Association for Information Systems AIS Electronic Library (AISeL)

ICEB 2003 Proceedings

International Conference on Electronic Business (ICEB)

Winter 12-9-2003

Self-Governance for Electronic Commerce: An Evolving Framework

Ei Sun Oh

Madeline Chai

Ei Fun Oh

Follow this and additional works at: https://aisel.aisnet.org/iceb2003

This material is brought to you by the International Conference on Electronic Business (ICEB) at AIS Electronic Library (AISeL). It has been accepted for inclusion in ICEB 2003 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Self-Governance for Electronic Commerce: An Evolving Framework

Ei Sun Oh Madeline Chai Ei Fun Oh timely training group Suite 2, 2nd Floor, 26 Block E, Damai Plaza 3, 88300 Kota Kinabalu, Sabah, Malaysia ei.oh@ties.itu.int

Abstract

The rapid rise of electronic commerce and the latter's increasing intrusion into everyday life has not been matched by an effective governance structure. The present paper proposes an evolving multi-faceted self-governance framework for the regulation of electronic commerce by, for and of the users and service providers of electronic commerce. The idea of "electronic commerce interest group" is proposed and described, together with their interactions. The framework takes into account the policy, ethical and economical aspects of electronic commerce development, and seeks to devise balanced and sensible electronic-commerce governance solutions.

1. Introduction

The advent of the Internet over the past decade has created new possibilities for business dealings, be they transactions of products or provisions of services. As a result, tremendous convenience and savings have been enabled by electronic commerce. Nevertheless, the proliferation and invasiveness of electronic commerce into both business and individual lives have also engendered opportunities for unscrupulous parties to engage in malicious activities over the electronic medium, often with greater ease, speed as well as harms to society. A typical knee-jerk reaction to these perceived electronic endemic is the tightening of Internet regulations by authorities. This paper attempts to explore an alternative answer. Part I of the paper discusses the policy, ethical, economical and social dimensions of electronic commerce specifically and Internet in general. Based on these observations, Part II proposes a multi-faceted self-governance framework for electronic commerce activities and compares its strengths and weaknesses.

2. Some Issues in Electronic Commerce

2.1 Policy

Despite the seemingly democratic nature of the Internet, sound public policy over the Internet can make or break the healthy development of electronic commerce. A public policy which restricts both the access and the contents of the Internet, for example, will almost certainly strangle the growth of electronic commerce. Some of the important public-policy issues on electronic commerce may be divided into three categories: intellectual property, content and privacy.

2.1.1 Intellectual Property

The property rights over intangible "property" which is the result of creativity and/or innovation are often referred to as intellectual property (IP). On the Internet, the main IP debates concerns domain names and copyrights.

2.1.1.1 Internet Domain Names

Internet "domain names" have seen intense "turf fights" during the last decade. Domain names are unique Internet "addresses" which indicate a web page. A domain name consists of at least two components - a designation of the organisation (e.g., "ums") and an abbreviation for the nature of the organisation (e.g., "edu"). The latter is known as "top-level domain" (TLD). A domain name registered in a country other than the United States usually has an additional country-designating component (e.g., "my" for Malaysia). In the United States, on the other hand, the domain names usually do not have an additional country-designating component, and these TLD's are known as "generic' TLD's (gTLD). For the electronic commerce communities worldwide, the ".com" gTLD has become a priced commodity, with its subtle phenomenological implications of commercial superiority. Nevertheless, confusion may arise out of similar gTLD. To illustrate, both University of Malaysia Sabah and University of Malaysia Sarawak may arguably have a legitimate claim to the domain name "ums.edu" provided proper registration is made.

During the latter part of 1990's, two initiatives have been made to resolve the gTLD disputes. There was initially the "gTLD Memorandum of Understanding" (gTLD-MoU) [9] developed by an international ad hoc body in 1997, with participations from both the World Intellectual Property Organization (WIPO) and the International Telecommunication Union (ITU). The gTLD-MoU proposed a seemingly autonomous gTLD governing structure with various functioning arms such as a policy advisory body, a policy oversight committee, a depositary for the MoU, a council of registrar, and an administrative challenge panel. Despite its limitations, the gTLD-MoU may be viewed as one of the first international efforts in arriving at a self-governing structure for electronic commerce. The main advantage of gTLD-MoU is that it is a truly international attempt to resolve an international problem. The main disadvantage, on the other hand, is a lack of criteria to separate the genuine, interested participants of the gTLD debate from those who incidentally avail themselves of the benefits of the MoU.

