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WHAT EVERY POLICYMAKER NEEDS TO KNOW ABOUT THE INTERNET

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The Internet today is a technology of freedom and innovation. In less than two decades it has become a powerful, global platform for commerce, human development and democratic participation. This growth did not happen in a legal vacuum. From the outset, the Internet has been enabled by a policy framework suited to its unique technical architecture. Misguided policies could just as easily stifle the Internet's continued expansion. Increasingly, despite the Internet's success, the policy principles that supported its growth are being challenged.

The successful policy framework for the Internet emphasized openness, competition, innovation, consumer choice, and freedom of expression. For example, while ISPs themselves were relatively unregulated, they benefited from an open platform that was based on telecommunications policies of interconnection and non-discrimination. Early on, the Supreme Court ruled that the Internet was entitled to the strongest form of First Amendment free speech protection. Congress expressly decided that Web hosting services and ISPs should not be liable for the content created by others. Recognizing the importance of privacy, in 1986 Congress updated laws on government surveillance to require court orders for access to data communications, just as they had been required for telephone taps.

In recent years, policymakers seem to have forgotten what makes the Internet special. Increasingly, policy proposals treat the Internet as a problem to be solved rather than a valuable resource that must be supported. Debates over objectionable content online, protecting intellectual property, preventing terrorism, or restructuring telecommunications policy seem to have lost sight of the Internet's history and its architecture. We are seeing an increasing number of heavy-handed policy proposals that place the Internet's core characteristics at risk. Standing alone or in conjunction with marketplace and technological changes, these policies could fundamentally alter the very elements of the Internet that have made it so successful.

Key Features of the Internet

These are the key features of the Internet that have been largely responsible for its success — and can continue to do so, as long as they are enabled by a sound policy framework:

User Empowerment

The Internet is uniquely user-controlled. To a far greater extent than users of any other electronic medium, Internet users have the power to choose where they will

go online and what they will see or hear. Users can configure their browsers and their search engines to avoid content they consider objectionable. They can install filters to block unwanted content and email. Assuming users are provided with notice and genuine choices, they can decide what software to download. They can install security software to protect against many forms of fraudulent behavior. Empowering users — especially parents, librarians and educators to use technology tools to shield children from inappropriate content is far more effective than any government censorship regime. Efforts to address Internet challenges should focus first on policies that empower users, rather than empowering the government or requiring intermediaries to exert control.

Open, Decentralized, Interoperable, No Gatekeepers

The Internet is, by design, decentralized. Its power is at the edges of the network, unlike previous mass media. The brilliance of its underlying technology is that any device can be attached to the network and interoperate with another device, with little regard for physical distance. The decentralized architecture of the Internet means there are few chokepoints. Censorship is difficult at the core of the Internet because network operators and ISPs simply did not build a lot of intelligence into their networks; the sheer quantity of traffic precludes effective control from one point to another. Network operators focus on speed, on getting Internet traffic to its intended destination, without pausing to examine every electronic bit for compliance with standards of acceptability.

If ISPs, Web hosts, and website creators become liable for content posted by others, the Internet would be stifled by gatekeepers and it would cease to be a medium where everyone has an opportunity to make their voices heard. Increasingly, policymakers have been seeking to turn service providers into policemen, forcing ISPs to filter undesirable content and refuse access to undesirable users. Policymakers have also sought to delegate enforcement obligations to other components of online commerce, notably credit card companies, forcing them to block certain payments for undesirable services or content.

Non-Discrimination

Early policy choices confirmed and enforced the Internet's open platform. In the dial-up world of the Internet's emergence, the network's edge architecture was supported by telecommunications policies that required network operators to allow any equipment to be attached to their networks and to carry all traffic on a non-discriminatory basis. Innovators did not need to negotiate with network operators to connect a modem to the network or to make their content and services available to a wide audience. This allowed innovation on the Internet to flourish. On the converged broadband Internet, there is a risk that network gatekeepers could engage in discrimination, favoring some content, or some uses, over others, in a way that diminishes innovation and erects barriers to new voices. It is essential that the core elements of these open and non-discriminatory principles are applied to the converged broadband Internet. Doing so poses difficult challenges, but must be achieved.

Innovation, Not Technology Mandates

The Internet's simple core supports a remarkable degree of innovation. It does so on the basis of voluntary technical standards. Even though the Internet was "born" under the auspices of the

Pentagon, the U.S. government never mandated its core technologies. Those technologies were developed by scientists and broadly adopted because they worked. From the outset, Internet policy was based on the notion that the government should not design technology; in order to ensure innovation, that function was best left to the marketplace. For example, early efforts to control encryption were abandoned, in part because of the recognition that government-mandated back doors would undermine security, rather than improve it.

Increasingly, policymakers have been asserting control over the Internet's technology and imposing design mandates on Internet services and applications. The FCC has already imposed on the Internet design mandates for wiretapping. Proposals abound to do the same to protect intellectual property, and consideration of such mandates is likely to continue growing. Such mandates pose a severe threat to innovation.

Abundance and Low Barriers to Entry

Traditional radio and television technology was bound by a limited technical capacity to exploit the electromagnetic spectrum. Consequently, regulation of the airwaves was deemed necessary in order to allocate what was seen as a scarce resource. The Internet by contrast can accommodate an essentially unlimited number of points of entry and an essentially unlimited number of speakers. Its open platform accommodates many-to-many, one-to-many and one-to-one communication. Compared to the cost of a printing press, a TV station or a radio tower, the cost of launching a website is remarkably low — and that website can reach the entire world.

Low barriers to entry and participation have led to a relative equality of voice and a democratization of expression. In terms of free speech, an environmental activist can reach the same people as an oil company. A blogger can impact an election as much as a major newspaper. And a new content or application provider can emerge from nowhere to become an extraordinary success with relatively low investment and without having to obtain a government license or negotiate with an incumbent to offer new services.

Global

While the digital divide in the developing world poses serious challenges, the Internet from its inception was a global medium. This greatly limits the reach and effectiveness of many national regulatory efforts, especially those directed at controlling content. Given the global nature of markets, burdensome regulation in the U.S. could send innovation overseas.