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FREE

The Future of a Radical Price

CHRIS ANDERSON

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MAIN IDEA

At one time, giving away free stuff was an attention grabbing sales gimmick. That's now changed dramatically. In today's business environment, companies can profit more by giving things away than they can by charging for them. Notably this isn't just a digital economy phenomena. It applies right across the global economy. In more and more industries, abundance thinking is becoming a far more powerful engine for commerce than scarcity thinking ever has been. Free is becoming a business strategy which might just end up being essential for any company to survive.

The online economy's costs continue to go down dramatically. This has created the unique situation where the primary inputs of the entire industrial economy are falling faster today than at any other time in recorded history. To take a case in point in 1960, a single transistor sold for $10. Today, when you buy Intel's latest microprocessor chip, you're in effect purchasing two billion transistors for $300 – which works out to around 0.000015 cents a transistor. These and other similar cost decreases are generating a tremendous reduction in costs for all three of the basic building blocks of online commerce – processing power, bandwidth and hard-drive storage.

"At the beginning of the twentieth century, Free fueled a consumer revolution that defined the next hundred years. The rise of Madison Avenue and the arrival of the supermarket made consumer psychology a science and Free the tool of choice. Free-to-air radio and television united a nation and created the mass market. Free was the rallying cry of the modern marketer and the consumer never failed to respond. Now, at the beginning of the twenty-first century, we're inventing a new form of Free, and this one will define the next era just as profoundly. Today, the most interesting business models are in finding ways to make money around Free. Sooner or later, every company is going to have to figure out how to use Free or compete with Free, one way or another."

– Chris Anderson

The word "free" can mean lots of different things but these all boil down to variations of the same thing: shifting the cost of a product or service from person to person, between now and the future or into nonmonetary markets and back out again. There are four basic business models by which things can be made available for free:

Four basic business models of Free		
	1 Direct cross-subsidies	3 Freemium
	2 Three-party markets	4 Non-monetary markets

The obvious reason most products are not free is because their production costs are not zero – it costs money to make things and that cost must be met. Digital markets are an exception to the rule. For almost all digital products, the marginal cost of reproduction is zero. Therefore, sooner or later, it is almost inevitable producers in the digital realm will find themselves competing against products which are free. Accepting this fact, the smart thing to do is to try and figure out how to use a zero price point profitably yourself and get there first.

Economists have known for hundreds of years one fact: "In a competitive marketplace, price always falls to the marginal cost." This was of academic interest only until everyone joined hands to build the world's first truly competitive marketplace – the Internet. In this, the most competitive marketplace the world has ever seen, free is not just an option. Rather, free is the inevitable endpoint which is generated by the forces of economic gravity. You will be far better off acknowledging this reality and becoming one of the first in your industry to figure out how to build a business model based around free that still makes you money. This will take creative thinking and ongoing experimentation to get right but by being an early-mover in finding ways to exploit free, you can position yourself advantageously. That head start just may be enough to give you a sustainable competitive advantage.

Above all, swap scarcity thinking for abundance thinking – because sooner or later, that's where every industry is heading.

Scarcity		Abundance
You have to get permission	Rules	Anything goes
"We know what's best"	Social Model	"You know what's best"
Business model	Profit Plan	Figure it out as we go
Top-down	Decision Process	Bottom-up
Command and control	Management	Out of control

1. The history of free – and why it has such power

The word "free" can mean lots of different things but these all boil down to variations of the same thing: shifting the cost of a product or service from person to person, between now and the future or into nonmonetary markets and back out again. There are four basic business models by which things can be made available for free:

Four basic business models of Free

1. Direct cross-subsidies
2. Three-party markets
3. Freemium
4. Non-monetary markets

"Free can mean many things, and that meaning has changed over the years. It raises suspicions, yet has the power to grab attention like almost nothing else. It is almost never as simple as it seems, yet it is the most natural transaction of all."

– Chris Anderson

The phrase "there's no such thing as a free lunch" refers to a tradition of seventeenth-century saloons in New Orleans and elsewhere to offer "free" food to anyone who purchased at least one drink. In practice, this was more like a cross-subsidy – the saloon-keepers were betting the cost of a meal that most customers would not be able to have just the one drink but would end up buying more than enough to pay for the food as well.