In response, the United States proposed its own domain name system reform policy in 1998 [11]. Under the American initiative, a non-profit corporation was formed with headquarters in the United States to manage gTLDs and to resolve international gTLD disputes. Both the strength and the weakness of this structure is its backing by the American government. While US backing lent credibility to the proposal, a significant amount of suspicion has also been raised. The European Union has criticized that the American proposal was not arrived at with sufficient international consensus. Others view the US proposal as the extension of US domain name policy to the Internet community in the rest of the world. Over the past few years, however, the US proposal has more or less been grudgingly accepted and practices around the world.

2.1.1.2 Copyrights

Another contentious IP issue concerning electronic commerce is the issue of copyrights. The history of copyright law witnessed the conflicting demands between, on the one hand, the authors of protected creative works who would like to exact their due shares whenever their protected works are reproduced, and, on the other hand, the user of the protected works who would like to ensure his access to the greatest amount of materials, protected or otherwise, with as little charges as possible. This constant struggle is magnified on the Internet, as was the case with peer-to-peer electronic file swapping services, which provided a means for their members to exchange digital music files which may or may not be protected. The Internet has made reproduction of protected works relatively effortless. A further complication is that the global reach of the Internet implies that restructuring of the copyright law and policy must necessary be universal. In addition, the debates over copyrights between the developed and developing countries often assume a non-economic and political nature. Some argue that the present copyrights system protects the interests of developed countries who limit the flow of "protected" information to developing countries which cannot afford to pay the often stiff royalties for the vital information necessary for the latter's national development. The Internet thus enables the developing countries to obtain crucial "protected" information with relatively low costs.

2.1.2 Content

The huge amount and diversity of opinion and materials expressed and exchanged on the Internet constitutes a main reason for the tremendous development of electronic commerce. Governments around the world are gently waking up to the potential of the Internet in providing essential services. They are also rudely awaken by the poorer taste or appropriateness of some of the Internet contents. The governmental impulse, then, is to regulate Internet content allegedly for the public good. This was the case, for example, in Germany [8] and China [5]. It remains to be seen whether these draconian policies would hamper the healthy electronic commerce development in those countries. Nevertheless, these measures may not be as effective in eradicating "harmful" material as they first seemed. The global nature of the Internet means that a prohibition on certain content production in one country would help the content-creation industry in another country, since the demand for the content remains the same. Therefore, a more effective system may be a self-regulatory "content" framework, such as the "content forum" with industry and expert representation such as that proposed under the Malaysian Communication and Multimedia Act 1998.

2.1.3 Privacy

The protection of personal Information is essential to integrity to both human dignity and commercial integrity. Therefore, the protection of Internet users' and producers' information privacy is important for the continuous development of electronic commerce. Without an adequate privacy protection framework, potential participants would be deterred from engaging in electronic commerce, lest their personal data become tradable commodity. To answer this concern, most developed countries, such as the European Union [6] [7] and Organisation of Economic Cooperation and Development [13], have been drawing up their respective data privacy laws, policy and guidelines.

2.2 Ethics

The moral outlook of the "Internet community" should be examined before a meaningful proposal of a self-governance framework for electronic commerce. This determination of the ethical attitude of those who use and who provide services over the Internet is crucial in determining the best Internet self-governing structure and in avoiding self-regulatory pitfalls.

Using ethical principles distilled from various philosophical and sociological literature, Oh et al. (1998) [12] designed a survey on the attitude of the of Internet community. The survey requested participants to rank these ethical principles in the order of their preference in utilizing the principles in resolving the moral dilemmas which the participants may encounter in the course of their Internet usage or service provision. Table 1 summarises and adapts the results of the survey in descending order of the preferences of ethical principles by the Oh et al. (1998)

[12] survey participants.

Table 1. Ethical principles and their descriptions (Oh et al.,1998)

Ethical Principle	Description
Means-Ends Ethic	If the end justifies the means, then you should act.
Might-Equals- Right Ethic	You should take whatever advantage you are strong enough and powerful enough to take without respect for ordinary social conventions and laws.
Intuition Ethic	You do what your "gut feeling" tells you to do.
Professional Ethics	You should do only that which can be explained before a committee of your professional peers.
Conventionalist Ethics	Individuals should act to further their self-interests so long as they do not violate the law.
Organization Ethics	This is an age of large-scale organizations – be loyal to the organization.
Hedonistic Rule	If it feels good, do it.
Disclosure Rule	If you are comfortable with an action or decision after asking yourself whether you would mind if all your associates, friends, and family were aware of it, then you should act or decide.
Golden Rule	Do unto others as you would have them do unto you.
Utilitarian Principle	You should follow the principle of "the greatest good for the greatest number."
Categorical Imperative	You should not adopt principles of action unless they can, without inconsistency, be adopted by everyone else.

