

## Dark Pattern Unsafe by Design



# Martina Armbrecht

UX CONSULTANT

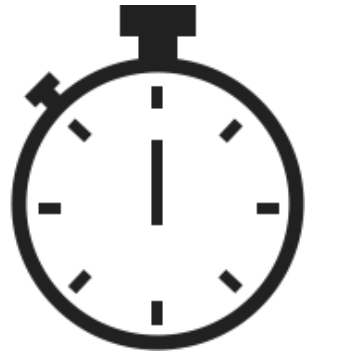


# Ariane Jäger

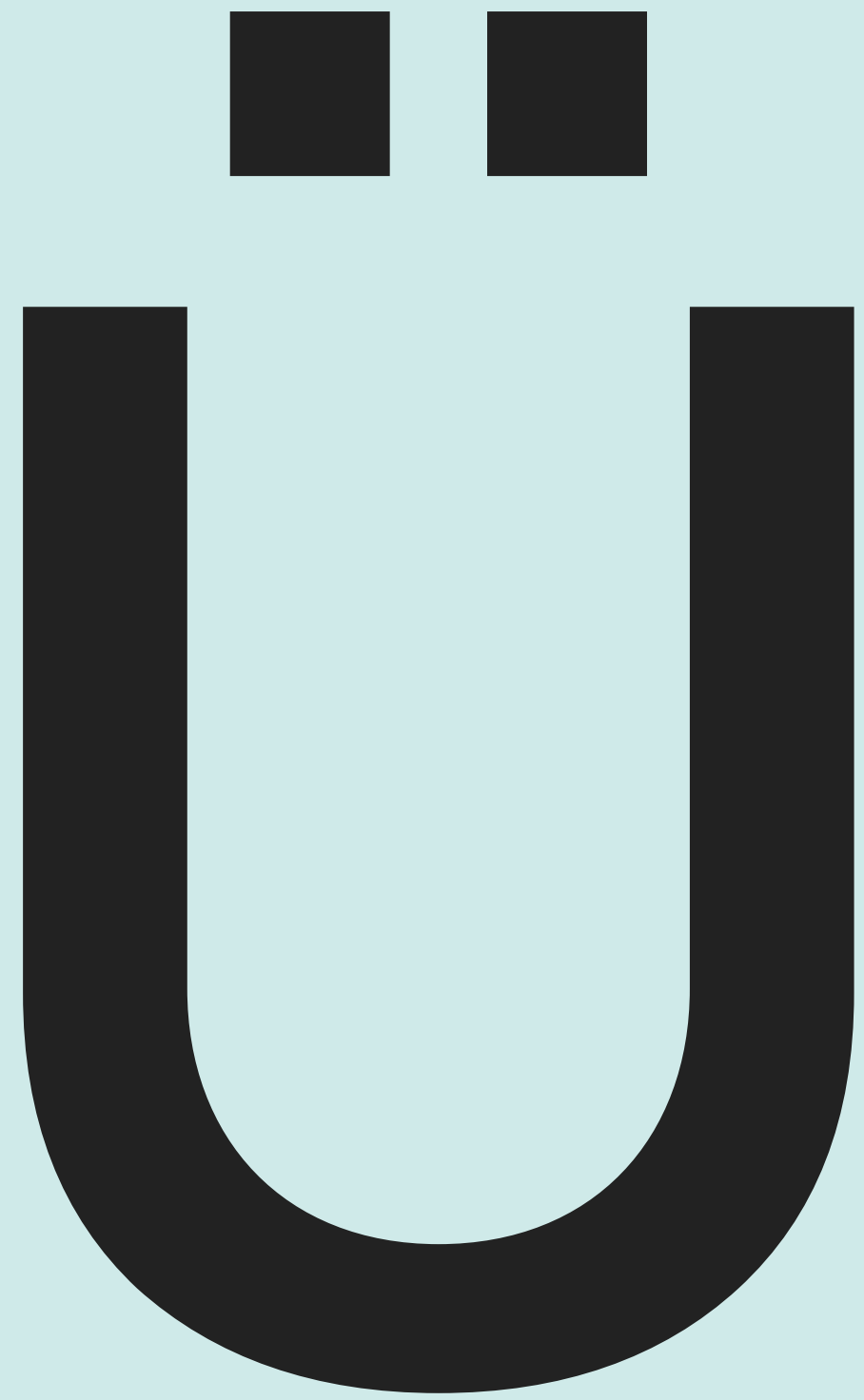
SENIOR UX CONSULTANT

# Themen

1. Über Usetree
2. Safe by design
3. Dark Patterns
4. Methoden zur Evaluierung
5. Fazit
6. Q&A



30 min



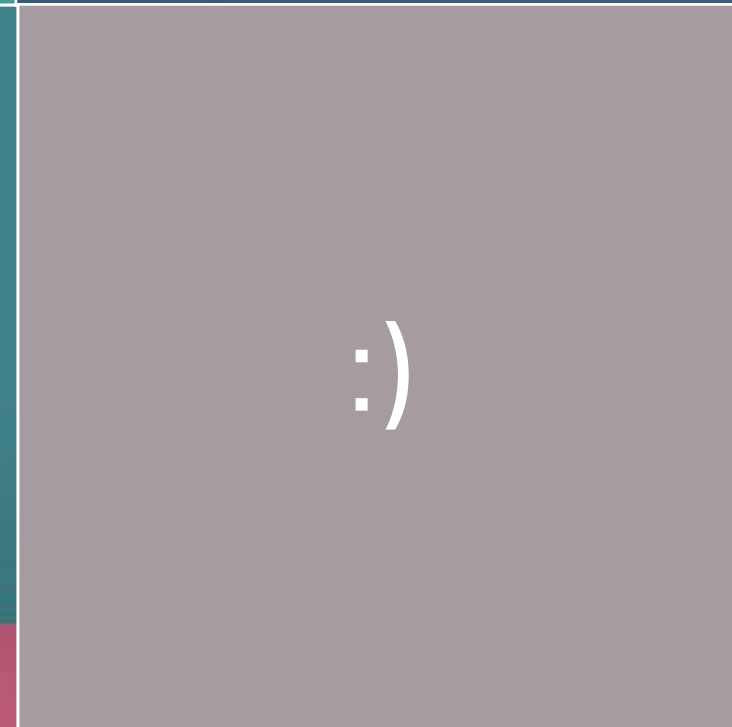
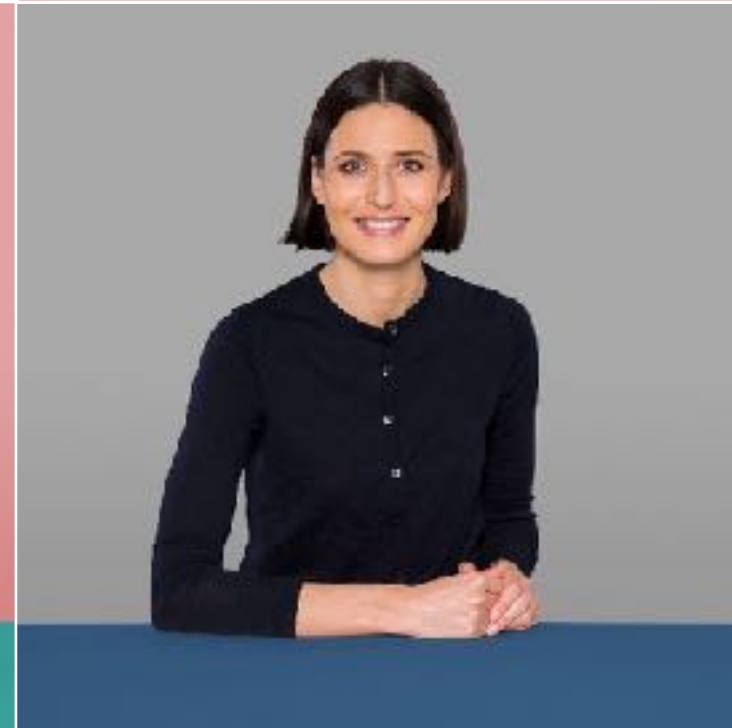
# Über UseTree

You cannot NOT have a user experience.

