

## Makers The New Industrial Revolution ebook reader

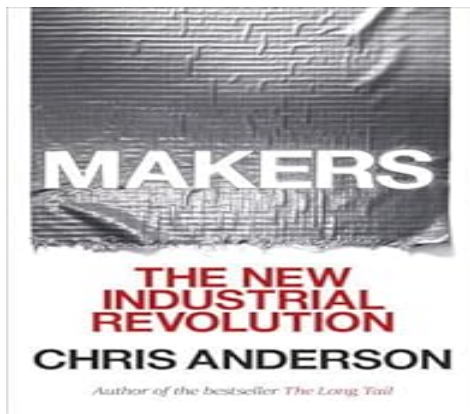
We are now in the midst of a new type of industrial revolution. Probably at least half of this book is about 3D printing and all of the advantages that gives to small start up manufacturing companies or even non company hobbyists and hobbyists internet communities that cater to long tail customization oriented clientele. To be sure there are many advantages of 3D printing in that regard. However in the context of so many other ideas and technologies the internet open source mentality crowdfunding etc we are set to see not just lots of cool new options but a true global economic revolution. Giant manufacturers of today are all very limited by their supply chains; the new manufacturers will possess an agility that will easily out compete these giants. Next stop? Nanobots DNA construction workers and Star Trek replicators ; Information science. Originally reviewed on the Night Owls Press blog here. It's easier than ever before to be an entrepreneur and start a business. This is a good thing. Chris Anderson starts with this basic premise in his book Makers The New Industrial Revolution. And he's not just talking about web based and cloud based businesses that dominate the world of startups. He's talking about the "Real World of Places and Stuff". In other words businesses that make things. He's talking about manufacturing. You're thinking Isn't manufacturing dying? But consider this statistic. According to Anderson the digital economy is roughly 20 trillion. Beyond the Web the economy of things is 130 trillion. Whoa. Yes that got my attention too. Manufacturing isn't dying. It's being transformed. The central idea in Makers is that the same basic conditions of technology funding distribution and demand in the economy of bits can drive a revolution in the economy of things. Makers is divided up into two parts. Part One discusses "The Revolution"—what it looks like and why and how it's happening. The most interesting chapter in that section is Chapter 4 "We Are All Designers Now". Anderson starts off with a fascinating discussion about how we all became our own designers in the economy of bits when desktop publishing became all the rage. We take it for granted now but think back to how MS Word and PowerPoint made it so easy to make digital documents that could then be distributed or printed from home. Printing and designing a document used to be a manufacturing process; printing presses were huge factories. From there Anderson pitches readers the new frontiers being carved out in the world of things through 3 D printing. It's like the world of bits and things which were largely separate in the 20th century suddenly collided and recombined. What are the possibilities? Enormous. Think furniture toys machine parts even human organs. A world that is sometimes called the "Internet of Things". Think of the future of new industries focused purely on designing bespoke templates that could then be sold shared or circulated. With printers at home or at community hacker spaces eg TechShop individuals and households can become their own makers. Anderson quotes MIT professor Neil Gershenfeld's speech at Maker Faire "I realized that the killer app for digital fabrication is personal fabrication. Not to make what you can buy in Wal Mart but to make what you can't buy in Wal Mart". Artisanal small batch manufacturing. That's the maker revolution. Part Two of the book is boldly titled "The Future". This section covers all the tools and conditions that make the maker revolution possible. Anderson discusses the familiar territory of new markets. Chapter 7 organizational changes. Chapter 9 crowdfunding. Chapter 10 and the cloud. Chapter 11. Granted these ideas are only familiar to most readers because we think of all that in terms of web based businesses or businesses in the digital space. Until five years ago a microentrepreneur that made things didn't really have access. It was expensive and time consuming to make something at market scale. Now what we're seeing is a dovetailing of that technology that made it so easy for digital entrepreneurs with the manufacturing space. It looks like this. You can create prototypes on your computer with off the shelf or free open source software like SketchUp and Tinkercad. The power of information sharing through social networks and communication platforms makes it easy to collaborate on design with your end users fostering intimate connections with your markets. Then you can upload your prototype file to a 3 D printer or factory which can then produce whatever you need whether it's a hundred or a million.

