Digital Outcasts: Moving Technology Forward without Leaving People Behind

Kel Smith
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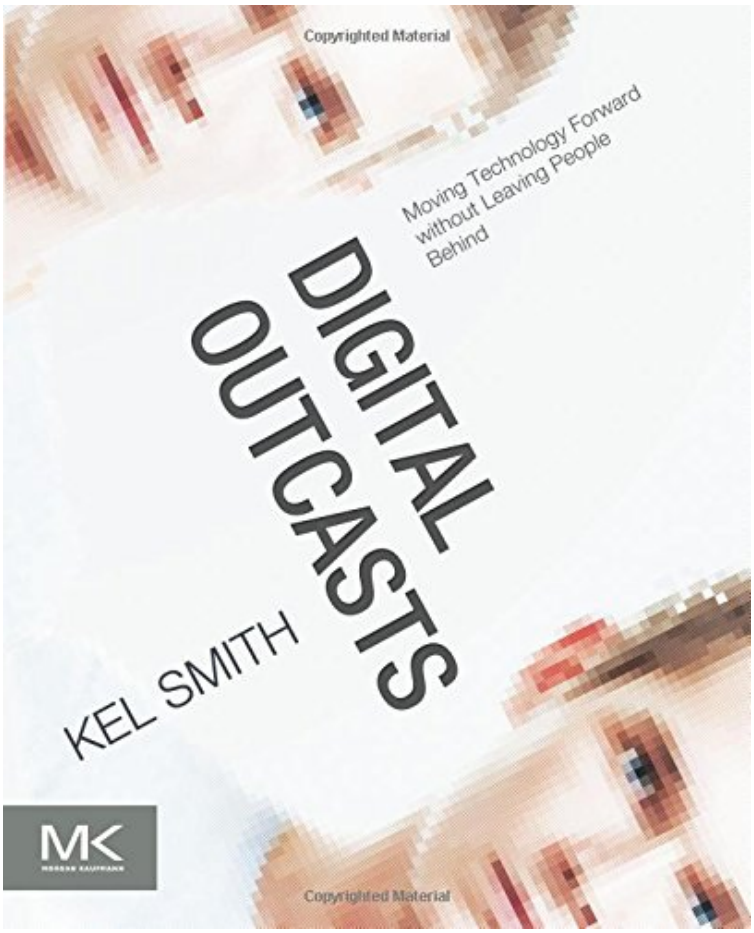

#2476995 in Books 2013-04-29 2013-04-15Original language:EnglishPDF # 1 9.25 x .65 x 7.50l, 1.10 #File Name: 012404705X288 pages | File size: 71.Mb

Kel Smith : Digital Outcasts: Moving Technology Forward without Leaving People Behind before purchasing it in order to gage whether or not it would be worth my time, and all praised Digital Outcasts: Moving Technology Forward without Leaving People Behind:

0 of 0 people found the following review helpful. Innovation = Design for EveryoneBy Pratik PatelIn late 1998 and early 1999, I began my journey that would ultimately lead to my career as a technologist, working on bringing independence through electronic information and digital means. As a student entering university, I had somewhat of a BLAS attitude toward what technology could do for me. I of course understood that screen reading technology could make my life tremendously different from many other blind people who attended university before me. I had seen a model of the Kurzweil Reading machine from 1988, which took nearly five minutes to scan a page and render it to somewhat understandable speech. By fall of 1998, I had experience with such personal technologies as the Braille 'n Speak. I took pride in quickly learning and understanding these technologies and teaching them to others. And yet,

