

# Crit #2

# Tech22

HMW allow people to have positive digital interactions while feeling safe and empowered?



**Emilie Burton** 



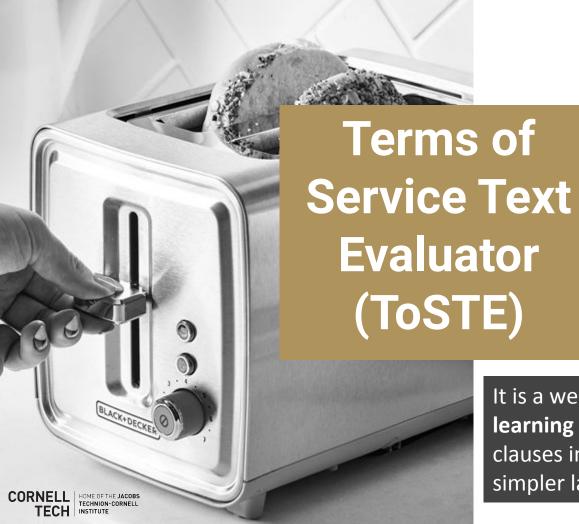
Jerry Tsou



Arief Hutahaean



Ryan Kim



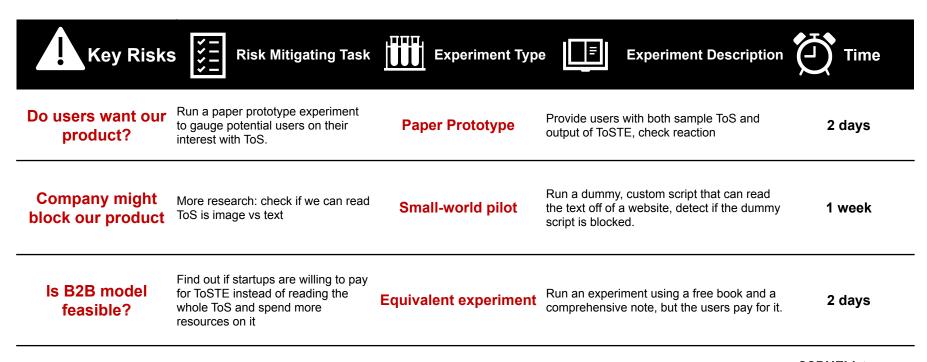


"I HAVE READ AND AGREE TO THE TERMS". DO YOU ACCEPT?



It is a web extension that uses **machine learning** to analyze complicated privacy clauses in **ToS** and presents key points in simpler language to users.

## **Top 3 Risks and Experiments**





### Paper ToSTE

Q: Will People Use ToSTE?



Paper **Prototype** 

Provide users with both sample ToS and **output of ToSTE**, check reaction

#### Terms and Conditions (Template)

#### Key highlights from each agreement:



Included information about Pandora's new Voice Features and Pandora Community



Revised and clarified your options regarding the collection of location data



Explained how information is shared among Pandora's parent corporation, Sirius XM Radio, Inc., and its subsidiaries

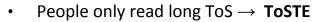


Added a section about your privacy rights under certain state laws



Updated our contact information

### **Possible Outcomes**





People only read short Tos → **ToSTE** 



People read both  $\rightarrow$  **ToSTE**  $\bigcirc$ 



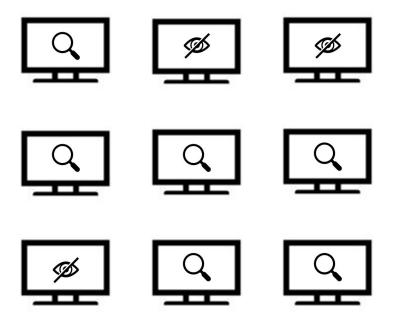
People read neither → **ToSTE** 





## **Dummy Script**

Q: Can we access the data to build ToSTE?



**Small-World Prototype** 

Run a **dummy**, **custom script** that can read the text off of a website, detect if the dummy script is blocked.

#### **Possible Outcomes**

All websites allow dummy script to read  $\rightarrow$  ToSTE  $\stackrel{\triangle}{\Leftrightarrow}$ 



Some Websites blocks dummy script → ToSTE =



All Websites block dummy script  $\rightarrow$  ToSTE  $\stackrel{\triangleright}{\bowtie}$ 



### **Book Experiment**

Q: Is B2B model feasible?

Equivalent Experiment



Free Book



Note with a price





Save **cost** 





**Target** 

Start-ups

### **Experiment**

Book – Take **Five hours** to read Note – Take **half hour** to read

### Willingness to Pay?

- People only want free book
  - $\rightarrow$  ToSTE  $\stackrel{\textstyle \smile}{\smile}$
- People pay for summary → **ToSTE**





# Thank You

HMW allow people to have positive digital interactions while feeling safe and empowered?



