

Building trust through design: Eliminating dark patterns in digital financial services

July 2025



Dark patterns in digital finance: When design deceives

What are dark patterns?

Dark patterns are interface design tactics that deliberately steer users toward actions they may not have otherwise chosen. These include choices, such as data disclosure, incurring hidden charges, or enrollment in unwanted services. These are not accidental flaws but intentional choices that often benefit the provider at the user's expense.

How do dark patterns affect the low-and moderate-income (LMI) population?

Dark patterns in digital financial services can lead to unintended costs, data privacy risks, and loss of user trust. This translates to an estimated global revenue loss of approximately USD 231 billion* for DFS platforms. These impacts are also especially severe for LMI users, increasing their economic vulnerability and risking exclusion from essential financial tools. Here are a few ways in which dark patterns can affect LMI individuals:

- ▶ Manipulative engagement that keeps users engaged to trigger unintended actions;
- ▶ Hidden financial information that buries key information, such as fees or repayment rules;
- ▶ Tricky subscriptions or services that are difficult to cancel and lead to surprise charges.

As digital financial services become a primary channel for millions, the responsibility to have transparent and ethical designs becomes critical. The following slides unpack common dark patterns in financial UI and UX and propose practical design principles to eliminate them. The deck also presents MSC's approach to address dark patterns through engagement with three key stakeholders: Regulators, service providers, and policymakers, to build an inclusive digital finance ecosystem.



*Based on MSC's calculations

Overview of the dark patterns*

Comparison prevention

The user struggles to compare products due to complex pricing and the lack of easily accessible essential information.

Visual interference

The user expects clear, predictable information. However, it is hidden or obscured.

Confirm shaming

The user is emotionally pressured into actions they would not normally take.



Obstruction

The user encounters hurdles that make it difficult to complete their task or access information.

Trick wording

The user is misled into action through confusing and deceptive language.

76% of all websites or apps use at least one dark pattern.

56% of users lose trust in a platform or website due to dark patterns.

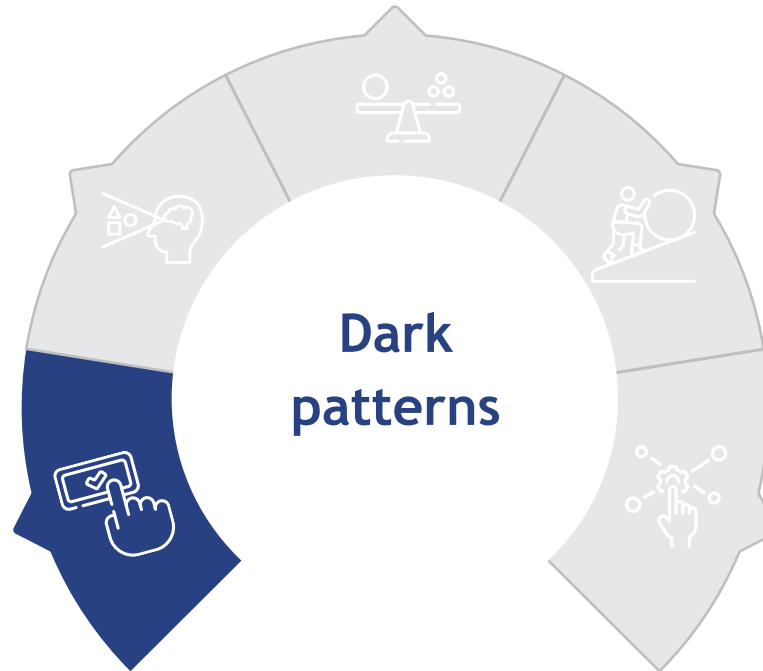
67% of platforms or websites use multiple dark patterns.

*MSC's work with leading banks and financial institutions has consistently revealed these five dark patterns as the most widespread and harmful in digital financial services.

Overview of the dark patterns

Confirm shaming

The user is emotionally pressured into actions they would not normally take.