these technologies for me were simply a means to an end-nothing more than something to gain personal independence.It wasn't until my freshman year at the City University of new York as i began volunteering at the newly established CUNY Assistive Technology Services project that I truly understood how assistive technologies could help others. Since I knew screen reading technology well, I was asked to help maintain the assistive technology center; thus began my professional foray into adaptive technologies. But, more important, it began several years of my work with students with disabilities, leading me to fully comprehend the benefits of access technologies for others.One of the very first students I got to work with was Angela-a perfectly intelligent student with a motor disability who was unable to write or express herself due to a motor disability and a speech impediment. As my colleague and I worked with her to test and devise a technology solution, we learned that Angela could use the end of a pencil on a keyboard with a key guard to type. Nothing prior to that simple solution had given Angela the hope of communicating with her family and friends.What Angela was able to accomplish in 1999 represented an early example of what has become a vital link between technical innovative solutions and human beings with disabilities. In ten to twelve years after my contact with Angela and many other people like her, I have seen technology take a leap that no one could have truly imagined; or, if someone had imagined it, the rapidity with which technology changes have come about has left many people dizzied with astonishment. It has been difficult to explain to someone who does not work with people with disabilities on a daily basis the profound nature of technology to bring about independence-the sheer capacity of technology to allow people with disabilities to travel, read, be social, or simply live.Enter Kel Smith's Digital Outcasts: Moving Technology Forward Without Leaving People behind--a book that takes the complex subjects of adaptive technology, usability, and accessibility, recasting them into a new, overarching paradigm of innovation. In eloquent language, Kel's book not only manages to provide numerous examples of current high-tech solutions that enable people with disabilities to improve their daily lives, but it uses these adaptive solutions as illustrative instances of innovation and inclusive design. Stories focusing on the web, gaming, medical technologies, rehabilitation, mobile applications, and virtual reality allow Kel to fully demonstrate the solutions that people with disabilities currently use; by example, however, Kel's story-telling highlights the gaps that exist in spite of these demonstrable improvements in technological solutions.Where this book succeeds the most is in its ability to cast accessibility as an inclusive design principle-which, if properly wielded, could lead to revolutionary technologies that addresses the needs of all populations. While illustrating this again and again, Kel returns to the foremost concern that matters when we consider product design: Be it web sites, mobile applications, neural interfaces, devices in new, unforeseen categories, or revisions to existing products or services, there is simply one thing that cannot be forgotten-that is "people." At the heart of all design and development lie people who must live with those products.Kel Smith's "Digital outcasts" succeeds at redefining innovation as a function of people considered through the lens of inclusive design. This strategic repositioning of accessibility and innovation is a no small matter. Reaching more than a billion+ number of people believed to have some form of disability will not only require the tenacity to understand their needs, but, even more important, will require us to start with a broader all-inclusive perspective.I can only hope that Angela's of the world will have the opportunity to be included in our world starting in their younger years rather than having to wait until they are college-aged. Following the type of strategic thinking so ably defined in Kel's book will certainly help us as we attempt to reach people in all their lives.3 of 4 people found the following review helpful. A Must-Read for Everyone of UsBy Noah FangThis is an advocate for innovation outside the box of trendy technologies. Whatever we do with technologies to improve our lives or the world, we can't leave people behind. And innovation doesn't come for the sake of it -- it only comes in the name of passion, love, and devotion.I'd recommend anyone read this book because it's not just about the technology sector or people with disabilities. It's about a better way for us to think about technology and innovation.We must listen seriously to what the author has to say.3 of 4 people found the following review helpful. Manifesto for technology accessibility for allBy Ben RothkeMany of us have experimented what it means to be disabled, by sitting in a wheelchair for a few minutes or putting a blindfold over our eyes. In Digital Outcasts: Moving Technology Forward without Leaving People Behind, author Kel Smith details the innumerable obstacles disabled people have to deal with in their attempts to use computers and the Internet.The book observes that while 1 in 7 people in the world have some sort of disability, software and hardware product designers, content providers and the companies who support these teams often approach accessibility as an add-on, not as a core component. Adding accessibility functionality to support disabled people is often seen as a lowest common denominator feature. With the companies unaware of the universal benefit their solution could potentially bring to a wider audience.Smith writes that despite our growing potential to augment human capability and competence through technology, the innovation curve sometimes leaves behind people who could most benefit.One of the many examples of this which the book provides is how sidewalk ramps are often an easier access method to streets; not just for those in wheelchairs, but for those simply walking and desiring an easier method.In the book, Smith details how digital outcasts often rely on technology for everyday things that we take for granted. The problem is that poorly designed products create an abyss for these outcasts, who number in the hundreds of millions.So just what is this digital outcast? Smith notes that the term was first introduced by Gareth White of the University of Sussex to describe people who are left behind the innovation curve with respect to new advances in technology. The term is also relevant to today's Internet user who can't perform

a simple function such as making an e-commerce purchase or checking their financial statement; due to inaccessibility of the content, platform or device. These outcasts represent large swaths of forgotten populations.In the first chapter, Smith makes the chilling observation that all of us, at some point or another, will find that our capabilities have diminished. Today's disabled users are not outliers of the able-bodied population - they are a prototype of what our future looks like.The book provides a detailed overview of how people with disabilities use technology. More importantly, it shows that creating effective user interfaces for those with disabilities is beneficial for all users.It showcases numerous application and case studies, including how iPad apps have been used for cognitive therapy, video games to help many types of illnesses and more.An important point the book makes is that there are no easy answers or silver-bullet solutions. There are no quick add-ons which a firm can use to quickly make their user interfaces outcast compliant. Rather it takes a concerted effort from senior management to make accessibility work.A key point Smith makes many times is that students with disabilities are left behind. There are many students who fail in antiquated educational systems since the administration can't restructure their curricula around a child's individual talents or aptitudes. He writes that students with disabilities get stigmatized into special education programs, some of which are very good, but can be socially ostracizing.Throughout the book, Smith quotes many studies and significant amounts of data that shows the power of how software can make significantly positive impacts on the lives of those with disabilities. In chapter 7, he writes that at the Center for BrainHealth at The University of Texas, they used virtual worlds and avatars to help autistic children. That form of therapy has proven to be successful and that 4 or 5 sessions using that technology, is worth 2 or 3 years of real world training.As detailed in many parts of the book, many doctors say the best high-tech treatments are in fact the ones you can download from an app store.As the end of the book, Smith writes that for accessibility to work, it has to be an enterprise initiative. He provides 8 strategic steps to doing that, including creating an accessibility task force (and engaging them from the very beginning of the project), knowing the legal landscape (and not to be driven solely by law), to designing mobile applications to be run universally, and more.Smith sadly writes at the end of the book that while Apple has been at the forefront of accessibility, in 2012, despite having no legal mandate, Apple removed the Speak for Yourself (SFY) application; which was an extremely popular and helpful augmentative and alternative communication app. It seems that SFY is now once again available in the App Store, but with legal maneuvering what it is, that could change at any moment.While the accessibility of technology is getting better every year, there are still many challenges to ahead. Digital Outcasts: Moving Technology Forward without Leaving People Behind articulately and passionately details the groundwork, itemizes what needs to be done, and implores the reader to do something to ensure this trend continues.This book is an important read for everyone. As there are two types of people, those that are currently digital outcasts, and those that will be sometime in the future.The book closes with a most accurate observation: digital outcasts are not a biological model for a future we should fear, they are an inspiration for what we can all become.

