Responsible Digital Credit

What does responsible digital credit look like?

July 2018

AUTHOR

John Owens

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Executive Summary

Throughout the world, small loans to individuals and very small businesses are increasingly made through digital credit. Digital credit is defined as loans accessed through a digital channel, either online, through a mobile device or through a third-party agent. In this study, we analyze a range of digital credit provider categories and models, the consumer risks they involve, and some of the standards being developed to address these risks. Finally, we make recommendations for the Smart Campaign and other organizations concerned with financial consumer protection to consider.

Consumer Risks in Digital Credit

Digital credit customers in markets around the world are facing diverse and numerous financial consumer protection challenges. While digital credit creates some of the same consumer risks as traditional lending models, new technologies and new channels, along with new credit providers, also create unique new risks. This study summarizes both types of risks, using the seven Smart Campaign Client Protection Principles as an organizing framework, and adds an eighth category to address security and fraud concerns.

1. Product Design and Delivery Risks

The way digital credit is designed and delivered can create various consumer risks including:

> Products designed with insufficient customer information
> Nearly automatic and frictionless access
> Mobile information limitations
> Aggressive digital marketing
> Misleading marketing or false representation

To address these issues, digital credit providers should design, target and sell only products with features that meet the particular needs of the customer segments or individual customers for whom they are intended. Emerging standards address:

> Ensuring the right product for the right customer and use case
> Appropriate mobile interface design practices
> Adopting responsible advertising and marketing standards
> Pressure-free loans

2. Preventing Over-Indebtedness

Industry associations, regulators and consumer protection advocates have raised concerns that digital credit products may trap clients in an expensive cycle of borrowing, especially if they are made without sufficient information on the borrower's ability to repay. Some of the observed practices that trigger such concerns include:

> Limited debt capacity analysis
> Inappropriate financing
> Lack of responsible credit reporting
> Responsible restructuring or refinancing options

Industry standards should encourage digital credit providers to avoid creating debt traps through automatic repeat loans by ensuring:

> Responsible underwriting
> Robust credit information sharing

3. Transparency for Borrowers and P2P Investors

The transparency principle asserts that lenders have a responsibility to provide all the important information about a product, particularly pricing information, in a manner that enables clients to understand and make informed choices. In many cases, however, digital loan interest rates, fees, charges and terms are unclear, incomplete and hard for clients to compare across products.

> Non-transparent rates and hidden fees
> Terms and conditions that are hard to understand
> Confusing menus and user interfaces
> Lack of ability to compare products across providers
> Lack of notice regarding referrals
> Lack of transparent broker/agent fees

To address these issues, digital credit providers should ensure that their products feature the following:

> Availability of information and ease of understanding
> Disclosure approaches that facilitate comparison
> Adequate notice periods

In the case of peer lending models, a special transparency concern arises, because investors into these models put their funds at risk, and so investors as well as borrowers require protections. Some of the most important challenges include a lack of standardized disclosure and misleading advertising.

To address issues faced by individual investors, P2P lending platform providers should disclose and take steps to share:

> Historical performance data
> Investment selection data
> Investor portfolio data
> Marketplace management practices
> Any related party investment by P2P lending platform owners/employees

While digital credit creates some of the same consumer risks as traditional lending models, new technologies and new channels, along with new credit providers, also create unique new risks.

4. Responsible Pricing

Several digital credit models have been developed based on high loss rates which require providers to charge high rates, fees or penalties. This has especially been the case for digital payday lenders as well as some of the new mobile nano-lenders. There have also been failures to provide consistent or comparable disclosure of finance charges across digital lenders.

Responsible pricing should be both affordable to clients and sustainable for financial service providers. Digital lenders now have the technology to better segment potential and current customers, assess their repayment capacity more carefully, target appropriate use cases and improve overall pricing in a more responsible way. To protect the industry, encourage competition and avoid policy maker overreach (interest rate caps), regulators and industry players should move toward standardized interest rate and fee disclosure and promote open, transparent and comparable industry interest rate and fee platforms for the public to view.

5. Fair and Respectful Treatment of Clients

While digital credit does involve little face-to-face contact, some client treatment issues still affect clients of digital credit:

> Discriminatory practices
> Unfair collection practices
> Lack of disclosure of conflicts of interest

Among the recommended steps to prevent poor client treatment are the following:

> Documenting the rationale for algorithmic features
> Using regulatory technology (RegTech) to identify potential discriminatory practices
> Detailed fair collection policies and procedures
> Policies and procedures regarding calls to borrowers that ensure respectful and non-threatening treatment
> No pressure on customers to reborrow
> No surprise fees
> Opt-in and opt-out options for borrowers
> Technical support options
> Text/digital alerts of missed or upcoming payments and service fees
> Resources for customers suffering from financial strain, such as identification of financial counselors in the customer's vicinity

6. Privacy of Client Data
Data-related risks faced by digital credit clients include:

> Lack of information provided to clients on data collection and use
> Lack consent by clients to set parameters for data sharing
> Improper handling, storage and retention of sensitive data
> Information at risk, and in the case of P2P models this includes both investor and borrower information

Emerging standards and mechanisms to address these risks include:

> Appropriate laws, regulations and policies to protect data privacy and consumer information sharing
> Secure handling of sensitive data
> Informed consent
> Awareness of consequences of data sharing
> Consent to communicate electronically *with clients*
> Internal procedures to prevent data misuse
> Limits on collection and data retention periods
> Management of data usage by third-party providers
> ARCO Investment Management principles

7. Mechanisms for Complaint Resolution
Complaint resolution issues include:

> Limited knowledge about how to complain and resolve complaints
> Lack of appropriate channels for correcting errors
> Lack of recourse regarding unauthorized activities
> Confusion over responsible parties
> Difficulty settling cross-border disputes

Overall emerging standards for digital credit complaint resolution include:

> Adequate policies and procedures on how and where to complain
> Communication to customers
> Multiple channel options
> Ombudsman or other independent dispute resolution option
> Clarity on responsible parties
> Recording, analysis and public sharing of actions taken

The lack of person-to-person contact involved in most of these models heightens the challenge of providing adequate complaint resolution processes. In addition, due to the potential for confusion over different digital interfaces, especially those offered over a mobile phone, well-staffed call centers and other means of troubleshooting are essential. New developments in artificial intelligence and the potential uses of chatbots may hold a key to improved customer complaint management tools.

8. Improving Security and Fraud Protection

Fraud and security issues surrounding digital credit providers come in many forms including:

> Phishing, spoofing, fake SMS and/or websites
> Misuse of client data by connected third parties
> Unauthorized charges
> Issues with mobile app security

Regulators should undertake steps to identify and mitigate fraud and security risks by:

> Engaging with digital credit providers and their partners to better identify security vulnerabilities and outlining how they will be mitigated
> Analyzing the extent to which existing regulation and guidance addresses the products, models and risks in the market; identifying gaps and developing practical plans to assess compliance
> Engaging in peer-to-peer networking with regulators in other jurisdictions to stay abreast of new developments and emerging best practices

To avoid fraud for small scale investors in P2P lending platforms, best practices now include ensuring that bank escrow account services are in place to segregate and manage investor funds and borrower payments.

Industry and Regulator Responses and Recommendations

Given how new and rapidly evolving the digital credit sector is, the state of consumer protection standards and practices is not yet settled. Nevertheless, many providers and regulators are actively seeking to develop and promote standards. Policy makers, regulators and digital credit industry groups continue to struggle to agree on and apply consistent responsible digital credit standards.

Self-regulation

While laws and regulations play an important role, industry associations also need to ensure that their members operate responsibly. In some markets, industry players are beginning to see that protecting customers is a strategic business decision and a way to address issues before stricter regulations are needed.

Empowered Digital Credit Consumers

The increased online connectivity and speed of sharing of information across digital finance consumers and third party ratings providers can help to identify consumer protection issues quickly and pressure industry and regulators alike to address consumers' concerns.

Balancing Act for Regulators and Policy Makers

Regulators and policy makers face new challenges in protecting consumers in the digital credit age, including the need to update regulations to address fast-evolving digital lending channels, business models and new players. In addition to the specific areas for standards development and testing mentioned above, regulators will need to move toward principle-based consumer protection that can adapt readily to new digital credit models and products. They can harness the power of regulatory technologies (RegTech) to make supervision easier for both regulator and provider, and identify consumer risks faster. And they can work with consumers and consumer groups to ensure they are well-informed. In pursuit of a digital credit system that is safe for participants, regulators need to take the lead in dialogues that involve public and private entities as well as consumer representatives.

Next Steps to Support Responsible Digital Credit

It will take a village to ensure that digital credit clients are protected. This requires locally customized approaches that are collaboratively implemented by governments, regulators, industry players, consumer protection advocates, and even consumers. Three important approaches that industry, regulators and consumer groups need to focus on include:

1. Digital credit industry standards on existing best practices. These standards should be based on key concepts with detailed practices highlighted depending on individual market conditions (see Figure 1).

2. Certifications. The Smart Campaign's Certification Program can provide a roadmap and much of the specific content for

development of a "seal of responsible digital credit practices" or "Fintech Protects seal" that could be promoted via multiple digital channels globally to not only policy makers, regulators and industry players, but also directly to digital credit consumers.

3. Empowering digital credit consumers. Digital credit consumers can be empowered to push the industry to improve consumer standards. Given today's advances in technology, social messaging chatbots may be effective in educating and empowering large numbers of digital credit clients in ways that were not possible before. Chatbots can also be used by regulators as new "smart tools" to address consumer complaints. By working with consumers, regulators and enlightened digital credit providers, advocates such as the Smart Campaign could leverage "smart tools" like multi-platform chatbots to provide cost-effective virtual call center services for industry players and their associations in emerging markets.

Proposed Consumer Protection Standards for Digital Credit

INDUSTRY DIGITAL CREDIT STANDARDS	DETAILED PRACTICES
Appropriate Product Design and Delivery	▶ Matching product design and usage ▶ Using appropriate mobile technology experts when designing for mobile channel delivery ▶ Advertising and marketing best practices
Prevention of Over-Indebtedness	▶ Avoidance of debt traps ▶ Responsible underwriting ▶ Responsible credit reporting/sharing ▶ Pressure-free loan principles
Transparency	▶ Borrower disclosure standards ▶ Investor disclosure standards (P2P platforms)
Responsible Pricing	▶ Pricing terms and standards that are reasonable and affordable
Fair and Respectful Treatment	▶ Clear collection policies and procedures ▶ Fair collection practices
Data Privacy and Usage	▶ Responsible data usage ▶ Consistent review of data privacy standards ▶ Consent to communicate electronically ▶ Informed consent and opt-in/opt-out policies ▶ Management of third-party providers to protect client data
Complaint Resolution	▶ Timely, clear and responsive complaint resolution practices
Security and Fraud Risk Management	▶ Authentication practices ▶ Industry standards on security compliance

The Landscape of
Digital Credit Providers

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Throughout the world, small loans to individuals and very small businesses are increasingly being made through digital means. While a lot of the focus on digital credit providers has revolved around mobile lenders, there are actually six broad categories and several subcategories of digital credit providers that offer a range of digital lending models and that are expanding rapidly around the world.[1] These digital providers offer various advantages over traditional brick and mortar lenders but also create various risks that need to be managed. In addition to the digital credit providers, a range of third-party operators are also involved in collecting, analyzing and processing customer data. In many markets, several of the categories of digital credit providers, particularly non-bank providers and third-party providers, fall outside of the supervision of financial regulators, especially in emerging markets. This chapter discusses the overall landscape and the different providers and third-party operators that exist.

Marketplace Lenders

These non-bank lenders originate loans to clients through intermediary digital platforms that connect borrowers to investors, directly utilize funds from the platform's own balance sheets or combine these two strategies.[2] This broad category includes peer-to-peer lending platforms and online balance sheet lenders.

Peer-to-Peer (P2P) lending models provide platforms for borrowers to source loans primarily from individual or institutional investors. An important feature of these models is that both borrowers and lenders are customers of the platform, each with their own individual risks. These risks pose particular challenges since P2P lenders are not directly regulated by financial regulators in most

markets. While P2P models can be found in multiple markets, these models have, until recently, been active more extensively in the United Kingdom, China and the United States.

The U.K.'s largest P2P lender, Funding Circle, has now expanded to lend in the U.S., Germany and the Netherlands. It focuses on small-to-medium enterprise (SME) lending and analyzes traditional data, including business and personal cash flow and collateral, as well as alternative data, like Yelp reviews and an owner's online activity. It also obtains digital SME transactional data for various partnerships with banks such as Santander and RBS, software firms Intuit and Sage, and tax advisor H&R Block. Funding Circle has been one of the more proactive players in terms of developing standards for the industry, especially in the U.K., where its leaders

Defining Digital Credit

Digital credit, as discussed in this paper, is defined as loans that are accessed via a digital channel either online, via a mobile device or via a third-party agent that facilitates digital credit processing remotely. Most customer interactions and credit processes are handled remotely, and often completely automatically, including loan applications, approvals, repayments and collections. While digital credit can and many times does utilize conventional credit scoring information, especially in more developed countries, most models in emerging markets and even in some developed markets also use a range of alternative data sources, such as payment information, transactions, e-commerce, search, social network data, voice, airtime, e-money usage and other data that is often processed by computerized algorithms to determine credit eligibility and pricing.