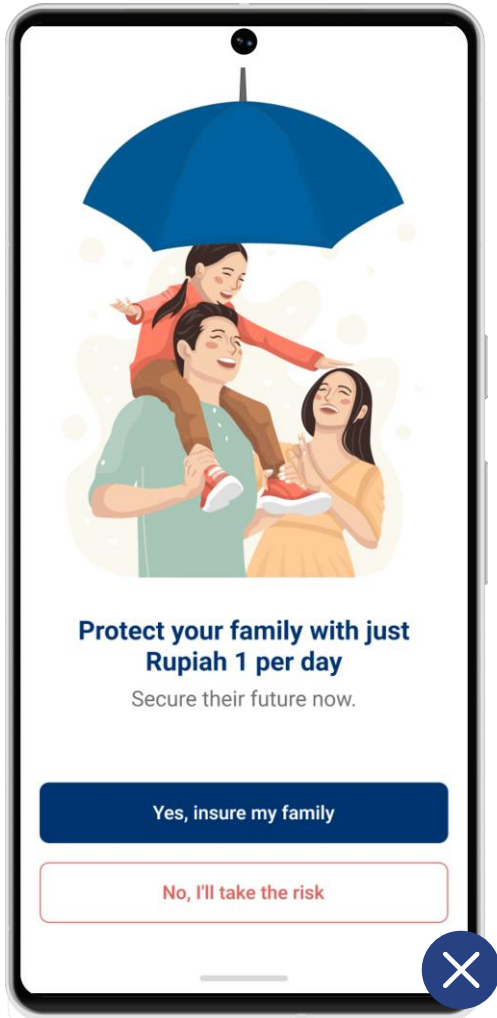
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Confirm shaming

The user is emotionally manipulated into doing something that they would not otherwise have done.



How does this screen exhibit confirm shaming?

➤ Implied irresponsibility:

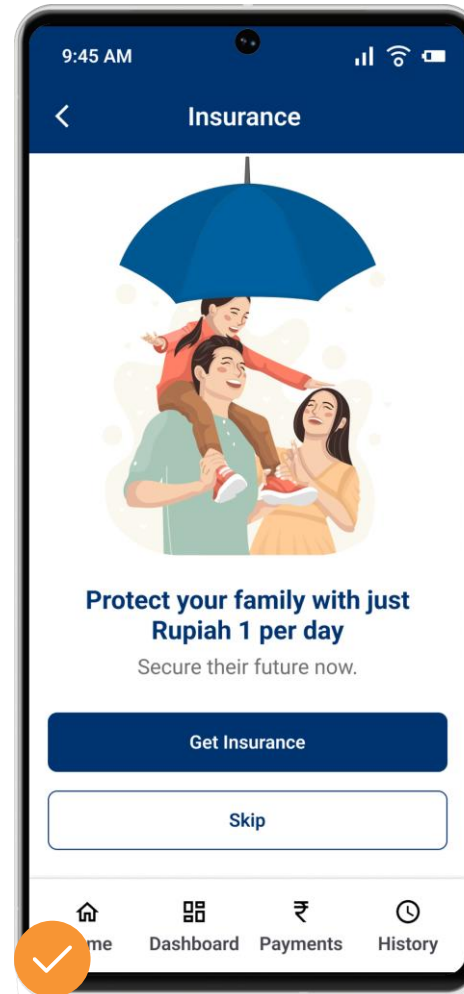
The opt-out choices suggest that the user is irresponsible or careless if they say "no."

➤ Moral and financial pressure:

The act of saying "No" is framed as morally or financially wrong, which creates guilt.

➤ Guilt-driven nudging:

Users are pushed to choose "Yes" not out of interest, but to avoid discomfort or shame.



Design practices that eliminate confirm shaming

➤ Neutral language for actions and labels:

The opt-out text is neutral, factual, and avoids guilt-inducing or emotional cues.

➤ Equal visual weight:

Both action options are presented with equal emphasis, which avoids nudging people toward a specific choice.

➤ Clear, familiar language:

The wording is simple and free of jargon, which ensures easy comprehension and respect for user autonomy in decision-making.

Confirm shaming: Case study



I was trying to skip the savings plan because I needed every rupiah that month. But the app said, "I guess you do not care about your future." It made me feel guilty—as if I was being irresponsible just for saying no.

