Mr Krishna Choudhary, discussed about starting their own data analytics company in Life Sciences.

Simultaneously, the duo were also applying for their respective PhD programs.

Mr Pawan targeted Swiss Federal Institute of Technology (Eidgenössische Technische Hochschule Zürich, ETHZ), European Molecular Biology Laboratory (EMBL), and Sanger Institute. But was rejected in all the three places.

However, Mr Krishna was offered a place for his PhD at the University of California Davis, USA. He went to pursue the program. Mr Pawan decided to stick to his decision in starting a bioinformatics company.

Before establishing Eumentis, Mr Pawan spent a lot of time gathering information about the need for [bioinformatics](#) in Indian research, and then planned the services accordingly.

He also wasted no time in looking out for clients right away, alongside acquiring data analytics skills.

Currently, the company provides all types of bioinformatics services in [genomics](#), proteomics, transcriptomics and systems biology.

It also specializes in Next-Generation Sequencing (NGS) and its analytics, and consult researchers and companies on utilizing NGS in their research.

Eumentis is developing a diagnostic test for Tuberculosis (TB) which can determine [drug resistance](#) to most of the antibiotics using NGS. Later on, it intends to develop tools surrounding clinical applications of NGS.

It is looking out for partnerships with biomedical device manufacturing companies to develop the device for its TB diagnostic tool.

The company is also working on big data technologies like Apache Spark to carry out large-scale and real-time analytics in healthcare (healthcare IoT data, EMR data, and hospital data).

"People generally use very well-defined and straightforward bioinformatics pipelines for all types of analysis. This is not a good practice. We create very specialized pipeline for each project that we get," points Mr Pawan.

According to him, the major challenge was to explore the bioinformatics outsourcing scene in India.

"I found that," he explains, "very few people accepted the fact that they do not have necessary bioinformatics facility or skills to carry out modern day research. Also researchers are skeptical in outsourcing their bioinformatics work, and are hesitant to even talk about it. Thus, convincing people the need for bioinformatics outsourcing has been a major challenge."

At the moment, the company provides bioinformatics services to research institutes.

It also intends to continue and expand its clientele, and also cater to biotech companies that need bioinformatics work.

"In the future we would like to work with all the big healthcare companies and develop big data analytics tools for them," Mr Pawan adds.

Funding for tool development wasn't a cakewalk for Eumentis. "Twice we applied for [BIG](#) grant, and once for the GC-TBC grant for our TB diagnostics using NGS. We got rejected all the three times. We are planning to develop the tool on our own by bootstrapping," he reveals.

As it forges ahead, Eumentis will strategize on concentrating more on developing big data analytics products for the healthcare and medical industry, and use the machine-learning algorithms to build tools to provide intelligent insights; and also develop NGS-based novel diagnostic and prognostic tests.

In a year or two, the company plans to reach revenues to fund the development of its analytics products.

"We would definitely expand our work to the US first, and then enter the European markets," highlights Mr Pawan.

According to him, the best way to begin a start-up is to develop a kick-ass product which will automatically draw mass attention.

"For our service-based business, our main source is word-of-mouth publicity. We also use LinkedIn and other social media to promote our business. Getting published in the print media is also good for start-up visibility," he expresses.

He feels that the Government should start more enterprises like the Biotechnology Industry Research Assistance Council (BIRAC) that help start-ups with funding, and also open incubators for Life Science start-ups at nominal charges.

"I suppose getting funds for a company in the West is relatively easier and quicker than in India. They have a very old start-up culture because of the Silicon Valley revolution," says Mr Pawan, for whom Steve Jobs has been the biggest role model and influencer. The Tatas, Elon Musk and Rahul Yadav also occupy a certain influential position in his life.

Mr Pawan optimistically says that Next-Generation Sequencing is the future.

"It is highly booming, and soon it will be used for all kinds of clinical applications. In the future, genome sequencing will become a norm, and the insights obtained from it would be extensively used in [preventive healthcare](#). It is a great tool for R&D. Its adaptation into mainstream research in life sciences would be extremely beneficial for our country," he predicts.

He also adds that Life Science data management and analytics, IoT for healthcare monitoring, gene editing, Electronic Health Records (EHR), lab-on-a-chip [diagnostics](#), as some of the areas where new start-ups can venture into.

Immediate returns is almost impossible in Life Sciences, he tells, when asked about how he explains to [investors who anticipate immediate returns](#).

"I would probably give the examples of all the big biotech companies in India and around the world, and the time it took for them to become successful. As it deals with lives, the product should undergo extensive testing, and the R&D is very complicated and takes a lot of time," he stresses.

Mr Pawan also remarks that Pune is an emerging start-up hub in India.

"The work being done by Venture Center in Pune is really helping start-ups. They provide a very nurturing environment and provide excellent guidance to start-ups. They have also created a list of biotech startups in Pune, and constantly conduct important workshops and seminars for entrepreneurs. A new [biotech park](#) was recently opened in Hinjewadi in Pune which is great place for biotech start-ups," he appreciates.

He thinks that the most important qualities in being an entrepreneur in the Life Sciences industry are excellent technical knowledge and perseverance.

"The life cycle of life sciences companies are much longer and it is currently difficult in India to get the funding easily when compared to [e-commerce start-ups](#). A lot of time goes into research, which is a vital part for any life sciences company. Having a degree from a good college or university is always beneficial to begin start-ups. Also one can find very good co-founders in those places. Having a good degree and team helps a long way in securing funding," he notes.

He reveals that the top ways to raise start-up cash are through angel funding, grants from government or foundations like Bill and Melinda Gates Foundation, B-Plan competitions, incubators or accelerators and bank loans.

Speaking about unusual ways of [funding start-ups](#), he comments, "Bootstrapping, crowdsourcing or crowdfunding, and money from friends and family are other ways. We at Eumentis are currently pursuing bootstrapping to run the company. I believe that in the long run, it is the best way to build a long-lasting brand," Mr Pawan opines.

Should a start-up join an incubator or accelerator, or just simply begin on its own?

"For me it is to grow on its own," he says. "[Accelerators](#) are kind of a shortcut that people take to earn money quickly and this makes it impossible to run a sustainable business. When you grow your business, your process foundation built from years of trial and error, becomes rock solid. For me, business is not about earning loads of money. It is about creating value and an entity that is sustainable."

Mr Pawan, an entrepreneur, enjoys traveling, hiking, and trekking. He is also an avid nature lover who loves to cook and has varied interests including spirituality, philosophy, psychology, and hardware, and believes in constantly learning something new. To his credit, so far, he has learnt 10 different programming languages.

He says he would have gotten a PhD and carried out research all his life had he not been an entrepreneur.

As an important piece of advice to budding entrepreneurs, he mentions, "The most important lesson is to never look at peers who earn a lot more money. This depresses and forces one to take unnecessary steps just to earn money in short-term and makes lose focus in the longer run. Secondly, save as much money as possible and avoid spending too much money on hiring or getting unnecessary services. Never start a company with the aim of making tons of money, and never compromise on customer service or quality."