



# WEBINDEX

REPORT 2014-15

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# 1 EXECUTIVE SUMMARY

## The Web & Growing Inequality

Growing inequality is one of the defining challenges of our time. What role can the World Wide Web play in tackling it?

Seven out of 10 people live in countries where the gap between rich and poor is greater than it was 30 years ago, according to [Oxfam research](#). In some countries these disparities are reaching levels last seen before the Great Depression. Inequality topped the World Economic Forum's annual [survey of global risks](#) this year, while the head of the International Monetary Fund (IMF), Christine LaGarde, recently [warned](#) that rising inequality is choking economic growth, and leaving "a wasteland of discarded potential" in its wake.

This discarded potential is the most damaging effect of inequality, eroding the chance for people to make a better life for themselves and making poverty a permanent trap passed on from parents to children.

The Web's power to help restore equality of opportunity is clear. Twenty-five years ago Sir Tim Berners-Lee and his colleagues at CERN took a momentous decision not to patent the Web, which led to a remarkable democratisation of its capabilities. Today, armed with little more than a smartphone, anyone — regardless of where they were born or how much they earn — can start a business, record a music video, crowdfund an invention, take courses with Nobel Prize-winning professors, or even launch a successful campaign for office. As the examples of Korea, Brazil, Estonia and Iceland demonstrate, the Web has three critical contributions to make to fighting inequality:

- Expanding access to knowledge, information and skills
- Enabling wider political participation and voice

- Lowering barriers for small and micro enterprise to innovate, compete and succeed

But we can't take the equalising power of the Internet for granted. Current trends suggest that we now stand at a crossroads between a Web "for everyone," which strengthens democracy and creates equal opportunity for all, or a "winner takes all" Web that further concentrates economic and political power in the hands of a few.

Already, overall scores for the Web's contribution to development and human rights are strongly correlated with wealth. The higher a country's per capita income, the higher its Web Index ranking.

In part, this is because access is still heavily skewed to those living in high income countries. An estimated 4.4 billion people — mostly poor, female, rural and living in developing countries — have no access to the Internet at all.

- While Internet use has soared from around 45% to 78% in high-income countries since 2005, in low-income countries it has remained below 10% year after year. Internet penetration grew by only one percentage point per year from 2011-2013 in low-income countries. [\(ITU\)](#)
- In the poorest countries, the relative costs of basic Internet access remain over 80 times higher than in the rich world — while Internet use is 10 times lower.

But digital divides also exist within countries. First, the skills and education needed to fully benefit from technology are very unevenly distributed. According to the [IMF](#) and [OECD](#),

the Internet revolution is increasing the wage gap between the very highly skilled and everyone else, making technological progress the single biggest factor driving income inequality in both advanced and developing countries.

Second, powerful state actors and economic elites are gaining more control over what ordinary people can do and say online.

- At least 1.8 billion Internet users have little or no right to privacy or freedom of expression online thanks to pervasive surveillance or censorship.
- Legal safeguards against government snooping on our communications were eroded or bypassed in many countries in the past year, with 84% of Web Index countries failing our test for basic privacy safeguards, up from 63% in the 2013 Index.
- Almost 40% of countries blocked politically or socially sensitive Web content to a moderate or extreme degree in the past year, up from 32% in 2013.
- In 74% of Web Index countries, lack of net neutrality means that ability to pay may limit the content and services users can access.
- One in five female Internet users live in countries where harassment and abuse of women online is extremely unlikely to be punished.

Third, governments and donors have yet to invest enough in putting the power of the Web in the hands of the poor and marginalised, leaving some groups even further behind:

## Policy makers must:



- 1. Accelerate progress towards getting everyone online.** Poverty must not prevent anyone, anywhere from connecting. Universal access means everyone should be able to use all of the Web all of the time, safely, freely and privately.
- 2. Level the playing field** by preventing price discrimination in Internet traffic, balancing the rights of copyright holders with those of Web users, and protecting online service providers from liability for content posted by third parties. We believe that governments must recognise the Internet's essential place in economic and social infrastructure and treat it like other public utilities.
- 3. Invest in high-quality public education for all** to ensure that technological progress doesn't leave some groups behind.
- 4. Promote participation in democracy and protect freedom of opinion.** Fight the growing "democratic deficit" by reversing the erosion of press freedom and civil liberties seen in almost all Web Index countries in recent years; use the Web to make government more transparent to citizens; and provide stronger protections for freedom of speech, freedom of association, and privacy, both offline and on.
- 5. Create opportunities** for women and poor and marginalised groups by investing more in ICTs to overcome key barriers in health, education, agriculture and gender equity. Achieve scale and impact by involving stakeholders in identifying the specific problems that ICTs can help to solve and those it cannot, and designing properly resourced programmes to address both.



- Small and medium enterprises (SMEs) in most middle- and low-income countries are realising only small gains from ICTs, whereas SMEs in most of the developed world have seen large benefits from the Web.
- Farmers can use their phones to access market price information, weather warnings, and extension advice in most rich countries, but hardly in any low or middle-income countries.
- Locally relevant information on sexual and reproductive health rights and services

and gender-based violence is available via phone or browser in only 37% of countries.

- Education is a bright spot, with over 80% of high-income countries and almost 50% of low- and middle-income countries expanding the use of technology in poor and marginalised schools.

If inequality is the challenge of our time, then we must take steps now to ensure the most powerful technology of our era helps us to overcome, not increase it.

Currently, the means and freedoms to fully utilise the Web are within reach of only one in seven people on the planet. While over four billion unconnected people enjoy no rights to the Internet at all, the rights of another two billion Internet users are severely restricted. Now is the time to take positive steps to recognise the Internet as a basic human right and ensure the open Web belongs to all of us.

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OVERVIEW OF RANKINGS

As the table below shows, the Web Index rankings — which measure the economic, social and political benefit that countries gain from the Web — are strongly correlated with per capita income. Rich countries, such as the Scandinavian countries, dominate the top of the Index for the third year running.

THE WEB INDEX		
Overall rank	Country	Overall score
1	Denmark	100.00
2	Finland	98.81
3	Norway	97.32
4	UK & Northern Ireland	95.67
5	Sweden	94.97
6	United States Of America	94.52
7	Iceland	93.72
8	Republic Of Korea	92.81
9	Netherlands	91.84
10	Belgium	89.61

(See full table in Appendix 1)

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The Web Index is best explored online. We've produced this PDF for convenience for offline reading, but it is a much less rich experience than you'll find on our website. If you can, we urge you to head over to [thewebindex.org/report](http://thewebindex.org/report) to enjoy interactive visualisations, the chance to compare countries side-by-side and much more!

For the 86-country sample as a whole there is also a significant relationship between income inequality and the Web Index scores. When countries are broken down into income groups, inequality seems to be a more important factor in high income countries, whereas absolute poverty levels seem to be more significant in developing countries. The existence of the two dimensions together — high absolute poverty and high inequality — seems to produce a compounded negative effect on the ability to benefit from technology, which in turn could exacerbate inequality by leaving poorer countries and poorer people further behind. (In measuring inequality, we used the latest available World Bank "Gini Coefficient" data — a widely-used statistical measure of income inequality in countries).

This sets a very clear challenge for the international community. People living in poverty must be able to use the Web to improve their lives and their communities every bit as much as affluent groups. The steep slope on the graph needs to be flattened out, making the Web truly "for everyone". Unless and until that happens, the Web can't become an effective weapon to fight poverty and inequality globally. Indeed, it may even contribute to worsening inequality. Building a Web "for everyone" requires policies that promote equal opportunities and equal participation in decision-making, both on- and off-line. The top-performing Nordic countries are a case in point. As the global economy becomes more digitally driven, countries' ability to

harness the Web for the common good may also start to influence how equal or unequal, as well as how rich or poor, they become. Nordic policy-makers have been quick to adopt and promote the free Internet — and open access to information — as a 21st century public good. Others, as this year's findings show, need to move fast to catch up. Although very different from the Scandinavian countries, in their own ways Korea, Iceland and Brazil have also seized on the possibilities of the open Web to expand opportunities for all. (Read more in our country examples woven through the text).

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## THE WEB AND ECONOMIC INEQUALITY

Equal opportunity to succeed is a principle vital to market economies; it makes sure that everyone's talents and ideas can be fully utilised regardless of the circumstances of their birth, and promotes trust and compromise across different social groups since everyone has a stake in the economy's success. Large gaps between rich and poor undermine and ultimately destroy this principle, as the [chair of America's central bank](#) warned earlier this year. In today's high-inequality US, a child born to poor parents has less than a one in 10 chance of making it into the top 20% income bracket, compared to a one in five chance in low-inequality Denmark.

The Web has long been held out as an enabler of equal opportunity and broad-based growth. Among other things, it can:

- Reduce entry barriers and disrupt monopolies;
- Make knowledge freely accessible to all, lowering the costs of acquiring and disseminating information;
- Build social capital that helps people get better jobs and services; and
- Match workers to job opportunities and enable traders to overcome geographical isolation.

Our rankings of economic empowerment combine secondary and primary data to assess the contribution of the Web to job creation, livelihoods and growth. In theory, a poor country could do just as well or better than a wealthy country on this pillar of the Index, if the Web was making a large relative contribution to boosting a small economy. However, in practice these rankings are led by wealthy countries. Why should this be?

