

**"What's Up?" - Biotech - that's what's up!  
(And what's that mean to us?)  
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June 26, 2000 the official "owners manual" was unveiled about what makes you what you are. A genetic map that will be able be used to "trouble shoot", after it is decoded, to "tailor" the correct medicines for all of us. Biotech moved from page four to front-page news to stay.

This is the beginning of the Age of Biotechnology and we're here to experience, participate, benefit and profit by it. This new Biotech economy will explode in growth over the next five years and dominate this whole new century, particularly the first 15-30 years - it's a global event - it's for the human race. Some give the number \$1.9 trillion!

What's this mean to us? We could leave the safety industry as the first profits and power will fall to the companies and scientists who commercialize the data, or we can stay in the safety industry and invest in the most successful companies in this arena. Or we can recognize this terrific long-term opportunity and experience, participate, benefit and profit by it ourselves. How? Read on if you're still with me.

Biotechnology is much broader than just the medical breakthrough. The commercial applications of biotech and research are endless: new fibers, and "smart" materials that learn. The redesign of the structure of plastics, paints and ceramics to be better, less expensive, faster, more useful and less harmful to the environment. In addition, the areas of agriculture and the scientific advancements can change the nature of the raw materials we now use in manufacturing plus new breakthroughs in energy sources.

According to author Richard W. Oliver in "The Coming Biotech Age", "Today more people are employed in biotech in the U.S. than in the machine tool industry." In the U.S. and EU alone there are some 2,400 biotech companies and many more on the way!

We learned from one of the earlier "Facing the Forces of Change" (The DREF Report, Steve Samek) that "according to recent Harvard study that cumulative human knowledge has doubled ten times since the birth of Christ, first after 1500 years, second 300 years later, the third 100 years later and most recently every 18 months (or less)."

It is predicted (by Oliver) "biotech knowledge as a result of this mapping of the human genome will double in less than a year and by 2005 biotechnology knowledge will likely double on a daily basis." Samek of Arthur Anderson recently (June 10) stated while in Cincinnati "It's no longer technology that drives value, it's knowledge. Companies' ability to create, manage, license and trademark intellectual capital is as important as leveraging your inventory in a previous age." (i.e. Industrial Age or Information Age)

So what do we do now? We think about this - we talk about this - we act on this - we prospect into other new areas or new channels of opportunities (some of which already exist and where we participate). Manufacturers, examine your product offerings for these markets globally and align yourselves with those distributors (domestic and global) who have identified and aligned themselves with the Biotech end users in their regions. Biotech firms, researchers, labs (private, government, universities), pharmaceuticals, agriculture. . . .the list goes on and on.

What role do you play?

Think about it.

George J. Hayward