Data localization refers to various policy measures that restrict data flows by limiting the physical storage and processing of data within a given jurisdiction’s boundaries. Multiple countries have adopted localization policies to combat multiple concerns over the free flow of data. A vital question, then, is whether any particular variant of data localization would help the Indian government meet its multiple stated objectives for considering such a policy course.

There are four key types of localization variants. These include (a) conditional localization that entails a local storage requirement, (b) unconditional local storage requirements (for all personal data), (c) unconditional mirroring requirements (for all personal data), and (d) the unconditional free flow of data with bilateral/multilateral agreements for data access and transfers. This paper breaks up these four variants further into a total of nine specific designs and evaluates which would best serve India’s objectives.

The Case for Data Localization in India

Data localization has become a significant policy issue in India in the last decade. This is primarily due to the perceived economic benefits of processing Indian consumer data, and difficulties accessing personal data for national security and law enforcement purposes. In 2019, the Indian government introduced a data protection bill in the Indian parliament, which is still being debated and considered. This bill proposes the country’s first economy-wide data localization framework. That said, more tailored, sector-specific data localization measures have already been implemented in many parts of the Indian economy. For example, the telecommunications sector already requires the local storage and local processing of subscriber information and prohibits the transferring of subscribers’ account information overseas. Most recently, India’s central bank, the Reserve Bank of India, has mandated that all payment data be stored in India, though it can be processed abroad.

The Indian government’s motivations for enacting data localization have been articulated in multiple government documents. One especially noteworthy document is a report produced by the Committee of Experts under the chairmanship of Justice B. N. Srikrishna. The report has provided detailed reasons for proposing the localization of personal data. The same committee then formulated a legislative proposal based on its findings in the form of a 2018 draft known as the Personal Data Protection Bill. The Indian government introduced the 2019 bill in the Indian parliament based on this draft.
The Indian government has given four stated objectives for pursuing data localization:

- securing faster and better access to personal data for law enforcement
- increasing economic growth and boosting employment
- preventing foreign surveillance and
- better enforcing data protection laws

A central question is what kind of data localization measure, if any, is best suited to meet the government’s stated objectives? This paper sought to answer this question by studying each of the state’s objectives to understand whether any specific design of data localization measure would be most suitable.

Findings

At the outset, this analysis revealed that data localization measures do not further two of the stated objectives: preventing foreign surveillance and better enforcing data protection laws. This is because localization does not enable the Indian government to further legal claims for accessing data. The best way to make such legal claims is to do so directly by establishing regulatory jurisdiction. The paper therefore focused on assessing the government’s other two objectives—securing data access for law enforcement agencies and increasing economic growth.

First, Indian law enforcement agencies face major constraints in getting timely access to data. This is usually because the data that law enforcement personnel is seeking is collected in India and stored in another jurisdiction, leading to a conflict of legal systems. Currently, governments go through legal instruments known as mutual legal assistance treaties (MLATs) to access this data. However, this process is considered cumbersome, as on average it takes ten months for governments to gain data access in this way.

To measure which type of localization measure would best help law enforcement personnel get improved access to personal data, four criteria were used: (a) the scope of data accessible after localization (31 percent weight), (b) the speed at which data would be accessible to law enforcement (50 percent), (c) the countervailing risk of losing foreign businesses that provide data-related services in India due to localization requirements (5 percent), and (d) the countervailing risk of retaliatory action against Indian firms by foreign governments (14 percent). Each localization measure was scored on these criteria to tabulate aggregate scores for ranking the different kinds of localization measures.

The scores highlight that restrictive localization options do not actually increase the speed of access or the scope of access to different types of data because foreign businesses are still required to comply with the laws of their home countries while serving consumers in India.

Localization measures that impose minimal restrictions on the flow of data, combined with bilateral or multilateral arrangements for access to data, scored the highest. The current status quo is the most suboptimal—the policy option of allowing free-flowing data while keeping the cumbersome MLAT process scored the lowest. Furthermore, the 2019 bill before the Indian parliament is not well-designed to meet the needs of India’s law enforcement agencies. (See the full paper, especially appendix 2, for a full explanation.)
Second, it is commonly asserted that localizing the data of Indian consumers within India would likely spur economic growth and support innovation in India more than allowing data to flow freely. To gauge which localization measure would best help increase economic growth by benefiting Indian producers and the larger economy (compared to the status quo of free-flowing data), four criteria were used. These include (a) increasing demand for local goods and services (36 percent weight), (b) giving Indian firms a competitive advantage (38 percent), (c) the countervailing risk of loss of businesses related to Indian data (18 percent) and (d) the countervailing risk of retaliatory action against Indian firms from foreign governments (8 percent). Again, each localization measure was scored on these criteria to tabulate aggregate scores so that the various localization options could be ranked.

The localization measures that impose a local storage requirement and permit the global processing of data scored the highest. On the other hand, the policy status quo is suboptimal—policy options featuring the free flow of data with cumbersome MLATs again scored low. Based on these findings, the 2019 bill before the parliament is not well-designed to best meet the government’s stated objective of spurring economic growth and innovation. (The full paper, especially appendix 3, contains a full explanation.)

Conclusion

It turns out that data localization and data access cannot be equated. Localization policies premised on the mistaken assumption that they can be are not likely to serve their purpose and may result in unintended costs. Specifically, law enforcement personnel must gain the data access they need by either establishing an explicit claim of jurisdiction or by solving jurisdictional conflicts through bilateral or multilateral arrangements. The best alternative for India to enable higher economic growth and innovation involves a localization framework that mandates a local storage requirement but allows global processing of data.

Policymakers must work toward reconciling the differences and tradeoffs between different localization frameworks. While these findings did not seek to exhaustively replicate all the localization proposals in the Indian data protection bill, this paper examines stylized policy alternatives designed to give stakeholders a clear idea of the relative advantages of various localization options. Another caveat is that underlying facts are likely to change rapidly due to the nature of technological progress and regulatory developments in domestic and international settings. This paper offers an in-depth explanation of these findings as a substantive contribution to ongoing policy discussions about the merits and drawbacks of different localization approaches.