— Dewi K., a domestic worker in Jakarta



Context

Dewi, a 35-year-old domestic worker in Jakarta, uses a popular digital wallet to manage her income and pay for utilities. When she tried to top up her mobile data, the app promoted an auto-debit savings plan and suggested that if she saved small amounts regularly, it would help her “build a better future.” When she tried to decline, the “No, thanks” option was labeled with guilt-inducing text, which said “I do not care about securing my future.” Pressured and ashamed, Dewi enrolled in the plan, even though her budget was already stretched thin. She had to cancel it weeks later after she missed a key payment.

The dark pattern: Confirm shaming

Confirm shaming manipulates users by making them feel guilty, irresponsible, or selfish when they try to opt out of a product or service.

In Dewi’s case:

- ✦ The app used emotionally loaded language which implied neglect of responsibilities with phrases, such as “I do not care about my future”;
- ✦ It framed savings as a moral obligation and used guilt to push sign-ups;
- ✦ It contrasted a positive call-to-action with a shaming opt-out and made rejection feel like a personal failure.

Overview of the dark patterns

Visual interference

The user expects clear, predictable information. However, it is hidden or obscured.



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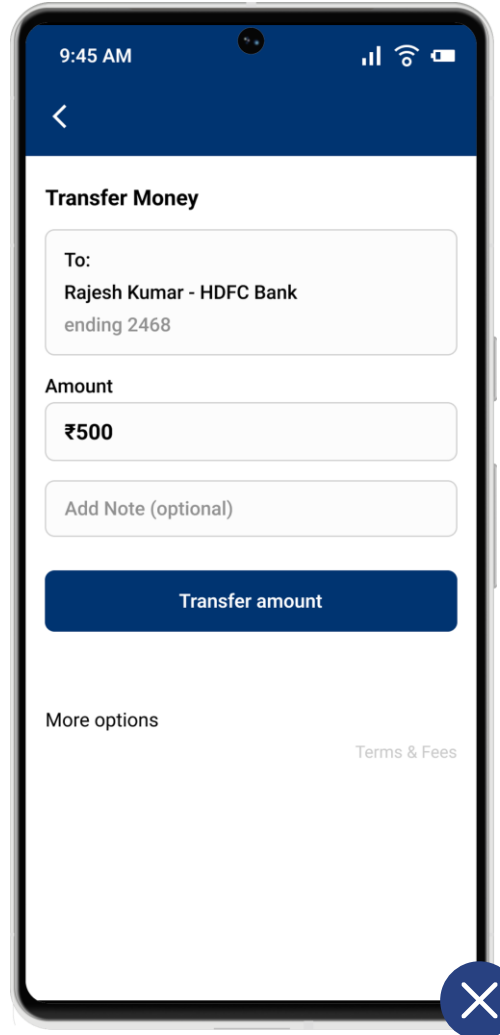
Visual interference

The user expects to see information presented in a clear and predictable way on the page, but it is hidden, obscured, or disguised.



When I tried to transfer money through the app, the amount deducted was more than I had expected. At the bank, they told me that I must have missed a button or a message about extra charges at the bottom. But I did not see anything like that on my screen.

- Malti Devi, domestic worker, Jharkhand



How does this screen exhibit visual interference?



- Information about crucial cost is **obscured**: The “Terms & Fees” text is small, low-contrast, and positioned away from the main action. It is easy to miss before confirming the transfer.
- No visibility into account balance**: Lack of real-time balance does not allow users to know if they can afford the transaction or if they should wait.
- Overloaded interaction zone**: Clickable elements are crowded at the bottom, which increases accidental taps and reduces focus on key actions.

Visual interference

9:45 AM

<

Transfer Money + Add beneficiary

From:

Shweta Priya
Account No: XXXXXXXXXXXX4319
Account balance: ₹1000

To:

Rajesh Kumar
Account No: XXXXXXXXXXXX2960

Amount

₹500

Fee: ₹5

Remaining account balance: ₹495

Transfer amount

✓

9:45 AM

<

Transfer Money + Add beneficiary

From:

Shweta Priya
Account No: XXXXXXXXXXXX4319
Account balance: ₹1000

To:

Rajesh Kumar
Account No: XXXXXXXXXXXX2960

Amount

₹2000 ⓘ

The amount you have entered exceeds your balance.

