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Mobile vs. Computer: Implications for News Audiences and Outlets

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Introduction

By 2020, two-thirds of all online activity is expected to take place through mobile networks on mobile devices.¹ Many Americans, including more than half of Latinos, are already mobile-only internet users.² The move to mobile is commonly portrayed as expanding the base of internet users. That's true, but mobile is different.³ Mobile also means a different pattern of internet use, including the likelihood of seeking news online.⁴ Mobile reduces news seeking and engagement. Mobile-only access to news is better than none, but news is more time consuming and costly to access through mobile devices,⁵ resulting in reduced exposure. The effect is most severe among those who are otherwise least exposed to news.⁶

In this paper I will explain mobile's limitations as a means of news consumption and its implications for an informed citizenry. It will be shown that Americans are increasingly abandoning cable in favor of mobile and that news consumption through mobile devices is different from consumption through computers with a high speed connection.⁷ The shift to mobile will increase the problem of informing the public, which was already complicated enough as a result of media fragmentation. The knowledge gap between America's most and least politically interested citizens has widened substantially in the past three decades and will widen further as a result of the move to mobile.

The High-Choice Paradox

News can enrich civic life.⁸ There was a time—the heyday of the broadcast networks—when Americans consumed a lot of news, the great bulk of it provided by print and broadcast outlets wedded to the notion that they were obliged to inform the public.⁹ Changes in communication technology changed that media system. Cable and the internet have produced an abundance of outlets for those with an interest in news.¹⁰ Some Americans now spend more time consuming news than was possible in earlier times. Even the incremental shift from dial-up to high-speed internet has contributed to increased news seeking among the politically interested.¹¹ They have become more politically informed and engaged as a result.¹²

However, the high-choice media system has also been disruptive.¹³ It gives people the opportunity to find like-minded information outlets. Exposure to partisan news serves to reinforce bias.¹⁴ Selectivity—a preference for supportive information and a tendency to dismiss disconfirming information—has long characterized the news audience. But today's high-choice system heightens that tendency.¹⁵ For those who choose to reside in “echo chambers” that tell them what they want to believe, the effect is opinion polarization that can include outright disdain for “the other side.”¹⁶

Today's high-choice system has also led to news avoidance by those with less interest in politics.¹⁷ With media fragmentation has come expanded entertainment options, and most Americans prefer entertainment to news. They still manage some exposure to news. But the amount of time that the average American spends with news has declined over the past three decades while the amount of time they devote to media-based entertainment has sharply increased. A consequence has been a widening knowledge gap between the politically interested and those for whom politics is of passing interest.¹⁸

The Mobile Revolution

The next big disruption—the shift to mobile—is already well underway. Global tablet sales recently surpassed desk and laptop computer sales. At the same time, broadband subscriptions are declining, with people increasingly shifting to wireless.¹⁹

Analysts tend to look at mobile through the same two lenses they have applied to cable and the internet. Through an abundance lens, mobile is seen as yet another step in the transition to a high-choice media environment.²⁰ Mobile means that choices made on cable and the internet can now be made on mobile at any place and time. Through the affordance lens, mobile is seen as expanding the audience for content, particularly in the developing world.²¹ Mobile technology extends internet connectivity to millions who would otherwise not have it.

What's missing in much of this analysis is recognition of the constraints that mobile technology places on how people engage with news content.²² Research indicates that the mobile is less conducive to news consumption than is a traditional computing platform.²³ It is not a “news friendly” platform.²⁴

Research by Karen Mossberger and her colleagues found that high speed internet in the home is a leading predictor of whether people engage in online news seeking, whereas mobile internet access is not closely related to such behavior.²⁵ The smaller screen size of mobile affects user choice and learning.²⁶ Nipam Maniar and his colleagues showed that subjects learn far less when watching video on a small screen rather than a large one.²⁷ Small screen size is also negatively correlated with reading time and ease²⁸ and positively related to time spent scrolling for information.²⁹

