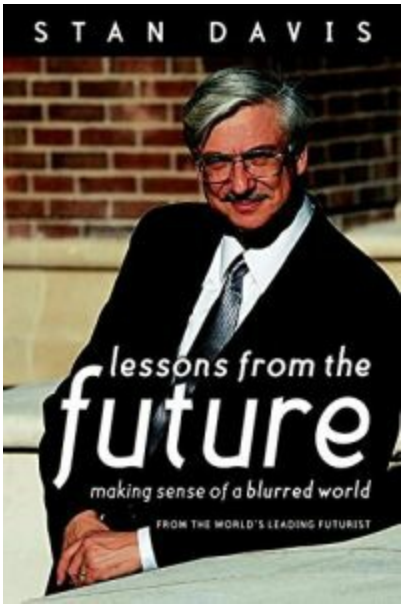

Book Lessons From The Future

Making Sense of a Blurred World

Stan Davis
Capstone, 2001

Recommendation

This collection of essays links futurist Stan Davis' previous works with some of his newer ideas about change and commerce. Believing that his ideas *(Future Wealth, Blur, Future Perfect, 2020 Vision)* have held up, he expands upon them to explain the philosophy he thinks underlies the next 20 years (or "the second half") of the information revolution. He delves into the next era he anticipates, one of even greater consequence - the Bio Economy. He explains not only the rise of biotech, but also the biological or networked economy, where everything is connected to everyone all the time. Moving from theoretical to practical, he advises judging your company's worth by its predicted rate of growth and change, not by traditional measurements. Then, Davis speculates about the more distant future, post 2050, when cloning, stem-cell research and such transcend theory and join the chaos of our everyday lives. If the future makes you gasp, *BooksInShort.com* says read on.

Take-Aways

- Business realities can be based on the principles of science.
- Cyberspace is just as valid a universal principle as mass, space and time.
- We are rapidly moving toward an economy where everything and everyone will be connected.
- Many businesses now make more money from their information services than they do from their core enterprises.
- Knowledge is now the economy's prime mover.
- The open organization is good for business.
- The rise of an embedded-chip world will bring new opportunities in both tracking and surveillance.
- Businesses must "informationalize," or rethink themselves into information services companies.
- The worth of your company should be determined by its potential rate of growth.
- The bio-economy will bring vast, unsettling changes to society.

Summary

Future Perfect

As Stan Davis maintained in his previous book, Future Perfect, published 10 years ago, the qualities of the universe determine business realities. Thus, your business can be described by the universal properties of time, space and mass. These ideas are now assumed factors in business strategy. For instance, planning requires consideration of speed and time. The speed at which an idea can move from concept to product and into the hands of consumers is a basic measure of success. The factor of time forces a business to question why it should mail information when an e-mail would do and to ask why it should build physical models when computer simulations would serve.

> "The informationalized businesses often become worth more than the parents from which they sprang in the first place. That is why American Airlines makes more money from its SABRE reservations systems than by flying people around on airplanes, why Ford makes more money financing cars than making and selling them, and why Marriot makes more money from management contracts to run hotels than from owning the brick and mortar real estate."

Cyberspace, a term coined by science-fiction writer William Gibson, wasn't included among those original elements, but it certainly belongs on that list. Cyberspace is built upon data. It is the center of the information revolution, which is the keystone of the current great economic shift.

The core of today's economy is information technology and, therefore, all businesses "informationalize," no matter what else they do. The information economy means two significant things. First, economic value increases faster in an information-based economy. And, second, companies often make more money from their information services than their traditional operations. This is why American Airlines makes more money from its reservations systems than from passenger transport and why Ford makes more money by financing cars than by selling them. Simply put, smart products and services are better than dumb ones.

