# Selling Yourself

Talk for <u>Garum</u> Day, Bilbao, Spain, February 16, 2011 by Rudy Rucker Professor Emeritus, Department of Computer Science, San Jose State University, San Jose, California. Website: <u>http://www.rudyrucker.com</u>.

# Types of Profitable Information

How have people profited from providing information in the past, and how will we do this in the future? Let's think in terms of four overlapping categories of information: art, software, data, and services.

*Art* means novels, essays, painting, music, film, and the like. Let's include scientific writings here as well.

*Software* is dynamic and interactive, as opposed to the more static forms of art. We think of word-processers, web browsers, or videogames.

*Data* refers to distilled, searched-out information that has been mined and refined from the web or the physical world.

*Services* include readings, musical performances and shows, as well as lectures, classes, and consultations.

I myself have made my living in providing information for my whole life: *Art:* Novels, popular science books, paintings, photographs. *Software*: Interactive programs involving chaos and cellular automata. *Data*: Blogging, editing anthologies, publishing a webzine. *Services*: A career as a professor, lecturer, and consultant.

#### Art

The old model for an art career is that you create things and sell the originals or copies of the information. You're paid directly by users or via a royalty arrangement with a publisher, gallery or producer.

But now, although art is still sold in material form, the focus is on online distribution, as in electronic books, music files, images, or videos.

Electronic distribution channels have lower fixed costs than print. POD (print-on-

<u>demand</u>) and <u>ebooks</u> can be produced with no costs of carrying an inventory. With POD and ebooks, self-publishing is a more realistic concept than in earlier times. I've experimented with producing a <u>high quality art book</u> for sale on Lulu. It was interesting, but I only sold a few copies.

With books becoming lightweight pieces of electronic information, some authors are tempted to give their books away, licensing them as Creative Commons releases, as I've done with my books, *The Hollow Earth*, *The Ware Tetralogy*, and *Postsingular*. The science fiction writer Cory Doctorow is known for advocating this approach, see for instance his 2010 column, "<u>The Real Cost of Free</u>." Artists and authors have three reasons for giving away electronic copies of their works.

*Upgrades.* A number of readers will sample a free electronic version and then either buy a commercial electronic version or buy a hardcopy paper book.

*Branding*. Getting people to read your work builds the brand value of your name. This can lead to various commercial offers to speak, to consult, or to write.

*Immortality*. Setting aside any financial considerations, the simple fact is that authors want to be read, and they want their books to stay available indefinitely. A Creative Commons release provides a touch of artistic immortality.

#### Software

When I worked for Autodesk in the 1990s, the sole model of selling software was that of putting the software onto disks and selling the disks in boxes. But now only a very few high-end software products are sold on disks. Most software is distributed online by a download that is, at least initially, free. How does this software earn money?

*Trial basis.* Stops working after a few weeks unless a license is bought. *Upgrades.* Offers extra features at a cost.

Begging. Continues working but repeatedly asks for donations.

Ads. Carries commercial advertising, possibly from third parties.

Branding. Builds a brand awareness of the producer, creates large user-base.

Sellout. Entices a deep-pocketed speculator to buy the software company.

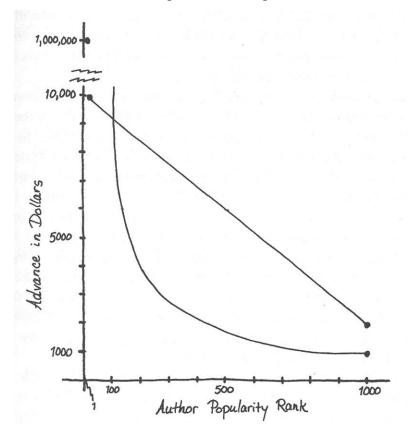
Stepping back a little, it's worth noting that, in an older sense, recipes, chemical formulae, and trade secrets are a type of software as well. And, looking ahead, genomic data is a type of software too—which is often known as *wetware*, as in the novels of my

### Ware Tetralogy.

# The Not So Long Tail

It's worth noting that for the vast majority of artists or software producers, the pay for selling any kind of intellectual property will always be low. The earnings are subject to a so-called scaling law, also know known as an inverse power law distribution. The scaling law applies to all natural phenomena—to the populations of cities, the number of hits on websites, the heights of mountains, the number of friends that people have, the areas of lakes, and the sales of books.

