

Positive Friction for Responsible Digital Lending: A Call to Action

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Introduction

Technology-enabled innovation in financial services, often referred to as “fintech,” has been a leading driver of the past decade’s global increase in financial inclusion and access. Some fintech innovations have improved the customer experience by reducing information asymmetries and transaction costs as compared to traditional financial services delivery,¹ leading some to describe fintech as “a way to deliver financial services in a frictionless manner.”² However, the focus on reducing friction in delivering financial services, while vastly beneficial for the growth of financial services, has also created new consumer protection challenges related to the digital delivery method, speed, and ease of access to these services. These challenges are exacerbated for people in vulnerable circumstances and in the context of specific products like digital credit.³

“Digital credit” refers to loans that are accessed and delivered to consumers through digital interfaces – primarily mobile phones. Digital credit has been characterized as having three attributes: i) it is instant, with lending decisions often made in minutes or seconds; ii) it is automated, with algorithms making loan decisions rather than loan officers; and iii) it is remote, with the application, origination, and repayment processes completed directly by the borrower on their mobile device.⁴ Digital credit has grown significantly in recent years; this growth has been driven by increased mobile phone ownership and connectivity, the introduction of new business models like buy now, pay later (BNPL), and consumers’ shift to using digital financial services (DFS), catalyzed by the COVID-19 pandemic.

The instant and automated nature of digital credit has raised consumer protection concerns, especially around over-indebtedness⁵ and lending decision biases.⁶ Debt stress risks have been documented in surveys



- 1 Feyen, E., Natarajan, H., & Saal, M. (2023). Fintech and the Future of Finance: Market and Policy Implications. World Bank. <https://documents1.worldbank.org/curated/en/099450005162250110/pdf/P17300600228b70070914b0b5edf26e2f9f.pdf>
- 2 Williams, J. (2022, April 18). Making frictionless finance a reality. FIS Global. <https://www.fisglobal.com/en/insights/what-we-think/2022/april/making-frictionless-finance-a-reality>
- 3 Coppack, M., Raza, Y., Sarkar, S., & Scribbins, K. (2015). Occasional Paper No. 8: Consumer Vulnerability. Financial Conduct Authority. <https://www.fca.org.uk/publication/occasional-papers/occasional-paper-8.pdf>
- 4 Chen, G., & Mazer, R. (2016, February 8). Instant, Automated, Remote: The Key Attributes of Digital Credit. CGAP. <https://www.cgap.org/blog/instant-automated-remote-key-attributes-of-digital-credit>
- 5 Zapanta, A., & Cassara, D. (2024, January 23). The Promise and Harms of Digital Credit: What Does the Evidence Say? Innovations for Poverty Action. <https://poverty-action.org/blog/promise-and-harms-digital-credit-what-does-evidence-say>
- 6 Kelly, S., & Mirpourian, M. (2024, January 18). Algorithmic Bias, Financial Inclusion, and Gender. Women’s World Banking. <https://www.womensworldbanking.org/insights/algorithmic-bias-financial-inclusion-and-gender/>

of digital credit consumers in several leading DFS markets,⁷ raising concerns that for many borrowers, digital credit may not be welfare-enhancing. Research by the Center for Effective Global Action (CEGA) has shown that evidence of the positive impact of digital credit is still emerging and seems to be limited mainly to self-reported feelings of well-being by borrowers, even as consumer protection risks continue to emerge.⁸ In particular, reports of “high and hidden fees, over-indebtedness, post-contract exploitation, fraud, and discrimination” have been increasing in leading digital credit markets.⁹

One potential solution to addressing these issues is the introduction of positive friction. To date, digital credit has overwhelmingly focused on making the consumer journey as “frictionless” as possible. Reducing friction has allowed digital credit to reach hundreds of millions of consumers instantly with little or no human interaction and, in some emerging markets, has expanded formal borrowing to tens of millions of new borrowers. While there have been discussions around concerns about digital credit’s high costs, lack of transparent fees, and use for primarily consumption smoothing and income generation,¹⁰ there has not been much focus to date on the negative implications of the frictionless design of digital credit, particularly for vulnerable segments such as low-income consumers.

Frictionless delivery of digital credit can create or exacerbate vulnerabilities through poor disclosure of product costs and rapid lending, which in turn leads to unsuitable borrowing decisions by consumers.¹¹ Consumer protection measures for digital lending have almost always come from regulating the industry. While regulations are crucial, they lag in innovations, and over-regulated markets can pose as much harm as under-regulated markets by cutting off much needed liquidity to good borrowers. Consumer

A Note on Vulnerabilities

The UK’s Financial Conduct Authority (FCA) defines a vulnerable consumer as someone who, due to their personal circumstances, is especially susceptible to detriment when a firm is not acting with care. In financial services, people may be temporarily vulnerable due to a life event like loss of a loved one that prevents clear decision making; they may be vulnerable on a recurring basis due to issues such as mental illness; or they may be vulnerable due to continuous challenges such as low digital and financial capabilities, low-income, high debt, and/or low resilience to shocks. Whatever the reason might be, research indicates that there are a few common solutions to reduce the risks raised by vulnerability. We know that consumers need: (i) better disclosure practices; (ii) more flexibility and space for judgment to be used by staff; (iii) straightforward and clear information; and (iv) trust that the firm will act in their best interests.

