

**Digital Money Forum
London - April 2nd, 2003**

Open Money - Context and Application

This presentation has three parts - I will cover some theory and practice of virtual money in the first half of the time available and thus leave room for questions, which usually provide better entertainment.

Preface

First - this presentation is about virtual money, which will probably be digital money, but since it's not necessarily so, please be prepared to adjust your sets. And, please also be assured - this isn't just another hill of beenz.

This main interest of this forum is of course the application of digital technologies to mainstream money. Digital conventional money is (potentially) big business, which is why we're here today and tomorrow - with all due thanks to the sponsors for their generosity and Hyperion for their excellent organisation.

There's a sense in which digitizing conventional money is like modernising railways - increasing safety, tilting trains, maglev etc - largely a matter of improvements to what's already in place.

But while there's much money in managing money, it still seems quite hard to make it pay. For instance, the Guardian recently, on a micropayments system that failed -

<http://www.guardian.co.uk/online/comment/story/0,12449,902684,00.html>

"The problem was that merchants hated the anonymity part, governments hated the alternative currency part, banks hated the competition, and internet users could not be persuaded that they even needed micropayments at all."

This is a familiar story - it's tough talking money with banks and governments. For a start, they think they know what it is, and even if they're quite ignorant about that, in the end, they do know where it is and that seems the key issue.

But the reality is that conventional money is increasingly unreal and insubstantial - most of our current assets are merely items of account, with nothing really behind them - and this is the basis of open money / virtual money / community currencies.

Open money is NOT merely a different technology for moving the "hard" stuff around. The technology and application of open money is to that of conventional money as aviation is to marine, or as ac is to dc, as a laser beam is to a light bulb.

Virtual money doesn't need to be digital - it can be on paper, handshake, or by nod and wink - but it's a very good fit for digital technologies.

It's also an entirely new context, or almost so, and one without the stringent requirements and entrenched vested interests that so constrain developments in conventional money.

So, just as the Wright brothers didn't try to fly a locomotive, it makes sense for the digital development of virtual money to take full advantage of the space available in that domain.

And if, as we project, virtual money transfers will soon account for at least 20% of gdp in developed nations, the opportunity for rapid growth is worth consideration.

Which brings me to my second point - that I don't expect you to believe much of what I'm saying today, or even any of it - at least, not yet. But I do also fully expect that you will get it in the end.

The shifting of a major paradigm is more frequently discussed in the abstract than observed in the real world, or noticed by people in general. It took some time for the round earth to replace the flat and for most people the change was not significant. Likewise, the theory of relativity didn't greatly affect the price of fish or the operation of the railways.

However, there are a lot of people who use money, some of us on a daily basis, so a significant shift in what money is can be expected to have some impact on all of us.

So, this is an advisory. There's more to money than you presently suppose, and that's actually good news. If you pay attention you will see when "the penny drops" for you, and you'll get a very useful insight into how your mind changes. But you will only get one real chance to see this, so good luck.

And to close this preface, I have to warn you that there will be a test. But, have no worries, it's not skill testing. However it can take a long time, since it's not over till it's passed. But, you can relax - anyone can cheat and it's all on-line.

And so to theory - newtonian and post-newtonian monetarism

When David Birch opened DMF #5 last year, he described how 300 years ago Isaac Newton was appointed Master of the Royal Mint with the challenge to sort out the British financial system. David proposed that we are now in need of something similar. At that time, three things were critical to Newton's success:

1) matching the complexity of the market

variety matching - scale and form of the market and means of payment should match an increasingly complex society / economy
reducing transaction costs / uncertainties

2) state of the art technology

presses, milling, composition
should convey "substance", make replication very difficult if not impossible

3) legal tender

it helps - you get the best government their money will buy
the illusion of symmetry - looks like it's free
minting / management / banking costs more covered than discovered

These three - variety matching, state of art technology and legal monopoly - but the greatest of these was the elegance of Newton's technology and it had consequences that were, perhaps, unexpected.

Here I cite "Adam Smith" - not the usual suspect, however, but the much more current PBS financial analyst and journalist aka George J W Goodman and his book "The Power of Money".

By Goodman's account, Newton designed his sovereign with such dimensions and composition that it was a finely-tuned gong. If the coin was shaved, rubbed, or recast in baser metal it quite simply no longer had the ring of truth to it. By this elegant technical device, Newton made the sovereign instantly verifiable by anyone with ears. I pay off my debts by dropping coins in a pile, and if I drop a clanger, it's not accepted.

According to the later Adam Smith, this not only had an immediate and positive effect on the confidence of traders, it also opened the door to fractional reserve banking. Prior to this deposits were not often aggregated as each depositor wanted their own money back. Coinage of secure value made this unnecessary.

Smith further supposes that this led quite directly to the sovereign becoming the strongest currency in Europe, to London becoming the leading banking centre of that world, and thence to the financing of the emergence of the British Empire. Maybe so.

