

Chapter 1 : Digital divide - Wikipedia

Bridging the Digital Divide High-speed Internet access, or broadband, is critical to economic opportunity, job creation, education, and civic engagement. But there are too many parts of this country where broadband is unavailable.

Bridging The Digital Divide Better connectivity has encouraged socio-economic division Today, almost four billion people have access to the internet. There are over seven and half billion people living on the planet, which means that a huge number of people are still without digital access. Before the s, the digital divide referred to telephone access. Now, of course, connectivity encompasses so much more. Bridging the digital divide has presented an ongoing challenge for organisations on many different levels. As so much of business strategy is focused on digital, consumers without an online presence can easily slip through the net. Businesses themselves can also be left without adequate services. So why is digital illiteracy still such a major concern, and what can be done to address it? Deciphering the digital dilemma Broadly speaking, the digital divide is the result of the nonuniform distribution of opportunities and resources. Whether someone has access to digital services can depend on numerous factors including where they live, how much money they have, and how educated they are. Location, for instance, is still the blight of ubiquitous connectivity. According to Ofcom, 17 per cent of rural UK businesses struggle to operate on low broadband speeds. Some people, even those who live in urban and affluent areas, are digitally illiterate. This can often be a result of their age or a reluctance to embrace change. Whatever the reasons, bridging the digital divide has clear advantages for the global, socio-economic climate – the improvement of literacy, democracy, and economic growth to name just a few. In his opening talk at DEN Live earlier this month, Nick Williams, Managing Director of Consumer and Commercial Digital at Lloyds Bank, suggested that businesses should send representatives into the community to connect with technological laggards. Governments and official bodies have a responsibility to solve the separation, too. In Rwanda, a national fibre optic policy has enabled connectivity to surge. Even in more economically developed countries, these sorts of initiatives have not yet been taken. Mass digitalisation and disruption Digitalisation has had some incredibly positive consequences. Bringing more people online has meant an increased talent pool, opening up opportunities for individuals and businesses that previously had to make do without. An influx of connected innovators has fuelled economies and social mobility across the globe. As the digital divide closes, this is likely to continue. Although there will be a level of predictable continuity, mass digitalisation will certainly rock the boat by disrupting technological patterns. For example, in many areas, people are dependent on smartphones for connectivity. As such, any change to accessibility could have a knock on effect on smartphone domination. Technology aside, if governments are to legislate on digital adoption, they need to be careful to respect the lifestyle choices of their citizens. Not everyone wants digital access, no matter how much corporations might like to turn them into a data point. A potential social consequence of greater digital fluency could be that people choose to interact digitally rather than in person, making humanity more insular at the same time as being more connected. More can be done to encourage digital literacy, and this must be a combined effort. For a start, there are those who actively avoid any involvement with online products or services. Nonetheless, the digital divide is slowly closing. This is likely to accentuate the existing social and economic trends that have already come with digitalisation. How else can governments and companies tackle the digital divide? Will increased digitalisation make humans more insular?

Chapter 2 : The Importance of Bridging the Digital Divide

Bridging the digital divide and expanding access to wired and wireless networks will be the central theme of our August meeting, but it won't be the only focus.