Regression results for the entire sample of countries show that not only are wealthier countries gaining more economic benefit from the Web, but two other factors have independent explanatory power: education levels (as proxied by secondary school enrolment rates) and inequality. The higher the inequality, the lower the economic

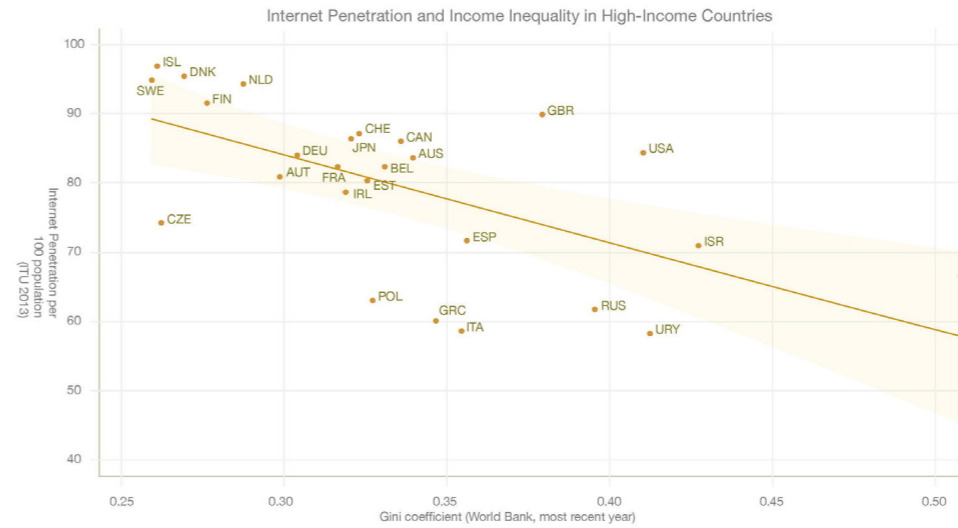
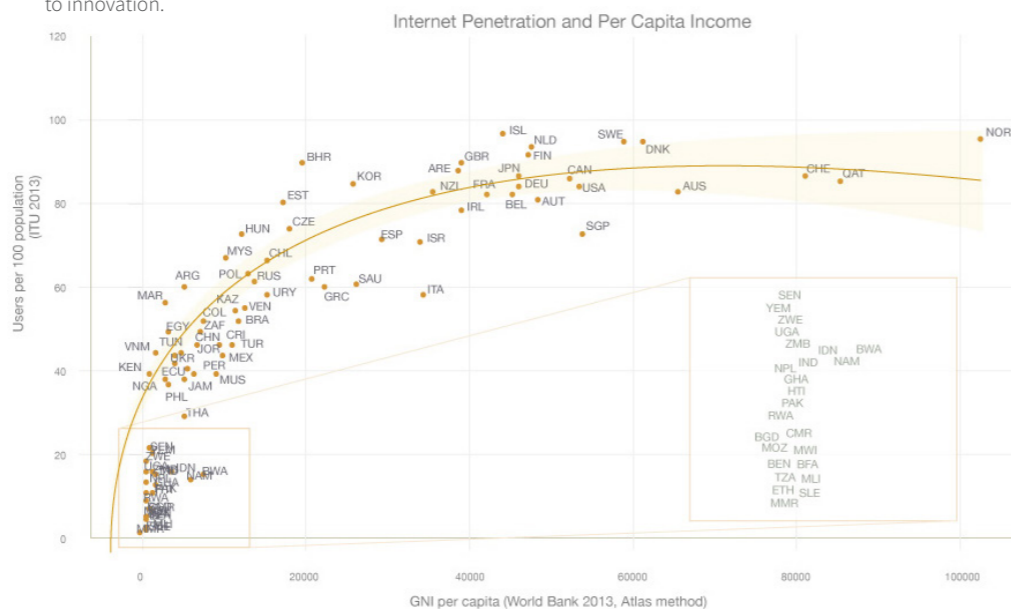
empowerment observed; the higher the education level, the greater the economic empowerment. Of course, poor education and high inequality are usually closely related, in and of themselves. However, initial analysis suggests that in many instances, each variable on its own plays a significant role in explaining the empowerment scores.

This analysis confirms that investment in universal education is a key prerequisite to enable everyone to benefit from the Internet revolution. It also suggests other factors that need to be tackled before the Web can make a real contribution to inclusive, broad-based growth. These fall into two main categories: barriers to access and use, and barriers to innovation.

### 3.1 Getting Online: Affordability & Access

Over four billion people are [not connected](#) to the Internet. Nine in 10 of them are in the developing world. As the graph below shows, there is a very strong correlation between per capita income and access to the Internet, with the steepest increases in Internet penetration taking place as average income rises from \$0 to \$10,000 per year.

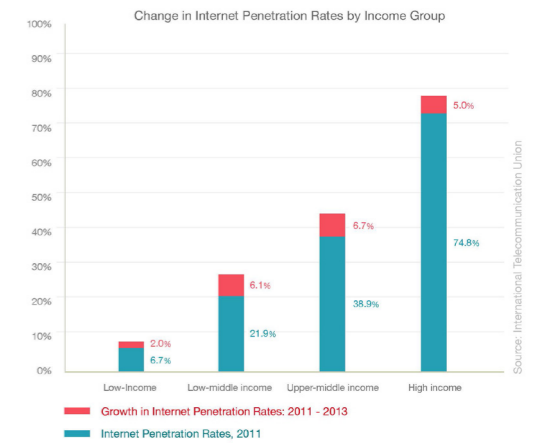
In high-income countries, lower levels of inequality — as measured by Gini coefficient — also seem to be related to higher levels of access (see opposite).



However, as McKinsey has noted, the rate of growth in Internet use is slowing. On current trends, McKinsey estimates, more than half the global population will still be offline in 2017.

Overall, the proportion of people using the Internet increased only 5% last year in the Web Index countries. It is upper-middle-income countries that have racked up the most growth in connectivity, from 39% in 2011 to 45% in 2013. As the analysis below shows, these are also the countries with the

cheapest entry-level broadband in the world (when prices are averaged across both fixed-line and mobile options). But low-income countries, with 2011 penetration rates well below 7%, managed to raise those rates by only 2 percentage points by 2013. This unimpressive performance was brightened by spectacular achievements in four low-income African countries that achieved a 20% jump in Internet adoption last year — Kenya, Malawi, Ethiopia and Sierra Leone.



## SOUTH AFRICA

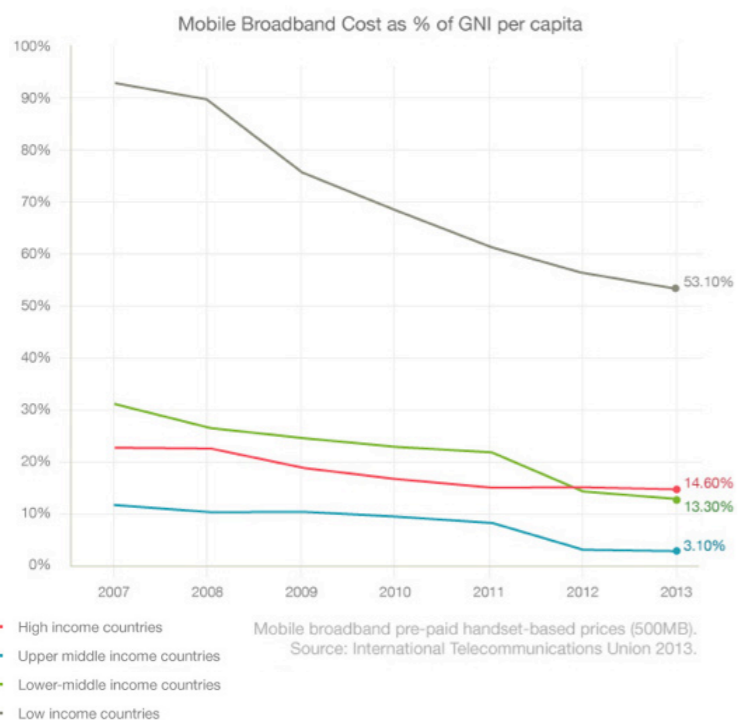
For decades, apartheid South Africa competed with junta-ruled Brazil for the title of most unequal country in the world. Unlike Brazil, however, South Africa has become more unequal since its transition to democracy. Heavy spending on social grants is not enough to bridge the divides created by a dysfunctional education system, high levels of unemployment, and extreme wage inequality. "The returns from economic growth favor the organized, the educated, the highly skilled and the well connected," says economist Haroon Borhat.

But rather than using its excellent communications infrastructure as a tool to address these fundamental challenges, the South African government has been content to allow mobile cellular and broadband prices to remain among the highest in the world. Internet uptake has grown relatively fast in recent years with the spread of smartphones, but users are disproportionately affluent and well-educated. Less than 20% of those beneath

the poverty line are Internet users, according to household survey research. Three-quarters of users are urban and over 40% are fluent in English. Hence, under the current policy regime, it is hard not to conclude that technology is deepening economic and social inequalities in South Africa.

Politicians' apparent apathy on access and affordability may be related to an increasing climate of secrecy in government that makes the free flow of information and views online a "national security threat" rather than a boon. In 2013, the government developed two new laws restricting the rights to information and freedom of expression: the Protection of State Information Bill (not yet passed), which criminalises reporting on classified state information and intentionally accessing leaked information online; and the General Intelligence Laws Amendment Act, which authorises state security agencies to intercept "foreign signals intelligence" without a warrant.

Nevertheless, South Africans remain determined to exercise their hard-won democratic rights online as much as offline. In cases such as the death of a man dragged behind a police truck in early 2013, and the ongoing controversy over government spending on President Jacob Zuma's private estate, Nkandla, citizens are using photos and videos taken on cell phones and circulated by social media to challenge the official version of the facts and force the authorities to account for their actions. Shortly after the government attempted to douse the Nkandla debate by declaring it illegal to publish photos of Zuma's villa, a journalist's tweet giving the Google Earth coordinates of the compound went viral on Twitter. The hashtag #Nkandla instantly became a trending topic, "with some enraged South Africans using recent Nkandla pictures as their profile pictures on social media as a sign of defiance," according to the SA Times.



As we will discuss later, this is a significant barrier to the use of technology to improve health and education outcomes in the developing world.

Mobile broadband is a cheaper option in most of the developing world, but it is nowhere near being affordable — an entry-level package in low-income countries still costs over half of average monthly earnings, and as much as 100% for those living below the \$2/day poverty line. What is more, ITU statistics show that in middle- and low-income countries, only a fifth of the rural population, on average, is covered by a 3G network.

As the South Africa case study suggests, making Internet access more affordable is critical for fighting inequality and creating jobs. A 2014 Deloitte report estimated that if Internet penetration rates in developing countries could be raised to those of developed countries, “the resulting economic activity could generate \$2.2 trillion in additional GDP, a 72% increase in the GDP growth rate, and more than 140 million new jobs.”

The Web Index’s “Universal Access” sub-index assesses how well countries are doing on ensuring affordable and ubiquitous broadband. This sub-index was, once again, led by Scandinavian countries who have made universal access to the Internet a pillar of their commitment to equal opportunities. However, there were some surprises. Hungary

topped the table of middle-income countries, out-performing several richer countries, including the United Arab Emirates, Italy, and Greece, and this October, a massive popular revolt against a proposed tax on Internet data showed exactly how highly Hungarians value their affordable broadband. Meanwhile, Bangladesh’s 61st place ranking made it the best performing low-income country on this sub-Index, beating middle-income countries such as India, Jordan and Nigeria.

### 3.2 Using the Web to Enhance Jobs & Livelihoods

Even in countries with relatively high rates of Internet use, research suggests that the benefits of broadband accrue mainly to more highly skilled workers, increasing the wage gap between them and everyone else. This trend lies behind the IMF’s finding that technological progress has been the single most important cause of increased income inequality in recent years.

An equitable education system is key to mitigate this – as discussed below. In addition, deliberate efforts are needed to ensure low-paid workers and small and micro businesses can benefit from technology’s spread. Small farms are a prime example.

