The State of Deceptive Design in Africa

Case Studies from Nigeria and Kenya









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Tech Hive Advisory Limited ("Tech Hive") is a technology policy advisory and research firm that provides services to private and public organisations regarding the intersection between technology, business, and law. We focus on how emerging and disruptive technologies are altering and influencing the traditional ways of doing things while acting as an innovation partner to our clients.

Our experience and capability extend across Research and Policy Advisory, Privacy and Data Protection, Regulatory Intelligence, Data Ethics, Cybersecurity, Start-Up Advisory, and Digital Health. We ensure our advice serves our clients well by having an excellent understanding of their business and the markets in which they operate through accurate policy and legislative development tracking and intelligence.

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About Ikigai™

lkigai Innovation Initiative is a non-profit organisation set up with the vision of becoming the one-stop centre for technology policy in Africa. We promulgate diverse research on technology policy and legal frameworks across Africa. We also engage relevant stakeholders around the intersection of law, business and technology and advocate for better policies for the ecosystem at large. Being a research and advocacy centre focused on emerging technologies, policy and research, we often work and collaborate with leading research institutes, academia, organisa tions, civil society, and individuals on policy affecting technology. We also publish and contribute to whitepapers, reports, policy briefs, infographics, guides and guidance, academic journals and publications.

Our researchers work closely with government, stakeholders and ecosystem players, placing evidence and academic intuition at the heart of policymaking. We bring together the latest insights, evidence and commentary from our researchers with our one-stop-shop vision for policy by connecting policymakers, decision-makers, and practitioners with our industry-lead ing research. We also deliver evidence-based policy that meets the grand challenges facing society by advocating for social justice in the face of technology; sensitization of the public on technology policies that impact their rights and lives and promoting digital rights and digital ethics.

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Executive Summary

Deceptive designs are user interface and design techniques used on websites, mobile applications (Apps), or any other digital medium to manipulate users into doing something they did not intend to do to benefit the website or App owner. Deceptive designs can range from subtle omissions to explicit lies, but they all serve to undermine users' objectives and waste time or money they did not intend to spend. Furthermore, users' access to privacy and control over their psychological and behavioural autonomy are jeopardised by the exploitation of deceptive designs by digital service providers, undermining the concept of freedom of choice.

This policy brief provides insight into the state of play of deceptive designs in Nigeria and Kenya. It examines various expressions of deceptive design on e-Commerce, e-Transaction and flight aggregation platforms. Our analysis found that deceptive design includes using countdown timers, use of pop-ups, false pricing schemes, forceful creation of accounts, hidden charges and information, and so on.

Our research also found that despite the viral nature of deceptive designs and the deceptive practices that consumers suffer, there are no comprehensive policies, laws, guidelines, or regulations that explicitly address the issue of deceptive designs and their nuances. Thus, this policy brief offers insights into the state of play of the designs in these two countries and also analyses the existing regulations that address the issue of deceptive design. Finally, as a solution to regulating deceptive design, the policy brief recommends comprehensive legislation against deceptive design, provision of design tool audit, awareness and advisory for consumers and entities, use of regulatory sandboxes, and providing an avenue for consumer complaint.

Introduction

In Africa, not nearly enough countries are addressing data protection and consumer rights concerns adequately. Of Africa's fifty-five countries(55), only thirty-four(34) have legislated a data protection law, while only 52%¹ of African countries have legislation on consumer protection online. There is no doubt that digital technologies offer and unlock new opportunities and seamless access to services for consumers. However, they have also enabled blatant disregard for users' privacy and consumer rights in many instances, causing a huge roadblock which, if not addressed, would cause users more harm than good².

As the proliferation of technology continues to advance and enhance the delivery of goods and services, the protection of consumers needs to be prioritised as an enabler of a thriving digital ecosystem. This policy brief mainly focuses on the state of deceptive designs in Africa because of the adverse effects of their use by digital service providers on privacy and consumer rights.