RESPONSIBLE DIGITAL CREDIT: WHAT DOES RESPONSIBLE DIGITAL CREDIT LOOK LIKE?

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advocated strongly for the Financial Conduct Authority to regulate P2P lenders in 2014[3] and were actively involved in establishing the Marketplace Lenders Association[4] and the Small Business Borrowers' Bill of Rights.[5]

In the lending slowdown after the financial crisis in 2007–08, several P2P lenders expanded rapidly in the U.S. Apart from Funding Circle, the largest and best known include Lending Club, Prosper, SoFi, Upstart and Peerform. The majority of P2P lenders in the U.S. tend to focus on personal lending, and particularly debt consolidation, especially for individuals with high credit card debt—a focus that sets the U.S. apart from most other markets. Apart from traditional credit scores, these lenders also look at alternative data. For example, SoFi and Upstart look at criteria such as occupation, education (including university, GPA and major) and work history in determining potential repayment capacity. Unlike the financial regulatory framework that exists for P2P lending in the U.K., the U.S. still has a fairly fragmented approach to oversight of P2P lenders. However, P2P lending is still expanding options for SMEs in the U.S. Some P2P lenders also support supply chain models in arrangements with large retail chains. Lending Club has tie-up arrangements with Google and Walmart's Sam's Clubs, which give the company access to millions of SMEs' sales volume data, and subsequently allow it to offer loans to SMEs. While marketplace and peer-to-peer lending in the U.S., fueled mostly by consumer lending, grew year-on-year by 22%, the Latin America and Caribbean region, mostly driven by an increase in marketplace/P2P business lending, grew by 209%.[6] Rapid growth in Mexico, Chile and Brazil helped push the collective marketplace and P2P lending market in Latin America and the Caribbean

to US $342.1 million in 2016, exceeding for the first time the market in Canada which grew to US $334.5 million in 2016.[7]

In China, P2P lending models are quite different and have expanded access to finance to a broad range of unbanked and underbanked consumers and businesses with limited prior access to formal credit. At the end of 2017, the Cambridge Centre for Alternative Finance estimated that 85% of the world's global P2P lending is happening in China.[8] Due to limited access to reliable information, many smaller Chinese P2P platforms utilize a hybrid online-to-offline approach to sourcing client data, such as collecting e-commerce transactions and digital payments, as well as analyzing online search histories and social media data. These platforms complement online alternative data with offline credit and background checks by partnering with non-bank financial institutions or by leveraging the platform's own agents or staff to visit the borrower's business to verify their information (for example, by taking pictures of the workplace).

Larger P2P lenders in China tend to rely more on social media and e-commerce data than P2P lenders in the West. Some of the largest P2P lenders include CreditEase, China Rapid Finance (CRF) and Dianrong. CRF has partnered with WeChat's parent company Tencent to develop credit scores for 50 million Chinese consumers using social networking and computer gaming data. P2P lenders like CRF have documented that potential clients who use social networking services actively tend to be more concerned about their reputation and integrity.[9] Dianrong uses e-commerce giant Alibaba's credit scoring service, Sesame Credit, which includes information from social media like Weibo (China's equivalent to Twitter). However, consumer protection issues have arisen, including abusive collection practices, such as harassing past due customers on social media.[10]

While Chinese P2P lending platforms have grown tremendously and provided loans to millions, they have also increased consumer protection risks, especially to small individual investors who provide loan capital. In one case, almost 900,000 individual P2P investors collectively lost US $7.6 billion in what was effectively the largest Ponzi scheme ever

conceived by those who established the Ezubao P2P platform,[11] one of the 10 largest P2P firms in China before it was shut down. An estimated 95% of all borrower listings on Ezubao were allegedly fraudulent.[12] The scale of this fraud caused Chinese P2P lenders (who refer to the industry as *internet finance*) to establish the National Internet Finance Association of China and issue their own self-regulatory pact for the industry,[13] followed by disclosure standards, in 2017.[14] This also led the Chinese Banking Regulatory Commission to issue regulations for P2P lenders in 2016 and 2017, primarily focused on disclosure and protecting small individual investors.[15]

Other markets are also witnessing rapid growth in P2P lending, especially the Asia Pacific region and other parts of Europe. As in China, P2P lending in emerging countries tends to focus on expanding financial inclusion for both consumers and SMEs. South African-based RainFin provides SME loans in an innovative partnership with M2North, a company that acts as an electronic intermediary between large companies and their entire supply chain. SMEs registered with M2North opt to share their transactional data with RainFin, including invoices and sales history. This enables RainFin to assess the creditworthiness of the business, much like a credit check, and to provide a risk rating on the individual borrowers using its site.

India-based Faircent collects alternative data from social platforms such as LinkedIn and Facebook as part of its credit analysis and its algorithms detect good and bad credit behavior. Faircent also evaluates lifestyle and spending patterns by analyzing bank account and payment transaction data (e.g., buying the latest phone or frequenting a bar, among other personal habits).[16] The rapid growth and some of the concerns over the practices of P2P lending platforms have also encouraged the Reserve Bank of India (RBI) to provide more oversight of an industry that is predicted to grow to over US $4 billion in the next five years. Some of the more fundamental prudential measures under the RBI P2P guidelines include registration, minimum capital requirements, debt to capital ratios, and ensuring proper escrow accounts are in place to avoid the potential of Ponzi schemes.[17]

Another market where P2P lending platforms are growing rapidly is Indonesia,

where estimates place the number of platforms at more than 40, with a focus on SMEs and financially excluded consumers.[18] In addition to analyzing social media, P2P SME lenders in Indonesia are also exploring the use of psychometric credit information for credit scoring and screening. Indonesian-based Moldaku has teamed up with Entrepreneurial Finance Lab (EFL) to generate credit scores based on applicants' answers to various psychometric questions on attitudes, beliefs, integrity and performance. Moldaku relies on EFL's credit score to assess the applicant's ability and willingness to repay a loan. EFL also uses alternative data such as social media data, cellphone usage and locational data. Due to concerns similar to issues raised in China, the financial regulator OJK released P2P guidelines in 2017 to protect consumers.[19]

Online balance sheet lenders differ from P2P lenders mainly in that they retain their own portfolios and collect interest over the life of the loan portfolio. In addition, unlike P2P lending where investors only earn interest once they are matched with a borrower, for balance sheet lenders, the funds are pooled and interest starts accumulating immediately. Balance sheet lenders offer lower risk for investors since the online balance sheet lender's capital acts as the "first loss" buffer for investors.[20]

Many online balance sheet lenders focus on specialized market niches like merchant cash advances or point-of-sale financing. Examples of online balance sheet lenders include Kabbage and OnDeck in the U.S., Capital Float in India, and GAX Finance in Malaysia. A subgroup under online balance sheet lenders are firms that also process payments for small merchants and use their sales transaction data to provide merchant loan advances. These include Square Capital, which offers credit to Square card readers in the U.S. and Kenya-based Kopo Kopo, which facilitates mobile e-money payments for merchants and offers them lines of credit. Tienda Pago in Latin America is another example of an online balance sheet lender that provides credit to small merchants who buy from various distributors. Risks associated with online balance sheet lenders are generally easier to manage, since there is usually one key

lender and the main credit provider controls all aspects of the lending, unlike P2P lenders where multiple parties may be involved.

Banks are increasingly teaming up with marketplace lenders (both P2P and online balance sheet lenders) or launching their own platforms as a way to facilitate clients, especially SME clients they initially deem too risky based on the lack of a credit or business history. Examples include Beehive by Belgazprombank in Belarus and CUB (Credits to Ukrainian Business) launched by PrivatBank in Ukraine. CUB makes it possible for SMEs to borrow from the bank's clients, with PrivatBank facilitating disbursements and collections. However, because many small investors did not understand the risks, especially the fact that their investments were not guaranteed, the bank discontinued this service in 2017. Examples such as this provide early lessons for regulators in other markets to ensure that small investors are appropriately warned and protected.

Other Digital Lenders

Another category of digital lenders is **digital payday lenders** who have shifted to online platforms (often including mobile phones). All markets that already have payday lending are seeing a shift to digital platforms. In addition, new markets, especially in Central Asia and Eastern Europe, are seeing a dramatic growth in online consumer lenders (often referred to as microfinance lenders, even though they are quite different from traditional microfinance lenders focused on MSMEs). As is the case with traditional payday lenders, digital payday lenders also have issues related to lack of transparency, high fees and unfair client treatment, especially related to collections.[21] The speed and ease of digital lending along with digital push marketing techniques also increases concerns around over-indebtedness, especially for low income clients who become dependent on this category of digital lender.

Tech giants that originated in e-commerce, search, payments, social networking or computer technology are leveraging their massive data streams either directly or via partnerships to offer loans and other financial services to the millions of captive customers they already interact with and collect data from. These new players use digital means to mine transactional, personal and financial data to offer financial services, including SME finance, e-commerce buyers and sellers, and consumer credit.

These companies are making inroads in credit markets including China (e.g., Alibaba, Tencent, Baidu, DHgate.com), the U.S. (e.g., Amazon, PayPal), and India (e.g., Amazon India, Flipkart, Lendingkart, NeoGrowth), with multi-country expansion, especially across Southeast Asia, developing rapidly. In the West, the tech giants tend to target one or two specific SME banking services such as loans, trading or mobile payments. In the East, most notably in China, these players are instead forced to get banking licenses and therefore provide a broader range of financial services than their Western counterparts.

In terms of challenges, while these tech giants strive to offer high quality customer experiences, they also control the customer's data, making it harder for consumers to migrate to other financial service providers. In addition, customers often fail to understand how their information may be used for credit decision-making, despite disclosures in lengthy terms and condition statements. Debt capacity for most credit customers who sell on e-commerce sites is determined primarily from sales history without a broader understanding of an individual's credit history or overall financial picture. However, e-commerce providers that offer digital credit to those who sell on their platforms, and then automatically deduct repayments from future online sales, have maintained high repayment rates.

Supply chain platforms support SME financing focused around purchase orders, invoices, receivables, and pre- and post-shipment processes between buyers and sellers along the supply chain. Triggers from the physical supply chain underpin each financial event. Cloud-based digital supply chain platforms gain insights into complex trade flows by digitizing documents and transactions and applying data analytics to make credit decisions. They also leverage the financial stability and strength of bond-rated large corporations (often large department store chains or manufacturers) buying SME products or services to offer faster and cheaper SME financing.

These platforms vary widely (e.g., invoice or receivables discounting, payables financing, dynamic discounting, working capital auctions, factoring, inventory finance, pre-shipment finance, etc.), as do their funding sources (e.g., banks, investors, corporate buyers, lenders, etc.). For all, digitization provides more efficient SME lending for suppliers, accelerates approval, increases SME credit access, reduces the chance of supplier or procurement fraud, and sometimes lowers the cost of financing for SMEs. Noteworthy examples include Kickfurther, Tungsten, Basware, Tradeshift and Kinara Capital. Many of these models work by digitizing the value chain, allowing for such innovations such as contracts that trigger immediate payments and loan disbursements when they are delivered and scanned. Open supply chain models where different providers may compete for customers appear to have fewer consumer protection issues, given the competition in their niche markets and relative sophistication of their clients. Issues arise in some older models where banks linked to large companies have locked in customers seeking credit advances by tightly controlling a client's sales data.

Mobile nano lending models offer very small loans utilizing credit scoring models based on mobile transaction history, mobile e-money usage and credit history. In addition, new mobile-based lenders are using data from apps running on smartphones, including SMS messages, emails, metadata from calls, and retail transactions. For mobile lenders such as Branch and Tala in Kenya, even obscure variables such as battery recharge frequency, the number of incoming text messages, miles traveled in a day, whether the client gambles, and even how the client enters contacts into the phone—use of last names correlates with creditworthiness—can bear on a decision to extend credit.[22]

Many early lenders in this category were partnerships between mobile e-money operators and banks, notably M-Shwari, a partnership between Safaricom and the Commercial Bank of Africa. However, several small fintechs such as Tala and Branch have also developed mobile data-based lending models focused on early smartphone users in developing markets. Equity Bank has also

entered this market and other banks are following, especially across East Africa, by beginning to analyze captured data from their clients' savings and credit transactions, along with mobile and e-money histories. As customers increasingly shift to smartphones, the expanded data available is expected to further expand such lending models.

Ironically, one challenge here has been the extreme ease of obtaining loans offered through push marketing, often with little understanding of terms and conditions. In addition, there is a concern that some credit scoring algorithms that rely on factors like educational or literacy levels may unintentionally lead to discriminatory lending practices.

Digital bank models are also developing as banks open their APIs to third-party service providers or acquire or partner with data analytics providers and/or alternative lenders. Some examples include OnDeck and JP Morgan Chase; DBS Bank and AMP Credit Technologies; and the acquisition of Holvi by BBVA. Several new digital-only banks without branches such as DBS Digibank in India, Fidor Bank in Germany, and mBank in Poland, as well as neo banks that often ride on top of another bank's charter, like Simple and Movenbank in the U.S., are also moving quickly to adapt and use alternative data in credit decisions. By cooperating with third-party providers, these new digital bank models support financial innovation in much the same way as Apple's App Store acts as a platform for developers.

