Abstract

Since the revolution in information and communications technologies, there have been plenty of pundits offering predictions about how the Internet will change the world. Beyond these predictions though, we have little hard data about the impact that for example web sites are having on social-ecological governance. In the domain of governance, there is a deep divide between optimists (e.g. Rushkoff 2003, Noveck 2009) who believe that the Internet will revolutionize government for better and herald a new age of mass participation; and the pessimists (e.g. Gladwell 2010, Morozov 2012) who argue instead that online engagement with politics is shallow and that states are likely to use these tools to reinforce the status quo.
One of the reasons for this divide is that there is still no clear case of the internet being used to govern a complex problem. Sites exist to carry out governance activities that are related to such problems, for example, web crawlers are used to monitor the outbreak of health pandemics (Galaz 2009), but other aspects of governance, such as policy making, are generally outside their remit. Furthermore, with regards to no major complex-problem can the impact of the Internet yet be said to have decisively altered the way we govern. Studies based on empirical evidence tend either to employ a very narrow conception of governance that ignore complexity and ‘wickedness’ (Head 2008), and/or, focus on a very narrow selection of cases (e.g. just looking at Twitter, Gladwell 2010).
There is a need therefore, for empirical work looking at what impacts web sites are actually having on governance already, and which captures the enormous diversity of such sites. In this study, I look at one hundred websites that are already being used to contribute to the governance of complex problems. The selection of cases is based on a broad conception of governance that includes activities such as data gathering and information sharing as well as more traditional governance activities like creating and implementing. This collection of cases is a comprehensive overview of the ways in which web sites are interfacing with governance and includes the most prominent sites engaged in these activities (such as Wikipedia, Avaaz, and Facebook).
The 100 sites are categorized in terms of the kinds of activities they carry out in order to reveal those areas of governance where they make the biggest contribution and areas where they are largely inactive. They are also assessed in terms of their impact on governance, and in terms of their strengths and weaknesses with regards to handling complex problems based on criteria developed in earlier work (Tjornbo, 2013). The study reveals areas of strength and weakness and makes suggestions for how existing practices could be modified for greater
results. There is still not enough work being done to understand how the internet could strengthen the governance of complex problems, this is the first step in a larger research effort to answer that question

**Keywords:** Technology, Governance, Global Change