Often, digital products are what the User interface (UI) and user experience (UX) designers make of them, and they reflect the service providers' ethics, priorities, and goals. Thus, because there are generally no specific rules or legislative obligations placed on the product designs of digital service providers or product designers, there has been continuous and growing exploitation of deceptive designs to manipulate and take unfair advantage of unsuspecting users online for either financial gains or conversion rates.

Deceptive designs are UX design tricks for over-shadowing websites, apps and digital platforms generallly content facts and motivating visitors to do things that they might not want to do with attractive and tricky elements - creating a false sense of scarcity bias, creating the fear of missing out for users (FOMO), using fake testimonials, bait and switch, misdirection, social proofing, or obstruction to influence consumers¹³ decision making adversely. Forcing user actions could force users to buy unnecessary things or sign up for services that may compromise their' privacy and autonomy⁴.

This policy brief was developed to showcase the state of deceptive design in Africa, using Nigeria and Kenya as case studies. In addition, the brief focuses on providing recommendations some of which flowed for the expert sessions at the Deceptive Design policy Hackathon 2022⁵ hosted by Techhive Advisory and Ikigai Innovation Initiative to ensure a safer digital environment

^{1. &#}x27;Online Consumer Protection Legislation Worldwide' (U.N.C.T.A.D.) https://unctad.org/page/online-consumer-protection-legislation-worldwide-accessed 31 August 2022.

^{2.} Adegoroye, A, Banjoko, O. Oloyede, R. (2022) The Blurry Lines between Deceptive Design and Marketing Strategy in Nigeria's Digital Space. https://tech-hiveadvisory.org.ng/wp-content/uploads/2022/04/Dark-Pattern-Research-2.pdf accessed 8 August 2022

^{3.} Narayanan, A. Mathur, A.Chetty, M. Kshirsagar, M. Dark Patterns Past, Present, and Future: The Evolution of Tricky User Interfaces. https://queue.acm.org/detail.cfm?id=3400901 accessed 14 September 2022.

^{4.} Rajput A, 'Spotlighting on Deceptive Design Patterns and How to Avoid Them' (300Mind, 12 August 2022) https://300mind.studio/blog/deceptive-design-patterns accessed 31 August 2022.

^{5. &#}x27;News' (TechHive Advisory) https://techhiveadvisory.org.ng/news/ accessed 18 September 2022

The State of Play of Deceptive Design

To understand the state of play of deceptive designs in Africa, we considered several digital service platforms with operations in Nigeria and Kenya. We found the use of several deceptive designs ranging from F.O.M.O. (Fear Of Missing Out), fake testimonials, bait and switch, misdirection, social proof, disguised ads, hidden costs, misdirection, friend spam, and price comparison prevention in several digital consumer-facing sectors, particularly e-commerce, e-transactions, ed-techs, flight aggregation, and the digital lending industry.

E-commerce

In the e-commerce sector in Nigeria and Kenya, we examined deceptive designs across five (5) major e-commerce platforms. The findings revealed several deceptive design techniques employed by platform owners to manipulate users into spending more money and time on their websites. Some of the techniques we found include:

Use of countdown timers: Three of the e-commerce websites use countdown timers on products on sale. This type of deceptive design forces the consumer to make an instant purchase so as not to miss the sales period. These sale timers, unfortunately, are frequently wrong, and their only function is to pressure users into a quick purchase. Often, the sale prices featured during the use of countdowns usually remain the same after the countdown, and in some instances, even better price offers are available.⁶

Use of pop-ups: In addition to employing the countdown timer, pop-ups showing how many things are left in stock are also utilised to create a sense of scarcity and compel customers to buy immediately. These sale timers, unfortunately, are frequently wrong, and their only function is to pressure users into a quick purchase. In addition to employing the countdown timer, pop-ups showing how many things are left in stock are also used to create a sense of scarcity and compel customers to buy immediately. Using timers and pop-ups creates a sense of urgency and the fear of missing out for users.