A new development to watch for in 2018 will come with the EU Payment Services Directive 2 (PSD2), which mandates open banking. Consumer protection involving data sharing and data protection will become more complex, and possibly more challenging than regulators anticipated. The principle of informed consent is difficult to satisfy when the "I Agree" button is at the end of a lengthy online credit application with fine print that is difficult to read on a computer screen, let alone a mobile device. A real challenge in the open banking era will be how to best educate consumers, especially on data sharing and privacy. An additional challenge will be to properly oversee and ensure that third-party providers fulfill their obligations on data use and management.

Consumer Risks, Desired Outcomes and Movement Toward Standards

Digital credit customers in markets around the world are facing diverse and numerous financial consumer protection challenges. While digital credit produces some of the same consumer risks as traditional lending models (and these must be accounted for), new technologies and channels also create new and unique risks, as surveys and studies conducted around the world have shown. The variety and complexity of the digital credit stakeholders, including third parties, make the consumer protection issues more diverse.[23] In addition, developments around the world are quite varied, and risks differ based on the development of the sector, the legal system, regulations and cultural practices.

The Smart Campaign, a global consumer protection campaign originating in the microfinance movement, has organized consumer financial risks into seven categories—the Client Protection Principles.[24] These categories provide a useful framework for understanding borrower risks in digital credit and largely capture the vast majority of issues borrowers face in the space. To this list, however, we add an eighth concept: security and fraud protection, which is especially salient for digital financial services.

Smart Campaign Client Protection Principles +1

1. Appropriate product design and delivery
2. Prevention of over-indebtedness
3. Transparency
4. Responsible pricing
5. Fair and respectful treatment of clients
6. Privacy of client data
7. Mechanisms for complaint resolution
8. Security and fraud prevention

Apart from borrowers, individual investors in P2P lending marketplace models are also customers who have their own consumer protection issues, which are also discussed in this chapter.[25]

The next two chapters take up the Client Protection Principles one by one, first discussing the main consumer risks, then identifying the outcomes sought through standards development, and finally describing emerging or existing standards arising from industry associations, regulators and research. The main sources for the standards referenced here include the Smart Campaign (global), the Borrowers Bill of Rights (promulgated by the Responsible Lending Coalition in the U.S.), the Online Lenders Alliance (also U.S.-based), and on the regulatory side the Alliance for Financial Inclusion (global), and CGAP's research (global).

1. Appropriate Product Design and Delivery

Consumer Risks

The way digital credit is designed and delivered can create various consumer risks. Appropriate design and delivery is particularly difficult for mobile-data based and mobile-delivered digital credit products where small screen size, rapid delivery and a "one-size-fits-all approach" creates special challenges.

Overall design and delivery issues include:

> **Insufficient Information and Unintended Use.** Products designed without sufficient client information and/or those that encourage borrowers to take a loan designed for another use present undue risk to consumers.[26] For example, short-term products may be suited for short-term working capital, but would be too expensive for long-term use or fixed asset purchases. Long-term products with prepayment penalties may be suited for long-term use, but not for short-term needs.

> **Nearly Automatic Access.** While regulators, policy makers and consumer protection advocates have advocated for simpler and easy-to-use digital financial services, including digital credit, very simplistic products that offer near automatic access to credit come with their own risks. When combined with push marketing, easy-to-use digital credit models with artificially short timelines may force borrowers to make too quick, unconsidered decisions. This is a particular issue for credit delivered via mobile phone, primarily due to the instant, automated, remote nature of the transaction, as well as mobile screen size limitations.[27]

> **Information Limitations on Mobile Devices.** Due to the small screen size, especially on basic and feature phones popular in lower income segments, clients often can only access loan terms and conditions via a web link, which often cannot be viewed directly through the handset (unless the borrower has a smartphone and data plan).[28]

> **Aggressive Marketing.** Digital advertising, especially via push SMS (i.e., text messages), email and other unsolicited approaches, coupled with frictionless and automatic enrollment, encourages some clients to borrow without determining first whether the credit is something they really need or contemplating how they will plan to repay the loan. Additionally, customers often regard such marketing as annoying and intrusive.

> Examples of these risks include solicitation simply because the client was a customer of a telecommunications, e-commerce, e-money or some other service. In these cases, whether the client provided informed consent to be analyzed for a loan is in question since the client may only have inadvertently consented via "fine print" attached to his original contract with the provider for other services. For example, one Tanzanian mobile network operator (MNO) has very broad terms of service that state: "You accept that we may disclose or receive personal information or documents about you … for reasonable commercial purposes connected to your use of the mobile service or the M-PESA Services, such as for marketing and research related purposes."[29]

> Digital credit users can be heavily influenced to borrow just by the way products are marketed on a digital platform. Unsolicited credit offers may be framed to exploit behavioral biases, enticing consumers to borrow even when they do not have a specific use in mind. Examples of trigger terms in advertisements include: "Borrow now for just $10 per $100! Only [x]% interest! Get money now, pay back over the next 12 weeks!"

> When questioned, some clients state they do not want to miss out on a chance to borrow, especially when they have not been able to easily access loans in the past. Others report that they may want to test the product, even to the point of taking on a high-cost loan they do not need just to "see what it's about." Some borrowers report that they have taken loans against their own better judgment.[30] This risk is exacerbated when combined with poor disclosure of costs and other terms by some mobile data-based lenders.[31]

> **Misleading Marketing or False Representation.** Online credit products, especially those promoted by lead generators or brokers, may be marketed in a misleading or even false way, including offering loan amounts or terms that are not actually available. For example, consumers pursuing digital loans offered as "same day loans" or "loans within minutes" may find that these features do not actually exist. Such promotions are referred to as "bait and switch" tactics. These complaints often accompany loan lead generators such as Lending Tree in the U.S. where the lead generator's initial pitch is followed by a wide-ranging offer from various lenders.[32]

Desired Outcomes

The Smart Campaign defines product suitability as a provider's duty to design products that are useful and relevant for target clients and to market them in a way that promotes responsible usage.[33] For digital credit, the heart of the suitability principle is that digital lenders should design, target and sell only products that have features that meet the particular needs of the customer segments or individual customers for whom they are intended. To meet this standard, there is a specific concern in some markets that digital lenders need to more effectively gather sufficient client information to better segment potential and current customers, more carefully assess client repayment capacity (more on over-indebtedness prevention below), and match appropriate credit use cases.[34]

Marketing and advertising best practices that result in truthful, accurate, transparent and non-aggressive marketing are also specific areas of concern for digital credit.[35] Those utilizing mobile channels to advertise, acquire and transact with customers have to pay particular attention to the limitations of mobile interaction and follow industry mobile best practices.[36] In several markets where digital push marketing and unsolicited offers are common, consumer protection advocates have flagged these strategies and highlighted the risk of encouraging borrowing without a purpose. There are heightened concerns about the need to frame loan offers so as to reduce the likelihood that consumers will take the largest amount available without thinking through

their needs and repayment capacity.[37] Opt-out rules should be considered as a potential requirement for digital credit providers, especially in markets like Kenya where mobile push marketing has become more problematic.

In addition, the use of marketing and advertising best practices must also be extended by digital credit providers to their lead generators, online brokers or agents to ensure that credit is not marketed in a misleading manner.

Emerging Standards and Regulations

In addressing these issues, various industry associations have advocated for standards. With respect to the appropriate design and delivery principle, the emerging standards include the following:

> **The Right Product for the Right Use Case.** Industry best practice guidelines generally encourage the importance of product design and matching prospective borrowers with loan terms and conditions that suit their needs. For example, the Small Borrowers' Bill of Rights, created by the Responsible Lending Coalition in the U.S., focuses on offering SMEs products based on analysis of debt capacity and capability along with right size financing. These guidelines also focus on matching credit products to actual needs and use cases.

> **Appropriate Mobile Interface Design.** The Online Lenders Alliance's guidance on mobile best practices is probably the most extensive industry associated guidance for digital lenders that interact with customers via a mobile channel.[38] This guidance includes the requirement for digital lenders to design all terms and conditions clauses to be viewed on all mobile devices and not via a link on a website. Specifically, the Alliance recommends that providers offering loans via a mobile device must make use of experienced mobile developers that ensure that product information can be appropriately displayed on all mobile devices. CGAP offers recommendations for implementing this concept to ensure terms and conditions are not only being provided via a mobile device but are also presented in such a way to improve "informed" client consent.[39]

> **Responsible Advertising and Marketing Standards.** The Online Lenders Alliance has the most extensive list of standards on protecting consumers (and the industry) from deceptive or misleading advertising and marketing, including ensuring that:

> Advertising loan terms and conditions are accurate and only made for loans that are available from the provider (not marketing "same day" or "instant" loans when the provider does not offer these loans)

> Disclosure of conditions when trigger terms are used, including the down payment, terms of repayment, actual APR, and whether the rate is variable or subject to change

> Disclosure of full terms and conditions includes the implications of late payments, the implications of non-payment, and loan renewal policies

> Lenders are responsible for ensuring that their brokers and agents are also following the same practices

> **Pressure-free Loans.** The Small Business Borrower's Bill of Rights sets a standard that borrowers should be allowed a reasonable timeframe to consider their options, free from pressure or immediate deadlines to make credit decisions.

Various regulators and regulatory networks have provided guidance on suitability, product design marketing and advertising related to digital credit products. The Alliance for Financial Inclusion (AFI), which brings together regulators from around the world, has issued recent guidance to its members recommending that regulators engage with providers and oversee digital credit product designs in order to address potential inherent weaknesses.[40] In addition, the guidance recommends that regulators actively monitor digital finance advertisements to ensure that prohibited activities are identified and appropriate measures taken. Regulators in several markets have developed specific guidelines to ensure that promotional materials for digital credit are fair, reasonable and not misleading.[41] Specifically, markets such as India, Ghana and South Africa have highlighted how

> The variety and complexity of the digital credit stakeholders, including third parties, make the consumer protection issues more diverse.

product suitability concerns should be adapted for digital lenders, including an obligation that lenders accurately assess individual consumers' needs and capacities and sell only those products that are appropriate to meet the needs of the consumer.[42] [43]

CGAP researchers noted that regulators may need to develop further guidance on application of suitability principles to different types of lenders, models and customer segments.[44] To achieve this, regulators should encourage digital lenders to strengthen their customer segmentation and product diversification efforts as the basis for suitability-based lending, and then periodically review the lenders' portfolios and policies and gather information through consumer surveys.[45] These proposed practices apply to all digital credit providers, especially those that target consumers and microenterprise clients in emerging markets. CGAP also calls for closer attention to the use of push marketing in digital credit to limit or prohibit practices that may lead into debt traps.[46] While this study focused on mobile data-based lenders, these recommendations apply equally to other digital providers, especially e-commerce, tech giants and online payday lenders who may actively use push marketing techniques.

2. Prevention of Over-Indebtedness

Consumer Risks

Concerns have been raised by industry associations, regulators and consumer protection advocates around digital credit products that trap clients in an expensive cycle of re-borrowing or that make loans without sufficient information on the borrower's ability to repay. Unfortunately, several digital credit products have been designed to profit lenders more when clients fail to repay their loans or are late rather than paying on the original terms. Some of the observed practices include:

> **Limited Debt Capacity Analysis.** Similar to the way that traditional asset-based lending has happened in the past, some digital lenders have an overt focus on collateral, including savings accounts, with little or no debt capacity analysis. Many algorithm-based loans are made with little assessment of a client's current repayment capacity, which has been the main focus of traditional SME lending and microfinance. Instead, the new models are based on indicators that analysis shows to have predicted repayment in the past. While such use of data analytics is not necessarily a problem and may make it much easier to approve loans for new customer segments, it can become problematic under certain circumstances, such as when models build in high defaults or for large loans.

> **Inappropriate Financing.** Digital lenders and/or their brokers market digital credit products that maximize the initial loan offering (beyond the borrower's needs) in an attempt to focus on the lender's or broker's revenue rather than on the debt capacity of the client. This is particularly an issue with regard to digital payday lenders. Push marketing, focused on providing loans up to a "maximum" amount, has encouraged clients to borrow up to that amount, rather than sums that would meet their immediate needs. Marketing messages may also encourage repeat borrowing by emphasizing future availability of higher loan limits. In some cases, clients have borrowed multiple times in a few days just to increase their loan sizes. The automatic renewal features of some mobile data-based credit models, similar to the stepped loan sizes of early village banking programs, along with digital marketing messages to "grow their loan limits," tend to facilitate clients borrowing more than they can afford.[47] Digital lenders typically start consumers off with very low loan amounts as a risk management strategy, creating incentives for their own business models to increase loan sizes as quickly as possible.[48] The temptation to borrow too much may be heightened by the instant feature of digital credit requests, as discussed earlier.

> **Lack of Responsible Credit Reporting.** Due to an inability to access credit reporting services (or in some cases, unwillingness to share captured client data), many digital lenders do not adequately report loan repayment information to major credit bureaus or consult credit bureau data when underwriting a loan. In addition, those that do utilize credit bureaus may only provide negative information and use the credit bureau solely as a means to collect debt.

