

Webinar on artificial intelligence and consumer protection:

Risks for consumers

1 February 2024

**Using AI to spot dark patterns and help
consumers protect themselves**

Presentation

Department of Consumer Affairs

Government of India

This material has been reproduced in the language and form as it was provided. The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.

WEBINAR OF THE UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT (UNCTAD) WGE

*“Using AI to spot dark patterns and help
consumers protect themselves”*

01.02.2024

DEPARTMENT OF CONSUMER AFFAIRS
GOVERNMENT OF INDIA



POWER OF AI: INFLUENCING CONSUMER INTERACTIONS

- ❑ Use of AI has become prominent in customer interactions through
 - ✓ chat bot, virtual assistants,
 - ✓ E-commerce and visual search,
 - ✓ content creation and personalized branding etc.
- ❑ [EY consumer index](#) survey reveals that an impressive 82% of Indian participants are open to improving their purchase decisions using AI

❑ But in the guise of technology, e-commerce platforms use **misleading and unfair trade practices**

❑ They use **consumer bias & deceptive UI/UX designs** to manipulate consumer choice

Have you ever...

Accidentally opted in to receive
marketing notifications?

Have you ever...

Tried to book a flight, and found
hidden fees?

Have you ever...

Bought something extra to qualify
for “free” delivery?

Have you ever...

Subscribed to something and
now finding it difficult to
unsubscribe ?

I don't want to keep updated

To know more about such practices,
Please subscribe on the link given below

Confirm Shaming

To subscribe and keep updated
Link Expires in 119 Seconds

Designed to ensure subscription

False Urgency



These practices are called
DARK PATTERNS

GLOBAL DEFINITIONS OF DARK PATTERNS



California Privacy Rights Act (CPRA), 2020

“A user interface designed or manipulated with the substantial effect of **subverting or impairing user autonomy, decision-making or choice**, as further defined by regulation”



The Digital Services Act (DSA), EU, 2022

“Dark patterns on online interfaces of online platforms are practices that materially **distort or impair**, either purposefully or in effect, the ability of recipients of the service **to make autonomous and informed choices or decisions.**”




OECD Committee on Consumer Policy


“Dark commercial patterns are business practices employing elements of digital choice architecture, in particular in online user interfaces, that **subvert or impair consumer autonomy, decision-making or choice. They often deceive, coerce or manipulate consumers** and are likely to cause direct or indirect consumer detriment in various ways, though it may be difficult or impossible to measure such detriment in many instances.”

INDIAN DEFINITION OF DARK PATTERNS


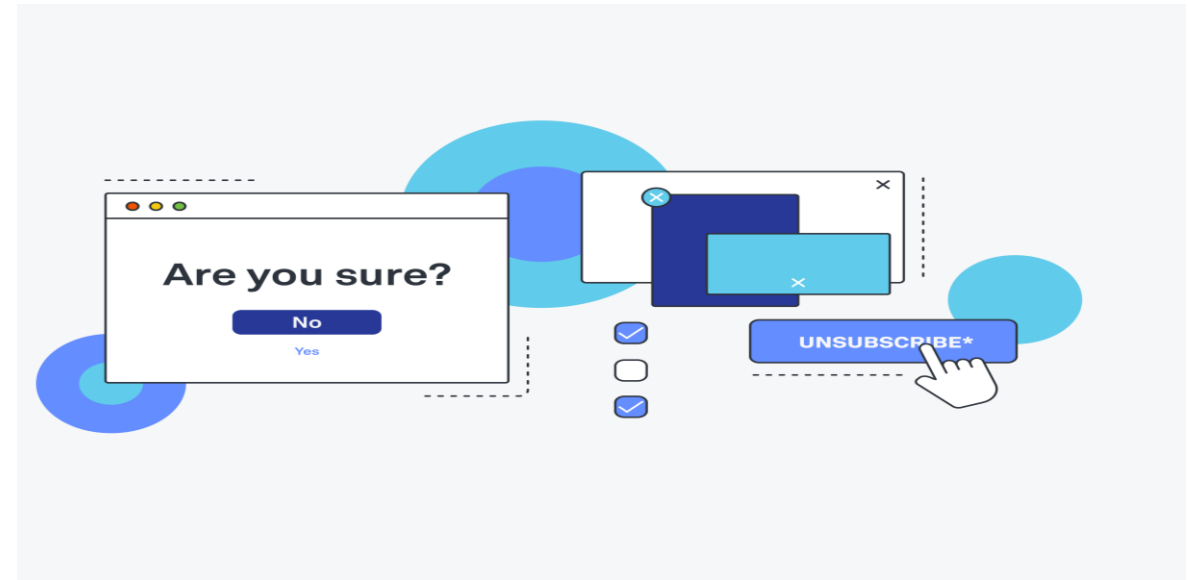
“GUIDELINES FOR PREVENTION AND REGULATION OF DARK PATTERNS 2023”



“Practices or deceptive design pattern using user interface or user experience interactions on any platform that is **designed to mislead or trick users** to do something **they originally did not intend** or want to do.”