False pricing schemes: A noticeable trend is the use of false pricing schemes to trick consumers into believing they are buying at a discounted price. It is a common practice for e-commerce websites to list the current price in comparison to a former price of the same product. The former price usually appears with a strike-through, indicating it is no longer valid. The comparison in pricing may not always be false and is usually a great way to communicate discounts or sales⁷. However, the inconsistency and disparity in prices, especially when the former prices have clearly been inflated and do not reflect the value of the displayed products, shows clear evidence of the intention to deceive and manipulate the digital service providers.



Forceful creation of accounts: All four out of the five e-commerce websites studied mandated users to create accounts before letting users checkout. Again, asking users to create accounts to use or gain access to a service may not be deceptive. However, where this process is strategically positioned at the stage where users are at the point of getting results for their time and data spent surfing the website, then it can be deemed deceptive. It is quite different when users are given the option of either creating an account or not using a website, because the former lets users decide the opportunity cost of using that service before they begin to expend their time and resources. Users can objectively decide whether they want to create an account, how much of their personal data is being requested for the service, and whether they can delete their account or opt-out of receiving marketing/advertising emails. Often, a checkout stage is not necessary to shop online, and users may not be aware of that extra stage where they need to create accounts until they are about to checkout, leaving them with little or no option but to create an account.

E-transactions

Like most digital services, several digital finance platforms have employed deceptive designs, from investment platforms to digital lending platforms and fintech platforms. However, findings from our analysis of eleven(11) financial service platforms revealed that banks employ less deceptive design techniques, which may be attributable to the robust regulatory frameworks that guide the banking sector in the countries. Some of the popular deceptive techniques we found across digital financial service platforms include:

Hidden charges: Hidden charges are often exploited by digital lending services to take more money from users than they expect to pay. For digital lenders, at the last minute of approving the loan, originating fees for the loan are imposed on users. Users who have probably gone through a rigorous process of registration and credit scoring analysis usually tend to tire out and accept the new terms for originating fees. Other digital finance platforms tend to overemphasise that a particular part of their service is free and deemphasise or remain silent on the applicable charges for other services they provide. For example, emphasising zero payments on transfers but remaining silent on deposit and maintenance fees. In addition, the use of hidden charges was also found on a government website that forced users to pay a higher fees than what was displayed to them.

Hidden information: Deceptive designs in e-transactions seek to influence the user into paying for a product or service by misrepresenting the terms and conditions of the service or fraudulently making the terms and conditions difficult to understand or read, adding hidden costs to the user's burden, or forcing users to give away more personal information than they would prefer without even knowing it or seeking consent for the processing of such data. Aesthetic manipulation is also exploited to hide information from users by either directing users' attention to or away from certain information or clauses. For example, putting a clause that users may find burdensome in smaller print than other clauses or using colour schemes to confuse users. Often, colour schemes and aesthetic deception are used to hide information in policies to direct users' attention. Even worse, the policies are sometimes drafted in a way that makes them difficult for users to read and understand.

Social Proof: this basically means influencing a users' behaviour by describing the experiences and behaviour of other users. We found similar comments of random names of users who had supposedly received money from several digital lending apps. However, everytime we checked the apps, those names seemed to reoccur. There was also use of false comments and recommendations on google playstore to influence users to download apps. An earlier research by TechHive Advisory revealed that there was also a marketplace for positive reviews as a service.⁹

Deceptive Designs in obtaining consent for the use of cookies: More opften than not the apps and websites did not obtain consent for the use of cookies and where consent was sought, there was clear use of manipulation. In some instances, there cookies categories were preselected for users and in other instances, uswers were not allowed to proceed without accepting the use of the stickers.

