

Digital Sharing Ends Media Scarcity

By Stephen Turbek



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Commerce has always valued scarcer things over the more plentiful. When a drought reduces the harvest, food becomes more expensive as people compete for the same smaller quantity. Money itself is essentially an agreement between people that a token (beads, gold, paper) will represent the value of all other useful things. Gold is useful as a unit of currency, not because it is pretty, but because it is rare. You can be sure that someone isn't going to find a lot of it and undermine the agreement on how much gold something is worth. Digital media, however, can be infinitely duplicated, making it difficult to agree on a value for it.

Scarcity Allows Control

Paper money works in the same way: printing too much of it causes it to lose value (creating hyper-inflation in Argentina in the 1980's). Media, as in music and software, are fundamentally different than physical goods in their ability to be copied. Infinite copies destroy scarcity, making it difficult for the music publishers (those who record, fabricate, and distribute the music) to control the supply and charge for access to the product. This has been highlighted in the music publishers' MP3 crisis—freely traded copies of songs are threatening their business model. Without scarcity, a whole new economic system needs to be established.



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Media is Information

The shiny disks and colorful boxes give music the appearance of a physical product, but disguise its true nature: information. The essential quality of information, that it can be easily duplicated, has been limited in music because the means of re-production has until recently remained out of the hands



A 20th century unit of commerce?

of the consumer. People have had the ability to duplicate audio cassettes for many years, but this has not significantly affected music commerce because moving the copies between people is as much effort as simply buying the music. The loss of quality in analog copies also limited serial distribution.

Media Sharing Threatens Scarcity

MP3 sharing software, such as Napster and Gnutella, eliminates most of the effort of trading copies of music. The MP3 format has existed for some time, but it only achieved a significant impact when the means of easy transfer were created. Millions of listeners sharing their collections removes the scarcity that has allowed the publishers to charge for access to the songs. If people are going to continue making music for profit, a new model of commerce will have to emerge. For media, scarcity economics is being displaced by 'convenience economics'.

Transactional Friction

All transactions have what economists call 'friction' which is a rough measure of the human effort it takes to be completed. This is often non-monetary, but the amount of "hassle" has a real effect on the economy. In general, systems with less friction eventually dominate. For example, newspaper real estate listings enable a renter to find hundreds of apartments much easier than visiting real estate brokers across town, and the newspapers can charge for the free information, as it is more convenient. The inverse of transaction friction is convenience—how easy it is to get what you want. Money, in this case is actually a measure of convenience—what the person will pay to avoid the effort of copying the music. The music publishers are competing with a new type of competitor, one that is more convenient than they are (especially if you include money as a source of transaction friction).

“He who receives an idea from me, receives instruction himself without lessening mine; as he who lights his taper at mine, receives light without darkening me.”

-Thomas Jefferson

The music publishers' main revenue stream is threatened by the free exchange of digital music files, and they must develop a new strategy to deal with this change in technology and culture. The recording industry's first

attempt, the Secure Digital Music Initiative (SDMI) file format is unlikely to succeed as it is more complicated (has more friction) to use than the already established MP3 format. The second attempt, legal action against the music sharing companies, MP3.com and Napster, has halted those channels of access. Unfortunately, a large demand will always encourage people to find ways of sidestepping obstructions, as demonstrated in the 'war on drugs'. The demand for drugs in America makes thousands of people risk their life and liberty for the rewards that a governmental blockade creates. The solution to the music publishers' problem takes two steps, and illustrates a business model for the post scarcity era.

“Television must be a medium, because its neither rare, nor well done.”

-Marshall McLuhan

Sell Convenience

The first step the publishers must take is to make getting music from them the most convenient, and currently that means selling the music online. This sales site must be the most convenient way to get music. That means that every album from every label must be easily accessible in one location, cross-referenced and searchable, include concert recordings, and artist ephemera. The user can be charged a convenience charge, probably on the order of 3-7 cents a song. This charge will be determined by the maximum amount that will not send the user looking for another way to get the music. It will also assuage any guilt they feel about getting the music for free, more of a viable force at 3 cents a song, than \$15 an album. Cheap pricing will also increase the



The amber waves of media?

number of people listening to the music as the cost is not an issue. Instead of thousands of CD buyers, a band will have millions of song downloaders.

Fight Sharing with Sharing

The second step is to make the illegal digital channels less convenient. One initial step would be to fill the file sharing systems with millions of false recordings of albums from hundreds of fake sharers. If the “sound to noise” ratio becomes unfavorable, that is, if it is unlikely that a file you download is real, people will use the music publishers' site and pay the minor fee. The sound could even be a jingle directing the user to the correct download site! This second step must be done with the first step, because an inconvenient publishers' site will provoke people to develop more convenient methods, like a resistant version of Gnutella.

The most convenient medium dominates. The listeners have voted with their modems.

This new strategy will likely create new financial arrangements and new businesses. Music publishers will likely refocus from manufacturers to organizations that discover and promote musicians. Music rating and critiquing services will fill the gap of taste-makers in a field of

thousands of equally accessible musicians, with music critics taking a new importance. Bands may sign deals forgoing profits from the first album to get their name known.

Defend the Commons

It is important that a parasitic music-trading economy does not overwhelm its commercial host. Those who create work must profit from it to prevent the new digital media economy from grinding to a halt. A system that does not compensate the creators is likely to see a lot fewer creations. What happens in the next few years is very important to the digital economy – the MP3 crisis will be repeated in the other industries that think they are selling physical products – software and videos. In the media world, business models based on scarcity may become scarce themselves.

for more information

The Economy of Mind on the Global Net by John Perry Barlow

<http://www.fastcompany.com/team/searson/economy.html>

“What is Copyright?” by the RIAA

<http://www.riaa.org/Copyright-What.cfm>

Courtney Love Does the Math

<http://www.salon.com/tech/feature/2000/06/14/love/index.html>

The No Electronic Theft law

<http://thomas.loc.gov/cgi-bin/bdquery/z?d105:HR02265:@@@L>

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