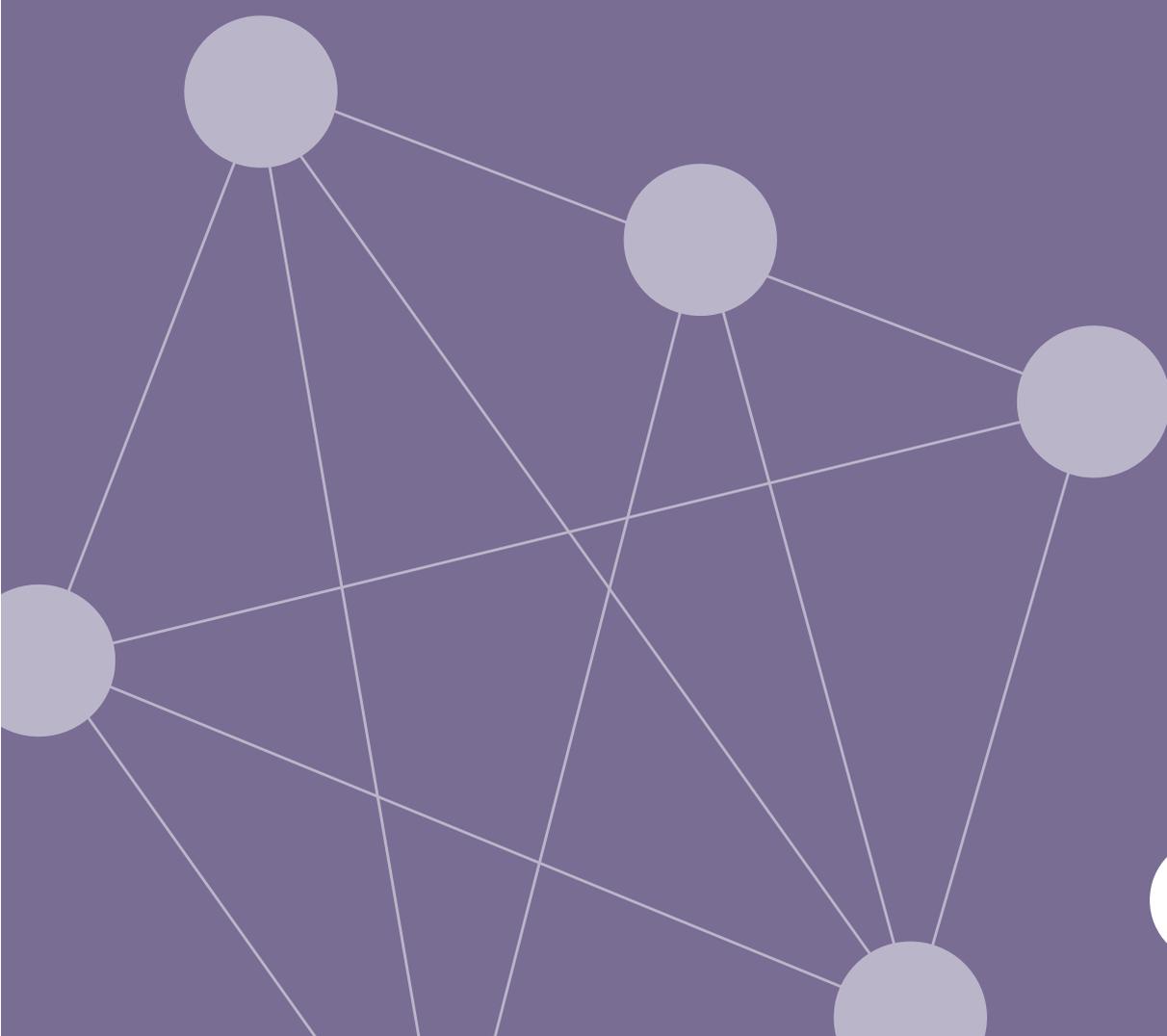


Innovating for pro-poor services

Why politics matter



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Data and information in this report were accurate as of January 2016. Any errors are our own.

Insights project introduction

ODI Insights is a series of research papers, policy briefings and outreach activities that address urgent and unresolved development priorities and challenges. As well as reaching new audiences, the aim of Insights is to ensure that ODI's high-quality research and analysis influences policy debates, providing innovative practical solutions to existing and emerging problems.

Contents

Acknowledgements	1
Insights project introduction	1
Acronyms	4
1. Introduction	5
2. Issue and context	7
2.1 Why and for whom did we write this paper?	7
2.2 What do we mean by innovation, politics and pro-poor services?	7
2.3 Where are we coming from? Grounding the research	8
2.4 Intersecting A, B, and C: the politics of innovation for pro-poor services	11
2.5 Where are we going? Outlining our findings	12
3. Methodology	13
4. Findings and recommendations	14
Finding 1: Why and how innovation in pro-poor service delivery is political	14
Finding 2: Matching innovations to political problems in service delivery	17
Finding 3: Adapting innovations to avoid political resistance and unintended consequences	23
5. Conclusions	29
References	30
Annex: organisations consulted	32

List of figures, tables and boxes

Figures

Figure 1: Indicative, levelised costs of electricity for on-grid, mini-grid and off-grid technologies in sub-Saharan Africa, 2012	5
Figure 2: Locating our enquiry at the intersection of three areas of practice and research	8
Figure 3: Key relationships of power in service delivery	9

Table

Table 1: A set of bridging questions to think about politics in service delivery	17
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Boxes

Box 1: The politics of the innovation ‘industry’	8
Box 2: How mobile phone innovations can change the incentives and accountability dynamics around health care services for poor rural women	22
Box 3: Adapting and supporting innovations to help poor service users assess the quality and value of the service over time	24
Box 4: Adapting and supporting innovations to support management of frontline performance for the poor	25
Box 5: Adapting and supporting innovations to ensure appropriate expectations and incentives for government to provide or safeguard the service for the poor	27
Box 6: Adapting and supporting innovations to navigate resistance by incumbents and elites	28

Acronyms

EOSG	Executive Office of the Secretary-General
IEA	International Energy Agency
GIF	Global Innovation Fund
HRP	Humanitarian Response Plan
ICT	Information and Communication Technology
IoT	Internet of Things
JMP	Joint Monitoring Programme
MDG	Millennium Development Goal
NGO	Non-Governmental Organisation
O&M	Operations and Maintenance
OCHA	Office for the Coordination of Humanitarian Affairs
ODI	Overseas Development Institute
SDG	Sustainable Development Goal
Sida	Swedish International Development Cooperation Agency
SMS	Short Messaging Service
SNV	Netherlands Development Organisation
UK	United Kingdom
UN	United Nations
UNDP	UN Development Programme
UNHCR	UN Refugee Agency
UNICEF	UN Children's Fund
US	United States
USAID	US Agency for International Development
WDR	World Development Report
WEF	World Economic Forum
WFP	World Food Programme
WHO	World Health Organization

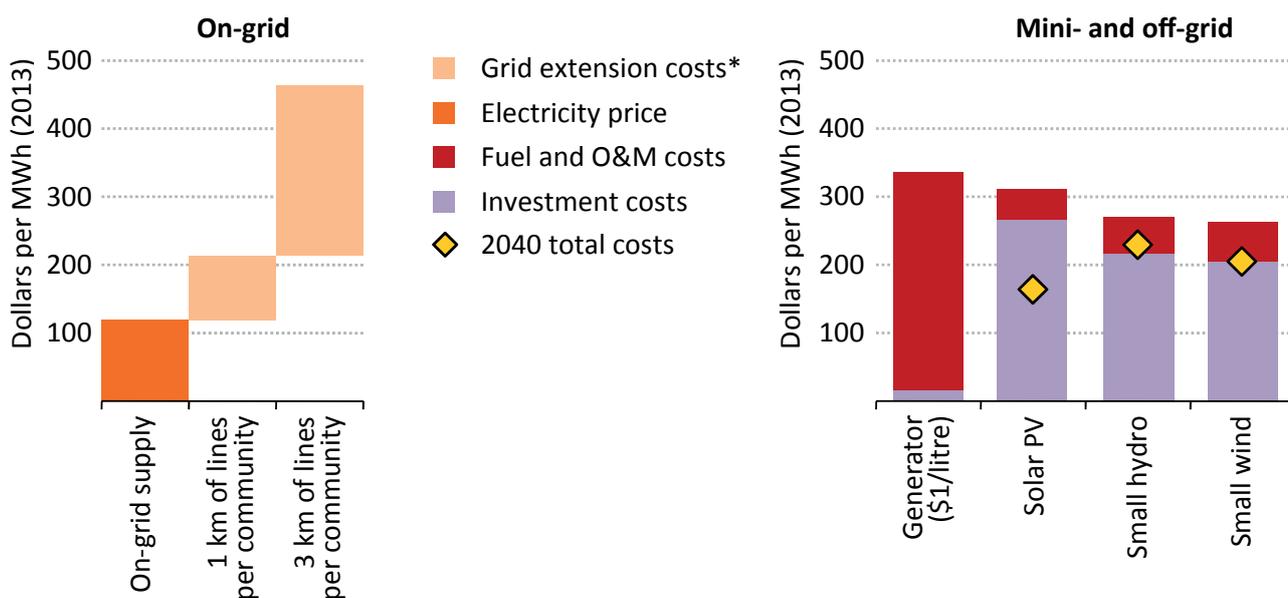
1. Introduction

Innovation is important for our world. We need new ideas, as well as old ideas used in new ways and new places, to solve sustainable development challenges. The recent pace of global innovation, particularly digital innovation, is generating optimism. Global leaders at the 2016 World Economic Forum (WEF) in Davos declared that rapid technological innovation has positioned us at the start of the ‘Fourth Industrial Revolution’, which will involve societal transformation unlike anything humankind has experienced before (Schwab, 2016).

We know innovation can support service delivery and transform service delivery models (Christensen et al., 2015). Technological advances mean renewable and decentralised energy options are increasingly cost-competitive with conventional alternatives (Figure 1). Quality-tested solar products for the African market declined in price by 70% between 2011 and 2014 (Scott et al., 2016). With mobile technology like RapidSMS, medicine stockouts in Nigeria can now be reported and viewed online, in minutes, rather than with lags of days,

weeks or months (when reports came through at all).¹ The new UN Sustainable Development Goals (SDGs) have committed to making major progress on basic services by 2030, for example to achieve universal access to adequate sanitation and modern energy services. The world will need to increase rates of progress significantly to achieve these targets. This is particularly true for poor and marginalised groups, which were consistently left behind in the progress of the Millennium Development Goal (MDG) era. For example, the MDG target for water supply² was met at global level, but only nine countries achieved the same for the poorest quintiles of their population in both urban and rural areas (WHO and UNICEF, 2015). Fourteen times as many mothers died in childbirth in developing regions compared with developed ones in 2013 (UN, 2015). Two-thirds of the population of sub-Saharan Africa lack access to electricity – about 620 million people. Still more lack access to clean and safe energy for household cooking (IEA, 2014). Exclusion and marginalisation are not just about money, though.

Figure 1: Indicative, levelised costs of electricity for on-grid, mini-grid and off-grid technologies in sub-Saharan Africa, 2012



*Costs of grid extension are calculated as the average of extending the medium-voltage grid a certain distance (e.g. 1 km) to each community on a levelised cost basis.

Notes: Costs are indicative and could vary significantly depending on local conditions such as electricity tariffs, population density and the delivered cost of diesel. The quality of service for the different technologies also varies: additional investment in batteries or back-up power may be needed to compensate for the variability of renewables or intermittent grid supply.

O&M = operations and maintenance.

Source: Numerical data presented in aggregated or graphical format. Based on IEA data from the World Energy Outlook Special Report: Africa Energy Outlook © OECD/IEA 2014, IEA Publishing.

