# I&N Partners' Meeting – Rio
# December 11-13, 2010

| Time | Day 1 – Dec. 11, 2012 |
|---|---|
| 8:30-9:30 | **Introduction – Why we are here** |
| 9:30-11:00 | **Session 1: The Networked Landscape in the South** Mike Jensen and Steve Song/ Helani Galpaya, Alison Gilwald, Roxana Barrantes |
| 11:00-11:15 | Break |
| 11:15-12:30 | **Session 2: Open Governance and Rights** Emmanuel Lallana, Elisa Calza/Tim Davies, Carly Nyst, Robert Guerra, Nagla Rizk |
| 12:30-1:30 | Lunch |
| 1:30-3:00 | **Session 3: Learning and Science** Cheryl Hodgkinson-Williams, Gustavo Fischman, Francois Grey, Eve Gray |
| 3:00-3:15 | Break |
| 3:15-5:00 | **Session 4: Open Business and IP** Ronaldo Lemos, Jeremy Debeer, Sunil Abraham, Joe Karaganis |

| Time | Day 2 – Dec. 12, 2012 |
|---|---|
| 9:00-10:45 | **Exploring Openness and Interdisciplinarity** |
| 10:45-11:00 | Break |
| 11:00-12:00 | **Exploring Openness and Interdisciplinarity** |
| 12:00-1:30 | Lunch |
| 1:30-2:45 | **How to Build research capacity (SIRCA) and foster innovation (SEED Alliance)?** |
| 2:45-3:00 | Break |
| 3:00-5:00 | **Exploring Grants + (Intro to DECI)** |

| Time | Day 3 – Dec. 13, 2012 |
|---|---|
| 9:00-10:45 | **Planning Ahead and Working Together** |
| 10:45-11:00 | Break |
| 11:00-12:00 | **Planning Ahead and Working Together** |
| 12:00-1:30 | Lunch |

# Information and Networks Advisors

## **Francois Bar -** Methods/Openness

*University of Southern California*

BIO: François Bar is Associate Professor of Communication in the Annenberg School for Communication & Journalism at the University of Southern California. He is a steering committee member of the Annenberg Research Network on International Communication. His research and teaching focus on the social and economic impacts of information technologies, with a specific concentration on telecommunication policy, user-driven innovation and technology appropriation. His most recent work examines the impact of information technology for development, in places ranging from East Africa to Latin America.

His work has been published in books of collected studies, in policy reports, and in such journals as Information Technologies and International Development, Communications & Strategies, Telecommunications Policy, The Information Society, Media, Culture & Society, Organization Science, Infrastructure Economics and Policy, Communications & Strategies, Réseaux, and the International Journal of Technology Management. He is co-Editor in Chief of Information Technologies and International Development (ITID).

## **George Sciadas -** Quantitative methods

*Statistics Canada*

BIO: George Sciadas has a keen interest in all matters related to the Information Society. He particularly enjoys and appreciates numbers, and works at Statistics Canada. George has also worked at the OECD, the UNESCO Institute for Statistics, the International Development Research Centre, and has been the Scientific Director for Orbicom's international Digital Divide project. He collaborates extensively with UN bodies, development agencies, national statistical offices in developing countries, NGOs, and numerous researchers globally. George holds a PhD in Economics from McGill University and taught for many years at McGill, Concordia, and Carleton universities.

## **Ineke Buskens -** Gender/Methods

*Gender Research in Africa and the Middle East into ICTs for Empowerment*

BIO: Ineke Buskens is an international gender, research and facilitation consultant living in the Western Cape, South Africa. Having been one of the pioneers of women's studies in the seventies in Europe, she currently leads the GRACE (Gender Research into Information Communication Technology for Empowerment) Network involving 28 research teams in 18 countries in Africa and the Middle East. Before she started her company Research for the Future in 1996, she was Head of the Centre for Research Methodology at the Human Sciences Research Council in Pretoria, South Africa for five years. In her research she focuses on emancipatory approaches that are aligned with a sustainable, just and loving world, in her research training on bringing out the genius in every participant, in her facilitation work on gender awareness and authentic collaboration. Ineke is a student in Ramtha's School of Enlightenment, Yelm-Washington, USA and this journey helps her to become all that she can be.

## **Steven Song -** Openness/Technology

*Village Telco*

BIO: Steve song is the founder of Village Telco, a social enterprise that builds low-cost WiFi mesh VoIP technologies to deliver affordable voice and Internet in underserviced areas. Prior to this, Steve spent three years as a fellow at the Shuttleworth Foundation working on telecommunications and access issues in South Africa. Before joining the Foundation, he spent 10 years at the International Development Research Centre in Ottawa funding and engaging in research into Information and Communication Technology for Development (ICT4D) issues, mostly in Africa.

His blog covers a variety of issues that interest me from telecoms in Africa to Open approaches, to understanding in general how our lives and livelihoods are being reshaped by telecommunications and the Internet.

# Information and Networks Partners and Attendees

**Alison Gilwald**

University of Cape Town Graduate School of Business, Management of Infrastructure Reform and Regulation
BIO: *Alison Gillwald is Executive Director of Research ICT Africa and 18 African-country ICT policy and regulation research network. She is also an Adjunct Professor at the University of Cape Town's Graduate School of Business, Management of Infrastructure Reform and Regulation programme. Prior to this she was Associate Professor at the Witwatersrand University Graduate School of Public and Development Management, where she founded the Learning Information Networking and Knowledge (LINK) Centre in 1999 with the purpose of fast tracking ICT policy and regulatory training in Southern Africa. She did so after serving a term on the founding Council of the South African Telecommunications Regulatory Authority (SATRA). Before joining SATRA in 1997 she was responsible for establishing the Independent Broadcasting Authority's Policy Department. From 2000-2002 she chaired the National Digital Advisory Body appointed by the Minister of Communication. She has served on the board of the public broadcaster, the South African Broadcasting Corporation, AVUSA, Womensnet and Media Monitoring Project. She has consulted to infoDev, World Bank, the African Development Bank, the Government of Mauritius, International Telecommunications Union, Commonwealth Telecommunications Organisation, United Nations Department of Economic and Social Affairs, the South African Presidency, Treasury, Department of Trade and Industry, and Competition Commission. She was founding editor of the Southern African Journal of Information and Communication, and is published in the areas of telecommunications and broadcasting policy and regulation, gender and politics more broadly and is regular guest editor on special annual African issue of international policy journal Info*.

106231 Evidence-based ICT Policy for Development and Innovation
Responsible Officer: Khaled
Timeframe: December 2010-December 2013
Amount: $922,000
Institution: Research ICT Africa

Abstract:
*The cost of access to information and communication technologies in Africa remains the major impediment to the participation of Africans in the networked society. While Africa is the region with the fastest growing number of mobile phone subscribers in the world, only a few African countries have achieved positive network externalities which have resulted in innovations for the poor such as mobile money transfers for the unbanked and improved access to market information for marginalised farmers.*

*Research ICT Africa (RIA) is a network of African scholars that has effectively addressed research gaps in the area of ICT policy and regulations and has developed the data analysis necessary for evidence based policy making.*
*RIA has interacted with policy makers and regulators to promote retail price reductions in telecommunications.*

*In this research cycle, RIA will build on findings and policy successes from previous phases to address new issues and developments. RIA will focus on adapting and creating new analytical tools and training the network of university researchers in analytical skills, writing, publishing and policy advocacy. Amongst the research issues are mobile money transfer, informal sector use of ICTs, bottlenecks in expanding market competition for new entrants and broadening affordable services to the underserved.*

**Ang Peng Hwa**
Singapore Internet Research Centre, Wee Kim Wee School of Communications and Information
Nanyang Technological University
BIO: *Ang Peng Hwa (Ph.D., Michigan State University; MA University of Southern California; LL.B., National University of Signapore) is Professor and Director of the Signapore Internet Research Centre at the Week Kim Wee School of Communication and Information, Nanyang Technological University. He researches social impact and law and policy issues around new media and the Internet. He is the author of 'Ordering Chaos: Regulating the Internet' (2005), which argues that the internet is being, will be, and should be regulated. In 2004, he was appointed by the UN Secretary General to the Working Group on Internet Governance. He later co-founded the Global Internet Governance Academic Network, and served as its inaugural Chair.*
(Joint presentation)
**Arul Chib**
Singapore Internet Research Center, Nanyang Technological University
BIO: *Arul Chib, PhD, is the assistant director of the Singapore Internet Research Center. Dr. Arul Chib examines the impact of development campaigns delivered via a range of innovative information and communication technologies (ICTD or ICT4D). Dr. Chib studies mobile phone healthcare systems, particularly in resource-constrained environments of developing countries. Dr. Chib won the 2011 Prosper.NET-Scopus Award for the use of ICTs for sustainable development. In March 2012, Dr. Chib, along with Dr. Roger Harris, released a new volume, 'Linking research to practice: Strengthening ICT for Development Research Capacity in Asia'.*

106618 Strengthening Information Society Research Capacity Alliance
Responsible Officer: Matt
Timeframe: September 2011-September 2013
Amount: $1,381,700
Institution: Nanyang Technological University

Abstract:
*The Strengthening Information Society Research Capacity Alliance (SIRCA) II project is a 24 month capacity building programme for young and emerging researchers in Africa, Asia, and Latin America who undertake information society and development research. It builds on the Strengthening ICT Research Capability in Asia (SIRCA) project, a highly successful program that sought to build the capacity of emerging researchers in Asia to perform high quality, rigorous and relevant ICT4D research. SIRCA II will award 15 research grants (5 in each region) through a competitive selection process and then provide the grantees sustained training and mentorship throughout their research experience. Each grantee will be assigned an experienced mentor who will collaboratively work with the grantee to develop and execute sound and interdisciplinary research for development. Grantees will also receive training in a variety of research and research-to-policy relevant areas as well as research dissemination opportunities.*

*The SIRCA II programme with its sustained, mentorship-based capacity building approach is needed and relevant for a variety of reasons. As witnessed in the precursor field, ICT4D, there is a disparity in the representation of "southern" research in the literature that pertains to information studies, particularly from an international development perspective. This disparity stems in part from the lack of research capacity in the south. For example, a recent study stated that Africa is home to only 2.3% of the world's researchers. Furthermore, research in this field often suffers from disciplinary silos and often speaks to "northern" interests.*

*Building the capacity of southern researchers to make a methodologically and theoretically strong contribution to the literature is critical to improving the quality and relevance of developing country research. Encouraging interdisciplinary research in an inter-regional network should also play a role in breaking silos. Finally the project will develop methodological toolkits and guidebooks that should help foster better quality evidence and aid emerging researchers in this dynamic field.*

**Carly Nyst**
Privacy International
BIO: *Carly directs PI's work in developing countries and the organisation's regional and international human rights advocacy. She was previously Legal Adviser to the United Nations Special Rapporteur on Extreme Poverty and Human Rights, and Visiting Scholar at the Columbia Law School's Human Rights Institute. Carly is an Australian-qualified lawyer who has worked in human rights law and advocacy at both national and international levels, both for civil society organisations and in private practice. She holds a MSc in International Relations from the London School of Economics, and Bachelors degrees in law and international relations from the University of Queensland, Australia*

107071 Protecting Privacy in an Increasingly Digital Developing World
Responsible Officer: Phet
Timeframe: October 2012-March 2014
Amount: $2,085,200
Institution: Privacy International

Abstract: This project will create the first global research network dedicated to improving privacy protection in the developing world. Rapid increases in the number of people online, as well as computer capacity, are making it possible for governments and the private sector to collect and share information on every facet of people's lives. Increasingly, these technological changes are outpacing the development of integral legislation for the protection of privacy rights.

The absence of appropriate privacy protections can lead to grave political problems. Privacy is considered critical for freedom of expression and political engagement. Without it, democracy can break down. Entire communities are also at risk when privacy isn't protected. History is fraught with examples of databases created to identify information on ethnicity, religion, colour, or even sexual orientation. This information, which is increasingly easy to collect digitally, could be used to discriminate against certain groups, or, in extreme circumstances, for targeted violence. The fact that different ethnic groups were identified as such on their national ID cards greatly facilitated the systematic killings during the Rwandan genocide.

This new digitally connected, information saturated reality requires national privacy legislation and enforcement to ensure citizens maintain their fundamental right to privacy. In developing countries, home to the greatest number of Internet and mobile users, such privacy protection is scarce. Furthermore, there is limited to no evidence based policy discourse regarding the need to balance this increase in data collection and storage with appropriate data protection and privacy safeguards.

This grant will seek to fill this evidence and policy void and work towards improving privacy protection in the developing world by facilitating evidence based policy dialogues through a research network. The network, entitled SAFEGUARD (Surveillance and Freedom: Global Understandings and Rights Development), will be comprised of 20 developing country research teams. The teams will be supported by Privacy International, a unique UK-based policy-research organization with an international network of experts in law, technology, and human rights.
More specifically, the network will generate evidence on national and regional level privacy issues in order to identify legislative gaps and obstacles as well as lack of implementation and enforcement. This research will also catalyse engagement in policy-making in order to advocate for greater protection and promotion of the right to privacy. Finally, this project will collaborate with national, regional and international governmental bodies to promote research findings, enhance participation of national and regional stakeholders in this policy area, and raise the profile of privacy issues in regional and international fora.

**Cheryl Hodgkinson-Williams**

Centre for Educational Technology

BIO: *Cheryl is an Associate Professor of information communication technologies (ICT) in education. She is the co-ordinator of the Mellon Scholarship programme, which sponsors colleagues from higher education institutions in Africa to attend a post graduate programme in ICTs in Education at UCT. Cheryl is also one of the lecturers on the MEd ICT in Education programme. She and CET learning designer, Andrew Deacon, teach the module Online Learning Design during which students produce an authentic online learning intervention to support teaching and learning in their own institutions. Cheryl and CET colleague, Dick Ngambi, teach the module Research Design for ICT in Education. Cheryl and Dick also taught the Learning, Cognition and Technology module in 2011.*

*In addition to her existing commitments, she was the project director for the open educational resources project (OER) at UCT and was one of the lead researchers in the Opening Scholarship project, both sponsored by the Shuttleworth Foundation. She has dedicated herself to supervising PhD and MEd students whilst also hosting the research seminar series, Research@CET. Cheryl's research interests lie in the areas of Online Learning Design, Open Educational Resources, and electronic portfolios.*

107311 Research on Open Educational Resources for Development ROER4D *Project idea

Responsible Officer: Matt

Timeframe: N/A

Amount: N/A

Institution: University of Cape Town

Abstract from PIM

This project will develop a global south research network on OERs in developing countries. A planning workshop was held in May 2012 to develop the research framework. The central

1 A Google search on “Open Educational Resources” returns over 23 million results.

research question is: How, in what circumstances, and for whom do different types of OER bring about increased accessibility, affordability, quality, efficacy and self-direction in the Global South? This includes a number of additional sub-questions including:

* In what ways, for whom, and in what contexts is the use of OER increasing the availability of and accessibility to Post-secondary education in the Global South?
* How, to what extent, for whom, and in what contexts is the use of OER increasing the affordability and/or efficiency of Post-secondary education in the Global South and how are (or might) these initiatives be sustained?
* In what ways, for whom, and in what contexts is the use of OER contributing to the enhancement of quality of materials, learning and teaching in Post-secondary education and the mechanisms to assure these in the Global South?
* How are government policies and regulations influencing the up-take of OER in the Global South and to what extent is this supported or counteracted by socio-economic, cultural, legal and institutional processes or regulations?
* When and in what contexts is the use of OER socially accepted and how, for whom, and in what contexts do OER contribute to increasing self-determination and participation of the Global South in Post-secondary education?

A workshop will be held in Jakarta in Jan 2013 to bring together the sub-project proposals and collaboratively work on the methodologies. There are currently nine sub-project proposals being considered at this workshop, three from each region.

The project structure combines the benefits of demand-driven research and the desire for comparative cross-case research. As determined in a planning meeting, the project funds for research will be split between an open call (75%), cross-cutting meta-analysis (15%), and reserving 10% for a flex funds for research on to-be-determined targeted emergent topics.

(Joint presentation)
**Elisa Calza**
UN-ECLAC
106286 Open Data for Public Policies in LAC
Responsible Officer: Fernando
Timeframe: June 2011-July 2013
Amount: $ 382,500.00; $300,500; $54,900(IDRC)
Institution: Comisión Económica para América Latina y el Caribe/Economic Commission for Latin America and the Caribbean/Commission économique pour l'Amérique latine et les Caraïbes; Brazilian Network Information Center - NIC.br/NIC.br

Abstract: Understanding an increasingly complex knowledge economy demands economic, social and environmental data from a wide range of sources. In many cases, however, these sources are dispersed, unstructured or simply unavailable, limiting their use by policymakers and society as a whole. Emerging practices relating to Open Data have shown that disseminating data over the Internet via open, accessible and structured formats has the potential to transform the way data are created, distributed and utilized (or re-utilized), with important implications for the design and implementation of public policy.
This project will explore how Open Data strategies can contribute to improve public policymaking in Latin America and the Caribbean. In particular, it will examine their potential to increase transparency and accountability around public policymaking; support new analyses of existing data; create new services; and foster more equitable development in key industries.
The project will do so by strengthening technical capacity to use Open Data within government agencies, observatories and research networks in the region. In particular, researchers will examine how Open Data strategies can contribute to policymaking that fosters more productive and knowledge-intensive industries. It is expected that effective Open Data initiatives will contribute to evidence-based policymaking and a more inclusive knowledge economy in Latin American, as well as other, developing countries.