widgets Need financing and captial? Crowdfund your product through Kickstarter or put your design on uirky From there you can sell your product on Etsy Alibaba or other global marketplace which takes care of distributionInventing and creating are no longer separate processesWhat is the impact of this maker movement on growth? That is the darker uestion Anderson argues that growth within this new economic paradigm means productivity albeit with less workers This may be disturbing to some The idea of massive companies with large workforces that sustain a middle class is a throwback to the 1950s and 1960s than the future Anderson is imagining Fewer jobs tend to sustain higher tech manufacturing It is a bitter pill to swallowBut Anderson is zealously optimistic In a 2012 interview with Forbes Anderson explained it this way "This movement through the use of the traditional engine of the start up economy small business plus the Web's innovation model of opening up to lots people plus automation ends up bringing manufacturing back to the West the United States in particular I'm confident that digital fabrication technology just like the personal computer and the Web before it will ultimately be a job driver in the US"His book largely reflects this optimistic outlook on the 21st century workshop Is it realistic? Too soon to sayAs a publisher of a previous book on the new economy Working in the UnOffice A Guide to Coworking for Indie Workers Small Businesses and Nonprofits I have much to admire in Anderson's Makers The values that underlie the maker revolution are the same that feed the coworking movement collaboration and openness What is really revolutionary about the maker movement is the access it is giving people Anyone can be a maker entrepreneur Anyone can be a company "The beauty of the Web is that it democratized the tools both of invention and production" Anderson writes "We are all designers now It's time to get good at it"The writing in Makers is analytical and insightful yet personal too Readers will find personal colorful anecdotes from Anderson entertaining The book also includes a wonderful appendix of technical resources including "Getting started with CAD" "Getting started with laser cutting" and "Getting started with CNC machines"Overall Makers is a compelling book for people looking to get a glimpse of the future It is wonderfully written and chock full of useful information even for those who aren't budding makers Disclaimer I received this book from Blogging for Books for an honest and candid review Information science The book is not for all audiences and it is targeted for those who are really interested in the maker movement Mr Anderson is clearly an enthusiast and the book is about what some hobbyists have done than a real analysis of a new industrialization In that aspect the book is very superficialAlthough there are several examples of startups and other hobbyists' success stories we don't have statistics on how much the maker movement is making I read this book several years after its publication and few of the described companies are no longer in business or have changed their original purpose Just a glaring example is "Tesla" that is no the big customization company that Mr Anderson describes The realities of economics changed that The "New Industrial Revolution" does not delve deep in how the revolution is really happening No answers to how many jobs the "new industrialization" has created and we don't know how many jobs are around either Is this a mirage? The reader won't know because again there is not analysis just a list of success storiesOn the other hand if you are inclined to build your own stuff and entrepreneurship this book is a good read The same success stories show a path that any person can follow The author himself is an example of that Information science I originally picked up this book because I thought it might have some useful observations about life as a micro entrepreneur Anderson does talk a little bit about this and seems to have a particular fondness for Etsy which is where I do most of my online selling But his larger interest is in how on demand manufacturing is beginning to revolutionize the global economy with some intriguing asides about how Karl Marx might react to seeing the tools of production being put into the hands of the workers and how he thinks the United States could become a world leader in manufacturing againThere was a little too much about 3D printing to keep my interest but given his investment stake in this industry I guess it's understandable And at least I have a better understanding of what it is now People have been telling me for years about this cool newfangled thing but I guess I didn't really get that it could be used for than just making relief maps until I listened to this book Information science Chris Anderson always connects the dots for me If you want to know how the

maker revolution has the potential to change the not so distant future read this book While I feel like I'm only peripherally part of this movement being a librarian who is exploring the possibilities of libraries being sites for makerspaces I knew enough about what is going on with the maker movement to have begun thinking about the possibilities I particularly loved his connection between the DIY punk culture of the 80s and today's maker movement I'd thought of this myself and was excited when Anderson mentioned it The idea that anyone can be in a band just pick up an instrument and learn to play And the idea that anyone can publish their thoughts just make a zine with a typewriter and a copy machine Expand this DIY thinking to so many possibilities and add the connectedness of the Internet the crowdfunding of sites like Kickstarter and the growing availability of 3 D printing and you can see why we have a new industrial revolution on our hands Information science Chris Anderson was named in April 2007 to the Time 100.

## Makers The New Industrial Revolution information-sciences

Where he served in several editorial capacities. **EPub Makers The New Industrial revolution**



From SolomonSaysMakers should be read as an extension of Anderson's idea of "the long tail" In specific he is building on the first condition for a long tail to exist ie democratization of the tools of production which enables everyone to become a producerThe idea is that today there are far and cheaper options for design manufacture and funding if you want go into the manufacturing businessAs such all these ideas have been discussed at length in The Long Tail but here the focus is on production of real world items "atoms" rather than "bits" But while the former unveils a radical new way of analysing consumer behaviour this book is only a collection of case studies and reinforcements of a particular paradigmI found Anderson's discussion of online communities far powerful In the wired world dedicated followers on the internet are the biggest asset any business can have Makers explores this world of organized enthusiasts and semi pros in depth and offers great advice on how to cultivate it for evangelizing your businessHere as in The Long Tail Anderson's tendency to over uote a particular example is evident in repeated mentions of Etsy and the 3D printer The 3D printer may in fact be the next super empowering technology but mentioning it on every second page is only annoying Detailed descriptions of the working of manufacturing equipment also seemed uite besides the point and should have left for reference Makers also suffers from a US Silicon Valley focus Everything is analysed from America's perspective while China is set as the nemesis which must be countered A fairer treatment would include the rest of the world in its scope and consider the possibility that businesses there too could be players in this new industrial revolution Information science I'm in agreement with a number of other reviewers of this book that it was repetitive and basically read like a drawn out magazine article But as with Anderson's The Long Tail Why the Future of Business is Selling Less of More it was the content not the presentation that interested meWorking in the world of public libraries which Anderson mentions as the