1 RapidSMS Nigeria, <http://rapidsmsnigeria.org/vlm>

2 To halve the proportion of people by 2015 without access to improved water supply as compared with 1990 levels. Data on progress for poorest quintile have been measured by the Joint Monitoring Programme (JMP) since 1995.

For example, nearly half of rural, female, young adults across 79 low-income countries were found to have less than five years of education, compared with around a quarter in the general population of young adults (44% versus 23%; Bhatkal et al., 2015).

Innovations will be important for bridging the gap by making it cheaper and easier to access safe, affordable, flexible, high-quality services. But we also know innovations do not always translate into sustained, systemic change. Often, it is issues of power and motivation that get in the way. It is widely accepted that, in an increasingly networked and competitive world, ‘Innovation will be the key differentiator between the winners and the also-rans’ (Radjou et al., 2012: 36). It is less often acknowledged that for every winner there may be a loser. Those losers are not just the people who miss out on services, and the health and economic opportunities they provide. Innovation can change power relations and threaten existing interests. Losers can include incumbent firms that see their business models threatened; politicians who can no longer use services to win votes; or professions left stranded by the efficiencies innovation offers. These losers can also resist innovation if they think it threatens their interests and values. This makes innovation inherently political.

In this paper, we argue that politics is a major factor that can interact with innovations, with positive or negative implications for services for poor people and achievement of related SDG targets. The key question we seek to address is, ‘How do innovation and politics interrelate when it comes to providing services for poor people, and what are the implications for action?’

The paper has three main findings, each of which builds to a recommendation on how politics can be better incorporated into efforts to foster and support innovation with the goal of better basic services for poor people. These are:

1. That innovation around pro-poor services is inherently political, and that backers of innovation need to shift their perspectives to understand how and why.
2. That a politically informed, problem-driven approach can help those backing innovations to focus on why failures in pro-poor services persist, and what sorts of innovation could help.
3. That those backing innovations for pro-poor services can help navigate challenging politics as they go to scale, by suggesting adaptations to the innovation itself or using influence to help resolve political bottlenecks.

To build our case, we look at innovations, broadly defined to include both innovative processes as well as material technologies, across a wide range of sectors. These include water supply and sanitation, health care, energy, transport, education, and information and communication.

2. Issue and context

2.1 Why and for whom did we write this paper?

Innovation generally, and especially for pro-poor services, is attracting increasing interest and investment from development agencies, foundations and impact investors. A Global Innovation Fund (GIF) was recently established, backed by the aid agencies of the UK, the US, Sweden and Australia, as well as the Omidyar Network. Likewise, a Technology Facilitation Mechanism³ and Multi-Stakeholder Forum on Science, Technology and Innovation have been set up under the SDG process. Numerous innovation-oriented non-governmental organisations (NGOs) have arisen in recent years, particularly in the digital technology space.

To date, the surge in interest tends to be technology-led, although this may be changing. A number of agencies have endorsed the Principles for Innovation and Technology in Development, and the Digital Innovation Principles,⁴ which include the need to ‘understand the existing ecosystem’ (UNICEF, 2014). The World Bank points to the deep political barriers which mean that digital innovation has ‘not yet empowered citizens to make unwilling governments more accountable’ (World Bank 2016: 152). Methods to assess scalability and results are increasingly available and sophisticated, although they still tend to focus on financial and other quantitative factors rather than the greyer areas of politics and power. We believe we are at a pivotal point to make politics a core part of deciding how best to deploy the money and expertise going to innovation for development and, in particular, for delivering basic services for poor people.

Our primary audience for this paper is this broad group of development agencies, foundations and impact investors who are seeking to back innovators and innovations that will make a material difference to the lives of poor people. As such, our suggestions aim to support those investing in, advising and brokering partnerships for innovators, rather than those innovating directly. While our findings may be of interest to innovators, we feel this is a separate audience that we aim to address directly with further research.

2.2 What do we mean by innovation, politics and pro-poor services?

Innovation

For our purposes, the definition of innovation framed by the GIF is a useful starting point. This defines ‘innovation’ broadly as ‘new business models, policy practices, technologies, behavioural insights or ways of delivering products and services that benefit the poor in developing countries – any solution that has potential to address an important development problem more effectively than existing approaches’ (GIF, 2016). In line with this definition, we include innovations in processes as well as in material technologies – while recognising that this increases the risk that we could stray into what might be called, in the language of the development industry, ‘interventions’ or ‘reform initiatives’ more generally. We add one more important caveat – that a focus on the ‘new’ should include new ways of using old technology, or use of an old technology in a new setting. In the words of one of the experts we interviewed, ‘The rampant demand for innovation in development implies that nothing we have at the moment works, and that’s simply not true.’

Pro-poor services

Here, we are first concerned with basic services and the extent to which poor people can access them. In terms of which sectors we look at, we are selective for this preliminary research. We undertook more extensive interviews and research in three sectors (water, maternal health and energy) but draw examples from others, including transport, education, sanitation and information and communication, as required.

Next, in terms of what we mean by pro-poor services, we admit we skirt the debates about quantitative thresholds and definitions for poverty, and make broad assumptions about who the poorest people usually are. We assume that someone who is poor has a very low income relative to others, probably lives and works outside of the formal sector, is likely to have a low level of education, may live in a rural area or urban informal settlement and may be elderly, female, of a minority social group, chronically ill or disabled. Clearly, there are exceptions,

3 Launched at the UN Sustainable Development Summit in September 2015, the Technology Facilitation Mechanism ‘seeks to promote science, technology and innovation to achieve the 2030 Agenda for Sustainable Development’. The UN Secretary-General has appointed a 10-member expert panel. See <https://sustainabledevelopment/>

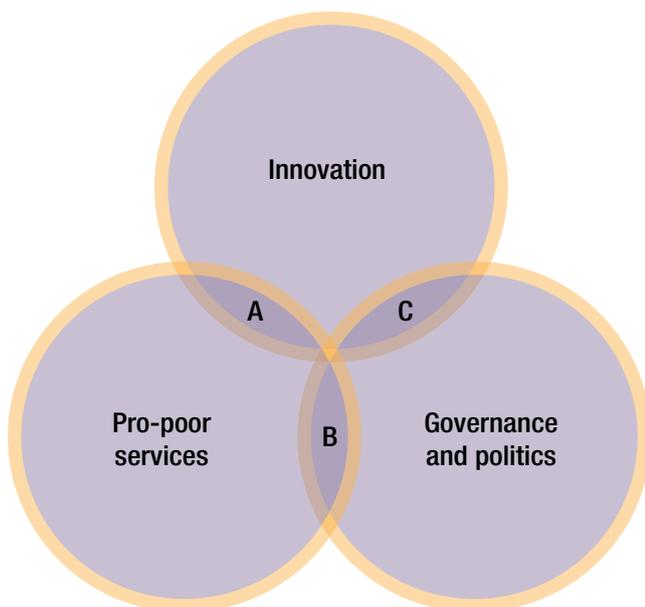
4 The Principles for Innovation and Technology in Development have been endorsed by the UN Children’s Fund (UNICEF), the US Agency for International Development (USAID), the Gates Foundation, the Executive Office of the Secretary-General (EOSG), Global Pulse, the World Food Programme (WFP), the World Health Organization (WHO), the Humanitarian Response Plan (HRP), the Office for the Coordination of Humanitarian Affairs (OCHA), the UN Development Programme (UNDP), the Swedish International Development Cooperation Agency (Sida), IKEA Foundation, the UN Foundation and the UN Refugee Agency (UNHCR). The Principles for Digital Development are very similar and have been endorsed by an even wider range of organisations. See http://www.unicef.org/innovation/innovation_73239.html and <http://digitalprinciples.org/>

but these characteristics present some common barriers around cost, information, regulation and physical location that prevent poor people from accessing services. Consequently, a pro-poor service would be a service that is designed and delivered to overcome these barriers. This means it is universally accessible, financially and practically, and poor people can make and articulate informed judgements about service quality. The methodology further discusses the limits of this qualitative definition.

Politics

For our working definition of politics we draw, like many others, on Adrian Leftwich (2000: 4-5): ‘all the activities of conflict, cooperation and negotiation involved in the use, production and distribution of resources, whether material or ideal, whether at local, national or international levels, or whether in the public or private domains.’ We also find Harold Lasswell’s older shorthand useful: ‘who gets what, when, how’ (Lasswell, 1936). As such, for us, politics primarily involves questions about winners and losers, with the qualification that, in working out who wins and who loses, contestation over ideas can be as important as distribution of resources (Hickey, 2013). We also emphasise that we are not referring only to ‘big-P politics’, of the sort played out by politicians and political parties. Relationships and patterns of winners and losers within markets, organisations, communities and households are as much within our scope – what we think of as ‘politics with a small-p’. Finally, we note that both small-p and big-P politics can arise at multiple scales, from the household level, to the national level, to the international politics of global trade and even of development aid itself (Box 1).

Figure 2: Locating our enquiry at the intersection of three areas of practice and research



Box 1: The politics of the innovation ‘industry’

The politics of the aid industry, and of the growing industry around innovation for development, is not a direct focus of this paper, although several of our interviewees picked up on it. There are two important implications to highlight.

First, it is important to consider who has the power (often in the sense of time and resources) to innovate in the first place. In the words of one of our interviewees, ‘It’s the folks who are already winning who can participate ... most interlocutors will be ex-pats. Who’s being funded, who’s got access to tools and incubators – will be upper echelons.’ This creates the risk that support for pro-poor innovations does not build long-term capacity for poor people to innovate directly, and may create solutions that underappreciate the nuance of local realities. In response, there are increasing calls for aid agencies to target their support more directly towards local entrepreneurs (Bahadur and Doczi, 2016).

Second, and at a more extreme level, there are questions about what an emphasis by donors on innovation and entrepreneurship does to the core political incentives for government to meet its side of the social contract. In the words of Ory Okolloh Mwangi,⁵ ‘I’m concerned about what I see is the fetishization around entrepreneurship in Africa. It’s almost like it’s the next new liberal thing. Like, don’t worry that there’s no power because hey, you’re going to do solar and innovate around that. Your schools suck, but hey there’s this new model of schooling. Your roads are terrible, but hey, Uber works in Nairobi and that’s innovation’ (Kuo et al., 2015). We agree up to a point, but would argue that the space for innovation and entrepreneurship must be defined broadly enough to include the sphere of governance, public financial management and, of course, service delivery, and that government employees as much as private entrepreneurs can and should be supported to innovate.

2.3 Where are we coming from? Grounding the research

We position this paper at the intersection of three areas of enquiry and programming within development: governance and politics, pro-poor services and innovation for development (Figure 2). Part of our purpose is to help disciplinary specialists in each of these broad fields find common language and purpose when working together.

5 A founding member of the crowd-sourcing platform Ushahidi and now Director of Investments for the Omidyar Network.

Several authors have looked at the overlaps of different pairs of these three broad categories (areas A, B and C in Figure 2) but few have directly addressed the intersection of all three. Still fewer have done so in a way that aims to provide practical suggestions for how innovations can be better fostered and supported.

For each of the intersections, we highlight a few formative bodies of work, which we draw on for this paper. We do not attempt to systematically review the literature in each area.