“It is done by **subverting or impairing the consumer autonomy, decision making** or choice, **amounting to misleading advertisement or unfair trade practice** or violation of consumer rights;”

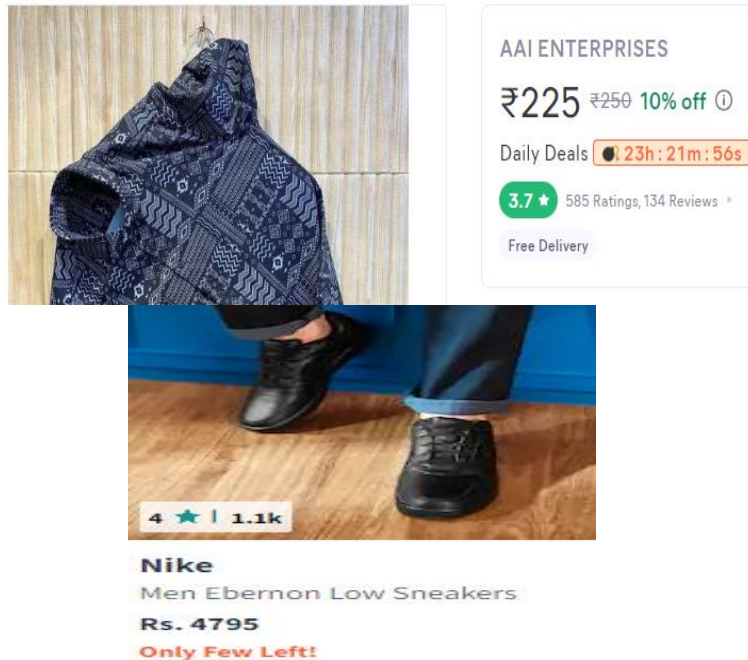


Dark patterns are covered under **unfair trade practices**. Unfair trade practices are **regulated under section 2(47) of Consumer Protection Act, 2019** and applies **equally to dark patterns**

13 DARK PATTERNS IDENTIFIED

1. FALSE URGENCY

This tactic creates a sense of urgency or scarcity to pressure consumers into making a purchase or taking an action.



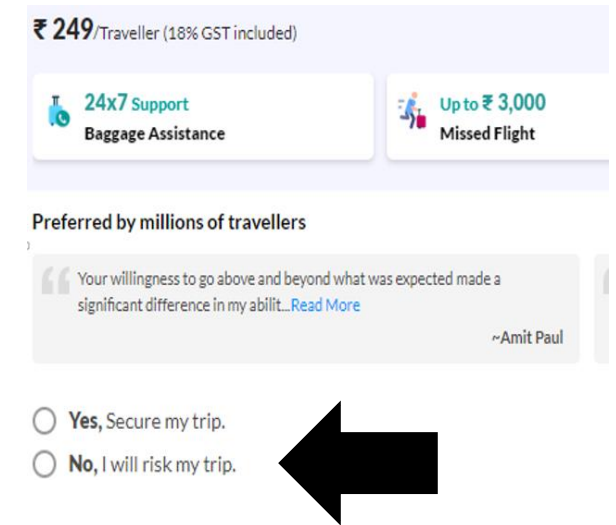
2. BASKET SNEAKING

Websites or apps use dark patterns to add additional products or services to the shopping cart without user consent.



3. CONFIRM SHAMING

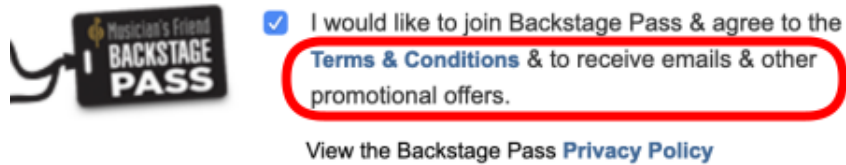
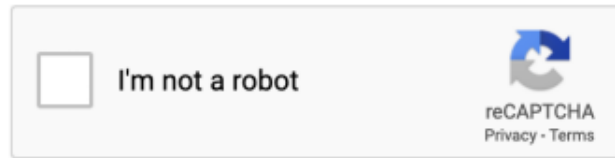
It involves guilt as a way to make consumers adhere. It criticizes or attack consumers for not conforming to a particular belief or viewpoint.



13 DARK PATTERNS IDENTIFIED

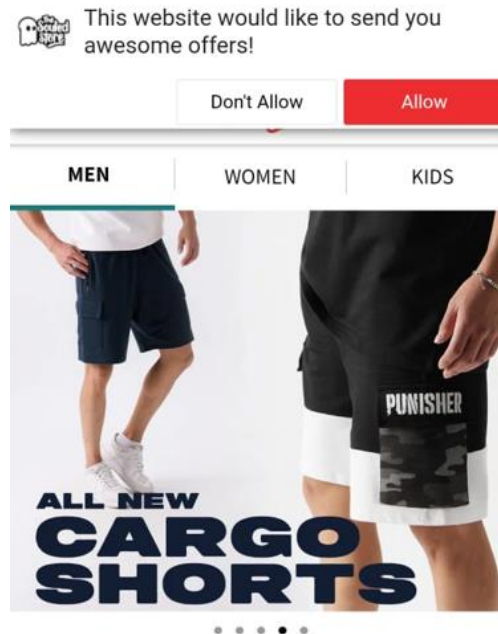
4. FORCED ACTION

This involves forcing consumers into taking an action they may not want to take, such as signing up for a service in order to access content.