Sources: [Coppack et al. \(2015\)](#)

protection by design is an approach that can help providers build in consumer protection measures in the design and delivery of financial services. Positive friction, i.e., friction that is intentionally

7 See, for example: Innovation for Poverty Action’s surveys of consumers in four leading DFS markets, which includes data on late payment and multiple borrowing in digital credit, at <https://poverty-action.org/consumer-protection-digital-finance-surveys>, and FSD Kenya’s findings on the linkages between digital credit and reduced financial health for respondents to the FinAccess household finance survey, at <https://www.fsdkenya.org/wp-content/uploads/2022/10/FSDK-Financial-health-report.pdf>

8 Cassara, D., Zapanta, A., & Garz, S. (2024). Mobile Instant Credit: Impacts, Challenges, and Lessons for Consumer Protection. Innovations for Poverty Action, Center for Effective Global Action. <https://reports-cega.berkeley.edu/mobile-instant-credit-report/>

9 Cassara et al. (2024)

10 For a review of emerging evidence on the impacts of digital credit, see: Robinson, J., Park, D., & Blumenstock, J. (2022). The Impact of Digital Credit in Developing Economies: A Review of Recent Evidence. UC Berkeley, Center for Effective Global Action. <https://escholarship.org/uc/item/3d31p39h>

11 Mazer, R., & McKee, K. (2017). Consumer Protection in Digital Credit [Focus note]. CGAP. <https://www.cgap.org/sites/default/files/Focus-Note-Consumer-Protection-in-digital-Credit-Aug-2017.pdf>



introduced at strategic points in a consumer journey to allow consumers to make more considered decisions, is an example of consumer protection by design. While we have limited evidence on the business case from using positive friction interventions, we find from examples across financial and non-financial services that it is a consumer protection measure that providers can adopt. For instance, a lab experiment run by CGAP and the African fintech Jumo found that adding friction to make it harder to skip through a screen detailing loan terms and conditions increased viewership of the terms and conditions by 14.3 percent.¹² This, and other testing of positive friction in digital credit, shows promise for how positive friction could both improve borrower decision making and improve the quality of lenders' portfolios, presenting a strong business case for adopting it as a consumer protection measure. We hope to see increased use of positive friction in delivery of digital credit as a strategy to improve borrower behavior and long-term financial sustainability of digital credit products.

This report focuses on understanding the implications of frictionless design and explores how increased friction could benefit both lenders and borrowers. Our research finds that increased friction, when introduced strategically, can benefit consumers. The evidence on the business value that is derived needs further research, but there are early indications of lower customer acquisition costs and improved portfolio performance. This report first describes and defines positive friction and offers examples from financial and non-financial services. It then identifies linkages between positive friction design and consumer protection in digital financial services through a series of case studies. Finally, we conclude with suggestions for how financial service providers, investors, and policymakers can better utilize positive friction for responsible digital credit design and delivery, with a call to action for further testing of positive friction concepts in real world environments. We derived our insights for this report based on secondary literature review and expert interviews with designers, financial service providers, and consumer advocates.

12 Mazer and McKee (2017)



The Case for Positive Friction

Friction is often considered to be a negative attribute as it can cause unwanted delays, difficulties, or complexity. However, friction can also have a positive impact and add value when it is intentionally inserted in a customer's journey. How different types of friction impact users can help us label it as "good" or "bad," although there is some variation in the way the topic is addressed by design researchers and/or behavioral researchers. Van Lieren et al. describe positive friction in the context of automatic thinking as "a small moment of intentional friction that attempts to influence people's behavior or decision making by intervening automatic thinking and activating reflective conscious thinking."¹³ Others define friction in the context of micro-boundaries or fast and slow thinking.¹⁴ When designing a user journey in products like digital credit, we should be aware of the power of friction, or the absence of it, and design any friction points we introduce with the goal of creating interactions that are safe, reflective, and generate positive outcomes for consumers.¹⁵

There are many terms related to friction that are used in a similar context but are slightly nuanced. The table below classifies and defines these terms and helps to define what we mean by "positive friction."

TABLE 1:
Commonly Used Terms Related to Friction

NUDGE	"Any aspect of choice architecture that <i>decreases</i> friction associated with a specific outcome relative to other outcomes and in doing so alters people's behavior in a predictable way." ¹⁶ Nudges facilitate automatic thinking and encourage system 1 thinking (see below).
SLUDGE	The opposite of a nudge, or "any aspect of choice architecture that <i>increases</i> friction associated with a specific outcome relative to other outcomes and in doing so alters people's behavior in a predictable way." ¹⁷ The term "sludge" is usually used when friction makes a good decision harder.
SYSTEM 1 (or Automatic Thought)	A "fast, automatic, unconscious, and emotional response to situations and stimuli." ¹⁸
SYSTEM 2 (or Conscious Thought); also used in the context of micro-boundaries or intentional friction	"Slow, effortful, and logical." ¹⁹

13 van Lieren, A., Calabretta, G., & Schoormans, J. (2018, June 25-28). Rational Overrides: Influence Behaviour Beyond Nudging [Conference paper]. Design Research Society Conference 2018, Limerick, Ireland. https://www.researchgate.net/publication/326111797_Rational_Overrides_Influence_Behaviour_Beyond_Nudging

14 Kahneman, D. (2011). Thinking, fast and slow. Farrar, Straus and Giroux.

15 Cox, A., Gould, S., Cecchinato, M., Iacovides, I., & Renfree, I. (2016). Design Frictions for Mindful Interactions: The Case for Microboundaries. CHI'16 Extended Abstracts on Human Factors in Computing Systems - CHI EA '16 (pp. 1389-1397). https://www.ucl.ac.uk/ucllc/sites/ucllc/files/design-frictions_chi2016lbw_v14.pdf

16 Halonen, E. (2023, July 31). Are nudges always good and sludges always evil? Square Peg Insight. <https://www.squarepeginsight.com/post/are-nudges-always-good-and-sludges-always-evil>

17 Halonen (2023)

18 The Decision Lab. (n.d.-a). System 1 and System 2 Thinking. Retrieved January 2024, from <https://thedecisionlab.com/reference-guide/philosophy/system-1-and-system-2-thinking>

19 The Decision Lab (n.d.-a)



CFI defines “positive friction” as steps that are introduced to intentionally slow users and shift them out of automatic thinking to allow them to make more considered decisions that can help achieve positive consumer outcomes.

Negative friction, on the other hand, is any step, whether intentional or not, that results in a negative consumer experience with no upside.