Intersection A: Innovation for pro-poor services

This is arguably the intersection with the most applied research to date. Much of this literature argues that the innovation mainstream serves the needs of a minority: research and development driven by the markets and political priorities of the global North produce innovations that consistently fail to meet the needs of poor people in the global South. Numerous authors use related concepts and explore common themes, including autonomous (Bahadur and Doczi, 2016), frugal (Basu et al., 2013; Vogelstein, 2015) and inclusive innovation (Heeks et al., 2014), and Practical Action’s Technology Justice movement (Meikle and Sugden, 2015). At the simplest level, this work looks at how innovation can serve the needs of poor and excluded people in the global South. At deeper levels, it looks at how to champion poor people’s own innovations and innovation capacity, and how to evolve more inclusive societal structures for innovation (Bahadur and Doczi, 2016; Heeks et al., 2014).

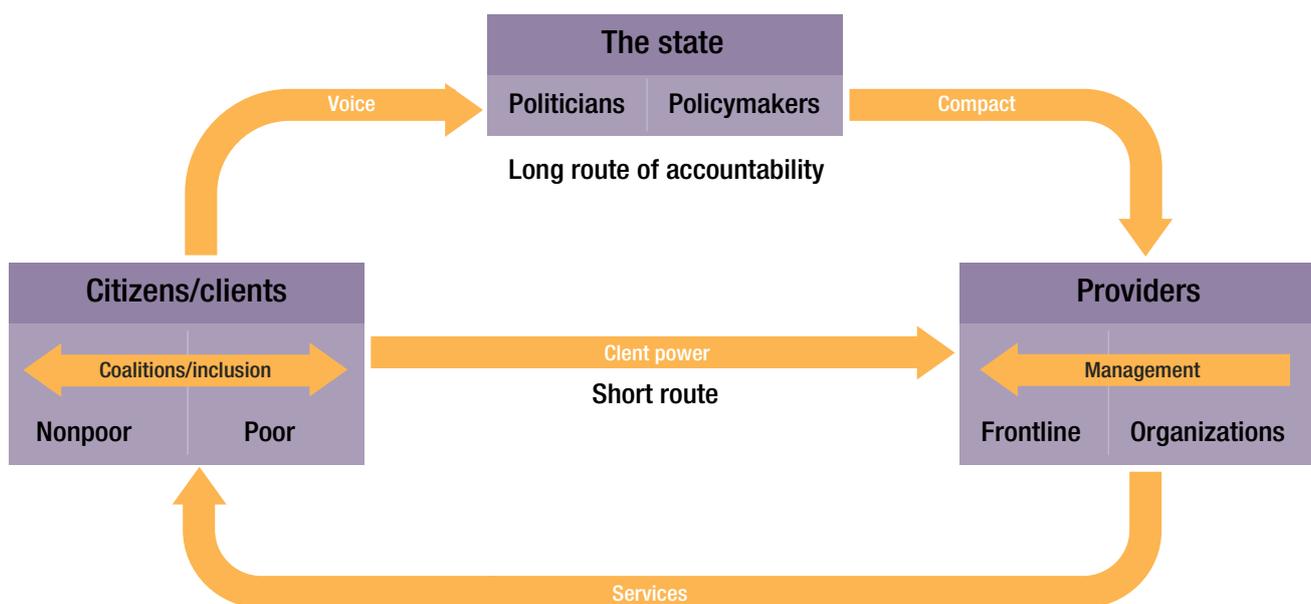
Deep structural imbalances inspire this thinking and practice, including in service sectors. The majority of investments in sanitation technologies are in urban areas, on conventional sewerage systems that rarely provide any benefit to poor households, especially those in informal

settlements (WHO, 2014). Just 10% of global health research spending goes to the problems that affect 90% of the world (Viergever, 2013).

These imbalances also exist for information and communication technology (ICT) services. Ninety percent of the population in least developed countries remain offline (Broadband Commission for Digital Development, 2015). There is widespread optimism that poor people can leapfrog older forms of ICT and that ICT can underpin pro-poor gains in other services – from improved targeting for cash transfers to monitoring the functionality of cold storage in the vaccine delivery chain. Gaps in access to the internet are declining, including for low-income households and countries. Yet Robert Pepper, Head of Cisco’s Global Technology Policy Team, warns of a new digital divide: we should look not only at the number of people accessing the internet but also at the number of connected devices per person, including sensors and trackers incorporated into service technology.

Without high penetration of such connected devices, the ‘Internet of Things’ (IoT) is unlikely to take off, since the IoT, like the internet itself, exhibits network multiplier effects whereby its attractiveness and utility increase as more people or devices connect. The IoT promises efficiencies across a range of frequent, complex interactions in service delivery, and there are promising pilots and projects harnessing IoT for services in low-income contexts: from water pumps equipped to send messages on faults to mechanics (machine to person), to mobile payments to private transport service providers (person to person), to remote utility metering systems (machine to person). By 2019, however, the average citizen in the Middle East and North Africa is projected to own just 1.4 connected devices, compared with 11.6 for the average North American.

Figure 3: Key relationships of power in service delivery



Source: World Bank, 2004.

There is, therefore, a risk that poor people in low-income regions will be left behind as the IoT takes off, making services cheaper and more effective in wealthy countries alone (Broadband Commission for Digital Development, 2015).

Throughout the paper, we draw implicitly on this wider body of work on innovation for pro-poor services. We argue that the fundamental challenges, whether they are called technology injustices or digital divides, are problems of politics, power and money – a tendency for governments and markets to respond to the needs and interests of the wealthy while side-lining those of poor people.

Intersection B: Politics of pro-poor services

Much of the work of the past decade on pro-poor services and politics (or governance, or political economy) has its roots in the World Bank's 2004 World Development Report (WDR), *Making Services Work for Poor People* (World Bank, 2004). The WDR 2004 examined the politics of service delivery failures through a simple triangle, highlighting the key relationships between the state, service provider and citizens/clients (Figure 3). It brought into the mainstream the idea that service delivery failures for poor people are problems of relationships, incentives and politics. It also emphasised the ability of poor people to influence service provision through two routes. The first is the 'long route', whereby citizens exert influence on service providers via policy-makers. The second is the 'short route', whereby clients exercise direct power over providers through choice (in a competitive market) or participation in monitoring and sanctioning service providers. The WDR called for approaches that would put 'poor people at the centre of service provision: by enabling them to monitor and discipline service providers, by amplifying their voice in policymaking and by strengthening the incentives for providers to serve the poor' (ibid.: 1).

The WDR framework remains a useful lens and one that we draw on for this paper. Its simplicity is both a strength and a weakness; subsequent efforts in this space have tended to try to add detail and nuance. Levy and Walton (2013) point out that the long route presumes a performance-oriented, top-down bureaucracy, whereas the short route requires a level of responsiveness from service providers that is unlikely without support to changes in the political context. Levy and Walton join other authors in looking at how overarching political settlements in different contexts can help explain variation in the incentives for powerful elites and capacity of the state machinery to provide services for poor people (Hickey, 2013; Kelsall, 2015; Levy and Walton, 2013).

Reform pathways that stem from a superficial analysis of the WDR 2004 triangle tend to focus on provision of more information but do not necessarily grapple with

the collective action and incentive problems that need to be overcome for information to be effectively utilised. In light of this, some authors have placed greater recognition on the importance of enabling local collective action and building strategic alliances (Fox, 2014; Wild et al., 2015). There is also mounting evidence that institutional reform efforts that are centred around externally driven ideas of 'good governance' do not necessarily translate into better outcomes. While adoption may be rapid, especially in aid-dependent countries, it is often superficial and does not extend to shifting underlying, deep-seated imbalances of power and vested interests (Andrews, 2013; Pritchett and Woolcock, 2010).

Finally, there is the body of work that we draw on most extensively for this paper, which looks at the politics inherent to the different economic and organisational arrangements and patterns of providers, users and supervisors, which arise in specific services sectors (Batley and Harris, 2014; Batley and Wales, 2015; Mcloughlin, 2012). This research identifies how such arrangements and patterns affect the norms and incentives for government or market provision; the ability of users to effectively articulate demand (individually or collectively); and the capacity of those providing or overseeing services to manage effective performance, or to game the system unfairly. We return to these concepts in introducing Finding 2.

Intersection C: Innovation politics

From our brief review, we found fewer attempts to develop overarching thinking at this intersection. Many case studies consider how politics and power have played a part in shaping the climate for specific innovations, or how particular innovations have reshaped politics and power (e.g. Cullen et al., 2014). Yet few authors have attempted to come up with overarching framings for the relationship between innovation and politics.⁶

Ely et al. (2013) review the politics of innovations for sustainable development in the specific context of global summits such as Rio+20. This is a broad field, and one that allowed the authors to draw some general conclusions that could support our enquiry. These emphasise the importance of (1) the direction of path dependencies in certain innovations, citing the example of whether investments in renewable energy options will favour grid or decentralised forms of generation and distribution; (2) the distribution of costs, benefits and risks arising from a given innovation pathway; and (3) the importance of fostering diversity in any given innovation field to ensure fit with the diversity of possible contexts. The authors conclude that the processes born out of Rio+20 (such as the UN Technology Facilitation Mechanism) must pay greater attention to these issues of direction, distribution and diversity.

⁶ We are not concerned here with the substantial body of literature on innovation within formal politics and policy-making.

We would argue these factors can be distilled still further. Questions of both direction (lock-in, path dependence) and diversity (fitness to context) are at their most pointed when distribution is at stake. In other words, the politics of innovation become a live issue when they involve a real or perceived change in winners and losers. This idea is at the heart of the framework for innovation politics developed by Taylor (2011), who observes that ‘political scientists still do not have a general theory of how, and under what conditions, technological change drives domestic and international politics’. Towards such a framework, Taylor draws on examples from street lighting, to ICT networks and shipping, mainly from developed country contexts, to illustrate how winners and losers arise and contest their status in response to the impact of innovations. Taylor identifies how innovations can generate political reactions by changing:

- the scope, scale and quality of public goods (and what people expect and demand from government)
- the extent and distribution of market failures such as negative externalities or information imperfections that advantage certain buyers or sellers over others
- the level of competition and barriers to entry in markets
- the demand for (and relative price of) inputs, such as labour, and the ability to switch technology at the same cost as competitors.

The most relevant of Taylor’s examples for our focus on service delivery is probably street lighting – arguably one of the earliest services over which debates about public and private goods emerged. Street lighting is often cited as an example of an innovation with a strong public good dimension because it is difficult to prevent non-payers from using it (i.e. freeriding is possible) and one person’s enjoyment does not reduce the possibility of others enjoying it. Hence, relying on the market to provide street lighting (as a private good) is unlikely to work. In 13th and 14th century Paris and London, political attempts were initially made to coerce businesses and even households into meeting the costs of lighting streets on certain nights – but these were resisted as an unfair imposition of costs that would mainly benefit others. Over time, the politics shifted towards city governments providing street lighting as a public good – initially to wealthy areas but subsequently to poorer areas, particularly in monarchies, where nocturnal light symbolised the reach of divine right.

Taylor’s use of economic concepts to think about how winners and losers arise from innovation has conceptual overlaps with efforts to identify common patterns of

politics in service delivery sectors mentioned above (Batley and Harris, 2014; Batley and Wales, 2015; Mcloughlin, 2012). We draw on both to develop a set of pointers on how to target innovations at unlocking key political constraints (Finding 2) and how to adapt and support innovations to overcome political resistance (Finding 3).

2.4 Intersecting A, B, and C: the politics of innovation for pro-poor services

As noted, there has been little dedicated attention to the intersection of areas A, B and C together. This is not to say organisations championing innovation for pro-poor services are working in politically blind ways. We mentioned the Digital Innovation Principles and the similar Principles for Innovation and Technology in Development, and their recognition of the need to ‘understand the existing ecosystem’. Discussion within the innovation community as to what this would mean in practice suggests an implicit awareness and attention to politics: highlighting the importance of identifying ‘networks of trust and influence in the ecosystem’, ‘using influence to empower marginalized actors’ and considering ‘resources and incentives’.⁷ The US Agency for International Development (USAID) has developed a Local Systems Framework to guide its ‘overarching approach to transforming innovations and reforms into sustained development’ (USAID, 2014: v). This calls for agencies to recognise that, ‘There are systems operating in every development context’ and to consider ‘perspectives on why things are the way they are and what needs to change; the identity of key actors, key relationships and the contours of power and interests’ (ibid.: 7).