**Tim Davies**
Practical Participation
BIO: *Tim Davies is a PhD student in the Web Science Doctoral Training Centre at the University of Southampton, UK, where his work looks at the impacts of open data on inclusive governance. He is research co-ordinator for the Web Foundation/IDRC 'Exploring the Emerging Impacts of Open Data in Developing Countries' project. He is on the advisory council of the Open Rights Group, a grassroots digital rights campaigning network in the UK, and has recently been involved in civil society participation in the Open Government Partnership and Internet Governance Forum, where he has worked to support youth engagement and e-participation. Tim lives in Oxford, UK.*

107075 Critical Perspectives on Open Government Data (*Awaiting approval)
Responsible Officer: Fernando
Timeframe: 30 months
Amount: $2,000,000
Institution: World Wide Web Foundation

Abstract: Releasing freely accessible, standardized and easily readable government data can increase transparency, efficiency, and accountability; foster greater civic participation; and promote new business opportunities. This push to release government data online is often referred to as the open government data movement. Worldwide, it is estimated that governments have already posted more than one million datasets on the internet. Although just a small fraction of these datasets is from developing countries, this is changing rapidly. Citizens in Brazil, Nepal, and Nigeria can now use publicly available government budget data to track and fight corruption. Developers and entrepreneurs across Latin America, Africa, and Asia can create web and mobile applications using government data on education, health, and crime, to promote smarter and more efficient local public services.

In the developed world, the case for open government data has been well documented. A recent study valued the re-use of public sector data generated information at 32 billion Euros in 2010 for the Eurozone. Another in the UK valued open government data's economic impact at 6 billion pounds per year. Moreover, qualitative evidence is emerging on the ability of open data to stem corruption and increase accountability confirming US Supreme Court judge Louis Brandeis' famous dictum: "sunlight is said to be the best of disinfectants". The impacts of the emerging open government data movement in the developing world are, however, significantly less clear.

It is possible, for example, that well-intentioned open data initiatives may cause adverse effects by exacerbating social or economic inequalities. Open data can favour well-resourced groups that are more capable of extracting value from the data for their own economic and political benefits. For instance, the digitization of land records in Bangalore has been used by commercial elites to find gaps in title and errors in documentation to gain ownership over land occupied by poor communities.
Despite the potential of open government data, rigorous evidence on the use, outcomes, and impact of these objectives remains scarce in the developing world. To ensure that open data initiatives effectively meet their targets of greater government accountability, efficiency and transparency, as well as create new economic opportunities for all segments of society, those responsible for funding and implementing these programs must understand emerging good practice as well as the varying impacts of open data in strikingly different social, economic, and cultural contexts.

This project will support the development of a research network to explore the emerging impacts of releasing open government data as a way to inform planned and on-going open data initiatives in developing countries. The network, administered by the World Wide Web Foundation, an organization that promotes and supports the development of an Internet that is open, usable, and valuable for everyone, with a dedicated focus to its use in developing countries, will include 18 partners in Latin America, Africa, and Asia. These partners will undertake case studies that will assess already existing initiatives, the challenges they propose to address, as well as emerging outcomes and impacts. Whenever possible, selected case studies in different regions will collaborate in specific thematic clusters, for instance: government budget monitoring and the local delivery of public services. The project will also develop cross-cutting data collection instruments to help explain if and how open data is bringing about change to developing countries. Finally, it will engage with policymakers at global and local levels to ensure development of robust evidence-based practice in this emerging policy area.

**Emmanuel Lallana**
Ideacorp
BIO: *Dr. Emmanuel C. Lallana is Chief Executive of ideacorp – an independent, non-profit, Philippine-based organization that is devoted to research, training, consulting and advocacy on ICT for Development (ICT4D). He was Project Leader/Principal Investigator, Pan Asia Network on eGovernance (PANeGOV). PANeGOV was an IDRC-funded, research initiative on the use of ICT in governance and citizen empowerment in Asia. Dr. Lallana was also Consultant, UNDP Asia Pacific Development Information Program (APDIP) and the UN Asia and Pacific Training Center for ICT for Development (APCICT). Under the latter's Academy of ICT Essentials for Asian Leaders, he has conducted trainings for government officials from developing Asia in India (Hyderabad), Korea (Incheon), Myanmar (Pyon Oo Lin), Afghanistan (Kabul) and Bhutan (Thimpu) on ICT Policy making. Dr Lallana was Visiting Professor, Asia-Europe Institute, University of Malaya, Kuala Lumpur, MY and Associate Professor, Department of Political Science, University of the Philippines – Diliman, Quezon City, PH.*

107074 Open Government Network *Project Idea
Responsible Officer: Phet
Timeframe: N/A
Amount: N/A
Institution: Ideacorp

Project Summary from proposal:

This project will seek to "understand" Open eGovernance through two types of research activities.

The first type is comparative research. The second type are (empirical) case studies, prototype development, and/or (theoretical) concept construction/development.

Below is a list of proposed Collaborative/Comparative Research topics that was developed through online consultations and a (face-to-face) research meeting of potential collaborators:

- New media and political mobilization: Identity-based movements in Asia, Latin America, and Africa
- ICT and political engagement among the urban poor
- OeGI over 2.0
- Media Structure, Regulation and Civic Discourse: A Cross Country Comparison of 'Old' and 'New' Media.

**Eve Gray**
University of Cape Town
BIO: *Eve is an Honorary Research Associate in the Centre for Educational Technology and an Associate of the IPR Policy Research Unit at the University of Cape Town. With a background in academic publishing, she brings to her research into Access to Knowledge an awareness of the value of professional skills and an understanding of the strategic importance of effective dissemination. Eve works with digital media to transcend both the limitations of the traditional publishing models and the knowledge hierarchies that consign developing world knowledge to the margins. She works in a number of projects relating to the communication and publication of African research, including the IDRC-funded Scholarly Communication in Africa Programme and the Ecology of Access to Educational Material in Developing World Universities.*

105716 Scholarly Communication in Africa Programme
Responsible Officer: Khaled
Timeframe: February 2010-February 2013
Amount: $1,679,800
Institution: Centre for Educational Technology

Abstract: The Internet and new information and communication technologies (ICTs) have changed the way research is being conducted and disseminated. Open access paradigms have challenged the conventional business model of scholarly publishing, offering developing countries an opportunity to make their scholarly contribution more visible. This grant will allow researchers to work closely with four universities in Southern Africa to test best practices and new affordable business models in online scholarly publishing, including institutional repositories, online journals and digital archives. The project is based on the recognition that a research environment that operates online can broaden the definition of scholarly communication to include not only journals and books as recognized in the traditional scholarly publishing system, but also non-peer-reviewed academic publications and grey literature arising from informal communications such as blogs and wikis. The project will support the emergence of a community of practice in the four universities, and further research on three themes: policy and infrastructure for open access publishing; economic aspects of open access publishing (sustainability, licensing models); and modalities for developing scholarly performance metrics.

**Francois Grey**

Centre for Citizen Science

Bio: *Francois is passionate about advancing Open Science, specifically Citizen Cyberscience, as the focus for his Shuttleworth Foundation Fellowship. Citizen cyberscience is a collective term for a diverse, grass-roots movement that is enabling ordinary citizens to participate in real scientific research thanks to the Web. Practically anyone with an Internet connection can join: schoolchildren, office workers, pensioners. Using PCs, laptops and even mobile phones, volunteers can classify images of distant galaxies or track the migration patterns of endangered species, to name just two examples.*

*Citizen cyberscience is social networking with a purpose. It turns science education into a highly motivating participative activity. At present, citizen cyberscientists are mainly concentrated in Europe and North America, and number in the hundreds of thousands. Francois's aim is to help make this number grow to tens of millions. He is catalysing a trend in the scientific community that will boost the number of online science projects, from dozens today to thousands in a few years. Most importantly, he wants to help more scientists in the developing world – Africa, Latin America and South-East Asia – to exploit citizen cyberscience, since it is a highly appropriate technology for researchers with limited resources.*

*Francois is a physicist by training, with a background in nanotechnology and a strong interest in science communication. He spent six years at CERN, managing IT communications. In 2004 he initiated and managed the launch of a volunteer computing project called LHC@home. This led to another project called Africa@home, launched in 2005 in collaboration with several academic institutions, NGOs and United Nations agencies.*

*He is currently based in Beijing, where he has spent the last two years as a visiting professor at Tsinghua University, part of that time supported by the Chinese Academy of Sciences to develop citizen cyberscience in China and more widely in South-East Asia, through an initiative called Asia@home and a project called CAS@home. In 2009, he helped establish a Citizen Cyberscience Centre in Geneva, which is a partnership between CERN, the United Nations Institute for Training and Research and the University of Geneva*

Open Science Project *Idea stage, no proposal yet

Responsible Officer: Ellie

**Gustavo Fischman**
Arizona State University
BIO: *Gustavo E. Fischman is Professor in the Mary Lou Fulton Teachers College, Arizona State University. His areas of specialization are comparative education and critical policy and gender studies in education. He is currently leading a research project aiming at improving the understanding of the quality, impact and reach of open access publishing in scholarly communication in Latin America. To achieve this he is coordinating a collaborative model of research and development among FLACSO-Brazil, Latindex, Public Knowledge Project, Redalyc, and Scielo, key institutional players in the field of scholarly publications in the region. This project will provide research-based frameworks that will allow for a comprehensive understanding of the Open Access scholarly models that are prominent in the region—not only their contribution to the greater circulation of knowledge, but also in addressing social needs. Dr. Fischman serves in numerous editorial boards, is a member of the publications committee of AERA and is also the lead editor of Education Policy Analysis Archives and co-editor of Education Review/Reseñas Educativas,*

106660 Quality, Reach, and Impact of Open Scholarly Publishing in Latin America
Responsible Officer: Fernando
Timeframe: March 2012-July 2014
Amount: $414,700; $ 35,000 (IDRC)
Institution: Facultad Latinoamericana de Ciencias Sociales/Latin American Faculty of Social Sciences

Abstract: Open Access (OA), which refers to unrestricted access to articles published in scholarly journals via the Internet, are far more prevalent in Latin America than in any other region of the world. However, while the quantity of Open Access (OA) in Latin America has been partially documented, neither the causes of this phenomenon, nor its impact, have been studied. OA advocates suggest this phenomenon should benefit researchers through helping them gain from the increased usage and impact of their work. Society, in turn, might benefit from better technology transfer, better diffusion of know-how and a better-informed populace. Critics of OA in Latin America, however, have focused on perceptions of poor overall scholarly quality. None of these positions have been grounded on empirical evidence. Considering the importance of science and technology to Latin America, this lack of a thorough research base about the contributions and challenges of OA for the development of the region is relevant and urgent.
In light of this need, this project seeks to improve the understanding of the quality, impact and reach of open access publishing in Latin American scholarly communication. To achieve this goal the proponents are proposing a collaborative model of research and development among Facultad Latinoamericana de Ciencias Sociales-Brazil (FLACSO), Latindex, Public Knowledge Project (PKP), Scientific Electronic Library Online (SciELO), and Red de Revistas Científicas de América Latina y el Caribe, España, y Portugal (RedALyC), key institutional players in the field of scholarly publications in the region. The project will combine the systematization of existing data, collection of complementary data on quality issues, and field building through the support of new methods for understanding the quality, reach and impact of open access. This project will also provide research-based frameworks that will allow for a comprehensive understanding of OA scholarly models that are prominent in the region-not only their contribution to the greater circulation of knowledge, but also in addressing social needs.

**Helani Galpaya**
LIRNEasia
BIO: *Along with her administrative duties as COO, Helani leads research on ICT and telecom sector indicators at LIRNEasia. This ongoing research includes analyses of the telecom regulatory environment, and the compilation of mobile and broadband price indicators among various countries in emerging Asia. She works with national regulatory agencies (NRAs), national statistical organizations (NSOs) and operators in the SAARC and ASEAN regions to develop, collect and report comparable sector indicators. She also leads activities related to capacity-building of NRAs and NSOs at LIRNEasia. She is involved in researching various policy aspects of using mobile phones for more-than-voice services, and previously conducted research on the ability of ICTs in increasing product traceability in agricultural markets. She has conducted research on e-governance.*

*Before joining LIRNEasia, Helani worked at ICTA, the apex ICT body in Sri Lanka. Prior to that, she was a management consultant in the USA, working with public and private sector clients.*

*Helani holds a master's degree in technology and policy from the Massachusetts Institute of Technology, USA.*

107077 Inclusion in the Information Society in Asia
Responsible Offcer:
Timeframe: September 2012-September 2014
Amount: $1,299,100
Institution: LIRNEasia

Abstract: Over the past decade, Asia has seen rapid growth in electronic connectivity across rich and poor segments of the population. Mobiles, most notably, have reached over 70% of the Asian population. Nevertheless, access to the Internet and mobile applications such as mobile money and early warning of disasters is quite uneven. As most Asian countries embrace electronically mediated information networks, this project seeks to propose policies and practices to ensure wider participation of those who are excluded from the digital opportunities offered through networked technologies such as access to government services. The project will support LIRNEasia, an information and communication technology (ICT) policy and regulation think tank in the Asia Pacific, in its research to improve government service delivery to the poor through online and mobile applications.

The project will first assess the factors inhibiting the wider participation of those excluded from government services offered through mobile applications, such as public utility management, pension and welfare payments, or agricultural information.

Second, LIRNEasia will analyze newly available data sets acquired through digital sources - such as Automatic Teller Machine (ATM) use, location information from mobile phones and internet traffic - to address important development problems. Data collected through these computerized day-to-day activities, often referred to as "big data" sets, could answer questions such as: What are the optimal locations for delivering government services? How integrated are the different parts of cities? How far do those who work in cities commute? In turn, these findings could be used to inform the implementation of government services.

Third, a small component of the project will provide timely assistance to increasingly open Burma (Myanmar) as it develops communications policies aimed at reducing its exclusion from the information society.

Finally, the proponents will research how best to ensure the quality of mobile and household broadband access to the Internet as more people in Asia connect online.

**Joe Karaganis**

Social Sciences Research Council

BIO: *Joe Karaganis directs SSRC projects on media, technology, and culture, including the 'Necessary Knowledge for a Democratic Public Sphere' Program and the 'Culture, Creativity, and Information Technology' Program. His research focuses on the relationship between digital convergence and cultural production, and has recently included work on media piracy, broadband adoption, and data policy. He is editor of Structures of Participation in Digital Culture (2007) and of the forthcoming Toward Detente in Media Piracy (2010). He has also worked as a consultant for the Ford and Rockefeller Foundations*

106657 Developing Ecology of Access to Educational Material in Developing World Universities

Responsible Officer: Phet

Timeframe: October 2011-April 2014

Amount: $721,300

Institution: The American Assembly

Abstract: The longstanding crisis of the developing-world library is coming to an end, but not in the way most observers anticipated. Resource scarcity, limited holdings, and poor infrastructure remain the norm. Debates over access to print materials continue to revolve around decades-long fights over photocopying and parallel importation. But the combination of ever-cheaper computers (and readers) and growing 'shadow libraries' of pirated scholarly material is flanking these battles. Increasingly, students have access to everything, on a scale and with an ease that would have been unthinkable in the richest universities a decade ago. The consequences for educational opportunity and research in these settings are profound, as are the implications for efforts to expand legal access to materials. Such efforts no longer operate in a context shaped primarily by scarcity (in relation to publishing sectors and copyright regime), but by massive, unauthorized, and uncontrolled flows of digital texts.

We have anecdotal accounts of these developments but no systematic analysis of them. We have no forward-looking analysis on the possible impact on developing-country publishing industries, existing library infrastructure, or legal strategies for addressing access to educational materials. This project will be a multi-country, 2-year research inquiry into the ecology of access to educational materials in developing-world universities, with a focus on Brazil, India, and South Africa, that will contribute to a wider inquiry into global market and policy dynamics, followed by six months of dissemination activities.