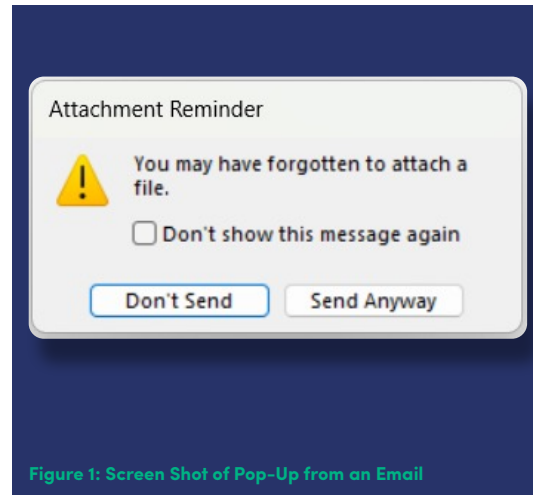


Figure 1: Screen Shot of Pop-Up from an Email

One common example of positive friction from our daily lives is when you draft an email with the word “attach” in the body of the email and a pop-up reminds you to add the file before sending. The pop-up slows you down slightly, allowing you to check whether you forgot to attach a document or just used the word “attach” in another context in your email. This pop-up offers the opportunity to quickly rectify your error before proceeding. Introducing steps that force consumers to slow down and consider their decisions is a design practice often used in gaming design to ensure that nonreversible actions are carefully thought through.²⁰ This idea of enabling thoughtful consideration of a decision instead of aiming for instant and frictionless choices is key to the potential benefits of positive friction.²¹

Although terminology around positive friction has yet to be universalized, we propose three core principles in considering positive friction design:

1. “There is no truly ‘neutral’ choice environment.”²² Every design decision has an impact on consumers’ experience and outcomes.
2. Any attempt to reduce friction in order to drive consumers to certain decisions is inherently driving them away from other decisions by increasing relative friction.²³
3. While there will always be trade-offs and a need to balance priorities, friction that translates into better consumer outcomes is positive, while friction that erodes consumer experience without any upsides is negative.

With these considerations in mind, we aim to identify examples where positive friction has been used successfully and to propose how it might be used in digital credit to improve consumer protection. For the rest of this paper,

20 Schnee, C. (2015, July 29). How to Game Friction for Better UX. UX Magazine. <https://uxmag.com/articles/how-to-game-friction-for-better-ux>

21 These different types of thought processes have been studied by psychologists for many years, and are now commonly referred to as System 1 and System 2 thinking (also called automatic and conscious thought processes). System 1 thinking can be categorized as “fast, automatic, unconscious, and emotional response to situations and stimuli,” while System 2 is “slow, effortful, and logical.” (Thaler and Sunstein, 2009) While much digital design has focused on creating a choice architecture that encourages System 1 thinking, effective use of positive friction relies on enabling the consumer to switch to System 2 thinking at key decision points. Researchers are beginning to distinguish between nudges and the use of friction since nudges tend to facilitate automatic thinking and encourage System 1 thinking. On the other hand, introducing friction thoughtfully forces users to switch to System 2 thinking. (van Lieren et al., 2018)

22 The Decision Lab. (n.d.-b). Sludge. Retrieved January 2024, from <https://thedecisionlab.com/reference-guide/psychology/sludge>

23 Mills, S. (2020). Nudge/sludge symmetry: on the relationship between nudge and sludge and the resulting ontological, normative and transparency implications. Behavioural Public Policy, 7(2) 1-24. https://www.researchgate.net/publication/347452817_Nudgesludge_symmetry_on_the_relationship_between_nudge_and_sludge_and_the_resulting_ontological_normative_and_transparency_implications

when the impact on the consumer is negative, we refer to the friction as negative friction, and when the outcome is positive, as positive friction.

We believe that both consumers and businesses benefit from applying positive friction to financial products. We see positive friction to be a valuable input for consumer protection measures that financial service providers can include in digital credit and a useful complement to regulatory guidance.

In our research, we found a number of examples of positive friction from non-financial services that we used to bring to life a typology of positive friction, outlined in Table 2. All of the examples help illustrate how positive friction can have positive consumer outcomes and should be used to build in consumer protection from the outset. We did not find sufficient research that establishes how incorporating positive friction in the design of products and services also delivers business value, but have found indications. We think further research on the business impact of incorporating positive friction is an important lens as we think of consumer protection by design.

TABLE 2:
Positive Friction Types and Real-World Applications

In their work on “rational overrides,”²⁴ Van Lieren et al. identify nine intervention strategies based on academic literature that offer a typology of positive friction interventions.²⁵ This classification provides a theoretical underpinning; we use a subset of these interventions below and overlay a set of positive friction intervention examples to provide insights on the use of positive friction.

Intervention Strategy	Explanation and Theoretical Basis	Example
EXTRA DECISION POINTS	Add extra decision points at the right time to force people to slow down and become more aware, allowing them an opportunity to “re-evaluate the decision or behavior at hand. It helps to establish boundaries that can minimize the risk of making a mistake or undesired decision.” ²⁶	E-scooter-related injuries in the UK are found to take place over the weekends and late at night when more riders are likely to be intoxicated. Voi, an e-scooter company, introduced an in-app reaction test where players must achieve a certain score to prove their ability to drive. The reaction test is active between 1:00 and 4:00 a.m. on Saturdays and Sundays. ²⁷
FUNCTIONAL FRICTION	“Include small, additional steps in the process to disrupt mindless, automatic interactions. People are asked to put in extra effort to reach their goal.” ²⁸	In 1998, the UK redesigned Tylenol packaging, switching from bottles to blister packaging. As a result, Tylenol-related suicides declined by 43 percent. ²⁹ Blister packaging forced people to individually pop out pills from their casing, which caused enough friction to slow down suicide numbers. ³⁰

24 Van Lieren et. al defines “Rational overrides” as the terminology used in research to define micro moments of friction that can be used to disrupt mindless, automatic interactions, prompt moments of reflection, and increase conscious decision making.