Samplers, gifts and tasters have always been used in all kinds of creative ways. More than once, companies have found their existing business models vaporized by new market entrants who were willing to give away free things in exchange for market share and the possibility to make more in the future. The dynamics of free has worked its way through radio broadcasting, television broadcasting, publishing and almost every other industry which could be mentioned.

The concept of free has had a notable impact on the publishing industry. Many community newspapers, for example, start out as standard subscription-based entities and then find they can increase their circulation by dropping their cover price and becoming free. That bump in circulation, in turn, makes the newspapers more valuable to potential advertisers. Often, the increase in advertising revenue is then more than enough to offset the loss of revenue from newsstand sales or subscriptions.

Similarly, it's not unusual for a glossy magazine to have a number of different price points:

- A stripped-down version on the Web which is accessible for free.
- Issues which sell at the newsstand for say $4.95 each – of which half the revenue goes to the newsstand and half to the publisher.
- Yearly subscriptions for $10 – which is generally less than the cost of printing and distribution but the money paid by advertisers is sufficient to make this profitable overall.

These various price points illustrate the fact all kinds of dynamics can come into play when considering giving something away for free. On the one hand, if you charge nothing, you'll get more attention and your circulation figures will soar. However, if you can demonstrate people care enough about your stuff to actually pay for it, then your value to potential advertisers soars. You can charge advertisers more because you've proven that your subscribers care enough about your material to reach into their wallets and pay for it.

A zero price point is something of a paradox really:

- People love getting free stuff because there is no downside risk that you've made a bad decision. Therefore, to maximize participation, a zero price point can't be beat.
- However, where there is no cost, there is also no commitment. People value what they pay for more than something that's free. Therefore, to get people to value what you have, you should charge for it.
- Once you get people to pay something for what you have to offer, you can then employ creative strategies to keep on bumping up the transaction value progressively over time.
- There is also a parallel dynamic in play between time and money. When you have no money, you're prepared to do more things for yourself so you'll happily take a free product and fiddle with it. But when you do have money, then it becomes far easier to pay for a finished product which is more expensive than the free version.

As a result, all kinds of business models have been developed as ways to make money from stuff that's free. Some of these are well established and form the basis of the four basic business models set out on the next page. Other business models also arise which are hybrid mixes of the four generic business models.

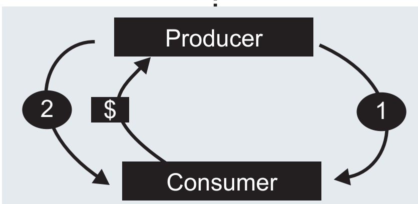
Take, for example, the concept of open source hardware. A company called Arduino exists to develop and sell environment sensors which can be used for home automation or interactive devices. The company's business model is:

1. Arduino makes all its information freely available over the Internet – plans, printed circuit board files, software and instructions on how to make everything. A community grows up around this information.
2. People start helping each other to build things using the plans and hopefully to come up with design improvements. Everyone is encouraged to tinker and share their new ideas.
3. For those who don't want the hassle or risk of building themselves, Arduino sells polished versions of its products which are guaranteed to work. The company also sells accessories and other add-ons.
4. Arduino is quite open about the fact it is building a 40 percent profit margin into its assembled products in order to pay the bills. Everyone understands this and accepts this as being fair and reasonable.
5. Arduino also makes money from a certification fee it charges others who assemble the product. This allows other entities to come into the market and compete.

Arduino's business model illustrates the fact free works well in conjunction with paid. There are all kinds of dynamics involved and companies have had long experience in finding ways to make a free price point work out to be profitable.

Four basic business models of Free

1 Direct cross-subsidies

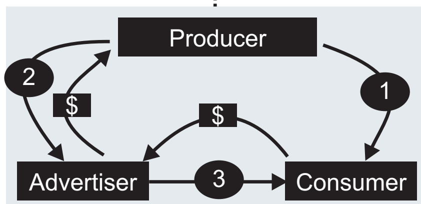


The producer gives the consumer product 1 for free in the hope this will then entice the consumer to subsequently purchase product 2.

This is the typified by the concept of loss leaders and buy-one-get-one-free. A loss leader is where a supermarket offers one item for sale at below cost in the hope while you're in the store, you will be enticed to purchase something else which generates a profit. Similarly, a cell phone company might lose money on its per minute charges (something consumers are highly sensitive about) in order to make money by charging voice mail fees.

