

# Clickwrap Attack: Assessing Digital Clickwraps and the Online Privacy Threat

By: Lior Magalashvili | Department of Communication Studies | Supervisor: Dr. Jonathan A. Obar

## WHAT ARE CLICKWRAPS?

- Clickwrap = digital prompt → allows user to accept or reject digital media policies.<sup>1</sup>
- Clickwraps may serve a political economic function, which benefits industry.<sup>1</sup>
- User interface creators should question “dark pattern” designs.<sup>2</sup>
- Clickwraps raise “meaningful consent” concerns identified by the Office of the Privacy Commissioner of Canada.<sup>3</sup>

## METHOD

- Sample (n=50): Clickwraps from three industries.
- Industries: Social Media (20), Brick and Mortar (20), E-commerce (10).
- Clickwraps collected from industry websites.
- Two coders and 15 variables.
- Inter-Coder Reliability  $p = 1.00$ .
- Quantitative content analysis.

TABLE 1. CLICKWRAP CHARACTERISTICS

Retail Brick and Mortar Clickwraps (20)	Yes	No
Accept Button	20	0
Policy Links	20	0
Policy Links Below Accept Button	8	12
Policy Links Smaller Than Accept Button	20	0
Policy Checkbox	7	13
<b>E-Commerce Marketplace Clickwraps (10)</b>		
Accept Button	10	0
Policy Links	10	0
Policy Links Below Accept Button	6	4
Policy Links Smaller Than Accept Button	10	0
Policy Checkbox	2	8
<b>Social Media Clickwraps (20)</b>		
Accept Button	20	0
Policy Links	20	0
Policy Links Below Accept Button	7	13
Policy Links Smaller Than Accept Button	20	0
Policy Checkbox	3	17

## RESULTS

- Overall 49 clickwraps had policy links, 1 had partial policy text.
- All 50 clickwraps had accept buttons.
- Zero policy links presented as a button.
- 12 clickwraps have a small accept button and 37 have a large one.
- Policy link font smaller than accept button font, in almost all cases.
- 29 clickwraps have policy links above accept button, 21 below.
- 13 clickwraps have a policy checkbox, 37 do not.

## DISCUSSION

- Many clickwraps have consistency in their design.
- Clickwrap features often privilege accepting behaviors as opposed to policy engagement to the benefit of corporate business models.
- Design inhibits meaningful consent and the ability to achieve privacy deliverables online.

Instagram  
Sign up to see photos and videos from your friends.  
Log in with Facebook  
OR  
Mobile Number or Email  
Full Name  
Username  
Password  
Sign up  
By signing up, you agree to our Terms & Privacy Policy.

Social Media

GET NEWS AND OFFERS FROM NIKE  
Sign up for emails to get special news and offers from the Nike family of brands.  
Email address\*  
Date of Birth\*  
Shopping Preference\*  
SIGN UP  
By signing up, you agree to Nike's Privacy Policy and Terms of Use. You may unsubscribe at any time.  
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Brick and Mortar

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Create account  
Your name  
Email  
Password  
Password again  
Create your Amazon account  
By creating an account, you agree to Amazon's Conditions of Use and Privacy Notice.  
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E-Commerce

1. Obar, J. A., & Oeldorf-Hirsch, A. (2018). The clickwrap: A political economic mechanism for manufacturing consent on social media. *Social Media + Society*, 4(3), 1-14.

2. Mathur, A., et al. (2019). Dark patterns at scale: Findings from a crawl of 11K shopping websites. *Proceedings of the ACM on Human-Computer Interaction*, 3(CSCW), 1-32.

3. Office of the Privacy Commissioner of Canada. (2018). Guidelines for obtaining meaningful consent. OPC Report.