**Mike Jensen**
(no project)

BIO: *Mike Jensen is an independant consultant with experience in over 40 countries in Africa assisting in the establishment of information and communications systems over the last 15 years. A South African based Johannesburg, he sent his first email 20 years ago while studying rural planning and development in Canada.*

*He subsequently returned to South Africa to work as a journalist on the Rand Daily Mail in Johannesburg in 1983. When the paper closed he moved back to Canada and in 1986 he co-founded the country's national Internet service for NGOs, called coincidentally, The Web. After helping to set up a similar ISP in Australia in 1989, he returned to South Africa where he works with international development agencies, NGOs and governments assisting them in the formulation, management and evaluation of their Internet projects. In 2008 Mike established a base in Itacare, Bahia, Brazil where he spends an increasing amount of time working on global projects.*

*Mike is a board member of the South African ISP for NGOs - SangoNet, a member of the international advisory board of IICD, and was a member of the African Conference of Ministers High Level Working Group which developed the African Information Society Initiative (AISI) in 1996.*

**Nagla Rizk**
American University in Cairo
BIO: *Nagla Rizk is associate dean for graduate studies and research, associate professor of economics and founding director of the Access to Knowledge for Development Center (A2K4D) at the School of Business, the American University in Cairo. Her area of research is the economics of knowledge, information technology and development, with focus on business models in the digital economy, intellectual property and human development. Rizk is faculty associate at Berkman Center for Internet and Society at Harvard University and an affiliated fellow of the Information Society Project at Yale Law School. She is a founding member of the Access to Knowledge Global Academy and member of the steering committee of the Open Africa Innovation Research Project (Open A.I.R). She is co-editor and contributor to Access to Knowledge in Egypt: New Research on Intellectual Property, Innovation and Development (Bloomsbury Academic, 2010) and contributor to the first Arab Knowledge Report 2009 (UNDP & Maktoum Foundation 2009).*

Digital Activism 107068
Responsible Officer: Matt
Timeframe: May 2012-May 2014
Amount: $258,800
Institution: American University in Cairo

Abstract: Networked technologies, such as the Internet, social media, and mobile phones are increasingly important mediums for sharing news and information and mediating collective action. During the Arab Spring, news media reported on the crucial role Twitter, Facebook and other social media played during the events, some going so far as to call the political protests "Twitter" or "Facebook" revolutions. While many point to the potentially powerful role that these networked technologies may play in politics and public affairs, rigorous empirical assessments of its relationship to collective action are rare. Any future efforts aimed at better governance and political reform will benefit from an improved understanding of the networked public sphere's impact on civic and political life. Such insights require advances in theory, data collection and analysis as well as a concerted effort to leverage and coordinate the activities of researchers studying these processes across a range of disciplines. Given the intricate context of the prevalent cultural and economic realities of the Middle East and North Africa region, tapping into offline as well as online networks completes a rigorous assessment of the networked public sphere's impact. This approach enables us to decipher how information is mediated through different networks and how subsequently it is consumed and feeds into civic engagement.

This two-year research project seeks to contribute to the understanding of the role of the networked public sphere on political and social life in the Arab region. It will do so through three objectives: assessing the role of the networked public sphere as it relates to civic society engagement in political and social action; improving the capacity and contributing to the field of scholars conducting research in this area; and including policy design for change through dissemination of knowledge and lessons learned

**Ricardo Ramirez**
DECI
BIO: *Ricardo Ramirez is a freelance consultant and researcher based in Canada. Ricardo has worked with communication as a component of rural development projects with NGOs, universities, consulting firms and the United Nations. He was associate professor of Capacity Development and Extension in the School of Environmental Design and Rural Development, University of Guelph (Ontario) where he remains as adjunct professor. His work in the field of information and communication technology (ICT) emphasizes participatory action research. He often collaborates with the International Development Research Centre (IDRC) in the fields of Evaluation and Research Communication.*

Dal Broadhead: *Dal Brodhead has variously been an activist community development worker, senior manager in the Federal Government and for the last twenty five years has operated a consulting firm based in Ottawa. The focus of his work has been on community-driven approaches to marginalization and poverty alleviation working from a range of perspectives as an organizer, project manager, policy advisor and researcher. Latterly, his participatory approach has drawn him into developmental and utilization-focussed evaluation work in Canada and abroad in Asia, Africa, and recently South America. He and Ricardo Ramirez have collaborated on a number of projects in Canada and overseas, most recently on the IDRC-supported work on Utilization-Focussed Evaluation (DECI). Currently, they are Co-Project Leads on the start-up phase of the IDRC-supported DECI 2 global level project which will link utilization-focussed evaluation with Research Communications.*

107064 Developing Evaluation and Communication Capacity in Information Society Research (DECI II)
Responsible Officer: Matt
Timeframe: July 2012-July 2016
Amount: $405,160
Institution: DECI II

Abstract: Ensuring that research contributes to policy and practice change is one of IDRC's most important goals. However, meeting that objective is difficult due to the inherent complexities of the moving parts: the context with multiple stakeholders, the research, and research communications processes. Recently, methodologies have evolved to help development actors to work in these complex environments and to engage in research for influence processes, increasing their chances for success. This project, Development Evaluation and Communication Capacity in Information Society Research (DECI-2), focuses on two main elements that are seen as essential pieces of ensuring that research has an impact: evaluation and communication. DECI will therefore provide ongoing mentorship support and capacity building in both Utilization Focused Evaluation (UFE) and Communications for Development (ComDev) for key Information and Network recipients. Appropriate, user-led and useful evaluations, as well as ComDev strategies are central elements that will equip projects with the information and methods to help to navigate the inherent complexities and increase their chances for success.

Expected results from DECI-2 are a trained cadre of regional mentors able to facilitate UFE and ComDev; I&N flagship project teams with enhanced capacities in evaluation and communication as well as improved opportunities for policy and practice change; knowledge generation about the practicalities of implementing and combining UFE and ComDev; and research communication products to share DECI-2 lessons with practitioners, researchers and policy makers.

**Robert Guerra**
Citizen Lab, Munk School of Global Affairs, University of Toronto
BIO: *Robert Guerra is a civil society expert specializing in issues of internet governance, cyber security, social networking, multi-stakeholder participation, internet freedom and human rights. Robert is the founder of Privaterra, a Canadian based organization that works with private industry and nongovernmental organizations to assist them with issues of data privacy, secures communications, information security, internet governance and internet freedom. Robert also works as special adviser to the Citizen Lab at the Munk School of Global Affairs at the University of Toronto.*

*Robert serves as a member of ICANN's Security and Stability Advisory Committee (SSAC), as well as a member of the US IGF Steering Committee. Additionally he has participated as a member of the official Canadian delegation at two UN World Summits on the Information Society (WSIS).*

*Robert has given numerous media interviews and often is invited to share his views on the challenges being faced by social justice organizations in regards to surveillance, censorship and privacy. He advises numerous non-profits, foundations, governments and international organizations, including Computer Professionals for Social Responsibility (CPSR), Taking IT Global, Diplo Foundation's Internet Governance and Policy Capacity Building Program (IGPCBP), and The Open Net Initiative.*

106967 Understanding Southern Influence in Cyberspace, Security, and Governance: Towards a Global Network of South-based Cyber Stewards
Responsible Officer: Matt
Timeframe: April 2012-October 2014
Amount: $1,126,000
Institution: The Governing Council University of Toronto

Abstract: The securitization of cyberspace -- a transformation of the domain into a matter of national security -- is perhaps the most important force shaping global communications today. States are moving swiftly to assert their power and shape the cyber domain in ways that suit their strategic domestic and foreign policy interests, a far cry from the laissez-faire approach to the Internet commonplace ten years ago. Governments with more "territorialized" visions of cyberspace controls are developing ambitious and increasingly internationalized strategies, coordinated through regional venues, the United Nations, and standard-setting and governance bodies that were once largely restricted to technical discussions. If successful, they could legitimize national-level controls on the Internet and undo gains that have been made in rights and openness.

These issues are particularly troublesome for the countries of the global South. The growing assertion of state power into cyberspace is happening at the same time as information and communication technologies are continuing to deeply permeate social, political, and economic life, with the fastest growth rates occurring in Asia, Sub-Saharan Africa, and the Middle East.

The aim of this project is to establish a network of South-based cyber security scholars / practitioners. These Cyber Scholars will collaborate globally while working locally to ensure that as cyberspace deepens and expands in each of their countries and regions, the security process that will invariably accompany it will be monitored, evaluated, and impacted to ensure that rights, openness and networking are protected and preserved.

**Ronaldo Lemos**

Fundação Getúlio Vargas

BIO: *Ronaldo is an internationally respected Brazilian scholar and commentator on open source, free culture, and copyright. He is the director of the Center for Technology & Society at the Fundação Getulio Vargas (FGV) Law School, where he is also head professor of intellectual property law. He is also Project Lead of Creative Commons Brazil. He holds law degrees from University of Sao Paulo Law School and Harvard Law and has published four books and numerous journal articles. Ronaldo brings valuable expertise on the policies and practices of the global south — especially related to cultural production, internet civil rights, and journalism. His work at CITP will include further work in these areas, as well as an examination of the Brazilian electronic voting system that builds on CITP's existing expertise in electronic voting*.

106624 Open Business Models: New Compensation Mechanisms for Creativity and Inclusion

Responsible Officer: Fernando

Timeframe: January 2012-January 2014

Amount: $156,700; $121,200; $127,800; $381,500; $38,500

Institution: University of the West Indies JM, The American University, Fundación Karisma, Fundação Getúlio Vargas, IP Watch Association

Abstract: The increasing ubiquity of digital devices, even in the developing world, is having an enormous impact on business sectors that rely on digital products to make, sell and distribute their goods. This is especially true for creative industries such as music, film, software and publishing, which account for approximately 4% of world trade, or about 500 billion USD in exports annually. At the same time, most developing countries still suffer from chronic underdevelopment of their creative industries despite their vibrant and diverse cultures. The goal of this research activity will therefore be to explore the relationship between digital changes in creative industries on the one hand and the need to support creativity, entrepreneurship and economic inclusion on the other, with a particular lens on intellectual property and incentive systems. An important element of promoting growth within creative sectors is to ensure compensation systems act as incentives for greater economic activity. However, existing compensation systems for artists and creators have not kept pace with technological change. The first project component will therefore discuss the role of the "click economy" - where content is distributed freely in exchange for advertising - as a stream of revenue for peripheral or informal artists, exploring in particular the increasingly important role of collecting societies, who have the authority to license copyrighted works and collect royalties as part of compulsory licensing or individual licenses negotiated on behalf of their members. A second empirical component will examine the 'sharing economy', focusing on the potential legalization of online peer-to-peer distribution as an alternative to traditional distribution systems and emerging flat-rate internet streaming models, such as Netflix or Spotify. The project will also advance the agenda developed inside the Global Congress on Public Interest Intellectual Property, bringing evidence to a policy dialogue that should aim to strike the right balance between the rights of artists and consumers in the South, with a particular emphasis on the cultural, economic and social inclusion of artists in the peripheries.

(Joint presentation)
**Roxana Barrantes**
Instituto de Estudios Peruanos
BIO: *Roxana Barrantes (Ph.D. University of Illinois at Urbana-Champaign) is Senior Researcher at Instituto de Estudios Peruanos and Associate Professor at the Department of Economics of Pontificia Universidad Católica del Perú (PUCP).*

*She is a member of the Steering Committee of DIRSI, member of the Scientific Committee for the IDRC-supported PICTURE Project in Africa, member of the Advisory Committee for LACEEP (Latin America and Caribbean Environmental Economics Program), and Advisory Committee member of the Master's Program in Business Law at PUCP. A former member of the Peruvian Telecommunications Regulator Board of Directors, Dr. Barrantes has served as Advisor and Consultant to other Regulatory Agencies in Peru, the Ombudsman Office, and IADB. She has published extensively in Peru.*

**Hernan Galperin**
Profesor, Investigador CONICET, Universidad de San Andrés
BIO: *Hernan Galperin (Ph.D., Stanford University) is Associate Professor at the Universidad de San Andrés (Argentina) and Director of its Centre for Technology and Society. Dr. Galperin is also Steering Committee member for DIRSI, an ICT policy research consortium for Latin America and the Caribbean. An expert on telecommunications policy and development, Dr. Galperin leads a number of research projects related to the regulation and development impact of new information and communication technologies in Latin America, funded by a variety of foundations and international donors such as IDRC, ECLAC, USAID and UNDP. He has published extensively in major journals such as Telecommunications Policy, info, The Information Society, and Information Technologies and International Development (ITID). His most recent books are "Accelerating the Digital Revolution in Latin America and the Caribbean" (ECLAC, 2010) and "Mobile Communications and Socioeconomic Development in Latin America," co-authored with Dr. Manuel Castells and Dr. Mireia Fernandez-Ardèvol (Ariel, 2011).*
106990 Broadband Adoption and Poverty: Evidence and New Research Directions from Latin America
Responsible Officer: Matt
Timeframe: April 2012-July 2013
Amount: $283,200
Institution: Instituto de Estudios Peruanos

Abstract: Despite the strong regional and national push to expand broadband networks in developing countries, there is little evidence that speaks to the development impacts of these broadband networks. Indeed, it is a topic of heated debate between those who argue that these networks should be regarded as "vital national infrastructure - similar to transport, energy and water" and those who question expending limited resources on an "infrastructure" that has yet to demonstrate significant payoffs, even in so-called "developed" countries.

This project seeks to inform broadband policy and to enrich the debate over the impact of broadband adoption on policy reduction through two significant empirical contributions. The first is a series of rigorous impact evaluation studies of broadband investments and adoption on key development outcomes in selected Latin American countries. Taking advantage of the availability of new datasets on ICT use they will examine the contribution of broadband adoption to income growth, employment generation, and educational achievement. The second is an exploratory study to better understand how the poor use information and communication resources in their daily lives in three low-income communities in Mexico

**Silvia Cadena**
(ISIF)
106619 Alliance for Information Society Innovations
Responsible Officer: Phet
Timeframe: February 2012-August 2014
Amount: $417,635; $420,451; $447,038
Institution: APNIC PTY LTD., Registro de Direcciones de Internet para América Latina y Caribe (LACNIC), AFRINIC Ltd

Abstract: This project intends to combine three regional, competitive small grants and awards programmes for Africa, Asia and Latin America and the Caribbean to support innovative digital applications. It will support developing-country researchers, practitioners, and entrepreneurs in exploring questions and ideas for using the Internet and pervasive network technologies (such as mobile phones) as catalysts for positive social and economic change.

This project will leverage experience, existing brands, and infrastructure of ongoing regional programmes to establish an alliance. IDRC support will bring together the Information Society Innovation Fund (ISIF), in Asia, the Regional Fund for Digital Innovation (FRIDA) in Latin America and the Caribbean, and a new programme in Africa, tentatively called the African Fund for Internet Research and Education Development (FIRE) programme. In pursuit of this goal, this grant will enable a variety of collaborative efforts between and for funding/principal partners, such as programme evaluation, communicating findings, knowledge management, and networking.

The small grants and awards programmes will allow the Centre and funding partners to identify and expand the reach of promising initiatives; and build connections for researchers, practitioners, and entrepreneurs keen to explore how best to channel the growth of digital technologies towards more inclusive economic and social opportunities.

**Sunil Abraham**
Centre for Internet and Society
BIO: *Sunil Abraham is the Executive Director of Bangalore based research organisation, the Centre for Internet and Society. He founded Mahiti in 1998, a company committed to creating high impact technology and communications solutions. Today, Mahiti employs more than 50 engineers. Sunil continues to serve on the board.*

*Sunil was elected an Ashoka fellow in 1999 to 'explore the democratic potential of the Internet' and was also granted a Sarai FLOSS fellowship in 2003. Between June 2004 and June 2007, Sunil also managed the International Open Source Network, a project of United Nations Development Programme's Asia-Pacific Development Information Programme serving 42 countries in the Asia-Pacific region. Between September 2007 and June 2008, he managed ENRAP an electronic network of International Fund for Agricultural Development projects in the Asia-Pacific facilitated and co-funded by International Development Research Centre, Canada*
104920 Pervasive Technologies: Access to Knowledge (A2K) in the Marketplace
Responsible Officer: Phet
Timeframe: January 2011-June 2014
Amount: $430,000
Institution: Centre for Internet and Society
Abstract: Knowledge is essential for so many human activities and values, including freedom, the exercise of political power, and economic, social and personal development.

The Access to Knowledge (A2K) movement takes concerns with copyright and other regulations that affect knowledge and places them within an understandable social need and policy platform: access to knowledge goods. "[Knowledge Ecology International]"

The A2K movement is essentially occupied with the promotion of alternative content licenses and practices, within the copyright regime, for digital and networked media. It is necessary then for the A2K movement to focus on rights-based, demand-side activism, advocating for a commons approach to cyberspace, for media openness, for civil liberties and privacy rights, and for the right to information, culture, and knowledge.

Pervasive networked communication technologies are transforming the way in which people across the world access information. The prices of mobile phones and netbooks have plummeted, even as penetration and use have reached near-ubiquitous levels. In many ways, these commercial devices are fulfilling the promise that initiatives like the One Laptop Per Child (OLPC) were never able to fully deliver on.

In China, hardware manufacturers invent, remix and recreate technological devices that have an unclear relationship with the law. In India, software developers change content (and its interplay with hardware) in surprising ways, often confounding the original intentions and legally-protected boundaries of the content. In Indonesia, domestic web portals dominate the market, without always being in agreement with domestic and international copyright law.

These third-world, mass-market, commercial technology players have been able to affect access to knowledge very significantly; and yet they have rarely been the subjects of scholarly research and investigation, especially with respect to their significance, overall, as a social good.