#### 3.2.1 Agriculture & the Web

Farmers, fishermen and forest producers make up the economic backbone in most developing countries, and they are overwhelmingly poor. Boosting their

productivity and earnings is key to reducing poverty and unlocking equitable growth. There are many economic handicaps that must be overcome for small farmers to thrive. ICTs are no panacea, but could help farmers to tackle some of the biggest challenges they face — including information asymmetries and lack of market power vis-a-vis the intermediaries who buy their crops, as well as increased weather risk resulting from climate change.

Simply by tracking weather conditions and crop prices through mobile phones, farmers in India increased their profits by 8%; a study by Deloitte predicts larger impacts from more sophisticated Web-based tools. Market price information is being widely shared via ICTs, on a real-time or daily basis, in almost 30% of Web Index countries. Agricultural extension advice is universally accessible via ICTs in only 23% of all Web Index countries and in only two of the developing and middle-income countries in our research.

Climate change is causing weather-related risks (such as droughts, floods, and tropical

storms) to steadily increase in scale and frequency. Enabling farmers to anticipate and plan for such threats is key to protect their livelihoods, and the Web can help. Chile delivers targeted information from the Web directly to farmers via SMS messages, a system designed to work even on slow networks with intermittent connectivity. One farmer reported that his entire crop for 2009 was saved by an SMS message advising him to delay planting because of impending bad weather.

Unfortunately, less than a quarter of Web Index of countries are making effective use of ICTs to share early warning information about both slow-onset and rapid-onset disasters, and all of them, except Costa Rica, are high-income countries. Sierra Leone and Bangladesh perform as well as Sweden and Israel in this area, providing very good early warning information on rapid-onset emergencies via ICTs, but fall down on the score for slow-burning crises.

#### 3.2.3 The Web & SMEs

We also looked at the Web’s contribution to the growth of other small and medium enterprises (SMEs). Our results suggest that in rich countries which already have a thriving Internet ecosystem, the market is presently driving SMEs to adopt Web-based tools and strategies, as shown by generally high scores on this indicator in high-income countries.

In low- and middle-income countries, however, our researchers found limited impact of the Web on small business growth. No low-income countries, and only a handful of middle-income countries (Turkey, China, Brazil, Argentina, India, Mauritius), scored above a five on this topic. In addition to removing barriers such as high access costs, low penetration rates, and unclear rules for Internet intermediaries, governments may also need to consider incentives (such as tax breaks or seed funding) or support (such as training programmes) to promote the Web as an engine of small business.

## UNITED STATES OF AMERICA

The United States is a very wealthy country with a long tradition of equality of opportunity, open markets, and high levels of political liberty and participation — characteristics that, together with the sheer size and affluence of its consumer market, may help to explain why the US was the country where the Web took off first, and why it is still home to one of the most vibrant technology sectors in the world, with many positive impacts on education, entrepreneurship, job creation and political participation.

However, recent trends could threaten US leadership in Web innovation and use. Skyrocketing income inequality in the US is starting to create deep divides in

social capital, civic engagement, political participation and academic achievement by income group. In addition, policies allowing geographic monopolies or duopolies for Internet providers have led to very high broadband prices compared to other advanced economies. The US now faces major disparities between rich and poor in Internet use: while 99% of those earning over \$75,000 per year use the Internet, that figure drops to 77% among those earning \$30,000 per year or less. Similar gaps exist between the college-educated and those with only high school education. This keeps total rates of Internet access considerably lower than in less affluent countries like Korea and Iceland, and will ultimately start

to limit the overall social and economic benefits of the Web in the US.

The monopolistic market also makes it tempting and easy for both wired and wireless Internet providers to impose price discrimination for certain types of content or services. In 2014, after Verizon succeeded in getting the courts to declare existing net neutrality rules null and void, the federal regulator introduced proposals to water down the rules permanently. The initiative drew a furious response from tech start-ups and small business as well as ordinary consumers; a campaign called Save The Internet mobilised millions of people to call or email Congress, while 783,000 people submitted comments

to the US Federal Communications Commission (FCC). In November, the White House spoke out in favour of reclassifying the Internet as a public utility to allow the enforcement of strong net neutrality rules, but the final outcome was not known as we went to press.

Overzealous enforcement of copyright law under the Digital Millennium Copyright Act (DMCA) may also be limiting scientific research, competition and free expression in the US. An analysis of US copyright takedown requests from 2002-2005 found that 41% of the plaintiffs filing requests could be classified as economic competitors of the target, while 21% of demands under the hosting and search

provisions of the act were directed towards hobbyists, critics and educational users, who often cannot afford to fight such notices.

Finally, America’s ability to create new opportunities and foster civic engagement through technology may also be undermined by its increasingly expansive regime of communications surveillance. A recent report by the Open Technology Initiative details actual and potential costs from the National Security Agency (NSA) fallout, ranging from loss of trust in online banking and shopping, to moves by foreign governments to require data to be stored locally. Industry projections suggest that the cloud computing sector alone could lose up to \$180 billion in the next three to five years.

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3.3 Putting the Brakes on Innovation

Another way in which the Web can contribute to a more level playing field is by removing entry barriers and reducing information costs for new or small market players, encouraging new business formation and promoting competition.

3.3.1 Net Neutrality

Net neutrality — the principle that all Internet traffic should be treated the same — is fundamental to ensure equitable access to the Web, as well as to underpinning innovation, competition, and new business formation in the ICT sector. Without effective net neutrality laws or regulations, connectivity providers can discriminate against the content (e.g.,

Websites, applications) they carry by affecting the speed or the quality of that content. Intermediaries can choose to give preferential treatment to certain content for commercial or political reasons.

Not only does traffic discrimination reduce competition between ISPs (resulting in higher prices and reduced quality of service for users), but it also raises entry barriers for content and application providers, which can deter innovation. Research commissioned by the Dutch government last year found that net neutrality stimulates a virtuous circle between more competition, lower prices, higher connectivity, and greater innovation. On the other hand, as our case study shows, many fear that the erosion of net neutrality in the US could contribute to a vicious circle of lack of competition, high costs, and declining innovation.

A robust and well-enforced legal and regulatory regime to protect net neutrality is the exception, not the rule. Only three

countries (Chile, Israel and the Netherlands) scored an eight (“very good”) on this indicator. Our analysis suggests that 74% of Web Index countries either lack clear and effective net neutrality rules, and/or show evidence of traffic discrimination. There were only three countries without effective regulations where we found no evidence of traffic discrimination.

While the establishment of higher-priced “fast lanes” for certain paid video or entertainment services is the concern in the rich world, in the developing world zero-rating deals are perhaps the most rapidly spreading form of price discrimination. Zero-rating involves an operator agreeing to carry a limited selection of preferred services and content over its network for free. Examples include Airtel’s “One Touch Internet” in India; Facebook’s “Internet.org” in Zambia, Tanzania and Kenya; and the deal between China Unicom and messaging service Tencent.

Although zero-rating deals have the short-term benefit of enabling more people to access at least some Web services, critics warn they may undermine competition (both among operators and among content providers); disadvantage small, local players; and could even play into the hands of governments keen to block or spy on the Web. The telecommunications authorities of Chile and Norway have both determined that such practices violate net neutrality laws, but governments in most other countries have yet to give serious attention to zero-rating, or lack clear net neutrality regulation in the first place.

It is not always private companies that are the culprits. In Nepal (which scored a five) our researchers report that despite the presence of laws and regulations designed to protect net neutrality, there are multiple complaints from private sector ISPs that state-owned providers get preferential treatment from the state-owned telecom operator.

ISPs can also be compelled to violate net neutrality by governments who require them to block or throttle access to politically or socially sensitive content. As discussed below, almost 40% of Web Index countries were deemed to have engaged in blocking sensitive content for political reasons over the last 12 months. In order for true net neutrality to be in place, traffic must be free from interference for either political or economic reasons.

Nevertheless, there is cause for optimism. Until recently, few people cared about net neutrality, but this is changing. Chile became the first country to enshrine net neutrality into law in 2010, and the regulator there has recently begun to ramp up enforcement. Recent developments in Switzerland, the US (see box), Mexico, and Brazil suggest growing public concern about the issue. In the European Union, the topic is currently the subject of an intense battle. The European Parliament passed a strong net neutrality law in April, but as we went to press, leaked proposals from the Council of European Ministers sought to water down the regulations.

It is clear as that as the commercial and political value of the Web becomes ever

greater, different vested interests will try harder to shape or even control the delivery of content to users. In response, governments need to recognise that the Internet is an essential part of economic and social infrastructure — “as basic to innovation, economic growth, social communication, and ... competitiveness as electricity [is],” in the words of Susan Crawford. Hence, it needs to be regulated like other public utilities to ensure services are provided on a fair, transparent and nondiscriminatory basis.

3.3.2 Copyright and Intermediary Liability

Copyright enforcement is another way in which economic and political power can become entangled on the Web to the detriment of ordinary users. Takedown demands from private parties on grounds of copyright infringement far exceed government censorship attempts. In the first half of 2013, services operated by Google received copyright takedown notices for about 4 million URLs every week, while government demands for content removal affected about 1,000 items per week. Twitter reported 20 times as many copyright takedown notices as government removal requests during the first half of 2014.

Although many such complaints are directed towards piracy and other legitimate instances of infringement, there are also examples of intellectual property protections being abused to deny fair use, disadvantage competitors, or suppress criticism. In Italy, for example, observers have suggested that copyright law is being used as a basis for censorship, while in Ecuador there are reports that content critical of the president is being targeted under copyright pretenses.

The notice-and-takedown system pioneered by the US Digital Millennium Copyright Act (DMCA) in 1998 gives intermediaries safe harbour from legal liability as long as they take immediate action when they receive an infringement notice. Notice-and-takedown regimes were

introduced in the European Union following the 2000 E-Commerce Directive, and are being widely adopted in other countries as a condition of free trade agreements with the US. Unsurprisingly, they are the most common form of intermediary liability protection in the 36% of Web Index countries that do have such protections. This approach has been criticised for giving online service providers very strong incentives to comply with copyright holders’ wishes, but few incentives to protect users’ rights — creating a chilling effect on free speech and market competition, as our US case study explores.

However, only a handful of countries have laws that try to achieve a better balance between users’ rights and copyright holders’ rights, such as the “notice-and-notice” system in Canada, or Chile’s version of “notice-and-takedown” which requires the copyright holder to obtain a court order before the infringing content is removed.

