



## Mega shifts

*By 2020, governments are embracing a new approach to service delivery. Many adopt the role of a solution enabler, creating environments in which innovators thrive and technology-equipped citizens can serve themselves. Open data, crowdsourcing, and the co-creation of services herald the shift to distributed governance. Predictive analytics, behavioral psychology, and outcome-based regulation translate into smarter decision-making and better governance.*

*Government's talent model undergoes a radical transformation, creating a more open, mobile, and dynamic workforce. And evolving societal attitudes on how we define success and well-being lead to the emergence of alternative measures of prosperity and progress that reach beyond simple gains in GDP.*

### **Government as solution recruiter**

#### **Growth of non-state problem solvers**

Millions of new players enter the societal problem-solving arena. A government-dominated model of public service delivery shifts to one in which government is just one player among many, including not-for-profits, private corporations, social enterprises, and ordinary citizens.

#### **Government as enabler**

Public-private partnerships and triple-bottom line businesses that pursue social and environmental goals as well as financial ones become the status quo. In this environment, government's role pivots from chief provider and administrator of services to enabler: the creator of environments in which society's innovators can thrive. The most successful governments build platforms, hold partners accountable for targeted outcomes, open up services to choice, and manage crowdsourced campaigns and competitions.

## Multi-trillion-dollar capital markets for social outcomes

“Mutual advantage” and “shared value” are no longer obscure buzzwords, but fundamental business strategies. Businesses around the world address social and environmental problems with sustainable business models. Impact investment, once a niche model, goes mainstream thanks to market-building efforts such as the UK’s Big Society Capital fund and India’s Inclusive Innovation Fund. Businesses, governments, and social enterprises work together to test, hone, and replicate investment models that produce robust financial returns and social and environmental impacts.

Bridge International Academies, founded in 2007, created the highly repeatable “school-in-a-box” model in the slums of Nairobi, Kenya. The low-cost model created schools that allowed local managers to operate at an extremely low cost. By 2014, Bridge International Academies had grown to a network of more than 200 private schools with over 50,000 students spread across Kenya.

## Franchises for public services

Social entrepreneurs adapt the franchising model to consistently deliver superior outcomes, particularly in the developing world. Businesses franchise quality services, scaling them to hundreds of millions of underserved citizens. What began in India and East Africa with schools and healthcare spreads throughout emerging markets and developed Western nations alike.

## Triple-sector innovation incubators

Physical and online innovation spaces allow government workers, private employees, and social entrepreneurs to work side by side, collaborating to create new solutions. These incubators further blur the boundaries between sectors.

## “Made-for-me” service delivery

### Technology-enabled self service

The burden of delivering many basic services shifts from professionals to individuals wielding technology. A new car owner prints out DMV forms at home. A parolee checks in via ankle bracelets. Tools that help users solve their own problems redirect the expert’s valuable time toward cases that actually require their particular expertise. Advanced, integrated self-service mobile apps and kiosks automate tasks such as municipal payments, the issuance of marriage certificates, passport scanning, and probation check-in.

The Michigan Department of Human Services’ Mi-Bridges program launched in September 2009 moved a variety of assistance programs online: food, cash, day care, medical, and energy assistance. Its features—which let clients check their benefit status, file changes, renew benefits, and upload documents to their caseworkers—allow 90 percent of the client-caseworker interaction to be completed online without an office visit.

## Government as food truck

Governments go 100 percent mobile, digitizing as many services and programs as possible. “Mobile first” is standard operating procedure for introducing new online services. Taking a cue from the food truck revolution, the bulk of services requiring face-to-face contact are available via mobile government units.

## Consumerization of public services

Enterprising startups offering inexpensive, tech-based services that focus on seamless customer experiences generate demand for similar public services. The wave begins in transportation, education, and healthcare. Just as Uber and Lyft reinvigorated transportation, entrepreneurs develop innovative and radically user-friendly approaches to satisfy unmet consumer demand for better public services. This trend is visible at almost every turn.