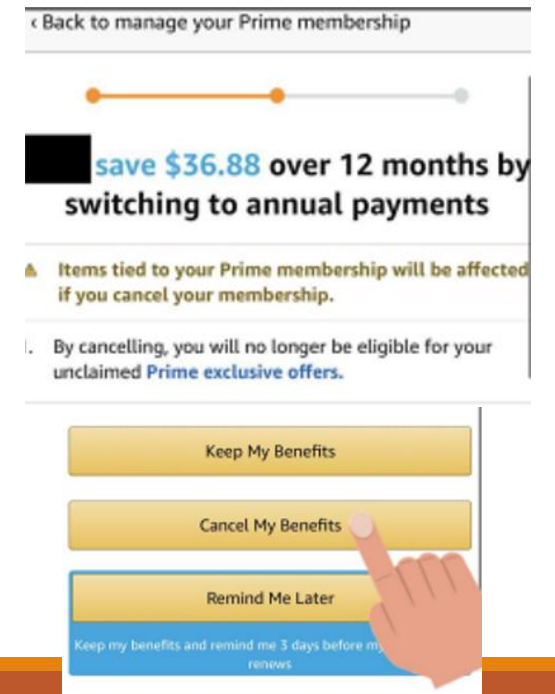
5. NAGGING

It refers to persistent, repetitive and annoyingly constant criticism, complaints, requests for action.



6. SUBSCRIPTION TRAPS

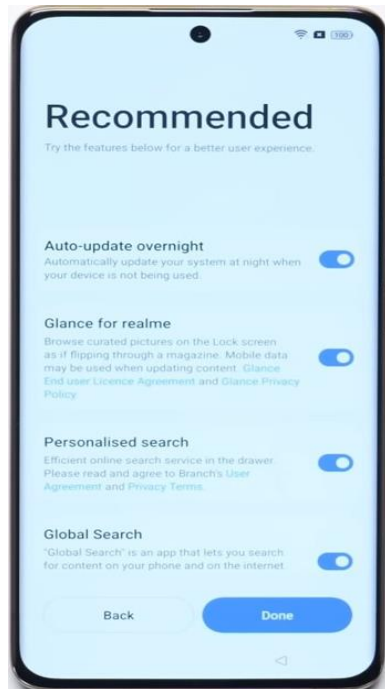
This tactic makes it easy for consumers to sign up for a service but difficult for them to cancel it, often by hiding the cancellation option or requiring multiple steps.



13 DARK PATTERNS IDENTIFIED

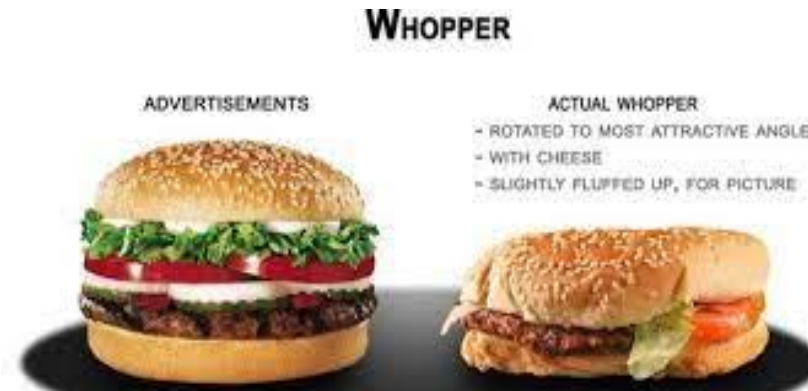
7. INTERFACE INTERFERENCE

This tactic involves making it difficult for consumers to take certain actions, such as canceling a subscription or deleting an account.



8. BAIT AND SWITCH

This involves advertising one product or service but delivering another, often of lower quality.




9. HIDDEN COSTS

This tactic involves hiding additional costs from consumers until they are already committed to making a purchase.

What's inflating your air fare?

Advertised fare (GoAir Mumbai-Delhi in October 2013)
₹4,399

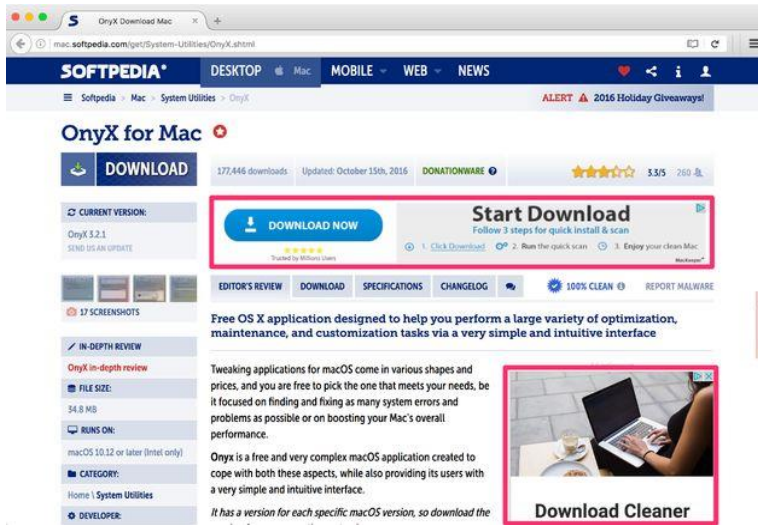


FARE BREAK-UP	
BASE FARE	₹950
FUEL SURCHARGE	₹2,450
CUTE CHARGE	₹50
SERVICE TAX	₹167
PASSENGER SERVICE FEE	₹146
USER DEVELOPMENT FEE	₹551
AIRPORT DEVELOPMENT FEE	₹113
CONVENIENCE FEE (₹300 ON MOST INDEPENDENT TRAVEL PORTALS)	₹100
ACTUAL FARE PAID	₹4,527
ADDITIONAL COST OF OPTIONAL SERVICES	
SEAT SELECTION	₹500
MEAL	₹250
FINAL FARE	₹5,277