25 van Lieren et al. (2018)

26 Cox et al. (2016)

27 Voi. (2020, September 23). Tap the helmets: Voi introduces world’s first Reaction Test for e-scooters to discourage drunk riding. <https://www.voi.com/blog/voi-reaction-test>

28 Laschke, M., Diefenbach, S., & Hassenzahl, M. (2015). Annoying, but in a Nice Way: An Inquiry into the Experience of Frictional Feedback. *International Journal of Design*, 9, 129-140. <https://www.ijdesign.org/index.php/IJDesign/article/viewFile/2099/689>

29 Emanuel, E. (2013, June 2). A Simple Way to Reduce Suicides. *The New York Times*. <https://archive.nytimes.com/opinionator.blogs.nytimes.com/2013/06/02/a-simple-way-to-reduce-suicides/>

30 Brade, Z. (2017, January 27). Designing a product with mental health issues in mind. *Monzo*. <https://monzo.com/blog/2017/01/27/designing-product-mental-health-mind>

Intervention Strategy	Explanation and Theoretical Basis	Example
CHECKLISTS	“Simplify how information is presented to make it easy for people to remember and use. Simple checklists for important multistep procedures are effective reminders and useful in preventing errors.” ³¹	An example of checklists to reduce error comes from the early 1990s when Boeing 777 developed an electronic checklist as part of a new flight deck automation tool. The electronic checklist decreased errors by 46 percent compared with paper based checklists and was used to help guide pilots through both normal and emergency procedures before, during and after flights. ³²
PERSONALIZED FEEDBACK	Prompts people to reflect on their own behavior and shows data that is highly relevant to their own lives. ³³	Smartphones will tell you the average time you spend per week on the phone, which can lead people to spend less time on screens. ³⁴
REAL-TIME FEEDBACK	“Show the consequences of people’s current actions and encourages them to adjust and improve behavior.” ³⁵	At first, Uber’s surge pricing model led to a negative consumer experience and higher number of complaints. Although Uber told consumers that prices were higher due to consumer demand, people often ignored the information and were surprised by a higher fare. To combat this, Uber introduced a moment of friction when app users were forced to type in the correct surge price to confirm that they were aware of and accepted the increase. This led to a drop in consumer complaints. ³⁶
ALERTS	“Make people aware, help them to remember important actions, or persuade people to perform desired behavior. Alerts and reminders work as feedforwards and could be implemented as sounds, visuals, and push notifications.” ³⁷	Outlook will push a pop-up notification reminding people of the failure to include an attachment in an email if the word “attach” is used in the body of the email.

- 31 Hales B., & Pronovost P. (2006). The checklist—a tool for error management and performance improvement. *Journal of Critical Care*, 21, 231-235. <https://www.ucl.ac.uk/anaesthesia/sites/anaesthesia/files/hales-2006.pdf>
- 32 Hales, B. M., & Pronovost, P. J. (2006). The checklist—a tool for error management and performance improvement. *Journal of Critical Care*, 21 (3), 231-235. <https://www.ucl.ac.uk/anaesthesia/sites/anaesthesia/files/hales-2006.pdf>
- 33 Frysak, J., Bernroider, E., & Maier, K. (2016). An Effort Feedback Perspective on Persuasive Decision Aids for Multi-Attribute Decision-Making. *International Journal of Information Technology & Decision Making*, 16(1), 161-181. <https://www.worldscientific.com/doi/10.1142/S0219622016500486>
- 34 Solon, O. (2018, June 4). Apple’s new ‘digital wellbeing’ tools aim to help reduce screen time. *The Guardian*. <https://www.theguardian.com/technology/2018/jun/04/apple-ios12-screen-time-apps-how-much-spent-phone-digital-wellbeing>
- 35 Hansen, P., & Jespersen, A. (2013). Nudge and the Manipulation of Choice: A Framework for the Responsible Use of the Nudge Approach to Behaviour Change in Public Policy. *European Journal of Risk Regulation*, 2013(1), 3-28. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2555337; Wendel, S. (2013). *Designing for Behavior Change: Applying psychology and behavioral economics*. O’Reilly Media, Inc.
- 36 Van Lieren et al. (2018)
- 37 Jung, J., & Mellers, B. (2016). American Attitudes Toward Nudges. *Judgment and Decision Making*, 11(1), 62-74. <https://psycnet.apa.org/record/2016-09222-006>



Positive Friction in Financial Services for Increased Consumer Protection

When introduced intentionally, friction can be a powerful way to increase consumer protection and achieve financial well-being. For instance, delinking credit cards to ecommerce accounts could prevent impulsive shopping and overspending as it takes more effort for consumers to make online purchases.³⁸ Or requiring consumers to confirm the loan terms via a small quiz before they sign and receive the funds could make consumers more price aware and reduce the risk of taking on high-cost loans without a financially sound use for them.

The positive friction types described in Table 2 all have potential for use in financial services, and financial service providers can intentionally introduce friction to increase consumer protection. The following case studies illustrate how positive friction can both better protect consumers and indicate value to business, although the latter needs more systematic research. Table 3 summarizes these interventions.

TABLE 3:
Positive Friction Interventions in Financial Services Can Increase Consumer Protection

Case Study	Intervention Summary	Targeting	Consumer Protection/Value to Business
JUMO	Increase comprehension of loan terms and reduce loan delinquency	Not targeted, all applicants encounter	Consumers who viewed the terms and conditions had a delinquency rate of 7 percent less than those who did not
MONZO	Reduce temptation	Opt-in, consumers must initiate the friction	Reduced customer acquisition costs
FCA (UK'S EXPERIMENT WITH HIGH-RISK INVESTING)	Increased comprehension	High-risk investors for the experiment, although consumer duty guidelines are applicable to all consumers	Resulted in consumer duty guidelines that require firms to put their consumers' needs first
BURLANDO ET AL.	Reduce loan delinquency	Natural experiment, friction embedded in process (time)	Longer loan delivery rates can reduce delinquency by 21 percent

38 US Bank. (2022, January 5). Friction: How it can help you achieve your money goals. <https://www.usbank.com/financialiq/manage-your-household/personal-finance/Friction-How-it-can-help-achieve-money-goals.html>

CASE STUDY 1: JUMO – INTRODUCING EXTRA DECISION POINTS IN DIGITAL CREDIT LOAN REQUESTS FOR MORE INFORMED BORROWING DECISIONS

Jumo is a digital financial service provider operating in six markets across Africa.³⁹ In 2015, after noticing that borrowers who spent more time on the loan terms menu during the loan application process had lower default rates in their Kopa Cash product in Kenya, Jumo tested ways to increase borrowers' viewing and understanding of key product terms and conditions. Jumo collaborated with CGAP and Busara Center for Behavioral Research to use lab and lab-in-the-field testing in Kenya of a hypothetical digital loan named "Topcash" – modeled after Kopa Cash – to see if they could increase viewership of product terms and conditions (T&Cs). In the Topcash experiment, when borrowers selected "Request a loan," they were sent to a new screen where they had to actively opt to skip the T&Cs if they did not want to view them (Figure 2).