Government services follow the lead of the retail energy sector, in which companies such as Simple Energy and Opower use analytics to transform otherwise esoteric data into digestible and actionable information that encourages customers to save energy.

## Borderless markets for public services

Border-agnostic marketplaces emerge in healthcare, education, job training, and other categories of public service. Some governments outsource service delivery to nations or multinational companies with strong brands and track records. Governments with best-in-class systems in specific areas help other governments implement their models. Citizens also search for superior service, engaging in “medical tourism” and educational travel across the globe.

## Distributed governance

### Distributed problem solving via technology

The accessibility and affordability of social, mobile, and cloud technologies allow groups of ordinary citizens to chip away at tough societal problems by the hundreds, thousands, or even millions. This technology-enabled approach to problem solving takes many forms, including micro-tasking and micro-volunteerism, crowdsourcing, peer-to-peer models, and prize challenges.

### Crowdsourcing policy

Crowdsourcing opens once-exclusive decision making to ordinary citizens. When drafting legislation, governments invite citizens, businesses, and social enterprises to provide input via sophisticated platforms that use game mechanics, personalization, and analytics to optimize the input of each contributor. Together, they develop policies that are better researched and designed and broadly supported by the public.

### Co-created policy and services

Engagement in politics increases, as the citizens who experience a policy’s impact most directly work alongside its designers. Carefully designed co-creation approaches allow policy designers to build better prototypes and test them more realistically, increasing the final policy’s effectiveness.

In an early example of the approach, in 2011 the Australian Center for Social Innovation tackled the issue of “chaotic families” (domestic violence, child abuse, and substance abuse) by co-designing a solution called “Family by Family” with the people they sought to support.

### Open data platforms 2.0

Millions of government data sets have been opened to the public, benefiting a bewildering diversity of community projects. The systems developed for open data programs also become platforms for documenting and rectifying corruption.

By 2014, governments had opened more than 1 million datasets to the public.

### Shareable cities

In cities around the world, the peer-to-peer philosophies of “access over ownership” and “value unused is waste” reach a cultural and commercial tipping point. Rideshares relieve congestion. Food sharing reduces food waste. Skill sharing improves job competitiveness. The growth of collaborative consumption, which turns underutilized products into on-demand services, changes how cities function, from transportation and education to water and energy supplies. Sector-spanning sharing solutions reduce pressure on public infrastructure and services, making the zero-emissions city possible.

## Micro-tasking work

“Micro-tasking” approaches, which employ technology platforms to distribute small, discrete tasks to online workers, are a standard practice for accomplishing government goals. Governments use such platforms to harness the knowledge and skills of citizens and their own workers across multiple departments and agencies.

To digitize content for its national library, Finland created a central “game” platform to persuade citizens to provide free labor. Participants completed more than 4.1 million small projects, or “microtasks.”

## Alternative funding models

### Revamped infrastructure pricing models

Dynamic pricing and pay-as-you-go systems replace the blunt pricing models of the past. Governments begin letting citizens pay for services they use. Multiple forms of dynamic pricing such as dynamic tolling and parking ensure a balance between the supply of and demand for infrastructure services. Alternate funding models such as mileage-based user fees (MBUFs) emerge, charging drivers based on how much they drive rather than how much gas they buy, and gradually replace the gasoline tax.

### Unbundling services

In 2020, many neighborhoods crowdfund their own needs, from park improvements to private security. Governments unbundle certain services, such as higher education.

Crowdfunding sites, such as education-focused giants [donorschoose.org](https://www.donorschoose.org) and [adoptaclassroom.org](https://www.adoptaclassroom.org), reduce some of the pressure on government for capital improvements and serve as models for other services.

### Mini-payments

With digital currencies and mobile payment companies such as Square and Stripe, citizens begin to pay for services on the go, as with today’s widely used “EZ Pass” payments used on toll roads. Building on the initial success of phone-based digital currencies such as M-Pesa, governments extend the ability to make small, direct user payments for a wider variety of public services such as parks and recreation and public health.