The project "Pervasive Technologies: Access to Knowlege in the Marketplace" aims to provide a different and necessary perspective to the A2K domain. It seeks to explore the interplay between Intellectual Property (IP) and the production and deployment of pervasive networked technologies. It will provide a supply-side picture of how IP plays a role (or not) in the proliferation of these access technologies. An emphasis on the supply-side of A2K is key to better understand how we can arrive at greater digital pluralism[1], and therefore greater inclusion that will then lead to the benefits as promoted by the A2K movement.

footnotes: [1] http://www.-india./about/substantive-areas/digital-pluralism

(joint presentation)
**Tobias Schonwetter**
University of Cape Town
BIO: *Tobias Schonwetter was born and educated in Hamburg, Germany. He studied law at the University of Hamburg where he passed his first states exam (LLB equivalent) in 1999. Between the end of his university studies and the beginning of his articles, Tobias worked as a legal advisor for Studio Hamburg Fernsehallianz where he was mainly concerned with licensing of archive material for one of Germany's public broadcasters (ARD/NDR). During his articles, Tobias worked for several judges, a large German law firm, the Hamburg Ministry of Economic Affairs and a law firm in San Francisco, USA. At the end of his articles in 2002, he passed his second states exam. Thereafter, Tobias worked in the legal department of Germany's second biggest medical health insurance company.*

*In 2003, Tobias enrolled for master studies at UCT which he completed with distintion. He then worked as a Teaching and Research Assistant for the Department of Commercial Law and commenced doctoral studies in 2005. For his doctoral studies, Tobias received three times the prestigious UCT Research Associateship Award. In February 2009, Tobias submitted his PhD thesis on copyright exceptions and limitations.*

*Over the last years, Tobias has spoken at various national and international conferences and workshops and published on numerous copyright-related matters. At present, he is a member of the Commonwealth of Learning's Copyright Expert Group, the legal lead of Creative Commons South Africa, the country-lead researcher and research consultant for the African Copyright and Access to Knowledge (ACA2K) project and a legal advisor for the technology law firm Chetty Law in Johannesburg. Tobias also co-manages the Law Faculty's digital repository 'lawspace'.*

*Tobias teaches Copyright Law to undergraduate and postgraduate students in UCT's Law Faculty*.

**Jeremy DeBeer**
University of Ottawa
BIO: *Jeremy is an Associate Professor at the University of Ottawa's Faculty of Law, working at the intersection of technology, intellectual property and international trade and development.*

*He holds a graduate degree in law from the University of Oxford, and degrees in business and in law from the University of Saskatchewan. Before becoming a professor, he has practiced law with Government of Canada's Department of Justice, as legal counsel to the Copyright Board of Canada. He was also the law clerk to Justice Allen Linden at the Federal Court of Appeal, and before that worked at the firm of Macleod Dixon LLP in Calgary, Alberta. As well as an academic, he is also a lawyer and frequent consultant to law firms, technology companies, think tanks, governments and international organizations.*

*He teaches courses on Property Law, which addresses current issues in real, personal and intellectual property, Interdisciplinary Studies of Digital Music, an engaging seminar about legal, commercial and cultural aspects of the global music industry, and Global Intellectual Property Policy, which links international IP systems and global challenges like poverty, climate change, hunger, disease, lack of education and more.*

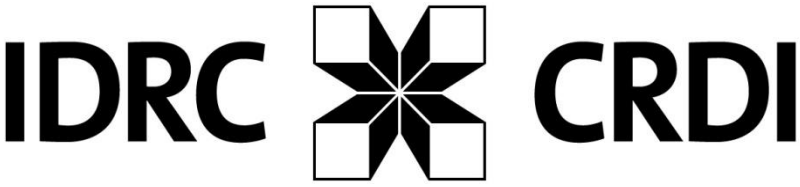
*His research and recent publications address topics ranging from digital copyrights to biotechnology patents. Recent books I've edited include Access to Knowledge in Africa: The Role of Copyright, and Implementing the World Intellectual Property Organization's Development Agenda. He co-leads the Canada-EU "Trade Environment Technology Exchange" (TETE) project, funded by the European Commission, and the new "Open AIR" - African Innovation Research - project, a multi-million dollar research and training initiative on open innovation in Africa, funded by Canada's IDRC and Germany's GIZ.*

106223 African Innovation Research on Intellectual Property's Role in Open Development
Responsible Officer: Khaled

Timeframe: November 2010-November 2013
Amount: $ 2,043,600
Institution: University of Cape Town

Abstract: Appropriate intellectual property (IP) rights policies could foster creativity and innovation, thereby promoting globally competitive African industries and services. Evidence suggests, however, that it is not only IP policies and laws (copyright, patents, trademarks) that limit Africa's contribution to innovation, but also their interpretation and use. The IP discourse is now polarized between those who advocate strong IP protection to enable investment, and those who maintain that these strong regimes fail to address development imperatives and reinforce the interests of dominant countries and firms. Furthermore, the measurement of innovation and knowledge production is based on such criteria as number of registered patents and peer-reviewed publications. These measurements have been challenged because of their developed-economy assumptions.

In this project, researchers will analyze under what conditions copyright, patents and trademarks limit innovators' access to and production of knowledge-intensive products and services. They will do so through several case studies. The case studies will focus on the energy sector, creative industries and agriculture in several African countries. The project will foster capacity building on the part of African IP researchers, uptake of the research results by policymakers, and peer networking with researchers in Asia and Latin America. A network of African researchers will be coordinated by the Intellectual Property Law and Policy Research Unit, University of Cape Town, South Africa. Sub-nodes of collaborating researchers will be located in Northern Africa (Egypt), West and Central Africa (Ghana or Nigeria) and East Africa (Kenya).




# Information and Networks

## Program Prospectus for 2011-2016

For Presentation to the IDRC Board of Governors

Program and Partnership Branch
International Development Research Centre

June 22, 2011

## Table of Contents


**LIST OF ACRONYMS ..... II**

**EXECUTIVE SUMMARY ..... III**

**1. CONTEXT AND BACKGROUND ..... 1**

A. DEVELOPMENT CHALLENGE AND SITUATIONAL ANALYSIS ..... 1

B. ABOUT THE PROGRAM ..... 5

**2. APPROACH TO PROGRAMMING ..... 6**

A. PROGRAM GOAL ..... 6

B. PROGRAM OUTCOMES ..... 6

C. POTENTIAL RISKS ..... 12

**3. PROGRAM STRATEGY ..... 12**

**4. REGIONAL PRIORITIES AND THEMES ..... 16**

**5. CONCLUDING COMMENTS ..... 17**

**6. REFERENCES ..... 18**

**ANNEXES ..... 21**

Annex 1: Key Projects Shaping Future Programming ..... 21

Annex 2: List of Year 1 and Continuing Projects ..... 24

## List of Acronyms

| | |
|---|---|
| BOP | Bottom of the Pyramid |
| DFAIT | Foreign Affairs and International Trade Canada |
| DFID | Department for International Development UK |
| ICT | Information and Communication Technologies |
| ICT4D | Information and Communication Technologies for Development |
| I&N | Information and Networks |
| IDL | IDRC Digital Library |
| IPR | Intellectual Property Rights |
| LAC | Latin America and the Caribbean |
| MENA | Middle East and North Africa |
| NGOs | Nongovernmental Organizations |
| OA | Open Access |
| OBM | Open Business Models |
| OER | Open Educational Resources |
| OGD | Open Government Data |
| OS | Open Science |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |

## Executive Summary

The accelerating advance of networked technologies, such as mobile phones and the Internet is transforming developing country societies. As of 2010, an estimated 5 billion people worldwide use mobile phones, including those at the bottom of the pyramid. Within 5 years, Internet penetration could reach similar levels, mainly by means of mobile Internet access. These diffusion rates are thrusting developing countries to become increasingly more networked societies where one's life is organized through information networks, with impacts across all socio-economic strata. For example, the presence of these technologies is lowering the transaction costs for communication as well as propelling new ways for people to share organize, collaborate, and even produce information and digital resources. As a result, new open platforms of development, such as open education, open government, open business models and open science could potentially improve learning, enable better governance, enhance livelihoods, and improve scientific collaboration.

Yet, at the same time, the growing prevalence of networked technologies can also facilitate the curtailment of individual rights to freedom of expression, privacy, access to knowledge, and collective action in the developing world. Moreover, concern has been expressed about the extent to which marginalized groups, such as women, are able to productively take part in emerging networked societies. This potential exclusion limits both the benefits marginalized groups can reap from networked societies as well as the roles they can play in shaping the future of these emerging societies. Legal and economic choices that are now being made will have critical implications for both shaping the nature of and determining who will benefit from a global networked society.

IDRC's ability to make a difference in these issues lies in its ability to develop a program that builds a critical southern perspective to catalyze positive and inclusive benefits from information networks, as well as dampen their negative tendencies. Therefore, this proposed "Information and Networks" (I&N) program will support interdisciplinary and systemic research that seeks to facilitate positive digital transformations, particularly in the thematic areas of creative industries, governance, learning, and science, as information networks are radically changing practices in these four areas. I&N will attempt to achieve four interconnected outcomes related to these abovementioned themes: (i) improve the quality of openness that networked technologies enable; (ii) protect the rights of citizens and consumers; (iii) catalyze the inclusion of marginalized communities in emerging networked societies; and (iv) deepen and broaden the field of information networks and development.

I&N will achieve its outcomes on the basis of complementary strategies: encouraging innovation, generating knowledge, influencing policy, and building research capacities. Key modalities to implement these strategies will include creating a set of thematic research networks, developing a series of competitions to seed innovations, and supporting a set of research capacity building activities for grantees, which will include young researcher mentorships, interdisciplinary theory and methods building and evaluation, and communications support. I&N's capacity to achieve its outcomes will be facilitated by building on a body of work that was previously supported by IDRC's ICT4D programs. An indication of continuing projects as well as those that would be supported in I&N's first year are included in in Annexes 1 and 2.

## Context and Background

### Development Challenge and Situational Analysis

Networked technologies[1], which include the Internet and mobile telephones, are transforming developing countries by increasing people's access to services as well as stimulating economic growth. For example, mobile phones have greatly expanded individuals', living at the Bottom of the Pyramid (BOP), access to a wide range of services in developing countries (Spence & Smith, 2010). In addition, increased mobile penetration has shown to positively increase economic growth in low income countries (Waverman, et al., 2005; Kathuria, et al., 2009). Networked technologies' positive social impacts seem particularly strong in poverty-stricken contexts (Donner, 2008).[2]

Furthermore, there is increased interest in the ways networked technologies could lead to positive development outcomes. This interest stems from various developments, such as the accelerating pace of technological change, which greatly expands the potential for these technologies to have social, political, and economic impacts over the next 5 to 10 years. Societies in the developing world are harnessing the accelerating speed of technology diffusion. As of 2010, almost 5 billion people use mobile phones. This amount comprises many of the world's poorest, including nearly 90% of the most impoverished populations of Brazil, India, China, and South Africa. An estimated 2 billion people access the Internet, with 60% of them living in developing or emerging economies (ITU, 2010). It is predicted that the majority of people in the developing world will have access to the Internet within the next decade, particularly as accessing the Internet through mobiles becomes more prevalent. In China alone, the number of mobile Internet users is expected to reach 600 million by 2012 (China Economic Review, 2011).

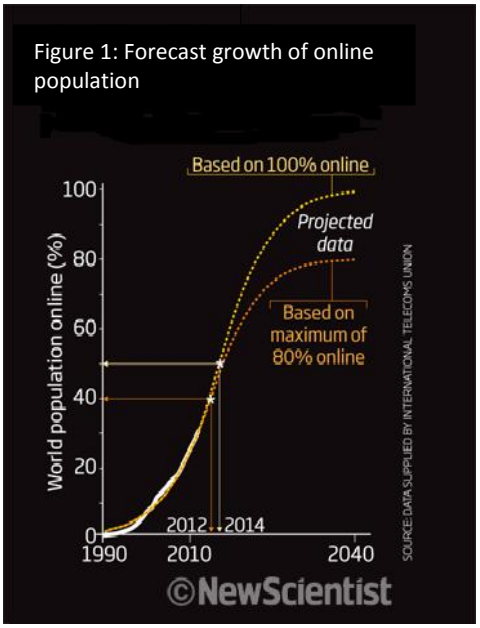


Figure 1: Forecast growth of online population

Therefore, as more and more people in the developing world become "networked" they benefit from the positive externalities (or "network effects") that flow from being a part of the larger network. As the landline telephone only became useful once a critical mass of people were connected, the same logic applies with mobiles and the Internet. Figure 1 illustrates that the critical mass needed for the Internet to have a durable impact on developing societies will be achieved by 2012-2014. As Clay Shirky, a prominent writer and scholar on the effects of new technologies, explains, "Communications tools don't get socially interesting until they get technologically boring... It's when a technology becomes normal, then ubiquitous, and finally so pervasive as to be invisible, that the really profound changes happen" (Shirky, 2008). All of these developments then demonstrate an opportunity to amplify the potential benefits and mitigate the risks of networked activities in certain domains. Amongst the most crucial and relevant themes are those of creative industries, governance, learning, and science, particularly because information networks are having an increasingly transformational role in these areas as well as raise new and important questions about these thematic. The following section will discuss the ways in which the Internet and mobiles could, and are, making a big difference within these four themes.

[1] For the purposes of the prospectus, the terms "networked technologies" and "information networks" will be used interchangeably although both refer to mobile phones and the Internet.

[2] It is for these reasons that Sachs (2008) stated that mobile phones and wireless Internet will "prove to be the most transformative technology of economic development of our time".

**Creative Industries:** Knowledge and creativity are drivers of economic growth in networked societies. Despite the world economic crisis, world exports of creative goods and services continued to grow, reaching $592 billion in 2008 — more than double their 2002 level, indicating an annual growth rate of 14 per cent (UNCTAD, 2010). This growth confirms that creative industries, which include the music, film, gaming, publishing, software, and broadcasting industries, hold great economic potential for developing countries. Digital technologies are, however, causing significant changes to occur within these industries' organizational principles (Castells, 2009). For example, the negligible costs of digital media reproduction – combined with rampant piracy – are fundamentally changing business models in this area. Active consumers (also known as "prosumers"[3]) in the developing world increasingly contribute to global online platforms, creating new pools of locally-relevant knowledge and delivering a wide range of services, including culture, education, and entertainment (Anderson, 2009; Chesbrough, et al., 2006). Also, digital transformations are driving a range of free and open business models in these industries that are reaching a large number of low-income customers and suppliers more quickly and less expensively than traditional vertically integrated models. The expanding reach of these new business models offer unprecedented potential to connect isolated communities and entrepreneurs, a connection that can play a significant role in speeding up the South's structural socio-economic transformation. Yet, this process also brings about many new challenges and while there are many success stories[4], there is limited understanding of the socio-economic implications of these new business models. Therefore, there is a strong need to investigate how the poor are benefiting from these models within creative industries as well as the ways in which they might be harmed by them. In addition, there is a need to examine whether these new models result in new forms of economic exclusion and informality. It is also fundamental to understand how to balance the global and national governance of creators, distributors, and consumers' intellectual property rights so that new forms of online income generation can be enabled in emerging networked societies.

**Governance:** Some governments in the developing world are seeking to meet their citizens' rising expectations of improving both the legitimacy and effectiveness of governance in their countries (Norris, 2011)by instituting "open government" initiatives, such as making government data available through the Web or attempting to create more participatory democratic processes through harnessing the power of social media. Some scholars see these changes as ways to widen the public sphere, promote a pluralism of ideas, and enable greater collective action to influence government (Benkler, 2006). Citizens are also engaging in novel forms of collaborative action, such as the use of mobiles and the Internet to monitor the government and expose abuses. For example, Ugandawatch 2011 is an application that allowed citizens to monitor voter intimidation through citizen-reporting of incidences through mobile text messages. Yet, despite these changes, the democratic impacts of these technologies are still unclear (Faris & Etling, 2008; Aday, et al., 2010).

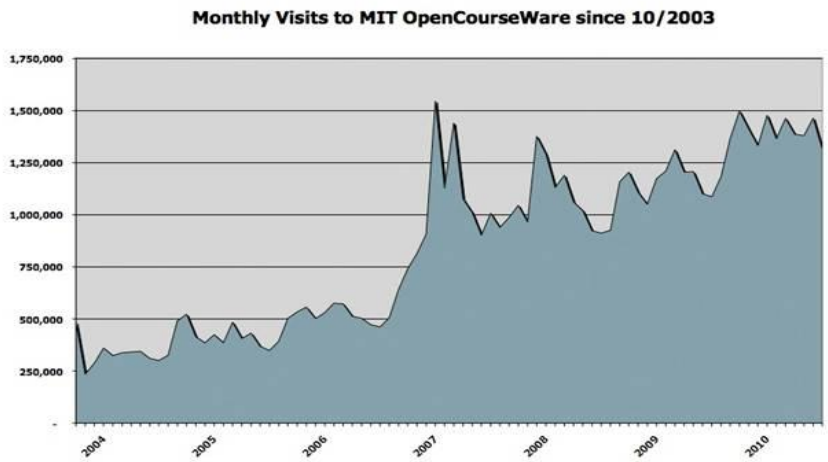
Although some experts perceive technology as a liberating force, others point to the fact that authoritarian states are exploiting the benefits of technology to consolidate their positions of power. Their growing sophistication in surveillance and censorship has chilling effects on citizens' political participation (Rohozinski, 2010). Censorship is rampant in cyberspace and extends far beyond "the great firewall of China." An example of governments' increasing surveillance is their ability to easily track mobile phone users' locations through the use of global positioning system technology. In addition, surveillance

[3] "Prosumers" refers to a combination of producers and consumers.

