Design!publiC

Design Thinking for Governance Innovation

Society

People

Needs

Challenges

Solutions

Services

Enhance

Understand

Develop
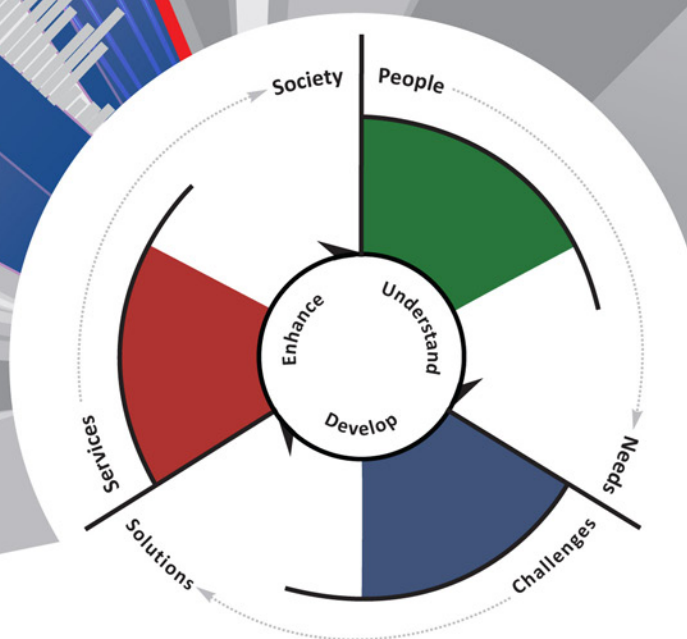
दृश् *√dris* 'to see, behold, look at, regard, consider, to see with the mind, learn, understand, to notice, to care for, to look into, to try, to examine, think or find out, to see by divine intuition, for something to become shown or manifested.

Contents

Design Public: The Challenge

Design Public is a conversation about whether and how to bring **design thinking** to bear upon the challenges of government so as to promote **governance innovation**.

The problem of governance is perhaps as old as society, as old as the rule of law. But it is only more recently -- perhaps the last five hundred years of modernity -- that human societies have been able to conceive of different models of government, different modalities of public administration, all having different effects on the configuration of society. The problem of governments, of governmentality, and of governance is always also the problem of how to change the very processes and procedures of government, so as to enhance the ends of the state and to promote the collective good.

Since the establishment of India's republic, many kinds of changes have been made to the policies and practices of its state. We may think of, for instance, successive stages of land reforms, the privatization of large-scale and extractive industries, the subsequent abolition of the License Raj and so and so forth. We may also consider the computerization of state documents beginning in the 1980s, and more recently, the Right To Information Act (RTI). More recently there have been activist campaigns to reduce the discretionary powers of government and to thereby reduce the scope of corruption in public life.

While all these cases represent the continuous process of modification, reform, and change to government policy and even to its modes of functioning, this is not what we have in mind when we speak of 'governance innovation.' Rather, we intend a specific process of ethnographic inquiry into the real needs of citizens, followed by an inclusive approach to reorganizing and representing that information in such a way that it may promote collaborative problem-solving and solutioneering through the application of design thinking.

Design Thinking and Its Relevance to Innovation

The concept of design thinking has emerged only recently, and it has been used to describe approaches to problem solving that include: (i) redefining the fundamental challenges at hand, (ii) evaluating multiple possible options and solutions in parallel, and (iii) prioritizing and selecting those which are likely to achieve the greatest benefits for further consideration. This approach may also be iterative, allowing decisions to be made in general and specific ways as an organization gets closer and closer to the solution. Design thinking turns out to be not an individual but collective and social process, requiring small and large groups to be able to work together in relation to the available information about the task or challenge at hand. Design thinking can lead to innovative ideas, to new insights, and to new actionable directions for organizations.

This general approach to innovation -- and the central role of design thinking -- has emerged from the private sector over the last quarter century, and has enjoyed particular success in regards to the development of new technology products, services and experience, and is now being considered as an optimal mechanism for the t sransformation public and governmental systems as well.

The Innovation Cycle™
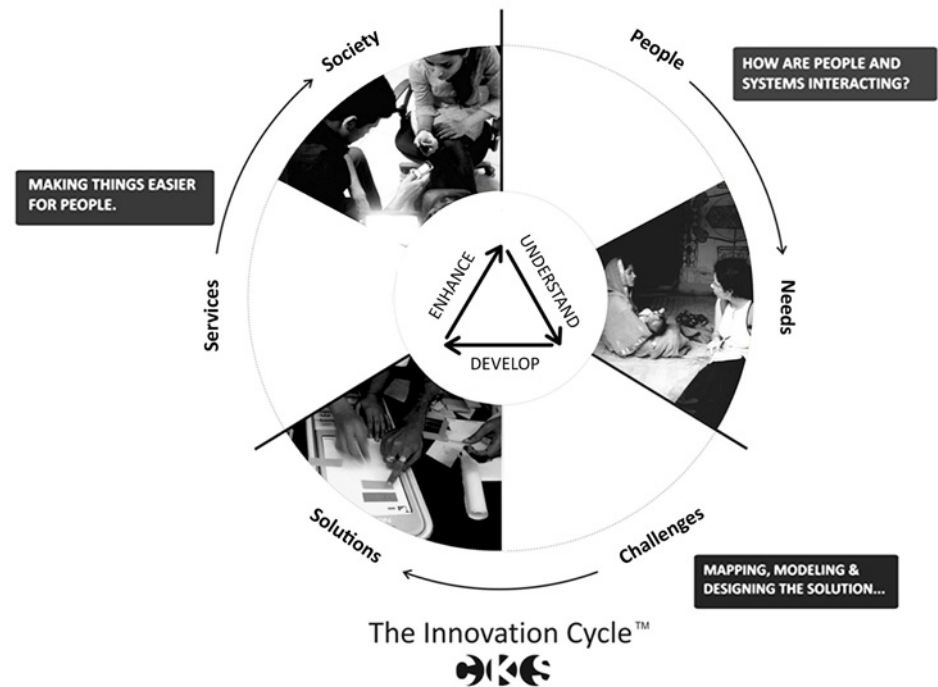
The Center for Knowledge Societies (CKS) utilizes design thinking using its Innovation Cycle, which consists of three arcs:

I. Understand
Through active or passive participation techniques, organizations should seek to understand their context, market, users' challenges, interactions, needs and preferences and their existing ecology. This ethnography-driven first phase helps us to understand exactly how a service is used at all levels, and to identify what works and what does not.

II. Develop
In a studio environment or through collaborative workshops, we conceptualize, design and develop solutions that respond to the earlier identified areas of need. From the gathered data, we develop multiple possible solutions and evaluate their relative values and optimal feasibility.

III. Enhance
In the last phase of innovation, we take our solutions directly to the intended consumers and communities to test and enhance our proposed solutions. We involve users in a collaborative dialogue to see how our solutions can be tweaked to fit better into the client's future application contexts.

Our approach, like design thinking as a whole, has emerged from the private sector over the last quarter century. Yet it holds tremendous potential for transforming government systems and services.

Innovation arises when we see in a visionary way, see things anew, see things as they really are or as they really should be. The Innovation Cycle, developed by CKS, is one way to integrate these different ways of seeing the world into a larger process of innovation that easily be applied by large organizations.

Governance Innovation

As a result of tremendous societal and economic development over the last two decades, the aspirations of the Indian government have never been higher. Moreover, the people of India are now aware that the tools and technologies to provide better governance are in fact available, and they are demanding that the state machinery use them. But the mere availability of technology is not enough. What is required is an ability to strategically use these new tools and technologies to actually create improvements in the way that governments provide services to their citizens.

When we say 'governance innovation,' we're talking about a specific process of inquiry into the real needs of citizens using ethnographic research methods. This research is followed by a process of problem solving that involves providers of a service and users of public services to create new solutions.

The Intersection of Design and Innovation with Governance

It is widely recognized that design can add tremendous value to consumer products. Consider, for instance, a recent CKS finding that for exactly the same feature-set and functionality, the price ratio for mobile handsets could vary by a factor of up to 4.5 -- all on account of design. The diverse elements of design contributing to this difference include user interface design, product form and structure, colour, material, finish, texture, and patterning, packaging, labeling, brand and visual communications design.

If design can create that much value in the world of consumer electronics, surely it can create efficiencies in the delivery of public services as well. Think of the problem this way: the Indian government projects a total expenditure of Rs. 1,257,728 crores for 2011-2012. If the application of design thinking were to provide efficiencies of just 2% annually, that would be a savings just over Rs. 25,000 crores per year.

The application of design in the public arena can create systems and services that are more efficient, more cost-effective and more useful for the people whom they serve: A well-designed medical facility can accommodate more patients and provide treatment that is more effective because it takes into account the needs of patients and the needs of the doctors who treat them. A well-designed mass transit system takes into account user preferences to create a system that reduces wait times and makes navigating the system intuitive and clear. A well-designed education system looks at the way that children learn and then caters the curriculum to find new ways to engage them.

The application of design to government is already happening, and already having an impact on people around the world. Here are a few examples of where design is improving government, and some areas where it has the greatest potential to help:

- Most recent surveys estimate that over half of the population of India is illiterate. Illiteracy makes a person's life challenging in many ways, including making it difficult to complete financial transactions. With this in mind, CKS is contributing to the development of a mobile financial service that can be accessed by people who are illiterate by only using numbers and voice-based interactions. Mobile-based financial technology has the potential to open up the area of formalized banking to millions of users in the informal economic sector of India, as well as dramatically changing the way that the India government makes direct payments to individuals.

- Commercial and Transmission Electricity losses in north Delhi currently account to 15%. Every 1% of the revenue loss is Rs.30 crores. CKS intends to conduct ethnographic research to identify fundamental motivations of non-consumers behind power theft in order to propose most effective design solutions (e.g., service enhancements, incentive schemes, and communication strategies). Through this innovation approach, CKS aims to substantially bring down the electricity losses to less than 10%.

- Due to lack of proper tools and equipments, frontline health workers spend 12 minutes on the entire process of vaccinating one child. This time-consuming task directly and negatively impacts service provision. CKS is developing a user-friendly integrated tool service delivery product which will reduce task time to 7 minutes for 1 recipient, thereby increasing service provision capacity to 40% more recipients every day they are at work. Additionally, automated cleanliness built into these tools can increase the safety of immunization and the quality of care.