Policy makers, regulators and consumer protection advocates have raised particular concerns regarding over-indebtedness, especially for mobile data-based loans and many digital payday loans, due to nearly instant push marketing and automatic renewal for a series of high-cost loans. Rising rates of over-indebtedness correspond to the rise of negative loan listings in countries such as Kenya, where mobile data-based lending has been quite extensive. TransUnion Kenya in 2016 noted more than 400,000 consumers were listed as defaulters for loans of Ksh 200 (approximately US $2) or less in its credit bureau. This raises concerns about whether credit reporting practices are proportionate and fair for consumers, as delinquency and default on very small loans could have significant consequences for borrowers, whereas consumers' positive repayment history may not always be reported by lenders.[49]

Desired Outcomes and Emerging Standards

Several of the industry standards encourage digital credit providers to avoid lending practices that may contribute to over-indebtedness of clients, such as creating debt traps with automatic repeat loans.

> **Responsible Underwriting.** The Online Lenders Alliance Best Practices and the Small Business Borrower's Bill of Rights encourage responsible underwriting with loans that are right sized to meet the specific terms and conditions that the borrower needs and can use. This includes ensuring that clients have the ability to repay even when loan proceeds are directly deducted from online sales, which can be especially relevant for trade, supply chain finance and tech firms lending to merchants selling on their e-commerce sites. In addition, in its prevention of over-indebtedness principles, the Smart Campaign considers whether adequate care is given in the credit approval process to prevent debt which could be harmful to consumers.

> **Robust Credit Reporting.** Where available, digital credit providers should report loan repayment information to major credit bureaus and consult credit data when underwriting a loan. As noted by the Small Borrowers' Bill of Rights, such reporting enables other lenders to responsibly underwrite the borrower and helps the borrower build a credit profile that may facilitate access to more affordable loans in the future.

As with other forms of credit, AFI's guidance recommends that regulators develop market monitoring mechanisms to continually review the levels of debt, both from demand-side data and portfolio-at-risk reviews of digital credit portfolios. As a means to mitigate over-indebtedness, regulators and policy makers should ensure that all digital lenders also report to credit reference sharing providers.[50]

   CGAP's focus note on digital credit also recommends that policy makers address gaps in coverage of and compliance with credit reporting regimes across the various types of digital lenders in a market.[51] It also recommends that policy makers and regulators work with credit registers and lenders to explore the inclusion of new and valuable customer data (e.g., mobile money and payments data) in credit reporting systems. Finally, the note recommends that policy makers consider a range of options to address disproportionate

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consequences of delinquency and default for very small loans, such as ensuring that existing rules for sharing both negative and positive credit information are enforced, enacting new rules on reporting requirements for a specific subset of credit products, using moral suasion for noncompliant lenders, disclosing consequences of nonpayment more clearly to consumers, and undertaking financial capability and consumer awareness efforts. This guidance is now being applied to P2P lenders in India.

3. Transparency

Consumer and Investor Risks
The transparency principle asserts that lenders have a responsibility to provide all the important information about a product—particularly pricing information—in a manner that enables clients to understand and make informed choices. In many cases, however, digital loan interest rates, fees, charges and terms are unclear, incomplete and hard to compare across providers.

> **Non-Transparent Rates.** Several digital credit providers only list the actual sum of finance charges the consumer will pay and, in some cases, only disclose the price after the loan has been executed.[52] In addition, many digital lenders do not disclose the Annual Percentage Rate (APR) as the all-in annualized price of the loan product.

> **Hidden Fees.** Several digital credit products include hidden fees not disclosed at the time a client applied for the loan. Examples of this come from both P2P and mobile models.

For digital credit, the heart of the suitability principle is that digital lenders should design, target and sell only products that have features that meet the particular needs of the customer segments or individual customers for whom they are intended.

> **Lack of Plain Terms.** Many digital lenders do not describe key terms in an easy-to-understand manner, including the loan amount, total amount provided after deducting fees, payment amount and frequency, collateral requirements, or prepayment charges. Instead, loan documentation is often unnecessarily lengthy and complex, actually hindering rather than supporting understanding. Many P2P and mobile borrowers do not take the time to review multi-page loan agreements online or, in the case of mobile loans, actually cannot access the loan terms and conditions from their mobile devices.[53]

> **Complex and Confusing Menus and User Interfaces.** Poor design makes it difficult for consumers to fully understand the credit services offered and opens clients to risks of misselling and unsuitable credit products.[54]

> **Lack of Ability to Compare Products.** Due to the various ways that digital loans are presented, pricing and other key information are not clearly presented in a standardized loan summary, making comparisons difficult. This has been an issue especially with online payday loans (marketed as microfinance loans) in Eastern Europe.

> **Lack of Notice Regarding Referrals.** Brokers and agents for digital lenders may not provide notice that a referral to one or more lenders is made, which is especially problematic when these lenders may not provide the same level of information or market best-fit products.

> **Lack of Transparent Broker/Agent Fees.** Not all fees to brokers and/or agents are disclosed (especially when they are to be financed under the loan) and additional unauthorized fees may be charged, especially at agent locations.

For individual investors providing funds for P2P marketplace lending, transparency is a particular concern.[55] The majority of individual investors in P2P platforms have investments below US $5,000, and most are micro-investors with amounts below US $500.[56] Many P2P platforms have an inherent conflict of interest, since P2P platforms earn fees from originating loans while the investors carry the burden of any loss. In addition, some lenders benefit from risky loans by charging debt collection fees on P2P loans that do not perform well.

> **Lack of Standardized Disclosure.** P2P lending platforms often do not follow standardized practices, making it difficult to compare or assess the risks and returns of such investments.

> **Misleading Advertising.** Some P2P lending platforms have been found to promote guaranteed returns or to overstate returns by presenting results only under advantageous circumstances.

Desired Outcomes

The Smart Campaign's approach to transparency goes beyond disclosure and asserts that providers have a duty to confirm that clients actually understand the key terms and conditions of the product and provide informed consent.[57] This principle should also apply to individual investors in P2P lending models.[58] Key borrower disclosure standards include:

> **Availability and Ease of Understanding of Information.** Ensuring full disclosure of terms and conditions in a variety of formats (digitally and in written form). These disclosures should be clear, complete and easy to comprehend in the target clients' own languages. They should be available prior to a loan being authorized.[59]

> **Disclosure That Facilitates Comparisons.** Standard summary disclosure documents that allow borrowers to compare traditional as well as digital credit providers should be agreed upon between the industry players and regulators.

> **Adequate Notice Periods.** Providers should give customers sufficient advance notice before implementing changes to fees or terms and conditions.

> **Honest Advertising.** Penalties for misleading marketing of credit products should be enforced. In addition, providers should name the financial regulator they report to in all advertising materials.

Some current research has highlighted the positive aspects of how digital delivery channels can be harnessed to improve transparency by tailoring communication to the borrower using SMS, smartphone messaging or email services that include interactive methods that ensure better informed consent.[60]

Emerging Standards

Not surprisingly, almost all industry consumer protection standards agree on the importance of transparency, as this is one area where digital credit consumers and investors in P2P platforms have had the most complaints.

Most industry standards require that digital credit providers provide borrowers the right to see the terms and conditions of any financing being offered in a form that is clear, complete and easy to compare with other options so that they can make informed decisions. This is easier said than done, however, as many clients, especially those new to financial services, do not understand the costs and terms of financing. Fintech may be able to make a difference, however, as has been demonstrated with some early industry testing. In partnership with mobile data-based digital lenders, CGAP demonstrated that interactive and user-friendly interfaces can improve the effectiveness of disclosure to digital borrowers in Africa.[61]

In addition to mobile-based lenders, P2P, digital payday and other digital credit providers could benefit from testing interactive ways of presenting loan terms and conditions to borrowers.

The regulatory working group of the International Telecommunications Union (ITU) Focus Group on Digital Financial Services came up with several recommendations to improve transparency and develop appropriate digital disclosure practices that are relevant for regulators to consider:

> **Timely, complete and accessible disclosure** to ensure the full disclosure of all charges prior to a loan application being finalized. Recommendations include fees disclosed in multiple formats (e.g., in brochures, verbally, on websites, via SMS, etc.).

> **Standard key facts documents** provided to all prospective borrowers in advance of any loan being finalized to ensure that the borrower is able to view information related to the service in a concise manner.

> **Plain language** to ensure that unclear terms or complicated sentences are avoided and loan documentation is easy to understand. Terms and conditions should likewise be available in the local language used by the borrowers targeted.

> **Adequate notice** should be given to consumers before any changes to fees, terms or conditions.

Some regulators are adapting regulations to promote and support more interactive forms of digital disclosure for digital credit and other digital financial services. For example, Australian regulators removed barriers that favored paper-based disclosures and now support innovative digital disclosure statements that use interactive web-based disclosures, apps, videos, games and audio presentations.[62]

Transparency for Investors. Many of the industry associations that deal with marketplace lenders, especially P2P lending platforms, have developed recommended investor disclosure standards. This has become even more important in the aftermath of the recent fraud issues in China.[63] Several of the relevant investor disclosure standards issued by the Marketplace Lending Association include:[64]

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> **Historical Performance Data.** Provide investors access to overall performance data for the marketplace lenders, including returns based on all loans issued through the programs equivalent to the investment being considered, except where not permitted by regulators. This data may be segmented by criteria such as product, vintage or investor type, where appropriate.

> **Investment Selection Data.** For investment programs where investors acquire interests in individual loans on a discretionary or active selection basis, provide those investors access to more detailed data on each loan available for investment including information used for credit decisions such as sales and past credit history, etc.

> **Investor Portfolio Data.** Provide investors with access to regularly updated, loan-level performance data on the loans in which they have invested.

> **Disclosure of Marketplace Management Practices.** If the marketplace's business strategy involves retaining an interest in a meaningful portion of the loans that are relevant to a specific investment program, such as 10% or more of the loans within a given loan product, there should be appropriate disclosure. For example, marketplace operators must disclose how they select which loans they will invest in, as well as the performance for those loans versus the overall portfolio.

> **Investment by Employees.** Maintain a policy with respect to employees investing in loans issued through the marketplace, to address potential conflicts of interest or the potential for insider trading.

> **Fair Investor Treatment.** If an investment program is available to non-accredited as well as accredited investors, maintain allocation policies to ensure that each class of investors is provided fair access to loans.

4. Responsible Pricing

Consumer Risks

There is a general presumption in the financial sector that market forces should determine prices, and for that reason, consensus on responsible pricing is difficult to achieve. However, there is broader agreement that pricing should not exploit customer vulnerabilities or create perverse incentives (i.e., incentives for providers to profit from borrower misfortune). Several digital credit models have been developed based on high loss rates which require providers to charge high rates, fees or penalties. This has especially been the case for digital payday lenders as well as some of the new mobile nano-lenders.

In addition, as discussed in the previous section on transparency, providers should inform customers about pricing in a way that is understandable and promotes comparison shopping. In several markets, digital credit products do not use a standardized calculation such as an annual percentage rate (APR), instead opting for monthly or weekly interest rate figures or failing to roll fees into APRs. There have also been failures to provide consistent or comparable disclosure of finance charges across digital lenders or to disclose costs and/or benefits of the other services bundled with the digital loan.[65] [66]

Desired Outcomes and Emerging Standards

The Smart Campaign's approach to responsible pricing means that pricing must be as affordable as possible for the customer while sustaining the financial viability of the provider. This formulation emphasizes that low prices are good for clients, while allowing for the practical realities entailed in the provision of small loans.[67] Therefore, responsible pricing implies a notion of shared benefits—providers should not justify high rates only because they are more affordable compared to informal alternatives.

Responsible pricing standards are, arguably, one of the most difficult principles for the credit industry to actively promote among digital credit providers. There are many reasons for this, including the challenge of fairly new credit models lacking sufficient data for pricing risk. At the same time, new digital credit models now enable providers to better customize and support responsible pricing approaches

than traditional lending of the past. Digital lenders now have the technology to better segment potential and current customers, more carefully assess their repayment capacity, target appropriate use cases and improve overall pricing in a more responsible way.[68]

Figure 2 demonstrates the broad range of detailed interest rate options that new digital underwriting can offer. Lending Club has been able to assign various grades to classes of borrowers from A1 to E5 with interest rates that are publicly posted and range from 5.31% to 26.77%.

Since digital lenders' post-sale servicing costs can be relatively low (because payments are collected remotely and loan monitoring is automated), this can better justify improved, more differentiated pricing models. This is now beginning to happen in places like East Africa where some newer entrants diversify and customize their product types, loan maturity and pricing. Examples include charging daily interest (creating a "pay for what you use" approach to interest and fees); risk-based pricing, both on initial and recurring loans; and eliminating penalties for late repayment—all of which could benefit from further testing and documentation of impact.[69]

While debated in many circles, interest rate caps, especially for high rate payday lending and some P2P platforms, are gaining support among the public, regulators, and at times, providers.[70] However, since interest rate caps are highly controversial and may create distortions in markets (e.g., by eliminating whole market segments if caps are too low), regulators could act first to move toward more transparent and competitive pricing through selective carrot and stick approaches. For example, interest rate caps could be set for providers that do not provide information to a public comparable and transparent interest rate table. Mandated disclosures could also be required, informing clients that they are about to accept a loan at a given interest rate, and before they proceed, allowing them to click a link to check the industry comparison table.

While several industry associations have issued standards under their transparency lending guidelines to ensure that appropriate APR policies are practiced, this has so far been limited to countries such as the U.S. and U.K., where strong standards already require the use

of APRs. Unfortunately, in jurisdictions where APR policies are not widespread, industry players often do not practice transparent pricing and the basis for pricing in terms of costs receives little or no mention.