Now let's consider Newton's criteria in our current context.

1) matching the complexity of the market

The market is increasingly diverse, multiple, fast, and granular and certainly recommends itself to digital technologies. There's clearly no point in moving heavy metal around any more.

But more than this, we can do it our way. There's no need to wait for the banks to open.

not big corps money
unstable, less useful in macroeconomics
SME backbone
more stable, more diverse

2) state of the art technology

of course, but NOT absolutely necessary - just obviously advantageous
the technicalities are almost trivial

building the internet would have been easier if the internet already existed
building the virtual money net on the internet will be very easy

3) legal monopoly

yes - legitimate - tax, death etc
the fsa present no problem, really
not their department, not their interest
and in any case beyond their immediate influence

and no - by definition, open money is beyond monopoly
NOT a matter of ensuring value of instrument and institutions

And what of the equivalent to Newton's gong, the factor that establishes confidence? - coming up in a few minutes.

In summary, in theory - there are two sorts of viable money -

1) money that's required to be valuable in itself, independent of users

it must go anywhere, so issue controlled by central authorities

2) money that depends for its value on the performance of its users

it just goes around, doesn't leave its community of origin, and can be issued by any who are credible in the community

Commercial barter as an early instance (and anomaly) - now over \$30b pa in transactions, with \$3b operating turnover. This is an increase of over a factor of 10 since the mid '80s, and must prove something. However, the commercial "barter" sector is in many ways equivalent to email before the internet - territorial and exclusive, with limited variety.

Think how email addresses hosted at isp enable the creation of and participation in email lists by individuals everywhere, without restriction to any particular host or geography. You can go Yahoo, set up a list on your own terms and see who joins. In much the same way, virtual money accounts at ccsp (community currency service providers) enable creation of and participation in virtual money networks of all sorts, under whatever terms are specified.

Metcalfe's law says the value of the network is proportional to the square of its size, but Reed's law rules - <http://www.reed.com/dprframeweb/dprframe.asp?section=gfn> - particularly "That Sneaky Exponential-Beyond Metcalfe's Law to the Power of Community Building". the most important factor is the proliferation of networks within the network.

This is material anyone can explore themselves. There are many websites addressing various parts of the matter, but the most advanced materials are on www.openmoney.org, which includes the LETSplay game and a demonstration of software that meets the open money specifications.

The "community way" programme.

However, practical realities can cut through a fog of theory and speculation. So I am now going to outline a practical application of a virtual currency that provides the level of assurance needed to attract participation. This is for virtual money the equivalent of Newton's coin with a ring to it, a system that establishes a useful level of confidence and thus an opening into the wider context and opportunities of open money systems.

The community way strategy is designed to appeal to the business community and in particular to address their aversion to risk - it's the shallow end of the pool, the bunny slopes, the tricycle before the bicycle. If a business participates in community way and follows the recommended procedures, there is no way it can lose.

Community way is also, therefore, springtime for the early adopters who can see the opportunities.

The pitch to the participating businesses raises no complex considerations of monetary theory, sustainability or social justice - just some basic questions "do you want: a) more money? b) more customers? c) to do good in the community?". The choice to participate or not depends on whether they can overcome their anxiety that something this simple must be a trap or a fantasy..

Playing it through - in tres partes divisa est

business - community service - us (& governments)

So it goes - any questions? any problems?

For more details, see

www.openmoney.org/cw
www.communityway.org
<http://wildfire.communitycurrency.net>

An important component of this application is that it realises "real" money revenues from the process of creating virtual money - a development engine that generates revenues, radically reducing investment needs. This initial phase of the development programme won't operate for long, maybe 6 months to a year, but during that time it's a nice little earner.

The London open money project

An application that prints its own money naturally evolves an unusual business plan. This one is particularly unusual since there's an embedded paradox in the deployment of open money, the nature and form of which virtually precludes conventional toll-booth revenue models.

Although the system is essentially exothermic, like a real cold fusion in the money space, once this cat's out of the bag it's essentially free and can't readily be re-enclosed. It's not easy selling water at the riverside, and trying to charge for money after you've given it away is unlikely to be successful.

David Isenberg - <http://isen.com> - analyses a similar difficulty that faces the providers of bandwidth - <http://www.netparadox.com/netparadox.html> - " The best network is the hardest one to make money running."

In this case, the strategy for financing development is to operate open money development as a fund-raising initiative on behalf of the third sector as a whole - charities, non-profits, community groups, schools, hospitals, churches etc. Providing £10 to the community for every £1 directed to the development program presents a strong defence against the sort of competitive encroachment that would quickly become a race to the bottom.

The core level of participation required to begin the London project is the active participation in community way programmes of businesses active in London region with a total of around 1000 employees. This is sufficient to yield c.£50k for development, and thereafter a steady expansion in operations and revenues can be reasonably expected.

We estimate the overall scale of this project (in the London region) to be around £100m over a period of perhaps 5 years.

Michael Linton