LOU CARBONE

Unser interdisziplinäres UX Team berät  
Unternehmen in allen Phasen des  
nutzerzentrierten Entwicklungsprozesses.  
Methodisch. Ganzheitlich. Einzigartig.

TEAM  
WORK



# B

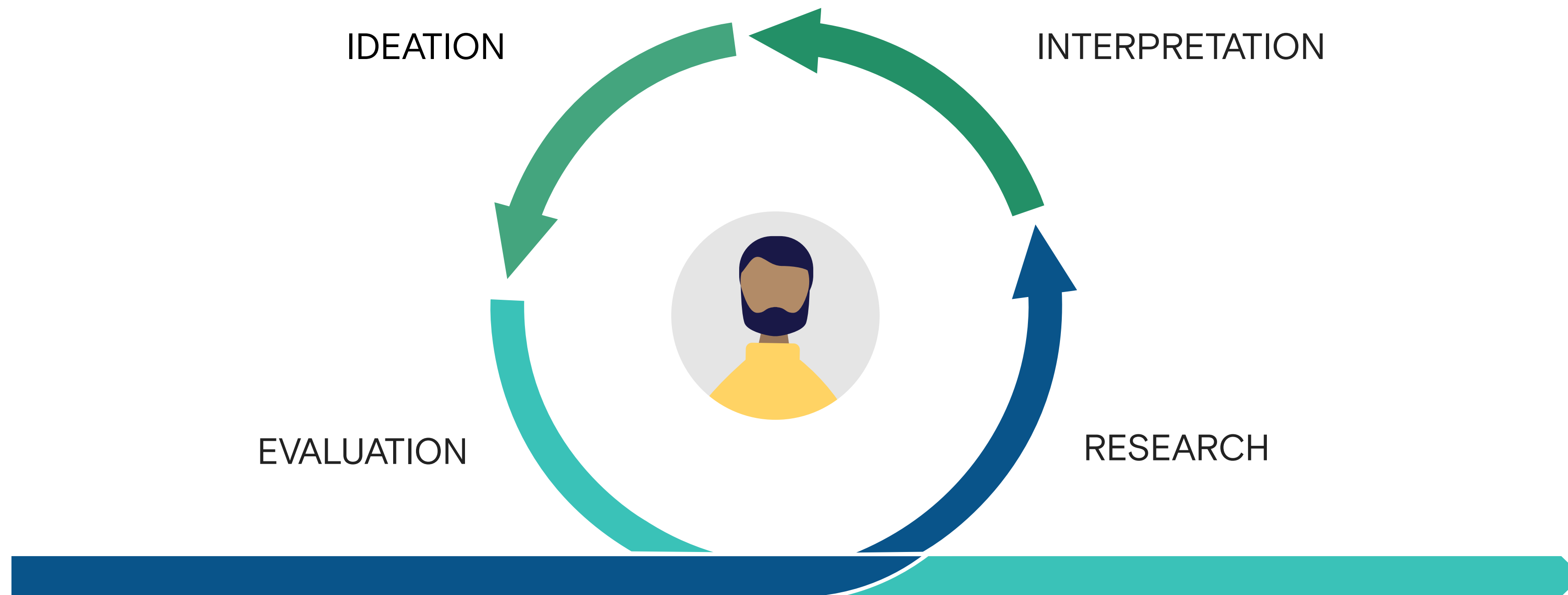
Jedes Projekt ist  
einzigartig. Unsere  
Kunden auch.

## Branchen



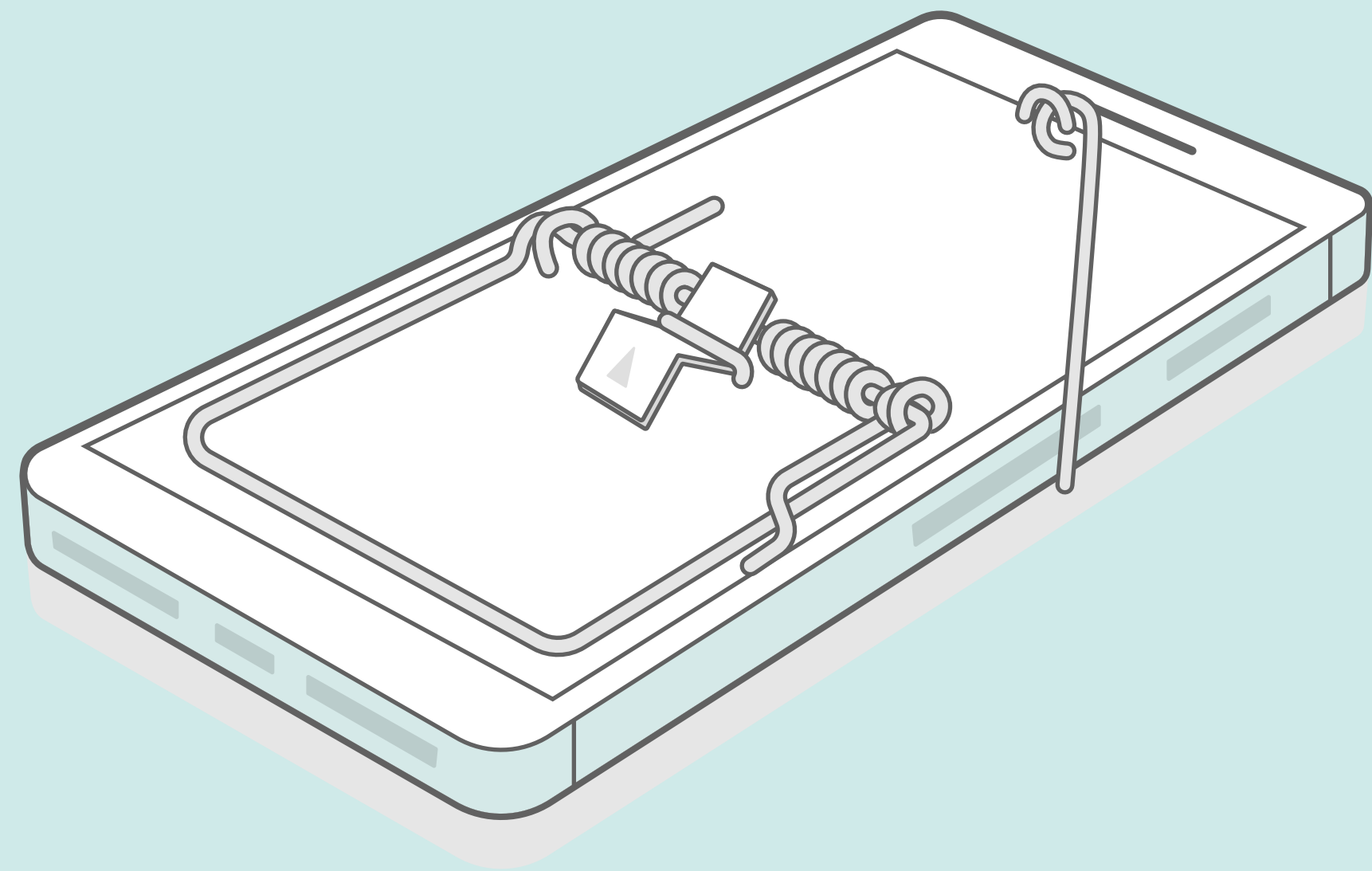
„Produktentwicklung in der Medizintechnik –  
sicher, effizient mit hoher Akzeptanz und  
positivem Benutzererlebnis!“