- One in five (21%) currently-married women in the state of Uttar Pradesh had an unmet need for family planning in 2005–06. Almost 8 million UP couples are not using family planning, but want to limit fertility or space births. The increasing presence of mobile phone technology provides an opportunity to meet this need. CKS is designing ways to use mobile service applications to bring awareness of contraceptives to couples in the early stages of marital life, especially in the first year of marriage.
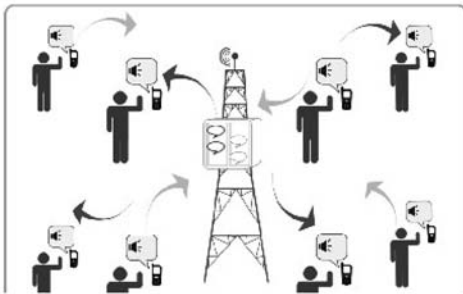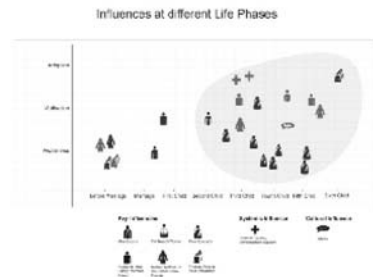
Evidence of Design Thinking Positively Impacting Governments

Many European countries have government-supported design conglomerations for the purposes of enhancing business and the government's interface with the public. Design Council in the UK not only works to create public identities but also helps formulate national design strategies that help the United Kingdom to differentiate its national brand and achieve broad national benefits. Elsewhere in the UK, a private organization, Think Public, and various governmental agencies, are working through a consultative approach with citizens to better target governmental services so as to maximize citizen benefits.

In Denmark, three national ministries came together to establish an internal innovation center called Mind Lab, which seeks to discover and implement new and improved means for the delivery of social and welfare services to its citizens.

In the context of public health, the first major public health information system has been built in Canada, and in many ways it may serve as a reference and benchmark for other countries around the world. The first deployment of a public health information system in developing country contexts is in Ghana, where a specialized Resource Center is even now being conceived to enable the support and further development of this new system.

In India, early innovation research and concept development activities by the Center for Knowledge Societies for the Gates Foundation has shown promising results in terms of new opportunities to enhance the quality of health care delivery through the Bihar pilot itself, using the tools and techniques of ethnography, design, and user experience enhancement. In its studios in New Delhi and Bangalore, it has hosted innovation workshops with international health experts, public officials and other stakeholders to envision new kinds of technologies and solutions for improving public health delivery. In future, it may be possible to organize these kinds of efforts in the form of an Innovation Lab or Innovation Center.

Whereas, in the past, attempts have been made to reform government, to make it more efficient, to reduce corruption and the arbitrariness of decisioning authority. Beneficial as these approaches may have been, they have not always been successful in fundamentally transforming the ways in which bureaucracies think about their mission, objectives and goals. They have not resulted in greater consumer orientation of these cadres, or greater public participation in the decision-making of these bureaucracies. These are the kinds of benefits that design thinking can bring to governmental and quasi-governmental bureaucracies.
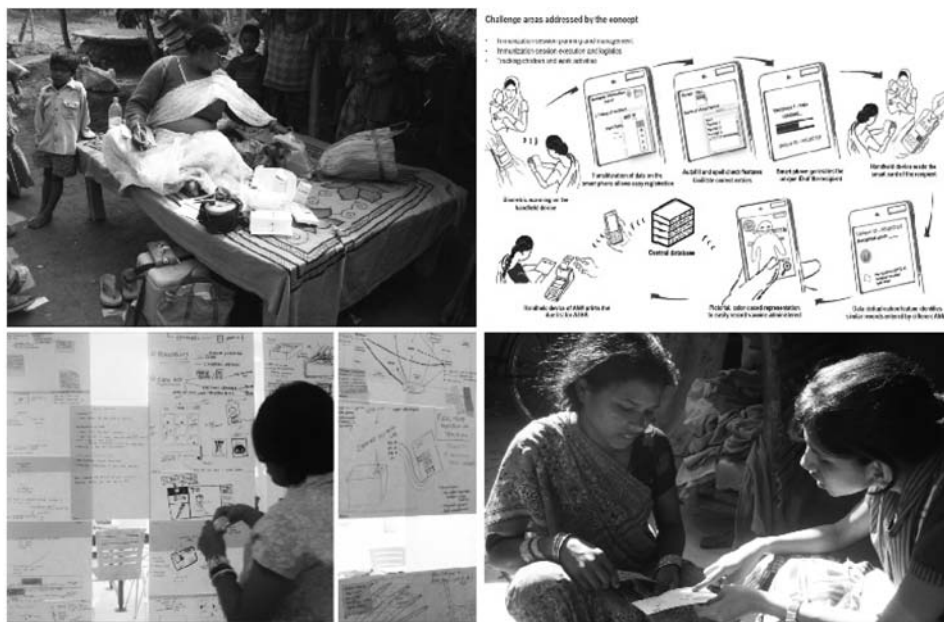
Consequences and Expected Outcomes Design Public

The Design Public Conclave is already bringing together new stakeholders in the larger challenge of Governance Innovation. The Conclave will have the immediate effect of bringing together

- Thought leaders in Design and Innovation
- Media Personalities and Opinion Shapers
- Representatives of Government charged with Innovation

The Conclave is creating new knowledge and new understandings of how innovation can be made to work for governments and for the people they serve, by sharing

- Several Case Studies of Governance Innovation
- A Glossary on Governance and Innovation
- A Bibliography on Governance and Innovation
- Numerous new ideas on how to promote Governance Innovation

In the course of the conference, the participants will

- Bring to light the areas of government that will be the first areas to benefit from this new governance innovation process
- Create a detailed plan for a possible Governance Innovation Lab focused on health care issues to be established the east-central part of the country
- Establish an on-going conversation around innovation. Specifically, it will set the stage for a follow-up conference.

Conclave Agenda

Summarized Agenda

09:00 am	Registrations
09:15 am	Mutual Introductions
09:50 am	Word of Welcome
10.00 am	Design Process and Its Impact on Everyday Life
11.00 am	The Opportunity for Design in Governance
12.00 pm	The Role of Social Media in Governance Innovation
1.00 pm	Working and Networking Lunch
2.00 pm	Innovation Workshops
4.30 pm	Team Presentations & Tea
5.00 pm	Institutional & Organizational Models for Governance Innovation

Detailed Agenda

09:00 am Registrations over Tea

09:15 am Mutual Introductions

Word of Welcome: Aditya Dev Sood, CEO, Center for Knowledge Societies

10.00 am What do Designers do? How can Physical, Informational and Interaction Design Impact the Everyday Life of Citizens?

Sunil Abraham, Executive Director, Centre for Internet and Society (Moderator)

Ekta Ohri, Head of Project Operations, Center for Knowledge Societies
Younghee Jung, Senior Designer, Nokia Corporation
Daniela Sangiorgi, Lecturer, Lancaster University
Kurnal Rawat, Creative Director, Grandmother India
Naresh Narasimhan, Principal Architect, VA Group

11.00 am How Can Governments Best Use Designers and Design Thinking?

Sudhir Krishnaswamy, Founder, Centre for Law and Policy Research (Moderator)

Niels Hansen, Project Manager, MindLab
Harsh Shrivastava, Consultant (Planning), Planning Commission of India
Anant Shah, Program Officer, Bill and Melinda Gates Foundation
Aparna Piramal Raje, Design Thinker, Mint
Kiran Dhingra, Secretary, Ministry of Housing and Urban Poverty Alleviation
Shubhagato Dasgupta, Senior Research Fellow, Centre for Policy Research

12.00 pm How Can Social / Media Promote Design and Governance Innovation?

Suresh Venkat, Executive Producer, CNBC TV18 (Moderator)

Yatish Rajawat, Editor-in-Chief, Business Bhaskar
Aditya Mishra, Founder, Headstart Foundation Network
Sashwati Banerjee, Executive Director, Sesame Workshop India
Vibodh Parthasarthi, Associate Professor, CCMG, Jamia Milia Islamia
Sukumar Ranganathan, Editor, Mint

1.00pm Working and Networking Lunch
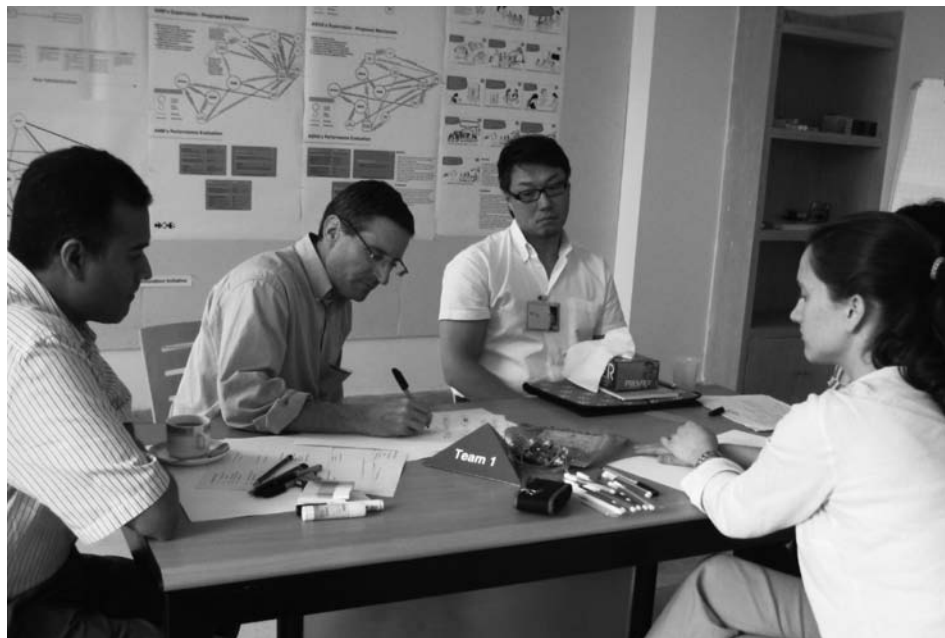
2.00 pm Innovation Workshopping Breakout Sessions

A: Conducting Ethnography to Inform the Innovation Process
The group is responsible for coming up with an innovative approach to curbing power theft in peri-urban locations in India. Many factors are responsible for this phenomenon. What questions will you ask and how will you collect information on the ground to inform any future innovations you might come up with?

B: Brainstorming and Concepting in Response to Ethnographic Data
The group is responsible for conceptualizing a new way to promote maternal and child health using mobile devices. Data on this question has already been collected and will be shown to the group in the form of a brief presentation. The group must come up with as many different ideas or concepts as possible using post-its and then prioritize these concepts and vote on the ones it would most like to see implemented.