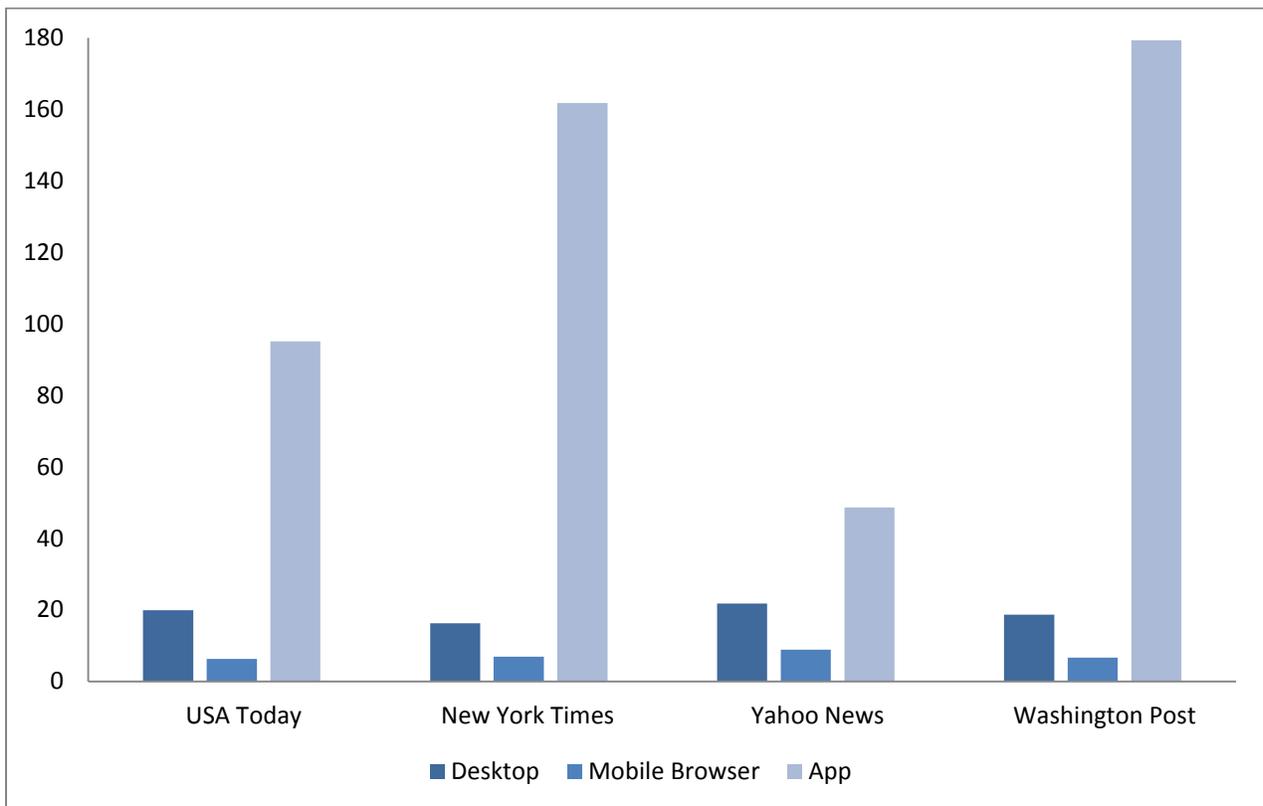
Slower connection speeds on wireless networks present another hurdle for information seekers. When users have to wait longer than a second or two for content to download, they tend to defect. Four of five users will click away if a video stalls while loading. Slow loading content also diminishes a user's likelihood of returning to the site.³⁰ Content providers are investing heavily to shorten load times³¹ but wireless is slow in comparison with high-speed internet

and will remain so for the foreseeable future.³² Slow load time tends particularly to curb use by those who don't regularly consume news.³³

Mobile also restricts news consumption in other ways. In two different experiments I conducted with Kathleen Searles, Mingxiao Sui, and Newly Paul, we monitored news attention and engagement with eye tracking software. Subjects were randomly assigned to computers, tablets, and smartphones and then shown online news stories.³⁴ We found that, relative to computer users, mobile users spent less time reading news content and were less likely to notice and follow links and to do so for longer periods of time.³⁵

