

THE NATURE OF EXCHANGE IN A KNOWLEDGE ECONOMY: COMMUNITIES, MARKETS AND METAMEDIARIES

Victoria Ward and Roger Butler

[This is based on an earlier article which first appeared in Knowledge
Management Review November/December 1999]

Changing crafts and professions

The new digital era is re-modelling markets. We all know about the well publicised examples in the publishing and music industry but the impact of this revolution is now fundamentally changing a myriad of professions and work like:

Photojournalism. An award winning photojournalist who, in response to the decline of print journalism interest in photojournalist essays, is now making his own digital photojournalism essays, using traditional photographic methods, but repackaging the stories (words, pictures, maps) for digital distribution

Antique dealing. A world expert on British corkscrews who has recently, himself, published his own 750 page book on the subject, has a shop in Portobello, downloads catalogues from the web and sells things through E-Bay as well as through his shop and sees his traditional niche as an intermediary evaporate as his clients all have access, through the web, to the same auction information as he does.

Film location work. The person at the London Film Commission, who, on being told that a film would come to London if 'you can find me a forest to trash', went and found one, using a combination of databases, contacts and networks (and presumably some excellent persuasive techniques)

Layered Markets

It is probably a truism to say that new markets, structures and ways of working are starting to have a profound effect on the boundaries between specialist expertise (creation of content), packaging of content (editorial roles), and agency (distribution of content, or advice about content). It is ironic that profound expertise (photojournalism, British corkscrews), is no longer enough on its own: that experts who seek a niche in new market structures are having to assume packaging and agency roles, new vulnerabilities and interdependencies, in order to create new possibilities.

There are deep implications here for individual skills and alertness, although I don't intend to rehearse these. What I would like to look at what this means for markets. What is the nature of assets? What is the nature of transactions?

If you look at a market of layers from explicit structures that are visible, governed by membership rules, regulations and protocols, all the way down to deep, invisible, hidden values and behaviours, you can use Edgar Schein’s distinctions to categorise market types. Schein’s work within the Sloan School of Management at MIT on the mapping of values and traditions concerns organisational cultures. Schein has forwarded a three-layer model of organisational culture:

Schein Layer	Characteristic	Components	Knowledge Market Layer
Artefact	Visible layer	Hierarchical structures, office spaces, rules, protocols	Explicit Markets
Espoused values	Middle layer	Strategies, rules of behaviour, philosophies	Local Exchange Trading Schemes (Bobbins)
Underlying level	Invisible layer	Basic underlying assumptions. Unconscious beliefs, perceptions, thoughts and feelings that are taken for granted and not questioned.	Political Capital Exchanges and Transactions

1 Explicit markets.

At the most explicit level there are formalised markets, reaching increasingly into e-commerce. E-bay, IQPort, Amazon.com. These markets are characterised by a kind of auctioning approach to core assets. An asset (kidney, book, piece of knowledge) is ‘wrapped’ with some kind of information which allows the buyer possibly to build the assets from components, to establish price, and, supported by logistics to execute the transaction (i.e. exchange cash for assets). This can have some bizarre results. Somebody recently sold their E-bay personality for \$2,000; a kidney was bid up to \$3m. Financial markets products are also being structured in such a way as to create streams of income from intellectual capital. David Bowie securitised his future royalties from his back catalogue for instance.

David Bowie, The Man Who Fell to Earth, has landed on Wall Street and picked up \$55m (£34m) from the issue of bonds backed by future royalty payments on his music.

The deal, which closed at the weekend, is the first in which music royalties have been used as security on bonds, instead of more common assets such as credit card payments or car leases.’

*Charles Pretzlik
Electronic Telegraph
5.2.97*

2 Local Exchange Trading Schemes (LETS)

This are community endeavours, both online and offline. I do gardening, you do babysitting. A skills exchange, which extends, particular in virtual communities into knowledge exchange for reciprocal favours. Some LETS systems are formal (1 marble an hour for babysitting, 2 for gardening etc). Others are informal – a kind of semi-guilding approach. I introduce an idea about digital photojournalism to my photojournalist. In return, he takes my publicity photos. No economic value changes hands.

This mutuality and knowledge exchange also extends some of the e-commerce sites. For example, encouraging reader book reviews at Amazon.com, creates co-evolution of knowledge between agent (Amazon.com), and reader groups.