Tech corporations and politicians frequently campaign on the need to build the local networks that will bridge this divide. Help make finding broadband easier. Share with your friends These small companies are surprisingly well liked. In an industry known for bottom-barrel ratings and high customer churn, WISP customers give consistently positive reviews and remain loyal customers for years. WISPs and the digital divide Fixed wireless is delivered via wireless access points installed on towers or tall buildings. Image courtesy of Skyriver. In America, the digital divide is a starkly measurable issue and has been a key focus for both Democratic and Republican FCC chairmen over the past two administrations. The idea of getting fiber run to every home in the US is, for now, little more than a pipe dream. Advances in 5G technology are pushing up the speeds on these services, and the Net Neutrality debate has stirred local advocacy and spawned hundreds of local network operators. Unlike fiber which has mostly paused so far as major providers like Verizon and Google go, fixed wireless point-to-point and point to multipoint networks are already being set up all over the country. WISPs are similar to wired ISPs, but instead of using a cable to deliver the last mile, they use fixed wireless connections. These are cheap to deploy compared to fiber. This means that it relies upon a direct, line-of-sight connection from the access point normally on top of a tower or tall landmass to the roof of your home. WISPs are also starting to take advantage of technologies such as millimeter Wave sometimes referred to as mmW to drive enhancements to their services. Wireless Internet takes up space in the already crowded wireless spectrum. For now, speeds around Mbps are commonly offered for business connections, and the only thing holding them back from residential application is the equipment cost, which descends quickly with any new technology. Think of it like this: Complaints range the field from a lack of service options and speeds to unreasonable data caps, sudden pricing increases, and contracts. WISPs may represent a more straightforward and fair option for those disenfranchised by their past experiences. Are looking for Internet-only options For many users, Internet is king. Live in a rural area This one is the most obvious on the surface; if you live in a rural area far from a major urban hub, you are highly likely to only have subpar options for getting online. WISPs know this, and in recent years, these companies have made huge strides to get more and more connections set up in these out-of-the-way places. This has set off a chain reaction of sorts, rekindling talks by users in online communities about bypassing any potential cable monopolies by literally building their own ISPs. Initiatives such as startyourownisp. When it comes to WISPs, however, the story can be different. While WISPs absolutely represent an exciting potential for the future, they do admittedly have their share of roadblocks to push past before they become a serious player on par with the cable giants. Here are a few of the most common problems these operations are grappling with: Bandwidth Allocation The FCC is currently debating whether to make portions of specific bandwidths available to be licensed affordability to local operations. If this were to happen, it would be a huge boon for WISPs, as the smaller, shorter-term licenses mean that they would be feasible for a local operation. Despite this, mobile carriers are predictably pushing for larger, longer-term license zones that only they can afford. These decisions will potentially affect the CBRS 3. How the FCC leans in the end will directly affect these companies and their ability to serve their customers. Reliability While fixed wireless as a technology has made strides in recent years, it still has several weak points that can affect performance in certain areas. As touched on above, trees, buildings, and uneven terrain can all be detrimental to a good signal, because again, this tech relies on a line-of-sight from the access point to the roof of your home. Providers we spoke to while researching this story frequently reported difficulty serving wooded areas, where only a physical wire like DSL can provide reliable speeds. Weather can also present a challenge. This can be mitigated with proper planning, however, and new technologies aimed at building more robust networks are on the horizon. Security Though this issue is arguably more perceptual than actual, some voices in the industry have expressed concerns over encryption and authentication techniques used with wireless networks. That said, though the issues facing wired and wireless

networks can vary, both mediums are generally understood to be roughly equal in terms of security. For starters, you can find out if there are any wireless ISPs operating in your area. If none are currently available, you can consider contributing to WISP PAC , whose mission it is to bring bipartisan awareness and support for emerging fixed wireless operations to Congress. Residents can do the same – write to your Senators and Representatives and tell them to listen to the needs of those trying to provide these services. In what is undoubtedly an added bonus for consumers, they seem to be aiming to do so fairly and securely as well.

Chapter 3 : Bridging the Digital Divide | Imagination Soup

Three years ago, Knight Foundation set out to find ways to bridge the digital divide in Detroit, a formidable task in a city where less than 40 percent of households have broadband access.