13 DARK PATTERNS IDENTIFIED

10. DISGUISED ADS

Disguised ads are advertisements that are designed to look like other types of content, such as news articles or user-generated content.



11. SAAS BILLING

process of generating and collecting payments from consumers on a recurring basis in a software as a service (SaaS) business model



After 30 days



12. TRICK QUESTIONS

deliberate use of confusing or vague language like confusing wording, double negatives, or other similar tricks, in order to misguide or misdirect a user from taking desired action



Do you wish to opt out of receiving updates on our collection and discounts forever?

Yes. I would like to receive updates

Not Now

13. ROGUE MALWARE

“Rogue Malwares” means using a ransomware or scareware to mislead/trick user into believing there is a virus on their computer and aims to convince them to pay for a fake malware removal tool that actually installs malware on their computer.

Example: When a pirating website/app promises the consumer to provide free content (audio/audio-visual/others) but actually leads to an imbedded malware when the link is accessed



I should buy the software



FAKE!
FAKE!



PRESS COVERAGE

mint

Markets Premium Money Mutual Fund Industry Companies

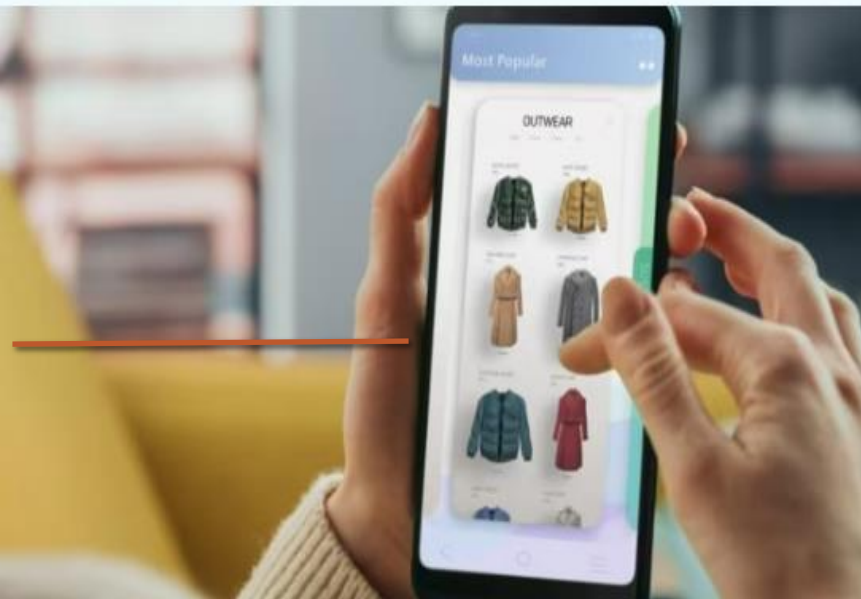
Business News / News / India / Centre puts e-commerce dark patterns on notice

Centre puts e-commerce dark patterns on notice

3 min read • 01 Dec 2023, 11:20 PM IST

Dhirendra Kumar

E-commerce companies in India will face penalties for using 'dark patterns' to trick users into unintended actions, according to guidelines issued by the Central Consumer Protection Authority



• 55 Lakh+ Guaranteed 'Tax-Free' Returns

• Save tax up to ₹46,800*

Center notifies guidelines against 'dark patterns' that mislead buyers

The guidelines that have now come into force will apply to all platforms systematically offering goods or services in India - advertisers and sellers.

iPhone 15

https://googleads.g.doubleclick.net/pcs/click?xai=AKAQjsvH1R6f5eea-KHQITYqr...

Nifty 50 21,725.70 +203.60 Sensex 71,752.11 +612.21 Silver 72,275.00 -67.00 Gold 62

businessline.

Companies / Markets / Portfolio / Opinion / Budget 2024

Home » News » National

Centre tightens grip against 'dark patterns', issues guidelines

Updated - December 01, 2023 at 06:23 PM. | New Delhi

These practices look at subverting or impairing the consumer autonomy, decision-making, or choice, amounting to misleading advertisements, unfair trade practices, or violations of consumer rights

BY OUR BUREAU

Government has banned 13 "dark patterns" on e-commerce website: What are they

TIMESOFINDIA.COM / Dec 5, 2023, 08:12 IST

200 PTS SHARE PRINT AA FOLLOW US

New For You



NEXA

The government has banned "dark patterns" on e-commerce platforms under guidelines by CCPA. A recent gazette notification outlines the penalty for violating the guidelines. These patterns deceive or manipulate customers. They include false urgency, basket sneaking, and forced action. The guidelines ensure clarity for buyers, sellers, marketplaces, and regulators, defining what is unacceptable as unfair trading practices.