Whether based on notice-and-takedown or notice-and-notice, clear intermediary liability laws at least avoid a situation where intermediaries may refuse to host sensitive content or feel they need to monitor users’ online actions — which would have an even greater chilling effect. As long ago as 2011, UN special rapporteur Frank La Rue called on countries to clarify the legal obligations of intermediaries and ensure that censorship measures are not delegated to private entities.

Despite this, our Web Index 2014 findings demonstrate that 64% of countries surveyed have not established clear and adequate protection for intermediaries. This creates an environment that is both highly uncertain and very costly for online service providers, as our examples show. Smaller, local Web companies are likely to be particularly disadvantaged. If intermediaries respond to legal uncertainty with self-imposed censorship or arbitrary takedowns, competition, innovation, and scientific progress via the Web will ultimately be hindered.

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4

## THE WEB AND GENDER INEQUALITY

Ending discrimination against women and girls — in health, education, political representation, and labour markets — is a powerful way to boost economic growth and unlock human potential. To what extent is the Web contributing to realising women’s rights and reducing gender inequality?



### 4.1 Women Online: Access & Rights

Gender inequality in Internet use remains significant, albeit poorly researched. According to International Telecommunication Union (ITU) estimates, 16% fewer women than men use the Internet in the developing world. Other studies confirm a significant gender gap in equal opportunities for online participation, including the Broadband Commission Working Group on Gender report and Research ICT’s Africa 2012 study.

Policy action to assess and overcome the gender gap has been sluggish.

**Only 30% of the Web Index countries score higher than a five for implementing concrete targets for gender equity in ICT access and use.** Almost all of them are high-income countries that have already achieved high levels of gender parity in other spheres of life (as assessed by the World Economic Forum’s Global Gender Gap rankings). Among countries with big women’s rights challenges, Estonia, Turkey and Tunisia stand out for prioritising gender equity in ICTs.

We looked at implementation as well as policy commitment, by assessing the extent to which government and civil society groups are using the Web to expand access

to sexual and reproductive health rights advice and services, and to support victims of gender-based violence. We chose these two issues because they are frequently surrounded by stigma and polemic, making the ability to obtain support privately and anonymously through the Web a potential game-changer. Countries’ scores on these two indicators tended to closely track their scores for policy commitment to gender equity in ICTs, varying by only half a point on average. However, in many cases, civil society is stepping in to provide ICT-based resources that the government does not. An example is Colombia’s ProFamilia, which aims to educate poor and marginalised communities on sexual and reproductive rights. By putting ICTs at the heart of its

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strategy, it has reached tens of thousands across the country. The net effect of civil society activism in these areas was to push 37% of countries to scores above a five on these two indicators (as compared to only 30% scoring above a five for policy commitment).

Likewise, women themselves are not simply sitting back and waiting for government to take action. **In over 60% of countries, women are using the Web to claim and exercise their rights to a moderate or extensive degree.** When the Web is used to good effect, the results can be dramatic.

estimated 20% of these misogynistic Tweets were judged to be threatening.

Online harassment of women has hit the headlines on multiple occasions this year, helping to prod law enforcement agencies and online service providers to respond to it more assertively. *“Revenge porn”* — which sees intimate pictures of former partners posted online — has become a major issue this year. The response has been swift — Israel became the first country in the world to pass a specific law outlawing revenge porn in January 2014. The practice is illegal in 12 US states, while Canada, the UK, and

Better training and clear, balanced legal guidance for police, courts and online service providers is a priority to ensure an effective law enforcement response without trampling on freedom of expression or privacy. Additionally, as highlighted in a recent report by the Association for Progressive Communications, online service providers must improve their own user policies, including through providing transparency on their reporting and redress procedures; engaging with the perspectives of women beyond North America and Europe; and broadening their human rights policies to include clear commitment and standards for respecting women’s rights.

*“The Web is democratising and also the voice of people who don’t think they have another outlet. And that voice can be punitive.”*

Mary Beard

In March 2014, an NGO called Shoft Taharosh (I Saw Harassment) released footage online of a young female student being harassed on Cairo University campus. The resulting outcry led to the university implementing a sexual harassment policy — one of the first universities in the region to do so.

### 4.2 Gender-Based Violence Online

Inasmuch as they can enhance fights for women’s rights, social networks can also amplify misogyny and gender-based violence. The Pew Research Internet Project study in the US finds that 26% of young women aged 18-24 have been stalked online, and 25% were the target of online sexual harassment. Demos tracked more than 6 million instances of the word *“slut”* or *“whore”* in English on Twitter over a six-week period in early 2014; an

Japan are all mulling new laws. However, many of these laws have been criticised as carelessly drafted and overly broad; as we went to press, the courts suspended Arizona’s revenge porn law in response to free speech concerns.

In most countries, however, responses to ICT-mediated violence against women remain wholly inadequate. We assessed whether clear legal protection exists (either through the application of existing laws or the development of new ones), whether training and clear guidelines are provided to both the police and judiciary, and whether enforcement is taking place as evidenced by the arrest and prosecution of perpetrators. **In 74% of Web Index countries, including many high-income nations, law enforcement agencies and the courts are failing to take appropriate actions in situations where Web-enabled ICTs are used to commit acts of gender-based violence.**



# 5

## THE WEB AND SOCIAL INEQUALITY

Not only is investment in human capital critical to build the infrastructure of skills and capabilities that will enable everyone to benefit from technology, but smart use of technology and data can also make it easier and more affordable to expand access to good quality health care and education, creating a virtuous circle of opportunity and growth.

Our research looks not only at the use of PCs and smartphones in schools and clinics, but any and all “Web-powered” platforms, including Web-based services that can be deployed via simple mobile phones or community radio. We also tested whether the information and services provided by such tools are locally relevant and available in local languages.

Some countries are making good use of this two-way street between the Web and enhanced human capital, but in most – including the majority of developing countries in our sample – the potential of digital technology to fight poverty is mostly untapped.

Despite some striking successes – such as mobile payment systems in East Africa – the “ICT for Development” (ICT4D) effort remains small scale and fragmented, with small pilot projects often sputtering to a halt due to a failure to tackle systemic constraints. In this section we explore what needs to happen to bring ICT4D to scale.

### 5.1 Education

Education is perhaps the most consistently successful way to lift people out of poverty and catalyse broad-based, inclusive growth. All of the countries cited in our case studies – Brazil, Korea, Iceland, and Estonia – either inherited

strong universal education systems or made investment in education a key pillar of their strategies for inclusive growth.

Globally, however, educational attainment remains highly unequal, both between and within countries. Mean years of schooling among the adult population is 13.8 years in the UK, and less than one year in Burkina Faso. Within countries, it is the poorest children who receive the worst and the least education. In some countries these educational inequalities are stark. In the US, “the imbalance between rich and poor children in college completion – the single most important predictor of success in the workforce – has grown by about 50% since the late 1980s.” In India, children belonging to “high” castes score 27 percentage points better than “low-caste” children on basic reading ability. In South Africa, less than half of Grade 4 students in disadvantaged schools are able to read.

Not surprisingly, in low- and middle-income countries, **Web Index scores for economic empowerment through the Web are highly correlated to levels of secondary school enrolment.** Countries with better educated citizens do better on the economic empowerment sub-index, regardless of their income level.

Interestingly, in low-income countries, there also seems to be some relationship between male to female gaps in school life expectancy and the Web Index scores for

economic empowerment, suggesting that a strong policy commitment to overcoming gender disparities in society at large enables all citizens – not just women and girls – to derive more benefit from ICTs.

Hence, expanding access to quality education is essential to ensure that the benefits of the Internet are spread more equally, and must be a major investment priority for countries seeking to profit from the digital revolution.

At the same time, the Web itself could help to make better education accessible to poor and marginalised groups. The Web Index research finds that this is beginning to happen. **Over 80% of high-income countries and almost 50% of low- and middle-income countries have at least started pilot projects and allocated budgets for programmes that could help improve education outcomes for poor and marginalised communities.** However, of the 21 low- and middle-income countries with e-learning programmes, 13 seem to be allocating the majority of their resources to delivering computers or tablets to schools – with little attention to designing appropriate e-learning curricula and materials, or supporting teachers to use technology effectively. On its own, this approach has been found to have little or no impact on learning achievement, particularly among more disadvantaged students.

Lack of Internet connectivity in rural schools, lack of open educational resource policies and/or “fair use” copyright exemptions for schools and libraries, and prohibitive broadband costs also limit the impact of e-learning in low- and middle-income countries. In Egypt, for example, only 25% of primary schools that have PCs also have an Internet connection. In some cases, schools are trying to meet the costs by assessing additional student fees, which has been criticised as discriminatory. Countries like South Korea (see box) and China, which both scored highly for using ICTs to improve education, have undertaken far-reaching efforts to provide all schools with free or heavily discounted connectivity, and to ensure that content previously locked up in expensive textbooks is available for schools and students to download and use free of charge.

### 5.2 Health

As with education, there is a two-way causality between health and income inequality. On the one hand, poverty is a predictor of poor health, and countries with higher levels of inequality tend to have

worse health outcomes. On the other hand, health is a predictor of income. Those in poor health lose out on earnings. And every year, 100 million people worldwide are pushed into poverty by the costs of treating ill health.

Not all of the factors leading to worse health among poorer people can be tackled through ICTs. But evidence shows that the ability to access and understand accurate information about staying well, and to effectively navigate the healthcare system to get better treatment, is a direct determinant of health, and here the Web can make an important contribution to more equitable health outcomes. For example, Deloitte estimates that improved health information to expectant mothers and health workers could lead to a reduction in child poverty, saving 250,000 children who may have otherwise died in their first year.

In addition, ICT tools can reduce the costs of providing quality health care, making it easier for governments to implement free or inexpensive health services for all, reducing the burden of health care costs on the poor. Finally, ICTs can speed the spread of new and better medical techniques and tools from rich countries to developing ones.

As our examples show, the pioneering Web Index countries who are starting to scale up ICTs for health are using them in several different ways:

- To facilitate remote consultation, diagnosis, and treatment, allowing physicians in remote locations to take advantage of the professional skills and experiences of colleagues and collaborating institutions.
- To provide ongoing training to health workers.
- To enable policy-makers and healthcare professionals to keep abreast of the rapidly evolving stock of medical knowledge.
- To improve disease prevention by enabling more effective monitoring and response mechanisms.
- To disseminate public health information.