Flight Aggregation

In this policy brief, flight aggregation platforms are websites or applications that combine, analyse, organise and present information concerning air travel. It is common in such presentations to include logistical information (ports, arrival and departure times, and financial information such as prices). This is understandable given their considered value to consumers, making the process of finding and deciding on the best flight a more efficient, streamlined process. Their service has produced a variety of strategies in the customer acquisition process, mainly price-based incentives. These take a variety of forms, such as discounts, incentivised referrals,

We analysed five(5) of the most popular flight aggregation platforms used in Kenya¹⁰ and Nigeria¹¹ and found that the design trend among these platforms is to sneak additional cost implicative services at the point of checkout. For example, items like pre-selecting items like insurance and accommodation services as additional services at the point of checkout significantly changes the price of the flight service at final checkout.

^{8.} Adegoroye, A, Banjoko, O. Oloyede, R. (2022) The Blurry Lines between Deceptive Design and Marketing Strategy in Nigeria's Digital Space. https://tech-hiveadvisory.org.ng/wp-content/uploads/2022/04/Dark-Pattern-Research-2.pdf accessed 8 August 2022

^{9.} Manyame, A. Oloyede, R. Dark Design: The Art of Deception by Design. 2020 https://techhiveadvisory.org.ng/wp-content/up-loads/2021/11/th-DARK-DESIGN.pdf accessed 8 August 2022

^{10.} Keyword Research (seranking.com) Results accessed on 3 September 2022.

^{11.} https://online.seranking.com/research.keywords.html/?keyword=flight&source=ng Results accessed on 3 September 2022.

From our analysis, we found the following techniques:

Drip pricing: this is the practice of failing to present complete pricing information. The flight aggregator platforms will range from flight information and in-flight expenses to the costs of taking up partner products such as accommodation and transport. This impact, among others, is the likely expenditure of more of a user's time than initially intended, as found in this study.¹²

Scarcity messaging: Flight aggregator platforms also use language that indicates that specific offers, i.e. flights at a given price point, are almost running out. The impact of scarcity shaming is the pressure it creates for users to quickly book their flights to not miss out on the service.

The State of Policy in Africa

There is currently no comprehensive regulation or legislation specifically addressing deceptive designs or regulating their use in Africa or the countries under review—Nigeria and Kenya. There are, however, pockets of specific laws in both countries that contain provisions that can be applied to regulate deceptive designs. These provisions are embodied in competition, consumer, and data protection, as well as electronic transaction laws.

Nigeria

Although Nigeria has no comprehensive legislation that regulates deceptive designs, the Federal Competition and Consumer Protection Act 2018, the Nigerian Data Protection Regulation 2019 (N.D.P.R.), and the CBN Consumer Protection Regulations 2019 contain provisions that address deceptive designs.

The Federal Competition and Consumer Protection Act 2018 (F.C.C.P.A)

This Act caters to consumer protection generally in Nigeria. However, certain provisions of the law apply to deceptive design in the era of e-Commerce. The Act takes a stance against dip pricing, which is fast becoming one of the most common e-Commerce practices. The Act provides that there must be full disclosure of the information and pricing details of all goods that are displayed for sale.¹³ It also provides that consumers should not be required to pay more than the stipulated price for a product. In addition to this, the entire pricing of commodities is required to be stated on the products, such that consumers have adequate information on the pricing of the goods they are purchasing.¹⁴

As a standard for marketing products, the Act precludes platforms and manufacturers from making any form of false representation as to the nature and pricing of the goods, in a way that may influence the consumer's decision to purchase the good. The Acts also prohibit using force, harassment, coercion, undue influence or pressure, and unfair tactics against consumers in the marketing, supplying, and purchasing of goods. ¹⁵ Applying these provisions can cater to some deceptive design practices such as countdown timers, false pricing, and the use of pop-ups that put consumers under pressure to make purchases and induce the fear of missing out.

^{13.} Section 114 of the Act.