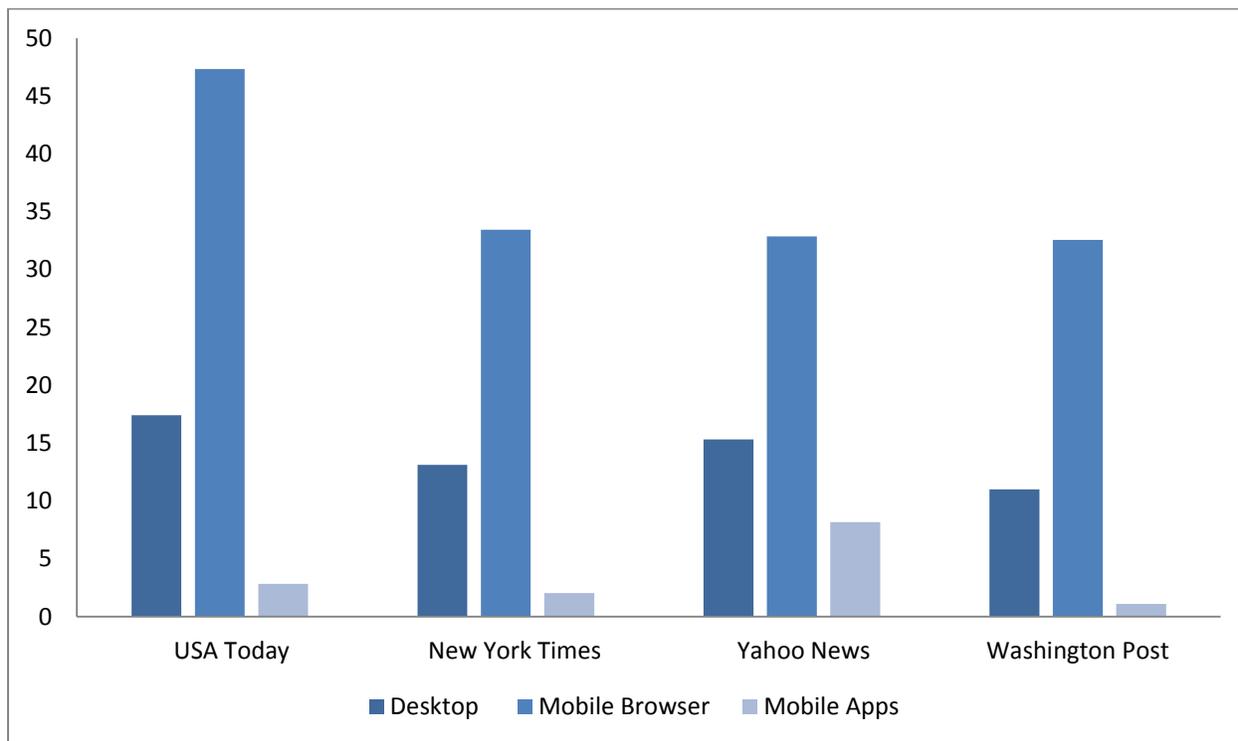
Important tendencies in mobile use can be seen in the comScore data presented in Figures 1 and 2. The first figure shows the average number of minutes that visitors spend on selected major news sites by mode of access—desktop computer, mobile web browser, or mobile app. The second figure shows audience reach by mode of access.

Figure 1: Average Minutes Visitors Spent on News Sites, Access via Desktop, Mobile Browsers, and Mobile Apps



Source: comScore, Media Metrix Data for March 2016.

**Figure 2: News Site Audience Reach for Desktop, Mobile Browsers, and Apps
Estimated Average Number of Website Visitors (in Thousands)**



Source: comScore, Media Metrix Data for March 2016. Audience reach is the estimated average number of individuals (in thousands) visiting any content of a website per day in the report month.

As Figure 1 shows, attention to news is quite high among mobile users who use news apps. In fact, the time spent on sites when accessed by mobile app exceeds the time spent on sites accessed through desktops or mobile web browsers. However, as Figure 2 shows, the mobile news app audience is only a fraction of the desktop or mobile-browser audience. Figure 1 also shows that time spent on sites via desktops is more than double that of the time spent through mobile browsers. Another look at Figure 2 points to a reach vs. engagement tradeoff. Though mobile browser users’ average time on news sites is short – audience reach is greatest through that mode of access.

The reach versus engagement tradeoff is also apparent in the Pew Research Center’s analysis of the top 50 digital news sites. The large majority of the top 50 news sites had higher time rates per visit for desktop than for mobile, whereas the large majority of the top 50 sites had more visitors through mobile than through desktop.³⁶

In light of what we know about Americans’ preferences in a high-choice media environment, these findings are predictable. Only those with the highest levels of

political interest will implant news apps on their mobile devices. We can expect them to pay substantial attention to mobile-delivered news. Yet, they are relatively few in number. Most mobile users encounter news content through web browsers, much of which is the result of click-based incidental exposure.³⁷

Different Connections and Different Audiences

Princeton's Markus Prior notes that a high-choice media system offers more of everything, entertainment as well as news. During the broadcast era the news monopoly at the dinner hour resulted in a high level of news exposure. News was viewers' only choice, and many Americans were wedded enough to television to watch it. With the advent of cable in the 1980s, the choices expanded and the flight to entertainment began.³⁸

Mobile is a high-choice platform. Audience statistics reveal that news is a relatively small part of the content accessed through mobile, which is contributing to Americans' widening news and information gaps. The politically interested are consuming more news than before, and know more about politics than before. The politically uninterested are shying away from news, and know less.

