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If data portability's the solution, what's the problem?

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As the large tech platforms are daily pilloried in the press and the halls of Congress, some form of internet regulation is becoming increasingly likely. Among the most prominent proposals is a requirement for “data portability.”

Proponents argue that data portability, perhaps together with the related concept of interoperability, is necessary to promote competition with the major digital platforms. In most cases, however, consumers can use new services relatively easily without transferring their data. This suggests that data portability would likely do little or nothing to encourage entry.

Moreover, the notion that data portability and interoperability are pro-competition and pro-innovation is based on a misconception of the dynamic nature of competition in digital platform markets. In these winner-take-all (or most) markets, firms make risky investments in order to earn large profits if they win. Proponents of data mobility and interoperability requirements appear to want to make switching between platforms as frictionless as possible. While this might have short-term benefits, it would also reduce potential returns for winners and therefore the incentive to invest and innovate. Investment in existing platforms may decline, because the benefits of those investments would be shared with competing platforms.

Finally, implementing data portability and/or interoperability would entail a complex set of regulations and standards. The process of developing these standards would be lengthy and costly and would almost inevitably favor large incumbents.

Data portability has broad support

Data portability has, in a short period of time, become a rare point of widespread agreement. The right to data portability is one of eight rights included in the European Union’s General Data Protection Regulation (GDPR). Data portability for tech platforms is also a central requirement of the “Augmenting Compatibility and Competition by Enabling Service Switching Act of 2019” (the “ACCESS Act”), recently introduced by Senators Warner, Hawley, and Blumenthal. The ACCESS Act goes further, however, and would require platform “interoperability.” Data portability is even part of Facebook CEO Mark Zuckerberg’s four-part internet regulation proposal outlined in a recent Washington Post oped.

While advocates suggest portability has privacy benefits by giving individuals more control over their data, their main argument is that portability would encourage entry and competition with incumbent tech platforms that are perceived to have too much market power. According to this view, moving from a large tech platform to a competitor is difficult because incumbents hold consumers’ data. A trove of data with incumbents and the lack of data held by competitors therefore create high switching costs for consumers and entry barriers for competitors. Making data easier to port could, depending on the service, make it easier for consumers to switch to a competitor.

Three major reports on digital platform competition issues published in 2019 – by the European Commission (EC Report), the United Kingdom Digital Competition Expert Panel (UK Report), and the Stigler Center at the University of Chicago (Stigler Report) – endorsed a data portability requirement. These reports have also endorsed some form of interoperability – sometimes in the

form of “open standards.” Variants have also been proposed by Gans, Zingales and Rolnik, and a number of advocacy groups.

To think through the possible implications of data portability, it is important to consider what the concept would mean in practice.

What do data portability and interoperability mean?

A rhetorical appeal of the proposal is that it harkens back to earlier days of telecommunications networks. Two oft-cited examples are requirements for telephone companies to interconnect their networks and the number portability requirement, which makes it easier to change mobile phone carriers.

But with tech platforms that do more than just carry voice or data from one point to another, portability and interoperability are more complex.

Article 20 of the GDPR allows individuals to obtain “in a structured, commonly used and machine-readable format” and use data that a company holds on them. The EC Report interprets Article 20 as clearly applying to “volunteered” data (data that consumers input about themselves), possibly applying to data that businesses “observe” (e.g., what consumers read or watch online). The report does not interpret Article 20 as applying to data that businesses “infer” by combining other data.

The UK Report proposes a broader concept of “personal data mobility” – being able to move or share data at the “click of a button.” This button click would apply to individuals’ “personal data, for example, their profile, purchase history or content.” Such data could be volunteered data that consumers input about themselves, observed data, or inferred data, depending on the circumstances.

Gans argues that standard data portability that addresses only the user’s data is insufficient. Data that users receive from and provide to others in their network also add to switching costs. To address this issue, Gans proposes “identity portability,” where users retain the right to access others’ data. In the Gans proposal, “The users will leave only the platform’s algorithms and services behind, and not their contacts.” The Gans proposal is similar to “social graph portability” proposed by Zingales and Rolnik, where consumers own all their digital connections.

The Gans and Zingales/Rolnik proposals would permit customers to communicate with their contacts regardless of which platform they or their contacts are on. How that could be done without also accessing algorithms and services on other platforms is unclear.

These proposals aim at interoperability in the same way that phone networks are interoperable. The similarities are in name only, however, given the differences in the technologies and their uses. Proposals from the reports referenced above that call for “open standards” also imply interoperability.

What problems do data portability and interoperability address?