Transfer amount

✓

Design practices that eliminate visual interference



- **Real-time account balance display:** The screen displays the user's available balance, such as INR 1,000, before they enter the transfer amount, which helps them decide whether they can afford the transaction.
- **Transparent fee breakdown:** Fees, such as INR 5, are displayed directly below the entered amount, which gives users full visibility into the charges before they hit "Transfer."
- **Real-time error prompt for incorrect input:** The screen instantly flags when the entered amount, such as INR 2,000, exceeds the available balance, such as INR 1,000, which helps users correct mistakes on the spot and avoid failed transactions.

Visual interference: Case study



I meant to send NGN 5,000, but I accidentally hit the quick transfer for NGN 50,000. The "Confirm" button was huge and green, while "Edit" was barely visible.

– Chinedu, a mobile-banking user from an LMI household in Nigeria



Context

Chinedu, a low-to-middle-income (LMI) user of a popular mobile banking app in Nigeria, intended to transfer NGN 5,000 to a vendor. As he reviewed the transaction, the interface displayed a large "Quick Confirm" button for NGN 50,000, based on his past transactions. The "Edit" or "Back" options were shown in a small, grey text at the edge of the screen. Distracted and in a hurry, Chinedu clicked the prominent button and sent NGN 50,000 instead of NGN 5,000. When he contacted customer support, he was told the transaction was "user-initiated" and irreversible.

The dark pattern: Visual interference

This experience reflects the visual interference dark pattern, where platforms use visual design to manipulate users into making unintended or detrimental choices.

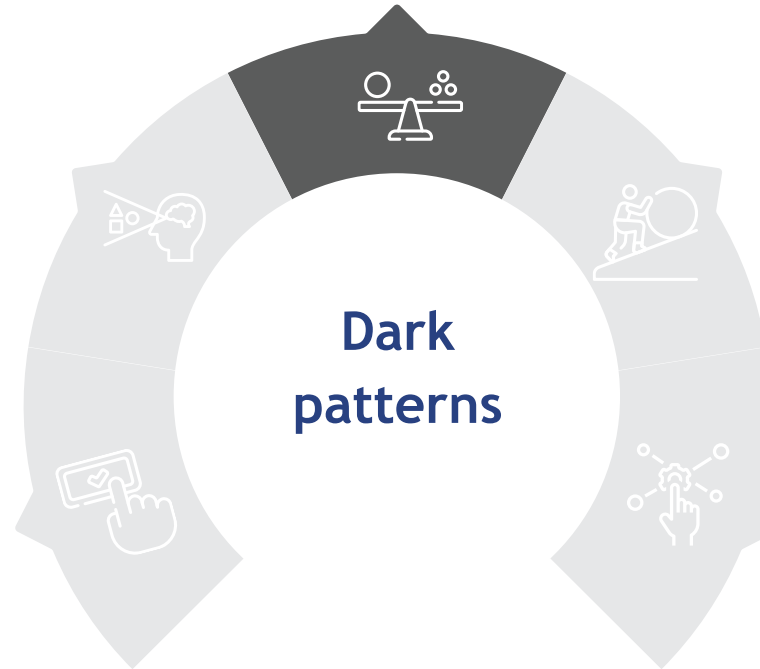
Chinedu encountered:

- ✦ Disproportionate button sizes, which nudged him toward a higher-value transaction;
- ✦ Default to past transactions without clear confirmation of amount changes;
- ✦ Low-contrast "Edit" or "Cancel" options, which makes them easy to overlook.

Overview of the dark patterns

Comparison prevention

The user struggles to compare products due to complex pricing and the lack of easily accessible essential information.



