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Types of Company in Biotech

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Ringold discusses in detail two ways of categorizing companies. Type A companies have found a solution for a fundamental problem. Technology or new approaches have been invented to help solve that problem. Type B companies, like Genentech, use old technologies in novel applications.

Transcript

And I'd like to categorize companies as essentially, type 'A' company versus type 'B' company. Type 'A' company is a company in which a fundamental problem is outlined for which a solution has not yet been found. And technology or new approaches need to be invented and /or developed to help solve that problem. And Alex has been, probably, the consummate individual in founding companies of that type. The first one that he founded after his earlier days at Syntex was a company called Alza which is his moniker, Alex Zaffaroni. And basically, what he said to himself over a number of years is, "Gee, drugs aren't delivered the right way. We don't take drugs the right way." Drugs, you take an oral tablet and you get this huge dose of drug quickly after it's absorbed. And after it goes away, it goes to low levels. And you take a new drug and you get high levels. So you get these high peaks and low troughs.

In drugs, well, the high peaks cause side-effects. The troughs cause lack of efficacy." "Why don't we develop technology that will allow controlled drug delivery." So you can control the level of drug over long periods of time. That technology didn't exist. So he brought together groups of pharmaceutical scientists, engineers, materials scientist, biologists; put them all in a room and said, "Invent technology for controlled drug delivery, fundamentally." And many patents and technology came out including ones which you're familiar with like the 'patch' technology. The Scopolamine patch for seasickness. That's a control delivery device for getting drug across the skin at a very constant level. And many other such technologies were invented and then applied to real world problems. The second kind of company is a company like the origins of Biotech, Genentech is great example. Herb Boyer, Stan Cohen here, the whole biomedical, molecular biology community said, "Gee, we can clone genes and we can express them in E.coli. And we can make the protein in E.coli.

Hmm, what could we do with this? How about making recombinant human proteins like human insulin, human growth hormone." That gave birth to the traditional biotech industry including Amgen, Genetech and Biogen and all the big successful biotech companies. They did not go out to seek technology to solve the problem, they sought applications of the technology that have already been invented for completely different purposes either in the academic or other settings. So there's a distinction between an 'A' type company and a 'B' type company in that regard.