In our view, this gets to the level of awareness-raising and general advice, but stops short of providing operational guidance – implying both that this is an area of some interest and that we can add something useful by deepening the analysis and providing practical recommendations. The majority of practitioners we consulted for this research implied they took an implicit approach to considering politics – relying on the expertise of country offices, their own experience or consultants where they lack in-country presence to understand the issues. We admit that politics will probably come some way down the list of concerns for those backing innovations. Often, things like business models, technology choice, scaling design and intellectual property rights will appear both more important and easier to get a grip on than abstract worries about politics. We therefore also recognise that simple, applied approaches are needed.

⁷ Principles for Digital Development, ‘Understand the ecosystem’, http://digitalprinciples.org/wp-content/uploads/2014/10/Principle2_v2.pdf

2.5 Where are we going? Outlining our findings

In the rest of this paper, we make three broad arguments. In each case, we offer specific ideas for how those supporting innovation for pro-poor service delivery – particularly donor agencies and foundations – can think through, anticipate and work with and around politics.

Finding 1 sets out in broad terms why innovation is inherently political and challenges some of the conventional ways that politics are approached in relation to innovation. First, that innovations are not inserted into a static context, but rather interact dynamically, reacting to and creating new politics. Second, that these effects play out at multiple levels. Third, that values, as much as material resources, are important considerations for who wins and who loses from innovation.

Finding 2 looks in more detail at the ways politics arise within specific service delivery sectors, with reference to some common patterns and dynamics in relationships involving users, service providers and government. These patterns and dynamics provide a useful bridge between the practical concerns of designing and scaling

innovation and the more abstract world of politics and power. We offer a set of pointers to support those backing innovations with finance and other resources to take a more problem-driven approach – identifying the key political constraints to pro-poor services and the broad types of innovation that could unlock these constraints.

In Finding 3, we take the opposite approach. We recognise that people do not always get to start from analysis of the core political problem preventing pro-poor outcomes. Often, innovations gain momentum because they appear to offer greater efficiencies, or just a different way of doing things, or because there are vested interests around certain research or product areas. As such, those supporting innovation also need practical tools that can help build politics into the broader assessment of whether an existing innovation is fit for purpose and likely to scale – and what adaptations or additional support might be needed to achieve intended purposes. We identify how those backing innovations for pro-poor services can offer support in a more politically attuned way, as a specific innovation progresses from design, to initial marketing, to wider uptake.



Photo: Elizabeth Mukwimba, an M-Power Off-Grid Electric customer in Tanzania. Russell Watkins / Department of International Development

3. Methodology

We embarked on this research with a broad set of questions around:

1. How technological innovation for service delivery evolves within existing policy and institutional contexts.
2. How policies and institutions are adapted in response to technological innovation.
3. What the implications might be for service delivery policy, in preparing for and adapting to technological innovation.

As is not uncommon for an inductive study tackling a new area, we quickly found that reorientations were required – recognising that:

- Politics, more broadly than formal policy and institutions, was being overlooked in the surge of attention to innovation within the international development community.
- Innovation can be understood more broadly than ‘technological innovation’ – alone, this tends to exclude the potential to innovate around ways of working.

As such, the core research question that emerged was, ‘How do innovation and politics interrelate when it comes to providing services for poor people, and what are the implications for action?’

In keeping with our inductive approach, we did not set out with any preconceived ideas about how we should organise or make sense of the information we acquired. We make reference to certain existing framings, such as the power relationships outlined by the WDR 2004, which offer accessible entry-points. We do not claim that this is the only possible interpretation or appropriate structure.

Research for this work was undertaken between November 2015 and January 2016. Primary data were gathered through key informant interviews. We collated and reviewed a variety of literature on technological innovation, pro-poor service delivery and political science to generate a list of research questions and potential case studies of interesting innovations emerging in certain country or regional contexts. We undertook written, telephone and in-person interviews with the entrepreneurs and NGOs championing these focal innovations, relevant sector and country experts and staff from development agencies and foundations supporting these innovations. In all, we consulted 33 individuals in 22 organisations (listed as an annex). We assured them of confidentiality to encourage them to speak freely about the political risks and opportunities they face. As such, we do not attribute specific quotes in this report to the individuals or organisations we interviewed.

Our approach has clear limitations. First, the timeframe and resources involved meant we were limited in the range and depth of cases we could consider. We were also purposive in our selection of both cases and interviewees.

Second, because of the complexity of causal chains and the limits of this brief review, we do not get to the level of quantifying the ‘pro-poorness’ of service delivery outcomes (e.g. sustained use over time) or impacts (better health, welfare, opportunity). As such, this paper generally offers anecdotal evidence of how politics have affected intermediate service delivery outcomes for poor people – such as affordability of drinking water, time to receive medical advice or continuity of energy supply. An important direction for further research in this area is to combine quantitative methods with deeper political economy analysis to understand better the relationships between innovation, politics and poverty.

4. Findings and recommendations

In the next three sections, we make the case for viewing innovations as inherently political, and what this could mean for how donors, funds, foundations and investors foster and support innovations that aim to improve basic services for poor people. We present our argument in three stages:

1. That innovation around pro-poor services is inherently political, and that backers of innovation need to shift their perspectives to understand how and why.
2. That a politically informed, problem-driven approach can help those backing innovations to focus on why failures in pro-poor services persist, and what sorts of innovation could help.
3. That those backing innovations for pro-poor services can help navigate challenging politics as they go to scale, by suggesting adaptations to the innovation itself or using influence to help resolve political bottlenecks.

Finding 1: Why and how innovation in pro-poor service delivery is political

In this section, we aim to challenge some of the conventional ways politics is approached in relation to innovation. We make three main points. First, that innovations are not inserted into a static context, but rather interact dynamically, reacting to and creating new politics. Second, that these effects play out at multiple levels. Third, that values, as much as material resources, are important considerations for who wins and who loses from innovation.

We draw these observations together to point to alternative perspectives, which those supporting innovation could potentially take, before we explore more focused, operational suggestions in Findings 2 and 3.

Innovation and politics interact dynamically

Innovations, even those based on technological hardware, are not generally precooked ‘interventions’ that are dropped into a fixed ‘context’, comprising politics and all the rest. The political context for an innovation is highly dynamic, while as an intervention goes to scale it can generate new, challenging political reactions, which in turn require innovators to adapt. For example, mTrac in Uganda is an initiative that uses RapidSMS (short messaging service) to accelerate the flow of community and health facility data up to national level (Cummins, 2012).⁸ Initially, reports were submitted directly from the

frontline to the national ministry. While this worked from a functional perspective, one of our interviewees pointed out how it reduced buy-in at the intermediate district level – a level of the Ugandan government that held much of the power to do anything with the monitoring data. The system needed to be adjusted to loop district health officials into the flow of accountability and make use of their ability to coordinate resource allocations down to the local level.

Existing approaches will nonetheless often treat political will or an enabling policy environment as a fixed context, which needs to be established ex-ante. The commitment of political leaders is clearly attractive for those hoping to develop and scale innovative approaches. One of our respondents cited the support of Dr Mohammed Pate⁹ to combating polio in Nigeria as critical to enabling innovations to be quickly rolled out in the health sector, such as ICT solutions to pick up on breakdowns in the cold chain for polio vaccines. The coordinated effort to develop an Ebola vaccine has been held up as an illustration of how wider-ranging international political commitment united diverse interests behind a common purpose (WHO, 2015a). But abstract appeals to the importance of political will do not get at why that will should manifest in the first place, and, even more critically, why it might be missing – where it is not aligned with the interests of those in power or actively threatens those interests.

Similarly, discussions of the enabling environment for innovation tend to focus at a high level, without engaging with harder questions of interests and power. Policy prescriptions are available to foster entrepreneurship and reduce cost and other barriers confronting local innovators – for example by providing market intelligence and access to credit or developing quality assurance mechanisms.¹⁰ While appearing reasonable on paper, these prescriptions often do not get to why policies may be difficult to establish, nor how people will work within, or outside, the ‘rules’ which policies claim to set.

As such, our first point on perspective is that it is critical to recognise dynamism – that is, how innovation can shape, as well as be shaped by, political issues of power, incentives and interests. While this can make it seem harder to get a handle on, it may imply that asking the right questions in a given context is more important than arriving with ready-made answers about political will or the ‘right kind’ of policy prescriptions.

8 mTrac, <http://www.mtrac.ug/>

9 Currently Professor at Duke University’s Global Health Institute, US, formerly Minister of State for Health and Executive Director of the National Primary Health Care Development Agency in the Government of Nigeria

10 Lighting Africa, ‘What we do’, <https://www.lightingafrica.org/what-we-do/>

Politics around innovation for pro-poor services can play out at multiple levels

Politics around innovation for service delivery do not arise only in terms of big-P politics – namely, the domain of politicians, political parties and government. As noted in our discussion of what we mean by pro-poor services, access and exclusion not only are determined by material wealth but also can depend on other variables, like gender, age, ethnicity and geographic location. In turn, politics that inhibit pro-poor services can occur at the level of governments but also go down to the power relationships within individual households. The politics around innovations in services also need to be seen from this multi-level perspective.

Zooming in to the micro level, in Bangladesh, Dnet, a social enterprise delivering ante and postnatal health promotion advice to mothers via tailored SMS, has adapted its approach to navigate Bangladesh's gender politics within the household. Under the Aponjon programme (the local brand of the Mobile Alliance for Maternal Action, a public-private partnership), formative research revealed that men acted as gatekeepers on the use of mobile phones by women. In the vast majority of cases, even where women had their own handsets (59% of women participating in the pilot), husbands paid the bills (97% of pilot participants). Dnet subsequently designed the commercial promotion of Aponjon to include males and to target them with a separate set of tailored messages accompanying those that go to female participants (GSMA 2014).

At the other extreme – namely, the level of international business – several of our interviewees pointed to how Kenya's m-Pesa has generated new politics around money transfer and financial services across East Africa. Governments in other countries that have witnessed the rapid growth of m-Pesa have taken a more circumspect approach to entrusting a significant proportion of national liquidity to a private telecommunications company – what has been described as m-Pesa's 'veiled stab at operating as a better central bank than the Kenyan central bank' (Kaminska, 2015).

An important, and often overlooked, intermediate level is how politics plays out within organisations and between the different tiers responsible for transferring political commitments into operational service delivery. Brij Kothari, who has developed same-language subtitling as a mechanism to improve functional literacy across several Indian regional languages, points to his experience of how workers within the Indian government hierarchy can protect their interests. For example, he notes the common 'death by delay' tactic, which avoids either a yes or a no response 'because a clear decision is always open to challenge' (Kothari, 2016: 224).

As the mTrac example above also showed, it can be crucial to consider how innovations will be perceived

by those responsible for translating political and policy commitments into services. And, just as the mTrac example suggests the importance of integrating interests at intermediate levels, it could also be necessary to bypass those who could abuse or otherwise resist the positive potential of the innovation at any level. For example, U-Report, a free-to-use platform that uses Twitter and direct messaging to interact with voluntary 'U-Reporters', has exposed a widespread issue of teachers awarding grades in return for sex in Liberia's schools. By bypassing the frontline service delivery agents (teachers), the technology avoided co-option and ensured a rapid and frank picture of the scale of the problem. In under 24 hours, 13,000 people responded, 86% of whom said they believed 'sex for grades' was occurring in their school. This in turn enabled the Ministry of Education to engage much more proactively on what had been a highly taboo issue (Sotomayor, 2015). Whether teachers will in turn attempt to mobilise to resist punitive action by the ministry remains to be seen.

