

# Web 2.0 for Collaborative Production

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## ABSTRACT

In this paper, we explore the possibilities of using Web 2.0 for collaborative production of government services in the UK. Can co-production be used to deliver eGovernment services in the UK? What kind of services could use Web 2.0-supported co-production? Could Web 2.0 help to promote cooperation? If Web 2.0 and collaborative production can be usefully allied, what are the potential advantages, risks, and barriers? We give a brief overview of the current territory and outline a study to investigate.

## Categories and Subject Descriptors

K.4.1 [Computers and Society]: Public Policy Issues

## General Terms

Management, Measurement, Design, Experimentation, Human Factors, Legal Aspects

## Keywords

Collaboration, co-production, Gov 2.0, Web 2.0. eGovernment

## 1. INTRODUCTION

Tim O'Reilly is widely credited with popularising the term Web 2.0 to describe online platforms in which user inputs and interaction *create* the sites' outputs, both in terms of content and value. O'Reilly gives an end to end definition of this term, from the lightweight business model of the development company to the "long tail" reach of Web 2.0 sites beyond their visitors [13]. For this paper, two factors are important:

1. The value of Web 2.0 sites is created by the contributions and collaborations of users, thus they are in some sort of partnership with the sites' "owners", especially in terms of the quality of resulting content and sustainability of the site.
2. Web 2.0 sites are platforms, designed to enable and facilitate collaboration.

Many writers have explored the use of Web 2.0 sites, especially social networking sites, for collaborative policy-making [e.g. 12; 16]. Further, various writers, including O'Reilly [7, 8] have

suggested that Web 2.0 platforms are a reasonable model for modern government: Gov 2.0.

Over the last decade or so, the UK government has had a programme of providing services online, currently centred round [direct.gov.uk](http://direct.gov.uk) and [businesslink.gov.uk](http://businesslink.gov.uk). Recently there have been moves, driven by the open data agenda, towards publishing data for use by third parties at [open.gov.uk](http://open.gov.uk). There is now a growing body of applications demonstrating how the data can be used. Similar initiatives emerge at devolved and, especially, local levels.

The terms collaborative production and co-production (terms we use interchangeably here) are used to describe a deeper level of collaboration: "Co-production means delivering public services in an equal and reciprocal relationship between professionals, people using services, their families and their neighbours. Where activities are co-produced in this way, both services and neighbourhoods become far more effective agents of change." [3]. An overview of current ideas and implementations of co-production is gathered in the Local Authorities & Research Councils' Initiative (LARCI) summary report [1].

The current political fashion across the political spectrum for co-production is reflected in the Prime Minister's ideas about *Big Society*: "We should not be naive enough to think that simply if government rolls back and does less, then miraculously society will spring up and do more...The truth is we need a government that helps to build a big society." [4]. This dovetails nicely with Gov 2.0 ideas about government as enablers and providers of platforms. It could also be seen as a continuation of the previous government's ideas. However, case studies of *co-production* come primarily from social programmes, centred on human contact in face to face settings, such as time banks, community justice and peer support groups for health and addiction problems [1, 15]. Users of these services (and arguably most government services) tend to come from socio-economic groups least likely to use or be interested in eGovernment services [6]. How could Web 2.0 support their involvement and increase motivation to cooperate and join in?

## 2. OBJECTIVE

Our overall objective is to develop a better understanding of the potential to use Web 2.0 to implement or support co-production of public services in the UK. It has been suggested that co-production can improve the efficiency and effectiveness of service delivery: "The key argument of co-production is that we can achieve an even higher level of outcome than by traditional service provision or self-help if we combine both the inputs of the public agency and the users and communities" [9].

This suggests attractive advantages, especially as Government plans necessitate cutting public services right back to reduce spending. Well implemented co-production could increase both efficiency and especially efficacy, and enhance the relationship between the partners involved: potentially public administrations, citizens, businesses and NGOs.

### 3. TRANSFORMING GOVERNMENT

True co-production is user-centric and requires a transformation of government: process and structure. In business, it has been emphasised how models, organisational structures, staff attitudes and technological facilities need to be re-designed and re-configured – transformed – in order to successfully realise user-centric innovation approaches, (cf. Chesbrough's Open Innovation Paradigm [5]). User-centricity is a recognised challenge in providing eGovernment services [10]. In the next stage: “‘everyday eGovernment’ based on everyday technologies... will also be driven by a completely new upside down business model starting from the needs of citizens, fuelled by freely available government and other data, dependent on multiple actors some of whom may work for free, and which is often small scale and inexpensive. New forms of trust and privacy will need to be developed and institutionalised.” [11] See also Ostrom's insights into cooperative groups' need to create and control their own rules [14]. How should UK Government (local, devolved and national) address this challenge?