Read Less

MC Exclusive | Government body pulls up Amazon India for 'dark' practices forcing consumers to sign up for Prime membership

REGULATORY MEASURES

Earlier, a 17-member Task Force submitted its report to the Consumer Affairs Ministry. The Task Force was set up to frame draft guidelines to stop the menace of dark patterns by online players.

Subscribe to updates

The Indian Consumer Affairs Ministry has taken a tough stand in the dark pattern used by airlines and has summoned them today at 3 pm. According to sources, the ministry has sought responses from these airlines on the presence of dark patterns on their websites.

HOW DOES IT IMPACT CONSUMERS?

Mislead consumers, distort their choice and behavior

Make certain decisions more prominent, more difficult or easier

Create a false feeling of urgency/scarcity /FOMO

Shame consumers (social influence or peer pressure)

Obstruct or confuse consumers (double negative questions)

'Blind' consumers (sneak things into their carts)



USING AI TO DETECT DARK PATTERNS



Pattern Recognition Algorithms:

- Train AI algorithms to recognize patterns
- Analyze website layouts, user interfaces, and interaction flows
- Identify potentially deceptive elements.



Natural Language Processing (NLP):

- Analyze the language used in terms and conditions, pop-ups, and notifications
- Flag instances of ambiguous or misleading language that might indicate a dark pattern.



User Behavior Analysis:

- Detect patterns indicative of deceptive designs
 - Flag unusually high conversion rates,
 - frequent use of opt-out options, or
 - rapid decision-making triggered by urgency tactics

USING AI TO DETECT DARK PATTERNS



Browser extensions:

- provide real-time warnings to users when they encounter websites employing dark patterns
- Use machine learning models to assess the likelihood of deceptive design elements.



Image and Visual Recognition:

- Analyze website visuals, including button placements, color schemes, and misleading images
- identify design elements that may trick users into unintended actions.

COUNTERING DARK PATTERNS



Continuous Monitoring:

- Monitor websites and applications for changes in design patterns
- Generating alerts when significant alterations occur
- signal potential introduction of dark patterns.



Community Reporting and Feedback:

- Collection and analysis of user reports and feedback regarding deceptive design
- Understand user complaints and identify commonalities.



Regulatory guidelines

- Identify dark patterns that violate regulatory guidelines
- ensure compliance with consumer protection laws.
- Incorporate legal and ethical considerations

COUNTERING DARK PATTERNS



Predictive Analysis:

- Predict potential dark patterns by learning from historical data and industry trends
- Anticipate emerging deceptive design techniques.



Educational Tools:

- Develop tools to help users understand and recognize dark patterns
- Provide real-time feedback as users navigate websites
- Increasing awareness and promoting informed decision-making.

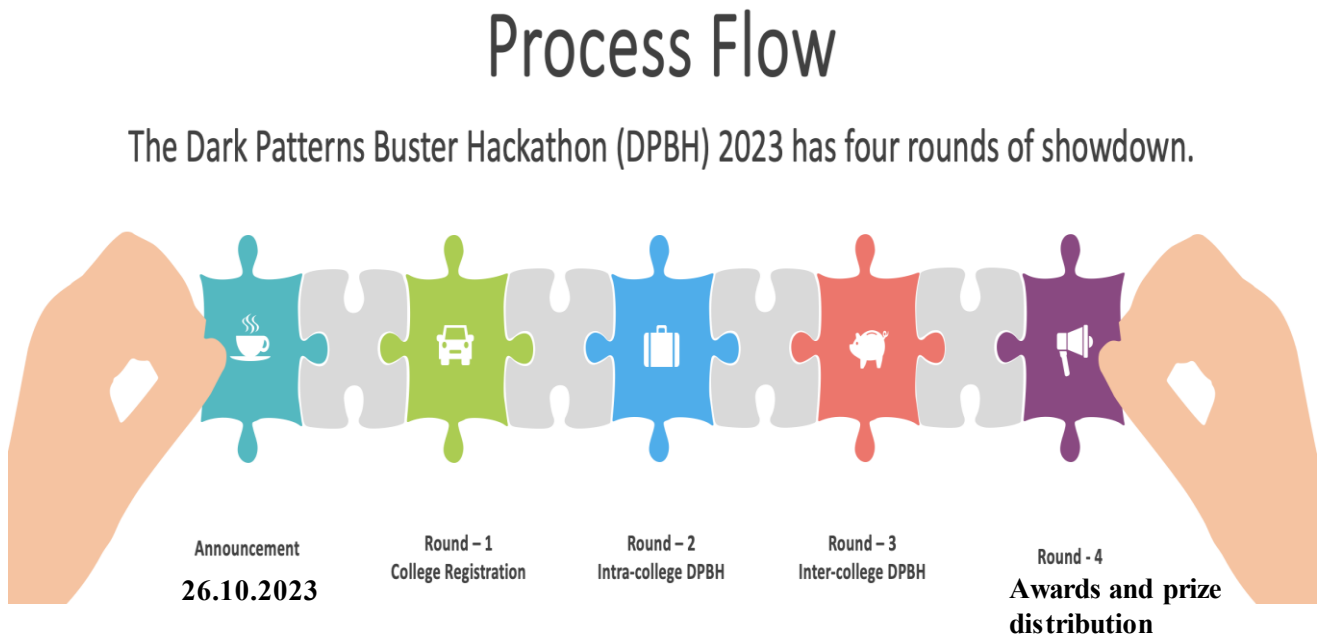
Dark Patterns Buster Hackathon- 2023

Design & prototype innovative app or software based solutions

- Four Rounds of Innovation using AI and other technologies
- Four Months of Hectic Engagements
- Students, professors, individuals, colleges, researchers etc. can participate in hackathon
- Involving best minds and technology Institutes in the Hackathon