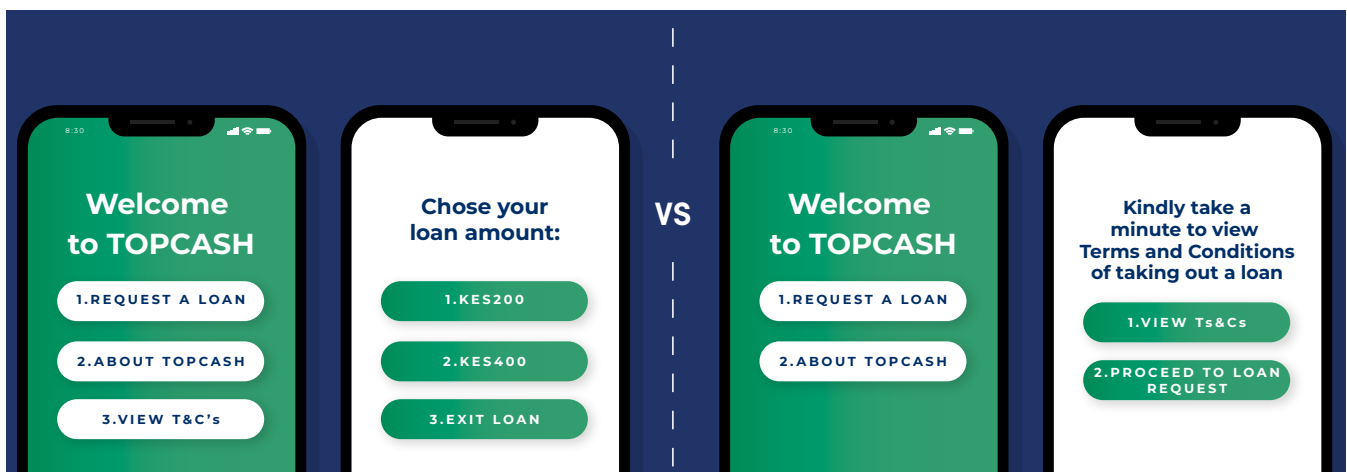


Figure 2: Original (left) vs. extra friction (right) T&Cs review design. Figure reproduced from Mazer and McKee (2017)

In the lab experiment, Jumo found that by moving T&Cs to a separate screen, the number of consumers who viewed them increased from 9.5 percent to 23.8 percent, and they found that those who viewed the T&Cs had a delinquency rate 7 percent lower than those who did not.⁴⁰ The lab experiment findings demonstrated the possible benefits of improved disclosure of loan terms and conditions by using functional friction during the loan application process. Based on these findings, Jumo changed their loan application screens and improved and expanded the disclosure of product terms. These changes included adding positive friction to increase T&Cs viewership and implementing a new T&Cs screen to make product terms easier to understand (also informed by evidence from the same lab experiment).

Jumo's findings from the lab experiment and subsequent adjustments to their loan application screens have positive implications on the idea that more informed customers make better decisions, resulting in lower defaults. Deeper understanding of these impacts should be a priority for further experimentation with these types of interventions by other digital credit providers in live lending environments.

39 Jumo. (n.d.). Homepage. Retrieved January 2024, from <https://jumo.world> Jumo. (n.d.). Homepage. Retrieved January 2024, from <https://jumo.world>

40 Mazer and McKee (2017)

CASE STUDY 2: MONZO — FUNCTIONAL FRICTION FOR IMPROVED WELL-BEING

A survey conducted in 2009 by the National Health Services (NHS) UK found that one in four adults is likely to experience a mental health problem each year.⁴¹ Further, people with mental health problems are three times more likely to experience over-indebtedness, as is it more difficult for them to maintain a steady income and manage money.⁴² In response, Monzo, a neobank, worked with the Money and Mental Health Institute in the UK to develop and test multiple positive friction interventions with the aim of protecting consumers when they are vulnerable.

Monzo introduced a gambling block that stops credit card payments to gambling merchants. The block is a simple feature that customers can turn on any time. On the back end, Monzo can identify merchants that were tagged with a gambling merchant category code in their payment system. Any transaction at this type of merchant would automatically get declined when the block was on, preventing consumers from placing bets. When customers enable the gambling block, they are also asked to set up a cooldown period, ranging from 48 hours to one year. If the customer decides to turn off the block, they must then wait out their predetermined cooldown period before they can switch it off from the app and start transacting at the merchant.⁴³