C: Approaches to Institutionalizing Innovation in Government
This group will consider ways and means for accelerating and institutionalizing innovation in governance, through for example, the provision of knowledge, best practices, support, training, and organizational change. Ideas may include, but not be restricted to new kinds of handbooks, online sources, academic and applied training and other ideas. Approaches should be evaluated and prioritized prior to presentation back to the group. The example of healthcare in the context of a central Indian state will be used to anchor the thoughts of the group.

4.30 pm Team Presentations (over tea served at tables)

5.00 pm What Institutional and Organizational Models can best Foster Governance Innovation?

Amit Garg, Director, MXV Consulting (Moderator)

Arun Maira, Member, Planning Commission & Member, National Innovation Council
R. Gopalakrishnan, Member Secretary, National Innovation Council
Ram Sewak Sharma, Director General, UIDAI
D. S. Ravindran, CEO, Center of e-Governance, Government of Karnataka
Aditya Dev Sood, CEO, Center for Knowledge Societies

Other Notable Discussants and Interactants

Aaditeshwar Seth, Assistant Professor, IIT-Delhi
Anushtup Nayak, Partner, iDiscoveri
D. Raja, Member of Parliament
Isabelle-Jasmin Roth, Director, Bridge To India
Jaijit Bhattacharya, Director-Government Affairs, HP
Lokendra Chauhan, Consultant, nDimensions
N. Cheluvaraya Swamy, Member of Parliament
Narahari Mahato, Member of Parliament
Nien Siao, Head of Department, Fashion Design, Pearl Academy
Nita Soans Sood, Advisor, Center for Knowledge Societies
Piyush Goyal, Head of Consumer Relationship Management, NDPL
Pooja Sood, Curator and Director, Khoj Foundation
Ravina Aggarwal, Program Officer, Ford Foundation
Syed Azeez Pasha, Member of Parliament
Moinul Hassan, Member of Parliament
Josh Glazeroff, Visa Chief, US Embassy
Steven Solnick, Member-Government Performance and Accountability, Ford Foundation
Tile Von Damm, Head, PerGlobal
Theo Groothuizen, Councillor, Embassy of the Netherlands

Organizer Profiles

Aditya Dev Sood

Aditya Dev Sood is the Founder and CEO of the Center for Knowledge Societies (CKS). He has doctorates in Anthropology and in Sanskrit Philology from the University of Chicago. He is a former Fulbright Scholar and has an wide range of disciplinary competencies, gained through a long and diverse education, including Architecture, Art History, Critical Theory, Comparative Literature, Sanskrit Philology, Philosophy of Language, Social Theory and Cultural Anthropology.

www.cks.in

Dr. Sood has directed a number of projects involving user research, new product/service concepting, user experience and service design at CKS. His work involves supervising ethnographic research, analyzing aesthetic forms and developing innovative analytic techniques through which users and the products, services and systems they interact with can be imagined in new ways.

Over the last decade, Dr. Sood has written a number of reports which have informed the public debate on technology and development. The CKS Guide to ICTs for Development (2002) received widespread samizdat circulation across South Asia at the highest levels of policy making. The Mobile Development Report (2007) provided the first empirical model to explain exactly how mobile phones create income effects for rural adopters. He directed research for the Emerging Economy Report (2008), which identified innovation opportunities for regions of the world experiencing informationalization under conditions of limited or partial industrialization.

Sunil Abraham

Sunil is a Bangalore-based social entrepreneur and the executive director of the Centre for Internet and Society (CIS), in Bangalore. The Centre for Internet and Society critically engages with concerns of digital pluralism, public accountability and pedagogic practices, in the field of Internet and Society, with particular emphasis on South-South dialogues and exchange. Through multidisciplinary research, intervention, and collaboration, CIS seeks to explore, understand, and affect the shape and form of the internet, and its relationship with the political, cultural, and social milieu of our times.

Sunil founded Mahiti in 1998, a social enterprise aiming to reduce the cost and complexity of information and communication technology for the voluntary sector by using free software. Sunil continues to serve on the board of Mahiti.

Sunil is an Ashoka fellow and was elected for a Sarai FLOSS fellowship. For three years, 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.

www.cis-india.org

R. Sukumar

R. Sukumar is the Managing Editor of Mint. Sukumar has an MBA from Bharatidasan Institute of Management, Trichy, and an MSc in Mathematics and a BE in Chemical Engineering from BITS, Pilani. He joined Mint in late 2006. He is a 14-year veteran of business journalism and was previously managing editor of Business Today magazine.

www.livemint.com

Mint is a business newspaper from HT Media Ltd, launched in collaboration with The Wall Street Journal in February, 2007. It is a premium business news publication aimed at decision makers and policy-makers of the country and it is the first newspaper in India to be published in the Berliner format.

Along with the print edition, Mint also has specialized online and mobile editions which can be accessed at "www.livemint.com". Livemint.com is among the fastest growing news websites in India and it attracts more than 1.5 million readers every month, majority of whom are decision makers in leading business organizations across the world. It is widely considered to be the most comprehensive and technically evolved news portal in the country that has introduced many multimedia enabled engagement platforms which give its readers the opportunity to express their point of view and interact with Mint's editors and columnists.

The weekend edition of the publication is called "Lounge" and it features columns on travel, fashion, arts, personal technology, parenting, and health.

Amit Garg

Amit Garg is a Founding Director at MXV Consulting. He started his career with the Boston Consulting Group (BCG) in 1996 and worked with their offices in Mumbai, Melbourne and New Delhi. At BCG he worked on the restructuring of business conglomerates and public sector enterprises. In 2006, Amit founded MXV Consulting, where he focuses on the areas of strategy, governance and organisation development. His consulting experience spans more than 30 different industry segments, with an emphasis on the services sector. He has been an advisor to several of India's largest and most respected companies. Amit completed his Bachelors in Electronics Engineering and Masters in Science from BITS Pilani, and MBA from IIM Ahmedabad. He graduated from both colleges with high distinction, and was on the honours list at IIM Ahmedabad. Amit writes regularly on topics of business management.

www.mxv.in

Naresh Narasimhan

Naresh Narasimhan is Managing Partner of Venkataramanan Associates (VA), a 40-year-old Architecture firm based in Bangalore. He graduated in Architecture from the Manipal Institute of Technology. He also studied Project Appraisal and Risk Management at Harvard.

Naresh has led the expansion of VA into diversified markets with particular strengths in Research and development, specialized manufacturing, IT business parks, public and institutional buildings, corporate offices and realty. With a sound understanding of global trends in project planning, architectural design, urban design, and infrastructure within a sustainable framework, Naresh also has a keen interest in design theory, economics and information systems. He advises urban government agencies on infrastructure development and is also Director of Janaadhar, a Bangalore based social housing company, and is the Co-founder of MOD.

www.vagroup.com

Vibodh Parthasarathi

Vibodh Parthasarathi maintains a multidisciplinary interest in media and development policy, business history of creative industries, and governance of media infrastructure. Currently at the Centre for Culture, Media & Governance (CCMG), Jamia Millia Islamia, New Delhi, he is the co-editor of L'idiot du Village Mondial (Editions Luc Pire/ECLM, 2004), Media and Mediation (Sage, 2005), The Social and the Symbolic (Sage, 2007), and most recently Communication, Culture and Confrontation (Sage, 2010). His ongoing work addresses innovations in policy literacy, curatorship in arts practices, and pluralism in television news. Parthasarathi serves on the Board of the Centre for Internet & Society, International Advisory Board of the India Media Centre, University of Westminster and International Editorial Board of Global Media and Communication.

www.jmi.nic.in

Sudhir Krishnaswamy

Dr Sudhir Krishnaswamy is a Fellow at the Centre for Law and Policy Research, Bangalore and a Professor of Law at the Azim Premji University, Bangalore where he leads the Law, Governance and Development Initiative. He studied law at the National Law School of India University, Bangalore (BA LLB) and the University of Oxford (BCL and DPhil). Before Azim Premji University, he was at the National University of Juridical Sciences, Kolkata, the National Law School of India University, Bangalore and Pembroke College, University of Oxford. He has worked with government at various levels including the Prime Minister's Committee on Infrastructure and the Kasturirangan Committee on Bangalore's Governance. His research interests include constitutional law, administrative law, intellectual property law and reform of the legal system, legal profession and legal education in India. His book 'Democracy and Constitutionalism in India' was published by OUP in 2009.

Design Public: Participant Profiles
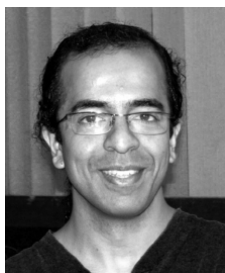
Aaditeshwar Seth

Aaditeshwar Seth is Assistant Professor at IIT-Delhi and Head of the Appropriate Computing Technologies for Development (ACT4D) research group. He is also a co-founder of Gram Vaani, a social entrepreneurial venture to enable development through community media in rural areas of India.

Aditya Mishra

Aditya Mishra is a Client Partner Manager at Tata Consulting Services (TCS) where he is also a part of the Innovation Team. He is also currently a Member of the Advisory Board of the Entrepreneurship Development Cell at the Institute of Chemical Technology. He is the co-founder and Director of Headstart Network Foundation.
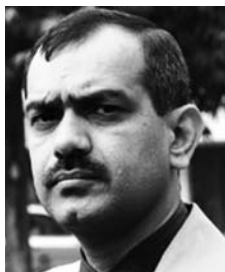
Amod Kumar

Amod Kumar is currently a Project Director at Intra Health International, a non-profit organization which has worked in more than 91 countries and is currently working on projects in the Americas, Asia, Africa and Eurasia. Prior to this, he was a Special Secretary Revenue, Special Secretary IT and a Collector and a District Magistrate.

Anant Shah

Anant Shah is a Program Officer on the Vaccine Delivery team in the Global Health Program at the Bill & Melinda Gates Foundation. Anant currently manages an effort in partnership with local organizations and Indian governments to improve maternal, newborn, and child health in India.

Ankita Narain

Ankita Narain is a Research Associate at The Energy and Resources Institute (TERI). She is currently working on development and dissemination models for sustainable and renewable technologies. Prior to TERI, she worked on climate change at the Centre for Science and Environment in Delhi.

