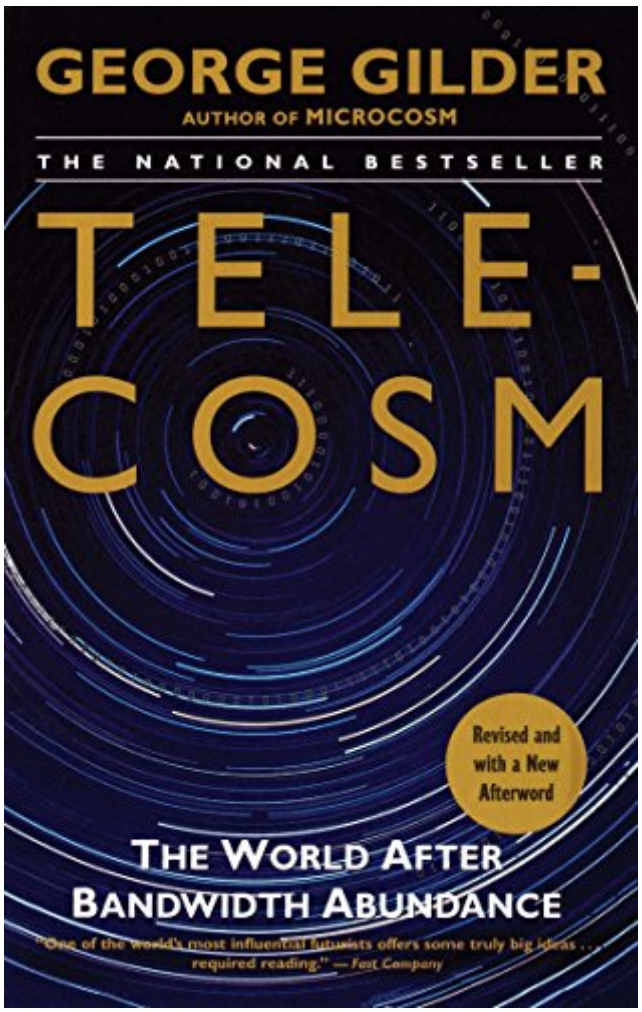
Telecosm: How Infinite Bandwidth Will Revolutionize Our World



Synopsis

The computer age is over. After a cataclysmic global run of thirty years, it has given birth to the age of the telecosm -- the world enabled and defined by new communications technology. Chips and software will continue to make great contributions to our lives, but the action is elsewhere. To seek the key to great wealth and to understand the bewildering ways that high tech is restructuring our lives, look not to chip speed but to communication power, or bandwidth. Bandwidth is exploding, and its abundance is the most important social and economic fact of our time. George Gilder is one of the great technological visionaries, and "the man who put the ’s’ in ’telecosm’" (Telephony magazine). He is equally famous for understanding and predicting the nuts and bolts of complex technologies, and for putting it all together in a soaring view of why things change, and what it means for our daily lives. His track record of futurist predictions is one of the best, often proving to be right even when initially opposed by mighty corporations and governments. He foresaw the power of fiber and wireless optics, the decline of the telephone regime, and the explosion of handheld computers, among many trends. His list of favored companies outpaced even the soaring Nasdaq in 1999 by more than double. His long-awaited Telecosm is a bible of the new age of communications. Equal parts science story, business history, social analysis, and prediction, it is the one book you need to make sense of the titanic changes underway in our lives. Whether you surf the net constantly or not at all, whether you live on your cell phone or hate it for its invasion of private life, you need this book. It has been less than two decades since the introduction of the IBM personal computer, and yet the enormous changes wrought in our lives by the computer will pale beside the changes of the telecosm. Gilder explains why computers will "empty out," with their components migrating to the net; why hundreds of low-flying satellites will enable hand-held computers and communicators to become ubiquitous; why television will die; why newspapers and magazines will revive; why advertising will become less obnoxious; and why companies will never be able to waste your time again. Along the way you will meet the movers and shakers who have made the telecosm possible. From Charles Townes and Gordon Gould, who invented the laser, to the story of JDS Uniphase, "the Intel of the Telecosm," to the birthing of fiberless optics pioneer TeraBeam, here are the inventors and entrepreneurs who will be hailed as the next Edison or Gates. From hardware to software to chips to storage, here are the technologies that will soon be as basic as the air we breathe.

Book Information

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Customer Reviews

If you would like to understand the history of Telecommunication industry this is a must have. Wow.

While "Telecosm" is now a bit dated, the analysis laid out in this book is interesting and sheds light on the potential for the world at large in an era of ubiquitous bandwidth. Gilder offers readers technical and business perspectives on a world of unlimited bandwidth, and does so in an engaging a readable manner.Things in the world in general, not to mention in the business and technical spheres, have changed dramatically since "Telecosm" was published in the year 2000. Despite the facts that bandwidth might not be as ubiquitous as projected and bandwidth availability might not have had the magnitude of the effects projected in this book, it is still worth a read.Well-research and logically-conveyed, "Telecosm" offers a unique historical viewpoint of a potential future.