### 4. RESEARCH

Edinburgh Napier University's International Teledemocracy Centre (ITC) has been investigating innovative eGovernance systems since 1999, including eGovernment to support effective, accessible and transparent government and eDemocracy/eParticipation pilots, using Internet technologies to strengthen public understanding and participation in democratic decision-making. Our parent group, the Centre for Social Informatics (CSI)<sup>1</sup>, have been investigating information systems to support collaboration within both the commercial and public sectors.

We propose to survey collaborative production initiatives to investigate the possibilities for integrating Web 2.0 and sharing good practice across the UK, with international comparison where possible. The survey would be based in a literature review, case study analysis and interviews with stakeholders. We would start by investigating the varying definitions and historical uses of *collaborative* (or *co-*) *production* with relevance to the UK context and identify criteria to use as the basis for building a database of case studies and analysis frameworks. Current questions include: what Web 2.0 technologies have been used, what metrics for efficiency and effectiveness are used and how (or if) a project has managed to move to sustainable operation. Stakeholders (and roles) will be identified, along with the risks and barriers, drivers and motivations that they face. Some cases will be analysed in depth and we will interview people who play identified roles, both within and outside the public sector.

Our goal is to identify and understand the factors for success and sustainability, especially in terms of the economic and political context. Factors could include how (or if) the business case was justified, whether there are there any tensions between cost

<sup>1</sup> <http://itc.napier.ac.uk/> and <http://www.csi.napier.ac.uk/>

savings and citizen engagement [2], who makes the decision to start (or stop) collaborative production and what areas are favoured and on what basis. We hypothesise that certain areas of government are more susceptible to co-production and Web 2.0 support, and more likely to succeed, than others. We also hypothesise that projects that include understanding of the risks that they face, and plan responses, will be more robust. Finally, we expect that successful government involvement will require a flexible approach as co-produced services are collaboratively reshaped by the users.

These are current ideas and we would work closely with organisations and initiatives investigating these areas, such as LARCI, NESTA and NEF<sup>2</sup>, and studies funded by the European Commission, to assess and pilot eGovernment and eParticipation initiatives<sup>3</sup>. We are also aware of relevant initiatives from governments and citizens across the globe and international research and practice communities following relevant themes. For example, understanding the motivations and social norms that govern cooperation and collective action is essential and Ostrom's work on common pool resources can help us to identify which contextual variables enhance and which discourage cooperation [14].

### 5. CONCLUSIONS

We need to be able to identify the characteristics that would enable successful and sustainable co-production, including the best of use of technology. We also need to find ways to measure efficiency and effectiveness, for example on social, economic and political levels. In particular guidance is needed about the feasibility of using co-production in specific services and identifying possible matches with eGovernment services or other services that can benefit from Web 2.0.

Our study is focused on innovative government, leading to increased efficiency and effectiveness of operations. However, we anticipate its relevance to both commercial and non-profit organisations and are most interested in its impact on citizens. Co-production has the potential to increase people's engagement with society and improve their quality of life, perhaps regaining control over aspects of their life and helping others in the process. We are keen to identify any aspects that could increase exclusion and find ways to tackle these.

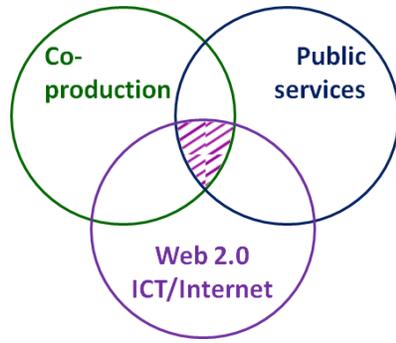
This study would support the Digital Economy objectives by drawing together current research and practice, making this available as a data source and identifying factors to support risk management and successful implementation. Governing bodies seem keen to implement these ideas; our study could have a real impact on their endeavours.

### 6. REFERENCES

See <http://itc.napier.ac.uk/Gov2/> for paper with references.

<sup>2</sup> Local Authorities & Research Councils' Initiative  
<http://www.rcuk.ac.uk/innovation/partnership/larci/>  
NESTA <http://www.nesta.org.uk/>  
New Economics Foundation <http://www.neweconomics.org/>

<sup>3</sup> [http://ec.europa.eu/information\\_society/activities/egovernment/](http://ec.europa.eu/information_society/activities/egovernment/)  
[http://ec.europa.eu/information\\_society/activities/egovernment/policy/eiparticipation/](http://ec.europa.eu/information_society/activities/egovernment/policy/eiparticipation/)



**Figure 1: Focus of study**