Anna Stratis

Anna Stratis, a Chief Medical Officer with WHP, has a long-standing interest in making a contribution to primary care and general practice in India. She studied at AIIMS, New Delhi, holds a medical doctor degree in family medicine and Master of Science in retina research from Dalhousie University in Halifax, Canada.

Anushtup Nayak

Anustup Nayak, a Partner with iDiscoveri, leads the executive education function at iDiscoveri. He has a Masters Degree in Public Policy from Georgia Tech and an Ed.M from Harvard University, he is interested in the possibilities of improving lives of those least privileged through social enterprise.

Aparna Piramal Raje

Aparna Piramal Raje is a Director at BP Ergo and a columnist with Mint, India's second largest business newspaper. She regularly writes for Mint, exploring the value of design to companies, their products and their spaces. She also contributes regularly to UK's Financial Times Weekend.

Arnab Bose

Arnab Bose is a Research Associate at The Energy and Resources Institute (TERI). He is currently working on Financial Markets for Sustainable Development at TERI and has presented papers on 'Derivatives and the Carbon Market' and 'Efficacy of Public Expenditure'. Prior to TERI, he worked with IT and consulting industries like IBM.
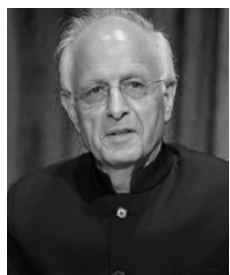
Arun Maira

Arun Maira is a former management consultant and present member of the Planning Commission iof India. He is a thought leader and writer on topics like transformational change and leadership. He is a frequent speaker at international forums on the future of India. He is also the India Chairman for the Boston Consulting Group.

Ashis Sanyal

Ashis Sanyal is a retired Senior Director, Department of Information Technology, Ministry of Communications and Information Technology, Government of India. He was responsible for drafting government policy guidelines, strategy and framework for the core e-governance network infrastructure programme.

Daniela Sangiorgi

Daniela Sangiorgi is a Lecturer at Lancaster University. She has a PhD in Industrial design from the Politecnico di Milano in Italy. She has investigated services as complex social systems, proposing holistic and participatory approaches to Service Design.

Ekta Ohri

Ekta Ohri is the Head of Project Operations at CKS. Trained in Architecture (New Delhi), Visual and Critical Studies (CCA, San Francisco), and Anthropology (Northwestern University, Chicago), Ekta has experience in design and business applications of ethnography. She is interested in exploring links between design, culture, and lived experience.

Harsh Shrivastava

Harsh Shrivastava is a Consultant (Planning) with the Planning Commission of India. He is a specialist in communication, marketing and public policy and is interested in the inter-linkages between politics, policies, and profits. He has worked in the Prime Minister's Office, in the Confederation of Indian Industry, as a journalist and with an NGO.

Isabelle-Jasmin Roth

Isabelle-Jasmin Roth is based in Munich and New Delhi and manages business development, marketing and acquisition at Bridge to India. She studied Political Science of South Asia at the University of Heidelberg. Before Bridge to India, she set-up and sold a company, led a student business consultancy and worked as a freelance journalist for several German newspapers and magazines.

Jaljit Bhattacharya

Jaijit Bhattacharya is the Director of Government Affairs, at Hewlett-Packard India. Prior to this he was Country Director of Government Strategy at Sun Microsystems. He is also an adjunct faculty at IIT Delhi.

Kiran Dhingra

KiranDhingra, IAS, is Secretary, Ministry of Housing and Urban Poverty Alleviation. She belongs to the 1975 batch of IAS-AGMU Cadre. She previously worked as Director General (Shipping), Department of Shipping, Ministry of Shipping, Road Transport and Highways.

Kurnal Rawat

Kurnal Rawat founded Grandmother India, a multi-disciplinary holding in the field of communcication, after graduating from Sir J.J. Institute of Applied Art. He is an active design researcher studying indigenous art & urban street culture through a typographic lens. He has recently represented India in the Asia Design Meet in S. Korea to discuss Asia being the new hub as design contributor in the Global Arena.

Lokendra Chauhan

Lokendra Chauhan is a Consultant at nDimensions, Research and training Services Pvt Ltd. Prior to this he worked as an Investment Officer at the India Investments at Grassroots Business Fund and as a Consultant at the Patent Board.

Lysander Menezes

Lysander Menezes works as Health Systems Design Specialist at PATH drawing on his education as a health economist and economic demographer as well as his experience working on a wide range of projects in the health sector. His exposure to Artificial Life Modeling, as a Harvard – MIT Artificial Life Group member, has formed his design perspective.

Niels Hansen

Niels Hansen is project manager at MindLab, a cross-ministerial innovation unit in Denmark which involves citizens and businesses in creating new solutions for society. He has a Masters Degree in Public Administration with a special focus on organizational dynamics and management of the public sector. Part of Niels' work is to deal with the challenges with measuring the results of Mind Labs' work..

Nien Siao

Nien Siao is the HOD- Fashion Design at the Pearl Academy of Fashion, New Delhi. She is a graduate in Industrial Design Textiles, from NID, Ahmedabad and has a Post Graduate Certificate in Higher Education from NTU, U.K.. She is an active member of Textile Institute Forum, UK and continues to be involved in both fashion and textiles related education, research, craft development and sustainable design practice.

Nita Soans Sood

Nita Soans Sood is a creative designer who works on fabrics, tapestries and accessories. Originally trained as an architect, she has worked with the Center for Knowledge Societies (CKS) in several capacities including, Ethnographer, Concept Designer, Design Strategist and Head of Project Operations. She maintains a consulting and advisory relationship with CKS.

Piyush Goyal

Piyush Goyal is the Head of Consumer Relationship Management at the North Delhi Power Ltd. He is a result oriented professional with a rich and comprehensive experience in the power sector, managing a wide array of functions inlcuding, Corporate Governance, Organizational Re-structuring, Business Process Re-engineering, Project Planning & Execution, Service Operations and Performance Management.

Pooja Sood

Pooja Sood is the chairperson and coordinator of KHOJ International Artists' Association, an autonomous, artist-led registered society aimed at promoting intercultural understanding through exchange. More recently, KHOJ, through its residencies, has been exploring the intersections between art and design.

R. Gopalakrishnan

R. Gopalakrishnan, IAS, is currently an Additional Secretary to the Prime Minister. His responsibilities in PMO include overseeing Ministries of Planning and Planning Commission, Human Resource Development, Health & Family Welfare, and Housing & Urban Poverty Alleviation.

Ram Sewak Sharma

Ram Sewak Sharma, IAS, is the Director General of UIDAI the organization responsible for issuing National ID number to all Indian citizens. Prior to this, he worked on several very successful eGovernance projects in Bihar. He was the Principal Secretary (Public Health and Engineering) in Jharkhand, Secretary IT, Human Resource Development, Panchayati Raj and Principal Secretary to the Governor.

Ravina Aggarwal

Ravina Aggarwal works on media issues in India at the Ford Foundation, New Delhi. Her grant making advances issues of democratic expression and media access among marginalized communities. Prior to this, Ravina spent 12 years at Smith College in Massachusetts, where she taught in the anthropology department. Her scholarship focused on media studies, political anthropology, gender and expressive culture.

S. Balaram

S. Balaram is design educator, writer and presently Dean of DJ Academy of Design, Coimbatore. Balaram has held positions on the board of directors of NID, Ahmedabad and NIFT. He has received several awards, including the Indian Helen Keller award and the international Ron Mace award. He has published 3 books including 'Thinking Design'.

Sashwati Banerjee

Sashwati Banerjee, is the Executive Director of Sesame Workshop India. She specializes in Behavior Change Communication. Prior to joining Sesame Workshop she was the Program Director and Communications Advisor at Abt Associates Inc., where she was responsible for designing, managing and implementing behavior change communications for reproductive health and child survival programs.

Shamik Trehan

Shamik Trehan is Deputy Chief of the Party of Integrated Family Health Initiative supported by BMGF. He has been working with CARE since 2002, and has worked in various sectors such as health, education, livelihoods and program development. He has wide experience in managing and implementing complex multi-sectoral programs in partnership with government, development agencies and the private sector.

Shubhagato Dasgupta

Shubhagato Dasgupta is a Senior Research Fellow at the Centre for Policy Research, New Delhi. Shubhagato has formerly worked in the urban sector in India for a number of years spanning the width of organizations in the public, private, multilateral and nongovernmental sectors in various capacities.

Steven Solnick

Steven Solnick is the Ford Foundation's Representative in New Delhi. He oversees the Foundation's annual grant making program in India, Nepal and Sri Lanka. He also directs all administrative aspects of the Foundation's work, manages the Foundation's relationships with host governments, local partners and the international community.

Subir Dey

Subir Dey is a Social Media and Communications professional who is currently the Executive Editor of Good Governance magazine. He has worked in myriad industries and domains before moving to the development sector working notably with Greenpeace and Oxfam and then starting a magazine on GMOs, Agbiodiversity and ndigenous Knowledge eduring his stint at Gene Campaign.

Suresh Venkat

Suresh Venkat is a Senior Anchor and Executive Producer with CNBC-TV18. Shows under his supervision include Tech Toyz, Lessons in Marketing Excellence and Chota Business Bade Sapne amongst others. Suresh's areas of programming expertise include Enterprise Technology, Innovation, Small Businesses, Art and Personal Technology. . He lives in Mumbai.

Theo Groothuizen

Theo Groothuizen is the Counseller for Science and Technology at the Embassy of the Netherlands in New Delhi, India. He is responsible for collecting information on trends and developments in Science & Technology in India and building bridges between Dutch and Indian universities, R&D institutes and businesses in all areas of Science and Technology.

Tile Von Damm

Tile Von Damm is a Political Scientist, Head of the research institute PerGlobal, Berlin and part of the urban action research institute MOD, Bangalore, Berlin. He has been responsible for the overall strategy of the Humboldt-University Berlin and the Centre for Literature and Cultural Studies. His research fields cover urban development, sustainable development, privacy and digital identity and global governance.

Vikas Arora

Vikas Arora is a Manager at North Delhi Power Ltd. He has more than 7 years of experience in the Power Distribution Business with exposure to functions like Aggregate Technical and Commercial (AT&C) loss reduction, Consumer Relationship Management, Metering & Data Analysis, Strategy & Planning, Business Excellence.

Yatish Rajawat

Yatish Rajawat is the Editor-in-Chief of the Business Bhaskar, the group's Hindi business daily that was launched in 2008. Prior to joining the Bhaskar group, he was Associate Editor at Business World and worked at the Economic Times as Editor – Knowledge and Technology. He has also worked with the Hindu Business Line.