In a nutshell, the graph of remuneration versus rank isn't a down-slanting straight line, it's a curve that swoops down fast and hugs the horizontal axis like a graph of 1/x. Thus, if you're the hundredth-most popular author, you earn a hundredth as much as the most popular one. Instead of a million dollars, you get ten thousand dollars. This is a law of nature, it's not something one can change.



The curve shows the inverse power law Advance = 1,000,000/Rank. The double lightning bolt indicates where I had to leave out miles of paper so as to fit in the point

marking where the most popular writer gets \$1 million. Despite this big spike, the total area under the curve between one and one thousand is only about \$6 million, which represents the total in book advances that society hands out to the top thousand writers. [Image and caption from *The Lifebox, the Seashell and the Soul*.]

The bad news is that the tail drops down very precipitously as one passes below the most successful handful of information creators. The good news is that the tail is long, and decays slowly. But there's more bad news: in the real world, the tails don't extend indefinitely far. The thousandth-most popular author may sell no books at all.

#### Data and Content

Traditional forms of informational data are travel suggestions, restaurant guides, and the current market values of things.

In the past, dealers in antiques have profited from having a superior knowledge of the current market values of things. As this kind of information becomes transparently available on the web, dealers will morph into something more like advisors on matters of taste.

Art and data are both a form of what website designers prosaically term *content*. With our current state of AI, it's not practical to automatically generate art, but most of the online data we value is in fact produced by algorithms.

We see many kinds of automatically generated data-based sites. Generally of a poor quality are the aggregator sites and the social sites that encourage and get the users to provide the content. Search engines are the great success story of automatically generated data.

### Services

There remains a lasting appeal to live, in-person interactions. People will turn out for an author reading a book or, even more so, for a band performing their music. Some producers distribute electronic copies of their work at low cost or for free, planning to earn their money from appearances.

Interactive services are tailored to the individual user. The work of a physician or a financial consultant falls into this category as well. As this is Garum Day, I should also mention the informational in-person services provided by chefs.

At this point, our quality of AI isn't really up to the task of emulating all such personal services.

# The Lifebox

Looking down the road, we can automate our personal services if we can create lifeboxes, that is, on-line simulacra of the self.

I don't think it will be too many more years until we see a consumer product that makes it easy for a person to make a copy of their memory along these lines. This product is what I call a lifebox.

As you continue feeding stories and information to your lifebox, it builds up a database of the facts you know and the tales you spin, along with links among them. Your lifebox will have a kind of browser software with a search engine capable of returning reasonable links into your database when prompted by spoken or written questions from other users.

Your lifebox will give other people a reasonably good impression of having a conversation with you. Their questions are combed for trigger words to access the lifebox information. A lifebox doesn't pretend to be an intelligent program; we don't expect it to reason about problems proposed to it. A lifebox is really just some compact digital memory with a little extra software. Creating these devices really shouldn't be too hard and is already, I'd say, within the realm of possibility — it's already common for pocket-sized devices to carry gigabytes of memory, and the terabytes won't be long in coming.

As I've been saying, my expectation is that in not too many years, great numbers of people will be able to preserve their software by means of the lifebox. In a rudimentary kind of way, the lifebox concept is already being implemented as blogs.

In a nutshell, my idea is this: to create a virtual self, all I need to do is to (1) Place a very large amount of text online in the form of articles, books, and blog posts, (2) Provide a search box for accessing this data base, and (3) Provide a nice user interface.

I made a first crude stab at this a month ago, with my <u>Rudy's Lifebox</u> page. This page lets you Google-search my rather large www.rudyrucker.com site.

We can view a person's memory as a hyperlinked database of sensations and facts. The memory is structured something like a website, with words, sounds and images

combined into a superblog with trillions of links.

For a fully effective user experience, I'd want my lifebox to remember the people who talked to it. This is standard technology—a user signs onto a site, and the site remembers the interactions that the user has. In effect, the lifebox creates mini-lifebox models of the people it talks to, remembering their interests, perhaps interviewing them a bit, and never accidentally telling the same story twice—unless prompted to.

If I use my lifebox while I'm still alive, some other options arise. I might start letting my lifebox carry out those interview or consulting gigs that I don't have the time or energy to fulfill. Moving on, my lifebox could be equipped to actively go out and post things on social networking sites, raising my profile on the web and perhaps garnering more sales of my books and more in-person speaking invitations.

With the lifebox technology in place, you'll be able to sell yourself!