In Table 1, it could be noted that the top two preferences in ethical principles of Internet users and producers, assuming the survey results as representative of the attitude of the Internet community, for utilization in resolving on-line moral dilemmas are Means-Ends Ethics and Might-Equals-Right Ethics which are not so positive. Oh et al. (1998) [12] pointed out that similar top preferences were also found in surveys of business school students and business managers. In other words, while the Internet community may be viewed (based on the Oh et al. (1998) [12] survey) as ruthless and aggressive, their attitude is no worse or better than the rest of the "real life" business community. Human selfishness and combativeness are just features of human characters that any regulatory framework has to work with.

Moreover, if those ethical principles in Table 1 which

may be deemed more or less "anti-social" (Means-Ends Ethics and Might-Equals-Right Ethics), "compulsive" (Intuition Ethic and Hedonistic Principle) or generally "problematic" (Conventionalist Ethics and Organizational Ethics), we are left with the moral/ethical principles in Table 2 (again in descending order of their preferences).

Table 2. "Preferred"	ethical principles based on Oh et al.
	(1998)

Ethical Principle	Description
Professional Ethics	You should do only that which can be explained before a committee of your professional peers.
Disclosure Rule	If you are comfortable with an action or decision after asking yourself whether you would mind if all your associates, friends, and family were aware of it, then you should act or decide.
Golden Rule	Do unto others as you would have them do unto you.
Utilitarian Principle	You should follow the principle of "the greatest good for the greatest number."
Categorical Imperative	You should not adopt principles of action unless they can, without inconsistency, be adopted by everyone else.

In Table 2, it could be noted that the top two "good" ethical preferences of the Internet community, Professional Ethics and Disclosure Rule, are both dependant on the establishment of either professional or specialized bodies – "professional peers" and/or "associates." This may give us a hint that an effective Internet self-governing structure must entail, as one of its most important components, professional or specialized bodies. They may be the most effective means to counter the more "sinister" human tendencies as discussed above.

2.3 Economics

The momentous growth in the number of Internet service providers (ISP's) implies the strength of electronic commerce. It can, however, be observed that the economic growth of the Internet has been concentrated in too few hands; there is a lack of competition among the major ISP's. In the wholesale Internet market, for example, the top three US ISP's accounted for about 73% of US market share. [3] In the retail Internet market, the number of AOL subscribers outdid that of its top ten competitors. [10] The fear is that with their overwhelming market shares, giant ISP's may squeeze out smaller competitors and thereafter inflate service prices. Governmental regulation in the form of anti-trust policy is often suggested as a suggestion. But is this an effective

solution?

Not for Ronald Coase, the 1991 Nobel laureate in economics, who once said, "All solutions have costs and there is no reason to suppose that government regulation is called for simply because the problem is not well handled by the market or the firm". [4] One version of the Coase theorem states if transaction costs are zero (i.e., if the parties involved are able to make any agreement that is in the mutual benefit of the parties), an economically efficient outcome will be reached regardless of any initial definition of property rights. For example, in the case of pollution, if left alone to bargain, both the polluter and polluter will reach an economically efficient settlement, regardless of their initial entitlements.

The chief criticism of Coase Theorem is that in reality all transactions entail cost. For example, Arrow (1969) [2] demonstrated that there is a priori no market where the transaction cost is zero. However, others have argued that at the least Coase showed that for some problems there is no fixed rule or best regulation that will generate an economically efficient solution. [1]

3. Elements of A Proposed Internet Self-Regulatory Framework

The lessons learned from the extended discussions above indicate that the most important elements of a proposed self-governance framework for electronic commerce may be referred to as "electronic commerce interest groups" (ECIG), representing the interests of the various members of the electronic commerce community. The chief beneficiaries of such self-governance will be the Internet users and service providers.

One ECIG crucial for self-regulation will be a Commercial ECIG, an on-line chamber of commerce. The Commercial ECIG will enable e-merchants to act in concert to safeguard their commercial interests while the diversity of opinions and modes of business within the ECIG will prevent them from developing into a self-perpetuating monopoly. In many circumstances, the commercial ECIG may also resolve commercial disputes among its members in the form of alternative dispute resolutions, to avoid the high costs and long delays of the traditional judicial systems.

Another "interest groups" should be a Professional ECIG akin to the professional societies in the real-life community, such as Medical and Bar Associations. These professional bodies set the crucial standards for their members, as they are in the best position to know what is sound for the healthy development of their trades. Electronic commerce today is highly specialized, just as the regular working world. The hardware technicians, the software designers, the chat room moderators and the on-line auctioneers should all establish their professional associations, much like the medieval masters and their guilds. The professional ECIG may, for example, adjudge cases of breaches in professional ethics.

Yet another, and probably the largest, ECIG is the Consumers ECIG, which is made up of electronic commerce consumers. As a consumer advocacy group, this ECIG should act as a watchdog in ensuring the quality of service delivered to the consumers.