[4] Artists in the developing world are becoming increasingly popular among fans using the Internet and digital media to disseminate their work. A well-known example is "tecnobrega" in North Brazil, where artists forego traditional copyright and willingly share their creations with informal street vendors to market and distribute their music. Significant revenues are, however, realized through paid events, such as highly popular dance parties that bring in millions of dollars (Anderson, 2009)

issues also emerge from the spread of personal information stored by government or the private sector. Without proper personal data protection, this collection and storage of information could put people at risk to a wide range of potential abuses, including invasions of privacy, identity theft, and ethnic or gender profiling[5]. Technology is therefore fundamentally transforming the relationship between the citizen, the corporation, and the state; yet, very little is known as to whether this transformation is empowering or disempowering for consumers and citizens.

**Learning:** Increasing demand for post-secondary education and increasing costs to provide educational services are forcing developing countries to find financially affordable and pedagogically acceptable solutions to address these challenges (UNESCO, 2009). A foremost concern is to maintain the quality of teachers and the content and instruction they deliver. It is possible to address educational quality and reach by increasing the availability and use of open educational resources (OER) and associated open source software. As well, technologies, such as mobile devices, the social web, and gaming are creating opportunities to manage learning and learning effectiveness. Better quality learning materials, learning environments, and learning results are potential outcomes in using these new media for education. However, while these technologies are growing on the supply side, little is known of the 'benefits' (such as improvements in educational outcomes) of using these media. While the creation of OER with the freedoms to repurpose, remix, and redistribute is increasing, there is little evidence of significance in reusing or reengineering existing OER content. Those who stand to gain the most from OER reuse in the developing world face considerable barriers, stemming from a general lack of knowledge about the concept of OER and a paucity of technological infrastructure and institutional policies. Not much is known about who, in emerging economies, are using OER, how, where and under what circumstances, how beneficial, at what costs, as well as the legal and policy requirements for institutionalizing an OER culture in higher education. As well, almost no analysis exists on whether there is a nexus between learning performance and the use and reuse of OER. Therefore, these issues represent a critical knowledge gap for innovating educational policy and program formulation to improve the learning culture in the developing world.




**Science***:* Scientific collaboration, an enabler of scientific production, is still very much dominated by the developed world. Developing countries researchers frequently reiterate the challenges they face in conducting research, collecting data, accessing information, and collaborating with their counter parts from the global research community. Recent studies highlight the general lack of awareness of research produced in the developing

[5] A recent study exploring how advertisers target Facebook members found that the social network site may be inadvertently revealing its users' sexual orientation. Research found that different ads were targeted to gay users, even though dating preferences were supposedly hidden (Guha, et al., 2010)

world as a result of poor research management and indexation of outputs (SARUA, 2008). Open and Internet-enabled collaborative science has been touted as a possible solution to these problems. The principal characteristics of open science are transparency in experimental methodology, observation, and collection of data; the public availability and reusability of scientific data; the public accessibility and transparency of scientific communication; and the use of web-based tools to facilitate scientific collaboration (Nielsen, 2008). Other suggestions to address these challenges include rethinking the value of development oriented research outputs that have been dismissively referred to as "grey literature". This issue is perhaps relevant in a context where developing countries' governments are rethinking the role they should play in supporting science and research and in encouraging universities' community engagement to ensure science addresses development challenges and concerns.

Yet, despite the potential positives of open science, it is also fraught with challenges, namely those related to reputation, resources, time, and ethics - all challenges that make researchers wary of adopting open science. This wariness stems from critics questioning the rigour and quality of open access journals as mainstream thinking assumes that "scientific productivity is measured by the number of papers in traditional journals with high impact factors, and the importance of a scientist's work is measured by citation count. Both of these measures help determine funding and promotions at most institutions, and doing open science is either neutral or damaging by these measures" (Gezelter, 2009). However, some recent studies suggest that open access journals are beginning to be more heavily cited than closed journals, a change that may respond to critiques of open journals' rigour and quality (Harnard, 2009). Nevertheless, little data is available to illustrate the ways that open science models may enhance the quality, reach, and uptake of research, particularly by and for the South.

As the above discussion has illustrated, an increasingly networked world is drastically transforming societies and having a significant impact on developing countries; yet, there is less clarity about whether these changes will be more or less inclusive in terms of their potential benefits in the developing world. Here lies some of the most salient debates within the field. Carolina Rossini, a Brazilian law professor based at Harvard, stresses the importance of understanding "how the Internet changes the capacity of knowledge production, distribution, and access and how this affects access to knowledge, education, scientific innovation, and development," particularly from the perspective of developing countries. Rossini takes her position based on the pioneering work of Manuel Castells, who observes that "technological capacity, technological infrastructure, access to knowledge, and highly skilled human resources become critical sources of competitiveness in the new international division of labour" (Rossini, 2010). However, others, such as Kentaro Toyama, are more sceptical and view new technologies as initially generating optimism and exuberance that is eventually replaced by a disappointing reality (Toyama, 2010). Some go further and warn that the surge in social media and mobile use are leading developing societies to fall prey to corporate interests, eroding the public sphere and reinforcing existing power asymmetries (Gurumurthy, 2009).

New arguments and questions are, therefore, being raised around the role that information networks play in societies in the South and how they might impact issues of poverty, empowerment, and citizen rights. These questions seem much more pressing when one takes into account the point raised by some of the leading computer scientists in the world - "Bits (digital technologies) are still a new phenomenon – a new natural resource whose

regulatory structures and corporate ownership are still up for grabs. The legal and economic decisions being made today will determine how our descendants will lead their lives. The way the bits illuminate or distort the world will shape the future of humanity" (Abelson, et al., 2008). Therefore, one of the key goals for this proposed program will be to explore the ways in which an increasingly networked society enables or inhibits actions to address development goals in the global South. The following section will discuss the ways in which IDRC as an institution has been supporting research in this direction over the past 20 years and how the proposed program will evolve and build upon this body of work.

## About the Program

The issues described above are not new to IDRC. Starting in the 1980s, with the Information Sciences division, IDRC demonstrated that information technology can play a positive role in development. Much of this work successfully stimulated digital inclusion of the poor and marginalized communities in the developing world. For example, external reviews of ICT4D validated that research on the BOP's mobile and Internet usage, expenditures, and earnings contributed to the reform of telecommunications and fiscal policies that favoured the poor. IDRC supported e-health projects also established that mobiles were useful and cost-effective tools to collect health data, which led the WHO to adopt an IDRC-supported open data collection standard. An IDRC-supported partner, LIRNEasia, was also the first to illustrate, using empirical data, how mobile price information systems could reduce transaction costs for farmers by approximately 11%.

In addition to these important outcomes, IDRC's research, supplemented by external evaluators' views, also identified a number of trends that were deemed important for the future role of ICTs in development. One of the most notable is the explosive growth of mobiles, which continues to make digital access less challenging and, as a result, allows new open models of collaboration and access to information to flourish. Phenomena, such as free access to research results, educational or government resources, or online crowd-sourcing, such as Ushahidi, have, in a few years, gone from being largely irrelevant to potentially having an impact on development. Nevertheless, although research has demonstrated the empowering potential of ICTs, other IDRC supported projects, such as the Open Net Initiative research, suggests that the growing prevalence of ICTs is facilitating the curtailment of individual rights to freedom of expression, privacy, and collective action in the developing world. The Gender Research for African Community Empowerment (GRACE) network expressed concern about the extent to which marginalized groups, such as women, are able to productively take part in emerging networked societies. The most recent external evaluations of the ICT4D programs also suggested that because of the increasing importance of networked technologies in all facets of society, it will be essential to take an integrated interdisciplinary approach to study the increasing role of information networks in development.

IDRC will continue to play a critical role in contributing to the field of ICTs through mainstreamed ICT research in health, agriculture, State accountability and legitimacy, climate change, and economics; however, the recent external evaluations also indicated that important emerging networked society policy issues, such as digital openness, privacy, censorship, and intellectual property rights, have increasingly significant implications across programming areas and merit a consolidated research approach. Therefore, in order to respond to the evaluations' recommendation, IDRC proposes to develop a networked society program - "Information and Networks" (I&N) - which will support critical Southern perspectives to better understand and catalyze inclusive and beneficial uses of open and networked platforms enabled by the Internet and mobiles. Although a growing number of government, foundation, private sector, and NGO actors are funding or implementing activities in digital inclusion and empowerment, few are using a critical interdisciplinary and systemic approach to explore these issues and fewer still are supporting research on the developing world by developing country researchers. Thus, by assuming this approach to programming, IDRC will have a strong comparative advantage. It will also benefit from building on a body of successful projects that were supported by IDRC's ICT4D program area (an indication of on-going ICT4D projects that

will shape I&N's programming is available in Annexes 1 and 2, as well as in the text boxes found throughout this prospectus).

## Approach to Programming

### Program Goal

I&N's goal will be to **enable greater understanding of how information networks positively and negatively affect developing countries' citizens, especially citizens belonging to marginalized communities.** The program will catalyze positive digital transformations, *particularly in the thematic areas of creative industries, governance, learning, and science*.

**Box 1: Enhancing quality online learning**
The "Openness and Quality in Asian Distance Education" network seeks to benchmark good practices and ensure quality in distance education delivery. It establishes a set of quality assurance standards and performance indicators for distance education in various settings (formal, informal, life-long); assesses the impact and viability of open educational resources (OERs); and investigates ways to increase access to adult education services responding to rural livelihood and health needs in poorly-resourced rural, remote or marginalized communities.

### Program Outcomes

The program has four interconnected outcome areas: (i) the enhanced quality of **openness** that networked technologies enable; (ii) the protection of citizens', consumers', and prosumers' **rights**; (iii) the **inclusion** of marginalized communities in the benefits of information networks; and (iv) the deepening and broadening of the **field** of information networks and development. The latter outcome integrates and builds on the first three outcome areas.

*Openness: Enhanced Quality of Openness*

The emergence of the networked society is particularly powerful because it has played a role in reducing the transaction costs of knowledge creation, communication, and distribution. Knowledge, a key input to human development processes, has traditionally been a high cost product, particularly for the majority of those in the developing world (Benkler, 2006). However, digital information can now, at little cost, be accessed, produced, used, reused, and shared around the world. In addition, new ways of organizing and producing are emerging (Benkler, 2006; Shirky, 2008). For instance, "Commons-based" production methods, describe collaborative efforts, such as free and open source software and Wikipedia, which are based on the sharing of information. These collaborative processes have spread significantly in the realms of the creative economy, science, government, and learning (Lemos & Mizukami, 2010). Finally, the increased ability to communicate also enables new forms of collective action towards a common goal. For example, Ushahidi is a system that allows people to act as data collectors by sending text messages with their mobile phones which is then mapped online[6]. An Ushahidi implementation in Mexico, *Cuidamos el Voto*, enabled citizens to report incidences of fraud in the electoral process that resulted in 335 official investigations (MobileActive, 2009). Also social media, like Facebook and Twitter, may make it easier to act collectively and affect social change, as the recent events in the Middle East appear to indicate.

Openness refers to two things. Firstly, it is the content available on information networks. And, secondly, it is the means people use to connect, share, organize, and produce on information networks. Although, as we have discussed above, the quantity of openness has increased over the past few decades, this program's goal will be to enhance the *quality* of

[6] We can say this is "Crowdsourcing," a process of enlisting "a crowd of humans to help solve a problem" (Doan, et al., 2011, p. 87)

openness and how information's quality can be enhanced to ensure it achieves its development outcomes.

More specifically, the "openness" outcome area will focus on developing:

- A greater understanding of the context, dimensions, variations, implications, and quality of digital openness, particularly in the thematic areas of creative industries, learning, governance, and science;
- Informed and influenced policies to enhance the quality of openness in the four themes.

Examples of potential research questions for this outcome area could include: What are effective mechanisms for the collaborative production of open educational resources in the South? How are creative entrepreneurs in developing regions making use of open business models to create vibrant, dynamic, and knowledge-intensive services and industries? How can open access to research findings and data enhance the production, uptake, and quality of research outputs? What types of ICT-enabled models could best support innovative ways of collecting data and what are the effects on research quality, ethics, and impact?

**Box 2: IPRs and Piracy**

The project "Toward Détente in Media Piracy" seeks to research the nature and extent of media piracy in India, South Africa, and Brazil to inform intellectual property policy making. The project contributes a socio-economic development voice to ongoing piracy debates, such as the understanding that increasingly punitive enforcement regimes and education programs in developing countries often do little to reduce piracy as they fail to address the underlying cause - a lack of access to affordable creative resources.

*Rights: Protecting the Rights of Citizens, Consumers, and Prosumers*

A number of human rights have been identified to be closely linked to the Internet. These rights include the freedom of expression, the right to information, data protection, and privacy, and the freedom of association. Although the expansion of networked societies can help promote citizens', consumers', and prosumers' rights, as well as expand their capabilities and freedoms, these same technologies can also be used to curtail them. For example, the potential of networked technologies to support the freedom of expression and association is debatable (Deibert, 2011). The recent events in Egypt and Tunisia speak to the potential of networked technologies to facilitate collective action to bring about social change (Shirky, 2011). Yet, others question the role social media has in stimulating effective collective action (Morozov, 2011). For the latter, the expansion of networked societies can also restrict these rights, in particular through the chilling effects of ubiquitous surveillance. For example, authoritarian states can exploit the benefits of technology to consolidate their positions of power. Following the 2009 protests in Iran , the government was able to capture data from mobiles and social media to crack down on protesters. By intercepting data from Facebook, they sent threatening messages to Iranians living abroad, text-messaged nationals to stay home and avoid the protests, and pushed "patriotic" Iranians to fight back online.

In addition to these issues, an expanding networked society also highlights the need to have an appropriate intellectual property rights (IPRs) regime. Copyrights and patents are generally considered important policy tools to boost access to information, creativity, and innovation. However, the expansion of strong IPRs in the developing world, which has emerged in response to rampant piracy, potentially threatens entrepreneurial innovation and the ability to access knowledge for learning and creativity (Karaganis, 2011; Kenny, 2011).

More specifically the " Rights" outcome area will focus on developing:

- A deeper understanding of the extent to which citizens', prosumers', and consumers' rights, particularly their rights to information, privacy, freedom of expression, and access to knowledge are, or are not, being protected in the digital sphere;
- Informed policies to protect aforementioned rights in networked societies;
- Increased uptake of new research methodologies and methods to assess the extent of curtailment of previously mentioned rights and help protect them.

**Box 3: Inclusive Networked Societies**
Research networks in Asia, LAC and Africa are investigating demand for various economic and social services among the bottom of the pyramid (BOP). The studies have proved useful in making governments understand the significance of networked technologies, especially mobiles. Their findings have contributed to debates on universal service policies, taxation and on the registration of phones for security purposes. The results have also been used by industry to better understand, and design products and services for the BOP.

Examples of potential research questions for this outcome area could include: What is the right balance between the intellectual property rights of creators, distributors, and consumers in networked societies? Which data protection regulations help or hinder the protection of privacy? How are digital technologies being used in developing countries to expand pluralism and freedom?

*Inclusion: Catalyzing Inclusion in the Benefits of Information Networks*

Although there are many benefits emerging from the expansion of information networks, these benefits are not equitably distributed, particularly in the developing world. For instance, marginalized communities and groups are often excluded from these benefits based on a variety of factors, including their socio-economic position, gender, and education. A study in Bangalore illustrates this point as the government's digitization of land records led to a land capture by rich and empowered Indians, which enabled India's elites to take advantage of this open data instead of the members of the poor and disempowered groups for which the opening of the data had been intended (Benjamin, et al., 2007). This example demonstrates that networked societies might actually exacerbate exclusion and reinforce existing power asymmetries as opposed to eradicating them as the initial purveyors of these applications often assume (Gurumurthy, 2009).

In order to determine ways of addressing this issue, I&N will seek to improve the possibilities of marginalized communities' economic and social participation by investigating issues of socio-economic integration, creativity, and entrepreneurship and their relationship to emerging networked societies. Currently, the vast majority of new connections to mobiles and the Internet occur amongst the urban poor, a trend that is only projected to continue. Therefore, the frontier of socio-economic exclusion and inclusion in emerging networked societies is in urban spaces (Qui, 2009). In Rio, Beijing, Delhi, and Cairo, many disadvantaged groups move from exclusion to inclusion or vulnerability to resilience and digital technologies, particularly mobiles, are playing an increasing role in those movements. Studying the phenomenon of moving from unconnected to connected in urban spaces may be the best way to catalyze inclusive networked societies. As the poor and marginalised in various urban settings develop innovative ways to access and use technologies, they can be documented and replicated elsewhere. For example, prepaid mobile phone subscriptions were essentially an innovation developed to meet the needs of poorer consumers that did not have regular monthly incomes and, yet, this innovation is one of the main reasons mobiles are now ubiquitous.