Our second point on perspective is therefore that backers of innovation need to take a multi-scale view, which is not limited to the level of big-P politics. Small-p politics can be an important intermediary concern. For service delivery, the WDR 2004 triangle of relationships highlighted above is a useful lens: while big-P politics might conventionally be perceived as concentrated in the 'state' corner of the triangle, small-p politics arise around relationships and power dynamics between the 'citizen-client' and 'provider' corners, as well as in relationships within each corner: between different providers; between frontline and managing staff within service providers; between different groups of users, including the poor and the non-poor; and between politicians and civil servants at different levels of government. The framing remains useful in how we think about politics of service delivery more specifically in Findings 2 and 3.

Innovation can create politics by challenging ideas as well as power

To harness commitment or forestall obstruction by political interests, it is important to consider why people might be willing to buy into or block an innovation. Politics, especially elite decisions, are often understood in terms of self-interest, but, as we argue, this is not the whole story. Certainly, incentives that arise around securing power or money or ensuring survival (actual, professional or political) are important. For example, in societies where political support is won and sustained by rewarding specific groups with goods and services (clientelism), an innovation that can be easily distributed as a gift (e.g. household water filtration or energy devices) could be appealing to politicians concerned with securing their power base. The flip-side is that innovations perceived as harmful to those in power may not get anywhere – a particular concern for those that aim to improve accountability around services.

Recent thinking on political economy nonetheless points out that we are not machine-like rational actors who take an exclusively instrumental approach to evaluating options ('What do I get out of this?') Judgements can also be based on values, social norms and ideas ('How does this fit with my world view?') (Hickey, 2013; World Bank, 2015). Value-based judgements, like instrumental self-interest, can hinder as well as support innovations in relation to achieving their intended outcome.

In Indonesia, the government is committed to scaling up integrated community systems for water supply, sanitation and hygiene. The innovation in this case is an amalgam of various technologies, including small-bore sewerage, bio-energy generation and reverse-osmosis water treatment, backed by a delivery and maintenance model that relies on communities to manage and operate the service (Eales et al., 2013). Often known as Sanimas,¹¹ the overall approach appears to fit well within the emphasis on self-help (*gotong royong*) and community empowerment, which is a prominent thread in Indonesian political and cultural values (Beard, 2005). Case study analysis of rollout of Sanimas in one city in Java suggests local officials may be using the idea of community empowerment, consciously or not, to defend a policy of not providing material post-construction support. More complex operational tasks and larger repairs are nonetheless outside the capacity of the community groups that manage Sanimas facilities. As such, a value-based position of public officials appears to contribute to failing services that do not provide effective wastewater treatment for low-income households and jeopardise public health (Mason et al., 2016).

Another example comes from preventative health care – in particular vaccinations. Effectiveness of vaccines requires 'herd immunity' – a threshold percentage of the total population to be covered. Vaccines are also politically interesting because they often raise ideological debates about the rights to individual choice versus public health. As such, scaling is imperative to reduce opportunities for the disease to spread, in turn reducing risk of outbreaks and contributing towards disease eradication. In Pakistan's Khyber Pakhtunkhwa, politically influential religious leaders have issued fatwas against polio vaccines, apparently motivated by, or exploiting, perceptions that vaccinations have masked attempts to sterilise the Muslim population. On occasions, they have issued fatwas in direct reaction to US attacks (e.g. after major airstrikes) – suggesting a strong interplay between transnational and local values and the politics they give rise to (Salim, 2012). There is evidence that spikes in cases of Polio follow mass-refusal by parents to immunise their children (Walsh, 2007).

These cases lead us to our third point on perspective – that values, as much as instrumental self-interest, play a part in how far individuals and groups will welcome or resist innovations. In turn, this means it is important for those backing innovations not to resort to a narrow, rational-actor view of what motivates behaviour. Ideas, ideologies and values can also play their part in whether we expect to win or lose from the changes wrought by innovation.

Recommendation

Innovation for service delivery is inherently political. Three shifts in perspective will help backers of innovations effectively incorporate political considerations into their work:

- **Dynamism:** looking beyond generic prescriptions about static policy features and political will to consider how innovations interact dynamically with politics.
- **Scale:** looking beyond big-P politics to consider the multiple stages, from the household, through hierarchies of service organisations, to national and international levels, on which innovation politics can play out.
- **Motivation:** looking beyond self-interest to consider how innovation can create politics by challenging values and ideas, as much as by changing winners and losers in material terms.

¹¹ Sanitasi Oleh Masyarakat, or Sanitation by Communities – the name of the original government pilot innovation.

Finding 2: Matching innovations to political problems in service delivery

Perspectives are only a starting point, and, as noted, they are not usually operationally helpful in and of themselves. In the next two sections, we offer some more focused concepts and questions that can help users think about politics around innovation in a more structured way. In this section, we approach the issue from a problem-driven perspective, considering the types of political problem that might undermine service delivery for poor people, and what broad types of innovations (i.e. change of process or technology) might change relative power to favour the poor. If innovation is inherently political, how can it be used to unblock the underlying political constraints to pro-poor services? A single innovation is very unlikely to be a silver bullet that totally transforms relationships in predicted, linear ways. It could, however, play a part in reconfiguring the interests and room for manoeuvre individuals and groups – such as service providers, citizens and governments. It is this possibility that we aim to explore here.

There is a range of ways of thinking about the political reasons for why services are not accessible to the poor, many of which are developed by political scientists (e.g. WDR triangle, Levy and Walton, 2013). These examine the power relations between the different groups using or providing services to understand how service providers, users and public leaders interact to deliver a service and what motivates their behaviour. These theories and frameworks offer helpful background but tend to focus on abstract concepts of power, accountability and incentives. As such, they are not so useful for an audience working on the practical task of promoting and scaling innovation to improve public services. For this discussion, we need something a bit more tangible.

We therefore borrow from a range of concepts that focus on issues that can be approached directly through innovation. These address more practical concerns, for example how easily health promotion messages can be targeted at certain users; or the continuity of energy supply measured; or the quality of water supply judged by users or regulators. These are technical issues but, as we show, they also reveal deeper political dynamics shaping how a service is delivered, in terms of relationships, power, ideas and incentives.

The concepts we introduce in this section are drawn from a framework developed by the Overseas Development Institute (ODI) and the University of Birmingham (Batley and Harris, 2014; Batley and Wales, 2015; Mcloughlin, 2012), which describes a range of ‘sector characteristics’. Following our understanding of pro-poor services outlined above, and the importance of affordability, we use these characteristics to frame a set of questions (Table 1). These questions bridge between the world of technical design and implementation and the messier world of politics. At face value they are about technical issues but, as we show, when asked in the right way, they allow users to identify political constraints to making a service accessible to someone living in poverty in a given sector. These political constraints often (though by no means always) reside in relationships between service providers, users and state authorities, as we have already explored.

We now take each of the questions and the related concepts in turn to explore how technical features and the politics they give rise to can shape accessibility for the poor. For each of the main considerations for whether a service is pro-poor (affordability, informed choice, physical access), we discuss what broad types of innovation have the potential to unlock underlying political blockages for pro-poor services – for example by shifting incentives and altering the potential for collective action.

Table 1: A set of bridging questions to think about politics in service delivery

Is a service pro-poor?	Bridging questions	Related service characteristic
Can everyone afford the service?	Can providers stop some people from accessing a service?	Excludability
	Who pays for hidden costs to the service?	Externalities
	How predictably do people want to use a service?	Predictability of use
	Can someone without specialist skills create an alternative service?	Professionalisation
	Is it an expensive service to provide?	Transaction intensity
Can everyone make and articulate informed choices about the service they use?	Can someone see the service working and benefiting them?	Visibility
	Can authorities and service users easily measure how good a service is?	Measurability
	Does the person who directly provides the service determine how good it is?	Discretion of frontline staff
	How often do people use this service and is their usage predictable?	Frequency of use
Can everyone physically access the service?	Is the service limited to people who live close by?	Territoriality

Can everyone afford the service?

Why can't a person from a poor household afford enough drinking water, healthcare or electricity? Using concepts such as 'excludability' and 'professionalisation' can reveal some of the reasons why private and public sector providers may fail to offer quality services at an affordable cost to all.

Excludability – can providers stop some people from accessing a service?

The concept of excludability applies to most services, especially those that are networked, such as sewerage, internet and water. Where the provider can control who accesses the service, it is easier to prevent people from using it if they do not pay and so the private sector can more easily profit from providing it. If private providers take the service to scale, the cost may fall as competition increases and more people pay for it, eventually making it affordable for all. However, private providers may be more concerned with generating profit than ensuring equitable access to a service, so state intervention in the market can be necessary to ensure affordability – for example by regulation. This introduces big-P political negotiation between the public and the private sector and can raise fundamental questions about the role of each in delivering the service.

For example, in Cambodia and Vietnam, many poor households use water sources that are publically accessible – that is, they do not pay for this water and it is untreated, so they need to find a way to purify it in their household (or risk using it untreated). Seeing a market opportunity in this need for better water quality, small entrepreneurs are selling small-scale water filters. Individual households buy these and use them to improve the quality of their water without necessarily sharing them with their neighbours. This means this is a private good and 'excludable' because only the purchasing household has access to it. Consequently, filter sellers can profit from selling filters to more households. If filters could easily be shared, in the way that a public water pump is for example, there would not be the same interest from the private sector in providing them because the market opportunities would be smaller. So, while water filters could be a way to improve public water provision, it requires each household to be able to buy a filter. Can all households in Cambodia and Vietnam afford a filter? Is there a role for the public sector or another actor to intervene in providing water filters to households so this innovation makes clean water affordable for all?

Externalities – who pays for hidden costs to the service?

Externalities are the consequences of an individual's actions that reach beyond the individual alone. These consequences may be positive or negative. In health care services, vaccination programmes produce a positive externality whereby one person's immunity lowers the risk of disease transmission for all (although effects usually become noticeable at a certain threshold). Overuse of antibiotics generally carries negative externalities, in that it can increase the probability of resistant strains of bacteria developing. Externalities (wider consequences)

of a service might create political tension if some people are negatively affected by others using it. At the extreme, government may be forced to intervene in the regulation or provision of the service to reduce the negative impacts.

One example of how negative consequences of a service could affect the affordability, and politics, of services is in the introduction of lower-polluting energy options. Renewable energy and some cleaner-burning fossil fuels emit fewer air pollutants than coal. This and the falling costs of decentralised renewable energy mean grid-based energy provision from coal-fired power stations is increasingly unattractive for meeting the needs of unserved households in sub-Saharan Africa (Hogarth and Granoff, 2015). However, because the negative externalities from air pollution are not properly priced (internalised in the market), incumbent coal industries enjoy an unfair advantage at the expense of citizens' health, which they can seek to protect through political lobbying.

Predictability of use – how easy is it to predict when people will use a service?

Some services, such as water supply, have a fairly predictable level of demand; others, such as curative health care, have fluctuating demand that is not so predictable, especially at the local level. The ability to predict demand is an important factor in the economics of service provision. Guaranteeing universal, permanent access whenever and wherever a service is needed is costly if it is used erratically. This makes it less attractive to the private sector and means it is more cost-efficient for providers to concentrate provision where there are most users, often in urban areas.

Low or irregular demand for a service clearly can be a barrier to pro-poor provision, since these services are usually more expensive to provide and may be unaffordable for the poor. For example, it is difficult to predict who will need emergency maternal care, when. If public funds do not cover the additional expense, accessing emergency care may mean users need to pay high fees, which exclude the poorest people.