# User-centred Design





**Safe by design**



# Dark Pattern Unsafe by Design

- FLÜGE**
- MIETWAGEN
- HOTEL
- AKTIVITÄTEN

- für Hin- und Rückflug
- Nur Hinflug



Von  Nach

Suchen

### Abflugland

Belgien	Irland	Montenegro	Serbien
Bosnia & Herzegovina	Israel	Niederlande	Slowakei
Bulgarien	Italien	Norwegen	Spanien
Dänemark	Jordan	Osterreich	Tschechische Republik
Deutschland	Kroatien	Polen	Tunisia
Estland	Lettland	Portugal	Turkey
Finnland	Litauen	Rumänien	Ukraine
Frankreich	Luxembourg	Russia	Ungarn
Griechenland	Malta	Schweden	Zypern
Großbritannien	Marokko	Schweiz	

### Flughafen wählen

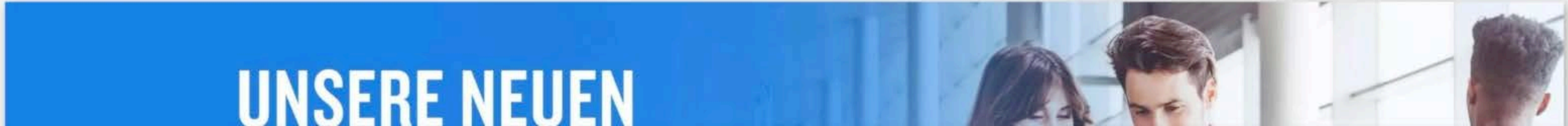
[Auswahl löschen](#)

- Aalborg
- Aarhus
- Aberdeen
- Agadir
- Alghero
- Alicante
- Almeria
- Amman Jordan
- Amsterdam
- Ancona
- Aqaba Jordan

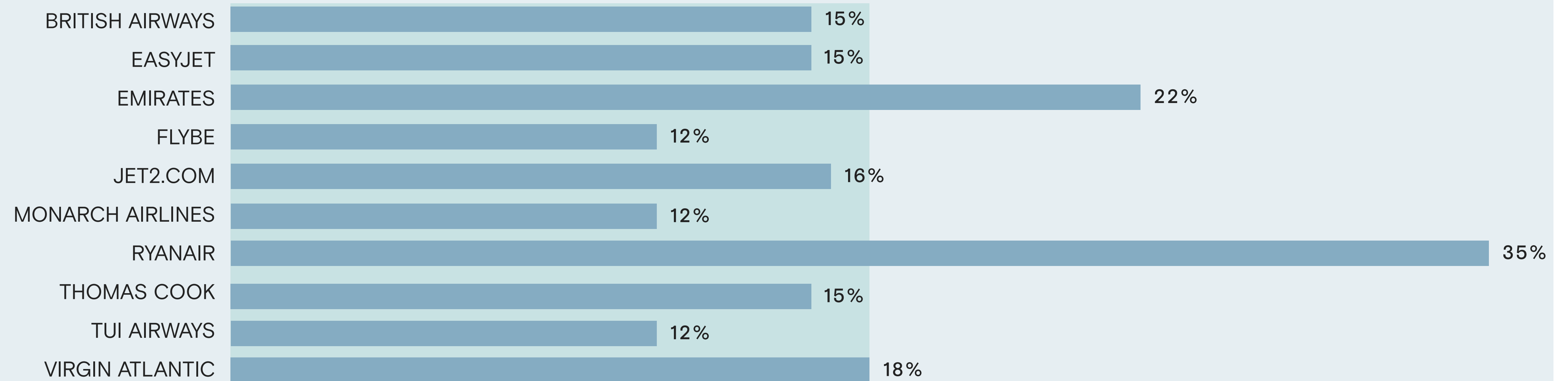
1 von 1 >

**D KAUFEN**

umfangreiches Angebot an  
und ermäßigten Produkten an Bord.



Wahrscheinlichkeit für Fluggäste von ihrer Gruppe getrennt zu werden,  
wenn sie nicht extra bezahlt haben, um zusammen zu sitzen \*



Mittelwert 18%

\* 4316 Buchungen innerhalb eines Jahres



7,99€















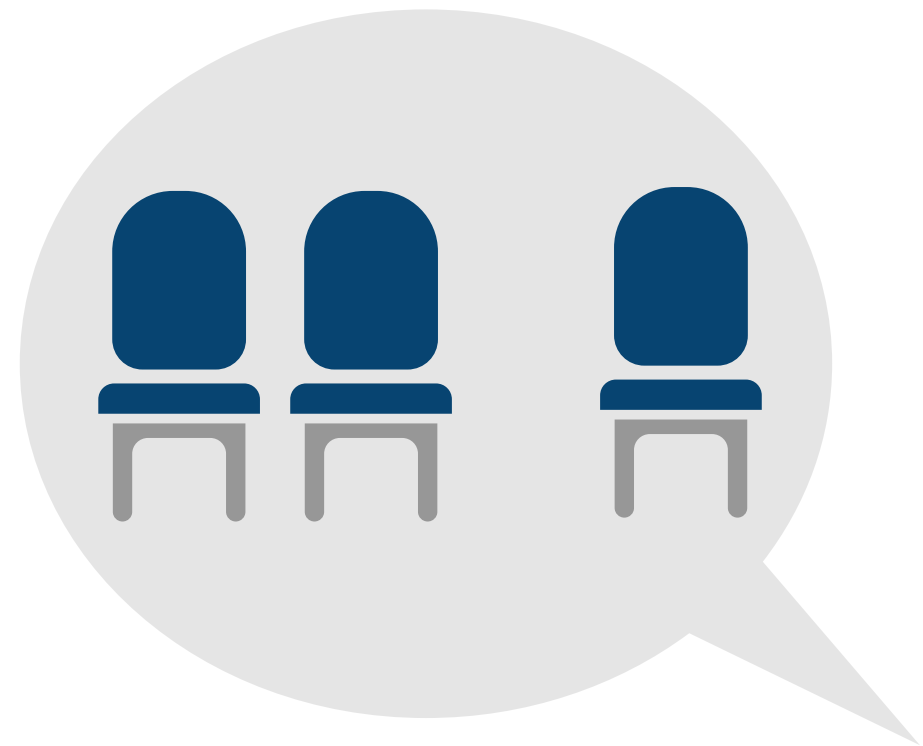


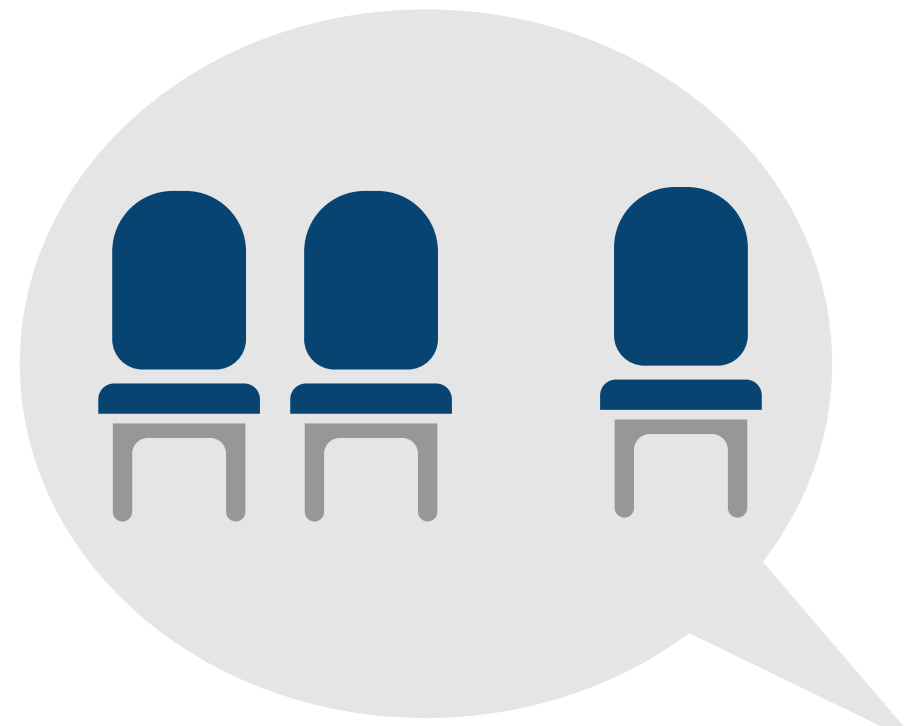
**Führt zu “subversiven”  
Fluggastverhalten ...**