### The rise of patient capital

Championed by nonprofits such as Acumen Fund, “patient capital”—investments in early-stage enterprises offering longer time horizons for returns—goes mainstream, even affecting venture capital strategies. This unlocks a sea of private money for ambitious, previously untouchable infrastructure projects such as Elon Musk’s Hyperloop and housing and community development projects. More and more investors shift from seeking quick exits to funding ideas that create sustainable value and solve sticky problems. This has radiating effects on corporate R&D, as corporations join governments in funding groundbreaking research.

### Pay for performance

Fiscal restraints yield an array of innovative funding structures for services and infrastructure. Once-exotic payment-for-results models such as social impact bonds and tax increment financing (TIF) are increasingly popular for financing big, costly development projects and services. Flipping the model and moving some financial risks from governments to investors and contractors is a central characteristic of this global trend.

## Data-smart government

### Preemptive government

Data-driven public policies help governments shift resources to where they are needed most. Outside analytics experts are routinely engaged to develop predictive algorithms for decision making. Predictive models, as well as other types of data analysis and visualization, allow the public sector to focus more efforts on prevention rather than reaction and remediation. For example, rather than simply reacting to custodial parents calling in to report they are not receiving child support, a predictive model can alert enforcement officers ahead of time about the noncustodial parents who are likely to go into arrears. This model can allow the agency to address the situation quickly, and possibly even prevent the noncustodial parent from going into arrears in the first place.

### Targeted transparency

Open public and private data drive transparency from the bottom up. Individuals and consumers demand government and corporate disclosure. Citizens' transactional data is made available to them in industry-standardized, machine-readable formats so that they can build "choice engines" that help them make better purchasing and life decisions. Targeted transparency as a policy ensures that information disclosed is valuable, actionable, and directed toward improving individual decision making in the marketplace and political arena.

### Using math to change social behavior

The science of social networks is applied to social challenges such as reducing obesity, improving education, and preventing disease. Since social ties are often more powerful than market incentives in shaping behavior, social network incentives are used to encourage certain healthier, safer behaviors.

### Psychology influences policy

Insights gleaned from behavioral economics, psychology, and analytics equip governments to tackle complex issues and affect citizen behavior without significant economic regulation or penalties. Consider, for example, the psychologically motivated line in a tax-collection letter: "Did you know that 90 percent of your neighbors paid their taxes on time?" Similarly, psychology suggests that people are more likely to act in a certain way if the desired option is the simplest. The tricky part is presenting choices in such a way that citizens are encouraged to make better decisions without impinging on their freedom of choice.

The UK government's Behavioral Insights Team (Nudge Unit) applies insights from academic research in behavioral economics and psychology to public policy and services. The unit has worked on multiple pilots with positive changes in public behavior in areas such as job center services, car tax late payments, and non-payment of court fines.

### Beta government

Reform-minded governments apply the agile software development model to policy. Policies undergo rapid iteration and scaling to meet shifting needs, through small prototypes and pilots, staged rollouts and error allowance. Complex systems simulation studies are used to anticipate potential problems and unintended consequences. Policies are regularly tested using randomized control trials to test their efficacy. Insights garnered from small failures during the experimental stage avert larger failures down the road.

### Outcome-based regulation

Digitization and big data analytics improve regulators' ability to track performance and outcomes, enabling them to shift from a concentration on processes to the achievement of specific targets. This allows those regulated to modify and adapt their approaches without falling on the wrong side of the law while giving regulators a clearer view of the ultimate outcomes.

## Just-in-time civil service

### GovCloud

Governments apply the consulting staffing model to their workforces. Permanent employees undertake a wide variety of creative, problem-focused work in a virtual staffing cloud. Government workers vary in background and expertise but exhibit traits of “free agents”— self-sufficiency, self-motivation, and a strong loyalty to teams, colleagues, and clients. Teams form and dissolve as needed, allowing civil servants to focus on specific project outcomes rather than ongoing operations.