Information Economy: Part One

You live in the first half of the information economy. By 2020, it will transform itself into something new. As the second half of this economy unfolds, bandwidth will become virtually infinite. Sound and image will completely pervade the Internet, turning every Web site into a potential television network. This has yet to happen, but it will. Change is the only unchanging rule. You have to ramp up your business to handle change, so much so that you will probably be in a different business 10 years from now, so you and your business must prepare for that eventual change.

The Next Ten Years

Economics and business must build around the critical factors of speed and connectivity, even as other pivotal intangible forces emerge. Already, the factors of time, space and mass are destroying traditional business solutions. What worked in the slow industrial world will not work tomorrow. This meltdown of traditional boundaries and ideas is called the Blur. In a blurred world, services and products merge. Remember, the frozen image is false. The reality is continual motion, a Blur motion.

> "Today, information-based enhancements have become the main avenue for revitalizing mature businesses and transforming them into new ones."

Three factors govern the Blur economy:

1. The blur of desires - Services and products merge into one offering and the roles of sellers and buyers merge into an exchange. This is the demand side of any economic system.
2. The blur of fulfillment - Organizations and strategies dissolve into permeable relationships and economic webs.
3. The blur of resources - Workers are no longer divided into their consuming and working selves and capital is more of a liability than an asset.

When Everything Is Connected

When you tie together a lot of dumb things that interact, you can create a smart system. Businesses should purposely start connecting people with as many electronic systems as possible. Smart systems will create a number of new business opportunities. For instance, look at changes in the tracking and surveillance industries. In tracking, global positioning systems already affect businesses ranging from skiing to the car industry to security companies. Try to imagine how an embedded chip could change the shopping experience of your customers. A multitude of embedded chips and miniature cameras means an upcoming boom in the surveillance industry. Obviously, this has both good and bad implications. You will be able to watch the people you care about, but it will be easier for somebody else to watch you.

The Changing Nature of Wealth

The new economy is also about the new consequences and causes of wealth. Momentous changes are ahead, including:

- Wealth creation will become more financial than real.
- Wealth accumulation will shift from earned to unearned.
- "Middle class wealth" will no longer be an oxymoron.
- Control of wealth will shift from institutions to individuals.

> "Connectivity, speed, and intangibles - the derivatives of time, space and mass - are blurring the rules and redefining our businesses and our lives. They are destroying solutions, such as mass-production, segmented pricing and standardized jobs, that worked for the relatively slow, unconnected industrial world."

The future of wealth isn't just about personal investing. The economic realities of society, businesses and individuals are changing. Already, mechanisms are in place that will reduce the gap between the rich and the poor. One solution is microlending, which acts on the belief that the way to increase wealth worldwide is to build relative wealth. However miniscule, microlending programs of various forms provide financial and human capital to those who most need it around the world. Grameen Bank in Bangladesh launched its first microcredit program 20 years ago and now enjoys a repayment rate of 95% on more than $2.4 billion in loans. Grameen makes a profit on microlending.

> "In agrarian times, wealth meant land. In industrial times, it meant factories. Recently, information replaced industrial capacity as the primary means of creating wealth and now the economic foundation is shifting yet again."

Nations increase everyone's wealth when they put solutions in the hands of the people rather than the state. The global growth of markets will cause overall worldwide growth and perhaps even lessen the worldwide gap between rich and poor.

Informationalization

"Informationalizing" may be an inelegant word, but it conveys a notion that can transform any business and give it an entirely new life. In fact, the new business may be more profitable than the old business that formed its foundation.

> "Simply put, smart products and services are better than dumb ones and knowledge-based offerings represent the next generation."

Between now and 2005, the information infrastructure will be completed and everyone will be connected. You can use a variation of the old 80-20 rule to describe the changes in the future. The current 80-20 rule says that your business gets 80% of its profits from 20% of your customers. The evolution of that rule would be this: By the year 2020, you should receive 80% of your profits from businesses built around your information services.