Yet the health sector is lagging even further behind than the education sector in uptake of Web-enabled ICTs to improve the quality and affordability of public health care. Just **one in five Web Index countries across the world have moved beyond pilot projects to broader implementation.** Only 15% of

## SOUTH KOREA

South Korea, number eight on the Web Index and the top performing non-Western country, overcame poverty and achieved rapid economic growth while maintaining, until recently, a relatively equitable income distribution that powered the expansion of the middle class. By the early 1990s, 70% of the population identified themselves as belonging to the middle class. Two factors that enabled this

were investment in education and investment in ICTs. Not only did the government build the most advanced IT infrastructure in the world, it also offered Internet and computer literacy programmes to marginalised groups, reaching 21% of the population; set up free Internet access points across the country; and connected all schools for free or at discounted rates. According to the World Bank, this twin-track

approach achieved two things: first, it “created not only a huge demand and market for the ICT industry,” helping to make it the single most important engine of growth for Korea’s economy, but it also helped to create “the vital human infrastructure” to make that growth equitable and sustainable.

2 Spaull, Nicholas. “A preliminary analysis of SACMEQ III South Africa.” Stellenbosch Economic Working (2011). 3. Although secondary school enrolment levels don’t make a statistically significant difference in economic empowerment scores in high income countries, we believe this is only because secondary school education is nearly universal in high income countries. Levels of post-graduate education would likely be more relevant to economic empowerment outcomes in high income countries. Similarly, a World Bank survey of ICT use in African education systems notes: “There appears to be the beginnings of a marked shift from a decade of experimentation in the form of donor-supported, NGO-led, small-scale, pilot projects towards a new phase of systemic integration informed by national government policies and multi-stakeholder-led implementation processes.”

5

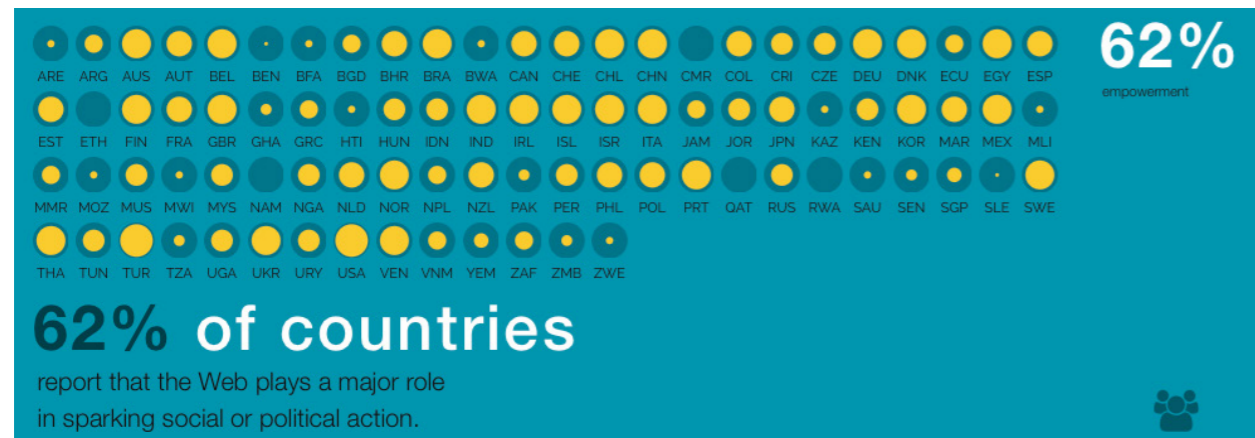
the countries have training programmes in place to improve the ICT skills of health workers.

As with education, the impact of ICTs on health care is further constrained by high broadband costs, lack of internet access in public clinics, and the slow progress of open access policies requiring publicly funded medical research to be made openly available at no cost. The next wave of ICT for Development (ICT4D) initiatives must go hand-in-hand with efforts to reduce the costs and increase the availability of broadband, as well as efforts to expand open licensing of educational and scientific materials; the Korean experience of ICTs in education is a good example.

Across education, health, agriculture, and women's rights issues, our research also suggests that many of the first wave of ICT4D projects were poorly designed, following an "odd technology and stir" recipe with little or no consultation with frontline users. The recent donor fascination with "innovation" (typified by "app contests") has sometimes displaced attention to scale, sustainability and structural change. Sending SMS reminders to pregnant women to attend ante-natal clinics, for example, obviously will not reduce infant and maternal mortality if the messages are in a language they cannot understand, or if most women in the area are functionally illiterate. But it also will fail to have the desired impact if the nearest

clinic is 50 km away, or if the clinic is not stocked with basic drugs. Sharing market price information with farmers via mobile phone may not make a difference if farmers are dependent on a particular large buyer for access to credit and inputs. But it may have a large impact if combined with "offline" initiatives to improve the market power of small producers.

Learning from such experiences, in the next wave of ICT4D we must involve the intended users and beneficiaries in identifying the locally specific problems that technology can actually help to solve as well as those it can't – and in designing participatory strategies to tackle both.



6

THE WEB AND POLITICAL INEQUALITY

Political equality – the idea that each citizen's preferences should count the same – is at the heart of democracy. There is often a two-way and cumulative relationship between high levels of economic inequality and concentration of political power among elites. More affluent and privileged groups are more likely to participate in political processes, and this may lead to policy outcomes becoming increasingly skewed in their favour, which can further increase social and economic inequalities.

Informed and unfettered debate through a free press is an important safeguard against undue concentration of power, but **the overall environment for freedom of expression has deteriorated in the overwhelming majority of Web Index countries.**

In 2013, over 90% of Web Index countries scored worse on either or both of the leading indices of press freedom (Freedom House and Reporters without Borders) than they did in 2007. Perhaps most worrying, the setbacks have been concentrated in the "most free" countries. Three in four of the Web Index countries that did better than average on Freedom House's Freedom of the Press Index in 2007 witnessed a decline in score in 2013; in 14 countries, including the US, UK, Finland, New Zealand, and Denmark, scores fell by 20% or more.

Voter turnout, identification with political parties and confidence in political institutions have also been declining steadily in OECD countries. Yet ordinary citizens do not necessarily have other ways to organise around their interests. A large-scale study of US policy-making, released last year, found that rich individuals and business-controlled interest groups dominate political decision-making while **ordinary citizens have a "near zero" influence on policy outcomes.**

The democratic deficit takes different, but equally severe forms in other countries. In Africa, voter turnout is relatively high. But the Afrobarometer surveys reveal that less than half of Africans believe elections give people any power over politicians, while only 20% believe that MPs often or always "listen to what people like me have to say". In India, a study showed that every single MP under

*"The Web is now a public resource on which people, businesses, communities and governments depend. It is vital to democracy and now more critical to free expression than any other medium."*  
Sir Tim Berners-Lee writing in *Wired*, March 2014

*"Today, to be disconnected from the net is to be silenced. And every issue of freedom of expression is amplified online."*  
David Kaye, UN Special Rapporteur for Freedom of Expression, October 2014

the age of 30 had inherited his or her seat. Opinion polls commissioned by Oxfam in six countries (Spain, Brazil, India, South Africa, the UK and the USA) found that a majority of people believe laws are skewed in favour of the rich.

Inspired by examples such as Iceland many hope the Web can help to close this democratic deficit. The Web can disrupt

**ICELAND**

In 2008, following years of financial deregulation and rising inequality, Iceland plunged into a catastrophic financial crisis, with the overnight collapse of all three of its major banks. "Never before had a country managed to amass such great sums of money per capita, only to lose it again in a short period of time," observed *Der Spiegel*. Many understood the roots of the crisis to lie with an unaccountable elite that had taken irresponsible risks with ordinary people's money, hidden from view by corporate secrecy and a cosy relationship between the elite and Iceland's media.

In early 2010, voters overwhelmingly rejected proposals for taxpayer bailouts of the banks. Instead, Iceland embarked on another path: remaking itself as a haven for freedom of information, freedom of expression and direct democracy. The Web and social media were enlisted to ensure a participatory and transparent process of drafting a new constitution, and some 370 formal proposals – many relating to Iceland's economic model – were submitted online. The resulting constitution includes some of the strongest protections in the world for freedom of expression, the right to information, protection of journalists and whistleblowers, intermediary liability protection, and online privacy.

The remaking of Iceland as an "information haven" links political regeneration to economic innovation. By passing "information friendly" legislation, and taking advantage of Iceland's climate and clean energy resources to build cheap, environmentally friendly data centres, Iceland aims to attract new investment and jobs, becoming "an ideal environment for Internet-based international media and publishers to register their services, start-ups, data centers and human rights organizations." Thanks to these and other economic and political reforms, Iceland's economy has recovered strongly and inequality is back on a downward trend.

## BRAZIL

Brazil has strongly committed to an open and universally accessible Internet as “a modern-day pro-empowerment, pro-transformation tool that changes society”, in the words of President Dilma Rousseff. In her government’s view, both universal access and privacy and freedom of expression online are necessary to build a more equal Brazil.

The connection between political freedoms and socioeconomic progress is perhaps particularly clear to Brazilians: a series of repressive military dictatorships ensured big landowners kept a tight grip on the country’s wealth, and Brazil emerged from military rule in the mid-1980s as one of the most unequal societies in the world. The Internet was not exempt — of the four to seven percent of the population who were online in 2002, 80% were defined as upper class.

However, between 2002 and 2012, the proportion of people living in extreme poverty was more than halved thanks to the introduction of a minimum wage, education reforms to expand opportunities for lower income groups (between 1995 and 2005, the average schooling among workers increased by almost two years), and far-reaching social protection programmes. At the same time, basic rights denied under the dictators — such as the freedoms of expression, information, and association — were entrenched, and initiatives such as direct citizen participation in allocating municipal budgets helped to expand democracy.

Despite these successes, inequality remains high. Dilma Rousseff’s government sees the Internet as the next frontier in Brazil’s pursuit of social

justice. A path-breaking law enacted last year, the “Marco Civil da Internet”, establishes the right of all Brazilians to a neutral, free, and private Web, and also charges the government with ensuring equitable access to connectivity and digital skills. Following the NSA scandal, Brazil has also championed UN action to uphold the right to privacy across national boundaries.

There is a long way still to go — almost half of Brazilians are still offline, net neutrality is hotly contested, media ownership remains highly concentrated, and elites still abuse defamation and copyright laws to stifle dissent. But political commitment to a Web for all is strong. And, as the Internet-powered protests of 2013 demonstrated, so is the will of citizens to use it.

political monopolies, “shifting power from traditional hierarchies to networked heterarchies” and giving marginalised groups a much bigger voice. There are strong design principles built into the decentralised architecture of the Internet and the Web that make it hard for anyone to control how information and voice are distributed around the network. Despite a sharp deterioration in the overall environment for press freedom in nearly every country studied, **for the second year running we found that the Web and social media are making a major contribution to sparking citizen action in over 60% of countries we studied. Women are using the Web to claim and exercise their rights in a similar proportion of countries. And almost half of governments are making progress towards improved transparency by publishing all non-personal government data online, free of charge.**

At the same time, however, efforts to hijack the Internet as an instrument of surveillance and control are clearly increasing. **In addition**

**to the 4.4 billion disconnected people who are not able to use the Web at all, another 1.8 billion people who are connected nevertheless face severe limitations on their rights online.** This is the total number of Internet users living in Web Index countries in which we found extensive government censorship of politically or socially sensitive content and/or very weak to non-existent due process protections against mass surveillance of electronic communications – scoring 3 out of 10, or worse, on one or both of the relevant Web Index indicators.