### Governments join the open talent economy

Rapid globalization, technology advances, geographic mobility, and innovation in education are transforming the concept of work. Governments expand their talent networks to include “partnership talent” (employees who are part of joint ventures), “borrowed talent” (employees of contractors), “freelance talent” (independent, individual contractors), and “open-source talent” (people who don’t work for you at all, but are part of your value chain and services). This shift from a closed model to an open, more inclusive one redefines what “workforce” actually means.

### Careers as patchwork quilts

Mobile workforces and the increasingly distributed nature of work break up the 40-year career into a personalized patchwork of different jobs and projects. Workers are motivated more by project-based work that advances their knowledge and less by linear pathways dedicated to a single career. The growth of peer-to-peer arrangements has led to the rise of “first jobs,” “second jobs,” and “Wednesday jobs.”

### The human side of government

The rapid deployment of digitization, robots, and UAVs in the workplace results in a new mix of civil service jobs. Smart technology causes the loss of some types of existing jobs but also generates plenty of new ones while quickening the pace of learning and retraining. Analytics and behavioral insights augment human capabilities. Displaced workers pivot to the new wave of jobs, many of them requiring close human interaction. Core skill sets for these jobs revolve around understanding human motivations and engaging civic and peer networks to address social problems.

### Government technology ethics

In an age of exponential technological change, government officials must focus not just on what is possible for government to do with emerging technologies, but how they can use technologies in ways that are in the public interest. 2020 technologies provide endless opportunities to impinge on individual rights and citizen privacy. Avoiding the dark side of technology requires a public sector workforce and the political class can expertly navigate the ethical issues involved in deploying new technologies.

## Basis of national prosperity shifts

### Talent: The new comparative advantage

The ability to attract and develop world-class talent emerges as the most critical component of national competitiveness. As such, governments lower political barriers (taxes, social security, and immigration requirements) to welcome a new class of global workers. Global demand for skilled workers, coupled with a choosier creative class, has led to new forms of global mobility, including short assignments (year-long posts for minimal disruption), reverse transfers (top performers from emerging markets move to developed markets for experience and skills) and virtual mobility (working in the cloud). Immigration policies begin to resemble corporate HR policies, as nations attempt to steer the flow of top talent to areas of critical need. Terms such as “global citizen” and “global community” assume larger places in personal identities, as waves of innovators travel to distant shores to solve problems.

54 percent of employers say they're unable to find qualified applicants for open positions.

### Learning and relearning as the key to national competitiveness

Welcome to the age of lifelong learning. A bachelor's degree used to provide enough basic training to last a career. Today, the skills that college graduates acquire during college have an expected shelf life of less than five years. The lessons learned in school thus become outdated long before student loans are paid off. National competitiveness may face no bigger challenge than the accelerating cycle of obsolescence. More than almost any other factor, national competitiveness becomes a matter of how to rapidly train and retrain vast numbers of people on an ongoing basis.

The skills college graduates acquire during college have an expected shelf life of less than five years.

### Economic indicators redefined

Automation, robotics, and the growth of peer-to-peer services decouple productivity and conventional employment. To accurately assess the economy and promote its growth, companies share data with governments, while new metrics account for a new class of tech-enabled workers, including micro-entrepreneurs driving for Uber, crafters selling on Etsy, and Airbnb hosts. More expansive metrics overturn legacy notions of “joblessness.” Regulators begin to shape a more supportive climate to nurture new classes of workers and services.

### Alternatives to GDP take hold

The importance of GDP as a determinant of a nation's progress begins to wane, making way for more holistic measures of progress and well-being based on measures such as personal safety, ecosystem sustainability, health and wellness, shelter, sanitation, equity, inclusion, and personal freedom. As nations grapple with global challenges including climate change, chronic disease, and rising inequality, the shift toward more multi-dimensional indicators represents a broader change in attitudes toward defining and measuring success.