Case Studies on Governance Innovation

User-Centered Design of a New Vaccine Delivery Services Kit

Center for Knowledge Societies, Bihar, India

Vaccines are an extremely effective tool in combating disease, including difficult to treat and debilitating diseases like typhoid, polio and rabies. When applied properly, vaccines are simple, safe, highly effective and extremely cost-efficient.

And while many children throughout the world receive a strong series of vaccinations, there remain large portions of the world's population that are outside the reach of quality vaccination programs. This remains especially true in many rural populations, where distance, the landscape and lack of infrastructure creates particular challenges to effective treatment.
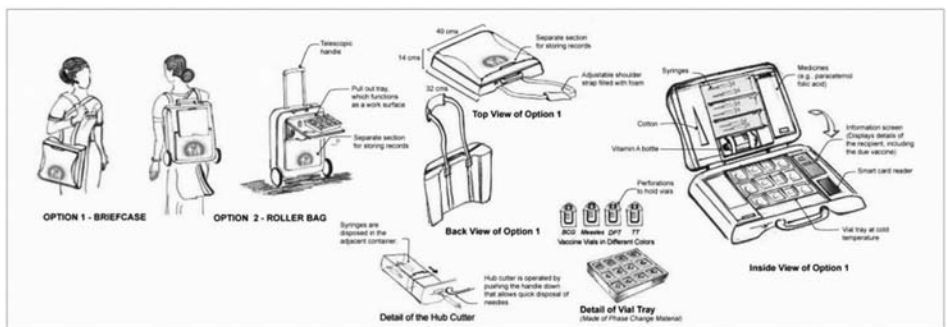
With this in mind, the Delhi-based innovation firm Center for Knowledge Societies (CKS) developed the Vaccine Delivery Innovation Initiative. Members of CKS spent several weeks in five locations across the northern Indian state of Bihar. They shadowed frontline health workers, interviewed families, and observed community life. Consequently, CKS has identified a number of ways in which the traditional vaccine methods and tools are falling short.

They discovered that the tools intended to maintain vaccine temperature (a key element in maintaining vaccine effectiveness) were failing, and that the indicators of when a vaccine was unusable were not accurately alerting health care workers. They found that many of the procedures for maintaining hygiene through the process (like using alcohol swabs to disinfect skin before injection or basic hand-washing procedures) were not being followed and that some hygiene tools were missing from the vaccination kits entirely. They found that the tools to ensure proper disposal of used syringes were falling apart after only several months of use, leaving workers to dispose of syringes on the ground.

Consequently, CKS is now developing a new Vaccine Services Delivery Kit that will maintain the proper temperature for vaccines and alert frontline health workers when vaccines are spoiled. It will help ensure that frontline healthcare workers have all the tools they need to inject vaccines hygienically and to dispose of syringes safely.

The kit is being designed with the frontline health care workers in mind. Specifically, it aims to re-emphasize the pride that many of the frontline health workers feel in the work that they do and communicate the necessity of safety and hygiene. The kit is being designed to be as intuitive as possible, to help make following proper safety procedures simple.

Ultimately, the project aims to further extend the reach of vaccination, in hopes of sharing the benefit of this simple medical treatment and to help further the efforts to truly eradicate some of the world's most serious diseases.

Source:
http://cks.in/VaccineDeliveryInnovationReport.pdf

User-Centered Design of Public Transport

Live|Work, Oppland County, Norway

The Norwegian county of Oppland has nearly 200,000 residents spread across a rural, vast, mountainous area.

Because of the low population density, public transportation in the county is infrequent, inconvenient and under-utilized. The vastness of the area means that, for many people, the nearest bus stop is a lengthy walk. And the lack of ridership means that buses come infrequently.

As a result of all these factors, the county's public transportation does a poor job of serving its residents and is not economically viable for the government.

To combat these issues, Oppland county approached English-based design firm Live|Work. Live|Work traveled to Oppland, riding the transportation system themselves and exploring the way the system functions. They conducted interviews with residents in their homes and conducted an innovation workshop with a group of local teenagers.

Live|Work has crafted all the insights gathered in the course of interviews and the workshop and has shared it with the Oppland public transport administration. Additionally, Live|Work is now helping to develop new ways that the service could operate, including bus-on-demand via the Internet or mobile phones, and improved price-schemes for rural transportation.

Source:
http://www.livework.co.uk/our-work/Opplandstrafikk

User-Centered Design of Mobile Financial Services for the Poor

Center for Knowledge Societies, North India

One of the most innovative uses of mobile technology to emerge over the last few years is the use of mobile phones as a tool for financial transactions. Mobile-based financial systems hold the promise of extending the benefits of banking to many people who do not have access to traditional banking institutions, and has far-reaching implications for the way that the government gives and receives payments to individuals.

But with these new tools, there remain several serious barriers to use. Current mobile financial systems require users to string together long, complicated number codes (often 40-50 characters long) that combine dialing codes, user account numbers, recipient account numbers and other information. Additionally, in many cases, the user has to carry either a random number generating tool or an encrypted booklet of access codes.

The complexities of these systems are intimidating to many potential users, especially those with limited literacy skills.

With that in mind, Delhi-based innovation firm Center for Knowledge Societies (CKS) is developing technology that would extend the benefits of mobile banking to even more customers through the use of voice-recognition technology.

With voice-recognition software, a user who wanted to transfer money would simply call a server that would prompt them to repeat a series of words. Once the system had confirmed their identity, the transaction would be verified. The system ensures secure uses of finances and requires no external number generator, no procedures to memorize and no password.

Making banking simpler allows even people with very low salaries to enjoy the benefits of bank accounts: the security of having money in an account as opposed to cash, the ability to earn interest, the convenience of a banking account, the ability to have shared accounts, etc.

Additionally, such a system (in combination with a government-issued Unique Identification Number) could be used for all the transactions between the Indian government and individual citizens. Between direct cash transactions, subsidies, transactions around education (scholarships) and health care, the government transfers approximately Rs13.3 lakh crore each year to individuals. Using mobile-based financial payments would make receiving funds significantly more efficient and more cost-effective, and would increase access for people with literacy barriers.

Source:
On-going CKS research

Eliminating Painpoints in Government to Industry Interactions

MindLab, Denmark

Though often strained, the relationship between private industry and government is vital to a functioning economy. Government provides important regulatory and legal functions that keep businesses running safely and provides the infrastructure necessary to conduct business. In return, business creates economic opportunity, providing for employment and creating the tax base that is the lifeblood of government.

But for many businesses, interacting with the government can seem burdensome and needlessly bureaucratic. Over time, the information or paperwork required by a government can become needlessly duplicated or outdated, and new requirements can be added without being smoothly integrated into the existing system.

With this in mind, the Danish design firm MindLab set out to reduce bureaucratic red tape in the business world. Through interviews with businesses and direct observation of Danish companies, MindLab was able to identify key areas where bureaucratic practices were creating difficulties. Using this information, they were able to brainstorm work-arounds and new solutions. The staff at MindLab presented their findings and suggestions to various government ministries and even took ministry officials out into the field to participate in observing and interviewing Danish companies about their experience dealing with government bureaucracy and red tape.

Furthermore, MindLab developed a method for observers to identify irritant burdens suffered by companies. They trained government employees in the method and made visits to over two dozen companies. MindLab then conducted a test workshop in which the methods for reducing red tape were subject to practical testing.

The project has successfully changed the way that business and the government interact. Many of the areas of burden that the project identified were later put into law as part of larger "easy administration" legislation. Furthermore, the project has attracted the attention of foreign governments looking to replicate MindLab's success.

Source:
http://www.mind-lab.dk/en/cases/officials-on-the-hunt-for-burdens
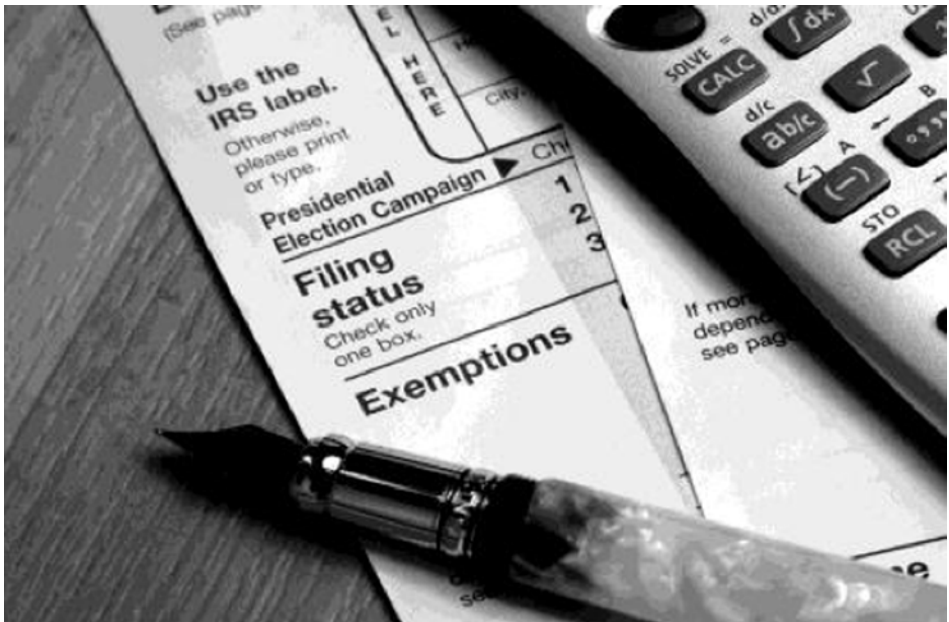
Redressing Gender Imbalances with Bicycle Gifts

Government of Bihar, India

In Bihar, one of India's poorest states, the cost of transportation and the threat of physical violence has left many women unwilling and unable to travel freely. Women as a whole are less likely than men to engage in society in a variety of ways, and many young girls drop out of school before completing their education. The effects of a lack of education compound over time, as it contributes to difficulty later in getting high wage work and acquiring new skills.

But in 2006, Bihar Chief Minister Nitish Kumar launched a creative program that funded a bicycle for all female students in Bihar who made it to Class Eight with an 80 percent attendance rate or better. The bicycles greatly increased girls' mobility and all but eliminated transportation costs for their families. Additionally, the bicycles have allowed girls to travel long distances safely and increased their ability to participate in society more generally.

In the ensuing years, the dropout rate among young women has dropped by over half. The project has met with a widespread success and helped Nitish Kumar get re-elected in 2010. The government continues to extend the bicycle credit to new students.