^{14.} Section 115 of the Act

^{15.} Section 123 of the Act





The Nigeria Data Protection Regulation 2019 (NDPR)

The NDPR regulates the processing of personal data. The principle of transparency can be applied to deceptive design, especially deceptive User Interface and User Experience (UI/UX). The NDPR provides consent as one of the lawful bases for processing personal data. In addition, the regulation provides that consent must be obtained without fraud, coercion, and undue influence. Also, there must be an avenue for data subjects to be informed of their rights and how to exercise those rights. In

Deceptive design sometimes manifests in hiding information from consumers and collecting more data than what is disclosed to the data subjects. The NDPR provides that data subjects should be informed in a manner that is plain, concise, transparent, intelligible, and easily accessible platforms¹⁸. Data subjects are at liberty to demand information, and the data controller may provide it orally or electronically.¹⁹ While the NDPR provides for principles that should guide the processing of personal data such as purpose limitation and security of data,²⁰ it does not provide for the principle of fairness which is most crucial to deceptive design. The principle of fairness in data processing means that data should be handled in a way that the data subject reasonably expects and in a manner that will not have adverse effect on the subject.²¹ The principle also reinforces the expectation that data subjects should not be mistreated, suffer harm or be put at risk while processing data.

CBN Consumer Protection Regulation 2019

The regulation protects consumers from unfair contractual dealings by institutions and, by extension, platform owners. Regulation 4 provides that documents that provide information to consumers must be written in clear, legible, and simple English and provided in a durable form for future reference. It further provides that the price must be consistent with the prices stated at the engagement points. ²²

Regarding advertisements, the regulation provides that advertisements shall be factual, unambiguous, and expressed in simple terms. Also, advertisements must not exaggerate the benefits of the product or service.²³ The regulation also emphasises that advertisements shall disclose the cost of products and services, including all fees and any other charges that may be associated with it²⁴.

16. Article 2.2 of the Regulation.

17. Article 2.3 of the Regulation

18. Article 3.1 of the Regulation

19. Article 3.1 of the Regulation.

20. Article 2 of the Regulation.

21. 'Lawful, Fair and Transparent Processing' (20 August 2021) <a href="https://ico.org.uk/for-organisations/guide-to-data-protec-data-pro

tion/key-dp-themes/guidance-for-the-use-of-personal-data-in-political-campaigning-1/lawful-fair-and-transparent-processing/* accessed 19 September 2022

22. Article 4.1.9. of the regulation.

23. Article 4.2.1 of the Regulation.

Kenva

Like Nigeria, Kenya has no law or guideline that specifically addresses the use of deceptive design. However, some existing laws contain provisions that address expressions of deceptive design.

Kenya Data Protection Act 2019

The Kenyan Data Protection Act sets the standards for collecting and processing personal data, and some of its provisions cater to some of the ways that deceptive design manifests. As principles of data processing, the Act provides for data minimisation and purpose limitation, which are principles that implies that data should not be deceived into giving more information than is necessary and data collected should be used only for the purpose for which it is collected. Also, the Act provides for the principle of fairness and transparency in the collection and processing of data.²⁵

As a right, the Act provides that data subjects have a right to be informed²⁶ of the purpose of processing²⁷. In essence, the Act expects as much disclosure to give the data subjects full knowledge of why data is collected, what it will be used for and the consequences of withholding data at the collection point. Regarding consent, the Act provides that consent must be freely given and the data subject must be able to withdraw consent at any time. Also, it is on the data controller to prove that consent was freely obtained²⁸.

Kenya Consumer Protection Act 2012

The Act protects consumers against being charged for unsolicited goods. According to the Act, unsolicited goods include goods supplied to a consumer who did not request them.²⁹ Section 9 of the Act provides that consumers are under no obligation to pay for unsolicited goods, and the seller shall not be entitled to demand any form of payment for such unsolicited goods³⁰. The Act protects consumers from deceptive advertising, which includes untrue representation regarding the state, quality, utilities, s and credibility of a product³¹. It is further provided that vendors and manufacturers are to engage in their transactions with their customers in a fair manner³².