"Companies look at a portfolio of products and price some at zero (or close to it) to make other products, on which they make healthy profits, more attractive. Technology is giving companies greater flexibility in how broadly they define their markets, allowing more freedom to give away some products to promote others."
– Chris Anderson

2 Three-party markets

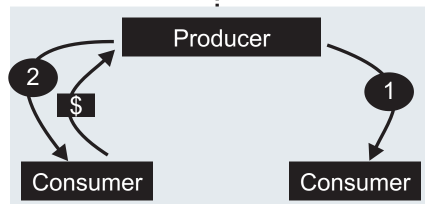


The producer provides product 1 free-of-charge to consumers. Advertisers pay to be included in product 1 in the hope they will be able to sell product 3 to the consumer.

This is the most common free business model there is. It is the basis of almost all media, especially magazines, newspapers and free-to-air television. Advertisers buy advertising from the publisher (product 2) so they can then sell what they have to offer to the consumers who read the magazines or watch the TV shows.

"Newspaper and magazine publishers don't charge readers anything close to the actual cost of creating, printing and distributing their products. They're not selling papers and magazines to readers, they're selling readers to advertisers. It's a three-way market. In a sense, the Web represents the extension of the media business model to industries of all sorts. Media companies make money around free content in dozens of ways."
– Chris Anderson

3 Freemium

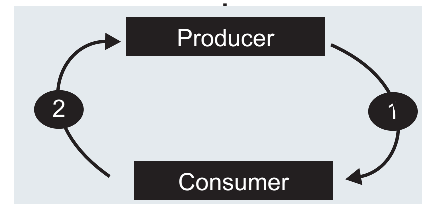


A free version (product 1) is made available to anyone who wants it in the hope some users will then choose to upgrade to the paid premium version (product 2) which has more features.

The freemium business model is very widely used on the Web. In reality, this is just giving people a free sample to try and get them hooked enough to pay for a better version which has more features. Well known online examples include Flikr and Flikr Pro which is available for $25 a year. This model is also used elsewhere – such as nightclubs which admit women for free so they can then charge the men an admission fee.

"A typical online site follows the 5 Percent Rule – 5 percent of users support all the rest. In the freemium model, that means for every user who pays for the premium version of the site, nineteen others get the basic free version. The reason this works is the cost of servicing the nineteen is close enough to zero to call it nothing."
– Chris Anderson

4 Non-monetary markets



In some markets, no money changes hands at all. People gift or give things to each other without any ulterior motives or expectation of future payment whatsoever.

This is why Wikipedia has millions of articles and why Freecycle offers millions of secondhand items. People write items for Wikipedia in order to become well known rather than because they are being paid. Similarly, Freecycle lets people clear out their clutter in a socially acceptable way.

"The incentives to share can range from reputation and attention to less measurable factors such as expression, fun, good karma, satisfaction, and simply self-interest. Some artists give away their music online as a way of marketing concerts, merchandise, licensing, and other paid fare. Sometimes the giving is unintentional, or passive. Every time you search on Google, you're helping the company improve its ad-targeting algorithms, creating information that can be useful."
– Chris Anderson

2. How digital electronics has revolutionized free

The obvious reason most products are not free is because their production costs are not zero – it costs money to make things and that cost must be met. Digital markets are an exception to the rule. For almost all digital products, the marginal cost of reproduction is zero. Therefore, sooner or later, it is almost inevitable producers in the digital realm will find themselves competing against products which are free. Accepting this fact, the smart thing to do is to try and figure out how to use a zero price point profitably yourself and get there first.

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The three drivers of today's digital economy are:
• Computer processing power
• Digital storage technologies
• Bandwidth

Moore's Law ("the amount of computer processing power for a given cost doubles every two years") is well known but impressively hard drive storage and bandwidth costs are improving at an even faster rate.