Professionalisation – can someone without specialist skills create an alternative service?

A service that has a high degree of professionalisation, such as medical care or legal services, may imply greater costs for the user because staff must be highly skilled and paid accordingly. If a service requires professionals for design or delivery, there may be fewer opportunities for adequate self-provision or alternative cheaper providers, which can mean the poorest service users cannot afford to use the service. For example, legal advice is a highly professional service that is difficult for someone to create themselves or access through an informal, low-skilled provider. Professionalised services carry the added implication of it being difficult for non-specialists, including policy-makers as well as users, to maintain effective oversight of service providers and ensure quality for a given cost.

Transaction intensity – is it an expensive service to provide?

Scaling a service by making it affordable to all is much easier when the unit cost of providing the service is low. The concept of ‘transaction intensity’ is also relevant here, asking how cost- and time-intensive the delivery of a particular task is. For example, providing malaria nets is often considered a very cheap and simple action, which should have public health benefits that significantly outweigh the cost of provision. Providing tailored, one-to-one professional advice for a chronic medical condition involves much longer and more intensive interactions, with greater cost implications – especially where service users need to be visited directly. In such circumstances, making a service affordable for the poor can be difficult unless the state can find a way to subsidise tariffs for the poorest service users. If state resources are constrained or if there is little political interest in using public money to reduce tariffs, the cost of using a service may be unaffordable for the poor.

What could technological innovation do to make services more affordable?

The service characteristics discussed above demonstrate how some services are more expensive than others to provide, be this because they require highly technical skills and infrastructure, because they do not have consistent demand from users or because they are provided by the market but competition is insufficient to ensure an affordable price for all. These barriers imply political decisions about whether and how the public sector should intervene to subsidise the cost of accessing a service, or whether it should provide the service itself using public funding. If there is limited political gain to be made from doing this, the poorest may remain priced out of a service.

However, an innovation could reduce the costs of providing a service or create a political incentive to subsidise it. For example, M-KOPA is a company that has developed an innovative way of providing off-grid solar energy to households on a pay-as-you-go basis, with payment made via mobile phone banking.¹² Providing on-grid energy to poor households in informal settlements or rural locations is notoriously expensive for providers, given the cost of laying infrastructure and the risk that non-paying households can tap power cables. M-KOPA reduces this cost by providing household solar systems that it activates remotely when a household makes an SMS payment for energy. At a certain threshold of payments, the system is permanently activated and users become owners of the technology. Unlike on-grid electricity, M-KOPA solar systems are excludable (only paying households can use them until they are paid off) which makes cost-recovery easier for the service provider, and they are cheaper to provide (less transaction-

intensive) because they require less infrastructure and the payment process is a simple text message, which means M-KOPA can offer the service at a lower cost to a wider geographic area.

Another example of a technology that may make public services more cost-effective to deliver is the ‘U-report’ SMS platform in Uganda.¹³ This free service allows mobile phone users to participate in public interest polls and share their thoughts about issues in their area while also receiving alerts about local public events or campaigns. U-report was recently used to send promotional text messages about a polio vaccination programme and offer people the chance to ask questions about the vaccinations. This technology therefore has the potential to increase the number of people who choose to be vaccinated and so maximise the positive consequences (externalities) for the whole community, which makes the vaccination programme more cost-effective for the government.

Understanding what makes a service cost-effective or not reveals where an innovation could be useful for reducing costs and could create greater incentives for the state or private sector to invest. In this way, an innovation can strategically change the nature of a service so it is more likely to be affordable for all.

Can poor users make and articulate informed choices about the service?

Cost is not the only barrier to services for the poor. To be able to judge the quality of a service, individuals need to be able to tell how good the service they are experiencing is (compared with others) and whether it is the best one for their needs. The poorest people often lack education and access to information, which leaves them more vulnerable than others when trying to choose which services to use and to discern their quality and value for money. They may also be less able to mobilise collectively to demand better services where they are inadequate. Concepts such as ‘visibility’ and ‘measurability’ help identify when this could be a problem for pro-poor access to an adequate service and how an innovation could overcome this.

Visibility – can someone see the service working and benefiting them?

The concept of visibility refers to how easily the user and provider can observe the outputs of a service. If a user can see the benefits of accessing a service, they may be more likely to invest time or resources in using it and demand for it may be greater. Services that offer visible outputs may also receive more political support, since voters can recognise the benefits of the service and may credit a politician with providing them. For example, building a new school is a visible service that a politician may claim

¹² M-Kopa Solar, <http://www.m-kopa.com/>

¹³ U-report, <http://www.ureport.ug/>

credit for, whereas improving the quality of teaching is less obvious to voters and so does not generate the same potential to leverage political support. While wealthier people may be able to pay for private services, such as tutors for their children, poorer people may be able to access only the public services that politicians have chosen to support.

Measurability – can authorities and service users easily assess how good a service is?

The measurability of the outputs and uptake of a service is important for quality control and accountability. If it is easy for the user or an authority to measure service outputs, there is greater chance the quality of the service is more uniform and of a higher standard across all user groups. For example, an individual may choose a particular health treatment relying solely on the advice of a health professional, who may be incentivised to promote a more expensive treatment than is necessary (if they are rewarded for referring patients to a certain programme or prescribing certain drugs). The authority overseeing the service may also lack the information needed to effectively regulate quality provision.

Discretion of frontline staff – does the person who provides the service determine how good it is?

The extent to which frontline staff determine the quality of a service is critical for control and accountability. If the quality of a service can vary depending on which individual provides it, then social discrimination, whether on the grounds of gender, poverty, ethnicity or other factors, may occur within service provision. This could be compounded if the quality of a service is also not easily measured or monitored by service managers or a regulatory body.

How often do people use the service and is their usage predictable?

Some service modalities, such as a water point in a peri-urban settlement, will involve frequent interactions between different service users. This can increase the potential for collective action to challenge service providers about the adequacy of services received, as it is often easier for a group of service users than for a single individual to effect change. Others, such as curative health care, are used intermittently and irregularly, making it difficult for individual patients to discuss and mobilise collectively around service inadequacies. This illustrates the important point that it is not just information but also the ability to mobilise and use information that is important in considering whether poor people can exercise informed choice about services.

Could technological innovation help the poorest make more informed choices?

The concepts above demonstrate the importance of users and regulatory authorities being able to discern the quality of services being offered and whether a service is appropriate to a user's needs. Technological innovations have the potential to overcome these information imbalances that make services difficult to understand, assess for value or monitor for quality. For example, a

function of the mTrac system discussed above is to enable all health service staff and users to anonymously report on problems they experience by sending a text message to a call centre, where the issues are collated and then investigated. This application of mobile phone technology can make health services, which are often difficult to monitor, measure and control, more transparent and accountable to users and regulators. Text messages are a very cheap way of monitoring remote services, so this also reduces the cost and time spent ensuring all users can experience a quality service.

However, it should be recognised that technology is only likely to assist service users or providers to monitor service quality if the wider public institutions are capable and interested in acting upon the monitoring information. As the 2016 World Development Report notes, for services that involve high-levels of discretion from staff, technology which makes quality standards more transparent may provoke service users to take actions to demand better services. But unless these actions are sustained and able to engage the service providers and public sector officials in resolving the problem, long-term service improvements are unlikely. For example, in India digital tools for monitoring health workers had some positive impact on their attendance, but few local governments used the data to sanction those who did not turn up because of cumbersome bureaucratic rules and other wider political reasons (World Bank, 2016).

Can everyone physically access the service?

Territoriality – is the service limited to people who live close by?

Some services, such as water supply, are described as 'territorial' because they are limited to a particular geographic area – whether a piped network or a point source like a hand pump or borehole. Like visibility, territoriality can connote the likelihood of political interest in the provision of a service. For example, a service that is reliant on static infrastructure, such as a school or health facility, will be available only to those who live relatively close by. This means politicians may use it as a way of generating political support from the local population who can benefit from the service.

However, a service that is limited to a particular area inevitably excludes people living further away and so may be inaccessible to poorer people if they cannot pay the transport costs of reaching it. These are not necessarily financial – there can be opportunity costs associated with travelling time. Many of the 0.5 billion people in rural areas alone who resort to using unimproved sources of water supply do so because safer sources are too far away (UNICEF and WHO, 2015). Services that are centralised, such as water, energy and sanitation, often require expensive static infrastructure, and the cost of creating this infrastructure means it is more likely to exist in densely populated areas where the cost can be recovered by means of many people paying to use the service. As a result, territorial services may be inaccessible to poorer people living in rural or informal settlements.

Could a technological innovation make a service easier to reach?

Technologies that can address the physical problems of territoriality inevitably include those that make a service more accessible remotely. Text message services for health advice are one example, reducing the need for expensive health care facilities and for health staff or patients to travel long distances for a consultation. M-KOPA arguably provides the equivalent in energy services by offering off-grid energy solutions to rural households, which are far from networked energy supplies. However, while digital services may be cheaper for the provider, they may require the user to own or have access to a mobile phone and internet connection. This could mean these services are not accessible to the poor despite appearing to be more inclusive (World Bank, 2016). Furthermore, there may be other political limitations to using technology to overcome problems of territoriality – including how attractive it is to politicians. For example, health clinics are likely to be a more costly and less accessible way of providing health advice than a text messaging system. Would a local political leader rather support a health clinic that is more visible to voters, or a text messaging system, which may not offer same political credit from a voter constituency, because the service is less visible and users may not count the service a local improvement? As such, additional effort may be needed around decentralised and remote service technologies, to develop political buy-in and also to help users to voice individual and collective dissatisfaction where services fall below expected standards. M-KOPA's customer care line is an example of the latter.

Technological innovation can change the politics of service provision

By asking questions about the technical features of a service, it becomes apparent why politics are so important to making a service accessible to all. How easily a service can be monitored influences how accountable providers are to users and state authorities. How easily voters can perceive the benefits from a service affects how much a politician can gain from supporting its provision. How easily a private provider can profit from delivering a service shapes the costs and therefore incentives for public or private provision. These factors, and others, demonstrate the importance of there being political or private interest in ensuring a service can reach the poorest in society. We can then examine how innovations can potentially change the pros and cons and shift the interests and motivations for pro-poor service provision.

In our case study below, we put the above analysis into the context of a single broad group of innovations in a particular sector, using the example of mobile phone technologies for maternal health care. The application of mobile phone technology to maternal health care demonstrates how a technological innovation can alter a service's characteristics, overcoming key political barriers to serving poor rural households. Because monitoring, training and delivery can be less expensive, the innovation has the potential to adjust the incentives to providing quality maternal health care for the poor. Used well, mobile technologies can also increase the accountability of service providers.



Photo: Delivering biosand water filters with the Trailblazer foundation in rural Siem Reap Province, Cambodia. Austin King.

Box 2: How mobile phone innovations can change the incentives and accountability dynamics around health care services for poor rural women

High rates of maternal mortality recorded in many low-income countries represent an on-going and tragic failure. The story is similar across many countries; a woman living in a poor household, often in a rural area, does not have access to regular, well-trained health workers who are able to predict and deal with medical complications. When ambulances and hospital treatment are expensive or unavailable, a woman may be unable to access emergency care if she needs it (USAID, 2015; WHO, 2015b).

The impact of maternal ill health and mortality is widely documented. This often avoidable loss of life is linked to neonatal mortality, and can result in economic hardship for the whole family and limited opportunities for children (Family Care International, 2014). Improving access to maternal health care means addressing problems such as the cost of the service, the quality of frontline health care, accessibility to care in rural areas and women's lack of knowledge on the care they need. While these problems appear to be technical, there are often underlying political issues that prevent budgets from being allocated to health care, health workers being trained and monitored and rural clinics being adequately staffed. Values can also come into play, for example when cultural norms around midwifery mean women rely on traditional midwives and births at home rather than trained professionals.