These tendencies differ across the American population, and mobile will further widen several already wide demographic divides.³⁹ According to Pew, the percentage of Latinos with home internet service has dropped while the percentage of Latinos that are mobile dependent has risen sharply. Mobile dependency has also risen more sharply among black Americans than white Americans. At present, roughly one in four Latinos and one in five black Americans are mobile dependent, compared with one in ten white Americans. Income is a strong predictor of the form of internet access, with lower-income Americans having less access to high-speed in-home service⁴⁰ and greater dependency on mobile service.⁴¹ Age, too, is in play. Young adults in the broadcast era consumed nearly as much news, and knew nearly as much about politics, as older adults. Today, young adults consume much less and know much less, with further declines to come, given their strong preference for mobile.

Unlike home access, mobile access has a variable cost. It's based on usage level, which forces the user to make a cost-benefit calculation.⁴² For those on a small budget, choices have to be made, and news is almost certain to take a back seat to more pressing or compelling uses. How many mobile dependent users are willing to bear the cost of news? Even in the home, where the cost is constant, the slice of internet traffic dedicated to news is very small relative to that devoted to entertainment, product consumption, and the like.⁴³ We also know that individuals of lower income generally have less interest in news.⁴⁴ When low interest and cost consciousness are combined, the result is predictable. News is a commodity that many mobile users are not willing to pay for. Free in the home is

one thing. Paying a higher mobile bill each month to consume a significant amount of news is another, a tradeoff that many Americans acknowledge. Forty-nine percent of Latinos in a Pew survey reported that their lack of broadband access was a barrier to their ability to keep up with the news.⁴⁵

Implications for News, Democracy, and Governing

Access to the internet via mobile devices has changed the way we engage with news, and how often and fully we attend to it—a shift that has affected segments of the American public in different ways. The implications are substantial.

News organizations are seeking to navigate the shift to mobile, recognizing that adjustments in the timing and content of news will affect their ability to attract audience. News organizations are not just thinking about when and how to format and deliver their news, but where screen size, resolution, and connection speed fit in. Even seemingly small differences such as screen orientation have been shown to affect users' behavior.⁴⁶

The discussion here highlights the need for deeper thinking about specific audiences and the particular constraints they face in the mobile setting. News organizations are aware they must know their audience. But for all news organizations hoping to cultivate and maintain an online audience, the lesson to date is clear: mobile news content must be crafted with the constraints of the mobile environment in mind. Research is only now beginning to emerge that could provide precise guidelines about how to navigate the constraints. Even something as basic as the difference between the app and the browser experience is not yet well understood. Preliminary evidence, including that of our experiments and the comScore data, indicate that important differences exist, but a larger understanding of such differences is needed if news organizations are going to flawlessly navigate the world of mobile.

News organizations face a menu of questions. For text based content, for example, they need to know more about user response to headline and link placement and style and how the arrangement of words and pictures on small and large screens affect user response. And with all such questions, there is the attendant question of whether the response varies depending on whether the user reaches the site through an app or mobile browser. Attracting and retaining audience in the mobile era is already an uphill battle. A better understanding of user behavior is needed if the odds are to be improved.

The move to mobile also raises challenges for democracy. Mobile has been shown to curb news seeking, attention, and engagement, adding to the concern that today's fragmented media environment is eroding the public's level of information and engagement. That concern is multiplied by the fact that citizens who are turning to mobile are already among those who are the politically least

informed and interested. There is literally nothing in the mobile experience that is likely to convert the less interested and a lot of reason to think that mobile will aggravate the information and engagement problem. It may be correct to conclude, as some already have, that we are entering an era of second-class digital citizenship led by a mobile-only digital underclass.⁴⁷

A conceivable result is a widening disconnect between those who are politically interested and informed and those who are not. Given that this disconnect falls along income, racial, ethnic, and occupational lines, the effect could be an acceleration of the divide between America's haves and have-nots—this at a time when that divide is already a source of political concern and unrest.

Any such development would have governing implications. Mobile has other governing implications as well. It could create pressure to reduce government funding for public access computers and could slow the effort to extend broadband connections in rural areas and poorer urban neighborhoods and rural areas.⁴⁸ It's already the case that some schools are requiring students to have tablets rather than laptops, undoubtedly in a well-meaning effort to respond to student interest while saving money. But schools need to recognize that such a policy is not simply a question of platform substitution. It will change students' behavior, including their inclination to access news content.

In short, the shift to mobile has broader consequences than are typically acknowledged. To be sure, from a public interest perspective, access to the internet through mobile is better than no access at all. But the massive shift from computer to mobile that's underway will create disruptions for news organizations and present new challenges to democracy and government. Major technological changes rarely enter society without altering it, and mobile is unlikely to be one of the rare exceptions.

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