October 26, 2023 to March 15, 2024



The Deliverables

- Browser extensions
- Add-ons
- Plugins
- Applications
- Mobile apps etc.

to detect dark patterns on e-Commerce platforms

Expected outcome for consumers



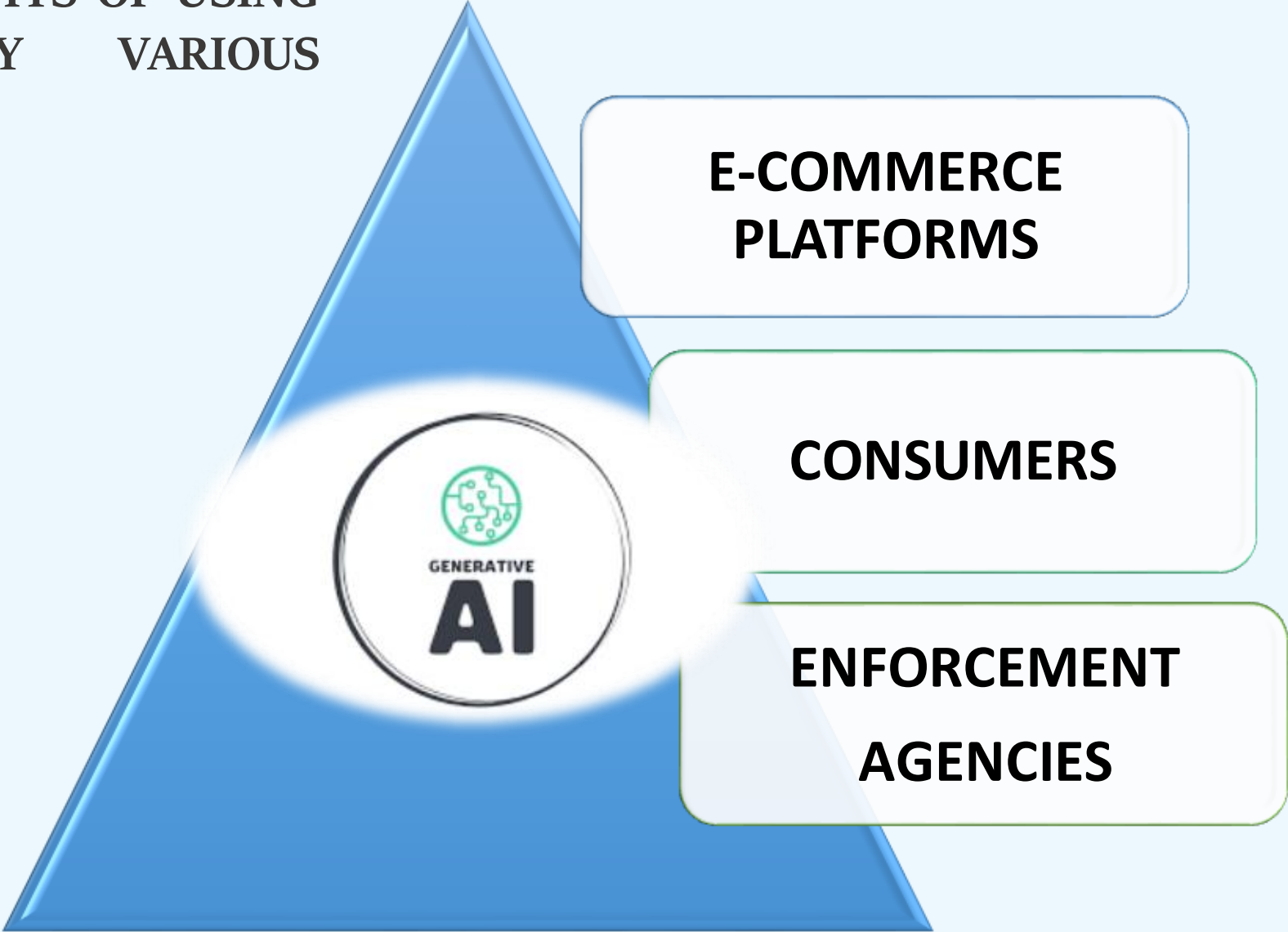
Login the system and access e-commerce platform

Detection tool helps in identifying the dark patterns using AI/in built technology