Such extensive denial of rights poses a threat that is economic as well as political: a report by Dalberg Global Advisors found that in countries where the Internet is “open”, its economic benefits are greater than in countries where governments tried to censor or control content. Interestingly, in high income countries, it appears that there is a significant relationship between the Gini coefficient and scores on the Web Index sub-index for freedom and openness online:

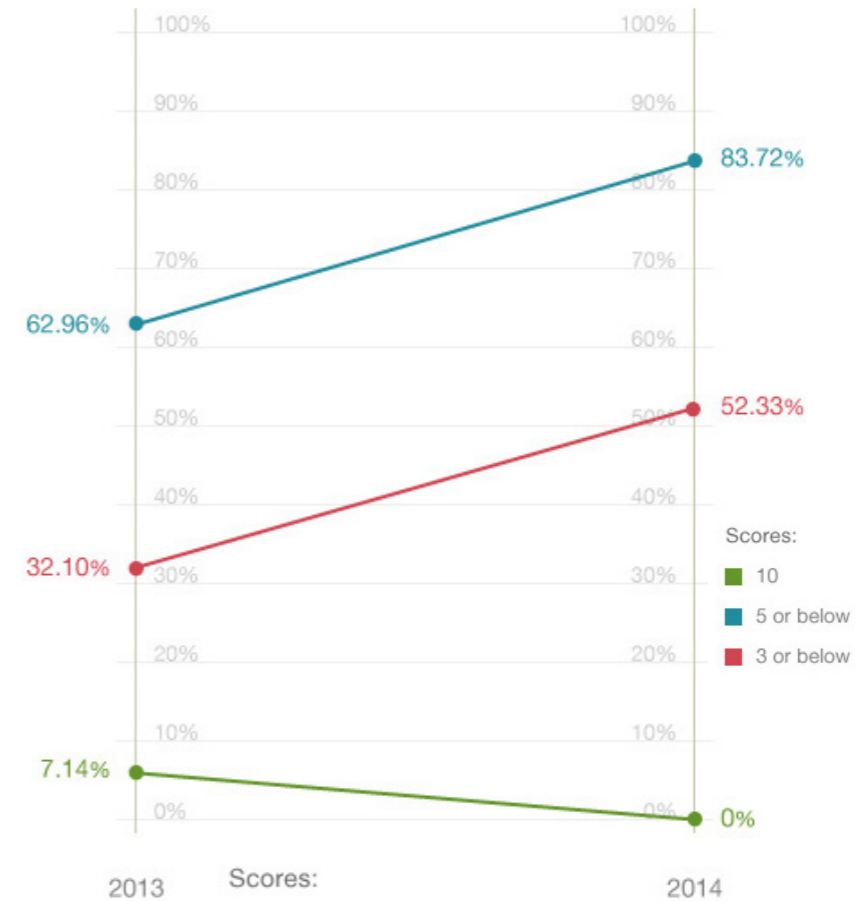
more equal societies are also likely to allow more space for citizens to exercise their rights to information, participation, privacy, and freedom of expression.

### 6.1 Privacy & Surveillance

At the time we released our 2013 Index, whistleblower Edward Snowden’s revelations had just begun to reverberate around the world. One year on, we now know even more about how governments around the world routinely use the Internet to secretly monitor their citizens, and in many instances, consolidate their power.

Last year, we asked the question: “To what extent are there laws and regulations in your country that provide both substantive and procedural safeguards to protect the privacy of electronic communications?” If there were laws in place, we asked researchers to assess how well they were being enforced, or if they were largely ignored in practice. This year, we repeated that question, with telling results.

## Legal Safeguards Against Surveillance



**This year, the proportion of countries whose legal safeguards for privacy were judged weak to non-existent rose from 63% to 83%** — despite a 2013 UN resolution calling on all member states to review their laws and practices to ensure that surveillance did not interfere with fundamental rights.

The UK, US, Australia, Canada and France all score below three out of a possible 10 on this indicator, placing them in the company of China, Russia, and Turkey, to name just a few.

Part of this shift in scores can be explained by the fact that we now know a lot more about what governments are getting up to. Much new information has come to light in the past year about the ability of state and intelligence actors to circumvent due process and the rule of law, even where such safeguards are nominally on the books.

However, there is also evidence that due process safeguards for citizens are being progressively dismantled — even as the capability and appetite of governments to spy on us is expanding. The companies that report on government demands for user data have documented worldwide

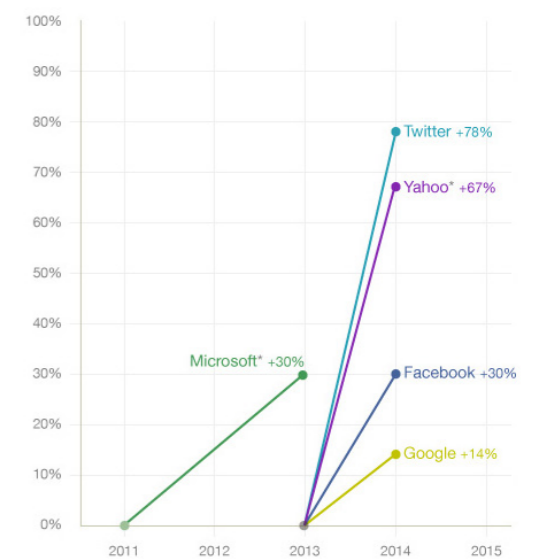
increases in such orders — between January–June 2013 and January–June 2014, Twitter reported a 78% increase; Google, a 14% increase; and Facebook, a 30% increase. Microsoft reported 30% growth in the number of accounts affected by secret US Foreign Intelligence Surveillance Act (FISA) requests between 2011 and 2013, while Yahoo said it was “troubled” by a 67% increase in accounts subject to FISA orders between the first and last half of 2013.

Transparency about the extent and nature of law enforcement and security agency surveillance is a basic starting point for any informed debate on the right to privacy in the digital age. Although some countries have increased transparency with regard to their surveillance activities, **Vodafone** said it was legally permitted to publish aggregate information about law enforcement demands in less than half of the 29 countries where it operates. Countries that did not allow disclosure of aggregate statistics on interception warrants and/or access to communications metadata included the UK, Germany, the Netherlands, and Ireland, as well as India, South Africa, and Turkey.

Our researchers found that many countries took legal steps to weaken privacy safeguards and expand state surveillance powers over the past year. **France** passed a new law which gives a wide range of agencies the power to snoop on Internet users in real-time without prior judicial authorisation, sending its score plummeting from a 10 to a two. In the UK, the new Data Retention and Investigatory Powers Bill (DRIP), which significantly enhances the powers of the security services, was rushed through Parliament in just a few days. Down under, the Australian government passed a bill which will enable the entire Web to be monitored with just a single warrant, and South Africa authorised warrantless tapping of “foreign” Internet traffic. Greater powers for government to intercept electronic communications are also under consideration in the Netherlands, Finland, and Denmark.

Worryingly, the tendency seems to be towards bulk collection of data in secret and by default, raising the spectre of the Web becoming established as a tool for pervasive surveillance. Brazil’s Marco Civil law, which enshrines a right to privacy, is a notable beacon of hope. As our case study shows, it arises from that country’s bitter experience of authoritarian rule, and reflects fresh determination to make the Internet an instrument of emancipation rather than control.

Increases in User Data Requests by Governments



\* Data refers to increase in FISA orders.

6

6



Such abuses of power by governments create inequalities by stifling dissent and increasing the chances that a dominant elite will be able to maintain a monopoly of power, shaping policies and laws in its own interest rather than for the common good. During the March 2014 election campaign, for example, the [Turkish government blocked several Web pages](#), as well as access to YouTube, Twitter and SoundCloud. The ban on Twitter [was lifted](#) after the election, thanks to a court decision.

freedom of speech more generally. In most of these “freer online” countries, levels of social and political mobilisation using the Web are significant (see next section).

However, some of those who censor less online may simply lack the sophisticated technical ability to filter and block digital content, a situation that could change quickly as the makers of “real-time” censorship software (including deep packet inspection systems such as BlueCoat) continue to find new customers in the developing world. According to evidence from [CitizenLab and other sources](#), **over half of the 45 Web Index countries with poor records on freedom of expression are known to be using such tools already**, which suggests that online censorship will continue to get worse unless bold steps are taken to reverse it.

## 6.2 Censorship

Like surveillance, censorship too is on the rise. **In 2013, we reported that just over 30% of Web Index countries were blocking politically or socially sensitive Web content to a moderate or extreme degree. This year, that figure rises to 38%.**

Is the Web a lightning rod for censorship or a safe haven for free speech? Of the 45 Web Index countries with extensive constraints on speech, only seven (about 16%) seem to censor more heavily online than offline, while 12 (about 27%) censor the Internet less extensively than they restrict traditional media – judging by a comparison of their Web Index score for online censorship with Freedom House scores for

Blocking and filtering of Web content by governments is automatically understood by most people as a violation of fundamental rights. However, acts of misogyny and gender-based violence carried out by ordinary Web users – discussed below – also have chilling effects on the freedoms of expression and association enjoyed by women – or half the population.

## 6.3 Mobilising via the Web

*“The Indian authorities can and do police physical space; but they cannot hope to control virtual space.”*

– Professor Abhijit Gupta, [commenting](#) on the role of social media in sparking student protests against gender violence at Jadavpur University.

Despite the worrying trends discussed above, the Web remains a powerful tool for activists and civil society to mobilise the public. **Civil society organisations (CSOs) around the world are increasingly using Web-powered ICTs to educate and inform citizens about government decision-making and public policy issues; in over half of Web Index countries, most or all of the major CSOs are using the Web in this way.** An [Afrobarometer survey](#) in 34 African countries found that *“those who use the Internet more often consider leaders less trustworthy [and are] more critical of the government.”*

**For the second year in a row, we found evidence that the Web is playing a significant role in enabling social and**

**political action, amplifying previously marginalised voices and causes in over 60% of the countries surveyed.** Notable examples included Korea, Chile, Mexico, the US and Turkey.

Unsurprisingly, most countries that score highly on the World Bank’s offline measures of voice, participation and accountability also score highly on our political empowerment measures and, in particular, are seeing active use of online tools to organise citizens.