Bhutan, a tiny country at the foothills of the Himalayas, moved away from measuring national prosperity through the GDP lens way back in 1971. Instead it measures prosperity through a unique metric called Gross National Happiness (GNH). The GNH measures prosperity through the spiritual, physical, social, and environmental health of its citizens and the natural environment.

## Sources

### *Deloitte deeper dives*

Andy Liakopoulos, Jeff Schwartz, and Lisa Barry, Human capital trends 2013: Open talent economy, Deloitte, 2013, [http://www.deloitte.com/view/en\\_US/us/Services/consulting/human-capital/268bf80dbcd310VgnVCM200003356f70aRCRD.htm](http://www.deloitte.com/view/en_US/us/Services/consulting/human-capital/268bf80dbcd310VgnVCM200003356f70aRCRD.htm).

Cathy Benko, Molly Anderson, and Suzanne Vickberg, The corporate lattice, Deloitte University Press, January 1, 2011, <http://dupress.com/articles/the-corporate-lattice-rethinking-careers-in-the-changing-world-of-work/>.

Charlie Tierney, Steve Cottle, and Katie Jorgensen, GovCloud: The future of government work, Deloitte University Press, January 1, 2012, <http://dupress.com/articles/the-future-of-the-federal-workforce/>.

James Guszczka and John Lucker, A delicate balance, Deloitte University Press, January 1, 2012, <http://dupress.com/articles/a-delicate-balance-organizational-barriers-to-evidence-based-management/>.

James Guszczka, David Schweidel, and Shantanu Dutta, The personalized and the personal: Socially responsible innovation through big data, Deloitte University Press, January 17, 2014, <http://dupress.com/articles/dr14-personalized-and-personal/>.

Jesse Goldhammer, Kwasi Mitchell, Anesa “Nes” Parker, Brad Anderson, and Sahil Joshi, The craft of incentive prize design, Deloitte University Press, June 18, 2014, <http://dupress.com/articles/the-craft-of-incentive-prize-design/>.

John Mennel, Tina Mendelson, Kellie A. McElhane, and Bill Marquard, The roadmap toward effective strategic social partnerships, Deloitte University Press, October 16, 2013, <http://dupress.com/articles/the-roadmap-toward-effective-strategic-social-partnerships?ind=74>.

Marcus Shingles and Jonathan Trichel, Industrialized crowdsourcing—Tech Trends 2014, Deloitte University Press, February 21, 2014, <http://dupress.com/articles/2014-tech-trends-crowdsourcing/>.

Paul Macmillan, Government and the publicly accountable enterprise, Deloitte University Press, July 1, 2011, <http://dupress.com/articles/government-and-the-publicly-accountable-enterprise-citizen-intervention-in-a-connected-age/>.

Shruti Shah, Andrea Blaylock, Virginia Gaskins, and Aaron J. Patton, Rethinking red tape, GovLab, 2012 <http://www2.deloitte.com/content/dam/Deloitte/global/Documents/Public-Sector/dttl-ps-rethinkingredtape-08082013.pdf>

Tiffany Fishman and Linsey Sledge, The future of higher education, Deloitte University Press, April 2014, <http://dupress.com/articles/reimagining-higher-education/>.

Vikram Mahidhar and David Schatsky, Big companies now have a hand in the collaborative economy, Deloitte University Press, May 5, 2014, <http://dupress.com/articles/collaborative-economy/>.

William D. Eggers and John Hagel III, Brawn from brains: Talent, policy, and the future of American competitiveness, Deloitte University Press, September 27, 2012, <http://dupress.com/articles/brawn-from-brains-talent-policy-and-the-future-of-american-competitiveness/>.

William D. Eggers and Joshua Jaffe, Gov on the Go: Boosting public sector productivity by going mobile, Deloitte University Press, February 18, 2013, <http://dupress.com/articles/gov-on-the-go/>.

William D. Eggers and Paul Macmillan, The Solution Revolution: How Business, Government, and Social Enterprises Are Teaming Up to Solve Society’s Toughest Problem, (Boston, Massachusetts: Harvard Business Review Press, 2013).