"Never in the course of human history have the primary inputs to an industrial economy fallen in price so fast and for so long. This is the engine behind the new Free, the one that goes beyond a marketing gimmick or a cross-subsidy. In a world where prices always seem to go up, the cost of anything built on these technologies will always go down. And keep going down, until it is as close to zero as possible."
– Chris Anderson

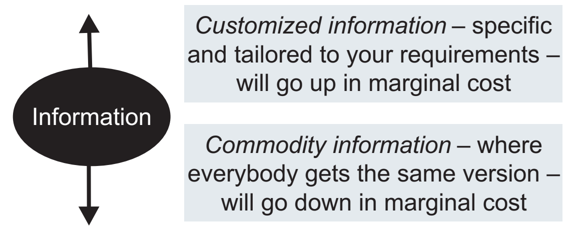
The practical implication here is if you're building a digital product, you can say for certain it will cost you less in the future to build it than it does today. Therefore, you can come up with some interesting pricing models. You can sell a product today for what it will cost tomorrow secure in the knowledge that when tomorrow comes, your costs will be lower than they are at present.

This triple play of technologies – processing, storage and bandwidth – means the cost of everything online is eventually going to be close enough to zero that you can safely round it down. Admittedly, that doesn't automatically mean everything will be free because prices will still be set by supply and demand as they always have been, but over the long haul pricing trends are driven by the costs of the underlying technologies. The overall trend for anything digital is going to be down.

That's not to say, however, that all information found on the Internet will automatically be free as is commonly suggested. This well-known sentiment is based on a statement by Stewart Brand, creator of the *Whole Earth Catalog* who actually said:

"On the one hand information wants to be expensive, because it's so valuable. The right information in the right place just changes your life. On the other hand, information wants to be free, because the cost of getting it out is getting lower and lower all the time. So you have these two fighting against each other."
– Stewart Brand

As a result of the ongoing increases in processing, storage and bandwidth, information distributed via the digital network will simultaneously move in two directions:



Put another way, to read a book online will become cheaper because this is inexpensive to duplicate, so cheap in fact it may make sense to make this free. But if you want to get the author to come to your business and deliver a customized talk where that generic information is applied to your business, then the marginal costs would be quite high because of all the preparation involved. Both extremes become feasible.

Google, the outstanding success story of the Internet era, is a perfect example of the need to have a foot in both camps in order to excel. Google today offers more than a hundred products to customers and doesn't charge a cent – a service charge from Google will never show up on your credit card statement. And yet ten years after its founding, Google is a $20 billion company which generated more than $4 billion in profits in 2008 alone. How Google got into that position is a perfect illustration of the diverging paths of commodity and customized information. The key stages of Google's development were:

- In 1999, Google came up with a better way to search the Web. Google's algorithm actually gets better as the Web gets bigger, not worse.
- In 2001, Google made available a self-service way for advertisers to create ads which match keyword searches carried out by Google's users to ads. Advertisers were even allowed to bid against each other for prominence of placement.
- By 2003, Google's advertising revenues had become so large the company has built a massive infrastructure which enables it to go into a wide range of profitable activities.

Google has shown the best way to reach the widest possible market and to achieve mass adoption is to offer a basic product for free. You can then find or develop all kinds of ways to convert that attention into money later on. This is feasible because Google's marginal costs of distribution are essentially free. Today, Google has loads of employees who come to work every day to dream up new things for the Google to give away – news services, Wi-Fi, open-source software, data storage, satellite imagery and much, much more.

"The initial studies on Google News said that people who use Google News were twice as likely to click on search ads on a subsequent search, so everybody said, 'Great'. It's a loss leader – a traffic getter. Sure, it's a service to the world and so forth, but a more sophisticated view of that is to say that the product is not Google News but Google. It's all about engagement into Google and that if we can get you, at some point in your engagement with Google, to end up using Google for something that we can then monetize, the sums work."
– Eric Schmidt, CEO of Google

If all of that has a familiar ring, it should. It's the broadcast model which has always been used in radio, newspaper and television with a few new wrinkles thrown in for good measure. The Web is having the effect of aligning every industry imaginable with the media version of free – which is where a third party (the advertiser) subsidizes content so the second party (the viewer in this case) can get it at no charge.

Advertising is already a $300 billion industry and the Web is certainly going to increase that number appreciably but what's interesting is when industries migrate to the Web, some things change and get reversed. In the old broadcast model, for example, ads were included which annoyed 90 percent of the viewers in order to get to the 10 percent who were inclined to act on those ads. The Google model reverses this dynamic completely. Software is used to show the ads mainly to those people who have expressed interest in a topic. The idea now is just 10 percent of the audience will be annoyed by the inclusion of the ad whereas 90 percent of people will like the fact related items are offered for sale when searching for something. That's an interesting difference.