From where you read this it will look like I have missed the bubble. After all, wasn’t the Telecosm a phonemena of the now historic Internet bubble ? With change moving at the speed of light I am just

starting to catch up on the products of the bubble era.In fact I was so caught up during the era that I think I made the transition from being an engineer to being a production line laborer in the manufacture of the Internet economy. So is Telecosm a product or even cause of the hype that has now deflated? It may seem so, but that's because no one saw the invisible hand (1) that really popped the inflated bubble.If there was a bubble, I think I was in it or near it. From 1997 through 2000 I was at first a Network Architect and later the Manager of Network Architecture at America Online. From the day that I first arrived at AOL I was caught up in the explosive growth of building the network. And later even my own personal life was affected as I found that being an engineer changed status when our culture not only accepted technology but openly admired it. This revelation first occurred to me when one of my best friends from college toasted me at his wedding rehersal dinner. He was thanking my colleagues and I at AOL for the service that was the medium for meeting his soon to be wife. It was called the nerds revenge. But it seems closer to what Gilder described. What was once witchery became not only accepted, but admired.I spoke at two Telecosm confences and had the priviledge of sharing the stage with Mr. Gilder at a Merryl-Lynch conference as well.I not only share Mr. Gilder's views, but dare say that at least my own views were solidified in my discussions either in person or over email with both him and the many people of the Telecosm that I met directly or indirectly through him.Although I completely agree with the vision of the Telecosm, I am probably the telecosmic pessimist. I am not the devils advocate, but just a pessimist. I believe in the same forces of change that he describes in Telecosm, but I suspect that instead of being used for the social good that the forces will be pushed to the worst extremes of capitalism. In hindsight this seems easy to explain the likes of Global Crossing and Enron.I would go even further to say that some of the service providers that surive today continue these practices. In fact it is they more than any others that contributed to the expansion of the bubble beyond the obvious capital potential of the Internet and telecommunications. Entrepreneurs, engineers, marketers, investors, and people in every other occupation associated with the Internet made money from stock options of their Internet economy employers. The biggest difference between the engineers and other visionaries, and profiteers, can be determined by examining what they did with those profits. Profiteers held on and diversified. The engineers and visionaries believe (we still do) in the Telecosm. So we invested the profits back into new ventures. The rest is the modern history of Wall Street.Technology doesn't have to be complicated. Our best technologies are made easy to use. That's what engineers strive to do. But across the Telecosm are overly complex technologies. Particularly wireless technologies. If one can criticize the flow of an IP packet across the Internet, then the progress of a telephone call on a wireless system is truly an act of complexity and waste.

As things stand today the escapees from AT&T, Lucent, et. al have fled to start-ups where they are making optics and IP not only more complicated, but even worse. Added to their complete misunderstanding of the simplicity of optics and the Internet is their need to want to "control" every pack on the Internet as if it were a telephone call. The result could be a system 1000 times more complex than the PSTN even though it should be 1000 times cheaper.The Telecosm is still here. The best is yet to come, but it is either a slow revolution or an evolution. Even though there are those of us who can stand the rate of change that it brings, we must battle those who resist. And that alone will make the difference between a revolution and an evolution.1. Smith, Adam. The Wealth of Nations.

If you want to know how today’s technology came into being, and what the future holds for tomorrow’s technology, this is an excellent book. As a non-techie, I understood Gilder’s explanations and found the story of tech development fascinating.Unfortunately, I decided to invest in some of the companies he claims hold the most promise. Boy was I wrong! Anyone who bought JDS Uniphase, Nortel, or pretty much any other company Gilder praised in 2000 is hurting now.Buy Telecosm for the technology. Go somewhere else for investment advice.

Terrible book. It reads like "bla-bla-bla". I’m very close of disposing it in the waste basket. I’m not learning anything from it.

Ah. The language of Gilder! In a typically verbose, self-confessed ’prophetic mode of the inspired historian’ he makes the reader wade through an egotistical, occasionally insightful and entertaining, and at times even annoyingly predictable view of the future of the networked world that he believes is no less consequential than the most important breakthroughs in physics.Expect to work through stuff like: "Beyond the copper cages of existing communications, the telecosm dissolves the topography of old limits and brings technology into a boundless, elastic new universe, fashioned from incandescent oceans of bits on the electromagnetic spectrum."A perfectly predictable notion that bandwidth will revolutionize our world (what a surprise!) is fleshed out into 20 putative laws of the telecosm that provide provocative rules to live by. Some of Gilder’s reasoning is tenuous, and many of his conclusions are obvious. For instance, the Law of Instantaneous Information builds on the fact that the speed of light is immutable and that our life spans are limited. Combining those facts, Gilder grapples to arrive at the terribly simple idea that companies should strive to save time for their customers. Uh huh.The flow of the book can be as daunting as the prose. Essentially this is

4 books in 1 --1. An investment guide, which really should be skipped for your own good. For instance, we were convinced over a span of dozen pages that JDS Uniphase would be the Intel of the networking world. The equity, at that time US$ 20 a share, now gets by at $3.2. A look at the world that infinite bandwidth is creating, which you most likely already know much more about than to subject yourself to this verbiage.3. A history of scientific discovery. Ironically, this is the only section with pockets of amusing anecdotal material, particularly a section on the development of science where he tells gossipy tales that show how entrepreneurs developed the technologies that are forming the telecosm.4. A textbook at the end, with a glossary that you could lay end on end from Tokyo to Tanzania.If you really must read this supposedly epic effort, this last section (the textbook section) is where you could consider starting off your equally monumental effort to read it. You'll find a handy compendium of the 20 laws and their underlying assumptions.Otherwise you can pretty much pass this by, assured that you haven't really missed a lot that you haven't already read in the WSJ, Economist, Forbes, BW etc.

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