The Act has supplementary guidelines which state that suppliers are not to engage in practices that are likely to mislead consumers about the state, quality, suitability, and characteristics of a product. Regarding prices, the guideline provides that prices stated on goods must include all levies, taxes, and additional fees³³ and must be stated in a clear and accurate manner³⁴. This will likely prevent sellers from sneaking additional prices into the total price of goods ordered by the customer. The Guidelines further preclude manufacturers and sellers from engaging in bait and deceptive advertising. According to the guidelines, a misleading advertisement can potentially deceive and distort the economic behaviour of the consumers³⁵.Instances of bait advertising occur when a business advertises a particular good to consumers but does not have sufficient stock to last until the end of the sale³⁶.

^{29.} Section 9® of the Act.

^{26.} Section 26(a) of the Act.

^{27.} Section 29 of the Act. 30. Section 9 of the Act.

^{28.} Section 32 of the Act. 31. Section 12 of the Act.

^{32.} Section 15 of the Act. 33. Section 29 of the Guidelines.

^{34.} Section 30 of the Guidelines.

^{35.} Section 56 of the Guidelines.

^{36.} Section 60 of the Guidelines

Recommendations

Legislating against Deceptive Designs

The absence of a comprehensive framework makes it difficult to determine what constitutes a deceptive act or manipulative technique and the appropriate penalty for deceptive design practices. A multistakeholder approach is recommended to capture the scope of deceptive designs under the law to ensure regulators are not creating laws in a vacuum. The legal framework could either update a number of existing laws to protect against misleading designs or use a single rule or set of guidelines to deal with them. Also, the law will make it a legal requirement for people in the industry to recognise digital rights as human rights.

Design Audit tool/process

Regulators can develop independent audit processes that digital platforms can use to check compliance. A design impact assessment test could be mandated for new and existing products to check for manipulative designs and correct them. The tool or process will judge the impact of design and serve as a foundation for regulation.

Complaints mechanism

There needs to be a transparent mechanism for reporting deceptive designs to regulators. More importantly, the mechanism should be responsive by quickly addressing and investigating reports of deceptive design. In addition, reports on investigations and decisions should be published periodically.

Awareness creation and advisories

Regulators, civil society, and academia must shoulder greater responsibility for educating users online and researching manifestations of deceptive designs on the African continent respectively. This would give users a better understanding of their rights and the ability to boycott abusive services. A classic example is the "Alliance to better protect minors online" a self-regulatory initiative with signatories like Apple, Google, and Facebook, among others, and they have developed their own principles, standards, and guidelines on how to prioritise the protection of minors on their platforms.

Use of Regulatory Sandboxes:

There should also be regulatory sandboxes that companies can use to test out their products. The goal will be to ensure that products can be made within the rules from the start.

 $^{37. \ &#}x27;Alliance to Better Protect Minors Online \ | \ Shaping Europe's Digital Future' < https://digital-strategy.ec.europa.eu/en/policies/protect-minors-online > accessed 6 September 2022.$

^{38. &#}x27;Creating a Better Fintech UI/UX Design | W.A.N.D.R.' (9 April 2022) https://wandr.studio/blog/fintech-ui-ux-design/* accessed 5 September 2022.

Unified Regulation:

There needs to be a harmonisation of standards with regard to design across Africa. Many digital platforms either operate or aspire to operate across countries and continents. Thus, fragmented frameworks make it more difficult and less enticing for tech companies who operate cross-country to comply. The regulator should develop operational guidelines, codes of ethics, and best practices for UI/UX designers, tech associations, software engineers, digital marketers, and tech companies. The codes of practice embody design principles of no surprises, transparency, fairness, and accountability and set defined standards that a user interface must meet.

Conclusion

Owing to the advent of new interface technology, user experience has become a critical component of consumer engagement. However, with deceptive designs embedded into our digital experiences, the respect for consumer and privacy rights that form the crux of users' digital rights has continued to be eroded. Moreover, the propensity for design interfaces to manipulate users is also increasing exponentially, and if it continues unchecked, individuals may be left vulnerable to behavioural monitoring. Thus, regulators and stakeholders must take critical action given the dangers of deceptive designs and the need to protect individuals in the digital space.