"While traditional advertising is limited online, the way Google has redefined advertising – connecting products with expressed desires – is still growing fast. Eric Schmidt, Google's CEO, has estimated the total market potential for online advertising is $800 billion, or twice the total advertising market, online and offline, today. It's easy to see why: Companies only pay for results. If you're sure to make a dollar for every 10 cents you spend on marketing, the sky's the limit. Compare that with the old Madison Avenue truism: 'Half my advertising is wasted, but I don't know which half.' No contest."

– Chris Anderson

Of course Google is the shining example of the ad-supported online business model. Other companies have failed to emulate Google's success and it is illogical to assume the advertising industry in and of itself will support everything that becomes available online. This is why today, there are at least fifty different business models which people are using to generate revenue from online businesses. Some of the options which are already in use:

- *Cost per transaction* – where advertisers only pay a fee whenever a viewer purchases something and becomes a paying customer.
- *Lead generation* – where advertisers pay for the name and e-mail addresses of people who have expressed interest in something.
- *Site sponsorship* – advertisers pay a fixed sum to be associated with a Web site offering some content.
- *Pay for prominent placement in search results* – where advertisers pay to be listed ahead of others.
- *Product placement* – advertisers pay to have their brand or goods included in a video clip or an online game. Embedded advertising in games is already a $200 million a year industry.
- *Subscriptions* – for access to content like online games or for a wide variety of other specialized information for a specified period.
- *Product upgrade charges* – to move from the free version of something to the full version with better features.
- *Selling virtual items* – where people pay for unlock codes which allow them to upgrade their online personas in games or other online simulations. One of the more creative examples of this is companies which sell virtual real estate in *Second Life* and other virtual reality games for one-time fees and ongoing monthly maintenance fees.
- *Selling toys with matching online virtual versions* – the phenomena spawned by Webkinz, the number one toy in America for two years running. Kids get an ordinary stuffed animal with a special code which allows them to go online and play with a digital version of their toy. A similar online/offline hybrid business model is now used by all kinds of companies ranging from Lego to Mattel.

It's accurate to note not all industries are rushing to embrace the online business models. The music industry is legendary for its battles against online piracy of music. Despite this ingrained distrust of online distribution, some interesting experiments are taking place. One of the best documented of these experiments was that carried out by the band Radiohead.

When Radiohead released *In Rainbows*, its seventh album, the band came up with a different distribution model. It made the album available for download in its entirety with the request the customer could pay as much or as little as they wanted to pay. Some people did choose to pay nothing for the download but others elected to pay more than $20 for the album. Overall, the average price people paid for the *Rainbows* album in download format was around $6.

The other results of this name-your-own-price experiment were very interesting:

- *In Rainbows* became Radiohead's most commercially successful album with more than 3 million sold worldwide.
- Radiohead also released a deluxe boxed version of the album which cost $80. The band sold more than 100,000 copies of this deluxe version alone.
- Radiohead made more money from the digital downloads of *In Rainbows* alone than it had from the release of its previous album.
- When the physical CD of *In Rainbows* came out, it entered the U.S. and U.K. charts at number one. The digital download version also entered iTunes at number one.
- Radiohead's tour following the release of *Rainbows* was its biggest ever with 1.2 million tickets sold.

Plenty of recording artists have embraced a similar strategy: reach a wide audience first with free stuff in order to convert some into paying customers later on. In reality, there are more bands recording more music today than ever before. In 2008 alone, iTunes added 4 million new tracks to its catalog. There are also all kinds of new ways to use music emerging including musical ringtones for cell phones. Concerts are thriving generating a boost to the food, accommodation and merchandising industries as well. The music industry as a whole is growing at an impressive rate on the strength of the digital economy. It's only the traditional record labels who have based their businesses historically on being gatekeepers who clip the ticket on the way through who are struggling to adapt.

"The way to compete with Free is to move past the abundance to fill the adjacent scarcity. If software is free, sell support. If phone calls are free, sell distant labor and talent that can be reached by those free calls (the Indian outsourcing model in a nutshell). If your skills are being turned into a commodity that can be done by software (hello travel agents, stockbrokers, and realtors), then move upstream to more complicated problems that still require the human touch. Not only can you compete with Free in that instance, but the people who need these custom solutions are often the ones most willing to pay highly for them."

