Technological and related developments—including new and improved solutions to store, manage, and process data; increased computing power; and mobile connectivity—have led to an exponential growth of data available to the financial services industry to gain greater insight into new and existing markets and consumers. However, it is difficult for mainstream financial institutions to obtain and convert raw data into actionable insights. They often need to collaborate with third-party data providers to source and analyze the data and to build the connections necessary for it to flow from the point of origination to its final point of utilization.

New Types of Data: Pros and Cons

The rapid growth of data is creating opportunities to reach a wider range of markets and customers, however, not all data is applicable to all products or use cases, and financial service providers (FSPs) have found that sourcing the right data type presents challenges of its own.

### Pros vs Cons

<table>
<thead>
<tr>
<th>MOBILE PHONE</th>
<th>SMARTPHONE</th>
<th>SOCIAL MEDIA</th>
<th>EMAIL</th>
<th>UTILITY PAYMENT</th>
<th>E-COMMERCE</th>
<th>PSYCHOMETRIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low cost</td>
<td>More data capture options</td>
<td>Scanning rapidly</td>
<td>Widespread availability and use</td>
<td>Additional source of payment history data</td>
<td>Useful for assessing micro, small, and medium enterprises (MSMEs)</td>
<td>Can be used to test anyone</td>
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<tr>
<td>Deep market penetration</td>
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</tbody>
</table>

**MOBILE PHONE**
- Difficult accessing data from mobile network operators

**SMARTPHONE**
- Lower market penetration
- High cost of data plans

**SOCIAL MEDIA**
- Consumer distrust
- Restrictions on use

**EMAIL**
- Time required to analyze messages
- Fragmented across different email providers

**UTILITY PAYMENT**
- Effort required to collect and verify payment history

**E-COMMERCE**
- Limited applications beyond MSME lending

**PSYCHOMETRIC**
- Time required to take test
New Data Challenges

From recruiting and retaining the right technical talent to navigating a fragmented regulatory landscape, mainstream financial institutions face both internal and external challenges in leveraging data for financial inclusion.

Internal Challenges

- Changing the banking culture
- Attracting technical talent
- Modernizing legacy IT systems

Data Management Challenges

- Identifying the most relevant data and where to begin
- Slow and arduous value extraction
- Getting data privacy and consumer consent right
- Data fragmentation and willingness of external parties to share
- Incomplete digital proliferation

Regulatory Challenges

- Fragmented regulatory requirements
- Regulatory uncertainty
- Data localization
- Strict rules surrounding the use of alternative data

Strategies for Leveraging New Data

**Engagement with Regulators and Policymakers**

While mainstream financial institutions should build internal expertise in data management and compliance, working with policymakers and standard-setting bodies can bring about greater regulatory clarity and direction providers need to effectively use data across jurisdictions to expand financial services to emerging consumers. Strategies for engaging regulators include initiating broader ecosystem-level discussions on new data and analytics tools, developing regulatory guidance or model legislation to clarify compliance requirements, and supporting regulatory sandboxes that allow providers to test new innovations within a controlled environment.

**Partnerships**

Collaboration between legacy FSPs and fintechs is facilitating the expansion of data-driven products and services to new customer segments at a quicker pace, lower cost and with less risk than previously possible. For example, fintech provider DemystData works with financial institutions to standardize and clean their data, source data from third parties, and test and validate data on a secure cloud-based platform. Through the platform, banks can select potential new customers based on their internal risk appetite.

**Emerging Technologies**

Artificial intelligence (AI) and blockchain are two data-centric technologies with great potential to deepen financial inclusion in the long term. AI can gather, process, and analyze large amounts of data quickly and effectively, thus helping financial institutions make more informed decisions, automate processes, and reduce operational costs. Blockchain is a decentralized, distributed ledger technology that keeps a permanent record of transactions across a network of computers. Blockchain can streamline know-your-customer and identity verification processes, create digital identities for customers lacking formal documentation, and improve data access for banks and external parties. These technologies could give emerging customers greater control over their data and lower the barriers to their inclusion in the formal financial system.
New Data Product Breakthroughs

**WeBank Social Media**
Since 2015, WeBank has used social media data generated from Tencent’s WeChat and QQ messaging platforms to inform its lending strategy. WeBank uses blacklist data and creates social graphs—which trace the evolution of a user’s social media profile and communication frequency—to detect fraud risk and assign proprietary social scores to applicants to inform credit decisions.

**SCB Abacus e-Commerce**
SCB Abacus is a data analytics firm that uses nontraditional data and artificial intelligence and machine learning techniques for a new customer rewards product, alternative credit scoring, and MSME lending. These efforts allow its parent company, Siam Commercial Bank, to recommend relevant products to customers, identify new creditworthy thin-file borrowers, and increase access to capital that businesses need to grow.

**Mainstreaming Financial Inclusion: Best Practices** is an initiative of the Center for Financial Inclusion at Accion, in partnership with the Institute of International Finance and the International Finance Corporation, with support from MetLife Foundation, to facilitate learning and action on how mainstream financial institutions around the world can reach underserved populations with quality financial services. Learn more: [http://bit.ly/MainstreamingFI](http://bit.ly/MainstreamingFI)