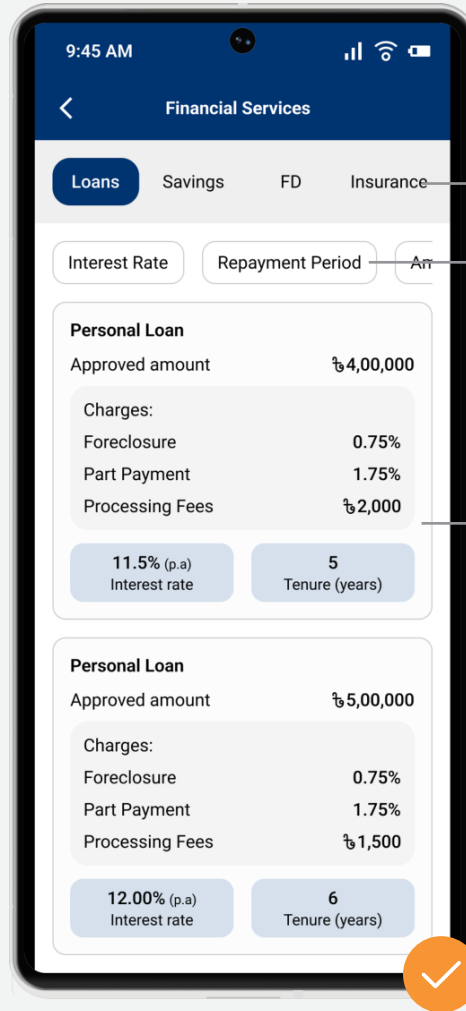
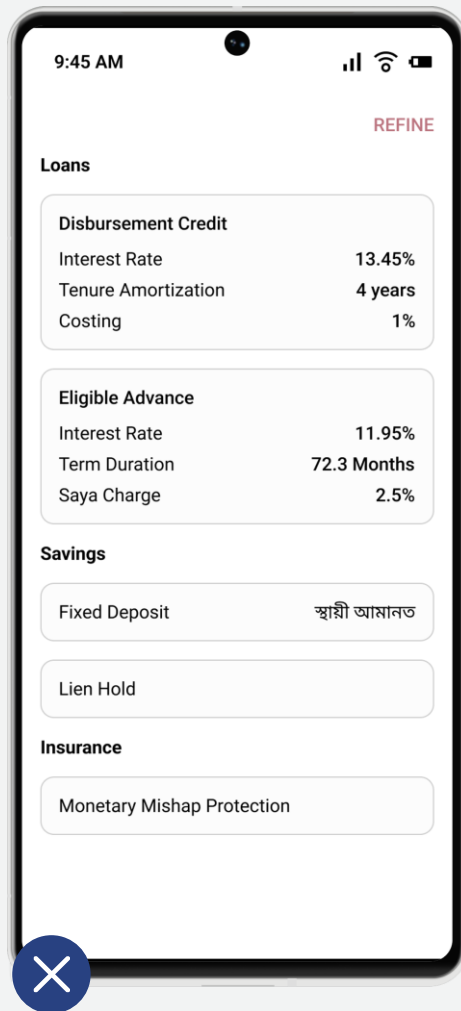
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Comparison prevention

The user struggles to compare products because features and prices are combined in a complex manner, or because essential information is hard to find.



Include visible filters at the top that allow users to sort products by interest rate, and repayment period, among others.

Organize related financial services into clearly defined, logically grouped categories, such as "Loans", "Savings", and "Insurance."

Show a side-by-side comparison view of similar products. For instance, use two loan options with interest rate, repayment term, and fees.

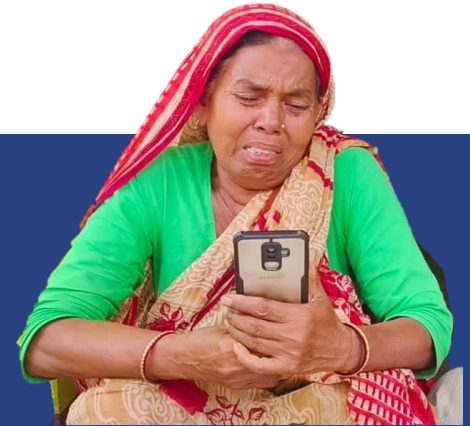
Facilitate informed decision-making by allowing users to easily compare similar costs without confusion.