William D. Eggers, Rob Hamill, and Abed Ali, Data as the new currency: Government’s role in facilitating the change, Deloitte University Press, July 24, 2013, <http://dupress.com/articles/data-as-the-new-currency?ind=74>.

William D. Eggers, Social by the numbers: An interview with Sandy Pentland, Deloitte University Press, July 28, 2014, <http://dupress.com/articles/sandy-pentland-mit-interview/>.

### **Other sources**

Adam Oliver, From nudging to budging, London School of Economics Department of Social Policy, <http://www.lse.ac.uk/government/research/resgroups/BGatLSE/Documents/Nudge-verses-Budge.pdf>.

Alex Howard, Predictive data analytics is saving lives and taxpayer dollars in New York City, O’Reilly Data, June 26, 2012, <http://strata.oreilly.com/2012/06/predictive-data-analytics-big-data-nyc.html>.

Behavioural Insights Team, “About Us,” UK Cabinet Office website, <https://www.gov.uk/government/organisations/behavioural-insights-team/about>  
Catherine Rampell, “Alternatives to the GDP,” New York Times, October 30, 2008, [http://economix.blogs.nytimes.com/2008/10/30/alternatives-to-the-gdp/?\\_php=true&\\_type=blogs&\\_php=true&\\_type=blogs&\\_php=true&\\_type=blogs&\\_r=2](http://economix.blogs.nytimes.com/2008/10/30/alternatives-to-the-gdp/?_php=true&_type=blogs&_php=true&_type=blogs&_php=true&_type=blogs&_r=2).



David Weil, Mary Graham, and Archon Fung “Targeting transparency,” *Science*, June 21, 2013, <http://archonfung.net/docs/articles/2013/Science-2013-Weil-Graham-Fung.pdf>.

David Weil, Mary Graham, and Archon Fung, Promise and pitfalls of targeted transparency: A light-handed approach to social policy, Harvard Kennedy School of Government, March 1, 2013, <http://archonfung.net/docs/articles/2013/Science-2013-Weil-Graham-Fung.pdf>.

Harlan Yu and David G. Robinson, The new ambiguity of ‘open government,’ Social Science Research Network, February 28, 2012, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2012489](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2012489).

Janna Quitney Anderson and Lee Rainie, The future of the Internet, Pew Research Center, July 20, 2012, [http://www.elon.edu/docs/e-web/predictions/expertsurveys/2012survey/PIP\\_Future\\_of\\_Internet\\_2012\\_Big\\_Data\\_7\\_20\\_12.pdf](http://www.elon.edu/docs/e-web/predictions/expertsurveys/2012survey/PIP_Future_of_Internet_2012_Big_Data_7_20_12.pdf).

Mona Chalabi, “Does a government nudge make us budge?” *The Guardian*, November 12, 2013, <http://www.theguardian.com/politics/2013/nov/12/government-nudge-theory-budge>.

Molly Lanza, Archon Fung on the dynamics of transparency, Harvard Kennedy School, June 25, 2013, <http://www.hks.harvard.edu/news-events/publications/insight/democratic/fung>.

Stephen Goldsmith, “The coming era of preemptive government,” *Governing*, September 21, 2011, <http://www.governing.com/blogs/bfc/preemptive-government-cross-agency-data-prevent-problems.html>.

The Australian Center for Social Innovation, “Family by Family,” <http://www.tacsi.org.au/solutions/family-by-family/>.

The Australian Center for Social Innovation, “Co-design approach,” <http://www.tacsi.org.au/services/co-design/>.

United Kingdom Cabinet Office, “Red Tape Challenge: How it works,” <http://www.redtapechallenge.cabinetoffice.gov.uk/how-it-works/>.

World Economic Forum, The future of government: Lessons learned from around the world, 2011, [http://www3.weforum.org/docs/EU11/WEF\\_EU11\\_FutureofGovernment\\_Report.pdf](http://www3.weforum.org/docs/EU11/WEF_EU11_FutureofGovernment_Report.pdf).

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