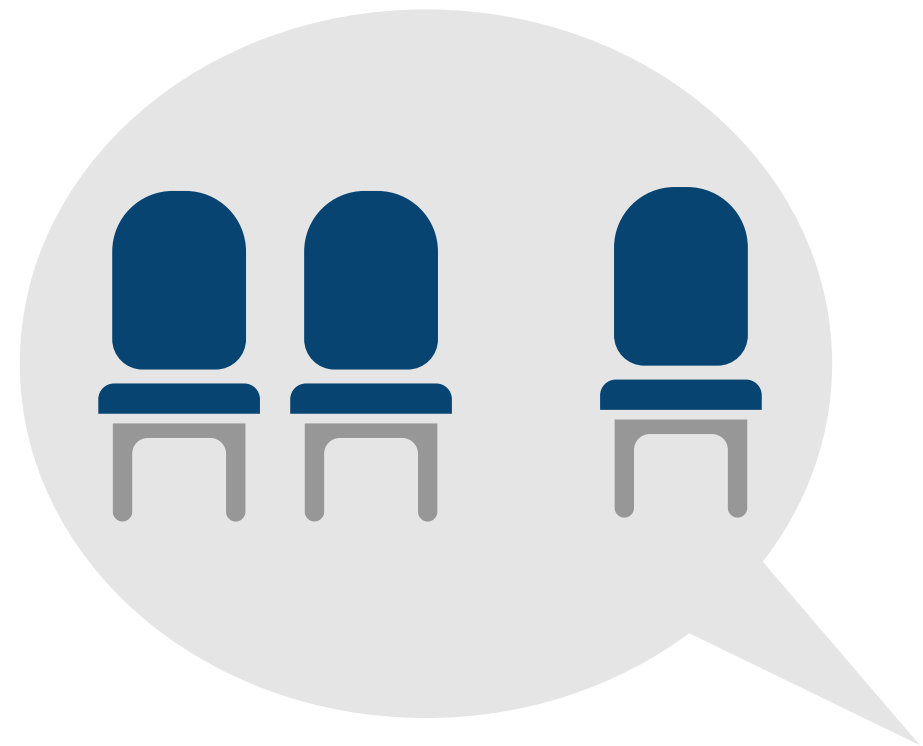


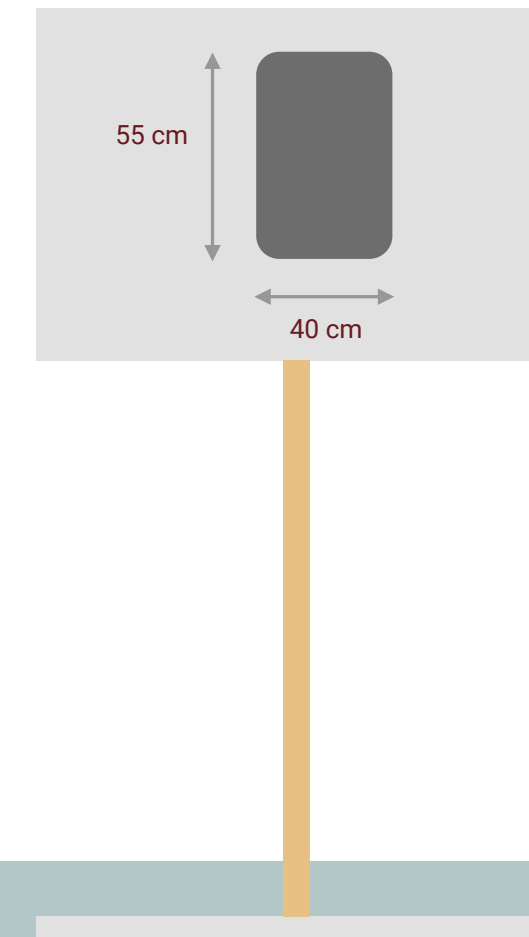




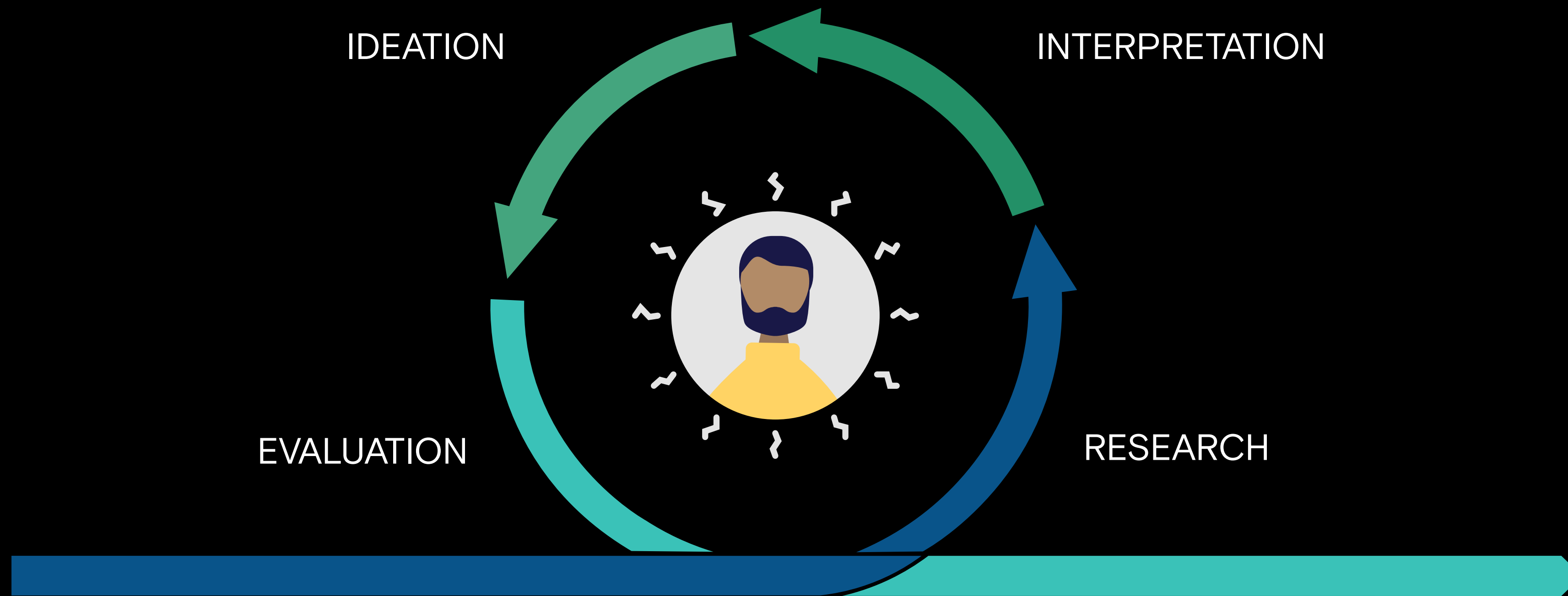








# Non-User-centred Design



**D**

# **Dark Pattern nach Harry Brignull**

A black and white portrait of Harry Brignull, a man with short dark hair, smiling slightly. He is wearing a dark jacket over a plaid shirt. The background is out of focus, showing what appears to be a building with a sign that says "KING OF THE HILL" and a white metal railing.