More specifically the "Inclusion" outcome area will focus on catalysing:

- An increased understanding of the mechanisms that reinforce inclusion or exclusion of the urban poor, with a particular focus on women and youth, in information networks and their developmental benefits;

- Policies that are informed and influenced by evidence to increase and enhance the economic and social participation of these marginalized groups;
- Improved innovations that enable marginalized people to benefit from information networks.

Examples of potential research questions for this outcome area could include: How are the urban poor using information networks to improve their situation? In what contexts are the urban poor benefitting or not from information networks? What policies or regulations would be most apt to facilitate the urban poor's sharing in the benefits of information networks in learning, entrepreneurial activities, and civic empowerment?

*Field-Building: Deepening the Field of Information Networks and Development*

Field-building, which seeks to build new areas of knowledge through constructing novel interdisciplinary concepts and methods, building research capacity, and investigating more systemic approaches to development problems, is essential to realize policy and practice changes (Bernholz & Wang, 2010).

**Box 4: Strengthening research on information networks and development**

A field building program funded by IDRC seeks to identify future research leaders and facilitate their development through support for theoretically-based and methodologically rigorous research. Applicants benefit from concerted capacity building exercises including a mentorship arrangement. In particular, the program promotes broad-based high-quality multidisciplinary research at the intersection of information networks and development.

Research in the domain of information networks and development clearly benefits from an interdisciplinary approach (Kolko, Unwin & Zinnbauer, 2010). Traditionally, the field has suffered from operating in disciplinary silos, such as economics, which has focused on the relationship between technology and economic growth or productivity; computer science, which has investigated the adoption or usefulness of a particular technology or law focussing on the legal dimensions of digital copyright. These single discipline approaches have resulted in minimal systemic thinking and cross-discipline learning. However, the transformational potential of the emerging networked society, particularly within a development perspective, is often systemic and structural and therefore requires an interdisciplinary focus to understand the interactions, feedback loops, and evolution of the systems. For instance, by taking an interdisciplinary approach to examine ways of promoting the production and dissemination of scientific outputs in the developing world, one learns that this activity can be constrained by a complex system, such as structures and values surrounding the dissemination of publications in universities; the (dis)incentives to collaborate and share research; digital infrastructure; incentives related to existing metrics for publication and quality of research; and legal contexts. Using an interdisciplinary approach illuminates the complex system that can impact how and why researchers publish, an illumination that is difficult to identify when a single research approach perspective, such as the promotion of open access journals is taken as its narrow entry point makes it difficult to uncover all of the challenges a researcher can experience in conducting as well as publishing their research. .

More specifically, the "Field-building" outcome area will focus on:

- Establishing integrative and interdisciplinary research that cuts across issues of openness, rights, and inclusion, as a way to conduct research in this field;
- Developing new interdisciplinary research concepts, questions, methodologies, and outputs that enhance our understanding of information networks and development;
- Supporting a set of research capacity building activities for grantees that will include young researcher mentorships, inter-disciplinary theory and method building, and evaluation and communications support.

Table 1 below provides a summary of this program's key expected outcomes.

| | Baseline | Minimum Expected | Medium | High |
|---|---|---|---|---|
| **Openness** | Growing prevalence of Open development processes, such as Open Government Data (OGD) initiatives, Open Educational Resources (OER), Open Science initiatives (OS), and Open Business Models (OBM) in the South; however, their quality and impacts on development are poorly understood | *Network building and innovation*<br><br>Networks are built on OGD, OER, OS, and OBM that produce new applications and evidence about their impact in developing countries | *Research recognition*<br><br>Evidence on good practices and impact of open development processes are cited, used, and recognized by a global community of peers, the media, and policy-makers | *Affecting open policies and practices*<br><br>Policy-makers and practitioners involved in OGD, OER, OS, and OBM use project results to inform their funding and implementation |
| **Rights** | Digital transformations challenge traditional Intellectual Property Rights (IPR) regimes, leading to a disjuncture between the rights of creators, distributors, and consumers.<br><br>Expansion of networked societies in the South brings increasing threats to privacy and freedom of expression. | *Knowledge generation*<br><br>A body of research that examines the relationship between IPR and emerging practices in networked societies<br><br>Networks built that produce policy research on digital privacy, censorship, and role of media in collective action | *Contribution to literature*<br><br>Evidence from supported research is recognized and cited by peers, policy-makers, and the media<br><br>Evidence is created that is used and cited on the importance and impact of personal data protection issues and digital censorship | *Affecting laws related to rights*<br><br>Evidence and networks inform legal and policy reforms at the global and national levels enabling balanced IPRs in developing countries<br><br>Networks support changes in legislation and business practices related to personal data protection |
| **Inclusion** | Information networks increasingly play a role in lives of youth, women, and urban poor. Lack of evidence on how these groups are affected by, enabled in, and excluded from information networks and consequences for development. | *Capacity building*<br><br>Research done and capacities built to enable the examination of the participation of the urban poor, women, and youth in emerging networked societies | *Research recognition*<br><br>Evidence on the ways the marginalized are affected by, enabled in, and excluded from information networks is used and cited by policy-makers, the media, and peers | *Inclusive policies*<br><br>Fiscal, communications, and technological policies and practices are informed by this evidence and ensure that excluded groups share the benefits of information networks |

| | | | | |
|---|---|---|---|---|
| **Field Building** | Research capacity is uneven and methodologically weak, with limited engagement with systemic and interdisciplinary approaches to assess the influence of information networks on development outcomes. | *Interdisciplinary knowledge generation*<br><br>Body of interdisciplinary and systemic knowledge (including new methods) generated about the relationship between openness, rights, and inclusion in networked societies | *Interdisciplinary capacities*<br><br>Research validated by peers for its analytical value. Networks with capacity to develop and apply research methodologies, communicate for influence, and critically evaluate contributions to the field | *Information networks research field*<br><br>IDRC and grantees are recognized for contributing to the evolution of the field of information networks and development, through advancing the perspective of systems-thinking and interdisciplinarity |

## Potential Risks

Table 2 lists the major risks that could be potentially detrimental to I&N achieving its goals, as well potential strategies to mitigate these risks.

**Table 2: I&N's Risks and Mitigation Strategies**

| Risk | Mitigation |
|---|---|
| I&N has presented outcomes that include contributing to policy change; however, this is a complex endeavour and may not happen within the prospectus' time-frame. | IDRC has documented successful experiences in supporting work that has influenced policy reform. I&N will establish practices using the same techniques, such as allowing flexibility through rapid response programs, supporting research communications training, and targeting specific policy windows of opportunity. |
| Policy research on certain topics, such as IPR, privacy, or censorship could be perceived as being advocacy-focussed or biased, particularly by governments or corporations that maybe feel targeted. | At the heart of I&N's policy influence activities lies findings that emerge from legitimate and rigorous research activities. I&N will ensure partners communicate results on the basis of evidence rather than what could be perceived as advocacy positions. A recent publication on the controversial issue of piracy is an example of this method (Karaganis, 2011). |
| Underestimating the complexity of the problems being targeted by not making the connections between various outcome and thematic areas, which then leads to a set of disparate activities that limit learning. | I&N's field building and evaluation strategies will seek to build interdisciplinary systems thinking into the program. |
| Inadequacy of currently available research methods to assess the impact of much of the phenomena I&N is interested in exploring. | Much of the focus on field-building will focus on innovating in the area of developing new methodological tools and instruments. |

## Program Strategy

I&N will achieve its outcomes on the basis of four complementary strategies: stimulating innovation, generating knowledge, influencing policy, and building research capacities.

- Stimulating innovation: Catalyze innovations and demonstrate their value, social impact, sustainability, and potential scaling-up over different thematic areas.

- Generating knowledge: Investigate the ways in which information networks are leading to social change in developing countries. Explore the potential to replicate models and then create standards that could contribute to field-building.
- Influencing policy: Inform and influence policy debates on conditions and environments conducive to creating and sustaining a progressive networked society.
- Building integrated research capacity: Support systemic and interdisciplinary thinking and research for an integrated and interconnected domain to be defined as "research on inclusive networked society"

### *Strategic tensions*

The following section outlines key tensions that emerge from development research in this field and the strategic approaches that have been chosen to balance these tensions and maximize the intended program outcomes.

*Research Quality and Capacity Building*: There is often a trade off in either focusing primarily on research quality led by top researchers or on building the capacity of less experienced or emerging researchers in a field. I&N will use its four programming strategies to counter this tension and attempt to achieve both objectives. Innovation will focus on capacity building while knowledge generation will balance capacity building and high quality research through research networks. Policy influence will concentrate on high quality policy research and employ targeted capacity building in the area of research to policy. Lastly, for the capacity building strategy, an interdisciplinary and systemic approach will be adopted in order to foster new skills, insights, and methodologies into a higher quality research domain.

*Intervention and Observational Research*: Intervention or action research, which is commonly used to understand and encourage innovation, can directly benefit and demonstrate valuable lessons for development; however, it can also be limited to a restricted sample, fail in its implementation, or even lead to unintended negative consequences. In contrast, *observational, policy or descriptive research* sets out to build knowledge and impact policy and practice, but through a much less direct route. I&N will assess each project to ensure the best methodological approach is taken to achieve the project's intended research goal. For example, research areas at an experimental stage, such as open government data, will employ an intervention (action) approach, whereas less experimental research, such as digital activism or government censorship topics, will use a more observational approach.

*Directive and Responsive*: Successful research programs for development need to be built on well identified development issues and needs; yet, at the same time, they need respond to new opportunities and potential inter-project synergies. In order to address this potential tension, I&N will use three programming modalities:

- Networks: This will be I&N's principal programming modality. Policy influence networks, research networks, and capacity building networks are three structures that emphasize different comparative advantages. Each has its own benefits, requirements, and financial/administration costs for IDRC and the recipients. The program will likely create a network on each theme and use the most appropriate type of network structure to achieve the greatest outcomes or research results.
- Open calls/competitive grants: A call for proposals may have objectives specific to the programming themes but allows for flexibility in terms of research focus and methodology. They have also proved useful in identifying new partners. Open calls will be used more within the "innovation" and knowledge generation strategies.
- Unsolicited proposals: Proposals allow for responsiveness around emergent issues and research topics that fall outside of those identified in the prospectus but must relate to the core ideas of I&N.

In addition, as the programming context may change over the course of five years, I&N will build flexibility into its strategy. Approximately 80% of funding will be dedicated to projects that fall under the prospectus' themes, while the remaining 20% will be allocated to projects that cover new themes, contributing to emergent issues and field-building.

### *Methodologies*

The nature of research on networked societies is at a crossroads of diverse disciplines across technology and the social sciences; therefore, I&N will support research that is interdisciplinary and uses multiple methods. The following section outlines the types of methods that the different I&N supported programs will employ.

- Innovation supported-research will tend to employ an intervention methodology (action research) that extracts general replicable principles that can be applied to scale up innovations.
- Knowledge generation will employ national, regional, and cross-regional comparative case studies as well as experimental and quasi-experimental designs.
- Research for policy influence will be carried out by descriptive studies of which the results will be shared through evidence-based advocacy.
- Field building activities will focus on theory-building, testing new inter-disciplinary research methodologies, and extracting models and principles to define the field.

### *Capacity Development*

To ensure recipients dealing with technological innovation in the context of social change can assess their progress and adapt to their rapidly changing context, I&N will initiate specific skill-building and mentoring activities around evaluation. I&N will also develop toolsets to facilitate interdisciplinary practices and foster social science research skills, including gender research, particularly for engineers and applied scientists working in development.

### *Communication for Influence*

I&N will support the development of tools and skills for effective communication of research, particularly through the use of social media, networking sites, and data visualization, among others. This approach will be adopted by recipients as well as the I&N team in its own communication practices. Each team member will also publish at least one article or chapter per year that brings to light findings across I&N projects.

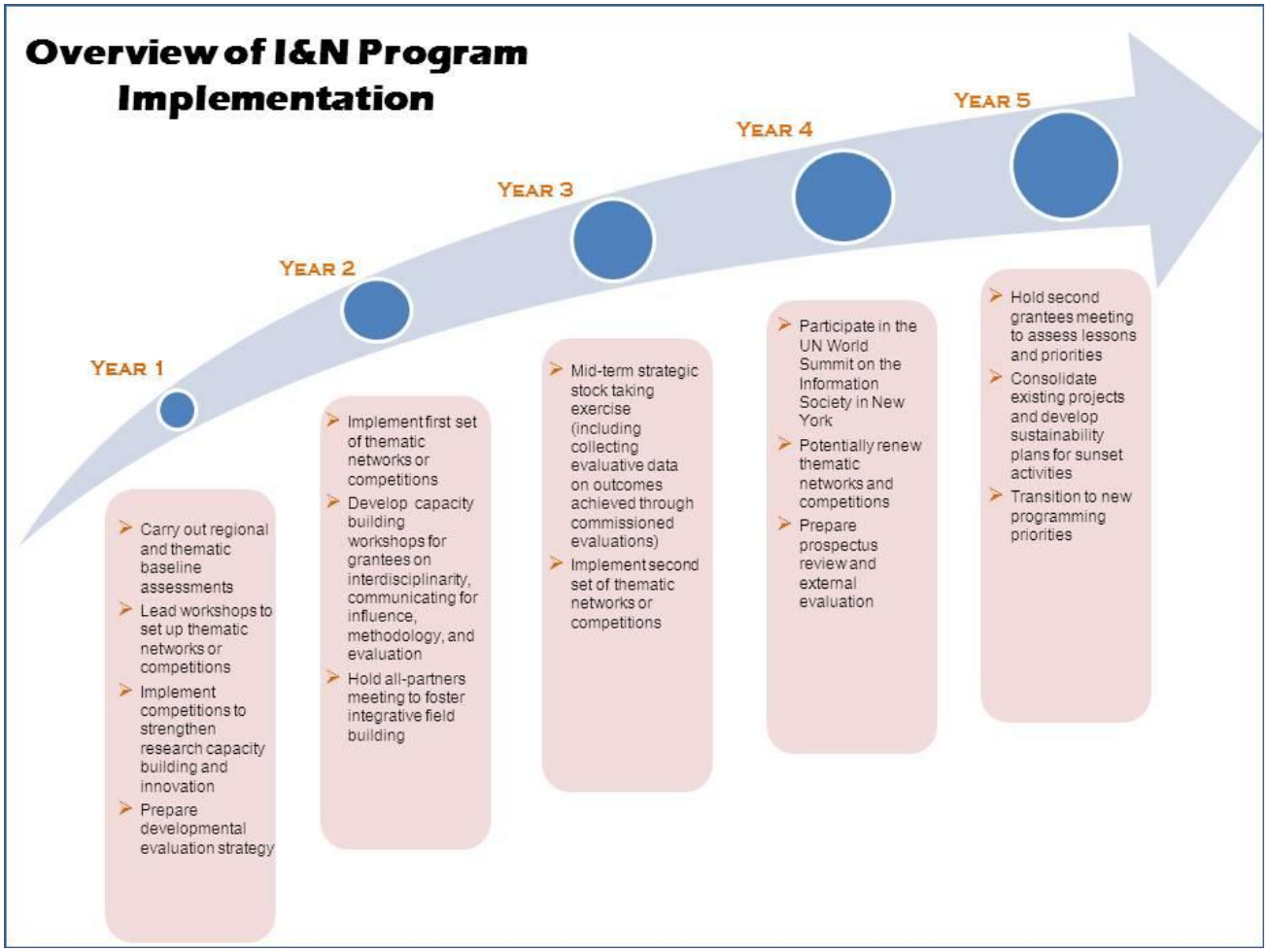
### *IDRC cross-cutting themes (gender and global governance[7])*

- The centrality of inclusion as an I&N outcome dictates that the program is aware of the nature of gender inclusion and exclusion that could be generated by I&N projects. I&N will also put a gender monitoring tool into place that will allow the program to gauge the extent to which gender is integrated into the research it supports.
- I&N will interact with issues of global governance in two principal ways. First, it will seek to ensure the grantees it supports in the areas of intellectual property rights engage with the global governing bodies in that area (e.g., World Intellectual Property Organization, World Trade Organization, etc.). Second, the program will support its projects to actively participate in global Internet governance bodies such as the yearly Internet Governance Forum and the third World Summit on the Information Society in 2015. The latter is a major event in this field.

### *Partnerships*

[7] ICTs, IDRC's third cross-cut, are obviously central to all of I&N's programming

I&N's partnerships will focus on expanding the program's resource base and building coalitions around particular issues. Specifically, I&N will target a collaborative funding partnership with the Department for International Development (DFID), which previously core funded the ICT4D program. DFID has expressed interest in many aspects of I&N's programming, particularly its focus on openness and inclusion. The program will also seek to play a significant role in the Canadian government's increased interest in fostering human rights through supporting a globally open Internet. Members of I&N informed DFAIT's position for the 2011 Deauville G8 Summit, during which the Internet was a key element of the agenda. I&N will also work with like-minded institutions that have similar goals in the area of fostering openness and exploring issues related to networked societies in the South. It will examine possibilities of establishing relationships and collaborations with the Open Society Institute, UNESCO, and the MacArthur Foundation, all of which have expertise in the various issues I&N will examine. The program will also explore the potential of working with new technology-based foundations, such as Google.org and the Omidyar Foundation on various issues that are of mutual interest.




