



Cloud Computing: The Next Computing Paradigm?

CSISAC comments on Cloud Computing: Portability, Competition, Innovation

Thank you to the OECD ICCP committee for giving us the opportunity to present our views on this important panel. Civil Society is still discussing the implications of the relatively new 'Cloud Computing' phenomenon, and no doubt you will hear much more from us on this subject in the coming months.

However, we have expressed a number of concerns and recommendations in our Civil Society Seoul Declaration and Background paper prepared for the Ministerial Meeting on The Future of the Internet Economy. Most of these are relevant to 'cloud computing', the buzz-name for services and software applications that are run and controlled from a central remote server and accessed by end users via the Internet on their computers, net books or mobile phones. The software as service applications that are already widely used, such as web mail and social networking applications, illustrate some of our concerns.

In the very short time available, I will address the following three issues relevant to this panel:

Access and development:

Cloud computing has interesting implications and potential for developing countries. For example, our steering committee member the Association for Progressive Communications reports about an initiative to use cloud computing to help universities and public libraries in Africa adopt open source integrated library systems, a transition they are struggling with as they lack local technical support. The concern in this case was that using cloud computing might reduce incentives for developing ICT capacity at the local level. Therefore it is important to consider cloud computing as a means that can be used by innovators in the south to provide products and services designed to meet local needs and stimulate innovation in developing countries. It should not be a substitute for local development of applications, services, programmers or ICT experts.

Equally important, cloud computing is dependent on high broadband speeds and affordable prices. So there is a real risk that the existing digital divide will become an abyss, as the majority of users in developing countries, particularly Africa and large parts of Latin America, continue to depend on poor quality, high cost broadband. There is also a divide that will become deeper in OECD countries. For example, one only has to look at the statistical data for internet access in the EU countries, to see that there are still very large numbers of people that are not connected, and in particular those on low incomes, the elderly or the disabled that would stand to gain the most from e-government service provisions. Some countries are being proactive in developing universal access policies for broadband, for example Australia and the UK. However, broadband readiness for cloud computing should be a global policy issue, but as far as we are aware it is being little discussed in the context of cloud computing.

Concentration of power, interoperability and open standards:

The ability to share, communicate or transfer data between cloud based applications, and switch providers, is essential for ensuring healthy competition and continued innovation. Yet this is certainly not the case with many of the widely used Web 2.0 applications:

The following is from an actual conversation reported to us:

“APPLE SUPPORT: “You want to sync your Hotmail mail and calendar account from Microsoft to your Apple iPhone and sync that to Apple’s MobileMe so you and your wife can share personal calendars? Sorry, but we don’t have an answer as to how to do it. And Microsoft won’t help you either”

Equally, important is the need for open standards. Open standards help to eliminate barriers to entry and allow for full and healthy competition.

CSISAC affirmed in its Seoul Declaration *“Standard making processes should be open and should encourage competition. This promotes innovation and development.” We further emphasized, “New forms of media and applications are emerging that challenge old paradigms and enable broader public participation. At the same time, dominant Internet firms are moving to consolidate their control over the Internet. It is vitally important for the OECD to develop a better understanding of the challenges industry consolidations pose to the open Internet.”*

Yet, one of the possible scenarios is that cloud services will get so proprietary that your data will not be transferable from one proprietary cloud to the other. And such services will be concentrated in the hands of a few big players. In fact, to us it looks like this is already happening – there are three big players in the cloud computing multi-service business at the moment: Amazon, Google and Microsoft. All of them are also sellers of services to all sorts of consumers. So even if they rent some of their server capacity to other providers, they will also be competing with them for end user attention. Is the wolf in charge of the sheep?

Some of our constituents are rightly concerned that the costs, including connectivity charges and bandwidth, and the disadvantages of the basic cloud model are not getting enough attention. This model, they argue, suits the big companies since they can develop different business models and likely develop rent-seeking positions. So unless governments consider and adopt policies to avoid such a scenario, cloud computing might be heading the wrong way.

Consumer-related issues.

Finally a few words on consumer related issues, which are mentioned briefly in the background paper provided by the ICCP. These issues in our view are vitally important for the development of cloud computing services. Consumers may find it increasingly difficult to ascertain who their main contractor is, where this contractor is based and therefore what laws apply when things go wrong? Whose liability is it when things go wrong? What means of communication and redress exist? There is also the issue of basic customer service, not just for individual consumers, but also Small Medium Enterprises and organizations. Here’s an example from one of our stakeholders, who said:

“In my practical experience: we paid for a service from Google to filter spam in our email system, the same filter used in Google mail. When we ran into trouble, I naturally mailed tech support thinking we would be up and running in no

time...but I got no response. Two years, near a dozen attempts later, we have basically given up and written off the money. The nearest thing to a response was an automated email directing us to yet another inhuman interface”

Consumer protection laws differ around the world, and global cloud-based services will necessitate a different approach, that is not fully addressed in existing guidelines and international agreements. We realise that consumer policy comes within the remit of the OECD Committee on Consumer Policy, and urge the two committees to work together, and these issues cannot be considered in silos. We also suggest that the OECD policy frameworks intended to protect consumers in a world of transborder data flows, including the Privacy Guidelines and the e-Commerce Guidelines, clearly should apply to cloud computing services.

Finally, the privacy and security requirements for cloud computing services are a serious challenge that regulators and legislatures must tackle. For example, EPIC has formally asked the US Federal Trade Commission to open an investigation to determine "the adequacy of privacy and security safeguards of Google cloud computing services." Computer researchers and security experts issued a report, supporting EPIC's concerns. The FTC has opened an investigation and cited the EPIC complaint as an example of its efforts to be at the forefront of emerging privacy issues, but there is still no outcome.

In conclusion

These are briefly some of our main concerns connected with issues discussed by this panel. We are fine-tuning our own positions on this wide-ranging development. We welcome further discussion with governments and other stakeholders on the essential issues related to cloud computing, such as data portability, consumer control over data, universal access to broadband, standards, interoperability, jurisdictions and so on. We think that ultimately a set of universal principles for cloud computing would need to be developed and agreed upon. From our perspective, such principles should build on current OECD policy frameworks and put people and communities first to enrich the life of society as a whole. This includes education, collaboration, multiple business models, and entertainment, among others. In order to achieve this, finding the right balance between consumer/community and business interests is vital.

References:

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