An Experts ECIG should also be formed including prominent electronic commerce academics and researchers who have contributed and continue to contribute significantly to the development of electronic commerce. The role of this ECIG is to render learned advice in charting the future course of the Internet.

A Workers ECIG, like a union, may also be formed to look after the welfare and benefits of those who rely on electronic commerce as their means of livelihood. A healthy functioning of this ECIG is crucial to the morale and hence the productivity of electronic commerce work force.

The last ECIG, the Development ECIG, takes care of the special needs of the developing countries, representing the interests of the majority of earth's population who yearn to accede to the Internet community.

It is important that the memberships in these ECIGs are not exclusive of each other. A member of the professional ECIG, i.e., a prominent electronic commerce practitioner, may indeed also be a member of the experts' ECIG. Relatedly, ECIG memberships are not limited to natural persons, but are open to companies, organizations, or other interested entities. However, each ECIG should devise rules for the eligibility of its membership. These ECIGs are also not exhaustive, and will evolve over time. As both the mode and speed of electronic commerce evolves, new ECIGs may be formed, and some or all of the existing ECIG may be replaced. The ECIGs should be formed at local, national, regional and international levels.

The overall governance structure of electronic commerce can best be based on so-called informal consultations among the various ECIGs. The informality of decision-making by informal consultations preserves the great Internet tradition of "off-handedness" and casualness which has been vital to the continuing survival of the Internet, while providing a flexible means of resolving problems or seizing opportunity as an online community. In addition to real-life meetings, the informal consultations may be held continuously via electronic means. In this way, issues may be brought to the electronic bulletin boards in a less confrontational manner. It is hoped that sound and practical policy will sublimate from the benefits of informal consultations, much as they have been so throughout the history of the Internet. A conceptual framework of interactions by informal consultation among the various ECIGs is depicted in Figure 1.



Figure 1: Conceptual depiction of a self-governance framework for electronic commerce

Criticisms may be voiced on such a self-governance system. For example, the system lacks a enforcing authorities (such as governments), and may hence be ineffective in handling serious challenges, either technical or policy, to electronic commerce. It should be kept in mind, however, that the electronic commerce community are reputedly quite proactive and would more readily rise up to challenges or accept responsibility, which is the basis for the self-governing framework is proposed for electronic commerce. Besides, just as in an off-line community, those who broke the ECIG rules, though not sanctioned by law, will often face alienation, ostracization, or outright expulsion.

4. Conclusions

The present paper discusses some of the policy, ethical and economical concerns of the Internet and then proposes a self-governance structure for electronic commerce based on policy formulation through informal consultations among the various electronic commerce interest groups. The self-governance framework proposed is not a perfect one, and will require constant refinement. It is, nevertheless, a baby step toward responsible governance of electronic commerce.

References

[1] Anonymous. *The Swedes Get It Right*, http://www.best.com/ ~ddfr/Academic/Coase_World.html, 1999, accessed 27 September 2003.

[2] Arrows, K. Readings in Welfare Economics, 1969.

[3] BoardWatch. *ISP Directory. BoardWatch Magazine*. Spring 1999 edition, http://boardwatch. internet.com/isp/index.html, 1999, accessed 27 September 2003].

[4] Coase, R.H. "The Problem of Social Cost," *Journal of Law and Economics*, 1960, 3, 1-44.

[5] Computer Information Network and Internet Security, Protection and Management Regulations of December 1997.

[6] European Union. EU Directive 95/46/EC, 1995.

[7] European Union. EU ISDN Directive, 1997

[8] German Information and Communications Act of August 1997.

[9] International Telecommunication Union. (1997). *GTLD Memorandum of Understanding*, http://www.itu.int/net-itu/gtld-mou/gTLD-MoU.htm, 1997, accessed 27 September 2003.

[10] International Telecommunication Union. "To Regulate Or Not To Regulate," *Challenges to the Network: Internet for Development*, 1999, 133, Geneva: International Telecommunication Union.

[11] National Telecommunication and Information Administration. *Proposal for Domain Name System Reform Policy*, http://www.ntia.doc.gov/ntiahome/domainname/6_5_ 98dns.htm, 1998, accessed 27 September 2003.

[12] Oh, E.S., Parikh, V. & Barruffi, G. "Toward Internet Self-Regulation: A Survey of Ethical Models," pp. 676-682, *Proceedings of the 20th Pacific Telecommunications Conference*, 1998, 676-682, Honolulu: Pacific Telecommunications Council.

[13] Organisation of Economic Cooperation and Development. *OECD Privacy Guidelines*, adopted by the OECD Council on 23 September 1980.

Note: The full paper is available from the CD of conference proceedings.