Bobbins

The term bobbin comes from thread bobbin – a real round which thread in wound. In Manchester the term ‘its worth bobbins’ has come to mean ‘its not worth much’. A LETS scheme

A LET system in South Manchester used bobbins as its unit of currency. A £5 annual joining fee paid for a directory of services, from plastering to car mechanics. Price would then be determined either directly as units of time + scarcity of expertise, so

- ⇒ Car mechanics – 5 bobbins an hour
- ⇒ Replastering – 10 bobbins a room
- ⇒ Crafted door handles – 3 bobbins.

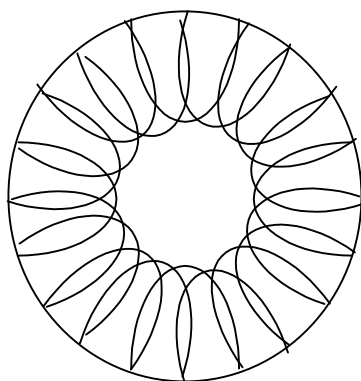
There was also a café where you paid for tea in real money and bobbins – 20pence plus ½ bobbin. Café staffing time was based in bobbins.

3. Political Capital Exchanges and Transactions

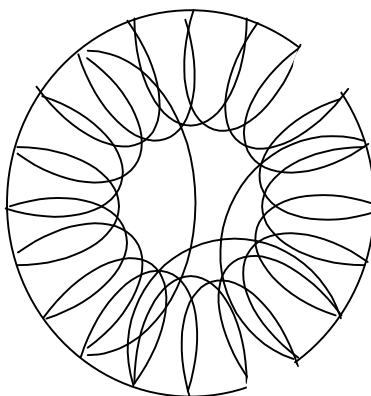
“Values can be and are discussed, and people can agree to disagree about them. Basic assumptions are so taken for granted that someone who does not hold them is viewed as crazy and automatically dismissed.”

This leads to the third, and probably most tacit layer of transaction. In order to exploit interdependence, and your role in emerging knowledge and skills markets (whether as expert, packager or agent) you need a good grasp of market theory, most usefully options theory. The network of psychological contracts you build with colleagues, collaborators and competitors can be viewed as a portfolio of rights and obligations (i.e. a portfolio of options) which you set up as an individual, team, or small business is complex.

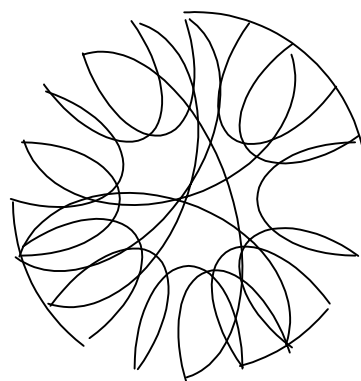
Cliquey-world network:
connections to 4 nearest neighbours



Small-world network:
a few long range connections



Open-world network:
points connected haphazardly



Source: New Scientist June, 1998

What does this all lead to?

6 Principles of Trading in Knowledge Markets

I suggest 4 trading principles, which are useful in governing behaviour in knowledge markets:

1. **The knowledge bazaar.** Be aware of who you are, what role you are playing, what assets you are trading. Understand that your internal assets (knowledge, experience, skills, capabilities) are extended by external assets – people, stories and templates.
2. **Give: Get.** Remember that all markets are built on a fundamental principle of give:get. Be aware of what you are giving, and of what you have the right to get. Related to this
3. **Gifting.** Understand the importance of gifts and invitation. The notion of membership of any kind of group with shared values is closely connected to rituals of exchange.
4. **Use the Tit for Tat rule when trading** (see Axelrod, reference), i.e. do unto others as they do unto you, but understand membership and mutuality. This leads to some interesting ethical kickers outside the scope of this article, but well worth noting for another time.
5. **Understand Encoding and Decoding.** Remember that, in an extension of Marshal McLuhans (reference) proposition that the Medium is the Message (reference) **the product is the process.** The whole area of patents, licences, franchises, copyright, will get increasingly tortuous. Markets will get odder and odder. In the US computer code is patented as weapons; the blueprint for Genetically Modified Foods is inside the seed. Tiny encoded instructions in microcosms lead to huge profits.