# Harry Brignull hat den Begriff Dark Patterns geprägt

“When you use the web, you don’t read every word on every page – you skim read and make assumptions. If a company wants to trick you into doing something, they can take advantage of it by making a page look like it is saying one thing when in fact it is saying another. You can defend yourself against dark patterns on this site.”

- HARRY BRIGNULL, 2010

Dark Patterns are money-driven, sneaky,  
intentional and forced.

HARRY BRIGNULL



# Types of Dark Patterns by H. Brignull

BAIT AND SWITCH

CONFIRMSHAMING

DISGUISED ADS

FEAR OF MISSING OUT

FORCED CONTINUITY

FRIEND SPAM

HIDDEN COSTS

MISDIRECTION

PRICE COMPARISON PREVENTION

PRIVACY ZUCKERING

ROACH MOTEL

TRICK QUESTIONS

SNEAK INTO BASKET

# Misdirection

**Your privacy is important to us.**

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

Third-party provider

**ACCEPT ALL**

**Settings**

**Third-party provider:**

**A**

- 
- 
- 
- 
- 
- 
- 

**B**

- 
- 
- 

**ACCEPT ALL**

**SAVE**

The image shows a mobile application interface for managing third-party providers. At the top, there is a grey header bar. Below it, the title "Third-party provider:" is centered. The main content area contains two sections, "A" and "B". Section "A" has seven items, each consisting of a grey horizontal bar and a green toggle switch to its right. All seven toggle switches are turned on. Section "B" has three items, each with a grey horizontal bar and a green toggle switch to its right. All three toggle switches are also turned on. At the bottom of the list, there is a large, teal-colored button with the text "ACCEPT ALL" in white. Below this button, centered at the very bottom of the screen, is a grey button with the text "SAVE" in black.

**Third-party provider:**

**A**

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

**B**

[Redacted]

[Redacted]

[Redacted]

[Redacted]

**ACCEPT ALL**

**SAVE**

### Third-party provider:

<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>G</b> <input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

**ACCEPT ALL**

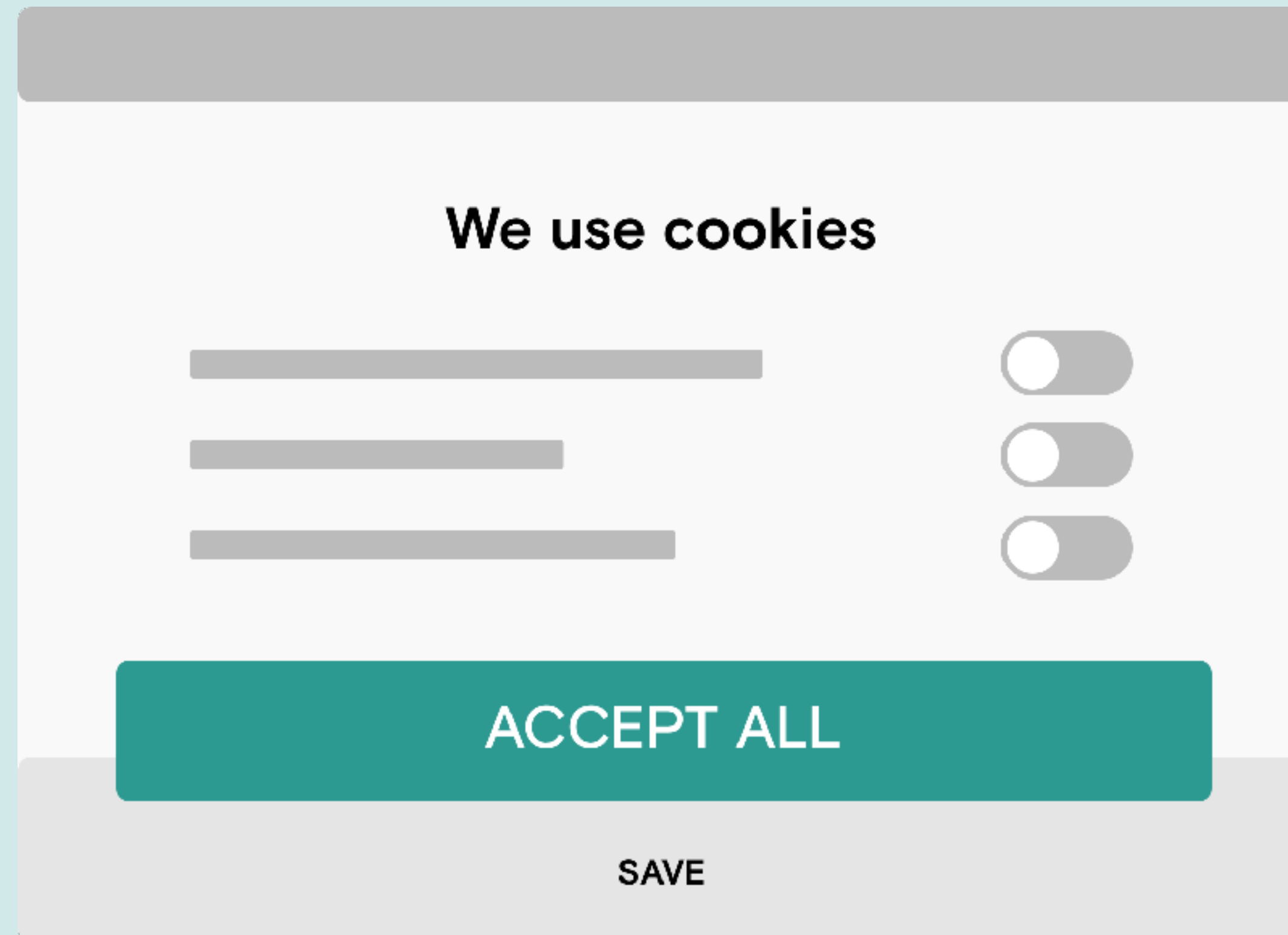
SAVE

### Third-party provider:

	<input type="checkbox"/>
S	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
T	<input type="checkbox"/>
	<input type="checkbox"/>