Comparison prevention: Case study



I did not realize the second loan had a lower rate of interest. The app did not show both options clearly. I just went with the one on top because I was in a hurry.

— Sufia, a mobile loan app user from an LMI household in Khulna, Bangladesh



Context

Sufia, a low-to-middle-income (LMI) garment worker in Khulna, needed a quick loan to pay for medical expenses. She opened a popular digital loan app that showed a preapproved offer on the homepage. While other loan products were technically available, the app displayed only one option and hid the others under multiple menus. It did not show a clear comparison of interest rates, fees, or repayment terms. She accepted the visible offer and later discovered that another loan option in the app had a significantly lower interest rate and longer repayment period.

The dark pattern: Comparison prevention

This experience reflects the comparison prevention dark pattern, where platforms limit transparency and make it difficult for users to make informed choices.

Sufia faced:

- ✦ Default prioritization of one loan offer, which made her not explore other alternatives;
- ✦ Lack of side-by-side comparison of rates, fees, and tenures within the app interface;
- ✦ Key information hidden in fine print or behind additional clicks.

Overview of the dark patterns



Obstruction

The user encounters hurdles that make it difficult to complete their task or access information.

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Obstruction

The user faces barriers, which make it difficult for them to complete their tasks or access information.

The diagram shows two smartphone screens side-by-side. The left screen displays a form titled 'Enter your details' with fields for Mobile Number, PAN, and Date. A red error message box is overlaid on the form, stating 'Error! The details entered by you are invalid. Please refill the form.' with a 'Done' button. A red 'X' icon is at the bottom left of the screen. The right screen displays a form titled 'Enter PAN' with a field for PAN number (ABCDE1234F) and a 'Continue' button. A blue speech bubble icon is at the bottom right of the screen. Three callout boxes point to specific UI elements: the first points to the back arrow in the top left of the right screen; the second points to the green checkmark next to the PAN number field; the third points to the blue speech bubble icon at the bottom right of the right screen.

Provide consistent and visible navigation controls, such as persistent back or exit buttons, to allow users to reverse or exit actions easily.

Display real-time input validation and errors.

Provide immediate access to customer support from all screens so users are not left stranded mid-process.

A 2023 MSC study found users of a leading payments bank app in India could not register their grievances online due to the lack of a dedicated "Contact us" section.

Obstruction: Case study



They kept asking me to repay INR 45,000, even after I reported the fraud. I felt helpless, like I was being punished for something I did not do.

— Ramesh, an app-based credit user from an LMI household in India



Context

Ramesh, a low- to moderate-income (LMI) user of a leading digital credit app, was the victim of two unauthorized transactions: INR 35,000, which was already reported to cybercrime, and INR 10,000, for which he awaited full transaction details. Although he had raised a complaint and shared a cybercrime reference number, he continued to receive automated repayment reminders and faced the threat of credit score damage.

The dark pattern: Obstruction

This experience reflects the "Obstruction" dark pattern, where platforms make it difficult for users to act in their own interest.

Ramesh faced multiple challenges:

- ✦ He was repeatedly pressured to repay the full INR 45,000, which also included the disputed amounts.
- ✦ He could not access full transaction details for the second fraud, which prevented him from filing a formal complaint.
- ✦ Despite clear signs of fraud, he was denied relief measures, such as pausing repayment reminders or waiving penalties.

Overview of the dark patterns



Trick wording

The user is misled into action through confusing and deceptive language.

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Trick wording

The user is misled into making unintended choices due to the use of confusing or misleading language.

9:45 AM

Accounts

Demand Amortization
Amortización gradual

Fixed Deposit
Beneficio Seguro

Tenure Amortization
Amortización del plazo

Initiate Transfer
Mobile Number

Personal Identifier
PAN Número

Submit

Common trick wording practices

- Use of vague or technical language that users struggle to understand, such as "Tenure Amortization" or "Lien Hold."
- Use of inconsistent translations in the multilingual interface. For instance, the English term "Fixed Deposit" is translated into Spanish as "*Beneficio Seguro*," which implies a guaranteed benefit rather than a specific financial product;
- Use of jargon that does not match local norms.