FIGURE 2

Interest Rate Scale of Lending Club

Interest Rates

Based on each loan application and credit report, every loan is assigned a grade ranging from A1 to E5 with a corresponding interest rate. Each loan grade and its corresponding interest rate is displayed below.

Loan Grade	Interest Rate	Loan Grade	Interest Rate
A 1	5.31%	D 1	17.47%
A 2	6.19%	D 2	18.45%
A 3	6.83%	D 3	19.42%
A 4	7.46%	D 4	20.39%
A 5	8.08%	D 5	21.85%
B 1	9.58%	E 1	22.90%
B 2	10.07%	E 2	23.87%
B 3	10.56%	E 3	24.84%
B 4	11.05%	E 4	25.81%
B 5	12.13%	E 5	26.77%
C 1	13.06%		
C 2	14.03%		
C 3	14.52%		
C 4	15.49%		
C 5	16.46%		

Source Lending Club, "Rates and Fees," last accessed May 17, 2018, www.lendingclub.com/public/rates-and-fees.action

In regulatory responses to responsible pricing, there have been few or no new rules specific to digital credit providers other than standardized truth-in-lending and APR requirements. However, AFI's Consumer Empowerment and Market Conduct Working Group noted that there is a need to require comprehensive disclosure of costs of digital credit to allow for comparison with other credit offers, both digital and non-digital, further promoting more transparent and comparative pricing.

5. Fair and Respectful Treatment

Consumer Risks

Digital credit clients have at times faced issues around unfair treatment. In addition, borrowing via brokers, agents or third-party loan marketplaces have been identified as following unfair client practices. As noted by the Smart Campaign, this also includes protecting against discriminatory loan practices related to algorithms that are increasingly utilized in digital credit platforms.[71] Some of the client treatment issues that affect clients of digital credit include:

> **Discriminatory Practices.** New credit models and algorithms have raised concerns about discriminatory practices against clients based on race, ethnicity, religion, national origin, gender, marital status, age, sexual orientation, and other protected classes.[72]

The use of algorithm-based lending practices that apply machine learning and artificial intelligence (AI) to underwrite loans introduces new challenges in determining whether policies and procedures are discriminatory. One of several reasons for heightened attention is the frequent reliance of these algorithms on alternative and non-traditional data to make credit decisions.[73] While algorithms have demonstrated effectiveness at speeding loan analysis, optimizing repayment rates, reducing labor costs and enhancing the customer experience,[74] digital credit providers must continually assess their use of algorithms, especially those that rely on AI and machine learning, as the algorithms are dynamic and change over time. As noted by White & Case, risks are beginning to appear, in particular, the risk that a well-intentioned algorithm may

migrate over time to generate conclusions that discriminate against protected classes of people.[75] The risk lies in the autonomous functioning of these algorithms. How these systems select and analyze variables from within large pools of data is not always clear, even to their well-intended developers. This lack of algorithmic transparency makes it hard to determine where and how bias enters the system.[76]

For example, non-traditional data used in credit scoring models may include the spelling of text messages, social media connections, online search histories and shopping behaviors.[77] Although algorithms processing this new non-traditional data have demonstrated potential to expand access to credit,[78] they also have the potential to produce unfair or discriminatory lending practices.[79]

A related challenge is that borrowers may not even be aware of the data being collected.[80] Without greater insight into the non-traditional data driving the approval or rejection of their loan applications, consumers are not well-positioned to correct errors or explain what sometimes may be meaningless aberrations in the data.[81]

Algorithms often do not distinguish causation from correlation or know when to gather additional data to form a sound conclusion. While data from social media connections, such as the average credit score of an applicant's "friends,"[82] can be used to determine a score, such an approach could ignore other relevant factors unique to individuals, such as which connections are genuine and not superficial. In addition, an algorithm that assumes financially responsible people socialize with other financially responsible people may deny loans to creditworthy individuals who lack creditworthy connections.[83]

We have seen examples of digital credit algorithms that "learn" that people who make typos in text messages have higher rates of default and have used this data to avoid lending to this group, regardless of whether or not the person's language skills have a direct connection to his or her repayment capacity.[84] From a risk standpoint, using language skills as a creditworthiness criterion could be interpreted as a proxy for an applicant's education, which in turn could implicate systemic discriminatory bias. A lender may be unaware that the algorithm has learned to incorporate such criteria when evaluating potential borrowers

and therefore cannot avert the discriminatory practice before it causes consumer harm.[85]

Even well-intended credit scoring algorithms could form discriminatory scores. Consider an algorithm programmed to incorporate shopping patterns into its decision model. It may reject all loan applicants who shop primarily at a particular chain of grocery stores because shopping at those stores is correlated with a higher risk of default. But if those stores are disproportionately located in minority communities, the algorithm could have an adverse effect on minority applicants who are otherwise creditworthy.[86]

> **Unfair Collection Practices.** Unfair collection practices have been observed as a key consumer risk faced by digital credit customers in several markets. These include:

  > Lack of oversight of third-party collectors. This is especially an issue for P2P lenders in China and online consumer and payday lenders in Russia and Eastern Europe.[87]

  > Several digital lenders, especially new mobile lenders in parts of Africa, have relied excessively on blacklisting clients who default via credit bureaus.

  > Some digital lenders have also resorted to online or social media harassment to collect from borrowers.[88]

  > Some individual investors on P2P platforms have engaged in harassing or intimidating collection efforts.[89]

> **Lack of Disclosure of Conflicts of Interest.** Brokers/agents do not disclose the fees or financial incentives they receive from lenders and hence may steer clients to lenders where they receive the highest commissions rather than loan products that are best suited to the borrower.

Desired Outcomes: Non-Discrimination

Turning first to non-discrimination, this principle calls for treating all clients equally, regardless of their race, religion, ethnicity, political affiliation, disability or gender. According to the Smart Campaign, this does not mean that everyone must be offered

the same terms.[90] Rather, credit offers for individuals may differ based on risk analysis, but such differentiation should be consistently applied across sensitive categories, stated in advance, and made with the goal of benefitting clients. Attributes that many societies consider as inappropriate bases for differentiation include religion, language, gender, or ethnic origin, among others. Both the list of protected categories and the extent of laws protecting them differ widely across the world.

Among the recommended steps to prevent discriminatory practices are the following:

> **Opt-Out Features.** This provision allows customers to withhold their personal data from credit scoring.

> **Pretest, Test and Retest for Potential Bias.** Digital credit providers and third-party credit data analytics providers should continuously monitor the outcomes of their algorithmic programs to identify potential discrimination. Such testing could involve running scenarios to identify unwanted outcomes and building controls into algorithms to prevent adverse outcomes. Other possible approaches include creating an independent body to review companies' proposed data sets or creating best practices for data inputs and nondiscriminatory AI systems, following the self-regulatory organization model that has been successful for the Payment Card Industry Security Standards Council.[91]

> **Document the Rationale for Algorithmic Features.** Digital credit providers should ensure that algorithms can provide visualization and decision tree models for the factors they analyze,[92] as well as justification for relying on these factors.[93]

> **Regulatory Technology (RegTech).** Numerous financial services companies are expected to develop or leverage third-party regtech algorithms to test and monitor the algorithms they deploy for credit scoring. For example, a paper presented at the Neural Information Processing Systems Conference shows how predictive algorithms could be adjusted to remove discrimination against identified protected attributes.[94]

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> Policy makers, regulators and digital credit industry associations can all benefit from monitoring complaint feedback and ensuring that industry standards and guidance are adapted as new practices emerge in various markets.

In the EU and Australia,[95][96] policy makers and regulators are enacting rules that will allow individuals to opt out of the use of their personal data for automated credit scoring decisions. Individuals who do not opt out are required to be notified of any such decision and be permitted to request reconsideration.

Emerging Standards: Fair Collections and Other Issues

Most of the principles that address fair and respectful treatment of clients address interactions between borrowers and digital lending platforms, brokers, lead generators, agents and third-party collectors, with a strong emphasis on collections. Policy makers, regulators and digital credit industry associations can all benefit from monitoring consumer complaint feedback and ensuring that industry standards and guidance are adapted as new practices emerge in various markets. We also note that digital credit platforms allow for improved communications, 24/7, with clients that, if harnessed properly, could improve collections and other interactions by providing technical support options in real time, alerts on upcoming payments, and even identification of financial counselors or resources for clients in financial stress.

The Online Lender's Alliance Best Practices provides one of the most detailed statements available on fair treatment of customers including:[97]

> **Detailed Fair Collections Policies and Procedures.** These policies and procedures should be documented in detail, and providers should ensure that third-party collectors follow these practices. These policies should address work flow, account handling, payment handling and posting, workforce training, quality assurance and monitoring, complaint handling, vendor or partner selection, due diligence and monitoring, contract review and compliance, and exception account handling (i.e., bankruptcy, consumer credit counseling services, dispute and fraud).

> **Procedures Regarding Calls.** Advance notice should be provided to customers prior to calling them, and providers should disclose their identity (lender or third-party collector) and the purpose of the call. No false or misleading representations.

> **No Harassment or Threats.** For example, "excessive" numbers of calls, calls late at night, social media harassment or other abuse should be prohibited. Clients should not be threatened with criminal prosecution or led to believe that they may be sued.

> **Respect.** Consumers owing debts should be treated with professionalism, respect and civility. Discussions with clients should be simple and clear, without legal jargon.

> **Cease Collection Communications.** Providers should cease collection communications under the following circumstances: the account is disputed; the debtor has filed for bankruptcy protection and provided documentation of such action; the debtor is deceased; or the debtor has demonstrated that he or she is the victim of identity theft.

> **No Pressure to Reborrow.** Encouraging customers to pay off one loan and quickly take another should be prohibited.

> **No Surprise Fees.** All fees should be included in the initial terms and conditions of the original loan.

> **Offering Responsible Restructuring.** When a customer is unable to repay according to their original contract, offer terms that ensure flexibility based on the customer's circumstances.

Since many digital credit providers hire third-party collectors, groups like the Online Lenders Alliance also list standards that outsourced collection agencies should follow.[98] These include:

> Opt-in and opt-out options for borrowers[99]
> Technical support options
> Alerts of missed payments
> Alerts of upcoming payment due dates
> Alerts of servicing fees imposed, such as late fees[100]

Digital credit providers may also provide proactive information that may better assist borrowers, including identification of financial counselors located in the customer's geographic area and other resources for customers suffering from financial strain.

Most of the regulatory guidance around fair treatment of clients is similar to guidance for traditional credit products. CGAP particularly flagged that supervisors should monitor how digital lenders determine penalty charges, the size of these charges, how they are communicated, and the policy for writing off delinquent loans. Supervisors may also want to review the messaging scripts and call center protocols digital lenders use to communicate with delinquent borrowers to ensure clear and responsible communication of penalty charges and collections practices.

6. Privacy of Client Data

Consumer Risks
Digital credit providers, especially technology, e-commerce, payment giants and mobile lenders are collecting extensive customer information, including social media information, call and SMS logs, contact lists and even geo-tracking of clients' whereabouts. Clients often are not aware of the extent of the information collected, how it is used, how long it will be stored, who it will be shared with or even the fact that they may have signed away their privacy rights.[101] Compounding

these issues are legal and cultural differences. What may be acceptable to most Chinese or in Chinese law may be considered a clear violation of privacy rights by Europeans. The European Union arguably has the strictest data protection rules,[102] with China taking a very different approach,[103] and other markets, especially in emerging economies, having limited or no data protection rules for credit providers.

The U.S. Federal Trade Commission, in its February 2013 Staff Report, noted that mobile technologies raise unique privacy concerns based on the fact that mobile devices are uniquely personal to an individual, they are almost always turned on and frequently on the user's person.[104] This can facilitate unprecedented amounts of data collection, which could reveal highly sensitive personal information. The data collection and sharing made possible by mobile devices goes well beyond that available through an online desktop computer. For example, precise geolocation information could be used to build detailed profiles of consumer movements over time.

Data-related risks digital credit clients may face include:

> **Lack of Information on Data Collection.** Digital credit clients are not always provided with an adequate disclosure about data collection and use in the digital credit applications.

> **Lack of Control over Data Sharing.** Digital credit clients often do not have the ability to choose whether data is collected, used or transferred to a lender or other third parties. This issue is a particular concern with respect to big technology companies (especially e-commerce, search, telecommunications and social media providers) that have massive access to data that might be shared with financial service providers without the customer's permission. In particular, there is a concern that data analysis providers using social media in credit scoring may improperly use consumers' personal data or sell it without the express permission of the client.[105]

> **Lack of Timeline for Data Storage and Usage.** Clients of digital lenders and affiliated third parties may store and continue to use client data without proper notification.

> **Improper Handling of Sensitive Data.** Some information collected by lenders, third-party loan originators, brokers or agents is especially sensitive, especially identification data or other information that might allow access to a customer's financial accounts.

> **P2P Investor and Borrower Information at Risk.** Given the sharing of identity information about individual investors as well as personal information about borrowers on P2P platforms,[106] there is also an elevated risk of fraud by dishonest individual investors.