## Regional Priorities and Themes

As previously described, the thematic areas of creative industries, governance, learning, and science will be key entry points to seek outcomes around openness, rights, inclusion, and field-building within emerging networked societies in the South. The program will address regional priorities based on an analysis of the different countries and regions' diverse political, social, cultural, and economic characteristics. This analysis will take advantage of the IDRC experience in programming inside these different contexts, while, at the same time, respond to new challenges and opportunities.

In Asia, persistent inequalities remain in terms of sex ratios, gender gaps in earnings, economic autonomy, and employment segregation. For example, women are overrepresented in the most casual and low-earning segments of the informal economy. In addition, disparities with regard to opportunities are also related to urban and industrial biases in national and regional development. Governments and civil society groups are learning that by calibrating technologies to specific development needs, and taking into account factors of usability and affordability, relatively inexpensive technologies applied in appropriate settings can have high economic and social returns. The mobile phone, for example, is becoming the tool governments use to communicate with the public to create citizen-centric smart governments that allow for greater transparency while safeguarding consumer/citizen rights. At the same time, Asia is also home to long-standing authoritarian regimes (e.g., China, North Korea, and Burma) where State innovations in the area of digital surveillance pose threats to human rights activists. As a result, it appears that a specific regional interrogation of these  of these innovations will be necessary.

In Latin America and the Caribbean (LAC), there has been recent improvement in key development indicators, such as years of formal education, access to information technology, and overall economic growth. However, there has been little change in the structural conditions that make LAC the most unequal region in the world. For example, more than 20% of young people in Latin America do not study or work. Young people who are employed face unstable and informal job conditions because of their lack of training and work experience (ILO, 2010). Even in the formal sector, in 2007, less than 15% of the workforce had a tertiary education. Therefore, a large part of the population still remains largely vulnerable to social risks and trapped in a poverty cycle that is linked to the lack of skills and absence of economic opportunities. While a few countries have improved their participation in scientific outputs, most researchers in the region lack the resources to actively participate in the activities related to global knowledge production. Also, the region is still characterized by young democracies, and although a few countries such as Chile, Brazil, and Colombia have made substantial progress in using technology to increase the efficiency of the State, their capacities to respond to their citizens' demands remain limited. Given that Brazil is the world leader in the area of developing a new form of networked society based on open models, there is an increased demand to explore novel models of organization in education, business, science, and governance that respond to this region's development challenges.

The Middle East and North African (MENA) region is characterized by high levels of direct engagement by the state in the productive sectors, increasing demographic growth, high levels of youth unemployment, and low rates of women's participation in the labour force. The region's digital infrastructure has significantly improved, as mobile and Internet affordability has increased access in urban and peri-urban areas. This successful deployment of ICTs may have contributed to citizens' mobilization during the recent Arab spring. As a result, there is growing interest in the role of social media in national debates, citizens' mobilization, and reducing corruption. Moreover, there is continued interest in the ability of information networks to foster employment, improve educational outcomes, ameliorate collaboration of Arab societies in scientific collaboration, and promote gender empowerment.

In Sub-Saharan Africa, in addition to governance and social service delivery reforms, youth unemployment remains a major challenge. Promoting and developing youth's skills  to ensure they can actively participate in emerging networked societies will be an important issue to tackle. As connectivity concerns increasingly become part of the past, Africa will need to rethink its policies and support scholars, universities, and small and micro

enterprises in ways that enable them to shape networked societies toward the region's social and economic goals. The exponential growth in mobile markets has happened in tandem to this context (Waverman, 2007). Despite its socio-economic challenges, the region is experiencing dynamic innovations, such as mobile money transfers (M-Pesa) or crowd sourced crisis information sent via mobile (Ushahidi). Therefore, research should explore the best mechanisms to harness Africans' innovation potentials in mobile applications and networking tools to support learning, livelihood improvement, and civic empowerment.

## 5. Concluding Comments

As highlighted in the introduction to this prospectus, the current day legal and economic decisions being made about emerging networked societies will have profound ramifications on the lives of future generations (Abelson, et al., 2008). Therefore, using an integrated approach to programming, I&N can empirically inform these legal and economic decisions by supporting research focused on achieving outcomes that could catalyze positive benefits from emerging networked societies. First, the proliferation of mobiles, PCs, and the Internet is creating an opportunity to produce and tap into a vast wealth of digital information for the purposes of learning, improving governance, enhancing livelihoods, and producing scientific knowledge. As such, it will be particularly important to learn how we can move from the trend of an increasing quantity of data to an enhanced quality of openly available information that serves development needs. Second, digital technologies are enhancing as well as potentially curtailing citizen, creator, and consumer capabilities and freedoms in the global South. In this regard, it will be particularly important to influence the policies and regulations that are needed to protect these individuals' rights to privacy, freedom of expression, and access to information. Third, information networks do not equally benefit all social groups. Reliance on technological processes, such as digitally delivering government information can reinforce exclusion, particularly for women, the poor, and youth. As such, it will be vital to develop digital policies and practices that ensure technological processes are as inclusive as possible for members of all social groups. By assuming this approach to programming, IDRC will have a strong comparative advantage because although a growing number of government, private sector, and NGO actors are funding or implementing activities on these issues of digital inclusion and empowerment, few are using a critical interdisciplinary and systemic approach to explore them and fewer still are promoting research on the developing world by developing country researchers.

## 6. References


Abelson H., Ledeen, K, & Lewis, H. (2008). *Blown to bits: Your life, liberty, and happiness after the digital explosion*. Available at: http://www.bitsbook.com/excerpts/.

Aday, S., Farrell, H., Lynch, M., Sides, J., Kelly, J., & Zuckerman, E. (2010). *Blogs and bullets: New media in contentious politics*. Washington: United States Institute of Peace.

Anderson, C. (2009). *Free: The future of a radical price.* New York: Hyperion.

Benjamin, S., Bhuvaneswari, R., & P. Rajan, M. (2007). Bhoomi: 'E-Governance', or, An Anti-Politics Machine Necessary to Globalize Bangalore? A CASUM-m Working Paper. Available at: http://casumm.files.wordpress.com/2008/09/bhoomi-e-governance.pdf.

Benkler, Y. (2006) *The wealth of networkسخصأw social production transforms markets and freedom*. New Haven, CT: Yale University Press.

Bernholz, L & Wang, T (2010). *Building Fields for Policy Change.* MacArthur Foundation. Available at: http://www.scribd.com/doc/45111709/Building-Fields-for-Policy-Change.

Castells, M., (2009). *The Rise of the Network Society: The Information Age: Economy, Society, and Culture.* Oxford: Blackwell Publishers.

Chesbrough, H.W., Vanhaverbeke, W. & West, J. (2006). *Open innovation: Researching a new paradigm.* Oxford: Oxford University Press.

China Economic Review. (2011). *China's mobile commerce market up 64%.* Available at: http://www.chinaeconomicreview.com/industry-focus/china-eye/article/2011_02_15/Chinas_mobile_commerce_market_up_64.html.

Deibert, R., Palfrey, J., Rohozinski, R. & Zittrain, J. (Eds.) (2011). *Access Controlled: The Shaping of Power, Rights, and Rule in Cyberspace*. MIT Press.

Doan, A., Ramakrishnan, R & Halevy, A.Y.(2011). Crowdsourcing systems on the World-Wide Web. *Communications of the ACM*, 54(4): 86-96.

Donner, J. (2008). Research approaches to mobile phone use in the developing world: A review of literature, *The Information Society*, 24: 140-159.

Faris, R. & Etling, B. (2008). Madison and the Smart Mob: The Promise and Limitations of the Internet for Democracy. *The Fletcher Forum of World Affairs Journal*, 65.

Gezelter, D. (2009). *What, exactly, is Open Science?* Available at: http://www.openscience.org/blog/?p=269

Guha, S, Cheng, B & Francis, P. (2010). *Challenges in Measuring Online Advertising Systems.* IMC'10, November 1–3. Melbourne, Australia.

Gurumurthy, A. (2009). *Social Enterprise to Mobiles – The Curious Case of a Propped up ICTD Theory*. Available at: http://publius.cc/social_enterprise_mobiles_%E2%80%93_curious_case_propped_ictd_theory/091709.

Harnard, S. (2009). "The PostGutenberg open access journal," in: B. Cope and A. Phillips (eds). *The future of the academic journal*. Oxford: Chandos.

ILO (International Labour Organization) (2010). *Increasing the employability of disadvantaged youth*. Available at: http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_143824.pdf.

ITU (International Telecommunication Union). (2010). *Measuring the Information Society*. Geneva.

Karaganis, J. (ed). (2011). *Media Piracy in Emerging Economies*. The Social Science Research Council.

Kathuria, V., Sen, K. and Rajesh Raj, S.N. (2009). *State- Business Relations and Manufacturing Productivity Growth in India*.Discussion Paper 33. Institutions and Pro-Poor Growth (IPPG). Available at: http://www.ippg.org.uk/papers/dp33.pdf.

Kenny, C. (2011). *Mickey Mouse, Villain: How copyrights for U.S. cartoons are holding the developing world hostage*. Foreign Policy. Available at: http://www.foreignpolicy.com/articles/2011/02/22/mickey_mouse_villain.

Kolko, B., Unwin, T. & Zinnbauer, D. (2010). *Pan Asia Networking External Panel Review*. Report to IDRC. Available at: http://www.idrc.ca/en/ev-159930-201-1-DO_TOPIC.html.

Lemos, R & Mizukami, P.N. (2008). *From Free Software to Free Culture: The Emergence of Open Business*. Available at: http://bibliotecadigital.fgv.br/dspace/handle/10438/2674.

MobileActive (2009). *Mexicans report votes (and non-votes) with SMS*. Available at: http://mobileactive.org/mexicans-report-votes-and-nonvotes-sms.

Morozov, E. (2011). *The Net Delusion: How Not to Liberate the World*. Allen Lane.

Nielsen, M. (2008). *The economics of scientific collaboration*. Available at: http://michaelnielsen.org/blog/the-economics-of-scientific-collaboration/.

Norris, P. (2011). *Democratic Deficit: Critical Citizens Revisited*. Cambridge University Press.

Qui, J.L.(2009). Life and Death in the Chinese Informational City: The Challenges of Working-Class ICTs and the Information Have-less. In *Living the Information Society in Asia*, E. Alampay (ed). Ottawa: IDRC. Available at: http://www.idrc.ca/openebooks/453-6/.

Rohozinski, R. (2010) Beyond denial: Introducing next-generation information access controls, in Deibert, Palfrey, Rohozinski, and Zittrain, eds., *Access Controlled: The Shaping of Power, Rights and Rule in Cyberspace.* MIT Press.

Rossini, C. (2010). Access to Knowledge as a Foundation for an Open World. *EDUCAUSE Review*, 45(4): 60–68.

Sachs, J. (2008). The digital war on poverty, *The Guardian*, August 21. Available at: http://gu.com/p/xph7k.

SARUA (Southern African Regional Universities Association). (2008). *Opening Access to Knowledge in Southern African Universities*. Available at: http://www.sarua.org/?q=content/opening-access-knowledge-southern-african-universities.

Shirky, C. (2008). *Here Comes Everybody: The Power of Organizing Without Organizations.* New York: Penguin Press.

Shirky, C. (2011). *The Political Power of Social Media*. Foreign Affairs (Jan/Feb).

Spence, R. & Smith, M. (2010). ICT, Development, and Poverty Reduction: Five Emerging Stories. *Information Technologies and International Development*, 6 (Special Edition): 11-17. Available at: http://itidjournal.org/itid/article/view/616/256.

Toyoma, K. (2010). *Can Technology End Poverty?* Boston Review. Available at: http://bostonreview.net/BR35.6/toyama.php.

UNCTAD (2010). *Creative Economy Report Creative Economy- A Feasible Development Option.* Available at: http://www.undp.org.tr/publicationsDocuments/CER2010.pdf.

UNESCO (2009). *Global Education Digest 2009: Comparing Education Statistics Across the World*. UNESCO Institute for Statistics**.** 9 Available at: http://www.uis.unesco.org/template/pdf/ged/2009/GED_2009_EN.pdf.

Waverman, L. Meschi, M., & Fuss, M. (2005). The impact of telecoms on economic growth in developing countries, in *Vodafone, Africa -- The Impact of Mobile Phones: Moving the Debate Forward.* Vodafone Policy Papers Series No. 2.

Waverman, L. (2007). Two-Sided Telecom Markets and the Unintended Consequences of Business Strategy. *Competition Policy International*, 3(1). Available at: http://ideas.repec.org/a/cpi/cpijrn/3.1.2007i=4915.html.

**Annex 1: Key Projects Already Shaping Future Programming**

## 1. African Innovation Research on Intellectual Property's Role in Open Development (106223)

Appropriate intellectual property (IP) rights policies could foster creativity and innovation, thereby promoting globally competitive African industries and services. Yet, evidence suggests that IP policies and laws (copyright, patents, trademarks) limit both Africa's contribution to innovation as well as their interpretation and use. The IP discourse is now polarized between those who advocate for strong IP protection to enable investment and those who maintain that strong IP regimes fail to address development imperatives and reinforce the interests of dominant countries and firms. Furthermore, the measurement of innovation and knowledge production is based on such criteria as number of registered patents and peer-reviewed publications. These measurements have been challenged because of their developed-economy assumptions. In this project, researchers will conduct several case studies to analyze under what conditions

copyright, patents and trademarks limit innovators' access to and production of knowledge-intensive products and services. The case studies will focus on the energy sector, creative industries and agriculture in several African countries. The project will foster capacity building on the part of African IP researchers, uptake of the research results by policymakers, and peer networking with researchers in Asia and Latin America. A network of African researchers will be coordinated by the Intellectual Property Law and Policy Research Unit, University of Cape Town, South Africa. Sub-nodes of collaborating researchers will be located in Northern Africa (Egypt), West and Central Africa (Ghana or Nigeria) and East Africa (Kenya).

**Project Objectives**

- To harness the development of Intellectual Property (IP) policy regimes that could best support Africa's creativity and innovation within an African research network.
- To conduct case studies to understand the IP environment that is most conducive to innovation and creativity in Africa in order to suggest alternative measurements to convey the contribution of African innovators and creators;
- To conduct a foresight exercise in the node countries to envision an IP environment that can maximize innovative and creative potential;
- To support the development of national "open licenses" regimes to promote collaboration and creativity;
- To build regional hubs and a network of scholars and actors capable of interacting with policy makers and other stakeholders; and
- To inform policy making in the area of IP reform.

**Recipient Institution**:

University of Cape Town (South Africa)

## 2. Scholarly Communication in Africa Program (105716)

The Internet and new information and communication technologies (ICTs) have changed the way research is being conducted and disseminated. Open access paradigms have challenged the conventional business model of scholarly publishing, offering developing countries an opportunity to make their scholarly contribution more visible. This grant will allow researchers to work closely with four universities in Southern Africa to test best practices and new affordable business models in online scholarly publishing, including institutional repositories, online journals, and digital archives. The project is based on the recognition that a research environment that operates online can broaden the definition of scholarly communication to include not only journals and books as recognized in the traditional scholarly publishing system, but also non-peer-reviewed academic publications and grey literature arising from informal communications such as blogs and wikis. The project will support the emergence of a community of practice in the four universities, and further research on three themes: policy and infrastructure for open access publishing; economic aspects of open access publishing (sustainability, licensing models); and modalities for developing scholarly performance metrics.

Project Objectives

- To support scholarly communication in Africa and promote higher visibility of African research through open access approaches to knowledge dissemination;
- To map out the current status of research dissemination in four selected universities from four Southern African countries;
- To understand the policy, ICT infrastructure and administrative support system needed to effectively integrate scholarly publishing and dissemination at these universities;
- To work closely with the partners from the selected universities to support the use of open source platforms

**Recipient Institution:**

University of Cape Town (South Africa)

## 3. Privacy and the Information Society in Asia (104927)

Mark Zuckerberg, founder of Facebook, has famously proclaimed, that privacy is "no longer a social norm" in our networked world. Companies like Facebook and Google do not see the demise of privacy as a particularly bad thing since their business models are predicated on the ability to store and share a key product: people's information. Moreover, the
exponential growth of data storage capability coupled with the rise of social media and ubiquitous Internet business applications has meant that companies - and governments - now have the capacity to capture and maintain every facet of an individual's digital life. The specter of an Orwellian society has, however, been kept at bay by the enforcement of
privacy laws in Western democracies, most recently demonstrated by the actions of Canada's privacy commissioner against Facebook and Sony. Yet, in Asia, home to the greatest number of Internet and mobile users, privacy protection is therefore increasingly the central focus of global policy fora. The Madrid Declaration, Asia-Pacific Economic Cooperation (APEC) and the Internet Governance Forum, where discussions around privacy issues dominated proceedings, are recent examples of rising concerns about privacy vis-a-vis technological and societal changes sparked by social networking, cloud computing, and trans-border outsourcing.
Privacy rights are often not well understood and the subject of much debate. However, global prerogatives around security and terrorism, as well as the claimed need for unfettered access to data in order to improve business opportunities, have been eroding privacy rights in Asia. Indeed, privacy and security are almost always presented as mutually exclusive principles that require trade-offs. Yet, recent thinking about these issues suggests that privacy may be a means to ensure greater security for governments and could even lead to more business opportunities by ensuring trust in new applications. Certainly, the interplay between privacy rights, security concerns and business need to be better understood.
In light of this need, this project aims to investigate privacy issues brought on by an increasingly ubiquitous networked society and its impact on the interactions between citizen, government, and the private sector. This project aims to also provide the necessary capacity and methodology for researchers and advocacy groups from the Asian region to identify gaps, incompatibilities, and deficiencies in national legal regimes, in order to address policy change towards safeguarding privacy and human rights.

