A personal perspective on the many challenges faced by bioentrepreneurs

Dream. And everything in this universe will conspire to make it happen. This profound line from Paulo Coelho's The Alchemist is of great relevance to a bioentrepreneur.

This decade, which is all set to see a biotechnology boom will belong to those who have, the power to convert their dreams into reality. In other words, it will see the rise of the bioentrepreneur. The ones who will move away from the safe waters of the laboratory and convert a patentable/testable research dream into a viable business proposition. The success mantra: willingness to change perspectives which faced with new ideas or situations and the ability to adapt.

Bioentrepreneurship in India

The concept of bioentrepreneurship is still new in India. Scientists in our country follow the road lined with obvious well-defined rules and symbols.

While the need for academic excellence is understandable, the world out there is waiting for safe, affordable, healthcare solutions that can affect millions of lives. It is biotechnology that can come up with answers.

Every would-be entrepreneur, scientist or a professor in India must understand the need to find a market for his research dream. While continuing the basic research, he must develop products/solutions that could immediately translate into use for the consumer.

The efforts of global biotechnology community are setting an example. Much of the efforts today are focused on treating, detecting and preventing human disease. Top research areas include cancer, AIDS, neurological disorders, heart disease and diabetes among others.

With newfound information such as mapping of several genomes, novel therapeutic and diagnostic breakthroughs are emerging.

Every bioentrepreneur must thoroughly understand the grassroots of biotechnology sector such as research, collaboration, infrastructure, technology and commercialization capital and come up with an alternative business model to achieve success.

Alternative business model

Curiosity is often what attracts a potential bioentrepreneur to the laboratory in the first place and may be the key motivator behind his or her foray into business. It is curiosity that keeps work productive and refreshing but bioentrepreneurs need to back up that curiosity with creativity.

Entrepreneurs complain that even when they are prepared to make the break with established conventions, they cannot find the necessary business talent to help them turn ideas and intellectual property into a growing concern.

Unlike in the US, where people who are on their second or third company already and who have gained the business experience they need to deal with venture capitalists and potential customers, the biotechnology industry in India is still too young to have those kinds of resources to draw on.
In this scenario, would-be entrepreneurs must create their own business model to suit their bioventures. The clue is to work closely with Financial Institutions (FI) Venture Capitalists (VC), the marketing team and the research team to develop a workable model.

To ensure that perspectives are shared, one entrepreneur used a roundtable to ensure that everyone understood the game plan. It doesn't matter if those chosen are not involved in the company in the long run, but they provide valuable sounding boards and insights. For example, can a FI/VC grasp the technical concept in the first place and will a marketing expert see what makes the product unique? Working with others in different fields will answer difficult questions and provide insights into new ones.

Once the basic planning is done, the second most important thing to do is to devise a phased plan for investment. The first three years for a start-up biotech company are the most difficult years. Entrepreneurs are forced to invest in appropriate technologies to get the project off the ground. It is in this phase that money-management becomes crucial. It is also in this stage that a budding entrepreneur must be willing to change perspectives. He must creatively chalk out a novel approach that would help maximize the returns on his investment.

Collaborate
Collaboration and effective sharing of knowledge are key attributes of the biotechnology industry. Every bioentrepreneur must understand this attribute and use it wisely.

With specific reference to India, would-be entrepreneurs can take advantage of the vast knowledge pool created by scientific institutions. Demonstrate the principle/patent of the academic institute and create an active liaison for sharing of expertise. Or take academic work to pre-clinical and clinical trials to check the efficacy of the said principle.

While collaborations take on many different forms that range from the traditional multi-party efforts, to virtual networks of computer technologies linked together, to universities establishing joint venture research facilities, to university-industry partnerships, choose the one that suits your bioventure.

Despite vast improvement in technology and communications that allow truly global collaborations to take place, the more traditional platform based on physical proximity remains the key component of the development of biotechnological activity.

Bharat Biotech for instance, works with collaborators such as Centers for Disease Control, Atlanta (USA), National Institute of Health, Washington DC (USA), All India Institute of Medical Sciences, New Delhi (India), Department of Science and Technology, GoI and a host of others in its quest for path-breaking technologies that ensure a disease-free future.
Become a biomover

Every bioentrepreneur, especially if he happens to be a scientist, must make a conscious effort to make the transition. Academic degrees and publications are valuable, but more intangible attributes win in business—adaptability, emotional intelligence, confidence, ambition, persistence, risk-taking, humility, flexibility and patience are some of the many attributes essential for coping in highly complex, ambiguous situations.

Would-be entrepreneurs need to "turn the tables" and attend conferences that specifically address the elements of entrepreneurship as a "nonexpert"—often an unsettling experience. This would help assimilate what is expected from the scientist to satisfy marketing, business and other agencies. Though frightening at first, the process becomes more familiar and can be fine-tuned with experience.

Confidence is a particularly important element of success. Bioentrepreneurs often reflect on how they coped with challenges in the past to build confidence in the future. In particular, they must be able to handle criticism and the many stressors involved in business life.

Remember that bioentrepreneurship is not just about having good scientific/research ideas, but also about obtaining funding, developing a prototype and marketing the final product. This requires convincing others of your idea and involving them in your vision. One bioentrepreneur says, "Believing in the product and self is what counts ... finding others to share in those same beliefs is what success is."

Build lasting relationships

Building relationships is probably the most difficult task facing most scientists who aspire to be bioentrepreneurs. For many, the element of fear is associated with the factor of dealing with others from unfamiliar backgrounds. This can be overcome by accepting the need to change. There is considerable overlap and therefore common ground in the disciplines of science, business, and marketing; those setting out in this area would do well to recognise this, but this realisation requires a shift in perspectives.

Successful bioentrepreneurs must develop good communication skills. They must write, speak clearly and confidently and they must be persuasive and creative. They must also develop excellent social skills. As a manager and leader of a medical biotech company, a bioentrepreneur may have to play many roles, becoming "cheerleader", "coach", "devil's advocate" and "lawyer" in order to create a cohesive team. The ability to build and foster relationships both inside and outside the company is essential.

The road less taken

And finally, vision. The road from concept to conquest can be tough and scattered with pitfalls. What may have been an accidental discovery may or may not become a marketable product. Many a time, it is the belief in the concept that can become the driving force behind its success.

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