Could technological innovations, such as a mobile phone app that helps midwives examine pregnant women correctly, address some of these problems with maternal health care so it is accessible to all? To answer such a question, we need to identify the key political problems undermining pro-poor services and consider what kinds of innovation could help resolve these.

Starting with service characteristics, what underlying problems can be identified? Maternal health care is often free at the point of use, so the poorest are unlikely to be directly excluded because of fees. However, the cost to the government of providing maternal health care may mean it is difficult to pay for an adequate ratio of health workers to pregnant women, especially in rural areas, where the health worker or women need to travel long distances for consultations to take place (high territoriality). Maternal health care is a professional service involving highly trained staff; cheaper alternatives, such as traditional midwives, may not offer a required level of quality, especially in emergency situations (highly professionalised). Expertise is often acquired through experience of dealing with cases, which may be difficult if midwifery is only one part of a health professional's role in a remote area (unpredictable demand). Meanwhile, the quality of the service is largely dependent on the skills of the individual health worker (discretion of frontline staff). Maternal health care is also difficult to measure and monitor since it is delivered through a personal consultation and often in remote health clinics, making it difficult for a state authority to control quality (low measurability). Clearly, there are high costs to the provider in ensuring health workers are well trained, are sufficient in number, can easily reach all the women in their area and are performing to a high standard. While the benefits of accessing maternal health care are visible to users, the service itself is not, so there may be limited political interest in investing in this service.

While various interventions could address these problems, what can innovative technologies contribute? One group of technological innovations applied to maternal health in numerous new settings in recent years is mobile phone apps. Governments and NGOs in many low-income countries currently use a wide range of such apps to improve maternal care. In general, their function is to provide guidance to rural midwives on how to assess a pregnant woman according to international standards. Apps might also offer a way of recording which women a health worker has visited and dates for future appointments, and can be used to send data on the health needs of each woman and the treatment she has received to a centralised monitoring system. This means the app contributes to addressing the problems of measurability and discretion of frontline staff by making it easier to monitor the quality of the service remotely and can support the skills of frontline staff without a supervisor always needing to be present. The data collection also addresses problems of unpredictability of demand, since it is easier to monitor the health needs of each woman and predict complications before they become emergencies. In addition, pregnant women as well as their midwives are using some phone apps to remind them when check-ups or other forms of treatment are due. This can help reduce the imbalance in information and control between the midwife and the patient and so give patients more control over the service they receive.

Of course, a mobile phone app does not address all the constraints to providing universal access to maternal health care and, as noted, innovations can create new and challenging politics of their own. For example, a phone app may be unable to change cultural norms around accessing maternal care whereby a woman may trust a traditional midwife more than a state-trained health worker. As in the Aponjon example earlier, in patriarchal society males can dictate phone ownership and use, and methods that target only females can challenge gender relations. In these circumstances, the innovation could challenge existing relationships of power and trust, resulting in difficulties in upscaling.

Source: Authors.

Recommendation

Prioritise support to innovations that can tackle underlying dynamics of service delivery failures for poor people using a politically informed, problem-driven approach. That means:

- asking questions about the characteristics of the sector, such as those outlined in Figure 4
- considering what these mean for political dynamics, for example incentives for public and private providers; ability for users to assess quality and mobilise to express demand; and attractiveness of the service to politicians
- identifying the key characteristics that constrain affordability, informed choice and access
- considering what types of technological innovation could alter the underlying politics, so there are greater incentives to make it accessible to poor people

This section has offered examples of how to select innovations to overcome some of the political constraints that prevent a government or private provider from achieving universal access. However, we also noted that technology alone is unlikely to address all problems of accountability between service users and providers, within bureaucracies, or between politicians and citizens. Technological innovations may contribute to making services for poor people more accessible, desirable and affordable, but other actions are often necessary for real change to occur. In the next section, we consider what additional support might be needed to help innovators anticipate, manage and overcome the political resistance that can arise from the introduction of an innovation.

Finding 3: Adapting innovations to avoid political resistance and unintended consequences

Our previous section focused on a problem-driven approach – examining systemic problems in basic service delivery and considering the types of innovations that might help address them.

However, innovators and those that support them do not always get to start from scratch and work in a problem-driven way. A more common scenario is probably ‘solution-led’, whereby there is an existing innovation already at a certain stage of development or being considered for use in a different context. For these cases, guidance is needed to understand how a specific innovation might shift the politics of service delivery; how this might compromise the ability to achieve intended outcomes for poor people, at scale; and what might be done to overcome these challenges.

We identify four overarching questions as starting points to support a context-specific analysis of these issues:

1. Will the innovation change the power of poor service users to assess the quality and value of the service over time?
2. Will the innovation change the power of service managers to ensure frontline performance for the poor?
3. Will the innovation change the expectations and incentives for government’s role in service provision for the poor?
4. Will the innovation change the advantages and opportunities enjoyed by market incumbents and elites?

For each question, we elaborate on possible political changes and implications for poor users using examples from different sectors, and referring back to the concepts that we introduced in the previous section (Table 1). Under each question, we also offer a more detailed set of pointers and questions to help in identifying appropriate responses. These responses can involve modifying the innovation itself or the delivery model (i.e. through design and production, marketing or customer support) as well as accompanying reform efforts and interventions that aim to influence the wider political environment.

The questions that we pose could also be asked by developers of innovations themselves – whether independently or at the encouragement of investors (by including the questions among the information required from prospective investees). They are not exhaustive, and they do not capture every possible political dynamic of an innovation. However, they do aim to provide innovators and those who support them with enough information to begin a light or moderately thorough assessment. We suggest engaging an expert in political economy analysis if more detail is desired for particularly sensitive innovations or contexts.

Will the innovation change the power of poor service users to assess the quality and value of the service over time?

In Cambodia and elsewhere, household water treatment products become less effective with sustained use if not well maintained or replaced. Users may be unable to assess their water quality until too late – that is, once they become sick from inadequately treated water. The risk is not just to individual consumers, however. The broader politics of the problem lies in the fact that users are disempowered as compared with service providers. Because it is hard for users to assess the relative quality one filter offers, a functioning market will be difficult to achieve, as markets generally require consumers to make consistent judgements about relative value. Over time, consumer confidence in the whole innovation could also be threatened by failure of inadequately maintained or cheap imitation filters. These issues relate to the problems of weak measurability and low visibility of service quality improvements outlined above.

In response, some Cambodian organisations that sell or distribute these treatment products are adapting their approach to train users on how to maintain the technology. Biosand filters, where water passes through a container filled with sand and rocks of differing sizes, are particularly sensitive to the need for good training. Their treatment effectiveness comes from the growth of bacteria over time between the grains of sand through which the water flows. Disturbing the sand layer and this bacterial growth reduces the quality of the filtered water until the bacteria are able to regrow. As such, the filter should be cleaned only if flow rate becomes unusably slow, and this should be done in a particular way that avoids disturbing the sand layer as much as possible. A user who lacks this knowledge and cleans the filter out of habit rather than necessity, or does so too vigorously, may suffer from poor water quality.

Clear Cambodia, an NGO, is one of the major distributors of biosand filters. Recognising the inherent challenge to poor users assessing the quality of water provided, the NGO undertakes a rigorous training regime with its beneficiaries. After initial installation and training, staff revisit the user at intervals of one, three, six and twelve months to reinforce proper maintenance practices and address any concerns. Clear Cambodia has installed over 170,000 biosand filters using this training model since 1999 and an independent survey in 2010 found the rates for continued functioning and use of the filters offered by Clear Cambodia and another NGO averaged 88% (Liang et al., 2010).

Box 3: Adapting and supporting innovations to help poor service users assess the quality and value of the service over time

Design and production stage

- Can elements of the innovation’s product or business model be altered or augmented so service output(s) are more clearly visible and recognisable? Can it be designed so deteriorating functionality/need for maintenance are easily spotted by users?

Marketing stage

- Can in-person sales to poor people include an element of customer training on product/service use, maintenance and quality assessment? Can easy-to-understand/visual instructions be provided with products to remind users when and how to carry out maintenance?
- Are there any easy to recognise certification standards for quality that can be applied to the innovation?

Customer support stage

- Can regular/on-call support be offered to customers after the initial sale, in a way that is accessible to the poor (e.g. toll-free phone lines or the presence of support reps at village markets)?
- Can warranties or refunds be offered to dissatisfied customers, in ways that are accessible and useable by customers who may face barriers such as illiteracy?
- Can poor users be supported to upgrade or replace their device/product as a reward for loyalty, once it becomes obsolete or degraded (e.g. loyalty discounts)?

Broader political-economic environment

- What additional support might be needed for poor customers to use the information around service quality – either individually or collectively (e.g. open government ICT platforms that allow users to provide feedback on service quality and lobby collectively for improvements)?
- Can regulators better encourage service providers to share information with users (e.g. by mandating product labels or enhanced disclosures on customer billing statements)?

Aftermarket support to allow customers to better understand service technology is one way to overcome measurability and visibility problems. In Box 3, we consider a wider range of options.

Will the innovation change the power of service managers to ensure frontline performance for the poor?

In a number of African cities, pay-per-use public toilets in informal settlements can offer a low-cost and environmentally sustainable alternative to leaking pit latrines and decrepit or non-existent sewerage. Some of the more innovative models franchise frontline service provision to local vendors and offer an integrated system for collecting and recycling human waste behind the scenes. As the service model expands, quality control becomes more difficult as the number of operators and facilities increases. In (small-p) political terms, this allows frontline staff operating these facilities to reduce the quality of the service offering, for example by not cleaning the facility or not providing water for hand-washing. Where there is a decline in performance, whether intentionally or unintentionally, poor users are forced either to pay the same rates for worse service or to find another way to cope – for example defecating in the open or using plastic bags. These issues mainly concern weak oversight power of the service managers, and reflect the themes of discretion of frontline staff, professionalisation and low measurability of service quality outputs outlined under Finding 2.

Sanergy, a company that franchises prefabricated and branded Fresh Life Toilets to local entrepreneurs in Nairobi and then provides a daily waste collection

service, has a commercial interest in safeguarding frontline performance. Being franchised operations, the public toilets and their operators are reasonably autonomous but they share the same Fresh Life Toilet brand. As such, it is important for Sanergy to ensure frontline quality in all of these franchisees – poor quality or unfair service provided by even one local operator could damage the brand. To guard against this, Sanergy uses ‘mystery loo user’ surveys. It sends staff members to these facilities unannounced, who then pretend to be new, local users. The staff discreetly assess the facility’s cleanliness, quality standards and customer service based on 16 survey questions they receive and report the results to Sanergy management, who take action as necessary (Sanergy, 2014). Because of this and other activities, Sanergy claims the vast majority of their franchisees are upholding their intended quality standards (ibid.).

The example is particularly suited to a franchised and branded commercial business model. In public service provision, the incentives for managers to review and enforce performance of frontline providers may not be as pronounced, especially if they expect to be held responsible for failures.

Where the commercial incentive to maintain service quality is missing, it may be necessary to bypass intermediate levels and allow reports from customers direct to senior sector leaders. An alternative, and likely less disruptive approach, is to offer positive incentives for good performance rather than negative sanctions for poor performance. In Box 4, we highlight a range of other options to increase the power of service supervisors to ensure frontline performance.

Box 4: Adapting and supporting innovations to support management of frontline performance

Design and production stage

- Can the production process be made resistant to theft, tinkering or use of (poorer quality) substitute components by staff (e.g. production line quality assurance processes)?