**Project objectives:**
The main objective of the Digital Privacy in Asia (DPIA) project will be to conduct research, build capacity, and inform policy deliberations on privacy issues across eight developing countries in Asia. More specifically, the project aims to:

- Develop research programs on privacy issues at the national and regional levels in Asia to reveal current and future gaps and policy problems that need to be considered;
- Conduct analyses of the pressing policy issues relating to privacy in each country. Privacy International (PI) will provide expertise and advice to local civil society groups to facilitate their engagement in policy development, and identify opportunities for raising the profile of these issues;
- Engage with national, regional, and international governmental bodies to promote research findings, enhance participation of national and regional stakeholders, and encourage authorities to use the resulting research to inform their policymaking by adopting privacy-respecting policies.

**Recipient Institution:**

Privacy International (UK)

## ANNEX 2: List of Year 1 and Continuing Projects

| New Projects or Ideas under Development | | | | |
|---|---|---|---|---|
| **Outcome area** | **Project title** | **Duration (months)** | **Total funding (CAD)** | **Country/region** |
| Openness | Exploring the impact of open business models in creative industries (Getulio Vargas Foundation) | 24 | 400,000 | Latin America and Caribbean |
| | Open Access and Open Innovation in Scholarly Communications ( Public Knowledge Project) | 24 | 400,000 | Global |
| | Developing a global research network on open education – (project development- Virtual University of Pakistan) | 12 | 200,000 | Global |
| | Developing a research network on the impact of Open Government Data on transparency, accountability, and entrepreneurship (project development) | 18 | 150,000 | Global |
| Rights | Influencing the global governance of Intellectual Property Rights in the digital domain: from evidence to policy (American Assembly, Alternative Law Forum, GVF ) | TBD | 515,000 | Global |
| | Research on adding access to knowledge principals in the UN Guidelines on Consumer Protection (Consumers International - Malaysia) | TBD | 200,000 | Global |
| | Exploring the tensions between privacy and government service delivery in implementing bio-metric identity systems | 24 | 400,000 | Mexico, Brazil |
| | Assessing the Impact of new media and digital activism in collective action (project development–Harvard and American University in Cairo | TBD | 300,000 | Middle East and North Africa |
| | Macro-economic modelling of the Fair use economy in the South – (project development) | TBD | 100,000 | Brazil. India, South Africa |
| Inclusion | Harassmap: assessing the use of mobile data collection to measure and prevent harassment of women (Ushahidi) | 24 | 300,000 | Egypt |
| | Exploring the effectiveness of community level open data initiatives (project development) | 12 | 100,000 | South East Asia |
| | Exploratory studies on the effectiveness of social media for improving learning outcomes of migrant women | 12 | 100,000 | South East Asia |
| Field Building | Information Society Innovation Fund (competitive grants) | 24 | 1,100,000 | Global |

| | | | | |
|---|---|---|---|---|
| | Strengthening Research Capacity in Information Society Studies (competitive grants, Nanyang University) | 24 | 1,100,000 | Global |

| Continuing Projects | | | | |
|---|---|---|---|---|
| **Title** | **Duration (months)** | **Total funding (CAD)** | **Country/region** | **Planned completion** |
| Innovations for Inclusive Knowledge Based Economies in Asia - LIRNEasia Phase III | 24 | 1,375,500 | Asia | 01-Jul-2012 |
| Arab Knowledge Society: Who represents The Arab World Online? | 24 | 304,100 | Middle East | 09-Dec-2012 |
| African Innovation Research on Intellectual Property's Role in Open Development | 36 | 2,893,072 | Africa | 15-Nov-2013 |
| Scholarly Communication in Africa Program | 36 | 1,679,800 | Sub-Saharan Africa | 10-Feb-2013 |
| Building research and communication capacity for an open, fair, and sustainable networked society | 24 | 803,600 | Sub-Saharan Africa | 01-Mar-2012 |
| Consolidating Research and Education Networking Phase II | 24 | 564,600 | Sub-Saharan Africa | 14-Aug-2011 |
| The Open Crowd-Sourced, On-line Digital Review of Asia Pacific (e-DirAP) | 24 | 175,800 | Asia and the Pacific | 22-Mar-2013 |
| PANeGOV : Understanding Democratic eGovernance in Asia | 30 | 1,102,500 | Asia | 15-Nov-2011 |
| Improving governance through access to information in Africa | 24 | 503,000 | Sub-Saharan Africa | 01-Jan-2013 |
| Strengthening the knowledge base for public interest intellectual property policy | 12 | 200,000 | Global | 1-Apr-2012 |
| Networks for Development: the Caribbean Information and Communication Technologies Research Program | 24 | 907,500 | Caribbean | 16-Nov-2011 |
| Open Business Models (Latin America) - Phase II | 23 | 849,800 | Argentina, Brazil, Colombia | 15-Jun-2011 |
| Impact 2.0: New mechanisms for linking research and policy | 24 | 427,800 | Ecuador, Peru, Uruguay, Latín America | 01-Mar-2012 |
| Opening up Global Value Chains: Web 2.0 technologies and the productivity and export-oriented strategies of SMEs | 30 | 414,600 | Costa Rica, Latin America | 15-Jan-2012 |
| Privacy and the IS in Asia | 24 | 1,053,600 | South and South East Asia | 23-Mar-2012 |

| | | | | |
|---|---|---|---|---|
| Information Society Innovation Fund Asia | 40 | 724,700 | Asia and the Pacific | 03-Oct-2011 |

| **Sunset Projects*** | | | | |
|---|---|---|---|---|
| **Title** | **Duration (months)** | **Total funding (CAD)** | **Country/region** | **Planned completion** |
| Human Language Technology for Development | 12 | 157,800 | Global | 22-Mar-2012 |
| Supporting the West and Central African Research and Education Networking (WACREN) | 36 | 238,200 | Central and West Africa | 26-Jan-2013 |
| Evidence-based ICT Policy for Development and Innovation | 36 | 3,003,380 | Africa | 08-Dec-2013 |
| The Mega Mongolia Project : DREAM IT | 42 | 1,371,300 | Mongolia | 02-Jul-2012 |
| Openness and Quality in Asian Distance Education | 36 | 1,200,000 | Asia | 01-Jan-2013 |
| The iREACH Transition Program | 18 | 249,500 | Cambodia | 01-Jul-2012 |
| Opening Up Natural Resource-Based Industries for Innovation: Exploring New Pathways for Development in Latin America | 26 | 396,500 | Argentina, Brazil, Chile, Americas | 01-May-2012 |
| Mobile Money and Local Development | 20 | 260,900 | Americas | 01-Nov-2012 |
| Using Technology to Document Violence against women | 24 | 339,800 | India, Cambodia | 18-Jan-2012 |

** Sunset projects are those which moved to the new Information and Networks program from the previous programs in Information and Communication Technologies for Development, most of which are scheduled to end within the year, will be monitored until completed, will add to the body of knowledge generated by the program, but which do not fit within the new program vision.*

**LODGING:**
The Global Congress/ FGV Room Block is at the Hotel Novo Mundo, just a short walk or taxi ride from FGV.

**Hotel Novo Mundo**
Praia do Flamengo, 20, Flamengo
Rio de Janeiro - RJ, 22210
BRAZIL
+55 21 2105-7000 · hotelnovomundo-rio.com.br

Taxis from GIG airport should run approximately R$ 50 ($25 USD) and will take about 30-45 minutes depending on traffic.

**VENUE:**
The Global Congress 2012 will take place almost entirely at FGV. Please note there is dress code at FGV that does not allow shorts and flipflops to be worn inside the building. This is strictly enforced by the security staff, and there are no exceptions to this policy.

FGV - Fundação **Getulio Vargas**
Praia de Botafogo, 190
Botafogo, Rio de Janeiro - RJ, 22250
BRAZIL
+55 21 2559-6000

Link to google map:
http://goo.gl/maps/Bpsci

**Transportation:**

*From and to the airport*

If you're getting an international flight to Rio you'll arrive at Antonio Carlos Jobim Airport (aka Galeão). If you're flying from another city in Brazil it's better to book your flight to arrive at Santos Dumont Airport, because it's way closer to the South Zone area, where people generally stay. It's probably best to use taxis to move to and from both airports as they're not very expensive. The yellow ones are the regular taxis which are much cheaper than the "special" taxis available on the airport. From Galeão to Botafogo for instance, you can expect to pay around R$50,00 – while the special ones can charge up to R$100 for the same route. Some claim the special ones are safer, but there seems to be no real difference.

*General tips*

You can get around Rio very easily by bus, but taxis are not only cheap, but also abundant. Some people prefer to call cab companies, but it is relatively safe to jump on the first one that shows up on the street. If you need to call a company, some options are Taxi Pontual: (21) 25207696 / (21) 32946650; or JB Taxi (21) 2178-4000 / 2501-3026. You can look online for more options.

**Safety**

Rio is a great place, but it certainly has some problems with crime, but it is much less than people who don´t live here might think. Recently, the implementation of the pacifying police units made people feel safer (crime statistics actually went down). Despite this, common sense is very advisable, such as not walk in the streets with jewelry, visible money, cameras, computers and so on. Do not take your computer

out of the bag when in public spaces like beaches, on the streets, buses etc. There's wifi by the beach (not sure how if it always works) but you really should resist the impulse to take your computer there and start working with the wonderful beach background.

**Touristic Attractions**

- Christ the Redeemer
- Sugar loaf
- Botanical Garden

There are obviously plenty more attractions, but given there's lots of information already available online, there's no need to list more on this guide.

**Cultural Attractions**

Museum of Modern Art

Centro Cultural do Banco do Brasil

MNBA – *Museu Nacional de Belas Artes*

Niterói Contemporary Art Museum

**Beaches**

The beach area (Leblon, Ipanema and Arpoador) are actually the safest to walk around. But they look pretty much like any other global city, full of stores, but also full of very traditional and interesting places, such as Bracarense (a great bar to drink draft beer – our `chopp` – while standing in the sidewalk) or Jobi (see bellow), a tiny but fantastic bar, where the locals always go.

Make sure you go to Ipanema and Copacabana beaches and spend a lot of time walking in the sidewalks, especially on Sunday. There is a huge beach scene, and it's one of the best things to do, with a lot of people from around the world, people running and riding bikes, and so on.

Don't bath on the following beaches: Copacabana, Flamengo, Botafogo, Urca and some others. Unfortunately, they are extremely polluted.

There are other beaches in Barra da Tijuca neighborhood, which are quite far from the South Zone, so it makes sense to visit them if you're feeling adventurous and willing to rent a car and have a local guide/friend accompany you.

**Restaurants**

- Zazá Bistro – One of the best places to have an intimate dinner. It´s advisable to arrive early, and ask to seat on the second floor, where there are no tables, but only cushions. Try the shrimp with lime risotto or the Shisbarak. They also have fantastic drinks.
- Zuka – Trendy restaurant of contemporary food, expensive but really good. Looks like some cool restaurant in New York, but the food has a lot of great Brazilian elements.

- Nam Thai – Small and cozy thai restaurant in Leblon.

- Porcão Rio's – traditional Brazilian BBQ place. The view is fantastic.

- For Brunch - Cafeina Leblon – try ordering the Roast Beef Cafeína sandwich.

- Intihuasi – A Peruvian restaurant in Rio, truly a hidden gem. Very small and rather cheap, with one of the best cuisines in town. Really delicious. Don´t miss the Pisco Sour drink, or the Algarrobina drink, the first made with egg whites and the second with egg yolk. It´s fantastic.

After dancing or drinking but before the night is over go to Cervantes and eat a sandwich. The most popular one is prepared with sirloin, cheese and pineapple. They're open until very late (probably until 4 or 5 in the morning).

**Places for drinks / hang out / early night**

- Bar d'hotel - located on the second floor of the Marina Hotel.

- Bareto-Londra – probably one of the most sophisticated places for drinks in Rio. It's located in Fasano Hotel and their prices are high, but worthwhile.

- Meza Bar – trendy bar located in Botafogo. Great ambiance, good drinks and nice people.

- Champanheria Ovelha Negra – awesome place for champagne and sparkling wine in general – It's not fency at all and sells Brazilian brands that are both affordable and good. It's a unique place in Rio. It's only open during weekdays and from 5 to 11 – an exception in Rio. You should arrive early (around 6pm – 6:30pm if you want a place to seat) because it gets completely crowded during most of the days.

- Doiz – trendy new bar around Botafogo area.
- Astor – a new favorite amongst bars in Rio – although it belongs to a well know chain of bars from Sao Paulo. Great drinks and appetizers and wonderful ambience. Plus, it's right in front of the Ipanema beach and one/two blocks from Ipanema/General Osório subway station.

**Traditional Bars (aka in Brazil as Botecos)**

- Jobi – small but very traditional bar in Leblon (one of the richest neighborhoods in Rio).

- Devassa Leblon – ask for the Devassa beer.

- Botequim Informal - delicious appetizers.

- Academia da Cachaça- great place to eat and drinks made of Brazilian spirit cachaca, such as Caipirinhas and others. They are the best Caipirinhas in town (make sure to try the "Providencia" caipirinha drink, made with raw sugar – it's very strong but really good).

- Bracarense – one of the most traditional bars in Rio de Janeiro located in Leblon.

- Adega Pérola – Traditional Portuguese bar famous by its appetizers

**Places to go out (dancing)**

- StudioRJ
- Casa da Matriz
- Espaço acústica
- Fosfobox

**LGBT**

- The Week
- Galeria Café
- Cine Ideal
- Fosfobox
- Ipanema beach in front of Farme de Amoedo street (you'll see the rainbow flag).

**Other (really doesn't mean less important):**

Lapa is a neighborhood where the new Brazilian samba lives. There are plenty of restaurants, places to dance (good samba) and bars. Some of most populars places to go out in Lapa are (in order of preference): Rio Scenarium, Carioca da Gema, Centro Cultural Carioca, Democráticos, Estrela da Lapa, Fundição Progresso (more like a music venue, so you have to check what's going on there beforehand) and many others.

Rio Scenarium – Fantastic and huge traditional samba place. The building is beautiful, and the music is great. You can have dinner there. It´s good to get there early (around 10pm) because it´s getting really crowded. It´s located at Lapa neighborhood, very close to Santa Tereza. This neighborhood is just crazy, with one club every 5 meters. It´s worth exploring, since they are all different (from hip hop, to rock, to heavy metal, to samba, to folk etc etc). The people in the streets are also an intriguing mix, from neo-hippie girls, to paris-hilton lookalikes, to transvestites.

Santa Teresa is a great neighborhood, and certainly one of the most traditional places in Rio. It has a very lively nightlife, with many Samba places, traditional restaurants and spontaneous gatherings. It has a very popular area, which is Largo dos Guimaraes and its surroundings (Casa Aurea is located nearby this area), and a lot of people from Rio and worldwide will say that its their favorite area in Rio. It is an area, however, more difficult to go around and it is advisable not to walk way from the main areas of the neighborhood if you don`t know where you are going. The entire neighborhood is uphill, so to get there you have either to take a Taxi or a Bus, which is the public transportation system (at night it is always preferable to take a Taxi). So it makes commuting to other parts of town such as Ipanema and the beaches more difficult.

Another great thing to do is to go to a Escola de Samba (samba school) rehearsal, such as in Mangueira. You can check the dates at their website. It is a fantastic experience, but I would advise going with a group, especially if it is the first time you will be going there.

An interesting option is to go hang gliding or, if you just want to take a walk surrounded by nature, try to make the Catacumba's park trail (at Lagoa neiborhood), which is easy and quick and, at the end, you'll be gifted with an amazing view of the south part of the city.

**Miscellaneous**

- Feira de São Cristóvam – traditional cultural fair downtown.

- Try to find at a supermarket some of the following:
    - Paçoca – a Brazilian candy,

    - Queijo Minas (traditional cheese) and goiabada – eat both together. It's a popular Brazilian dessert.

- Drink/eat Açaí in one of the many "Casa de Sucos" in Rio – places that prepare a wide variety of juices and natural sandwiches. You can have your Açaí mixed with other fruits – try it with bananas.

- Drink Caipirinha.

- Bike around Aterro do Flamengo (maybe on the way to the Museum of Modern Art), Urca, and/or Lagoa.

- Eat Pão de queijo somewhere.

- Visit Feira Hippie in Ipanema for souvenirs.