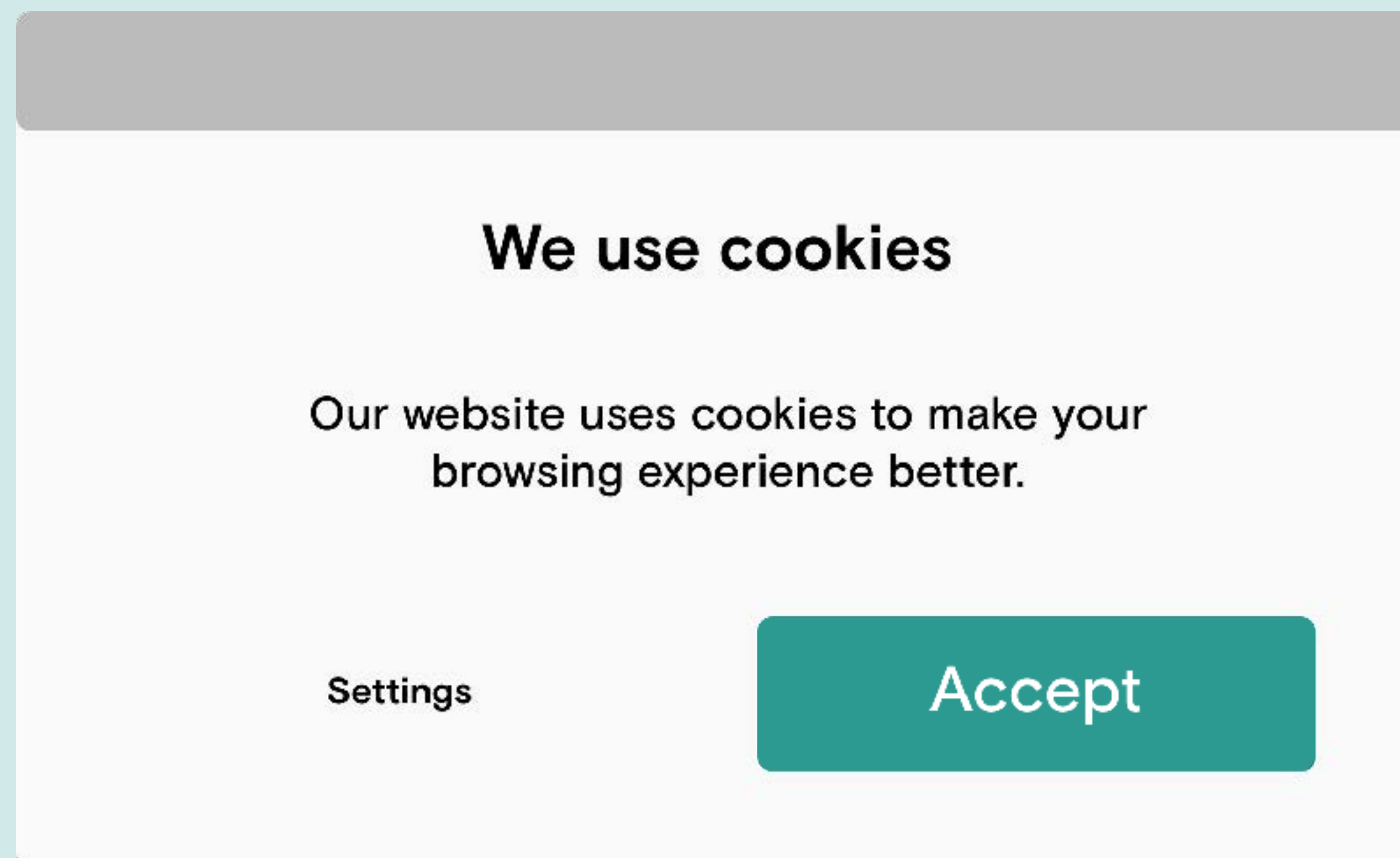
**ACCEPT ALL**

SAVE



Das Entfernen der  
Opt-out  
Schaltfläche...





.. erhöht die Zustimmung um 22-23%.

# Forced Continuity

**Use this App now!**

**7 DAYS FREE**

Access to all premium features:

- ✓ [Redacted]
- ✓ [Redacted]
- ✓ [Redacted]
- ✓ [Redacted]

VISA

[Redacted] [Redacted]  
[Redacted] [Redacted]

**TRY FREE & SUBSCRIBE**

then only 2,08 €/ month  
billed yearly at 24,99 €

# Roach Motel

✕

### Create Account

1

×

### Create Account

1

**Done**

### Delete Account

1

2

3

4

5

6

7

8

9

**Call Us**

✕

### Create Account

1

**Done**

### Delete Account

1

2

3

4

5

6

7

8

9

**Call Us**

# Hidden Costs



### Flights

Sort by **Lowest Price** ▼

	<b>BER - LHR</b> ██ ██	<b>109 €</b>
	<b>BER - LHR</b> ██ ██	<b>118 €</b>
	<b>BER - LHR</b> ██ ██	<b>129 €</b>
	<b>BER - LHR</b> ██ ██	<b>145 €</b>

# Confirmshaming



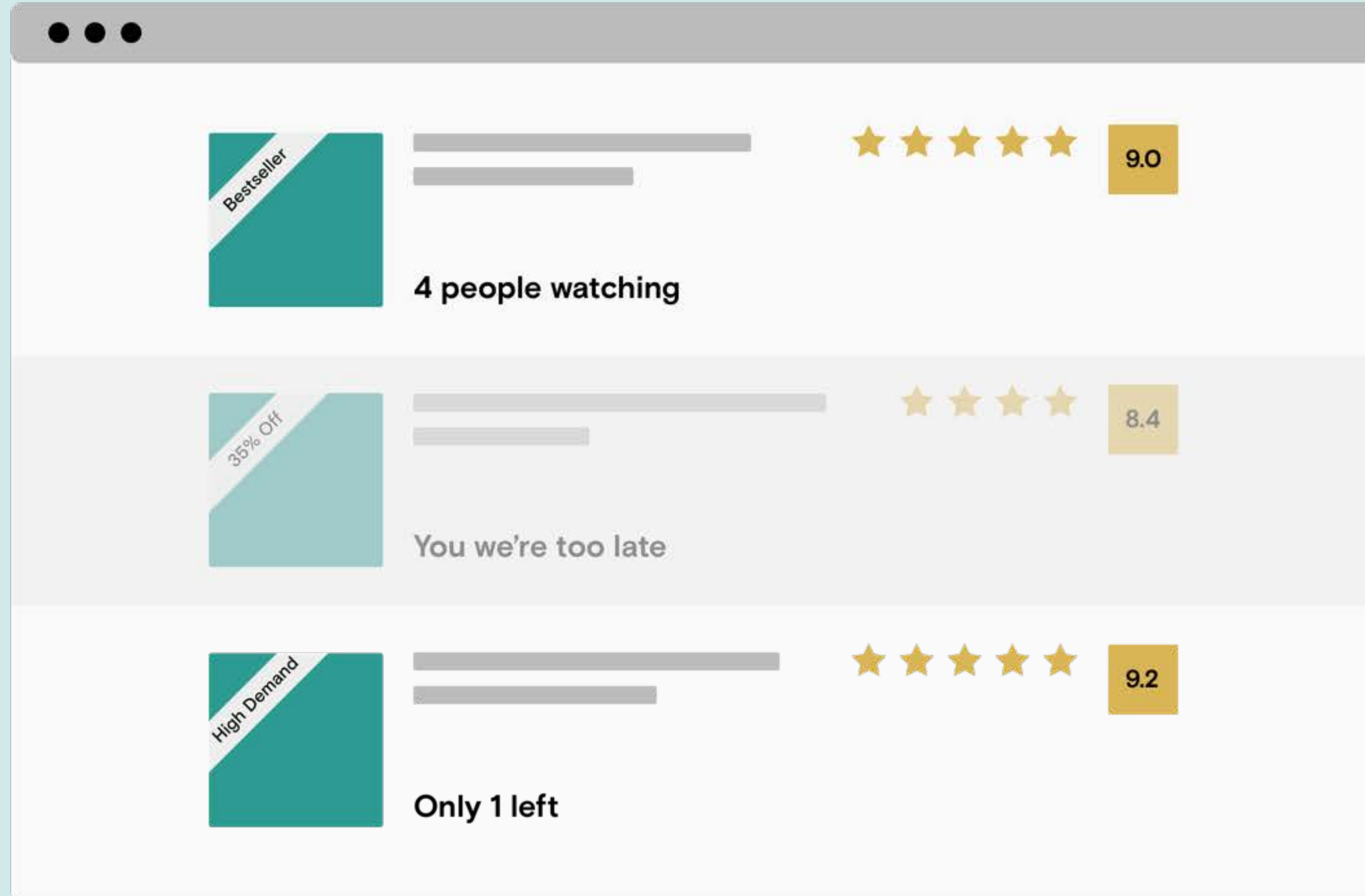
## Add Travel Insurance

Would you like to book a travel insurance for you and your family?