The Value of Capital

If the future value of a company lies in its ability to shift to information services and subsequently increase profits, how does that affect your analysis of a company's value today? Traditional methods of judging the worth of a company aren't always valid. The balance sheet might be strong, but its workforce might be about to go on strike or it may have just lost its biggest customer. Therefore, you can measure value more usefully by evaluating flow and change rather than stock and stasis.

> "Already, there are about 30 embedded processors for every central processing unit (CPU) housed in a PC. We are rapidly building what our colleague John Parkinson likes to describe as 'a world of cheap, smart objects.' The word is out and the gold rush is on."

Carnegie Mellon University scholar Yugi Ijiri recognized this change early on and is developing a new method for measuring the wealth of a company. His method evaluates a company's momentum of change. He refers to the system he is constructing as "triple-entry bookkeeping," because it would measure the acceleration of a company as well as the usual bottom-line numbers. When you decide to own and manage capital, value what is moving, not what is standing still.

> "Economics, not politics. Business, not organization. Build an ass-kicking culture, not an ass-kissing one. In the world of future wealth, everyone inside an organization is also outside, subject to marketplace forces. That is as it must be."

2020 and the Rise of the Bio-Economy The bio-economy got its start in 1953 when the double helix was discovered. It has evolved to the point that biotechnology will be as important tomorrow as computer technology is today. Learn to understand it now because its impact will be enormous.

In the future, infotech and biotech will overlap and many biological processes will be digitized. This will change the nature of information, which will evolve so that it will no longer be just about bits and numbers, but will include smell, taste and imagination. For example, three companies are working now to bring scent to the Internet experience.

> "Allowing ideas and people to flow in and out of their organization is a lot less risky than keeping things secret, controlled and out of sight of the competition. This understanding lies beneath the vibrant, high frequency transformation and excitement of the Silicon Valley business culture."

In the future, computers may be able to smell disease and Web sites could have their own particular scent. Beyond 2025, the bio-economy will probably filter into every aspect of our lives. Just as it was difficult in the 1950s and '60s to imagine that computers would change everything, it might be hard today to imagine biotech's impact - but it will happen. Society will confront challenges and debates about cloning, bio-engineered foods, eugenics and genetic patenting that will change the way we live. People will have to cope with new certainties about inherited diseases As point of fact, the biotech era will bring about changes that make the information revolution look slow, harmless and quaint.

The Future of Computing

The bio-economy will also bring a great leap forward in computing power, which has to increase to feed the demands of this new economy. Some systems that are still in development are contenders to fill this new void. They include:

- Optical computing - Instead of using electrons, future computers would be based on photons. The increase in computation would be huge, but there are still many bugs to be worked out.
- Quantum computing - This kind of computing would be based on the spin of the electrons at the quantum level. This sounds arcane, but it is theoretically possible. It would mean holding the equivalent of a supercomputer on the tip of your finger, but many problems remain to be solved.
- Molecular computing - This type of computing would use molecular switches instead of transistors. Again, this would make computers smaller and faster and would probably touch into the science of nanotechnology.
- DNA computing - This is potentially a way to make computers organic, since they would be based upon living cells. The theory is that nature concentrates information much more efficiently.

Beyond 2020

This time will take us into an even more troubling era. The truth is that our machines may evolve to become our equals. With our increased understanding of genetics, it is also possible that we could, if we chose to, create our evolutionary successors. Is this something that should be done? We seem to think that the apes did it. Are we not at least as capable as they were of such a creative bootstrapping act? If the answer to that question is yes, then we should look to technology to describe not only our future businesses, but possibly our future selves.

About the Author

Stan Davis is an author and acclaimed public speaker based in Boston, Massachusetts. This is his 11th book. Some of his previous books include *Future Wealth, Blur,* the landmark *Future Perfect, 2020 Vision* and *Future Perfect, 2020 Vision Monster under the Bed.* He is also an independent strategy and management consultant to major corporations and fast growing enterprises, and part-time Senior Research Fellow at Cap Gemini Ernst & Young's Center for Business Innovation.