Digital Financial Services: Customer Level Risks and Regulations

Data has always been an essential element of financial service delivery. Providers use demographic and geographic information to decide who to target; lenders use income, credit history, age and other factors to make credit judgments; and insurers use demographic data to target specific market segments and set premiums. Often this has been "soft" data, based on relationship information managed by individual staff; or it may have been collected in paper form (sometimes self-reported by customers) which is difficult/costly to verify, and very difficult to aggregate. Big (or alternative) data access and analytics can dramatically expand financial access, allowing providers to serve customers who are poor and those living in remote areas in new and better ways. Below are some of the ways in which data analytics can play a role in advancing financial inclusion:

Scope and depth	Tailoring product characteristics to the needs of individuals	Deployment of data-enabled services at a large scale	Risk management, increased operational efficiency, and greater affordability
• Big data aggregates customer behavior across different dimensions (e.g., airtime consumption and savings behavior) and can provide insights for a large aggregated pool of users, while at the same time providing highly individualized insights about individuals.	• Providers can develop tailored offerings, rather than a single mass-market offering. The fact that data can be accessed digitally, centrally and in real time means that the cycle to improve products and service can happen faster.	• Providers can have information they need to know and make decisions without physical presence. This opens the possibility of remotely issuing loans or insurance over digital channels that can reach large segments of the market fast, including unbanked	• Data on behavior can improve provider's risk management by enabling them to better predict borrower's willingness to repay. This in turn can benefit the unbanked who might not have proper documentation or credit history, but are reliable borrowers

However, the collection, analysis and use of enormous pools of consumer data has also given rise to concerns for the protection of financial consumers' data and privacy rights. With big data consumers no longer know or understand when data is collected, what data is collected, by whom, for what purposes, or how it is then linked and shared. These problems are exacerbated for poor consumers who often have more limited literacy, even less experience with modern uses of data, and less ability to negotiate, object or seek redress. This collection and use of big data by financial providers poses multiple risks for all consumers, including discrimnation, fraud and privacy issues.

Discrimination

• Inaccurate and discriminatory conclusions about a person's creditworthiness based on insufficiently tested or inappropriate algorithms

Fraud

• Unanticipated aggregation of a person's data from various sources to draw conclusions which may be used to manipulate that person's behaviour, or adversely affect their prospects of obtaining employment or credit

• Data breaches leading to identity theft and other fraudulent use of biometric data and other personal information

Loss of privacy

- Disclosure of personal and sensitive information without transparent process
- Publication of loan defaults and other personal information

There is broad agreement that data protection for DFS should be enhanced in order to mitigate the risks faced by all the stakeholders, including customers. Countries need to establish laws to protect the privacy of consumers and avoid discrimination. However, there are significant gaps in knowledge and evidence that are needed to inform these policies and regulations.

- There is a need for investigation and assessment of the broad range of the potential harm that may flow from data and privacy breaches in relation to DFS.
- Efforts also need to be made to address the unintended consequences that data protection rules may have on financial inclusion efforts.

There are various policy theme areas that have surfaced for consumer consideration and further discussion:

Data privacy	• Providing details as to how the data is gathered and used for identifying prospects, credit ratings, scoring and the credit-approval process • Instituting a process for correcting or deleting inaccurate or unsolicited information.
Opt-in as opposed to opt-out models	• Several of the financial providers utilize mobile and othe data often by default or with limited and/or offer obscure opt-out features. • Clearly informing customers how their data will be collected and used, as well as allowing these informed customers to opt-in as opposed to opt-out
Credit information sharing	• Sharing of borrowers' data need to address questions such as which data, how much data, the ideal frequency of the reporting • Ensuring that data information is only shared with other parties, and with the express approval of the borrower
Cyber Security and Data	• Ensuring that financial service providers players make sufficient investments in data protection and cyber security • A regulation addressing this should include identifying and assessing cybersecurity threats, protecting infrastructure and platforms from cyber intrusions, detecting a compromise or vulnerability, responding through a risk-based plan
Pricing Transparency	• Ensuring that lenders offer clear comparable standardized pricing policies • This is especially a concern when repayments occur as a percentage of payments flow and not as specific sums on specific dates
Balancing integrity, innovation and a competitive marketplace	• Any policy or regulation to protect consumers needs to also ensure that it doesn't discourage innovation or competition in the marketplace . They should not hinder the entry of new types of financial service providers, new instruments and products, as well as new business models or channels.