However, there appears to be a poverty barrier to the Web’s political impact: nearly all of the democratic countries that scored very poorly (three or below) on the use of the Web to catalyse citizen mobilisation are low- or lower-middle-income countries, and no low-income country scored above a six. High poverty rates are associated with low political empowerment scores for all countries as a group. This may well be explained by low levels of Internet access, preventing Web-powered communications from reaching a wide audience.

Web-based protest and mobilisation has also become a force to be reckoned with in a number of countries where citizen voice is limited offline – such as Egypt, Colombia,

China, Bahrain, Russia, Thailand and Venezuela. Many of these countries are also ones where we found that the Internet is less heavily censored than traditional media.

However, some research suggests that [civic engagement online](#) is most prevalent among the [affluent, urban, male, and well educated](#) – reproducing, rather than reversing, [disparities in political participation and social capital](#) that have been growing “offline”. The 2014 Web Index does not examine this directly, but we look forward to the results of household survey research in the 2015 Web Index that may shed light on this issue.

## ONLINE ACTIVISM

In Korea, the Web was used this year to mobilise protestors against a perceived political abuse of power. In the run up to the 2012 presidential elections, it [was alleged](#) that Korea’s National Intelligence Service used Twitter to run a smear campaign against one of the candidates. Starting in 2013, furious citizens used [social media](#) to fuel online and offline protests. The sustained public pressure has resulted in the conviction of the former agency boss, Won Sei-Hoon, who [was sentenced](#) to two and a half years in prison in September this year. Even in China – a country typically associated with

repression online – grievances over corruption and perceived elite impunity have fueled [online activism](#). For instance, a social media campaign was [cited as a factor](#) in ensuring justice was served in a gang rape case against a wealthy general’s son.

In the US, the #Not1MoreDeportation campaign for the rights of illegal immigrants was designed as an [“open source”](#) campaign that used ICTs to enable many different actors – from families fighting an individual deportation case to large trade unions – to collaborate without a central decision-making structure.

The campaign – which also used traditional tactics such as civil disobedience and direct action – won a significant victory in under a year, when President Obama issued an executive order in November 2014 to expand protection from deportation to over four million immigrants.

Chile provides another example of how the Web has helped to remove a political inequality. [Chilean law states that all citizens have the right to vote](#), but expats had to return to Chile on election day to do so. In the run up to an election in December 2013, disgruntled expats started an online campaign called *“Haz*

*tu Voto Volar”* (Make Your Vote Fly). This campaign quickly caught the attention of traditional media, and became an election issue. Presidential candidates weighed in on the issue and [a virtual online election was held for those who could not vote](#). Although reforms were not made before the December 2013 elections, in April 2014, a new law was passed which will make it easier for expats abroad to vote.

Meanwhile, in Mexico, citizens supported by the [Web We Want](#) campaign, and other international groups, used the Web to organise around demands for net neutrality, privacy and freedom of speech, in

opposition to the country’s proposed [telecommunications bill](#). Through the #DefenderInternet (Defending Internet) campaign, Mexican activists developed a site that lets Mexicans call lawmakers to demand that they put human rights at the core of any new bill.

Across national boundaries, the Web also helped build successful movements on a variety of issues. [Over 77,000 people worldwide](#) are actively involved in the Wikipedia project to create a free, open-source, collaborative repository of the world’s knowledge. *“Alternative”* Internet currencies such as Bitcoin have given rise to a 21st century version of the libertarian *“free banking”* movement,

organised entirely around and through Internet technologies. [Avaaz](#) leverages petitions signed and funds donated by its millions of users around the world to put local issues in the international media spotlight, a strategy that in 2014 helped Maasai pastoralists in Tanzania fend off eviction from their traditional lands, and overturned a flogging sentence for a 15-year-old rape survivor in Maldives. Through crisis mapping – the real-time gathering, display and analysis of data during a conflict or natural disaster – organisations like Humanitarian Open Street Map involved thousands of virtual volunteers in the fight against Ebola in West Africa.

7

## CONCLUSIONS AND RECOMMENDATIONS

We stand at a crossroads between a Web “for everyone” — one that enables all people around the world to improve their life chances and reduces inequalities both between and within countries — and a “winner takes all” Web that further concentrates wealth and political power in the hands of a few.

A “winner takes all” Web is not a pre-determined outcome. As this report has sought to demonstrate, much depends on the policy choices we make now. Will we take bold action to ensure the open Web

belongs to all of us? Or will we allow billions to be shut out from reaping the benefits of the most powerful technology of the century?

It is time to recognise the Internet as a fundamental human right and take the following steps to make it a reality:

### Policy makers must:



- 1. Accelerate progress towards getting everyone online.** Poverty must not prevent anyone, anywhere from connecting. Universal access means everyone should be able to use all of the Web all of the time, safely, freely and privately.
- 2. Level the playing field** by preventing price discrimination in Internet traffic, balancing the rights of copyright holders with those of Web users, and protecting online service providers from liability for content posted by third parties. We believe that governments must recognise the Internet’s essential place in economic and social infrastructure and treat it like other public utilities.
- 3. Invest in high-quality public education for all** to ensure that technological progress doesn’t leave some groups behind.
- 4. Promote participation in democracy and protect freedom of opinion.** Fight the growing “democratic deficit” by reversing the erosion of press freedom and civil liberties seen in almost all Web Index countries in recent years; use the Web to make government more transparent to citizens; and provide stronger protections for freedom of speech, freedom of association, and privacy, both offline and on.
- 5. Create opportunities** for women and poor and marginalised groups by investing more in ICTs to overcome key barriers in health, education, agriculture and gender equity. Achieve scale and impact by involving stakeholders in identifying the specific problems that ICTs can help to solve and those it cannot, and designing properly resourced programmes to address both.

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## CREDITS AND ACKNOWLEDGEMENTS

The 2014 Web Index benefited from the help and advice of many people, and involved a rigorous process of collecting and analysing data across a large number of indicators and countries, as well as consulting leading experts in various fields.

The Web Index research was managed by Khaled Fourati and directed by Dr. Hania Farhan from the World Wide Web Foundation. For a full methodology, please visit: <http://thewebindex.org/about/#methodology>

The lead report author is Anne Jellema, with Dr. Hania Farhan, Khaled Fourati, Dr. Siaka Lougue, Dillon Mann and Gabe Trodd all assisting in the writing and/or analysis.

We are grateful to the members of the Web Index Science Council for valuable advice in the construction and analysis of the Web Index: Sir Tim Berners-Lee, Robert Ackland, Paola Annoni, Kilnam Chon, Anriette Esterhuysen, Jonathan Donner, Robert Guerra, Torbjorn Fredriksson, Mishi Choudhary, Marcelo Daher, Rebecca Mackinnon, Alice Munyua, Ronaldo Lemos, Juliana Nolasco, Claire Sibthorpe and Shireen Santosham.

The Web Index also benefited from the expertise of:

#### Analyst team (African Institute of Mathematical Sciences)

- Siaka Lougue
- Tchilabalo Abozou Kpazou
- Aristide Romaric Bado
- Innocent Karangwa

#### Survey team coordinators:

- Carlos Iglesias
- Aman Grewal
- Raed M. Sharif
- Ginette Law
- Laura M. James Bromwich

#### The team at WESO (Website Design, Data Visualisation and Management)

- José Emilio Labra Gayo
- Guillermo Infante Hernández
- Juan Castro Fernández
- Daniel Fernández Álvarez
- Miguel Otero Gafarelo

#### The team at Development Seed (Data Visualisations):

- Ian Schuler
- Marc Farra
- Derek Lieu

#### We would also like to thank:

- Joy Liddicoat, Jan Vobořil, Sam Smith, Katarzyna Szymielewicz, Rejo Zenger for their inputs on country reviews
- Miska Knapek and Malcolm Buckland for their graphic design skills
- The European Commission’s Joint Research Centre

- The Unit of Econometrics and Applied Statistics-Ispra — IT, who supported us on methodological and statistical analysis.
- José M. Alonso, Kojo Boakye, Ingrid Brudvig, Tim Davies, Sonia Jorge, Luran Potter, Chan Sun, and the rest of the World Wide Web Foundation team that contributed to research, data-verification and fact-checking.
- The Index team is grateful to the large number of experts and professionals who assisted us with the Expert Assessment survey.

Finally, particular thanks must go to UK Aid for funding the continued development and production of the Web Index and to the Swedish International Development Cooperation and Naver for significant funding support.