Large technology providers, like e-commerce companies and lenders linked to MNOs, often treat client transaction records as proprietary, limiting clients' ability to share it. As noted by CGAP, especially for mobile data-based lenders,[107] this "lack of control over their own data prevents customers from maximizing the utility of the data trail they generate, for example, to receive competing credit offers." Similarly, inability to move data out of the hands of major companies helps the dominant players leverage their market-leader status to suppress competition by restricting new entrants and disadvantaging other lenders.

CGAP also notes that, unlike large incumbents, digital lenders that do not have access to information on applicants' bank or mobile e-money transactions often rely on more intrusive alternative data to build their scoring models. App-based lenders often ask consumers to authorize access to a wide range of data stored on the handset, including contact lists, social media information, mobile wallet transactions, emails (which they scan for references to past due loans, mobile e-money transaction receipts, and other potentially relevant indicators), as well as geo-tracking customers.

Desired Outcomes and Emerging Standards
While many regulators and industry groups agree on the principle of protecting the confidentiality and security of a customer's information, there are divergent legal and cultural views about specifics: how the information can be used, how much disclosure is appropriate, what kinds of controls to give to customers, etc. For the U.S., the Online Lenders Alliance and the Marketplace Lending Association have extensive lists of practices for their members on comprehensive information security and data privacy policies that extend to all vendors, brokers and third-party agents.[108] [109] CGAP's ongoing work with digital credit players in developing countries has also contributed to understanding of emerging data privacy issues.

Emerging standards include:

> **Present Laws, Regulations and Policies.** Providers should have data collection and handling policies that state what data will be collected and under what circumstances it may be shared. As an overarching policy, digital credit providers must be able to articulate to investors and borrowers why the provider is collecting the data; otherwise the provider should not collect it.[110]

> **Secure Handling of Data.** All personally identifiable information should be collected from consumers using secure protocols (https) and sent and stored only in encrypted formats. Available security measures to guard against reasonably foreseeable attacks should be used and regularly updated to keep abreast of standards. Retention of data only as long as necessary to satisfy a legitimate business or legal need.

> **Customer Informed Consent.** Informed consent to electronic data collection should be made with a clear understanding of what financial, personal or transactional data will be collected and how it will be used or shared, with an option to consent or not. This requires a conspicuously-placed privacy policy on all websites. In recent discussions at the Responsible Finance Forum and in ongoing research,[111] [112] concerns have been raised about whether digital credit customers actually provide informed consent. More often "consent" consists of checking an acceptance box at the end of a loan agreement or mobile money contract.[113] In addition, as noted previously, consent links may not be viewable via a mobile interface and, hence, most clients will not have read or understood the rights they are waiving.

> **Awareness of Consequences.** Clients should be made aware of their data trails and credit histories, including their potential to affect their credit reports, and they should have the ability to ensure accuracy and correct for errors.

> **Consent to Communicate Electronically.** Digital credit providers should not originate a loan until the consumer consents to receive disclosures electronically. The Online Lenders Alliance recommends an "I agree" or eSignature function to obtain this consent, without which the transaction may not proceed.[114] In addition, before the consumer binds himself to the mobile loan agreement, the consumer must indicate the mobile capability to download and retain such electronic disclosures.

> **Internal Procedures to Prevent Misuse.** Internal controls, such as levels of authorization and separation of duties, are necessary to ensure that employees and third parties cannot access all of a consumer's data without justification.

> **Limited Collection and Retention.** Providers should limit the amount of personal data they collect from consumers to only what is necessary. They should also limit the timeframe for the retention of data and destroy data after use.

> **Management of Third-Party Providers.** Management of third-party providers (including lead generators, brokers, agents, data analytic firm providers) should be the responsibility of the digital credit provider, with strict agreements in place to protect client data. Digital credit providers should exercise due diligence to ensure that potential partners have proper information security policies, as well as employment screening requirements for new hires, contractors or third-party personnel who have access to sensitive customer information.

An example of good practice regarding informed consent, First Access—a data analytics firm that helps digital credit providers collect non-traditional alternative data—utilizes an easy

to understand opt-in approach to help clients understand the data they collect (see Figure 3).

Some lenders are up front about their data collection practices in pre-loan documentation and are using randomized control tests to develop interfaces that improve informed consent for digital credit borrowers.[115] These messages are clear, timed in pre-loan procedures and can be viewed on a mobile device. See a screenshot example from a Kenyan lender, which clearly and simply identifies the type of data collected (Figure 4).

Regulators are also moving to develop policies in this area. A recent survey among regulators noted that there may be a need for an explicit regulation or guidance to clarify that digital credit providers are required to take sufficient measures to protect the confidentiality and security of a customer's information against threats and against unauthorized access to, or use of, customer information, including sharing of consumer data to third parties without clear and explicit prior authorization.[116]

The ITU Focus Group on Digital Financial Services provided several standards for regulators to consider relevant to data privacy, data rights and security.[117] These suggestions echo those described earlier, including the following:

> Overarching requirement for borrower data protection. Providers should have a data collection and handling policy stating what data will be collected and how it may be shared.

> Protection of misuse through levels of authorization and separation of roles within the organization (and with third parties).

> Informed consent. Customers should be in control of their own data and effectively informed of what data will be collected and how it will be used, prior to its collection and use, and must have the informed ability to consent or not.

> Providers should limit the amount of personal data they collect, limit the timeframe for retention of data and destroy data after use.
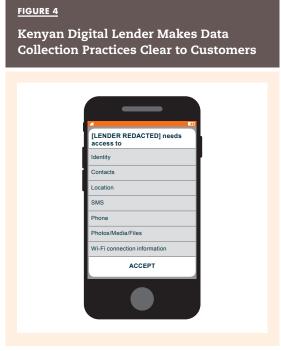
FIGURE 3

How First Access Informs Customers About Data Usage

Source Kaffenberger and Mazer, "Simple Messages Help Customers Understand Big Data," CGAP, 2014.

FIGURE 4

Kenyan Digital Lender Makes Data Collection Practices Clear to Customers

Source Adapted from Mazer and McKee, *Consumer Protection in Digital Credit*, CGAP, 2017.

> Adequate security systems, with appropriate authentication. Regulators should also have penalties and the power to remove the license for providers who repeatedly allow personal data to be misused.

Some of the most far reaching data privacy and usage policies will be implemented in the European Union as part of the new General Data Protection Regulation (GDPR). This new regulation is expected to have significant impact globally especially for various players who also work in the EU. Some of the new policies that are likely to have the greatest potential impact for digital credit consumers include:

> The expanded right to be informed that personal data is being collected, how it is being collected and for what purpose. Included under this specific rule is the right to request a copy of all personal data free of charge from those that are collecting and/or using personal data (**Right to Access**).

> The right to have one's data erased and to request a provider to stop any further processing of personal data (**Right to be Forgotten**).

> The right of an individual to receive all personal data and transmit it to another provider (**Right of Data Portability**).

7. Mechanisms for Complaint Resolution

Consumer Risks

Digital credit providers often face concerns with their clients over the lack of appropriate complaint resolution mechanisms. Concerns for clients include:

> **Lack of channels for correcting errors** on the part of the provider or due to design-related issues

> **Limited knowledge about how to resolve complaints,** when channels exist

> **Lack of recourse regarding unauthorized activities** such as data sharing or abusive collection practices

> **Confusion over who is responsible** in some digital credit models involving several companies[118]

> **Difficulty settling cross-border disputes** when the client is situated in a country other than the digital credit provider, especially in regard to trade and cross-border supplier credit models[119]

Desired Outcomes and Emerging Standards

Digital credit consumers need to know that they are able (and have the right) to access complaint resolution systems and seek redress for errors or illegal acts of digital credit providers or their related third-party providers.[120] Consumers should have access to straightforward, affordable, fair and speedy redress mechanisms. When complaints are not satisfactorily resolved via a provider's internal dispute resolution mechanisms, digital credit consumers should also have access to an independent, impartial and free redress process.[121]

Most digital credit industry groups have recognized these concepts and provided standards for their members, with at least one network creating a hotline to add another consumer complaint resolution recourse for clients that use the services of members in its network.[122] Policy makers and regulators can review consumer protection rules for complaint handling and redress mechanisms to ensure they adequately cover digital credit providers and their consumers.

Overall emerging standards for digital credit complaint resolution include:

> **Policies and Procedures.** Digital credit providers should have clear, thorough and easy-to-understand complaint policies and procedures in place. These would cover both customer-facing and internal dispute handling processes, including reasonable processing time deadlines.

> **Communication to Customers.** The complaint and resolution policy should be effectively communicated using multiple channels and made available in common local languages. Customers should be informed about how long dispute resolution will take.

> **Multiple Channels.** Multiple channels should be available to lodge complaints, including well-staffed call centers using toll-free numbers, local agents, apps, social messaging, SMS, and offices or branches.

> **Ombudsman.** Consumers who are not satisfied with how their complaint was handled by their provider should have access to an independent, impartial consumer protection ombudsman or third-party intermediary.

> **Clarity on Responsible Organizations.** The digital credit provider must be clearly named, especially when third-party intermediaries are involved in the digital credit product. The name of the responsible regulator should also be stated in all advertisements.

> **Records and Analysis.** The provider must maintain records of complaints received, periodically compile statistics on complaints and review them with regulators.

> **Publication.** Ideally, regulatory agencies should publish aggregate statistics and analyses related to their activities regarding consumer protection—and propose regulatory changes or financial education measures to lessen recurring complaints. Industry associations should also play a role in analyzing the complaint statistics and proposing measures to avoid recurrence of systemic complaints.

With the exception of the extra focus on third-parties, these standards are broadly similar to those for traditional credit products. Additional challenges for digital credit arise from the lack of person-to-person contact involved in most of those models. Research from the Center for Financial Inclusion at Accion (CFI) found that customers in Kenya strongly prefer to speak with a person, preferably face-to-face, to resolve complaints.[123] In addition, due to the potential for confusion over different digital interfaces, especially those offered over a mobile phone, well-staffed call centers and other means of assisting with problem resolutions are essential.[124] However,

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it should also be noted that new developments in artificial intelligence and the potential uses of chatbots, may hold the key to providing improved customer complaint management tools rather than a call center alone.[125]

Most industry groups recognize the need to establish robust complaint resolution systems among digital credit providers that ensures appropriate, fast and reasonable resolution of complaints by borrowers or investors. They also recognize the importance of tracking the progress of the resolution process. In some markets, industry has worked with regulators to participate in regulator-sponsored complaint portals.[126]

AFI's guidance to regulators recommends that digital credit providers must ensure that appropriate recourse mechanisms are in place even when products and services are offered via a third party like a telecommunications provider (or online broker).[127] The ITU Focus Group on Digital Financial Services also summarizes several of the emerging standards listed earlier.[128] It especially flags the need for collaboration between different regulators (such as telecommunication and financial system regulators) to address complaint issues when lead generators come from a different sector (such as an MNO). The ITU Focus Group also recommends that regulations expressly state that financial regulators will receive and monitor complaints and track their resolution (or non-resolution) on a regular basis. This should include requirements that digital credit providers share complaints data with the regulator and ensure available information during onsite audits.

8. Fraud and Security

Consumer and Investor Risks

While not normally considered a consumer protection issue, many industry professionals, consumer protection advocates, policy makers and regulators have raised concerns around digital credit-related fraud and cybersecurity issues, and they recommended that these be included in reaching a better digital credit standard to protect consumers.

Fraud and security issues surrounding digital credit providers come in many forms including:

> **Phishing, spoofing and fake SMS** to access client data or attack or copy digital credit provider's websites

> **Websites purporting to take customer information for a loan,** but using that information for fraudulent purposes

> **Access to client data by third-party** agents, brokers, lead generators or analytics providers that could be misused to commit fraud

> **Unauthorized charges**, especially by third-party agents.[129]

Individual lenders investing in P2P marketplace platforms face particular fraud issues that have been magnified by large pyramid schemes like Ezubao in China where 95% of the borrowers did not exist and over 900,000 individual investors, mostly micro-investors, lost their money.[130] However, the risks are not only related to high profile cases such as this. Research from CFI has shown that many digital credit apps, both established and new, have gaps in basic security features.[131]

Desired Outcomes and Emerging Standards

Rising concerns over security, risk and fraud prevention for consumers, P2P platform investors and digital credit industry players themselves has required the industry to work together to improve standards. Required collective action includes educating digital credit consumers as well as the industry to share and respond to security breaches.

Authentication and security around consumer information are particularly important. The most common authentication method is commonly a password or PIN. However, because of the increasing risk of digital fraud and identity theft, most digital credit providers now use two-factor or multi-factor authentication to ensure improved security.[132]

Several ITU Focus Group on Digital Financial Services recommendations on fraud prevention and digital security are quite relevant to digital credit providers,[133] including ensuring that digital credit providers are licensed and supervised under a regulatory framework. For example, China and India now have licensing

Consumers need to know that they are able (and have the right) to access complaint resolution systems and seek redress for errors or illegal acts of digital credit providers or their related third-party providers.

rules for P2P lending platforms. The ITU Group recommends that appropriate security measures be put in place and regularly tested. It highlights the principle that digital credit providers are responsible for the actions of their third parties (agents, contractors, lead generators, brokers and collectors) and calls for due diligence practices to ensure that provider's own staff as well as third parties are secure. Consumer awareness of the potential for fraud is an important part of the overall approach to security. Consumer awareness campaigns can highlight the most common frauds and encourage consumers to report suspected cases.