The blind person who tries to make an online purchase. The young girl who cannot speak due to a cognitive disability. The man confined to his home due to permanent injury. The single mother with a long-term illness who struggles to feed her family. With one in seven people worldwide currently living with a disability, the term "outcast" covers numerous scenarios. Digital outcasts rely on technology for everyday services that many people take for granted. However, poorly designed products risk alienating this important (and growing) population. Through a "grass roots" approach to innovation, digital outcasts are gradually taking action to transform their lives and communities. This emerging trend provides exciting learning opportunities for all of us. Citing real-world case studies from healthcare to social science, this book examines the emerging legal and cultural impact of inclusive design. Gain a better understanding of how people with disabilities use technology Discover pitfalls and approaches to help you stay current in your UX practices Anticipate a future in which ambient benefit can be achieved for people of all abilities and backgrounds

"The intended reader is anyone attempting to either create more accessible technology for use by the disabled, or has an interest in novel ways that things like virtual reality, computer games, and assistive devices can be used in medicine to treat a variety of disabilities and assist in patient rehabilitation. The book concludes with a series of chapters on socially and environmentally responsible design and thinking ahead to the future in which digital devices will become ever more integrated into daily life and even the human body itself."--Reference Research Book News, December 2013 "Kel Smith makes a significant contribution to the subject of user experience in this easily read but important treatise the book makes a compelling case for universal design, a concept far more expansive than the more common notion of handicapped-accessible technologyThe information here will be challenging and profitable, not only for designers but also for anyone associated with advancing computer technology."--Computing s.com, November 13, 2013 "The book provides a detailed overview of how people with disabilities use technology. More importantly, it shows that creating effective user interfaces for those with disabilities is beneficial for all usersSmith writes that for accessibility to work, it has to be an enterprise initiative. He provides 8 strategic steps to doing thatThis book is an important read for everyone."--Slashdot.org, November 25, 2013 "This is a wise book that accepts that disability, like

ability, is abounding with nuances and variation, and Smith admits that it is behaviour that has to be focused upon rather than any deviceSmith draws this excellent book to a close with the ethics surrounding the technology, along with current and future developments"--BCS online, November 2013From the Back CoverThe blind person who tries to make an online purchase. The young girl who cannot speak due to a cognitive disability. The man confined to his home due to permanent injury. The single mother with a long-term illness who struggles to feed her family. With one in seven people worldwide currently living with a disability, the term "outcast" covers numerous scenarios. Digital outcasts rely on technology for everyday services that many people take for granted. However, poorly designed products risk alienating this important (and growing) population. Through a "grass roots" approach to innovation, digital outcasts are gradually taking action to transform their lives and communities. This emerging trend provides exciting learning opportunities for all of us.Citing real-world case studies from healthcare to social science, this book examines the emerging legal and cultural impact of inclusive design. About the AuthorKel Smith (Principal, Anikto LLC) is a longtime speaker, author and practitioner on digital accessibility. The Pentagon Library, Springer-Verlag, the American Law Institute, the American Bar Association, the International Journal of E-Politics, Kent States Knowledge Management Program, the Sandra Day OConnor College of Law, the E-Access Bulletin and UX Magazine (UPA) have published his papers and articles. His presentations include three appearances at the CSUN Conference for Persons with Disabilities (San Diego), two stints at World Future Society (Boston and Vancouver), the Royal National Institute of the Blind (London), the Interaction Design Association (Savannah), the Unitech ICT Network (Oslo), the Society for Technical Communications (Sacramento) and the Universitat Autnoma (Barcelona). A current member of the Interaction Design Association (IxDA) and the Usability Professionals Association (UPA), Kel served two terms as Vice Chair of the Philadelphia chapter of ACM/SIG-CHI for computer-human interaction. He earned his BFA in photography from the Maryland Institute College of Art and studied cognitive science as part of the MS program at Philadelphia University.