THE WEB INDEX			UNIVERSAL ACCESS SUB INDEX			FREEDOM & OPENNESS SUB INDEX		
Overall rank	Country	Overall score	Sub Index Rank	Country	Universal Access Score	Sub Index Rank	Country	Freedom & Openness Score
1	Denmark	100.00	1	Denmark	100.00	1	Finland	100.00
2	Finland	98.81	2	Iceland	96.97	2	Norway	95.07
3	Norway	97.32	3	Republic Of Korea	95.92	3	Iceland	94.93
4	UK & Northern Ireland	95.67	4	Singapore	91.69	4	Denmark	90.45
5	Sweden	94.97	5	Netherlands	89.77	5	Chile	87.73
6	United States Of America	94.52	6	Finland	88.46	6	Belgium	86.26
7	Iceland	93.72	7	Norway	87.97	7	Germany	85.84
8	Republic Of Korea	92.81	8	New Zealand	87.28	8	Sweden	85.10
9	Netherlands	91.84	9	Belgium	86.97	9	Netherlands	83.36
10	Belgium	89.61	10	Ireland	86.86	10	Ireland	83.33
11	France	89.09	11	Sweden	85.07	11	Austria	82.78
12	New Zealand	87.48	12	Australia	84.62	12	Estonia	82.41
13	Australia	87.27	13	Estonia	84.31	13	Switzerland	81.27
14	Germany	86.19	14	UK & Northern Ireland	82.99	14	United States Of America	81.04
15	Austria	86.00	15	Germany	79.97	15	Canada	80.27
16	Canada	85.82	16	Switzerland	79.69	16	Czech Republic	79.84
17	Estonia	85.05	17	Qatar	79.62	17	Portugal	79.03
18	Switzerland	84.73	18	Japan	78.09	18	France	78.72
19	Japan	79.00	19	Canada	77.26	19	Japan	77.87
20	Ireland	78.28	20	Austria	76.12	20	New Zealand	76.31
21	Israel	75.46	21	United States Of America	75.83	21	UK & Northern Ireland	76.25
22	Singapore	75.16	22	France	73.96	22	Greece	76.06
23	Spain	74.53	23	Portugal	73.54	23	Spain	75.24
24	Chile	74.18	24	Spain	71.87	24	Australia	75.16
25	Portugal	73.33	25	Israel	71.40	25	Republic Of Korea	74.90
26	Hungary	66.12	26	Hungary	67.58	26	Costa Rica	72.16
27	Uruguay	66.10	27	Czech Republic	67.11	27	Uruguay	71.33
28	Czech Republic	65.50	28	Poland	66.60	28	Brazil	70.74
29	Italy	63.83	29	Russian Federation	64.17	29	Italy	70.53
30	Greece	60.91	30	Thailand	64.09	30	Poland	69.75
31	Argentina	60.74	31	United Arab Emirates	63.85	31	Hungary	66.72
32	Costa Rica	60.38	32	Mauritius	63.71	32	Israel	63.51
33	Brazil	60.19	33	Italy	62.30	33	Peru	62.53
34	Poland	58.81	34	Argentina	61.88	34	Jamaica	61.55
35	Russian Federation	58.17	35	Greece	60.77	35	Argentina	59.63
36	Colombia	57.12	36	China	60.55	36	Mauritius	59.17
37	Mexico	55.34	37	Chile	60.37	37	India	57.42
38	Turkey	53.30	38	Uruguay	60.16	38	South Africa	56.89
39	Tunisia	51.93	39	Bahrain	59.51	39	Colombia	55.46
40	Mauritius	49.60	40	Ukraine	59.29	40	Ukraine	54.86
41	Philippines	48.87	41	Tunisia	58.68	41	Tunisia	54.63
42	Malaysia	48.34	42	Colombia	58.41	42	Ghana	53.78
43	Peru	46.62	43	Turkey	57.61	43	Philippines	52.84
44	China	45.97	44	Costa Rica	56.66	44	Mexico	51.16
45	South Africa	45.82	45	South Africa	55.65	45	Benin	48.89
46	Ukraine	45.20	46	Saudi Arabia	55.53	46	Morocco	48.37
47	United Arab Emirates	44.90	47	Ecuador	54.77	47	Namibia	42.38
48	India	44.60	48	Malaysia	54.66	48	Singapore	42.24
49	Jamaica	44.50	49	Indonesia	53.51	49	Burkina Faso	41.96
50	Ecuador	42.57	50	Viet Nam	52.80	50	Senegal	41.94
51	Morocco	40.38	51	Brazil	52.17	51	Zambia	41.87
52	Indonesia	39.27	52	Philippines	51.03	52	Turkey	41.72
53	Thailand	39.20	53	Botswana	50.49	53	Ecuador	40.54
54	Qatar	38.01	54	Kazakhstan	50.30	54	Uganda	40.25
55	Kenya	37.48	55	Mexico	50.27	55	Russian Federation	39.60
56	Bahrain	36.41	56	Peru	48.25	56	Nepal	39.41
57	Kazakhstan	35.65	57	Jamaica	48.02	57	Sierra Leone	39.40
58	Ghana	29.87	58	Venezuela (Bolivarian Republic Of)	46.15	58	Botswana	38.76
59	Venezuela (Bolivarian Republic Of)	29.79	59	Namibia	45.88	59	Kenya	38.62
60	Egypt	28.98	60	Egypt	45.84	60	Nigeria	38.01
61	Botswana	28.44	61	Bangladesh	44.43	61	Indonesia	37.58
62	Nigeria	28.09	62	India	44.06	62	Mozambique	36.28
63	Bangladesh	28.00	63	Jordan	43.71	63	Malawi	34.61
64	Saudi Arabia	27.72	64	Ghana	39.71	64	Malaysia	34.55
65	Jordan	27.43	65	Nigeria	37.28	65	Bangladesh	33.76
66	Namibia	25.97	66	Kenya	37.00	66	Mali	32.85
67	Viet Nam	24.89	67	United Republic Of Tanzania	32.34	67	United Republic Of Tanzania	30.17
68	Uganda	24.62	68	Morocco	31.90	68	Pakistan	27.46
69	Nepal	23.95	69	Zimbabwe	31.50	69	Haiti	24.84
70	Rwanda	23.34	70	Zambia	28.19	70	Thailand	24.68
71	Zambia	22.75	71	Haiti	27.26	71	Zimbabwe	24.22
72	Senegal	21.67	72	Senegal	27.19	72	Rwanda	23.64
73	United Republic Of Tanzania	21.33	73	Nepal	26.80	73	Kazakhstan	21.30
74	Malawi	18.87	74	Rwanda	26.72	74	Myanmar	13.84
75	Zimbabwe	18.43	75	Malawi	25.93	75	Cameroon	13.10
76	Pakistan	17.76	76	Pakistan	24.57	76	Venezuela (Bolivarian Republic Of)	12.65
77	Benin	15.75	77	Benin	22.99	77	United Arab Emirates	12.25
78	Mozambique	15.46	78	Uganda	22.31	78	Egypt	12.08
79	Burkina Faso	13.72	79	Cameroon	19.52	79	Jordan	11.02
80	Sierra Leone	13.44	80	Mozambique	19.32	80	China	10.94
81	Haiti	12.52	81	Sierra Leone	14.35	81	Qatar	9.12
82	Mali	11.14	82	Mali	12.17	82	Yemen	9.06
83	Cameroon	9.71	83	Yemen	10.07	83	Viet Nam	5.79
84	Yemen	5.17	84	Myanmar	6.13	84	Ethiopia	4.08
85	Myanmar	3.03	85	Burkina Faso	2.64	85	Bahrain	1.87
86	Ethiopia	0.00	86	Ethiopia	0.00	86	Saudi Arabia	0.00

RELEVANT CONTENT SUB INDEX			EMPOWERMENT SUB INDEX		
Sub Index Rank	Country	Relevant Content Score	Sub Index Rank	Country	Empowerment Score
1	UK & Northern Ireland	100.00	1	UK & Northern Ireland	100.00
2	United States Of America	98.32	2	United States Of America	99.81
3	France	97.02	3	Sweden	94.73
4	Republic Of Korea	96.58	4	Denmark	93.61
5	Norway	96.56	5	Finland	92.97
6	Australia	95.12	6	Norway	86.55
7	Sweden	92.55	7	France	85.59
8	Denmark	92.37	8	Netherlands	83.57
9	Finland	90.61	9	Switzerland	83.10
10	Canada	89.71	10	Austria	82.32
11	Netherlands	89.70	11	Republic Of Korea	82.14
12	Belgium	89.39	12	Estonia	79.91
13	New Zealand	89.29	13	Germany	78.43
14	Iceland	86.40	14	New Zealand	77.45
15	Austria	83.81	15	Canada	76.81
16	Germany	81.84	16	Iceland	75.75
17	Chile	81.28	17	Belgium	75.72
18	Israel	78.83	18	Singapore	75.17
19	Japan	77.68	19	Australia	74.24
20	Switzerland	76.86	20	Israel	72.65
21	Singapore	76.48	21	Japan	66.33
22	Estonia	75.73	22	Spain	62.32
23	Spain	74.21	23	Ireland	57.84
24	Portugal	71.38	24	China	56.42
25	Uruguay	70.78	25	Portugal	55.72
26	Ireland	70.25	26	Italy	54.14
27	Russian Federation	70.22	27	Chile	52.57
28	Hungary	67.05	28	Hungary	51.84
29	Mexico	66.74	29	Turkey	50.72
30	Argentina	66.25	30	Uruguay	50.49
31	United Arab Emirates	64.42	31	Russian Federation	49.29
32	Greece	61.65	32	Czech Republic	49.12
33	Brazil	60.36	33	Brazil	48.29
34	Malaysia	60.18	34	Colombia	47.61
35	Colombia	58.87	35	Argentina	45.54
36	Costa Rica	58.75	36	Costa Rica	45.01
37	Italy	58.30	37	Mexico	44.86
38	Turkey	56.17	38	Poland	43.32
39	Czech Republic	55.83	39	Philippines	40.66
40	Bahrain	54.56	40	India	40.41
41	Tunisia	52.55	41	Kenya	40.32
42	China	51.21	42	Malaysia	38.32
43	Kazakhstan	48.92	43	Morocco	36.82
44	Poland	48.11	44	Greece	36.15
45	Philippines	46.27	45	Tunisia	36.01
46	Qatar	43.56	46	Peru	34.55
47	Ecuador	42.49	47	United Arab Emirates	34.21
48	Morocco	42.32	48	Mauritius	34.19
49	Saudi Arabia	40.11	49	South Africa	31.89
50	Jamaica	38.57	50	Thailand	30.99
51	Indonesia	38.30	51	Ecuador	30.18
52	Peru	37.94	52	Ukraine	29.76
53	Mauritius	37.52	53	Bahrain	28.11
54	Jordan	37.41	54	Jamaica	27.40
55	Thailand	36.26	55	Indonesia	26.74
56	South Africa	36.17	56	Venezuela (Bolivarian Republic Of)	26.64
57	Venezuela (Bolivarian Republic Of)	35.47	57	Egypt	25.59
58	Ukraine	34.61	58	Uganda	22.35
59	Egypt	34.50	59	Rwanda	22.29
60	India	33.99	60	Kazakhstan	21.31
61	Kenya	33.35	61	Jordan	19.97
62	Viet Nam	28.33	62	Nigeria	19.71
63	Rwanda	25.04	63	Qatar	19.16
64	Nigeria	20.97	64	Saudi Arabia	17.53
65	Bangladesh	20.77	65	Bangladesh	16.85
66	Nepal	19.67	66	Viet Nam	16.73
67	Malawi	19.22	67	Zambia	16.43
68	Ghana	19.09	68	United Republic Of Tanzania	15.35
69	Uganda	18.13	69	Nepal	14.79
70	Namibia	16.87	70	Zimbabwe	13.05
71	Botswana	15.98	71	Botswana	12.81
72	Pakistan	14.17	72	Pakistan	11.90
73	Burkina Faso	14.11	73	Senegal	11.76
74	United Republic Of Tanzania	13.59	74	Ghana	10.51
75	Zimbabwe	12.06	75	Mozambique	8.23
76	Senegal	12.03	76	Cameroon	7.83
77	Zambia	10.45	77	Mali	5.66
78	Cameroon	8.21	78	Yemen	5.42
79	Haiti	7.46	79	Burkina Faso	4.37
80	Yemen	7.25	80	Myanmar	4.02
81	Ethiopia	6.93	81	Namibia	3.87
82	Mozambique	6.44	82	Sierra Leone	3.47
83	Sierra Leone	5.67	83	Malawi	2.38
84	Mali	3.73	84	Ethiopia	1.54
85	Myanmar	0.42	85	Benin	0.31
86	Benin	0.00	86	Haiti	0.00



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REPORT 2014-15

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With thanks to our primary supporter



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