– Chris Anderson

3. Freeconomics – how and why free works and what it does

Economists have known for hundreds of years one fact: "In a competitive marketplace, price always falls to the marginal cost." This was of academic interest only until everyone joined hands to build the world's first truly competitive marketplace – the Internet. In this, the most competitive marketplace the world has ever seen, free is not just an option. Rather, free is the inevitable endpoint which is generated by the forces of economic gravity. You will be far better off acknowledging this reality and becoming one of the first in your industry to figure out how to build a business model based around free that still makes you money. This will take creative thinking and ongoing experimentation to get right but by being an early-mover in finding ways to exploit free, you can position yourself advantageously. That head start just may be enough to give you a sustainable competitive advantage.

Above all, trade in scarcity thinking for abundance thinking – because sooner or later, that's where every industry is heading.

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In the latter half of the twentieth century, most companies made their money by doing all kinds of things to keep their competition at bay:

- Companies would take out copyrights, patents and trademarks to stop their competitors from offering comparable products. This is why Microsoft could charge hundreds of dollars or more for software distributed on disks which cost less than a dollar apiece to make.
- Others had to charge high prices to recoup the extensive development costs involved in making their products. This includes pharmaceutical companies bringing new drugs to market, Hollywood movies and semiconductor chips. These goods are cheap to reproduce but very expensive to come up with the original version from which the copies are made.
- Some companies attempted to commandeer and control channels of distribution in order to maximize profits. If you had pull at Wal-Mart, for example, you were in a better position to ask for shelf space than an outsider looking in.

All of these are examples of scarcity thinking which has traditionally dominated the business environment. The more scarce you could make your intellectual property, your distribution channels, or your product or service, the more you could charge consumers for what you had to offer – supply and demand rules.

The online marketplace now emerging, however, is the complete opposite of this kind of business environment. All of a sudden:

- Everyone has infinite shelf space and can therefore offer as many products as are available.
- Digital copies of anything can be made and subsequently distributed to others at zero cost.
- Online distribution channels are available to all takers without restriction and without requiring licensing or any legal sanctions whatsoever.
- Customers can become consumers of digital materials and producers of derivative digital products simultaneously.

In all, the economics of abundance is now moving rapidly to supercede the historical economy based around scarcity. And in an abundance based world, free is an important price point. Or perhaps more accurately, free is a version you absolutely must offer. To succeed where abundance prevails, you have to develop a business model where you sell different versions to different customers at different price points with a free version being an essential entry point.

That thought raises a number of doubts which must be worked through:

1. *"There is no such thing as a free lunch – someone somewhere ends up paying and it's usually me."*

   It is true that someone somewhere has to pay for the cost of maintaining the Internet but when this is spread over billions of participants, the costs become so low they approach zero for all practical purposes. You can round down to zero because it is too cheap to meter and too cheap to charge for all practical purposes.

2. *"Free is always just a gimmick."*

   That may have been true in the twentieth century but in the digital world, there are no hidden costs that must be covered. Companies like Google can offer things for free indefinitely, and you can do the same if you are so inclined. Trickery or sleight of hand is no longer essential to being a smart business operator.

3. *"The Internet isn't free. You have to pay for access."*

   Monthly fees paid to Internet Service providers do not provide a subsidy for the Internet. They merely help pay for the transmission infrastructure. This money has nothing to do with what travels over the Internet in just the same way as your cell phone charges have nothing to do with the value you create by using the phone.

4. *"Free is just an advertising thing, nothing more."*

   It's true advertising-based business models dominated the Internet early on. In more recent times, freemium – one version for free, an upgraded version for those who pay – has grown rapidly to exceed those first generation businesses. More and more companies are going to come up with unique twists on all four of the basic business models of free. Thousands of programmers are now making money by selling software in the iPhone app market where others are giving the software away for free. All kinds of hybrid markets will emerge in the future.

5. *"Free versions of anything always include more ads and less privacy because my details get onsold."*

   Most people assume the only way something can be free is if it is ad-supported or else if information is onsold to other parties. That may have been true in the old days but today privacy is a huge issue. Most ad-driven sites have privacy policies which forbid on-selling customer details to third parties. This is more of a red herring than anything else.

6. *"Anytime you give something away, you're in fact saying it has no value."*

   You might accept this if you believe the only way to measure value is with money. The Web has been built on attention (traffic) and reputation (links). It's your job to find ways to convert either of those currencies into cash. Google manages to do this. You need to do the same. After all, there are still only 24 hours in a day. What you choose to spend your time on has value in and of itself.