A 2023 MSC study conducted with users of a payments bank app found that a limited language library made it difficult for them to conduct transactions without going to an agent for help.

9:45 AM

Financial Services

Loans Savings FD Insurance

Interest Rate Repayment Period Arr

Personal Loan
Approved amount \$ 4,00,000

Charges:

Foreclosure	0.75%
Part Payment	1.75%
Processing Fees	\$ 2,000

11.5% (p.a)
Interest rate

5
Tenure (years)

Personal Loan
Approved amount \$ 5,00,000

Charges:

Foreclosure	0.75%
Part Payment	1.75%
Processing Fees	\$ 1,500

12.00% (p.a)
Interest rate

6
Tenure (years)

Design practices that eliminate trick wording

- Use concise and unambiguous language suited to users with moderate digital and financial literacy. For example, use "Monthly Installment" instead of "EMI."
- Use simple, familiar terminology in regional languages along with English.
- Ensure terms are consistent and clearly mapped in a bilingual interface. For instance, use "Savings Account" for "*Cuenta de Ahorros*."

Trick wording: Case study



I did not realize I tipped them USD 30 until it was too late. I just needed the money quickly to pay my electricity bill.

— Latasha M., a fast-food worker in Georgia, USA



Context

Latasha is a low-income single mother who works at a fast-food outlet in Georgia. She used the Dave app to access a USD 200 cash advance for urgent bill payments. Although the app claimed there were “no hidden fees,” she was charged both an express fee and a 15% tip. This was added through an interface that did not clarify that the tip was optional and thus caused confusion. She only realized the extra charge after the transaction was completed.

The dark pattern: Trick wording

Trick wording uses ambiguous or emotionally manipulative language to push users toward decisions they might not make if fully informed.

In Latasha’s case:

- ✦ “No hidden fees” was misleading, as fees and tips were not separated clearly;
- ✦ The interface nudged users with emotionally framed language, such as “Help support Dave,” and made the tip feel necessary to get the loan approved;
- ✦ The tip screen lacked clear opt-out buttons, and action buttons were placed in a way that encouraged accidental tipping.

Why stakeholders must act now to address dark patterns in DFS

Regulators



- ▼ **Erosion of consumer protection mandates:** Dark patterns undermine the very safeguards regulators are tasked to enforce: Transparency, informed consent, and user autonomy.
- ▼ **Heightened oversight needs:** Dark patterns that enable data misuse can complicate regulatory enforcement of privacy and data protection laws.

What can help

- ▼ Carefully curate toolkits and frameworks to monitor dark patterns
- ▼ Assess regulatory robustness on dark patterns across legal, institutional, and governance dimensions

Service providers



- ▼ **Loss of long-term trust:** While dark patterns may offer short-term gains, they compromise brand integrity and increase churn, especially among financially vulnerable users.
- ▼ **Regulatory risk exposure:** Continued use of deceptive design increases the risk of sanctions, reputational damage, or forced redesigns under future regulations.

What can help

- ▼ Audit DFS platforms for dark patterns
- ▼ Design ethical, transparent interfaces and iterate the solutions for LMI, illiterate, and less digitally-savvy customers

Policymakers



- ▼ **Undermined financial inclusion goals:** If digital finance becomes associated with deception, it pushes users back toward cash and informal services.
- ▼ **Widened trust gap:** LMI populations, often the intended beneficiaries of financial inclusion efforts, are the most likely to be harmed and least likely to recover.

What can help

- ▼ Amend national consumer protection laws to explicitly prohibit harmful digital design practices
- ▼ Fund or lead the development of ethical design guidelines for inclusive UI/UX and DPIs

In an ideal world, interfaces guide users with intuition and confidence. However, the misuse of cognitive science for manipulative design highlights the need for ethical, human-centered approaches to restore trust and prioritize people over performance metrics.