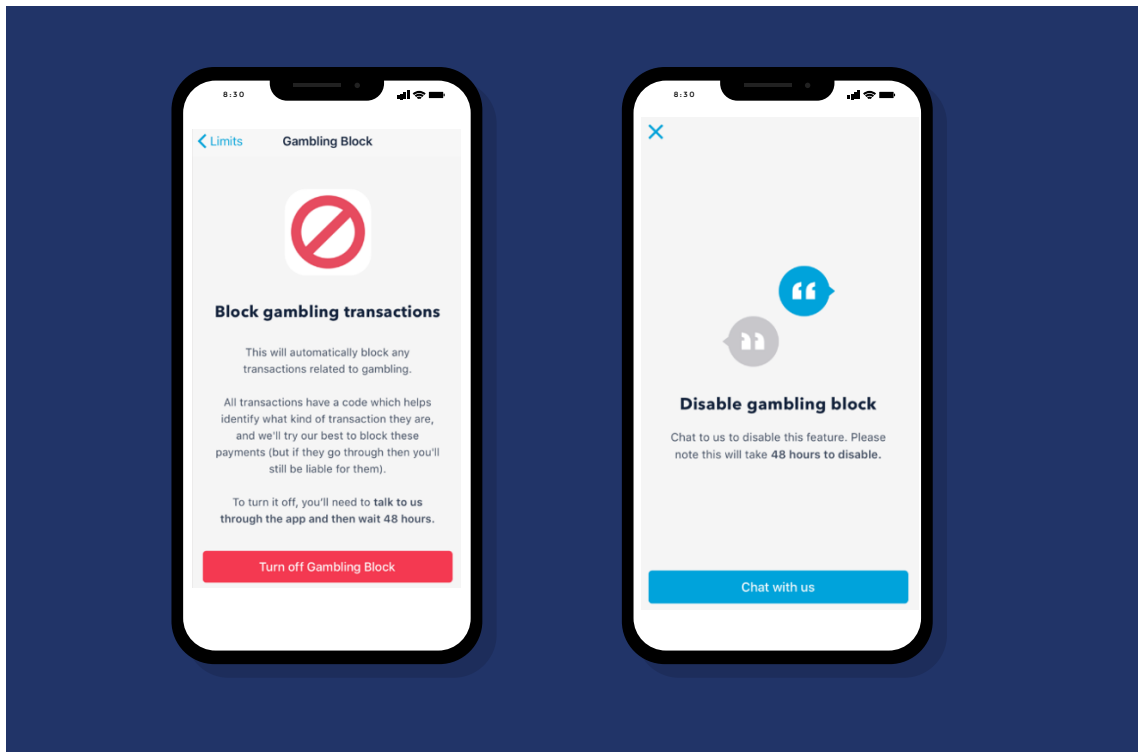


Figure 3: Screens from Monzo App to Block Gambling Transactions

The product design team at Monzo also experimented with ways to let consumers who suffer from bipolar disorder restrict their ability to spend during moments of mental vulnerability. Some bipolar consumers are likely to spend on needless items, often late at night when experiencing a manic phase. To address

41 Evans, K., & Acton, R. (2017). Fintech for Good: How financial technology can support people experiencing mental health problems. Money and Mental Health Policy Institute. <https://www.moneyandmentalhealth.org/wp-content/uploads/2017/07/Fintech-for-good-report.pdf>

42 Evans and Acton (2017)

43 Monzo. (n.d. -a). How our gambling and spending blocks work. Retrieved January 2024, from <https://monzo.com/help/account-and-profile/gambling-spending-block-how-to/>

this behavior, Monzo considered offering a “review late-night spending” option in the app that could be verified the following morning by the user or a caregiver (see Figure 4).⁴⁴ Although this product feature was never ultimately launched, Monzo did implement a spending block that would allow compulsive shoppers to block specific merchants, such that any attempt to transact at the merchant would be declined.⁴⁵ The spending block did not have a cooling-off period and could be reversed in the app instantly, but it did require considered action, which could prevent compulsive shopping.

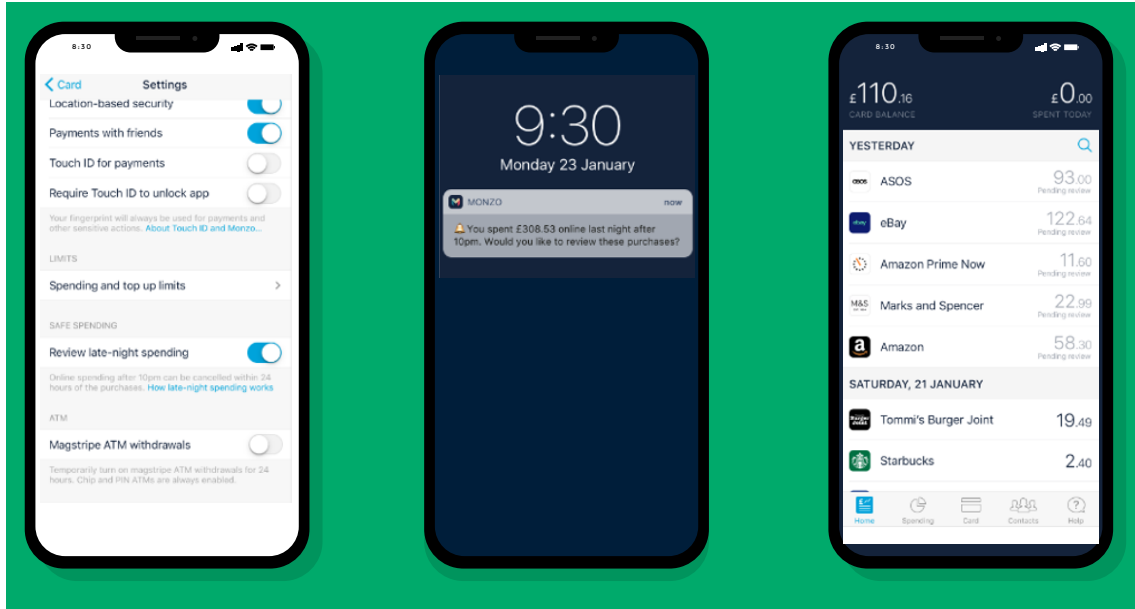


Figure 3: Proposed Screens to Address Late-Night Spending by Consumers. Figure Reproduced from a Blog by Monzo⁴⁶

In designing the delivery of financial services to reduce vulnerability, in this case caused by mental health issues, Monzo worked closely with the Money and Mental Health Policy Institute, a civil society organization that seeks to address the link between mental health issues and financial difficulties in the UK.⁴⁷ The Money and Mental Health Policy Institute team spent three months reviewing Monzo’s policies and identifying what Monzo was doing well and potential areas of improvement.⁴⁸ This partnership highlights the role that civil society initiatives can play in informing inclusive finance practices. The outcome of this partnership has been the implementation (and pending implementation) of several features aimed at specific challenges encountered by people struggling with different mental health problems. Monzo’s adoption of the “gambling block” strategy also led other banks to adopt the same measure.