Rather than offering specific standards to regulators, AFI's initial guidance for markets where digital credit products are available addresses the activities regulators should undertake to identify and mitigate risks, such as:
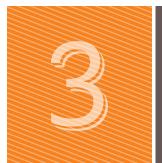
> Engaging with providers and their partners that offer digital credit products in order to understand specific product features and all steps of the credit process, with an eye towards identifying consumer protection vulnerabilities and how they will be mitigated.

> Considering whether to require pre-approval of new products or business arrangements.

> Ensuring that appropriate customer redress mechanisms are in place, as discussed previously.

> Analyzing information on customer experiences and collecting or commissioning studies (e.g., mystery shopping, surveys, focus group discussions) to prioritize and size risks.

> Analyzing the extent to which existing regulation and guidance covers the products, models and risks in the market, to identify gaps and develop practical plans to assess compliance.

> Engaging in peer-to-peer networking with regulators in other jurisdictions to stay abreast of new developments and emerging good practices.

In addition, while it is not a matter of regulation, jurisdictions (and other stakeholders) will want to consider how best to improve consumer awareness and behavior, including through awareness campaigns and financial capability interventions.

Investor Protections for P2P Lending
Certain fraud prevention issues are quite relevant to investors in marketplace lending. Due to fraudulent practices of a number of P2P lending platforms in China's US $60 billion P2P lending sector, Chinese and now Indian regulators have issued regulations geared to protect investors as well as borrowers. Similar to practices in the U.K., P2P lenders in China and India must now be licensed and use bank escrow account services to manage investors' funds and borrower payments. This appears to be helping improve trust and avoid several past fraudulent practices. India's regulations for P2P lending require that funds be transferred directly from the lender's account to the borrower's account rather than being held by the intermediary P2P platform.[134]

3

Achievements and Challenges in Advancing Standards Among Industry Associations and Regulators

As governments, policy makers, regulators, investors, consumer protection advocates and the public at large have largely supported the expansion of digital credit, they have also raised concerns about consumer protection issues. The previous chapter references dozens of emerging standards for digital credit provision from both industry associations as well as regulators. Of course, in order to effectively protect clients, providers must be incentivized to adopt and apply these standards. This chapter presents how both industry and regulators have advanced or struggled in applying such nascent standards and what we can learn from them.

Industry

While laws and regulations play an important role, industry associations also need to ensure that their members operate responsibly to ensure consumer protection. Based on insights gleaned from interviews with industry players and investors conducted for this report, it is clear that protecting customers is a strategic business decision for some providers to preemptively combat potential public backlash by customers and increased regulatory burdens.

The digital credit industry has established a number of associations in markets around the world. Some are either working groups of larger financial sector industry associations (usually banker associations, payment service providers or fintech networks) while others are specific to certain types of players, primarily marketplace lenders. Industry associations, development institutions and consumer protection groups are playing a more proactive role to address new digital consumer protection issues in some markets. Some of the more prominent examples include the Smart Campaign (global), the Responsible Business Lending Coalition (U.S.), the Online Lenders Alliance (U.S.), the Marketplace Lending Association (U.S.), the Coalition for Responsible Finance (U.S.), the Peer-to-Peer Finance Association (U.K.), the National Internet Finance Association of China (China) as well as various fintech-related associations[135] and networks in other markets in Latin America,[136] Africa[137] and Asia.[138]

The online connectivity and sharing of information among digital finance consumers surfaces consumer protection issues very quickly and can have dramatic impacts on industry developments and regulations. In the age of Uber and Airbnb, where consumers are empowered to rate their service providers, digital finance consumers are also more likely today to demand better information and protection from poor customer service practices by sharing information with one another and searching "better business seals of approval" where they exist. The Online Lenders Alliance, for example, encourages its members to agree to follow a set of best practices[139] and then promotes the use of their "seal of best practices" on members' websites and online portals to demonstrate to clients as well as regulators that they, as a member of an industry group, have agreed to abide by a set of consumer protection standards. The industry association backs these standards up with a consumer hotline number and a violation complaint form to monitor and track their members to ensure compliance. In the U.S., consumer review sites are popping up, with customer-generated ratings of digital credit providers alongside reviews of all kinds of other businesses.[140]

Regulation

Regulators from around the world are now challenged with updating financial consumer protection policies and regulations to deal with digital financial services, including digital credit. This is especially challenging given that in many countries consumer protection oversight for traditional financial service models has only recently been strengthened (a significant push was spurred by the 2008 global financial crisis). Consumer protection oversight is often spread among a range of regulators and agencies. While in most countries the financial regulator, usually the central bank or the superintendent of banks and other financial institutions, is responsible for consumer protection, in other markets the financial consumer protection ombudsman has primary responsibility.

In 2016, the G20 Global Partnership for Financial Inclusion (GPFI) identified digital finance as a top priority, including a financial consumer protection pillar as part of the new G20 High-Level Principles for Digital Financial Inclusion. In addition, regulatory networks like the Alliance for Financial Inclusion (AFI) and the International Financial Consumer Protection Organization (FinCoNet), which convenes supervisory authorities charged with financial consumer protection, are also conducting work on the risks to consumers, including security risks, associated with online and mobile-enabled digital financial services. CGAP and the G20/Organization for Economic Cooperation and Development (OECD) Task Force on Financial Consumer Protection have also been active in working with regulators on consumer protection principles that encompass digital credit products and services.

In international surveys conducted by the OECD on behalf of the G20 Global Partnership for Financial Inclusion across Asia, Africa, Europe and the Americas,[141] nearly three quarters of survey respondents stated that disclosure requirements, fraud and misselling represented the most important policy concerns or priorities in their jurisdictions. Access to complaint handling mechanisms, data privacy, security and fund protection mechanisms were also mentioned as relevant financial consumer protection issues for digital financial service providers.[142]

While it was clear from this author's discussions with regulators across the world that for the most part existing consumer protection standards applied to traditional credit providers will be suitable (possibly with some adaptation) for digital credit providers and models, there are a few areas where regulators may require specific new regulations or guidelines. These areas include disclosure requirements, especially for mobile credit, as well as appropriate disclosures for P2P lending investors.[143] In India and China,[144] regulators are ensuring that new digital credit providers, especially P2P lenders, are properly licensed and registered so that regulators can properly oversee and supervise them.

Regulators and policy makers within the AFI network have also noted that new digital credit business models and players create new challenges that include:[145]

> Keeping regulations current to address fast-evolving digital lending practices and provide regulatory coverage that ensures a level playing field for both market entrants and existing providers.[146]

> Adapting compliance requirements to digital credit providers under existing rules.

> Monitoring the business conduct of a more diverse set of digital credit products, delivery models and providers.

Best practice standards suggest that, from a legal and regulatory standpoint, consumer protection policies should primarily be principle-based rather than rule based.[147] In addition, since new digital credit products and models develop rapidly, principle based regulations allow providers the space to innovate while at the same time providing regulators with room to address emerging consumer protection issues specifically as they relate to digital credit.[148] It also be noted that not all digital credit players will fall under financial regulations. As much as possible, though, financial regulations should be amended to ensure proper regulatory oversight of new players, especially when they begin to reach large numbers of customers.[149]

The World Bank's basic good practices checklist is broken into eight general categories and which are adapted in Figure 6 to show how they apply to responsible digital credit.[150]

FIGURE 5

Models of Digitally Delivered Credit and Associated Consumer Protection Issues

	FAIR MARKET PRACTICES	EQUITABLE TREATMENT	DISCLOSURE	REDRESS	DATA PRIVACY AND PROTECTION
Unsecured mobile money-based loan	High interest rates due to short term and unsecured nature of loan; potential high initial default rates with bulk "push" offers to consumers via mobile phone.		Insufficient disclosure of terms via mobile handset and limited internet access hinder consumer ability to obtain product terms and conditions.	Need for recourse information and access to complaints mechanism to be available through all channels by which products are accessed.	
Social media scored loan	Risk of higher default rates as scoring models are refined.		Insufficient rules in place for disclosure of terms for internet-based loan products in most markets.		Need for protections against improper use of consumers' personal and social media data, as well as on-selling of such data.
Savings-linked loan	Need for rules and clarity on permissibility to freeze or strike savings balance to pay down loan balance.		Link between savings and loan obligations not always properly disclosed to consumers at point of enrollment or acceptance of loan offer.		
MSME loan		Consumer protection provisions may not extend to MSME firms due to classification as a business not an individual.	Need for clear disclosure of use of collateral and/or transaction values as collateral or repayment mechanisms.		
Peer to peer lending	Risk borne by individuals providing capital to on-lend needs to be clearly articulated.	Firm facilitating lending needs to ensure sufficient protection of identity and protect against improper conduct by lenders and borrowers towards each other.	Relationship and responsibilities amongst individuals providing capital, borrower and firm facilitating loan needs to be clearly articulated to all parties.		Protection of personal details of lenders and borrowers from other users.

Source Consumer Empowerment and Market Conduct Working Group, "Digitally Delivered Credit: Policy Guidance Note and Results from Regulators Survey (Guideline Note No. 17)," Alliance for Financial Inclusion, September 2015.

At the ITU Focus Group on Digital Financial Services in April 2017, there was discussion about a proposed "app store" approach to regulatory compliance issues using RegTech. This would involve developing app store-like platforms for providers to upload their proposed policies and practices to deal with compliance on matters such as consumer protection. Regulators could use machine learning tools that would be self-executing to better analyze these policies. For example, digital credit providers could upload their disclosure statements so that supervisors could rapidly review and approve them. This would also allow other providers to use or build on new open-sourced approaches to compliance.[151]

Public-Private Dialogues

Due to the challenges regulators face in coming up with appropriate regulatory responses, groups such as AFI have promoted public-private dialogues around issues including emerging standards for responsible digital credit. In addition, as the Smart Campaign and others have noted,[152] progress in digital consumer protection requires collective action, including industry-regulator consultation, formal industry standards, as well as responsive policy or regulatory measures. Given the diverse range of providers and products and the channels they use to disclose pricing, terms and conditions to consumers, it is clear that only through ongoing exchange between regulators and lenders can appropriate consumer protection measures be put in place and adjusted as new players and products are introduced.

FIGURE 6

The World Bank Good Practice Checklist for Consumer Protection, Adapted

GOOD PRACTICE CHECKLIST FOR CONSUMER PROTECTION[153]	DETAILED PRINCIPLES RELEVANT TO DIGITAL CREDIT
Consumer/Investor Protection Institutions	**1.** Consumer protection laws in place **2.** Sector-specific codes of conduct **3.** Adequate consumer protection supervision **4.** Licensing of digital credit providers **5.** Access to judicial process **6.** Support from consumer protection groups and/or mass media
Disclosure and Sales Practices	**7.** Properly suited products with appropriate credit analysis practices **8.** Requirement of a summary statement for all loans or digital credit investments **9.** Terms and conditions available in easily accessible form for consumers (no longer needing to be in paper form)[154] **10.** Laws/regulations prohibiting false or misleading advertising **11.** Cooling off period especially for high push marketing products and services **12.** Freedom to choose loans along with rules governing pre-purchase requirements as a condition for loan approvals **13.** Providers should advertise the name of the financial regulator they report to on public sites and in advertising materials **14.** Ensure that appropriate staff training for consumer protection is in place and practiced by providers
Customer Account Handling and Maintenance	**15.** Proper statements of all transactions provided to clients **16.** All changes to fees, charges, terms and conditions must be provided to digital credit clients as soon as possible **17.** Up-to-date records kept and available digitally to clients either without charge or for a reasonable fee **18.** Clearing and settlement of payments is based on regulatory, statutory or approved self-regulatory arrangements **19.** Prohibition of abusive collection practices
Privacy and Data Protection	**20.** Providers should be required to submit to credit reference sharing bureaus/agencies, and clients should be allowed to view and correct any errors **21.** Digital credit providers must provide adequate security and protect customer data **22.** Laws or regulations in place to protect consumer information sharing **23.** Digital credit providers must inform customers of their policies for the use and sharing of personal, financial or transactional data **24.** Credit information bureaus/agencies are subject to oversight by financial regulators

FIGURE 6

The World Bank Good Practice Checklist for Consumer Protection, Adapted (continued)

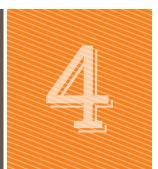| GOOD PRACTICE CHECKLIST FOR CONSUMER PROTECTION[153]	DETAILED PRINCIPLES RELEVANT TO DIGITAL CREDIT
Dispute Resolution Mechanisms	**25.** Digital credit providers have a designated contact point with clear procedures for handling customer complaints. The provider must also maintain up-to-date records of all complaints they receive and develop internal dispute resolution policies and practices, including processing time deadlines, complaint response and customer access **26.** Consumers have access to an adequately resourced dispute resolution mechanism as well as access to an independent financial ombudsman or equivalent institution with effective enforcement capacity **27.** Statistics of customer complaints, including those related to breaches of codes of conduct, are periodically compiled and published by the ombudsman or financial supervisory authority and reviewed with providers **28.** Regulatory agencies are legally obliged to publish aggregate statistics and analyses related to their activities regarding consumer protection—and propose regulatory changes or financial education measures to avoid the sources of systemic consumer complaints. Industry associations also play a role in analyzing the complaint statistics and proposing measures to avoid recurrence of systemic consumer complaints
Guarantee/Escrow Rules and Insolvency[155]	**29.** Regulator empowered to take appropriate measures to protect investors in the event of financial distress of a financial player **30.** Escrow account rules are clear, especially in the case of P2P lenders, and ensure proper management and/or timely payout of escrowed funds
Consumer Empowerment & Financial Literacy	**31.** An appropriate digital credit financial education and information campaign is developed to increase the financial literacy **32.** As much as possible, other governmental as well as non-government consumer protection groups and industry players participate in supporting financial education around digital credit **33.** Mass media should also be encouraged by regulators to understand consumer protection issues and help to disseminate best practices **34.** The impact of consumer education and empowerment should be measured through broad-based household surveys that are repeated from time to time to see if the current policies are having the desired impact on the digital credit marketplace
Competition, Regulatory Coordination and Consumer Protection	**35.** Financial regulators and other relevant regulatory agencies (e.g., the Securities and Exchange Commission and/or telecommunication regulators) as well as competition authorities should consult and coordinate with one another in order to avoid regulatory arbitrage as well as ensure the development of an appropriate competitive marketplace **36.** Competition policy in digital financial services should also consider the impact of competition issues on consumer welfare, and especially planned or actual limits on choice **37.** Competition authorities and/or regulators should conduct and publish periodic assessments of competition among emerging financial players, as well as engage with the industry to make recommendations on how competition among digital credit providers can be optimized.