The benefits of this program have the possibility of multiplying over time. Greater access to education can result in greater literacy, greater economic opportunity, greater opportunity to pursue even higher education and a multitude of other benefits.

Source:
http://southasia.oneworld.net/fromthegrassroots/girls-in-bihar-pedaling-their-way-to-education-empowerment

Easy-to-Use Tax Forms

MindLab, Denmark

The Danish Ministry of Taxation and the Tax Authority of Denmark were considering developing a mobile SMS version of its 'Self-Key' service to enable individuals to fill in information for their tax returns digitally and while on the move.

To test the viability of the proposed program, the Ministries turned to MindLab, an innovation unit that works across several Ministries in the Danish government.

MindLab included a number of potential users in the process to see how they reacted to the proposed program. In several workshops, MindLab presented the mobile service to the public (along with other proposed services). From their feedback, MindLab determined that few people were interested in trying to file their taxes from a mobile phone while they were out and about. They ultimately convinced the Ministries that their vision was not being eagerly embraced by the public, leading them to abandon that particular strategy and to explore other projects instead.

MindLab's involvement of the public saved the ministries from developing a costly new option that would not be embraced by its target audience. MindLab then brainstormed further and developed a catalogue of ideas for future version of 'Self-Key' service which is quality-assured and easily embraced by the citizens.

Source:
http://www.mind-lab.dk/en/cases/when-skat-deferred-mobil-tastselv

Community-Centered Design of Housing Services

Live|Work, Haringey Borough Council, United Kingdom

The Borough of Haringey in North London has a significant homeless population, many of whom live in temporary accommodations provided by the local government. The Haringey Borough Council hoped to reduce the number of people living in temporary accommodations by half and also improve the services the borough offers people while they live in temporary accommodations.

To help address this challenge, the Haringey Borough Council enlisted the help of the service design agency Live|Work.
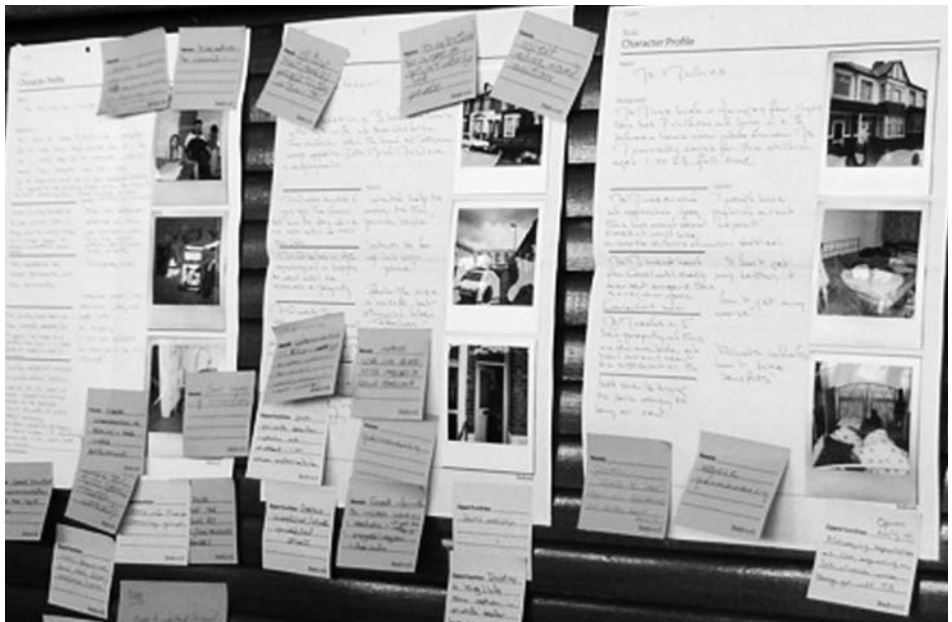
Live|Work and the Borough council collaborated to develop new ideas for housing services. They formed an innovation team that included housing staff, managers and policy officers. They worked to establish a method for engaging residents in the process and then used design processes to create over 100 new ideas for housing services. From those ideas, the group boiled the work down into four concepts for new housing services.

Haringey housing services is now using those principles as they continue to improve housing services. The focus has shifted to developing a housing "life plan" for people using housing services. New programs are focused on creating a choice for people on which housing options they prefer so as to reduce the time spent in unsatisfactory housing. Additionally, the programs have incorporated an increased focus on trying to help people improve their chances of finding a longer-term housing situation.

The council reports that going through the service design process has created a significant change of attitude within the housing services team. The council says that staff are much more prepared to listen to people using housing services and more responsive to the needs that they express. Additionally, the Council has created a dedicated group who are responsible for implementing a new service design approach to ensure that services are more customer centered as the various programs continue to grow and develop.

Source:
http://www.livework.co.uk/our-work/Haringey-Borough-Council
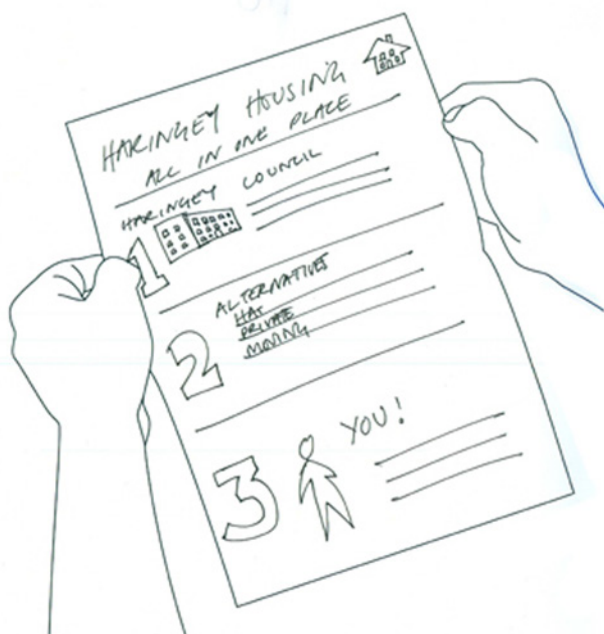
Co-Design of Diabetes Management

Design Council, Bolton and Kent Council, United Kingdom

There are roughly 1.8 million people with diabetes in the UK, equivalent to three per cent of the population. Diabetes can be an especially challenging condition since treatment requires consistent and diligent monitoring and care by the patient.

Bolton, a town in Greater Manchester in the UK, was seeking ways to improve the services. Despite a dedicated facility for diabetes patients, many patients in the community found it difficult to make the lifestyle changes necessary to manage their condition.

To help out, the UK-based Design Council (in partnership with other design organizations) aimed to harness the principles of design-led innovation to help transform diabetes care.
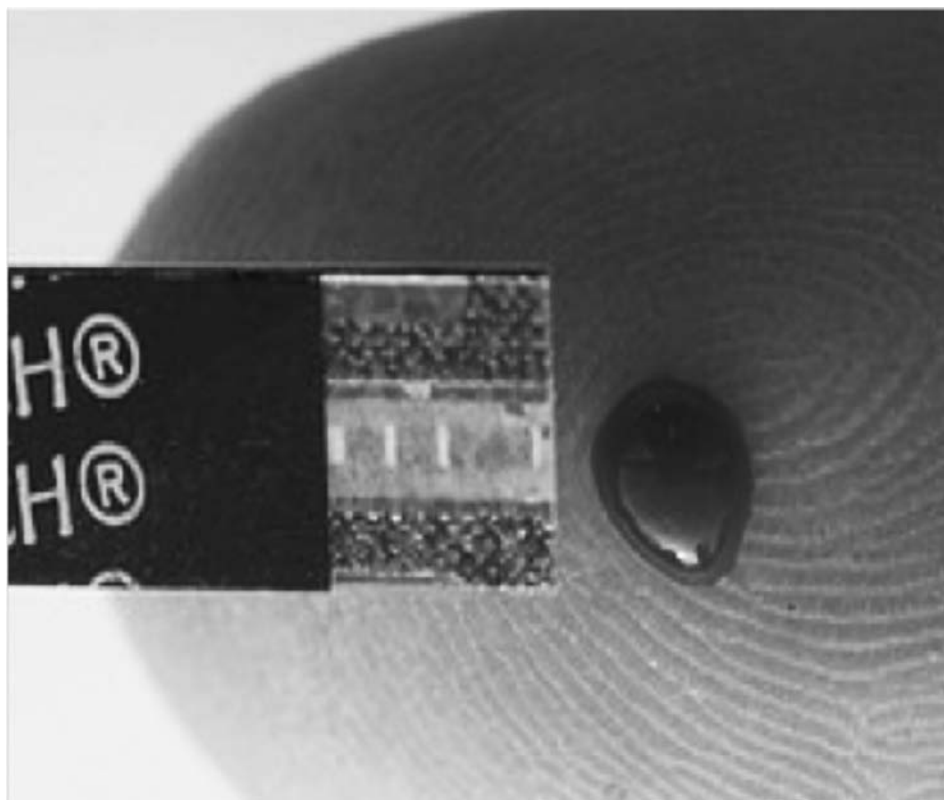
The design team found a group of 20 diabetes sufferers who would be willing to participate in the project. Members of the team then spent time with the patients in different aspects of their lives to figure out how managing their diabetes related to the other elements of their daily routines.

After extensive interviews and brainstorming sessions with diabetes sufferers and health care professionals, Design Council began creating prototypes for different health care design models.

One model involved an interactive deck of cards that diabetes patients could use to help articulate their specific needs for support, either to their doctor or to their families.

A second model proposed incorporating life coaches into the patients' lives as someone to help them manage the maintenance of their care. The patient would be given information about different life coaches at their doctor's office, and could select one based on their particular lifestyle or personality. The coach would then help them manage their lives in a way that allowed them to better monitor their health and seek support when they needed it.

As a result of the Design Council process, a more refined version of the agenda cards prototype is now in clinical trial and being used (and improved) by over 15 medical practices and 250 patients. Most importantly, the process helped establish that effective treatment of diabetes requires a radical change in the behavior of patients, and that any future attempts to combat the condition would have to focus on helping patients monitor their own health.