How sophisticated is the usage: Each one of them seems equally reasonable and depends on the objective pursued by the analyst". Instead, they chosen to use the term "digital inclusion", providing a definition: Digital Inclusion refers to the activities necessary to ensure that all individuals and communities, including the most disadvantaged, have access to and use of Information and Communication Technologies ICTs. This includes 5 elements: Given the increasing number of such devices, some have concluded that the digital divide among individuals has increasingly been closing as the result of a natural and almost automatic process. For example, "the massive diffusion of narrow-band Internet and mobile phones during the late s" increased digital inequality, as well as "the initial introduction of broadband DSL and cable modems during â€” increased levels of inequality". As shown by the Figure, during the mids, communication capacity was more unequally distributed than during the late s, when only fixed-line phones existed. The most recent increase in digital equality stems from the massive diffusion of the latest digital innovations i. In relative terms, the fixed-line capacity divide was even worse during the introduction of broadband Internet at the middle of the first decade of the s, when the OECD counted with 20 times more capacity per capita than the rest of the world. The International Telecommunications Union concludes that "the bit becomes a unifying variable enabling comparisons and aggregations across different kinds of communication technologies". There are at least three factors at play: More than just accessibility, individuals need to know how to make use of the information and communication tools once they exist within a community. There are also varying levels of connectivity in rural, suburban, and urban areas. Obtaining access to ICTs and using them actively has been linked to a number of demographic and socio-economic characteristics: As for geographic location, people living in urban centers have more access and show more usage of computer services than those in rural areas. Gender was previously thought to provide an explanation for the digital divide, many thinking ICT were male gendered, but controlled statistical analysis has shown that income, education and employment act as confounding variables and that women with the same level of income, education and employment actually embrace ICT more than men see Women and ICT4D. For example, the digital divide in Germany is unique because it is not largely due to difference in quality of infrastructure. In research, while each explanation is examined, others must be controlled in order to eliminate interaction effects or mediating variables , [35] but these explanations are meant to stand as general trends, not direct causes. Each component can be looked at from different angles, which leads to a myriad of ways to look at or define the digital divide. For example, measurements for the intensity of usage, such as incidence and frequency, vary by study. Some report usage as access to Internet and ICTs while others report usage as having previously connected to the Internet. Based on different answers to the questions of who, with which kinds of characteristics, connects how and why, to what there are hundreds of alternatives ways to define the digital divide. The first of three reports is entitled "Falling Through the Net: Defining the Digital Divide" This report will help clarify which Americans are falling further behind, so that we can take concrete steps to redress this gap. The digital divide is commonly defined as being between the "haves" and "have-nots. The Facebook Divide, Facebook native, Facebook immigrants, and Facebook left-behind are concepts for social and business management research. Facebook Immigrants are utilizing Facebook for their accumulation of both bonding and bridging social capital. Therefore, access is a necessary but not sufficient condition for overcoming the digital divide. Access to ICT meets significant challenges that stem from income restrictions. Furthermore, even though individuals might be capable of accessing the Internet, many are thwarted by barriers to entry such as a lack of means to infrastructure or the inability to comprehend the information that the Internet provides. Lack of adequate infrastructure and lack of knowledge are two major obstacles that impede mass connectivity. Some individuals have the ability to connect, but they do not have the knowledge to use what information ICTs and Internet technologies provide them. This leads to a focus on capabilities and skills, as well as awareness to move from mere access to effective usage of ICT. It

constitutes an example of a volunteering initiative that effectively contributes to bridge the digital divide. ICT-enabled volunteering has a clear added value for development. If more people collaborate online with more development institutions and initiatives, this will imply an increase in person-hours dedicated to development cooperation at essentially no additional cost. This is the most visible effect of online volunteering for human development. The former describes phenomena such as the divided users demographics that make up sites such as Facebook and Myspace or Word Press and Tumblr. Each of these sites host thriving communities that engage with otherwise marginalized populations. An example of this is the large online community devoted to Afrofuturism, a discourse that critiques dominant structures of power by merging themes of science fiction and blackness. Social media brings together minds that may not otherwise meet, allowing for the free exchange of ideas and empowerment of marginalized discourses. The Gates Foundation focused on providing more than just access, they placed computers and provided training in libraries. In this manner if users began to struggle while using a computer, the user was in a setting where assistance and guidance was available. Further, the Gates Library Initiative was "modeled on the old-fashioned life preserver: The support needs to be around you to keep you afloat. Prior conditions in Kenyaâ€”lack of funding, language and technology illiteracy contributed to an overall lack of computer skills and educational advancement for those citizens. This slowly began to change when foreign investment began. Those resources enabled public libraries to provide information and communication technologies ICT to their patrons. In , public libraries in the Busia and Kiberia communities introduced technology resources to supplement curriculum for primary schools. By , the program expanded into ten schools. CI is concerned with ensuring the opportunity not only for ICT access at the community level but also, according to Michael Gurstein , that the means for the "effective use" of ICTs for community betterment and empowerment are available. Social capital is acquired through repeated interactions with other individuals or groups of individuals. Connecting to the Internet creates another set of means by which to achieve repeated interactions. ICTs and Internet connectivity enable repeated interactions through access to social networks, chat rooms, and gaming sites. Once an individual has access to connectivity, obtains infrastructure by which to connect, and can understand and use the information that ICTs and connectivity provide, that individual is capable of becoming a "digital citizen". Their study shows that the rapid digital expansion excludes those who find themselves in the lower class. However, with more and more of the population with access to the Internet, researchers are examining how people use the Internet to create content and what impact socioeconomics are having on user behavior. Some of the reasons for this production gap include material factors like the type of Internet connection one has and the frequency of access to the Internet. The more frequently a person has access to the Internet and the faster the connection, the more opportunities they have to gain the technology skills and the more time they have to be creative. Users of lower socioeconomic status are less likely to participate in content creation due to disadvantages in education and lack of the necessary free time for the work involved in blog or web site creation and maintenance.