Recommendations for Smart Campaign

4

Digital credit providers are playing a variety of roles in countries around the world. Not all the types of players documented in this report exist in all markets, and some are more prominent than others due to market conditions, legal and regulatory frameworks, and culture. There are also significant differences between developed markets where there are industry groups, active regulators, and standards are relatively well advanced, and the developing markets where many of these elements are missing. It is also clear that as new digital credit players enter the market, offering innovative products based on new credit models, laws and regulations alone will not be able to address all the consumer protection issues.

It will take a village to ensure that digital credit clients are protected. This requires locally customized approaches, collaboratively implemented, by governments, regulators, industry players, consumer protection advocates and even consumers. In this section, we note three important approaches that industry, regulators and consumer groups can all participate in:

▶ Development and implementation of standards of practice that adapt the broad Consumer Protection Principles for digital credit

▶ Certification or other form of recognition programs for digital credit providers that meet these standards

▶ Use of new communications technologies (e.g., chatbots) to inform consumers and at the same time hear and resolve their complaints

Standards Development. In addition to industry associations and various regulatory and policy networks, globally-oriented groups such as the Smart Campaign, GSMA, the Digital Credit Observatory at the Center for Effective Global Action (CEGA), International Telecommunications Union (ITU) Focus Group on Digital Financial Services, World Bank, CGAP, the Better Than Cash Alliance (BTCA) and MicroSave have all documented and provided inputs that can be built on to support responsible digital credit principles.[156] Developing responsible digital lending practices is not straightforward, but the guidance and sources cited throughout chapters two and three offer some examples of frameworks for policy makers, regulators and industry players to develop and adapt their own principle-based standards. The best approaches witnessed so far have been specific principle-based standards that

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conform to but go deeper than broad principles or codes of conduct. These new standards need to be detailed enough for the industry to put into practice but also accessible, in plain language, to digital credit consumers. While the principles listed by the Smart Campaign are mostly the same for responsible digital credit, how they are applied in a given market needs to be adapted to the reality of different products that are being offered.

In an effort to improve trust in the industry, some digital credit provider groups, like the Online Lenders Alliance in the U.S., are initiating proactive measures to support responsible digital credit practices; however, these types of industry efforts may not occur in many emerging markets until there is a clear push or new demand that requires this type of initiative. Often, digital industry associations have united to take action when they realize government or regulators plan to implement stricter controls, as in the case of the U.K., U.S. and China. There is an opportunity here for the Smart Campaign to assist industry groups to advance more quickly than they otherwise might. The Smart Campaign's action research initiative, *Fintech Protects*, builds on the Campaign's earlier successful efforts to develop a consensus around the Client Protection Principles. As noted, this will require ongoing research into emerging digital consumer risk issues, good and bad industry practices, and building consensus to adapt responsible digital finance practices.[157] The Smart Campaign should also provide guidance to policy makers as new global rules on data privacy and usage will still be pressing issues for credit in the digital age.

In summary, the digital credit industry standards should be based on the following key concepts with detailed practices highlighted depending on individual market conditions:

Industry Digital Credit Standards
DETAILED PRACTICES

Appropriate Product Design and Delivery
> Matching product design and usage
> Use mobile technology expertise for mobile channel delivery
> Advertising and marketing best practices

Prevention of Over-Indebtedness
> Avoidance of debt traps
> Responsible underwriting
> Responsible credit reporting/sharing
> Pressure-free loan principles

Transparency
> Borrower disclosure standards
> Investor disclosure standards (P2P platforms)

Responsible Pricing
> Pricing terms and standards that are reasonable and affordable

Fair and Respectful Treatment
> Clear collection policy and procedures
> Fair collection practices

Data Privacy and Usage
> Responsible data usage
> Consistent review of data privacy standards
> Consent to communicate electronically
> Informed consent and opt-in/opt-out policies
> Management of third-party providers to protect client data

Complaint Resolution
> Timely, clear and responsive complaint resolution practices

Security and Fraud Risk Management
> Authentication practices
> Industry standards on security compliance

Certification Programs. The Smart Campaign's certification program applies standards of practice aligned to the Client Protection Principles for traditional service providers. To date, the Campaign has certified over 100 financial service providers collectively serving over 42 million clients. This program can provide a roadmap and much of the specific content for development of a "seal of responsible digital credit practices" or "Fintech Protects seal" that could be promoted via social media campaigns to consumers with adaptations that deal more specifically with digital credit services. In addition to providing an application to consumers in multiple languages and using multi-platforms, the Smart Campaign can also provide simple "Fintech Protects" chatbot templates for regulators to use and ultimately for digital credit providers and/or their associations to connect with.

Smart Tools for Responsible Digital Credit.
Digitally connected clients could become a new driver for pushing the industry to improve consumer standards. In an increasingly connected world, digital consumers are increasingly rating businesses and sharing concerns via virtual word-of-mouth reviews (e.g., TripAdvisor, Uber, Yelp). Since almost all digital financial consumers are able to connect "digitally," this same channel may be the best way to both educate and empower them to push for responsible digital finance standards.

With today's advances in technology, the use of social messaging chatbots may be an effective tool to both educate and empower large numbers of digital credit clients in ways that were not possible before. Chatbot applications can also be used to provide "smart tools" for regulators.[158] By empowering consumers with a tool that can be used in almost all markets, as well as by empowering regulators looking for new "smart tools," the Smart Campaign would also be providing the right amount of push to digital credit providers to also work towards endorsement of responsible digital credit standards.

Best practices in consumer education broadly apply to informing the public about consumer protection issues, and can be provided through chatbots as well. To be effective, digital financial literacy tools should ideally be:

▸ Included in national financial education programs. These programs should involve all stakeholders: government, regulators, industry, mass media and consumer groups.

▸ Built on the principles of behavioral economics, including focusing on "teachable moments."[159] This includes providing relevant information on digital credit at the time when the consumer is making or considering a decision to borrow and ensuring that such information is in a form that the customer wants.[160] Interactive digital interfaces may be used to educate clients and encourage more responsible usage of credit. Australia has created such examples,[161] and ongoing research with companies like Jumo and First Access[162] demonstrate how these interfaces can be used.

▸ Tailored to the consumer's level of digital and financial literacy and adapted to the local setting.

▸ Tested and allowing for a constant feedback loop to measure clients' comprehension and subsequent behavior. New artificial intelligence tools built into chatbot applications can provide for such analytical feedback in ways that would not be possible with traditional financial education approaches or even stand-alone mobile applications.[163]

An excellent example of the use of new financial literacy "smart tools" includes social messaging chatbots such as Mr. Finance in Myanmar.[164] While this tool is currently only offered on Facebook Messenger and is limited in functionality, it reached over 15,000 clients in a very short time and effectively demonstrates how this new type of application can be developed and used to provide financial literacy training.[165] Over the past year, advances in chatbot development now allow for multiplatform porting (Facebook Messenger, WeChat, Viber, Telegram, and soon WhatsApp),

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as well as improved natural language abilities and analytical tools. These various platforms and the related analytical tools also provide timely feedback mechanisms that can quickly track new issues and concerns and be updated much more quickly than a stand-alone mobile application.

Chatbots are also now being considered as potential new tools to use to improve consumer complaint management, using common social messaging platforms or chatbot-driven two-way SMS messaging channels as well. Regulators are advancing in some instances, and some digital credit providers are also installing chatbots as part of customer care. For example, in "RegTech for Regulators: Reimagining Financial Supervision and Policymaking,"[166] the authors imagine a scenario where "Filipino customers faced with issues while using financial services can file complaints about the providers or agents of those financial services via SMS, Viber or web portal, which then get processed automatically. Through a chatbot available on different channels and devices, the central bank learns from customers and provides redress via an automated complaints platform when service providers are unresponsive or fail to provide a satisfactory response. The chatbot can escalate certain complaints to the central bank (Bangko Sentral ng Pilipinas or "BSP") and redirect others to the financial providers, as appropriate. By automating complaints and reducing paperwork, financial authorities can now identify key risks earlier, better focus their supervisory efforts, and strengthen the analytical capacity of their staff to improve accountability and embed the customer's voice in the policymaking process."

Similarly, USAID is supporting a fintech challenge in Ukraine together with the National Bank of Ukraine (NBU) and the Independent Association of Bans of Ukraine (NABU) to develop a consumer complaint management tool using chatbot solutions that can utilize a range of social messaging platforms, both online and via a mobile phone as well as SMS, to better manage customer complaints for various financial service providers.[167] It is also expected to provide a tool to financial regulators to better monitor complaints and complaint resolutions.

These examples from Myanmar, the Philippines and Ukraine are part of a new trend in fintech tools that the Smart Campaign and others can learn from in order to better inform and protect consumers as well as provide cost effective regtech tools in an increasingly connected world.

By working with consumers, regulators and enlightened digital credit providers, the Smart Campaign may actually be able to build on "smart tools" like multi-platform chatbots to provide cost effective virtual call center services for industry players and potential digital credit industry associations in emerging markets. The same tools could easily be built in a modular fashion, be multilingual and provide solutions that can actually help industry players proactively improve responsible digital credit services. These tools can also be seen as investments to better educate consumers, which in turn can improve portfolio outreach and performance in a responsible manner, creating a win-win situation for consumers and digital credit providers alike.

Matrix of Responsible Digital Credit Standards, Codes of Conduct and Principles

NAME	ORGANIZATION	COUNTRY/ REGION	TYPE	URL
Small Business Borrowers' Bill of Rights	Responsible Business Lending Coalition	U.S.	Guidelines	www.responsiblebusinesslending.org
Responsible Digital Payments Guidelines	Better Than Cash Alliance	Global	Guidelines	https://btca-prod.s3.amazonaws.com/documents/212/english_attachments/BTCA-Responsible_Digital_Payments_Guidelines_and_Background.pdf?1469034383
Smart Campaign	Center for Financial Inclusion at Accion	Global	Guidelines	www.smartcampaign.org/about
Guidance on the application of the Core Principles for Effective Banking Supervision to the regulation and supervision of institutions relevant to financial inclusion	Bank for International Settlements	Global	Guidance	www.bis.org/bcbs/publ/d383.pdf
Smart Box	Innovative Lending Platform Association	U.S.	Supplemental Disclosure Guidelines	http://innovativelending.org/smart-box
Guideline Note 13: Consumer Protection in Mobile Financial Services	Alliance for Financial Inclusion	Global	Guidelines	www.afi-global.org/sites/default/files/publications/mfswg_guideline_note_7_consumer_protection_in_mfs.pdf
Online Lenders Alliance Best Practices	Online Lenders Alliance	U.S.	Industry Standards	http://onlinelendersalliance.org/best-practices
Marketplace Lending Best Practices	Marketplace Lending Association	U.S.	Industry Standards	www.marketplacelendingassociation.org/industry-practices
CRBF Code of Ethics & Best Practices	Coalition for Responsible Finance	U.S.	Code of Ethics	https://static1.squarespace.com/static/55ef54f0e4b099741343c590/t/5784cdcaebbd1aba2d3d3c8e/1468321227397/CRBF+Code+of+Ethics+Final+Posted.pdf
Peer-to-Peer Finance Association Operating Principles	Peer-to-Peer Finance Association	U.K.	Industry Principles	http://p2pfa.info/wp-content/uploads/2016/06/Operating-Principals-vupdate2016.pdf
Self-Regulation Pact for Members of NIFA	National Internet Finance Association of China	China	Industry Standards	www.nifa.org.cn/nifaen/2955881/2955906/2958400/index.html

Notes

1 Note that these categories are based largely in the categories identified in the 2017 report *Alternative Data Transforming SME Finance* (Owens, John and Wilhelm, Lisa. "Alternative Data Transforming SME Finance." World Bank Group. May 1, 2017. http://documents.worldbank.org/curated/en/701331497329509915/Alternative-data-transforming-SME-finance).

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