Source:
http://www.designcouncil.org.uk/Case-studies/Diabetes-management/

Ethnography and Design Thinking to Reduce Power Theft

Center for Knowledge Societies, New Delhi, India

Power theft is a problem in many developing economies, but is an especially significant problem in India. Power theft occurs comes in the form of meter tampering, establishing illegal connections and non-payment of bills. It is estimated that at different points in the last decade, as much one-third to one-half of the country's power supply has been unpaid for. In the Delhi area, some estimates say as much as 15% of Commercial and Transmission Electricity is stolen or otherwise unpaid for.
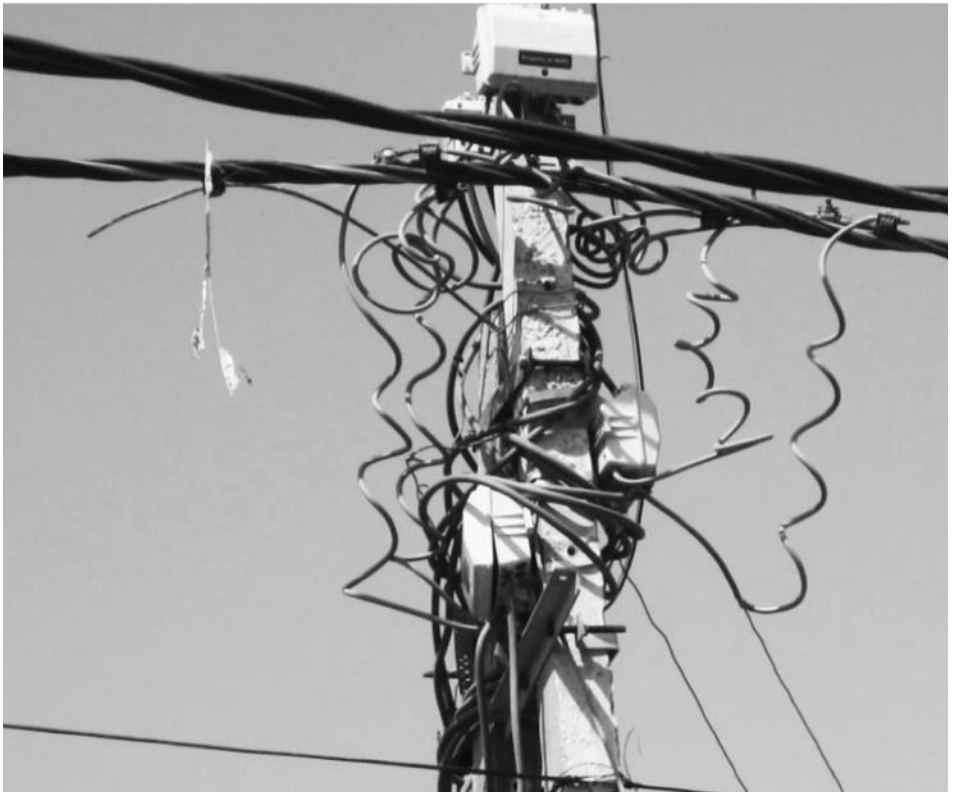
Current enforcement methods are only capable of recovering about 1-1.5% of commercial losses owing to power theft. But reducing the percentage further has proved challenging. Enforcement raids are often ineffective as defaulters are alerted in advance of raids. The frequency and location of raids are subject to political influence by local political parties. And even the most tamper-resistant power meters can still be manipulated.

Delhi-based innovation firm Center for Knowledge Societies (CKS) is designing new methods to substantially reduce losses from power theft.

CKS employees have conducted interviews with both power company employees as well as residents in areas where power theft occurs, and are now crafting proposals for further research. They are now crafting a strategy to use ethnographic research to learn more about the situation surrounding power theft.

With this material, CKS intends to use design thinking processes to create new methods of reducing power theft. These methods could include service enhancements to the current system to make paying for power a more appealing alternative to theft. Additionally, communication strategies can help change peoples' ideas about the ethics of power theft and create awareness about the idea of energy conservation.

Source:
On-going CKS research

A Social Innovation Lab

Engine Service Design, Kent County, United Kingdom

In order to remain relevant to the changing needs of its citizens, the English county of Kent decided to create a social innovation lab that could be incorporated across a variety of county services.

Accordingly, the Kent County Council turned to Engine Service Design to help create the so-called Social Innovation Lab for Kent (or SILK).

Together, Engine and KCC created a structured approach to project innovation that would be able to be modeled to the specific nature of the problem and the organization working to solve it.

The approach emphasized the importance of focusing on people's needs as a starting point, and the importance of engaging citizens to contribute to all stages of the project development process.

Additionally, Engine created a framework that SILK can use to re-work the service design process to suit the needs of the particular challenge. They helped SILK create a toolkit of different design processes and strategies that could be employed depending on the nature of the problem. And they helped SILK create materials that would help them make their services known to the various departments of the county's government.

Engine continues to be involved with SILK as the team continues to grow and expand the reach of their service design projects.

Source:
http://www.enginegroup.co.uk/projects/pcs_page/building_a_social_innovation_lab

A Bibliography on Governance Innovation

Bason, Christian. *Leading Public Sector Innovation: Co-creating for a Better Society. Bristol,* UK: Policy Press, 2010.

Castells, Manuel, et al. *Mobile Communication and Society: a Global Perspective : a Project of the Annenberg Research Network on International Communication.* Cambridge, MA: MIT Press, 2009.

A. Cereijo-Roibás, M. Vanderbeeken, N. Clavin, J.C. Zoels "Engaging developing markets", *Interfaces*: 81, Winter 2009.

Dewey, John. *Art as Experience.* New York: Balch & Minton, 1934.

Duggan, William. "How Aha! Really Happens." *Strategy Business: International Business Strategy News Articles and Award-winning Analysis.* 23 Nov. 2010. <http://www.strategy-business.com/article/10405?pg=all>.

Gupta, Akhil. P*ostcolonial Developments: Agriculture in the Making of Modern India.* Durham, NC: Duke University Press, 1998.

Heidegger, Martin. *The Question Concerning Technology: and Other Essays.* New York: Harper Torchbooks, 1982.

Johnson, Steven. *Where Good Ideas Come From: the Natural History of Innovation.* New York: Riverhead, 2010.

Kautilya, *The Arthashastra of Kautilya.* Translated by L. N. Rangarajan. Penguin, 1987.

Kelley, Tom, and Jonathan Littman. *The Ten Faces of Innovation: IDEO's Strategies for Beating the Devil's Advocate & Driving Creativity throughout Your Organization.* New York: Currency/Doubleday, 2005.

Latour, Bruno. *A Cautious Prometheus? A Few Steps Toward a Philosophy of Design (with Special Attention to Peter Sloterdijk).* Cornwall, 3 September 2008. Keynote lecture. <http://www.bruno-latour.fr/articles/article/112-DESIGN-CORNWALL.pdf>

Leadbeater, Charles. *We-Think: Mass Innovation Not Mass Production.* Profile Books. 2008.

Leadbeater, Charles and Hilary Coton. *The User-Generated State: Public Services 2.0.* <http://www.charlesleadbeater.net/archive/public-services-20.aspx>

Lindholm, Christian, Turkka Keinonen, and Harri Kiljander. *Mobile Usability: How Nokia Changed the Face of the Mobile Phone.* New York: McGraw-Hill, 2003.

Maira, Arun. *Remaking India: One Country, One Destiny.* New Delhi: Sage, 2004.

Margolin, Victor. *Design Discourse: History, Theory, Criticism.* Chicago: The University of Chicago Press, 1989.

Mashelkar, R.A. "Launching the Indian Innovation Movement." All India Managament Association, New Delhi. 21 February 1999. Award Lecture. <http://www.nif.org.in/launching_the_Indian_Innovation_Movement>

Munshi, Porus. *Making Breakthrough Innovation Happen: How Eleven Indians Pulled off the Impossible.* Noida, Uttar Pradesh, India: Collins Business, 2009.

New, S. J. "Celebrating the Enigma: The Continuing Puzzle of the Toyota Production System", *International Journal of Production Research*, vol. 45, 2007.

Norman, Donald A. *The Design of Everyday Things.* New York: Basic, 2002.

Prahalad, C. K., and Venkat Ramaswamy. *The Future of Competition: Co-creating Unique Value with Customers.* Boston, MA: Harvard Business School Publishing, 2004.

Rittel, H.W.J. *The Reasoning of Designers.* Stuttgart: Institut fur GrundlagendenPlanung, 1988.

Rosen, William. *The Most Powerful Idea in the World: a Story of Steam, Industry, and Invention.* New York: Random House, 2010.

Scott, James C. *Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed.* New Haven, CT: Yale University Press, 1999.

Thackara, John. *In the Bubble: Designing in a Complex World.* Cambridge, MA: MIT Press, 2006.

Tufte, Edward R. *Envisioning Information.* Cheshire, CT: Graphics, Press 1990.

Vezzoli, Carlo, and Ezio Manzini. *Design for Environmental Sustainability.* London: Springer, 2008.

Visvanathan, Shiv. *Organizing for Science: the Making of an Industrial Research Laboratory.* Delhi: Oxford University Press, 1985.

Visvesvaraya, M. *Planned Economy for India.* Bangalore: Bangalore Press, 1934.

Zoels, J.C. "Deep Places – Mobile 2.0 and Spatial Experiences." *Mobile Nation: Creating Methodologies for Mobile Platforms.* Eds. M. Ladly and P. Beesley. Riverside Architectural Press, 2008.

A Glossary on Design, Innovation and Governance

From the time of the Sivasutras through to the Hobson-Jobson Dictionary and the techno-futurist writings of J. G. Ballard, definitions and redefinitions have served as critical means through which to establish new discourses and constitute new communities.

Here we have created a glossary of terms that are often used by designers and innovation specialists. We have also addressed key terms related to governance and state-craft. We hope you will find these entries to be useful for reference before, during and after the Conclave.

Where we have found good definitions ready-to-hand, we have specifically cited the authors or institutions who have provided them. In all other cases these definitions have been created at the Center for Knowledge Societies.

Apple An American corporation that reigns as the current organizational embodiment of **Design**, **Innovation**, and **User-Centered** thinking, creating products that seem to anticipate **user**s' expectations and desires before they are even aware that they have them.

Brainstorming A collaborative activity in which small groups work together to generate as many new ideas or solutions to a problem as they can in response to particular kinds of stimulus and a particular framing of the problem. Ethnographic data is often the best form of stimulus. Large format index cards or post-it notes are good ways for participants to express their ideas. Team members should seek to build upon one another's ideas and to express them visually, so far as possible.