7. *"Giving away stuff for free undermines the motivation to innovate."*

   This suggests people won't invent new things if they can't commercialize them through patents or copyrights. If you believe this, you're ignoring the fact patents and copyrights expire eventually putting everything into the public domain anyway. By making innovations available for free, more people are encouraged to build on your ideas making it easier for you to make money by selling services around the free goods. You reach a broader market sooner if you give things away.

8. *"If things are free, we consume them to excess and end up with global warming, depleted oceans, etc."*

   Most of those problems arose because the traditional business environment did not incorporate any allowance for meeting external environmental costs into their pricing models. That is now being addressed by imposing carbon taxes, caps or other limits. The environmental costs of digital free are less of a concern. Many online companies are now locating their data centers near hydroelectric power sources which are carbon-free. Wasting electrons has less environmental consequences than wasting physical items.

9. *"Making something free just encourages piracy."*

   Actually it's the opposite. When something is free, there is no economic incentive to pirate it anymore. Everyone can have their own copy. Free makes piracy obsolete rather than encouraging more of it to happen.

10. *"Free is breeding a rising generation which values nothing."*

    It is true each generation takes for granted something their parents valued highly. What this means in practice is each successive generation values different things. Those who are used to getting digital products for free will find the concept the future of business lies in making money around free to be self-evident. Just because they expect to get digital stuff for free, though, they still understand they have to pay good money for physical goods and they tailor their behavior differently in each domain.

11. *"You can't compete with free."*

    Actually, it's easy to compete with free: offer something different and better. Microsoft has been going against open source software this way for years with great success. It's also why people in an office will walk past the free coffee in the kitchen and head for their nearest Starbucks instead. Free is just one of a number of factors which determine whether or not we want something.

12. *"I already tried giving away my stuff and it didn't generate any money for me at all."*

    Free is not a silver bullet which guarantees you success. Simply giving stuff away will not make you rich. You have to plan carefully and deliberately how you will convert the reputation you hopefully earn by giving things away into cash. Every project will have a different answer to that puzzle. This is not merely a matter of having a digital tip jar next to your stuff and expecting people to rush to fill that jar again and again. Instead, you need a business model which harnesses free constructively and productively. To give your stuff away and hope for the best is no business model at all. You need to think about the possibilities and figure out how to make free work for you. It always can be done and if you can't figure it out, wait until your competitors do.

13. *"Free is only good if someone else is picking up the tab for you."*

    It's true a "50 percent off" sale grabs our attention and can entice us to buy something because we just can't resist the savings. If we're getting something for free we know for certain others are paying big bucks for it becomes very attractive, but that mindset doesn't always apply perfectly in the digital world. Take the case of freemium for example. Just because we know someone else is paying for a premium version of the software, we're perfectly happy to stick with the free version if it does everything we need to get done. Nobody refuses to use Google because it's free. We don't exchange our perfectly functional free Web browser for another piece of software we have to pay for. When things have always been free, there is no evidence people view them with less regard. That kind of thinking is a carry over from seeing a hot club which used to have an exclusive clientele but which now admits anyone free-of-charge. Web sites are evaluated on their merits, not on their charges.

14. *"Making something free drives out professionals from that field and leaves it to the amateurs."*

    It is true free levels the playing field between professionals and amateurs to one degree or another. Inevitably, however, this kind of bloodbath leads to new roles for the professionals. Instead of being producers, they move up the food chain and create value some other way. They may become mentors for those aspiring to enter the field. They may find profitable ways to organize the work of the amateurs in some way or another. The arrival of amateurs doesn't mean you can't still get paid to do something. You just have to change what it is you charge for.

The simple and undeniable fact is free is an attractive price point. It will be the basis for many a business model in the future because the abundance of digital markets is a given, not an option. The Web is rapidly becoming the biggest store in history and almost everything is going to become available at 100 percent off eventually. It makes sense to start right away trying to build a business model which will thrive on free. It can be done – just ask Google, Yahoo! or loads of other companies which are thriving by giving their services away for free.