Chapter 4 : Bridging the Digital Divide | Good Things Foundation

Bridging a Digital Divide That Leaves Schoolchildren Behind Image Tony and Isabella Ruiz, with their younger brother, Leo, used a nearby school's Wi-Fi to download homework assignments onto.

Bridging the digital divide: Article Richard Morgan Principal, Consulting Without a robust digital inclusion strategy to address the digital divide, lower socio-economic groups will face increased marginalisation and social exclusion. In this article, we explore the importance of overcoming the digital divide particularly among lower socio-economic groups to meet high-speed broadband take-up targets set by the European Commission. We also look at some intervention options that may assist in improving the affordability and therefore the take-up of high-speed broadband services among lower socio-economic groups. The digital divide often refers to two distinct issues: Many governments and organisations in Europe are developing broadband policies to address the digital infrastructure divide, by stimulating investment in high-speed broadband infrastructure in rural areas; for example, through the provision of public-private partnerships and structural funds. The DAE targets are defined as: Broadband take-up among European households in 4Q [Source: Analysys Mason,] The primary barriers to broadband adoption can typically be classified as follows: The first two barriers can be addressed through government programmes to implement education and demand stimulation initiatives such as the development of e-government, e-health, e-learning and e-business, aimed at encouraging the development and use of new broadband applications. Addressing affordability requires other types of intervention. Our analysis shows a clear correlation between the affordability of broadband services and the levels of broadband penetration in a selection of European countries Figure 2. Relationship between affordability and fixed broadband penetration [Source: Analysys Mason,] Why does the digital divide matter? Our study also highlighted the role of broadband in communities in improving education and skills, increasing employment opportunities, saving money by shopping online, reducing crime, and in improving general well-being. Low-income groups in affordable housing are a target group towards which interventions can be targeted. Affordable-housing providers may therefore consider subsidising broadband infrastructure or service provision to encourage take-up among tenants. Although this statistic will vary across Europe, affordable housing tenants present an easily identifiable target group towards which interventions can be targeted. For providers of affordable housing, it has become increasingly important to make a channel shift in how they communicate with tenants and receive payments electronically, in order to increase efficiency and protect rental income. Affordable housing providers may therefore consider subsidising broadband infrastructure or service provision to encourage take-up among tenants. Without a robust digital inclusion strategy to address the digital divide, lower socio-economic groups will face increased marginalisation and social exclusion. However, with an ever-increasing reliance upon high-speed broadband communications in our daily lives, addressing the digital divide could be the opportunity to develop future-proofed fibre solutions targeted to lower-income groups. Strategies to connect the unconnected The cost of high-speed broadband services is relative to the large investment in infrastructure that must be recouped by operators. By reducing the cost of providing infrastructure to lower-income groups, it may be possible to tailor lower-cost broadband products that bridge the affordability gap. It may be possible for operator- and public-sector-led subsidies targeted at affordable-housing communities to reduce the cost of broadband provision to lower-income groups, through demand aggregation or through direct investment in infrastructure. There are a wide range of options available to improve the affordability of high-speed broadband services, with a particular focus on affordable-housing communities. We have summarised these into three broad categories as shown in Figure 3, with further explanations provided below. Analysys Mason,] Intervention options.

Chapter 5 : Bridging the Digital Divide - OECD

Bridging the Digital Divide The "digital divide" - a term that refers to the gaps in access to information and communication technology (ICT) - threatens the ICT "have-nots", whether individuals, groups or entire countries.

Chapter 6 : Close The Gap Â» Help us bridge the digital divide !

the importance of bridging the digital divide Access to computers and the Internet and the ability to effectively use this technology are becoming increasingly important for full participation in America's economic, political and social life.

Chapter 7 : General - Partners Bridging the Digital Divide

Educational psychologist and consultant Lori Day suggests that the new digital divide is more about the speed of tech upgrades than the gap between tech haves and have-nots.

Chapter 8 : Digital Divide: The Technology Gap between the Rich and Poor â€” Digital Responsibility

In this article, we explore the importance of overcoming the digital divide (particularly among lower socio-economic groups) to meet high-speed broadband take-up targets set by the European.

Chapter 9 : Bridging The Digital Divide - Disruption Hub

"I find it interesting that with record levels of technology consumption the gap separating us digitally from one another continues to grow at an alarming rate. I have made it part of my practice.