The approach Monzo has taken, and the different stakeholders they involved, provides a strong example of how impactful positive friction can be in better serving vulnerable consumers. Key to Monzo’s strategy was a dedicated focus on vulnerable consumers, evidenced by their creation of a Vulnerable Customers Team⁴⁹ and their Share With Us feature.⁵⁰ These focus on identifying both the specific needs and challenges that different groups face with financial services and the specific decision points where these challenges can be mitigated. More recently, the Money and Mental Health Policy Institute has worked directly with the Financial Conduct Authority (FCA) to provide feedback and insights from their research to inform the

44 Brade (2017)

45 Monzo (n.d.-a) <https://monzo.com/help/account-and-profile/gambling-spending-block-how-to/>

46 Brade (2017)

47 Ledward, N. (2021, May 12). Supporting our customers through mental health problems. Monzo. <https://monzo.com/blog/2021/05/13/supporting-our-customers-through-mental-health-problems>

48 Ledward (2021)

49 Borbon, B. (2018, May 15). Meet the Vulnerable Customers Team. Monzo. <https://monzo.com/blog/2018/05/15/meet-vulnerable-customers-team>

50 Monzo. (n.d.-b). Share with us. Retrieved January 2024, from <https://monzo.com/share-with-us/>

development of the recently released Consumer Duty measures.⁵¹ This demonstrates the significance of a supportive regulatory environment, as well as strong consumer representation from civil society groups, in enacting these solutions on a large scale.

While the business value from these initiatives needs to be better researched, there are initial indications that this is a valued feature for many customers. Initial reports show that 140,000 people have used this feature, with less than 5 percent opting to turn it off.⁵² Monzo also saw roughly 10,000 new customers join in response to the addition of this feature. What remains to be determined is whether the value people derive from this gambling block results in increased customer loyalty and greater repeat business or referrals for Monzo.

CASE STUDY 3: FINANCIAL CONDUCT AUTHORITY (FCA) UK – DECISION POINTS AND DISCLOSURES IN HIGH-RISK INVESTING

In 2022, the FCA conducted experiments to understand how several positive friction methods could lead to positive consumer outcomes in the context of high-risk investments. They introduced additional disclosures around financial product information and associated risks and the use of “active input” and “active click” to confirm understanding.⁵³ The impact of these interventions was examined by looking at consumer comprehension of product features and risks, as well as the likelihood to recommend the product to a friend. Results showed that all interventions increased comprehension, with the most impact coming from additional disclosures.

The key positive friction interventions utilized in the experiment are summarized below:⁵⁴

Intervention	Description
EXTRA DECISION POINTS	Added two checkboxes that required users to confirm their understanding of the investment risks and the lack of protection for failed investments.
FUNCTIONAL FRICTION	Required users to actively input the amount of money they were prepared to lose and confirm the understood that they are not protected if an investment fails.
PERSONALIZED FEEDBACK	Added a personalized risk message, additional button to proceed, and a “highly salient” button leading to additional risk information to the final screen of the user journey.

While most of their interventions resulted in users’ increased ability to answer comprehension questions, the FCA also found that some of the implemented friction resulted in users dropping out and not completing the process to self-certify (which asked users to confirm that they were a “high net worth” investor and “sophisticated enough” to invest). What is less clear is whether the individuals who dropped did so after recognizing they did not meet the criteria, or whether suitable potential investors dropped due to the additional steps. Better understanding the reason people did not proceed will be key to demonstrating the value of such initiatives to providers.

This experiment was a precursor to the FCA’s Consumer Duty guidelines that set higher and clearer standards for consumer protection across financial services and require firms to put their consumers’ needs first.⁵⁵

51 Financial Conduct Authority. (n.d.). Consumer Duty. Retrieved January 2024, from <https://www.fca.org.uk/firms/consumer-duty>

52 Kobie, N. (2019, June 9). Monzo has a cunning plan to stop you wasting money on junk food. Wired UK. <https://www.wired.co.uk/article/monzo-gambling-block-merchant-block>

53 Hayes, L., Gilchrist, C., Spohn, M., & Ng, C. (2022, February). Beyond disclosure for high-risk investments: slow down and think. Financial Conduct Authority. <https://www.fca.org.uk/publications/research/beyond-disclosure-high-risk-investments-slow-down-and-think>

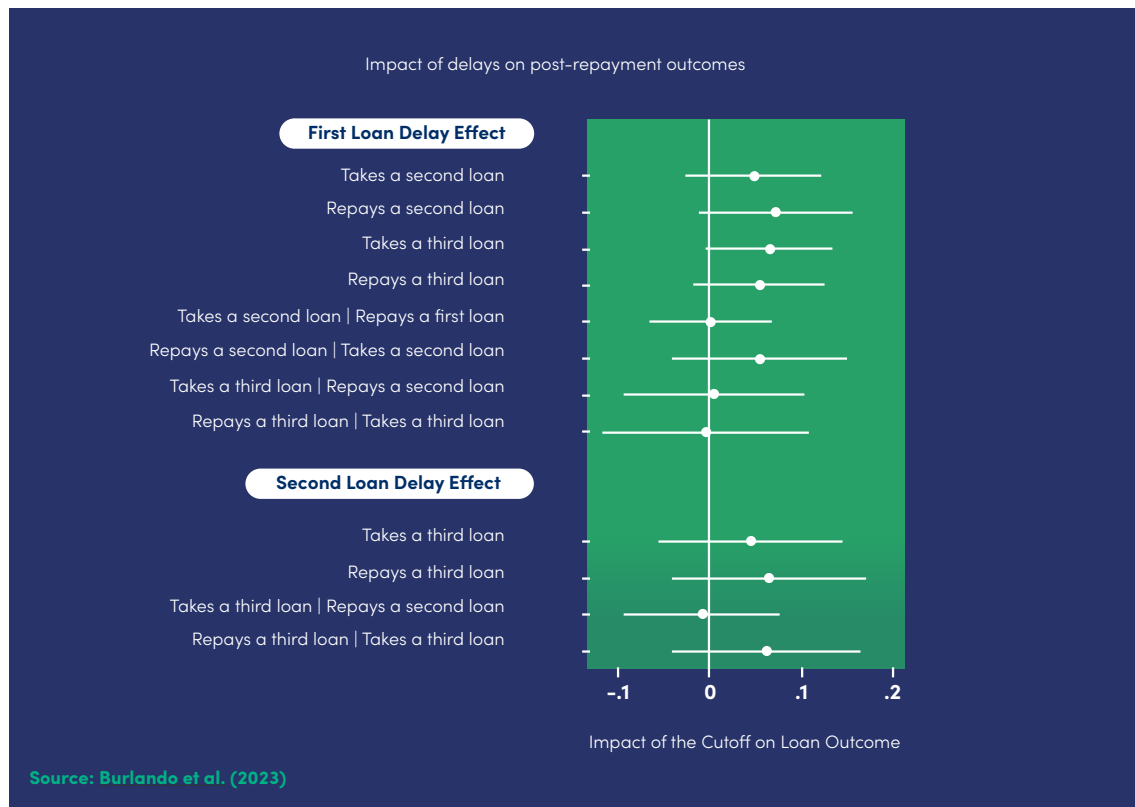
54 Farghly, F., Hayes, L., Ng, C., & Spohn, M. (2022, January). Pausing, reading, and reflecting: decision points in high-risk investment consumer journeys. Financial Conduct Authority. <https://www.fca.org.uk/publication/research/decision-points-consumer-journeys.pdf>