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### **Experiment**

**Objective of the experiment** Do users want our product?

**Experiment Type** Paper Prototype

**Experiment Description**Paper Prototype - provide users with both sample ToS and dummy

output of ToSTE, check reaction

**Treatment** Option of Long ToS vs short Tos

Sample Students at Cornell Tech

Possible Outcome: 1) people only read long ToS -> ToSTE useless. 2)

people only read short ToS. ToSTE - yay .3) people read both - yay. 4)

people read neither:(

All tested people show their preference and over half of them prefer

the short version of ToS. (2,3)

### **Threshold of Success**

**Key Metrics** 

### Paper ToSTE

### **Experiment**

**Objective of the** To check if we can read the Tos and whether companies' websites might

**experiment** block us in reading the ToS

**Experiment Type** Small World Pilot

Run a dummy, custom script that can read the text off of a website, detect

if the dummy script is blocked.

Treatment Websites will be classified into several categories. For example, social

media, user-generated-content websites, or e-commerce websites

Sample Social Media: Facebook, Twitter User content: YouTube, Blogs Retail: Nike,

Bloomingdales

**Key Metrics** The rate of failing to read the content on websites

Threshold of Success The contents on most of the website are readable

### **Dummy Script**

### **Experiment**

**Objective of the experiment** 

To find out whether companies are willing to pay for service which

saves their time on checking the long-form ToS

**Experiment Type** 

**Equivalent Experiment** 

**Experiment Description** 

Users: startups, would they pay for spark notes if book is free, if

they are willing to pay, then how much?

**Treatment** 

Thick book (five hours) vs. spark notes (half hour)

Sample

Startups people

**Key Metrics** 

Willingness to pay

**Threshold of Success** 

If they pay for spark notes - yay. Else, we have not need for B2B

### **Book Comparison**

Туре	Key Risks	Degree of Doubt	Importance of Risk	Total Risk	Risk Mitigating Task	Experiment	Type of Experiment	Cost of Task	Risk Factor/Mitigating Cost
demand/market	Do users want our product?	3	3	9	Offer a crique box if users/companies think that. Define features that users know. Offer an option where users can * if they agree with ToS	Paper Prototype - provide users with both sample ToS and dummy output of ToSTE, check reaction	prototype (paper) (5 company samples, each need one page for actual ToS and one page for dummy output)	5	1.8
supply	Company might block our product	3	3	9	more research: check if we can read ToS is image vs text	Run a dummy, custom script that can read the text off of a website, detect if the dummy script is blocked.	small-world pilot (test "only first page" of 10 websites)	1	9
demand/market	Does user want to pay for it (B2C)?	3	2	6	Create a survey asking the users whether they want to pay for the product		data collection	1	6
demand/market	Pricing model	3	2	6	Find out the how sensitive our customers (both B2B and B2C) are to such service via a survey		data collection	1	6
demand/market	How appealing in referring system (B2B)	3	2	6	Show companies how many users are willing to choose the service with better ToS	Can we attract users to a different serivce given knowldege of the service e.g. two bars of chocolate/food at same price ( one is fair trade, one is not> which one do they choose)	equivalent experiment	20	0.3
product	Medium of product (app/plug-in)	2	3	6	Implement user tests and collect feedbacks	Paper prototype to see what consumers prefer: apps vs plug-in	prototype	5	1.2
product	What is the Interface?	2	3	6	Run user experiments to gauge effifacy of interface + follow common good practices when it comes to UI	User tests with different possibilities of the user interface and observe their reactions and efficacy at doing tasks	prototype	5	1.2
product	Payment processing	2	2	4	Try to embed existing services (i.e. PayPal) so that payment processing is done by a 3rd party	seeing if the payment actually transfers money properly	pilot	1	4
product	Scalability: product can be applied to a wide range of ToS.	3	1	3	Run multiple training simulations on ML model, use k-fold cross validation with training data	Run ToSTE on existing ToS documents, compare the results with the original	pilot	1	3
product	Accuracy of prediction	1	3	3	Run multiple training simulations on ML model, use k-fold cross validation with training data	Run ToSTE on existing ToS documents, compare the results with the original	pilot	1	3
supply	Is there a licensing issue	1	3	3	Verify with distribution platforms about the necessity of owning a license. Manually check if the software we will use will require a licensing arrangment		data collection	1	3
demand/market	Who cares more about privacy (demographic)	2	1	2	Do a survey with users or random population sample about what they think about the topic and if they care about privacy		data collection	1	2
supply	Law related resources	1	2	2	Start networking early for possible relationships, maybe just rely on our own knowledge	See how accurate NLP is and if we are missing somethings	Pilot	1	2
product	Maintain & Update the product	1	1	1	Do tests to find how much time and resource do we need to update our product	Trained our product based on a ToS database and defined the best paractice for updating using new(untrained) ToSs	pilot	1	1
supply	Avaliability & cost of servers	1	1	1	Funding			1	1

# Full Risks and Mitigating Risks Table