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AN INTERRUPTED HISTORY OF DIGITAL DIVIDES

Bianca C. Reisdorf
Michigan State University

Whisnu Triwibowo
Michigan State University

Michael Nelson
Michigan State University

William H. Dutton
Michigan State University

Background

In the early days of the Internet, researchers across various fields and disciplines focused on the phenomenon of digital divides and digital inequalities (e.g. DiMaggio et al., 2004; Hargittai, 2002; Norris, 2001; Van Dijk 2005; Warschauer, 2004), and this area is reviving as a focus of research (e.g. Reisdorf & Groselj, 2015; Robinson et al., 2015; Van Deursen & Van Dijk 2014; Van Deursen & Helsper, 2015). However, with changing proportions of Internet users and non-users and the changing perception from the Internet being a new innovation to something that the majority of citizens in North America and Western Europe take for granted come changing foci of investigation and changing questions. In this paper, we will investigate the history of methodologies to measuring digital divides and inequalities in the United States and other countries with lower proportions of Internet use, with a case study of an ongoing survey of the State of Michigan. Using questionnaires from Michigan, the US, Hungary, and South Africa reaching back to 1997, this paper examines how the very definition and severity of digital divides have evolved over the last twenty years across these diverse contexts. Changing definitions of digital divides and inequalities are reflected in how questions about Internet access and use have changed overtime, when asked at all. In this regard, by tracking several survey measure over time, it is possible to capture the ebb and flow of academic interest in digital divides, the changing meaning of that term, and the changing character of divides.

Research Queries

To examine the history of digital divide research, we ask the following questions:

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1. How have survey questions regarding Internet use and access changed over the last 20 years? In many respects, changes in the wording of questions about digital divides are as telling as the responses themselves.
2. How frequently were survey questions regarding Internet use and access asked in the last 20 years? If the frequency has changed, when did this happen and what might be the reason? Is the attention cycle of academia little better than the press? How can academic research maintain the systematic study of evolving phenomena through the rise and fall of academic fashions?

Methodology

The methodology for this study combines several approaches:

Survey of Surveys: We will compare a number of questionnaires investigating Internet use and non-use from various years and countries, including questionnaires used in the World Internet Projects (WIP) from the US, Hungary, and South Africa. In addition, multiple waves of the State of the State Survey (SOSS), conducted by Michigan State University's Institute of Public Policy and Social Research (IPPSR) included questions on Internet access and use between 1997 and 2016. Tracking and comparing the wording of questions as well as answer options/values regarding Internet access over time and across national contexts provides a complementary indication of the changing meaning of the Internet and digital divides. Not only the wording, but also the presence of questions speaks to how and when the perception of having Internet access changed from something unusual into something expected. Moreover, tracking the frequency with which these questions were asked provides a sobering indication of the rise and fall of interest in digital divides in the academic community.

Analysis of primary and secondary survey data: To provide a background context of changing questions, we will analyze primary and secondary survey data from the countries whose questionnaires we are analyzing. This allows us to examine whether the wording changes with the proportion of Internet users or within a specific country context at a certain time.

Impact

The combination of these sources of evidence provides a new and unique perspective on digital divide research. It demonstrates the importance of placing digital divide and inequality research, as well as the policy recommendations borne out of this research, in the context of particular time periods and national contexts, along with the changing perception of the Internet and online access at the time. As questionnaires were adapted to general perceptions in each context, we can identify nuanced changes in the data. As an example, someone who was online "a few times per year" (an actual answer option in early SOSS waves) was considered an Internet user in 1999, but would barely be considered an Internet user in 2016. In such ways, this history raises the definition of use vs. non-use as a topic of debate in itself.

At a time where daily Internet use on a variety of devices—often even simultaneously—is considered the norm in highly technologized countries, it is important to reflect back to the rather short history of the Internet when this was not the case. The observed changes in the proportion of users and non-users as well as the frequency of use and

the way we inquire about digital divides and inequalities can be a powerful and informative tool for understanding not only the history of digital divides in highly technologized countries, but also remind the research community of the dramatic changes occurring in the short history of the Internet in ways that can open up new and old streams of research for understanding digital divides in countries with low proportions of Internet users.

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