Co-creation
"...increasingly, the joint efforts of the consumer and the firm - the firm's extended network and consumer communities together - are co-creating value through personalized experiences that are unique to each individual consumer. This proposition challenges the fundamental assumptions about our industrial system - assumptions about value itself, the value creation process, and the nature of the relationship between the firm and the consumer. In this new paradigm, the firm and the consumer co-create value at points of interaction. Firms cannot think and act unilaterally."
--Prahalad, C. K., and Venkat Ramaswamy. *The Future of Competition: Co-creating Unique Value with Customers.* Boston, MA: Harvard Business School Publishing, 2004.

See also: **Crowdsourcing**

Concept Design The description of a possible **Design** solution in words, diagrams, and other forms of text and visualization to communicate an imminent possibility that does not yet exist. Concept Design is the first and fundamental stage of design, from which the proposed solution may come to be described to increasing levels of fidelity.

Convergent Thinking
"The ability to narrow the number of possible solutions to a problem by applying logic and knowledge."
--"Convergent Thinking." *Gale Encyclopedia of Psychology.* Farmington Hills, MI: Gale Group, 2001.

See also: **Divergent Thinking**

Crowdsourcing The inclusion of large groups or the public at large into specific forms of decision making or solutioneering using public platforms such as websites, wikis, mobile media or other mechanisms that allow members of such groups to contribute ideas or propositions and for others to validate, ratify or improve them.

Design 1. Any expression of intentionality or purposiveness by an agent, including for example the scratching of one rock against another. 2. The process or path through which a final solution comes about. 3. The iterative description of a proposed solution, using language, gesture, text, visualization, plastic modeling, and any other form of human expression, to increasingly higher degrees of fidelity, until it approximates the object of design itself. 4. To see the world other than it is, to see it as it could or should be.

design An increasingly fragmented set of visually-related competencies, acquired more through apprenticeship than through formal training, that subserve the needs of post-modern consumer capitalism.

Design Engineering The technical development of a **Concept Design**, beyond its visual, formal and strategic articulation, towards a working prototype that will nearly resemble the final product, by employing the tools and technologies of material, electronic, informatic or other dimensions of Engineering.

Design Research All forms of data capture, research, intelligence gathering, and insight generation that may serve to inform the design and development of any product, service, system or solution. Methodologies commonly employed in the course of Design Research may include **Ethnography, User** interviews, **Usability** tests, and other interactive and immersive means for engaging with and observing prospective users.

Design Strategy An overarching approach and systematic policy of expressing, associating or otherwise aligning the physical and aesthetic values of a product or service with the expectations and needs of **User**s (based on underlying conceptual, social, psychological or other factors) so as to advance the commercial interests of the manufacturers or providers.

Design Thinking Ways of thinking, conceptualizing, imagining, and envisioning solutions to problems that (i) redefine the fundamental challenge or task at hand, (ii) develop multiple possible options and solutions in parallel, and (iii) prioritize and select those which are likely to achieve the greatest benefits in terms of, for example, impact, viability and cost.

"Design thinking is a human-centered approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success."
-- Tim Brown, President and CEO, IDEO, <www.ideo.com/about/>

Divergent Thinking
"The ability to develop original and unique ideas and to envision multiple solutions to a problem."
--"Divergent Thinking." *Gale Encyclopedia of Psychology.* Farmington Hills, MI: Gale Group, 2001.

See also: **Convergent Thinking**

Ease of Use
"[Usability/ease of use] has been defined in a very broad and inclusive manner as "the quality of use in context." However, the practice has focused heavily on task-centered thinking. If a given user accomplishes a given task quickly and without mistakes, the product is usable. Understanding the user is in effect understanding how that person performs the relevant tasks. What particularly characterizes the discipline is just how detailed this understanding has to be. The tasks to be evaluated are deconstructed into the smallest pieces imaginable."
--Lindholm, Christian, Turkka Keinonen, and Harri Kiljander. *Mobile Usability: How Nokia Changed the Face of the Mobile Phone.* New York: McGraw-Hill, 2003.

Ethnography

"Ethnography involves the researcher's study of human behavior in the natural settings in which people live. Specifically, ethnography refers to the description of cultural systems or an aspect of culture based on fieldwork in which the investigator is immersed in the ongoing everyday activities of the designated community for the purpose of describing the social context, relationships and processes relevant to the topic under consideration. Ethnographic inquiry focuses attention on beliefs, values, rituals, customs, and behaviors of individuals interacting within socioeconomic, religious, political and geographic environments."
--American Anthropological Association, <www.aaanet.org/stmts/irb.htm>

Experience

"Experience is limited by all the causes which interfere with perception of the relations between undergoing and doing. There may be interference because of excess on the side of doing or of excess on the side of receptivity, of undergoing. Unbalance on either side blurs the perception of relations and leaves the experience partial and distorted, with scant or false meaning. Zeal for doing, lust for action, leaves many a person especially in this hurried and impatient human environment in which we live, with experience of an almost incredible paucity, all on the surface. No one experience has a chance to complete itself because something else is entered upon so speedily. What is called experience becomes so dispersed and miscellaneous as hardly to deserve the name. Resistance is treated as an obstruction to be beaten down, not as an invitation to reflection. An individual comes to seek, unconsciously even more than by deliberate choice, situations in which he can do the most things in the shortest time."
--Dewey, John. *Art as Experience.* New York: Balch & Minton, 1934.

Governance
The practice and process of administration, management, regulation, organization and coordination of the machinery and apparatuses of the state.

"The word yogakshema is a compound made up of yoga, the successful accomplishment of an objective and kshema, its peaceful enjoyment. Thus, peaceful enjoyment of prosperity, i.e. the welfare of the people, is given as much importance as knowledge, self-control, and observance of dharma."
--Kautilya, *The Arthashastra of Kautilya.* Translated by L. N. Rangarajan. Penguin, 1987.pp. 70-71.

Innovation
1. Bringing newness into the world; making and remaking the world anew. 2. The transformation of insight into actionable knowledge that can make new use of the social and material technologies already available in the world.

Innovation Cycle
A process devised at the Center for Knowledge Societies to integrate three distinct components of **Design Thinking** into a formal innovation process, including: (i) **Understand**: the use of ethnography to describe the context, behaviors, needs and preferences of users in their everyday environment,
(ii) **Develop**: the conceptualization, creation, development, detailing and specification of multiple possible solutions, and
(iii) **Enhance**: the testing, trialing, and refinement of proposed solutions through interactions with end-users either in the field or laboratory conditions.

Innovation Workshop A specialized environment in which small groups of specialists work together in a highly choreographed and coordinated way. Through audio-visual stimulus and instructions, they create new options, possibilities or solutions using techniques of data review, role-playing, concepts generation, word-play, note-taking, visualization, and solution creation (among many others).

Kaizen (改善) Japanese for "improvement" or "change for the better", refers to the continuous improvement of processes in diverse organizational systems. It refers to activities that continually improve all functions, and involves all grades of personnel from the head of an organization to its frontline staff. It can also apply to processes such as purchasing and logistics that cross organizational boundaries to become part of an entire industry, supply chain, or national economy.

Planning A fusion of the individual psychological and cognitive process of imaginative forethought with the social and organizational process of arriving and agreeing to a plan. Planning is aided by having rich accurate data about the facts on the ground, insightful representations of that information in the form of maps, charts and other kinds of diagrams, and social organizational techniques which allow groups to organize their thought collectively.

See also: **Innovation Workshop**

"In preparing for battle I have always found that plans are useless, but planning is indispensable."
-- Dwight D. 'Ike' Eisenhower

Service Design
"Service design is a design specialism that helps develop and deliver great services. Service design projects improve factors like ease of use, satisfaction, loyalty and efficiency right across areas such as environments, communications and products – and not forgetting the people who deliver the service."
-- Engine Service Design, <http://www.enginegroup.co.uk/service_design/>

State 1. A social organization capable of making war, peace and political alliances so as to enlarge the territory under its authority (Kautilya). 2. The ultimate expression of human rationality (Hegel) 3. That entity which holds a monopoly over legitimate violence (Weber). 4. The vector sum of all lines of power in a society (Foucault). 5. That institution which is ultimately and cumulatively responsible for the equity, upliftment and welfare of its members (Ambedkar).

Usability
"The design has been optimized for human usage with respect to task completion, speed, accuracy, self-evidence (minimized training requirement), satisfaction, and safety. This does not mean that every user will be able to operate the offering in a flawless way (or even avoid lethal mistakes). It means that care is taken to optimize the design so that the overall usage by the target population of users is effective."
--Schaffer, Eric M. and Susan Weinschenk. *Certified Usable Designs: Products, Applications and Web Sites.* Human Factors International, 2010.

Use Case 1. The counterform of the product or service offering. 2. A narrative example that captures the specific instance in which a real or imagined product or service offers value or meaning to its **User**.

"A particular form or pattern or exemplar of usage, a scenario that begins with some user of the system initiating some transaction or sequence of interrelated events."
-- Jacobson, Ivar (et al). *Object-Oriented Software Engineering: A Use Case Driven Approach.* Addison-Wesley, 1992.

User-Centered Approaches or strategies that focus on and proceed from an understanding of the expectations and needs of the **User** of a product, service or technology, as distinct from the possibilities of technology, market forces, media, or any other set of social or organizational factors.

User Experience Design An approach to the **Design** of things and environments which seeks to envision how their ultimate **User** might encounter and interact with that artifact or system; the purpose of the **Design** is to have made possible a particular quality or character of experience for most if not all of those end-users.

Visualization The transformation of linguistic, textual, numeric or otherwise symbolic information into a diagram, map, or other form of graphic illustration so as to express or provoke a new kind of understanding of the same information.

User An individual agent or subjective self who uses linguistic, cultural, symbolic and material technologies to manipulate or navigate the world in which she finds herself.

Wicked Problem 1. A subclass of problems for which there is no ready-to-hand or off-the-shelf solution, but which can only be addressed through **Design** (with a capital 'D'). 2. All complex problems of state and society in which different stakeholders have radically different world views and divergent frames for understanding the problem, which moreover, may change over time. 3. Problems which have no definitive formulation, owing to which the definition of the problem turns out to be a Wicked Problem.

"The search for scientific bases for confronting problems of social policy is bound to fail because of the nature of [wicked] problems...Policy problems cannot be definitively described. Moreover, in a pluralistic society there is nothing like the indisputable public good; there is no objective definition of equity; policies that respond to social problems cannot be meaningfully correct or false; and it makes no sense to talk about 'optimal solutions' to these problems...Even worse, there are no solutions in the sense of definitive answers."
--Rittel, H.W.J. *The Reasoning of Designers.* Stuttgart: Institut fur Grundlagen der Planung, 1988.

Notes