Give: Get Principle

6. **Expect reversal.** This is a kind of ‘Through the Looking Glass’ world where everything gets curiouser and curioser, and seems to be reversed from what is regarded as normal in the real world. In a recent detailed study, Stanford University and The Poynter Institute researchers began collaborating to learn how frequent Internet newsreaders went about perusing news online. Among the counterintuitive findings is the evidence that text draws the eye first rather than photos or graphics, in particular briefs or captions. The same study indicated the importance of local news in drawing readers into global reporting. Another reversal: the customer provides the content and interactivity on Amazon.com that provides for the rich Internet experience which draws other customers. And the development of new, and unexpected forms of intermediation is coupled with a kind of overwhelming, and oddly unexpected helplessness when existing systems fail, as they did recently with the London Stock Exchange, the new media create new and paradoxical opportunities for unqualified information to inform action.

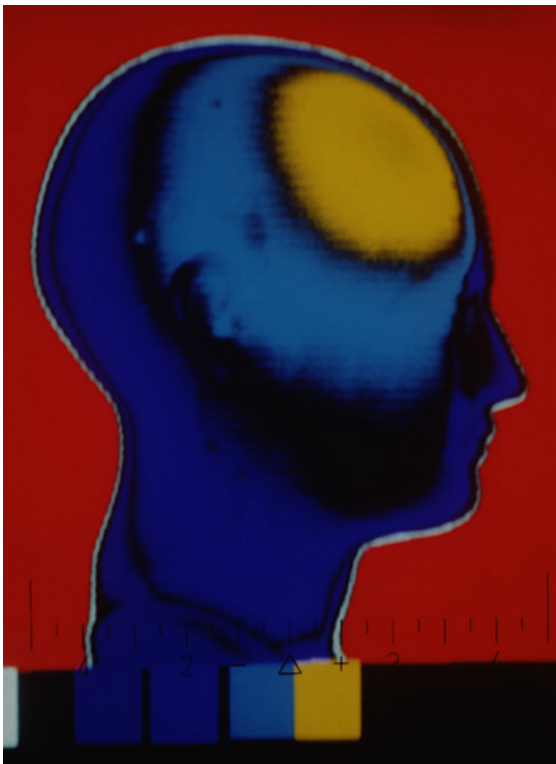
Metamediaries

In this new world of bizarre/bazaar, and as business migrates to new media, the nature of mediation will change. On the one hand people like my antique dealer will get squeezed out or have to reinvent. On the other the role of agents becomes increasingly essential in complex transactions like bid/ask pricing where many components are involved. The three main categories are:

Disintermediation	<i>-'cutting out the middleman'</i> and selling everything direct	Dell, E*Trade and Travelcity
InfomEDIATION	<i>'trusted third parties'</i> new style mediators lying between customers and suppliers	Exchange's Moneyextra who is a 'trusted third party' for consumers guiding them to the best value products.
Metamediation	<i>Providing integrative knowledge</i> The individual, community or enterprise that can govern flows of information – collect intelligence from diverse sources, repackage and redistribute it profitably.	The auto metamediary who provides a range of services from performance data on the cars, customers comments, insurance dealers, warranty suppliers and everything related to the car industry.

[Source: Roger Butler’s research into metamediation and call centres]

In Wired in late 1997, David Weinberger wrote, presciently, of integrative knowledge. This is a lengthy quote on which to end, but is one we have used since we first read it, and feel it is as pertinent today as it was then. The evolution of this thinking has created the Cluetrain Manifesto, which is now available in hardcopy as well as online.



“When Intranets do for organisations what hyperlinks have done for documents, companies that embrace the new model will look and feel very different. Rather than a hierarchical org chart, the business will have a "web chart" that shows the set of projects, with senior management providing a co-ordinating role outside individual project nodes. Controls on information will be loosened because the benefits of access outweigh the costs of restriction.

A sign of value to the organisation will not be standing at the top of the heap, but having the most hyperlinked roles - integrative knowledge will become at least as important as specialised knowledge.

Hyperlinking of organisations is happening already; unless it is managed, it loosens the grip of management without substituting any equivalent guidance. But even if you were able to restore the corporate monarchy, the democracies next door are going to outsell, outperform and outrun you.”