Marketing stage

- Can tampering by those involved in the distribution channel be reduced (e.g. product packaging with tamper-proof seals)?
- Does promotion to frontline providers explain the distinguishing features of the product, brand or service and build buy-in?

Customer support stage

- Can frontline providers be incentivised to provide adequate maintenance or support services (e.g. ‘mystery shopper’ assessments; free-to-contact complaints hotlines)?

All stages

- Are frontline production/marketing/support staff provided with appropriate salaries, training and career inspiration to encourage pride and buy-in to the service offering?
- Can the risk of frontline providers excluding poor users on the basis of tribe/caste/religion/social status/income group be reduced (e.g. through training; zero tolerance policies)?

Broader political-economic environment

- What additional support might be needed to ensure production and distribution networks are adequately incentivised to safeguard service quality (e.g. sector efforts to blacklist unscrupulous middlemen; human resource investments to ensure fair wages and job security for those involved in the sector; an independent ombudsman addressing user grievances)?

Will the innovation change the expectations and incentives for government's role in service provision for the poor?

In Cambodia, the distribution and sale of household solar products by different groups is expanding but this is raising questions about the role of government in energy service and about quality standards to safeguard the service. Currently, for-profit companies are attempting to sell what they claim are high-quality solar products at full cost, partnering with local microfinance organisations to make their sales affordable for the poor. However, they claim the government is outcompeting them with a programme that sells solar products to the poor at subsidised costs. According to one of our interviewees, companies argue the government's solar products are of lower quality.

The motivations for governments (and, more specifically, different individuals and coalitions within government) to take an interest in service provision, or to directly provide services, are variable. As we have noted, motivations can be value-based. Research on how Malaysia, Singapore and South Korea achieved significant expansion of sanitation and hygiene points to the 'ideological underpinnings [being]... a mix of ideas of civic responsibility and the construction of social norms associated with notions of modernity' (Northover et al., 2015: 5). But they can also be more instrumental, reflecting self-interest – for example the political capital for specific leaders that accrues from acts of largesse, such as subsidised or free distribution of specific technologies.

In Cambodia, interests within the government see value in subsidising services, whether to ensure affordability to poor users or to secure political support. For private service providers, the subsidies undermine competitive provision. Private providers argue the government could play a more positive role in safeguarding a functioning market for the service technology, by promoting quality standards or at least not distributing inferior products. Meanwhile, in the absence of government response, Cambodian solar companies and interested development partners are adapting their household solar innovations to align with their own theory of scaling and quality standards. They have established the Solar Energy Association of Cambodia as the sector's lobbying and standardisation effort. Alongside this, they are receiving support from the Netherlands Development

Organisation (SNV) (funded by the Agence Française de Développement and the European Union) to establish a Good Solar Initiative. The main goal of this is to develop an agreed set of quality and value standards for household solar products and to create a desirable brand and certification for those companies whose products meet these standards.¹⁴

This example shows how government has the power to significantly influence markets for innovation, and that government's role in service provision is often a politically contested issue. At its heart, the debate in Cambodia's solar industry reflects wider arguments about government's role in service provision more generally – whether its primary responsibility is to regulate and safeguard competitive provision through the market or to provide services itself, and which approach is best for poor people. Subsidies can represent a middle ground, overcoming affordability problems without creating new market failures – but they are notoriously difficult to structure and target (Komives et al., 2005). The contestation over public and private goods picks up on the theme of excludability, discussed under Finding 2. Excludability is usually required for market-based provision, but can also mean poor users can be prevented from accessing the service. Debates like these occur regularly for essential services with a strong public good dimension – notably water supply (Vidal, 2015) – but as the development importance of energy access is increasingly recognised, they can be expected to occur more widely in this sector too.

Because positions around public and private provision can often be ideological, those backing innovation may need to make subjective judgement of the trade-offs and winners and losers involved in different scaling options – whether it should be government or market-led, and what middle ground might be appropriate to ensure access for the poorest users. Irrespective of the pathway, however, certain considerations are generally relevant – for example ensuring consistent quality standards. In Box 5, we show how detailed questions around a specific innovation may also need to be tailored to the wider theory on how the innovation should scale.

14 Good Solar Initiative, 'Who manages the Good Solar Initiative?', <http://www.goodsolarinitiative.org/who-we-are.html>

Box 5: Adapting and supporting innovations to ensure appropriate expectations and incentives for government to provide or safeguard the service for the poor

Design and production stage

- If the scaling pathway is market-based, is the innovation's product or business model resistant to efforts to attain its service without payment (e.g. via theft or tinkering)?
- If the innovation will be provided as a public good, how will the innovation's product or service model remain resilient? How will capture and control of the service by powerful users be prevented, to ensure open access?

Marketing stage

- Are the innovation's product and service model measurable and in current conformance with relevant sector standards on quality and/or value?
- Can the innovation be used to gain political favour (e.g. by free or subsidised distribution)?

Broader political-economic environment

- If the scaling pathway is market-based, what additional support might be needed to ensure inclusion of poor users and how will this be targeted (e.g. graduated financing arrangements or public subsidies)?
- If the innovation will be provided as a public good, what additional support might be needed to ensure the open access model is well managed for the poor and avoids capture by powerful users (e.g. via regular government patrols of the service areas)?

Will the innovation change the advantages and opportunities enjoyed by market incumbents and elites?

In Kenya, the growth of Safaricom's m-Pesa has enabled millions of poor and previously unbankable people to gain access to a formal financial system and the various benefits such a system offers. Its transformative impact on the poor is at least partly about reducing the transaction intensity and therefore the costs associated with financial services. However, even where there is a clear pro-poor potential, innovations can get caught up in wider political negotiations, especially where they threaten vested interests or create new ones.

Authors like Kaminska (2015) argue that being allowed a virtual monopoly over Kenya's digital financial transactions was a key factor in m-Pesa's rapid growth. Now, as the innovation has gone to scale and Safaricom controls 68% of the country's total market share in mobile subscriptions, the Kenyan government is rethinking its approach. The rise of Safaricom has threatened the position and interests of Kenya's incumbent financial elites and institutions, including its banks. Likewise, its virtual monopoly has generated protest from other, smaller, market actors like Airtel, which argues that Safaricom's dominance is anti-competitive (Mohammed, 2015). This example shows both how an innovation's service model can threaten incumbents as it goes to scale and how in some cases rapid scaling can create new incumbents.

In response to m-Pesa's dominance, the Kenyan government has passed legislation in an attempt to break up Safaricom, aiming to force the company to separate m-Pesa from the rest of its mobile phone services and infrastructure businesses (Mohammed, 2015). The legislation is also in response to concern that m-Pesa's model of 'faster' money may be triggering inflation in the country, which the Kenyan government views as something it should be in control of – not Safaricom (Kaminska, 2015). The effects of this legislation remain to be seen, but one interesting downside could be to raise the costs of mobile banking for the poor. This is because the legislation is forcing a fragmentation of the market that could increase transaction costs and reduce the economies of scale associated with money transfers operating within a single platform (ibid.).

The full implications for poor users remain to be seen. m-Pesa's monopolistic service currently provides value for users, including poor people. Dismantling it is likely to make digital financial services more complex and expensive for them in the short term, yet they could be harmed in the longer term by inflation, as well as facing higher prices without open competition in the market.

Given that power disparities can often be substantial, innovations that threaten the interests of incumbent businesses and powerful elites require politically agile support. The box below provides some pointers as to useful questions to assess risks in this area and identify appropriate responses.

Box 6: Adapting and supporting innovations to navigate resistance by incumbents and elites

All stages

- Does the innovation threaten to displace or diminish the profits or rents obtained by market incumbent or societal elites if it goes to scale?
- Do those who need to provide licences or give permission for a service to operate fully understand the innovation's potential disruptive implications?
- What are the short- and long-term benefits for poor users to encouraging rapid scaling and potential creation of a new incumbent or monopolistic provider?

Broader political-economic environment

- Can vested interests be encouraged to view the disruptive potential of innovations positively, including as a chance to revitalise their own business models (e.g. through pre-competitive research and development partnerships)?

Recommendation

Help existing innovations navigate challenging politics as they go to scale, by suggesting adaptations or using wider influence to help resolve political bottlenecks:

- Assess the potential political implications with reference to the headline questions we use to structure this section, and the service characteristics we introduced in the previous section
- Consider how the innovation can be adapted, including in its design and production, marketing and customer support stages
- Consider what influence can be brought to bear on the broader political-economic environment, for example by linking up with civil society groups or other major reform initiatives.

5. Conclusions

Innovations for service delivery are inherently political, and the political aspects are particularly important when the objective is providing services to poor, marginalised and disempowered people. Following from this observation, and based on analysis of case study examples, interviews with experts and secondary literature, we have offered three arguments in this paper.

First, a sophisticated perspective is needed in considering how and why innovations around pro-poor services can affect and be affected by politics. Where the general importance of politics is increasingly recognised, there is often recourse to simple prescriptions about an enabling policy environment, or the importance of abstract political will. Politics may be perceived as largely the concern of parties, politicians and governments, which overlooks the ways innovation can affect power dynamics and winners and losers within all sorts of relationships – from the household, to communities, to the organisations that provide services, right up to the level of international commerce. And there is still too much emphasis on politics as being largely a question of self-interested motivations, overlooking the importance of values and ideas.

We therefore recommend that those supporting innovations for pro-poor services recognise the inherent dynamism and the multi-scale nature of politics, and the variety of motivations that can encourage individuals and groups to obstruct or support a given innovation.

Shifting perspective only gets us so far. Our second argument is that, because innovations are inherently political, they can be used to tackle underlying political constraints that underlie many service delivery failures for poor people. Innovations are often perceived as solving technical problems like how to put service infrastructure in an informal settlement, or how to train midwives. We argue that these are actually often political questions about government or private sector interest in investing

in services in poor communities, ensuring accountability of frontline providers and finding ways of reducing the cost of delivering a service and empowering the poorest households to use it. Drawing on a number of concepts from political science can help in understanding the political issues underlying apparently technical problems and, in turn, the broad types of innovation that could help overcome these problems. Single innovations are unlikely to provide silver bullets, but may alter the room for manoeuvre and affect the interests of the various groups involved in services in positive ways.

On this basis, we recommend a politically informed, problem-driven approach to prioritising investments in innovation, identifying underlying political reasons for service delivery failures for poor people and the types of innovation that could help unlock positive change.

Our third argument recognises that starting with a problem, unpicking the politics and then identifying suitable innovations is only one side of the coin – and probably the less likely scenario. There are also important implications for anyone working in a more ‘solution-driven’ way – who already have an innovation ‘on the table’ and are considering how it can be supported or adapted to maximise desired outcomes. Those supporting innovations for pro-poor services can help navigate challenging politics that arise as a given innovation goes to scale. This can involve adaptations to the innovation itself or the use of broader influence to help resolve political bottlenecks.

Our third and final recommendation is therefore that those backing or developing specific innovations for pro-poor service delivery help navigate challenging politics, by encouraging consideration of possible political risks and suggesting adaptations or using wider influence to overcome resistance.

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Annex: organisations consulted

Athena Infonomics

Azuri Technologies

BBC Media Action

Clear Cambodia

Digital Impact Alliance (DIAL)

Global Innovation Fund (GIF)

GRET

iDE Cambodia / Hydrologic Cambodia

International Development Enterprises (iDE)

Maternity Foundation

Medic Mobile

Mobisol

Netherlands Development Organisation (SNV)

Off-Grid Electric

Omidyar Network

Pathfinder International

Rainwater Cambodia

United Kingdom Department for International Development (DFID)

United Nations Children's Fund (UNICEF)

United States Agency for International Development (USAID)

WaterAid Cambodia

WaterSHED Asia

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