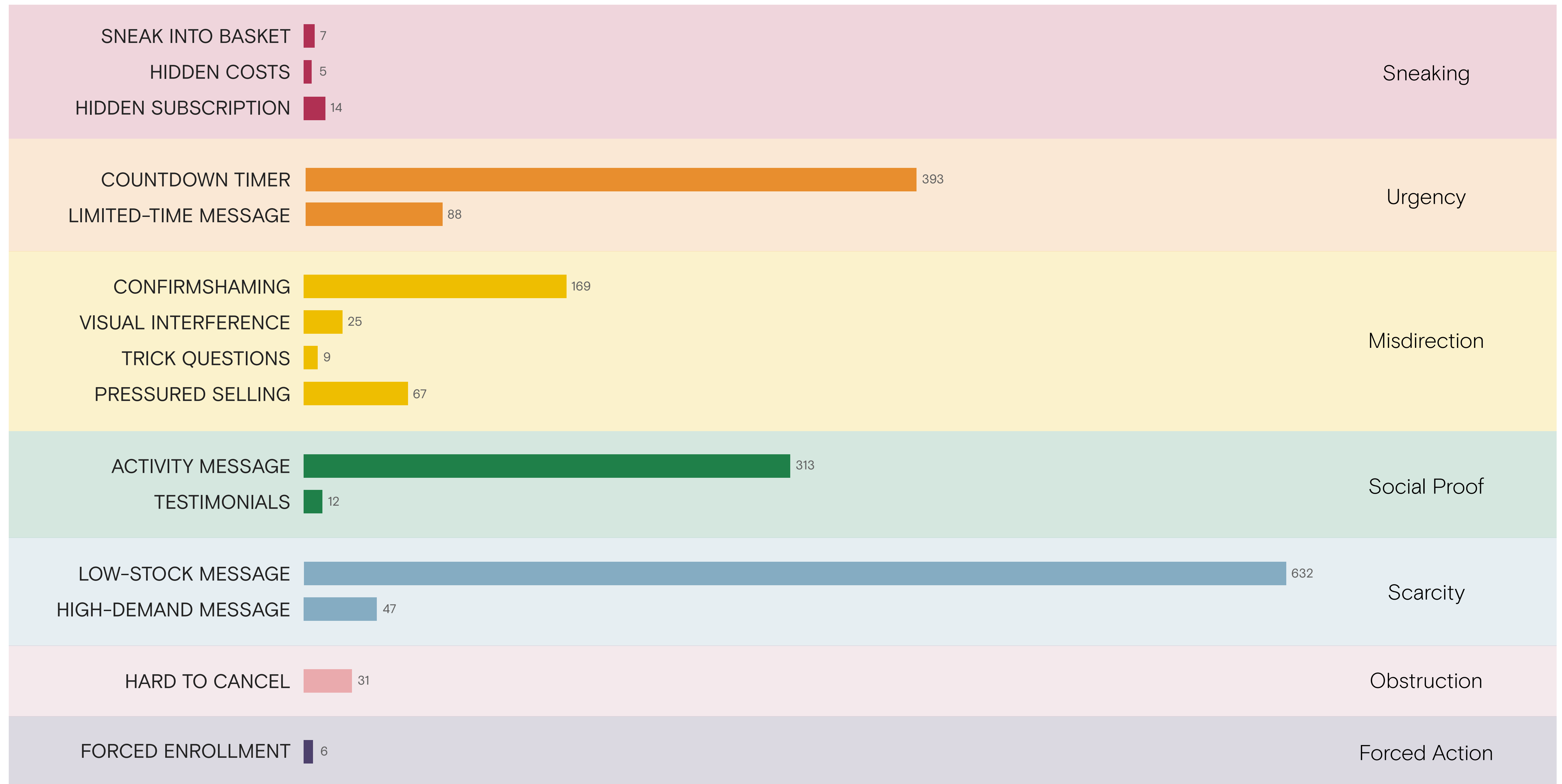
Of course!

No, I don't care about my family.

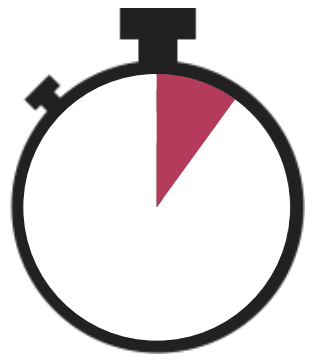
# Fear of missing out



In total, we discovered 1818 instances of dark patterns from 1254 (~11.1%) websites in our data set of 11K shopping websites.



Quelle: „Dark Patterns at Scale: Findings from a Crawl of 11K Shopping Websites“ Arunesh Mathur et al., 2019



3 s

Studie von Mathur et al., die 11000 der beliebtesten Shopping Websites untersuchte fand raus, dass 40% aller Timer, die sie entdeckten entweder nach Ablauf der Frist wieder zurück gesetzt wurden oder für das beworbene Angebot irrelevant waren.

# Weitere Taxonomien



Brignull [3]

Bait and Switch

Confirmshaming

Disguised Ads

Forced Continuity

Friend Spam

Hidden Costs

Misdirection

Price Comp. Prevention

Privacy Zuckering

Roach Motel

Sneak into Basket

Trick Questions

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Coercion

Confusion

Distraction

Forced Work

Conti & Sobiesk [9]

Interruption

Manipulating Navigation

Brignull [3]

Bait and Switch

Confirmshaming

Disguised Ads

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Sneak into Basket

Trick Questions

---

Coercion

Confusion

Distraction

Forced Work

Conti & Sobiesk [9]

Interruption

Manipulating Navigation

	Just You and Us
	Last Minute Consent
	Obfuscating Settings
	Repetitive Incentive
	Safety Blackmail
	Trick Question
	Wrong Signal
	<hr/>
	Forced Action
	Misdirection
	Obstruction
Mathur et al. [35]	Scarcity
	Sneaking
	Social Proof
	<hr/>
Lacey & Caudwell [29]	Cuteness of Robots
	<hr/>
	Automating the User
	Two-Faced
	Controlling
Gray et al. [20]	Entrapping
	Nickle and Diming
	Misrepresenting