Proposals for data portability and broader measures, such as interoperability, stem from the idea that the economic characteristics of digital markets – strong economies of scale and scope and network effects that make them subject to winner takes all, or most, of the market – create serious barriers to entry. This problem (according to this view) is exacerbated by incumbents’ data advantage, which is viewed as a major barrier to entry. Accordingly, data portability and interoperability are ways to increase competition, which would produce enough additional innovation and other benefits for consumers to overcome costs of loss of scale and scope economies and network effects. These conclusions, however, are all assumptions as little analysis has evaluated whether easier data portability or interoperability for tech platform users would, in practice, produce more competition, innovation, or other consumer benefits; nor has it been demonstrated that a market failure justifies government intervention to lower switching costs.

Research by Catherine Tucker suggests that possessing large amounts of data is less important and less likely to be a source of market power than many believe. She finds that economies of scale and scope in data are relatively limited. The ability to know what to do with the data – to develop smart, predictive algorithms – is a much more important source of competitive advantage. Tucker’s argument suggests that proposals along the lines of Gans’ proposal – which leaves behind the algorithms and services – might not significantly affect the competitive landscape (although as discussed below, they affect incentives to improve those algorithms). Moreover, data are widely available, for example, from data brokers, again suggesting it may not be data itself that provides a key advantage. It also suggests that the competitive “problem” may not be significant. Absent anticompetitive behavior, an entrant with better algorithms and services should be able to succeed.

Data portability is an aspect of competition. On the one hand, firms have an incentive to make it difficult for their customers to leave. On the other hand, firms have an incentive to attract customers in the first place, and facilitating data portability could help do that. Consumers are more likely to sign up for a service if they won’t be “locked in” if they are unhappy with the service. For example, an entrant into the fitness app space would have an incentive to offer data portability to gain a competitive advantage over firms that did not provide that feature.

Many applications, including health and fitness apps, and music streaming services, allow consumers to port their data, although perhaps not as seamlessly as some would like. Nield discusses this in the context of fitness apps. In any event, there seems to be lots of choice among fitness apps and streaming services, even though transferring data from one app to another, while possible, is not always easy.

Gans observes that platforms – including Google, Facebook, Twitter, and LinkedIn – already offer “standard” data portability along the lines of the GDPR requirement. These offerings result from a combination of market and regulatory pressures.

In some cases, limited competition (as defined by number of firms) exists even when switching costs are low. For example, Lyft and Uber are the major ridesharing companies, but data portability is not an issue. The only data you need to “port” to use a new service is a credit card number.

Concerns about market power (whether legitimate or not) focus on the largest tech platforms – principally, Apple, Amazon, Facebook, Google, and Microsoft – each of which has a different business model, particularly with respect to data. The Apple and Microsoft business models are less dependent on personal data, so would probably be less affected by a data portability requirement. That leaves Facebook, Google, and Amazon. While each of these companies is in multiple businesses, the concern in each case is narrower – Facebook’s social media network, Google’s search engine, and Amazon’s online retailing business.

Tucker observes that the ability to take historic data matters only in some cases – she points to certain medical and financial applications. For most consumer-facing applications, however, data portability would offer minimal benefits because the ability to transfer historic data is not an impediment to switching or multihoming.

Amazon and Google illustrate this point. An inability to port my purchase history from Amazon is not going to deter me from purchasing from other retailers if they offer better prices, products, or service. Similarly, it is not my Google search history that deters me from using Bing, DuckDuckGo, or any other search engine, either in place of Google or along with it. These search engines have been available and easy to use for many years and have failed to make a dent in Google’s share of general search, suggesting that Google’s market share is a reflection of consumer preferences.

That leaves Facebook. Switching costs for Facebook’s users are high, but only under a dated, and probably inappropriate, definition of “switching.” Nothing keeps people from using multiple social networks, each of which specializes in different areas. Nothing keeps people from using, for example, Facebook, Twitter, LinkedIn, Snapchat, and other services simultaneously. “Switching” from one to another is nonsensical given their differing purposes. In social media, there does not seem to be much demand for a “new” Facebook, as evidenced by the failure of Google’s Facebook clone, Google+. Instead, there is consistent demand for new types of social media, most recently evidenced by the rise of TikTok.

To the extent there is demand for a “new” Facebook, it is difficult to see how data portability would lower entry barriers unless, possibly, it allowed you to port all your friends. This presumably is the rationale behind the Gans “identity portability” and Zingales/Rolnick “social graph” portability proposals, which are close to or equivalent to proposals for full interoperability.

Lower innovation and other costs

Data mobility and interoperability requirements are intended to promote competition and innovation by reducing switching costs. This argument misconstrues the nature of competition in digital platform markets.

