Open source and public health: a contribution to OSHCA 2001.

John Lindsay Reader in Information Systems Design Kingston University

Chair, British Computer Society Developing Countries Specialist Group Information for Development Forum.

Informatics professionals are a minority within health services, those interested in the issues of resource constrained economies a smaller minority and those with a perspective that open systems, and in particular open source has a special contribution to make, a minority within two minorities. Nothing new there then.

The British Government's Department for International Development white paper Globalisation and development www.globalisation.gov.uk provides us with some interesting opportunities.

"o Promote better health and education for poor people, and harness the new information and communications technologies to share skills and knowledge with developing countries." quote.

is a policy objective.

So we have three challenges: what do we know how to do, how do we know we are doing, what do we know we have done? If we are making an argument about open source we are cutting against the dominant current thread and therefore have a further responsibility.

It sets up a commission on Intellectual Property Rights. Both Tony Blair and Clare Short have emphasised that for the poor to have rights, they also have obligations. It doesn't suggest that if people want their property protected by actions of states then they incur obligations. This is the section where would want most clearly to elaborate our principles and policies. Intellectual property obligations will be incurred should a right be demanded and defended.

Information for public health seems a special case. In the white paper the concept of an international public good is created. While it might be true that for depletable and excludable resources it might be that symmetric pricing through competition but this cannot apply to non depletable and non excludable resources. Software seems to exhibit in an exemplary manner these properties. We need also to distinguish, seeing the category has been created, a private good, then we need to distinguish private and public good externalities. This is particularly the case in health for it is water, waste and shit which evidence the positive and negative properties of goods and externalities. The white paper proposes a world of effective government and efficient markets. Fine. What is the market clearing rate of shit? We have here all we need for an elegant model. If interested in this thread it is explored further in the project strengthening the knowledge and information systems of the urban poor, on www.communityzero.com/kisup.

"o Help focus more of the UK and global research effort on the needs of the poor, and make intellectual property regimes work better for poor people." quote.

This seems another formulation of the issue, for what we know about research is the result of the organisation of knowledge. When considering health rather than medicine, it seems to me that I have an obligation towards my own health. I have to know some things. I'm not sure what those things are, or how they change, but I also have an obligation to what happens at my front door (however that object is defined – shall we call it a threshold).

I'd like to make a distinction between medicine, when I recognise that I have a deficiency and I then make an effort to go somewhere so that someone else may make an intervention on my behalf (I haven't abrogated responsibility for my own part of the contract, but I have made an approach) and health. Medical systems might be quite properly concerned with a professional and political system where the subject takes on the properties of an object. (Though of course I will doubt this but as I don't know the substantive literature, I'll open the door.) Health systems retain the subjectivity of the subject and the obligation of intersubjectivity with the community.

This means that research is not only the property of the researchers but of the communities. How does the community know what is true, right and good for itself? In small rural communities these issues might be tractable, but in the world cities in which more than half the world's population now lives, I'm afraid it seems to me that we have no global knowledge.

In promoting open source we now have a matrix of obligation from when the application meets the data, to the information and the action, to the programme and the theory, to the record and the result. Or what I call an information architecture of primitives, protocols, rules, models, laws, theories, or containers and contents. Because we are both professionals and citizens we have a further contribution to make for we are both the sender and the receiver. We understand the whole process, the address, the format protocol and the message.

As we move more to electronic health and electronic commerce the modelling of the business process and the contract of obligation is going to become more complex. The idea of open government, government direct, life long learning, is to empower the citizen. The idea of electronic commerce is to leverage out the cost of transaction thus facilitating the flow of goods. In order to enable this the British Government set up information age champions in its departments.

We proposed in our contribution to the consultation on the white paper international information development resource champions (idrc) in order to ensure that pro poor policies achieve international public goods. Given we here today are a minority within two minorities, perhaps our task is to seek these champions out and put them in touch with one another?