# E

**Ansätze zur Evaluation  
nach Mathur et al.**

# What Makes a Dark Pattern... Dark?

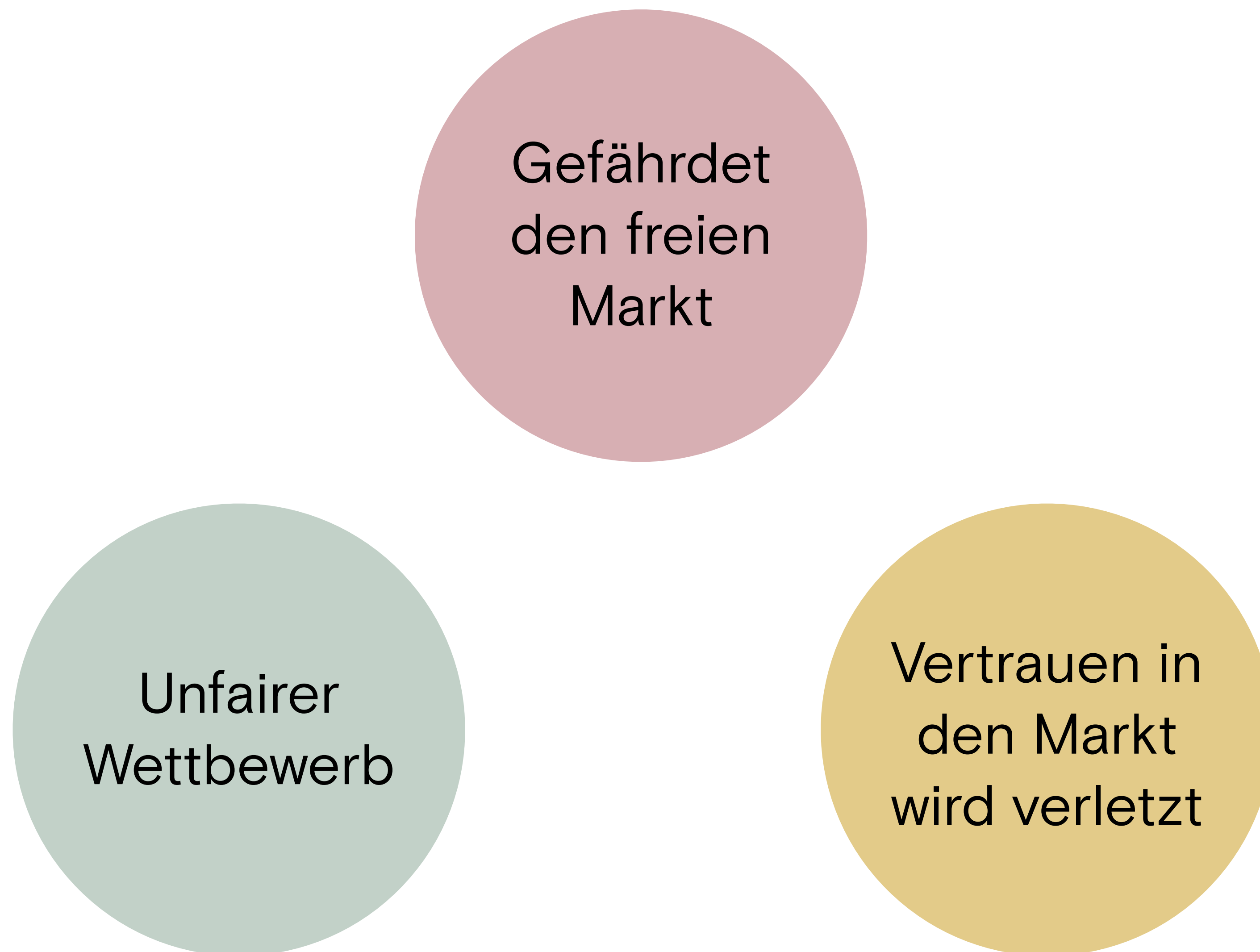
## 4 Perspektiven

# Individuelles Wohl

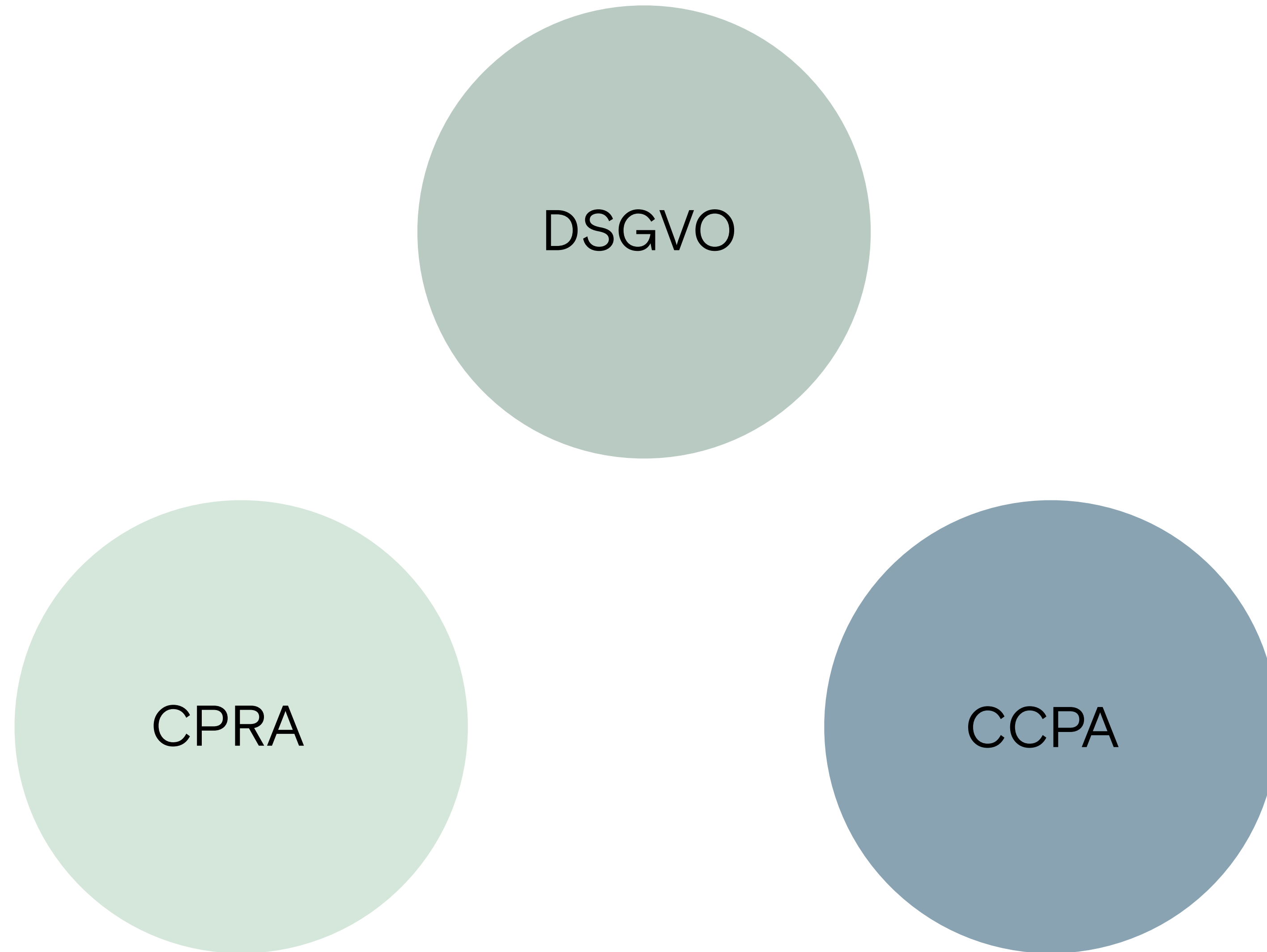


# Gesellschaftliches Wohl





# Bestehende Vorschriften



## Accept Cookies?

Here's a lot of text. If you are one of the lucky people who love to read you will find something interesting hidden here. Because if you don't want to accept all cookie settings we made for you already, just click **here**. That was easy, right? So now enjoy your day and keep on reading long texts.

Settings

Accept

Die DSGVO definiert „Einwilligung“ als:

der betroffenen Person jede **freiwillig** für den bestimmten Fall, in **informierter Weise** und **unmissverständlich** abgegebene Willensbekundung in Form einer Erklärung oder einer sonstigen eindeutigen bestätigenden Handlung, mit der die betroffene Person zu verstehen gibt, dass sie mit der Verarbeitung der sie betreffenden personenbezogenen Daten einverstanden ist.

(Artikel 4 Absatz 11)

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**Aus einer  
Stichprobe von  
1000 der  
beliebtesten  
Webseiten der EU...**

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Aus einer  
Stichprobe von  
1000 der  
beliebtesten  
Webseiten der EU...

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**...besitzen über  
50% der Cookie  
Banner mindestens  
ein Dark Pattern.**



# Autonomie



Unklare  
Optionen



Keine/schwer  
zugängliche  
Optionen

**F**

**Fazit**

# Design ist unsichtbar

LUCIUS BURCKHARDT

# Quellen und Literaturverzeichnis

- Zitat “Design ist unsichtbar” von Lucius Burckhardt. 1980.  
u.a. aus *Die Kinder fressen ihre Revolution. Wohnen – Planen – Bauen – Grünen*. Herausgegeben von **Bazon Brock**. DuMont, Köln 1985, ISBN 3-7701-1718-2.
- Brignull, Harry. 2017. Dark Pattern. Abgerufen 14. März 2021 von <https://www.darkpatterns.org>
- Arunesh Mathur, Jonathan Mayer, and Mihir Kshirsagar. 2021. What Makes a Dark Pattern... Dark?: Design Attributes, Normative Considerations, and Measurement Methods. In CHI Conference on Human Factors in Computing Systems (CHI '21), May 8–13, 2021, Yokohama, Japan. ACM, New York, NY, USA, 27 pages. <https://doi.org/10.1145/3411764.3445610>

MARTINA ARMBRECHT, ARIANE JÄGER

UX ROUNDTABLE HH | PATTERNS NIGHT & DAY, DEN 14.03.2022

[WWW.USETREE.COM](http://WWW.USETREE.COM); [INFO@USETREE.COM](mailto:INFO@USETREE.COM)

**UseTree.**  
**UserExperience.**