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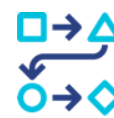
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MSC is recognized as the world's local expert in economic, social and financial inclusion



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Projects in **~68** developing countries

Our impact so far

>550
clients

>1,400
publications

Assisted development of digital G2P services used by
>875 million people

Implemented
>950 DFS projects

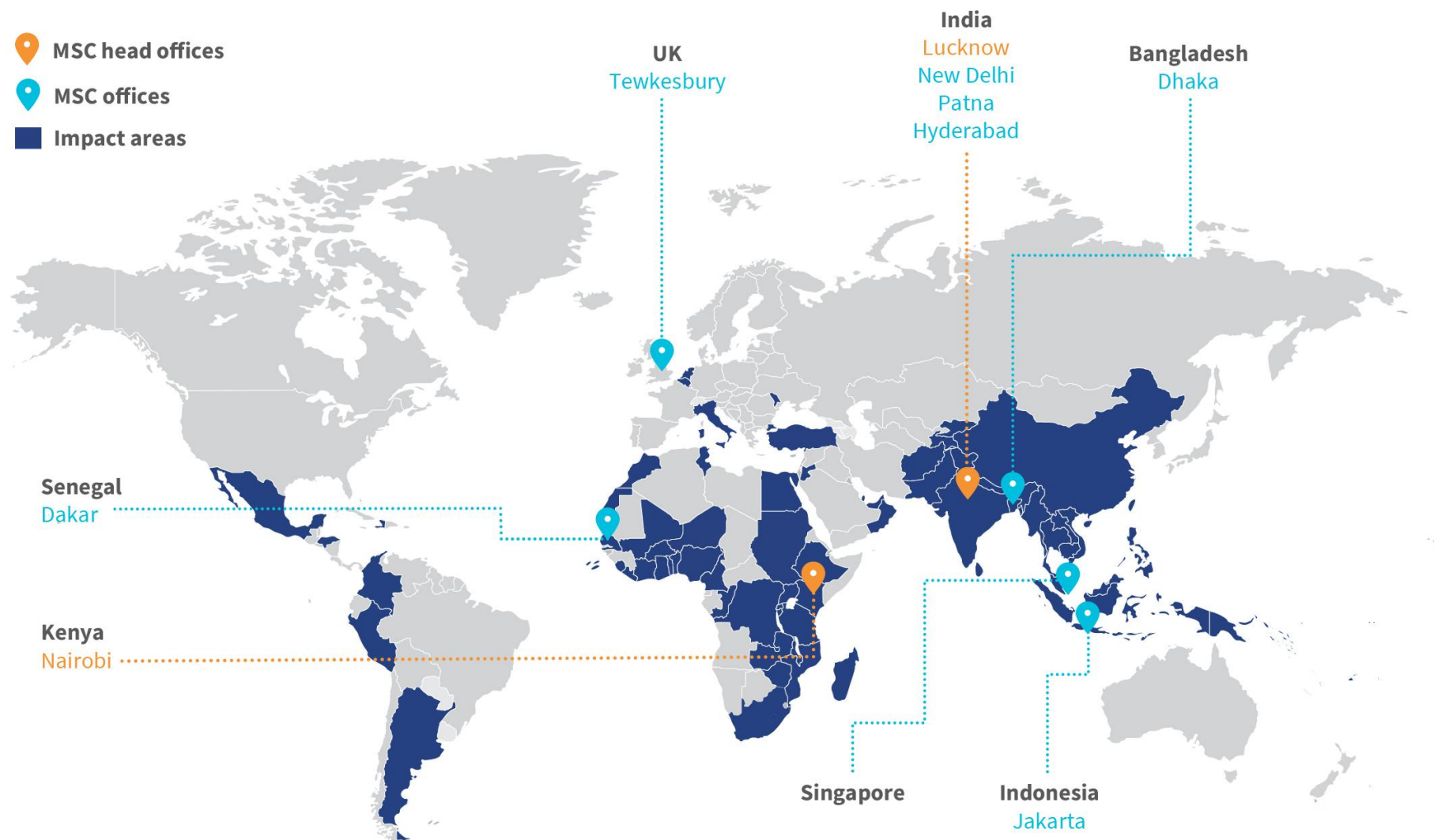
Developed
>300 FI products
and channels now used by
>1.7 billion people

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