originator of the Long Tail I was interested to see what he has to say on the Maker front Several public libraries have put together Maker Spaces complete with 3 D printers 3 D scanners etc and I'm trying to figure out if such a venture would make sense for my library After reading this I'm leaning towards yes Libraries while providing many different services have one core mission find what is valuable and make it available to our respective communities If the world of manufacturing is indeed moving from massive buildings to the desktop then public libraries have a role to play in that transition I think really exciting things could happen if a Maker community were closely intertwined with the entrepreneurial resources of the public library

Information science I found this book frustrating for a few reasons In part one you have to wade through a lot of euphoric optimism about the potential interventions of 3 d printing CNC machines and CAD software While it's an interesting phenomenon I am concerned with questions of access even so than in other areas of participatory culture that have supposed democratizing potential Equipment costs may decrease and shared equipment may become readily available but doesn't CAD software require specialized knowledge? This will require a different kind of literacy that is at the moment confined to fields that are already criticized for not being diverse Aside from the literacy issues the way that this interfaces with consumer culture is a bit of a puzzle to me Does the world need stuff? There is artistic and expressive potential but there is also a huge potential for this to merely shift the contours of consumer culture An elite group of users printing junk? Boring Part two is less burdened with euphoric rhetoric but the focus on the revenue generating potential and 3 d printing laser cutting as a business model was not very interesting to me There are a few short case studies on successful entrepreneurs using these tools which were interesting from a historical perspective I wish the chapter on DIY Biology had been longer as it was probably the most interesting I was left with a lot of questions What is being done to extend access beyond a privileged group of tinkerers? What are the environmental impacts of these machines? Aside from lowering production costs in the US what are the global labor impacts? Aside from sharing what is the relationship to capitalism? Ultimately I suspect I was not the audience for this book I think it is geared toward a general audience who is already excited about the possibilities of 3 d printing

Information science This is an important book Maker's is basically a sequel to The Longtail It's a deep look at what happens to the manufacturing mostly in America when physical manufacturing behaves like the digital world If this book doesn't make you want to go out and buy a 3D printer or start putting together OpenHardware robots I don't know what will

Information science Reads like a poorly written magazine article that has been unfortunately dragged out into a full length book All hype and no substance how many different ways can he really say production has gone digital? I'll be honest and admit I didn't read the whole thing I set it down halfway through Was going to read all of it before panning it like this but decided it wasn't worth the time Anderson's lack of understanding of the economists he tries to draw on to make his points just became too frustrating for me For instance he says The people now control the means of production Which isn't true in most of the examples he's talking about when you ship your designs off to a factory owned by someone else to have them make your invention then you control the means of design not the means of production but beyond that he actually contradicts himself almost immediately quoting Eric Reis he says It's not about ownership of the means of production any It's about rentership of the means of production It's sad because I think there's a kernel of truth in some of what he's saying But this is really just mock populist upper middle class pandering to people who spend too much time on some combination of Etsy boingboing and well I guess probably on reading Wired

Information science Wired magazine editor and bestselling author Chris Anderson takes you to the front lines of a new industrial revolution as today's entrepreneurs using open source design and 3 D printing bring manufacturing to the desktop In an age of custom fabricated do it yourself product design and creation the collective potential of a million garage tinkerers and enthusiasts is about to be unleashed driving a resurgence of American manufacturing A generation of "Makers" using the Web's innovation model will help drive the next big wave in the global economy as the new technologies of digital design and rapid prototyping gives everyone the power to invent creating "the long tail of things" Makers The New Industrial Revolution.

# EBook Makers The New Industrial revolution

The newsmagazine's list of the 100 men and women whose power talent or moral example is transforming the world. **Makers The New Industrial Revolution booklet** He is Editor-in-Chief of Wired magazine a position he took in 2001 and he has led the magazine to six National Magazine Award nominations winning the prestigious top prize for General Excellence in 2005 and 2007: **Makers The New Industrial Revolution pdf filler** Prior to that he was a physics researcher at the Los Alamos National Lab: **Makers The New Industrial Revolution kindle app** He is the author of the New York Times best-seller The Long Tail which is based on an influential 2004 article published in Wired and runs a blog on the subject at [www.thelongtail.com](http://www.thelongtail.com). **Information-science Makers The New Industrial revolution** Previously he was at The Economist where he served as US Business Editor Asia Business Editor; and Technology Editor, **Makers The New Industrial Revolution pdf reader** He started The Economist's Internet coverage in 1994 and directed its initial web strategy: **EPub Makers The New Industrial revolutionary** Anderson's media career began at the two premier science journals Nature and Science.

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