

AE510 EDGE¹ - A Proposal For A Fundamentally Different Set of Economic Arrangements
2013-04-30

The bankruptcy of modern finance capitalism, both numerical & moral, is increasingly evident. Nevertheless, as anarchist anthropologist David Graeber noted, visions of viable alternatives somehow remain elusive. This document outlines and motivates one such system of matching requests and offers, that is, of managing an economy. Like Bitcoin, it is a decentralised software system which needs no support from governments or other organisations; unlike Bitcoin, it does not replicate the zero-sum property of money and indeed it is not a money system. It is an "Extensible Decentralised Gift Economy" (EDGE), designed to make it easy for people to help out not only their friends, but friends of friends, friends of friends of friends etc. Apart from an investment of time in software development, it requires no infrastructure over and above a functional Email system.

Theoretical Background

Economic systems which assume actors will act in a strictly self-interested fashion can effectively normalize selfishness². Psychologist Abraham Maslow criticised classic economic theory for its failure to "accept the reality of higher human needs" and suggested it could be "revolutionized" by doing so.³ In 2004-5 I developed *Altruistic Economics*, an economic theory that rejects Homo economicus, the theory that people are amoral and completely selfish.⁴ EDGE itself does not draw directly on this theory, but is a distillation of its essence.

EDGE: Extensible

Just as successful technologies support more complex ones (e.g. a lot of advanced WWW technologies use HTTP/HTML), so multiple different, complementing and competing technologies could be constructed on top of EDGE as it is non-prescriptive about its data. Its single data type is a personal *evaluation*, which as well as data to identify the subject and object of the evaluation, comprises a set of (*Amount, Units*) value pairs plus some optional data for describing the interaction (e.g. a blog entry plus metadata)⁵. Since the 'Units' is a URI (web address), this is a much richer datatype than an ordinary ledger entry.

EDGE: Decentralised

Centralised systems rely on the integrity of the elite in charge, something which has consistently failed throughout history. Financial elites in particular seems unlikely to inspire much confidence any time soon. Since EDGE has no privileged users it is capable of piecemeal adoption without the knowledge or approval of centralised authorities.

EDGE: Gift Economy

EDGE was designed to implement a *Gift Economy*; it has no contracts, laws, reputation metrics or other features designed to ensure reciprocity and fairness. Such metaevaluation systems may coevolve with user behavior later^{6,7}.

1 <http://wiki.gifteconomy.org/EDGE>

2 A Fine Is A Price (Uri Gneezy & Aldo Rustichini, Journal of Legal Studies, vol. XXIX January 2000)
<http://rady.ucsd.edu/faculty/directory/gneezy/pub/docs/fine.pdf>

3 <http://www.brainyquote.com/quotes/quotes/a/abrahammas408723.html>

4 Altruistic Economics – An Unselfish Economic System <http://www.altruists.org/ae>

5 <http://wiki.gifteconomy.org/EDGE/Evaluations>

6 AE12 – Meta-Evaluations <http://www.altruists.org/ae12>

7 AE10 – Keeping Score <http://www.altruists.org/ae10>

Although it could be used to implement a barter system, such a development is not particularly important, not least because, as noted by Graeber, before communities used money, they didn't use barter, they used a gift economy⁸. Capitalist propaganda notwithstanding, human happiness is actually far more contingent upon healthy relationships than on than selfish accumulation of stuff. Though some economists might scoff at an economic system which is explicitly altruistic, gift economies have formed the mainstay of human interaction since prehistory. While we no longer live in isolated small groups, software can extend our capabilities for recalling and processing the interactions we have with others. What the money system disregards, but what EDGE heeds, is how we feel about our interactions with others.

Summary of Technology

To speed development of the software, and provide a flexible base on which to build other technologies, EDGE was conceived to be as lightweight as possible. It uses standard Email both for identifying its users and as a mechanism for transporting their evaluations. Users' evaluations are specially formed XML files attached to ordinary emails. A prototype extension for Mozilla Thunderbird is being developed to allow these evaluations (which correspond to offers and requests, as well as the equivalent of payment and recommendations) to be created through a GUI and forwarded from computer to computer without human intervention.

User Experience

Users send requests for and offers of goods and services using their Email client. They receive both replies and unsolicited messages from others. They may browse these personally, or may prefer to have semantic software filter them. Users may give whatever they wish to others. These messages will correspond to real world interactions just as money exchanges do in the modern business world.

Initially, EDGE users might be mainly the 'unemployed'. With no 'money' to accumulate, users may be initially baffled, but specific requests for assistance from friends should help them find their bearings. Instead of fixed prices declared in advance in zero-sum currency such as Euros or Bitcoins, the equivalent of 'payment' will take the form of evaluations in which other users declare their opinion of the goods/services rendered (a system proposed around 1970 by social critic Ivan Illich)⁹. Users who approach EDGE as a way to get 'something for nothing' are likely to be shunned by their friends, at least as far as passing on their EDGE requests, until they behave in a more pro-social fashion. Others may appreciate the lack of fixed contracts, the unpredictability of interaction through EDGE, and see it as a replacement of the hard-nosed world of 'work' by the F2F softer work of 'play'¹⁰.

Challenges

- Although each user adds a CPU, scalability/resource use is an issue as the numbers of evaluations processed might increase exponentially as the system gains popularity
- The normalising of altruism is a stark contrast with the (surely faltering?) project to normalise selfishness that is the monetisation of society, and so it might take EDGE users time to adjust
- The system would likely be subject to all manner of attempts to game it from a small percentage determined either to prevent it from flourishing or just out for selfish gain
- The technological base layer (Email) is notoriously insecure and might well need bolstering with additional security such as GPG.

8 Unwelcome Guests #577 – The Rothschild Formula and The Myth of Barter <http://www.unwelcomeguests.net/577>

9 Remarks on Accreditation (Ivan Illich) <http://www.altruists.org/f280>

10 F2F & the Internet Gift Economy <http://www.youtube.com/user/robinupton>