So what are the rules for success in an abundance economy? The ten key principles of abundance thinking are:

1. *If you make a digital product, realize sooner or later it's going to be free* – in competitive markets, price always falls to the marginal cost. If you try and ignore this, you're going up against huge forces which are bringing about steady declines in processing, bandwidth and storage costs. It can't be done.
2. *Don't forget the price of physical goods will also continue to decline as well* –because free is such an alluring psychological attraction eventually someone somewhere is going to figure out how to make it happen in every industry. Many people are hard at work creatively expanding the definition of their industries in order to find ways to make their core product free by selling something else. Join their ranks.
3. *You can't stop free* – so don't bother trying to hold back the floods by using laws or locks. Eventually, the gravitational force of free will win. Pirates will figure out how to do it and they will let everyone in on the secret. Take free back from the pirates and develop a business model which enables you to make money from selling upgrades.
4. *You certainly can make money from free* – because people will always pay to save time, lower risk or for something they are passionate about. People will also pay for status. If they're hooked on what you do, they will pay for more of the same. Use free to open doors and reach new consumers and then figure out ways to charge them.
5. *Be prepared to redefine your market* – for example, Ryanair went from being in the "providing airline seats" business to the travel business instead. Ryanair found it could make so much money from its commercial activities around its seats (car rentals, accommodation subsidies from destinations hungry for tourists) that it could give away its seats cheap, even free in some cases, in order to attract more customers. That's a great example of savvy abundance thinking in action.
6. *Round down sooner rather than later* – if you can see your costs steadily declining, then free is just a matter of when, not if. Why not try and get there first before someone else does? The first firm to go to free will get attention and there are all kinds of ways to convert attention into money. If you're smart, every day you will spend some time thinking about this: "What can we make free today?"
7. *Understand that sooner or later you're going to be forced to compete with free in your industry* – someone will figure out how to give away what you charge for. They will do it through cross-subsidies, by software or by some other means. Your only choice is to come up with a 100 percent price discount yourself and figure out something else you can sell or somehow ensure the differences in quality will overcome that price difference.
8. *Embrace waste rather than trying to eliminate waste all the time* – don't worry about things that are getting progressively cheaper all the time. Eventually, they will be too cheap to meter so stop metering them now. Don't keep on trying to ride the scarcity model of business when the world is awash in capacity abundance for everything. Get ahead of the pricing trends by moving to free now.
9. *Don't forget free inevitably ends up making some things more valuable* – value always migrates somewhere else. A hundred years ago, entertainment was scarce and time was plentiful. Today, the reverse holds true. Figure out what's going to become more valuable when the products in your industry become free to all and go there now.
10. *Manage for abundance* – recognize that as more and more business functions become digital, wasting them won't be such an expensive exercise. Shift away from having the mindset of "Don't screw up" to one which is more "Fail fast". Let people access resources without restrictions and experiment more. With any luck, you may be fortunate enough to uncover new and better profit opportunities you'd never before anticipated because the resources to try were too expensive.

In the "good old days", the way to make money by building a business on the Web was easy:

1. Have some great idea.
2. Raise money to set up a business which will give your idea away to your Web site visitors for free.
3. Once you prove your idea works, raise more money to ramp up what you're doing.
4. Repeat until you're brought out by a bigger company which values the reputation and attention you've earned.

In the current economic climate, steps 2 through 4 really are not feasible so Web sites really have to come up with ways to make money right from the start. This is a bit of a shock to the system for many but this is nothing new in the world of business at all. Start-ups have always faced pressure to reach break-even point as rapidly as possible.

"Does this mean that Free will retreat in a down economy? Probably not. The psychological and economic case for it remains as good as ever – the marginal cost of anything digital falls by 50 percent every year, making pricing a race to the bottom, and Free has as much power over the consumer psyche as ever. But it does mean that Free is not enough. It also has to be matched with Paid. Today's Web entrepreneurs have to invent not just products that people love but also those that they will pay for. Free may be the best price, but it can't be the only one."

– Chris Anderson

"At the beginning of the twenty-first century, we're inventing a new form of Free, and this one will define the next era. The new form of Free is not a gimmick, a trick to shift money from one pocket to another. While the last century's Free was a powerful marketing tool, this century's Free is an entirely new economic model. The new form of Free is based on the economics of bits, not atoms. It is a unique quality of the digital age that once something becomes software, it inevitably becomes free. Free is creating a multi-billion-dollar economy – the first in history – where the primary price is zero."

– Chris Anderson