55 Financial Conduct Authority (n.d.)

CASE STUDY 4: FUNCTIONAL FRICTION – A STUDY IN MEXICO ON THE IMPACT OF LOAN DELIVERY TIME ON DEFAULT RATES

An experiment by Burlando et al. based on data from a digital lender in Mexico sought to understand how the loan delivery time impacted default rates.⁵⁶ The research team examined seven months of data from the lender, using loan approval and disbursement timestamps to identify differences in loan delivery speeds – the amount of time between a loan being approved and the borrower receiving the funds. Because the lender routinely released disbursements in two to four batches each day, the researchers could examine the difference in repayment rate depending on when borrowers received their funds after their loan was approved.

The study found that borrowers who waited a longer time for their loan to be delivered also had a 21 percent reduction in the likelihood of loan default. The study did not find evidence of a negative impact on future loan demand, despite the longer wait times. For the lender, this means that reducing default rates while maintaining loan demand demonstrates a clear positive benefit to the lender from the introduction of functional friction.



However, the benefit to consumers is less evident in this experiment. Although the delay in disbursements examined was less than 24 hours, the researchers acknowledge this could prevent meeting consumers' immediate needs or drive them to find riskier but faster alternative loans while they waited for the funds to arrive. However, they also identify the positive impact on credit scores by having a positive repayment record versus a loan default listing, as well as an increased likelihood of being eligible for another loan that comes with decreased defaults for consumers.

56 Burlando, A., Kuhn, M., & Prina, S. (2023). Too Fast, Too Furious? Digital Credit Delivery Speed and Repayment Rates. Center for Effective Global Action. https://static1.squarespace.com/static/57869cbb2e69cf3d5af77419/t/64b6008741fcb13f8a7570d1/1689649290419/BKP_2023.05.17.pdf



Conclusion

The case studies discussed in the preceding section demonstrate how positive friction can be applied simply and effectively in financial services more broadly, with some examples of application to digital credit. Returning to the table of positive friction interventions discussed earlier, we see several promising examples of interventions which could be tested and implemented in digital credit, and which we encourage lenders and policymakers to build on and design live testing experiments.

Intervention Strategy	Indicative Examples of Concepts Which Could Be Tested for Digital Credit Products
EXTRA DECISION POINTS	Develop additional screens in apps that encourage consumers to search and compare different digital credit products before formally requesting a loan.
FUNCTIONAL FRICTION	Require borrowers to take a brief T&Cs comprehension quiz before disbursing their loan.
CHECKLISTS	Require the borrower to complete the loan usage and repayment plans to ensure their goals are aligned with the usage of the loan funds.
PERSONALIZED FEEDBACK	Automate recommendations on loan amounts based on additional information provided by the borrower.
ALERTS	Alert consumers when their loan is soon to be due and remind them to fund their accounts. This should be combined with options to set aside a portion of their deposit or payments account balance to cover future repayment, repay early for a discount, or ignore the alert.

For digital lenders, adopting positive friction interventions can not only help to protect consumers but can also offer tangible business value. For instance, improved comprehension of loan terms can translate to lower defaults, as seen in the case of Jumo, and therefore increase lender profitability. In the case of a digital bank like Monzo, adoption of positive friction features in the app resulted in higher acquisition of a set of customers who felt more protected while using the service, e.g., those prone to gambling. In this case, a reduction in customer acquisition costs can directly increase profits.

While there are limited examples of the use of positive friction in digital lending, we think there are some that lend themselves naturally to consumer protection interventions and should be tested. These include:

- Steering consumer decisions towards more suitable products, amounts, and features;
- Delaying the disbursement of consumption loans during certain hours (for instance, not allowing disbursements late at night); and
- Supporting responsible repayment and avoidance of penalties.

Policymakers can also encourage the use of positive friction in digital credit to support their consumer protection objectives. Some possible ways to support positive friction through consumer protection policy measures include:

- Introduce pricing transparency and disclosure rules that use positive friction. These can include

an extra review of terms and conditions or comprehension tests to improve consumer understanding of their loan obligations.

- Increase protections for vulnerable populations, such as the ability to self-protect from using a digital credit product during periods of vulnerability or for undesired behaviors (e.g., gambling using digital loans).
- Improve product suitability by matching consumer needs with product features. This can be done by having consumers provide additional information about their personal and business activities, or their borrowing needs, during the loan application process.
- Improve data privacy and data security by actively engaging consumers in authorizing the sharing of data with third parties and the use of periodic reminders to (re)consent to data sharing or opt out of continued sharing of data with providers when it may no longer be necessary.



Testing these intervention strategies can be achieved by making simple changes to existing digital loan interfaces (except for the loan comparison app). Given the short-term nature of most digital loans, results can be measured after only a few months of observation. As digital credit seeks to improve upon its mixed track record of consumer protection and responsible lending, financial services providers and policymakers should consider how positive friction solutions can be applied to their products to improve consumer safety and better inclusive finance outcomes.



To help build the evidence base on positive friction, CFI is supported by USAID and DAI to partner with Pezesha, a digital lender in East Africa, to test positive friction as a way to make considered decisions while borrowing, which will improve portfolio quality for the lender. Our experiment will introduce positive friction to test comprehension of key loan terms by app-based borrowers and test how this may impact borrower behavior and loan performance. We also aim to check the business value of adopting such an intervention, since financial service providers are best placed to adopt consumer protection by design and more likely to do so when they see business benefits.

We hope that other digital credit providers will join us in building on the success from prior research to build out positive friction solutions. If you have ideas or would like to partner with us, please email us at center@accion.org.

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