In sectors where “competition for the market” is important – the sectors at issue – entrepreneurs and venture capitalists compete in order to earn large returns from the fraction of ventures that succeed. To the extent that lowering switching costs lowers those returns, the incentive to invest in such ventures would be diminished.

The incentive to invest in new features and improvements to existing platforms would also be diminished, because those improvements could be accessed by customers of competing platforms. The platform making the investment would not be able to capture the full returns from its investment.

Moreover, data portability and interoperability requirements would entail additional costs, as illustrated by the ACCESS Act. Both portability and interoperability require accessible interfaces, and privacy and security standards for platforms that may receive data or may be interoperable.

Under the ACCESS Act, developing standards for accessible interfaces, as well as privacy and security, would involve the Federal Trade Commission (FTC) as well as the National Institute of Standards and Technology. The ACCESS Act requires interoperable interfaces based on “fair, reasonable, and nondiscriminatory” (FRAND) terms. These terms presumably include rates the platforms would charge each other for exchanging data and other services – a ratemaking problem that, despite much experience, has always been challenging. The FRAND concept is vague and has been difficult to define and apply in the world of standard-essential patent licensing from which it comes. Ruling on what is “fair, reasonable, and nondiscriminatory” under the Act would presumably fall to the FTC, which would also promulgate rules to facilitate verification of validity of requests for user data and otherwise implement the Act.

Standard setting is typically a costly and lengthy process, which invites strategic behavior by the affected parties. At each stage of rulemaking and developing standards, the largest firms with the greatest resources can be expected to play a disproportionate role. This provides an opportunity, for example, to develop technical standards that favor the larger firms. Indeed, Facebook, Google, Microsoft, and Twitter are already collaborating on a “Data Transfer Project, to develop standards to move data between platforms.” Although the ACCESS Act has a cutoff of 100,000,000 monthly users and other proposals are targeted at “dominant” firms, the proposals would affect firms of all sizes that are part of the ecosystem and potential participants in data transfers.

Even with all the regulatory controls envisioned by the ACCESS Act, the standards developed are unlikely to address all the privacy and security issues inherent in exchanging data between platforms with different policies and practices.

Antitrust is a better alternative

Although the idea of mandating some form of data portability or interoperability for tech platforms has gained currency, proponents have not produced the evidence that these measures would yield more competition and innovation. Proposals for these mandates are based on a static view of competition, which has limited applicability to the digital economy.

The rationale for mandating data portability or interoperability is that users can't move between platforms without taking their data with them. But switching costs are not a barrier to using a new online retailer or search engine. There is even entry by new social networks if they are able to differentiate themselves.

To the extent tech platforms present a market power problem, antitrust is a better answer than data portability and interoperability mandates. Properly applied, antitrust can help assure that new rounds of "competition for the market" will be on the merits.

Antitrust, however, requires finding that a firm (1) has market power, (2) has engaged in anticompetitive acts, and (3) consumers have been harmed. There have been no such findings thus far.

References

- European Commission, *Competition policy for the digital era*, <https://ec.europa.eu/competition/publications/reports/kd0419345enn.pdf>
- Gans, Joshua, “Enhancing Competition with Data and Identity Portability,” The Hamilton Project, Brookings, June 2018, https://www.hamiltonproject.org/assets/files/Gans_20180611.pdf
- Nield, David, “Switching to a new fitness app? Here’s how to bring your data with you,” *Popular Science*, December 23, 2018, <https://www.popsoci.com/transfer-health-fitness-data/>
- Stigler Committee on Digital Platforms, *Final Report*, 2019, <https://research.chicagobooth.edu/-/media/research/stigler/pdfs/digital-platforms---committee-report---stigler-center.pdf?la=en&hash=2D23583FEF8BCC560B7FEF7A81E1F95C1DDC5225E>
- Tucker, Catherine, “Digital Data, Platforms and the Usual [Antitrust] Suspects: Network Effects, Switching Costs, Essential Facility,” *Review of Industrial Organization*, 54 (4), 683-694.
- Unlocking Digital Competition, Report of the Digital Competition Expert Panel*, <https://www.gov.uk/government/publications/unlocking-digital-competition-report-of-the-digital-competition-expert-panel>
- Zingales, Luigi and Guy Rolnik, “A Way to Own Your Social-Media Data,” *The New York Times*, June 30, 2017, <https://www.nytimes.com/2017/06/30/opinion/social-data-google-facebook-europe.html>
- Zuckerberg, Mark, “The Internet needs new Rules. Let’s start in these four areas,” *The Washington Post*, March 30, 2019, https://www.washingtonpost.com/opinions/mark-zuckerberg-the-internet-needs-new-rules-lets-start-in-these-four-areas/2019/03/29/9e6f0504-521a-11e9-a3f7-78b7525a8d5f_story.html