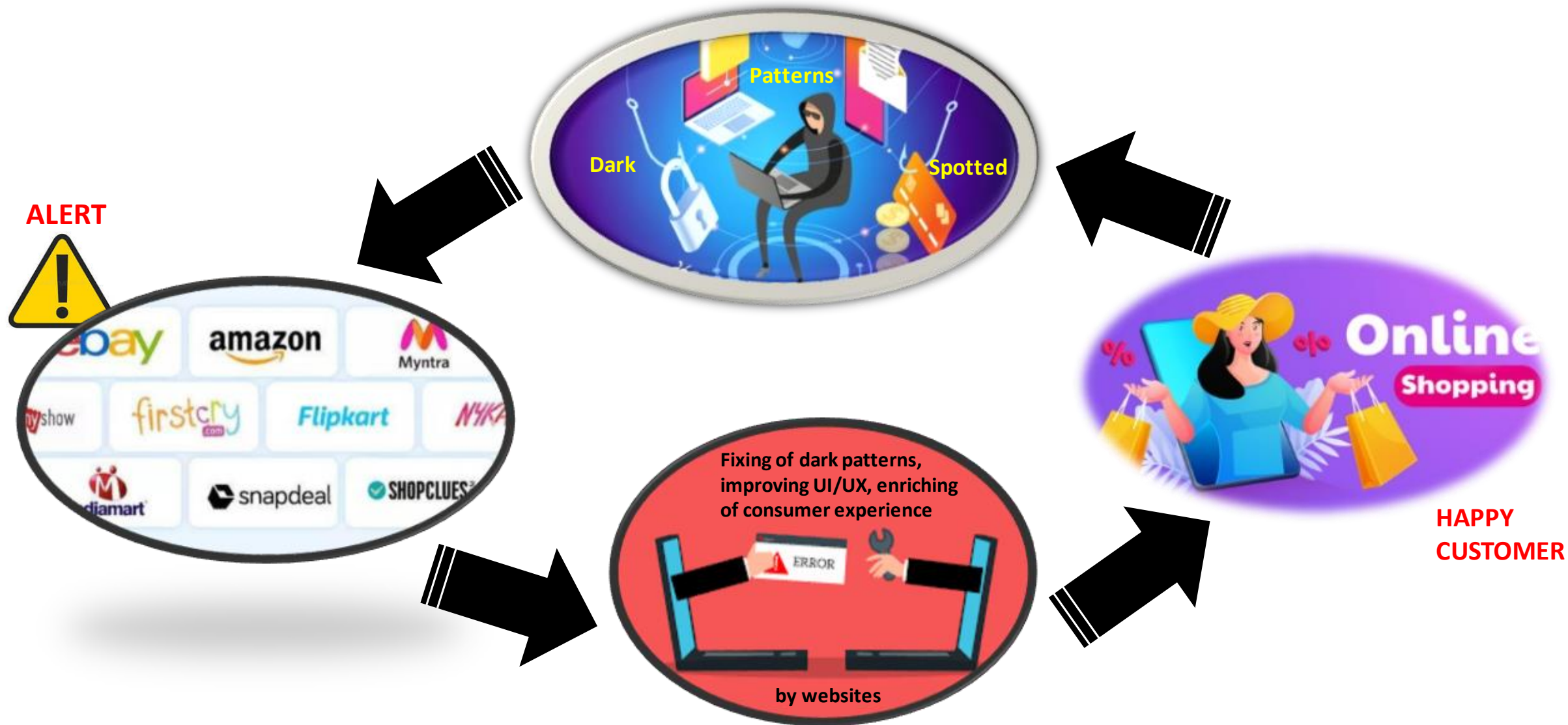


Alert the consumer about the dark pattern and enable them to make a rational choice

POTENTIAL BENEFITS OF USING AI TOOLS BY VARIOUS STAKEHOLDERS



SELF REGULATION BY E-COMMERCE PLATFORMS



**CONSUMER
EMPOWERMENT**

**Reporting of such dark patterns
on National Consumer Helpline (NCH)**

**Dispute resolution
through consumer
empowerment**



**Informed and
un-influenced
Decisions by
consumers**

Self detection of dark patterns using AI tool

**USE BY GOVERNMENT
OR
ENFORCEMENT
AGENCIES**



❖ **Using AI tools to track websites for dark patterns**

❖ **Stringent actions against defaulting online platforms and holding them accountable**

❖ **Redressing consumer grievances**

❖ **Creating public awareness**

PUBLIC AWARENESS MEASURES TAKEN IN INDIA



Consumer awareness through:

- ❖ Social media posts/videos
- ❖ Consumer engagement through Instagram posts, conducting quizzes etc.
- ❖ Celebrity awareness posts

Improving regulatory measures through:

- ❖ Conducting webinars
- ❖ Taking feedback & improving

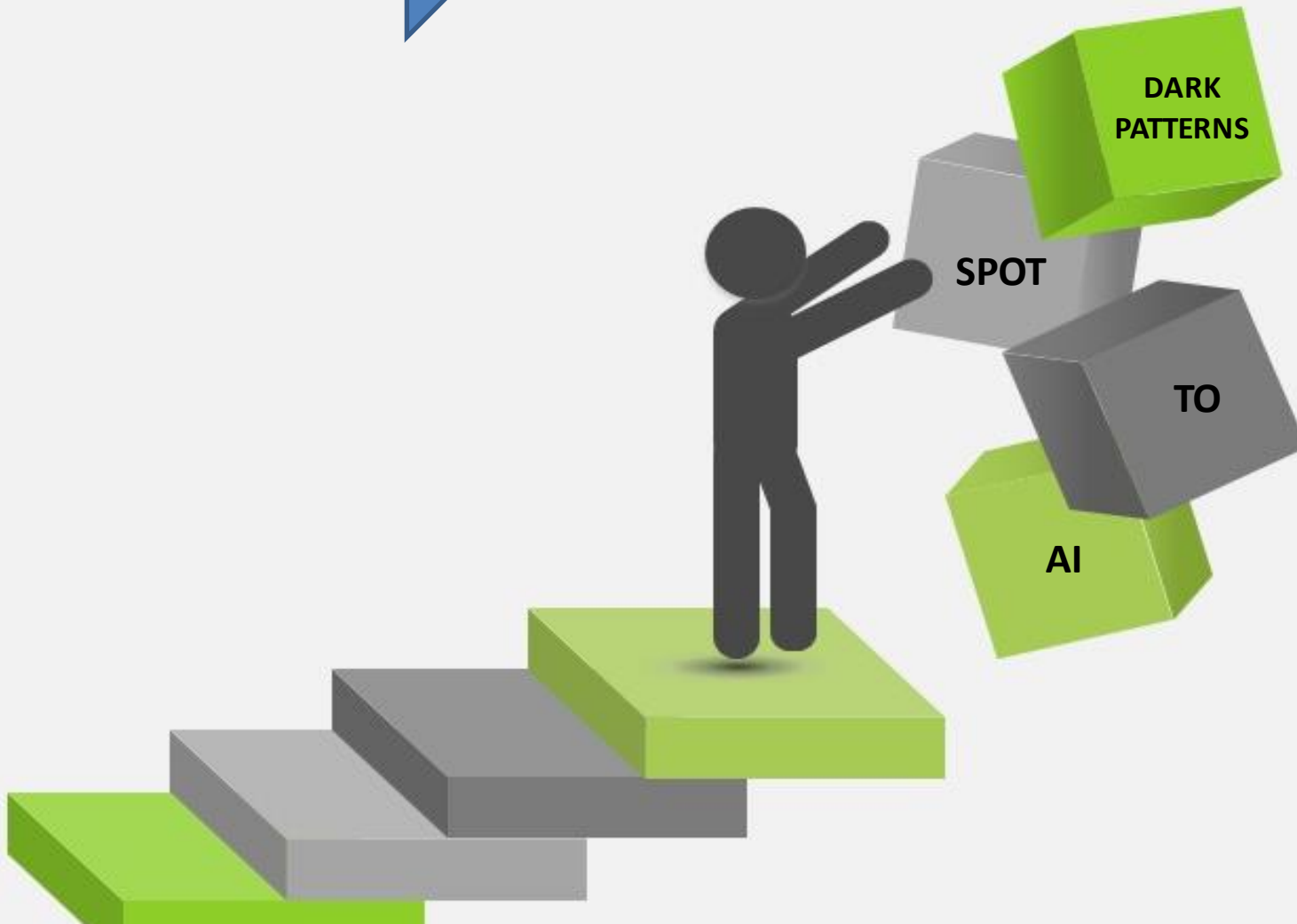


Dedicated helpline number for reporting incidents of dark patterns



Training NCH staff to identify complaints related to dark patterns and resolve consumer disputes

WAY FORWARD



Offer AI plug-in (developed through hackathon) for detection of dark patterns



To establish a Dark Patterns Observatory in collaboration with a premier technology institute



Undertake domestic and international comparative studies



Making partners for dispute resolution mediation through convergence

~~HEARD OF GREEN WASHING?~~





NOW BEWARE OF

AI WASHING

- ❖ AI washing is a **marketing effort** wherein vendors claim their offerings involve **artificial intelligence** (AI) technology when they really don't or the connection to AI is minimal.
- ❖ Marketing teams engage in AI washing when they embellish their products' AI capabilities to **enhance sales**.
- ❖ AI washing is much like "**greenwashing**," where a company's management team makes unsupported, **false or misleading claims** about the sustainability of its products, services or business operations.
- ❖ It **damage user and investor trust** in the technology as those who fall victim to it may not be as willing to purchase and adopt or invest in real AI technology in the future

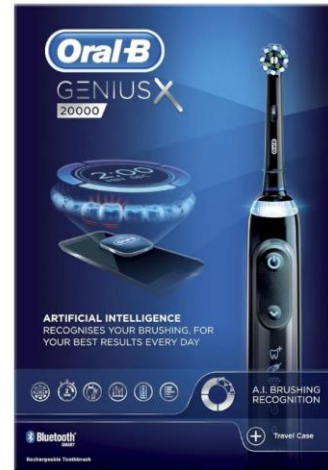
Taste the future



Real innovation or just a marketing gimmick to ride on the popularity of buzzword “Artificial Intelligence”?

AI enabled toothbrush

Brand: Oral B 4.4 ★★★★★ 1,155
Oral-B Genius X with Artificial Intelligence Black Electric Toothbrush, 1 Toothbrush Head, 6 Modes, Gum Pressure Sensor, USB Charging Travel Case, UK 2 Pin Plug, Gift for Men/Women



Do you understand the technology behind the advertised product or just falling for a supposedly unsupported, false and misleading claim?

AI controlled drive-through



Is it Artificial intelligence or just another complex technology in the guise of AI used by marketing company?

WE JUST DON'T KNOW YET!

Thank You

