

Online Privacy Policy: An Audio Visual Approach

SUMMER INTERNSHIP PROJECT(P1), TRDDC, PUNE, 2018

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Disclaimer:

Due to the confidential nature of design and research work pursued at TCS-TRDDC, Pune, I am under strict guidance to request the faculty and concerned authorities to keep this report and accompanying materials confidential and not divulge the details in any sort, length or manner.

As contracted, in case of any breach of trust I will be liable to heavy penalty or legal prosecution under corporate laws of India.

Certificate of Completion at Internship:



TRAINING CERTIFICATE

Name & Address of Organisation : Tata Consultancy Services, Pune

Name of Trainee Tamal Saha Date of Commencement of Training : 3-05-2018 Date of Completion of Training : 28-06-2018 Actual Number of working days attended : 100 %

Days of leave availed, if any

Creation of animated explainer video from privacy policy: Tamal summarized and converted text based privacy policy to animated explainer video. This work Brief Details of Training

will help to reduce time for communication.

Overall Performance of the Trainee during :

Remarks on the Conduct of the Trainee,

Punctuality, Interest etc.

Name of the Project Guide

Name & Designation of the Authorised Officer (with Seal)

Place: Pune

Very good

Tamal was very sincere and punctual. He ensured timely completion of tasks.

Vijayanand Banahatti and Gokul CJ

Vaibhavi Sharma- Assistant Manager,

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Abstract:

It is a common practice among users of digital services to skip reading the privacy policies before enrolling for the designated service. However, it is necessary for the users to realize their rights to the data they provide online while signing up. But due to the time and effort constraint required to read the entire privacy policy which may take up more time to read than user actually spends on the site most avoid reading it. Whatever maybe the reasons to not read privacy policies, recent incidents involving data security breaches and personal information sharing has proved the need to be aware of our online rights and thus reading the terms of use is increasingly compulsory. We can only do that by making the privacy policies concise, relatable and engaging. Hence the idea of audio visual animated videos to explain privacy policies.

About TCS-TRDDC, Pune:

The Tata Research Development and Design Centre (TRDDC) was established in 1981 as a division of Tata Consultancy Services Limited (TCS), India's largest IT services organization. TRDDC is today one of India's premier research and development centres; it is also the largest R&D facility among the network of Innovation Labs at TCS. TRDDC offers a collaborative and open innovation environment for engaging with industry partners and clients in various domains, academia, strategic technology partners, startups, standards organizations, among others.

TRDDC is home to three R&D labs: *Process Engineering, Software Engineering* and *Systems Research*. The R&D work at TRDDC leads to the creation of tools and processes that simplify the development, maintenance and management of large IT and engineering systems. In addition, several of our projects are directed at improving the environment, healthcare and education. Our goal is to develop novel solutions that not only advance significantly the state of the art, but also have significant societal and commercial impact.

Researchers at TRDDC also developed *MasterCraft* (now called TCS Code Generator Framework)¹¹ an artificial intelligence software that can automatically create code from a simple computer language, and rewrite the code based on the user's needs.

Research at TRDDC has also resulted in the development of *Swach* (formerly known as *Sujal*), a low-cost water purifier that can be manufactured using locally available resources. TCS deployed thousands of these filters in the *Indian Ocean tsunami* disaster of 2004 as part of its relief activities.

Internship Responsibilities

During the course of my summer internship at TCS-TRDDC, Pune, the main responsibility that was given to me was to develop animated video shorts explaining each point discussed in a privacy policy. These videos needed to be short, concise, self-explanatory and easy to comprehend and retain. Furthermore, I had to visualize and look for the UI for a website which can be developed further for business purposes.

Introduction:

Following the recent international incident where tech giant Facebook was brought under judicial scrutiny for Data Breach and privacy security lapses, the online community has woken up to better safeguarding their customer and client information and data security.





This has forced the online businesses to reconsider their privacy policy and come up with more fortified defenses against data breaches and infringement of personal information. Hence a need has arisen to make users and customers of online services and businesses to be better acquainted, educated and aware of their rights concerned with data privacy, online security and terms of service of the aforementioned online businesses and services.

However according to studies conducted reading entire privacy policies of every site and services availed online surely takes up a lot of time and effort. To avoid that, consumers mostly skip reading the policy and end up ignoring the terms of use/ service described in the policy for the said site.

Furthermore, the convoluted legal jargon often used in the policies as well as literary capabilities of consumers deter people from developing a habit of reading privacy policies. Due to this habit people are mostly ignorant or unaware of their rights regarding the data they provide while signing up with any online services.

Problems with existing Privacy Policies:

Time and effort: Mostly users avoid or ignore going through the privacy policies because of the time and effort consumption. Given the fast paced digital life where an average user may visit about 100 websites per month, it is highly unlikely for them to actually 'waste' time reading the privacy policies or terms of use. Furthermore, the fact that most of this sites maybe those which are visited but once or twice for a few minutes during the entire time of their online activity warrants hardly any attention towards the intricacies of their online use criteria and conditions of use.

General awareness: Given the rapid expanse and exposure of internet and related services worldwide it is only natural for people to adopt its usefulness in their day to day life. The wide demographic to which people who use digital services nowadays encompass all, from all walks of life, work, ethnicity or background. So given their varied background it becomes difficult to spread awareness about their rights regarding their personal data online.

Ignorance: It is also a tendency among users to ignore the privacy policy and terms of use as mostly deem it unnecessary and time-wasting. Other reasons may include reading disability and time crunch.

Technical and legal jargon: While drafting the privacy policies businesses and companies tend to use such convoluted technical and legal jargon which might be incredibly difficult or confusing for general users of the service.

Length of text: Most of the times the length of privacy policies are bafflingly long which further deters any user from reading it in its entirety even if the user wants to.

According to studies conducted in USA, reading entire privacy policies of every site availed online surely takes up a lot of time and effort. To avoid that, consumers mostly skip reading the policy and end up ignoring the terms of use/ service described in the policy for the said site. According to this study, in America, if users were to go through all the privacy policies of every site they visit annually even once, then the statistics would most likely be:

201 hours spent by consumers reading privacy policies **annually**.

\$3,534 loss in revenue per capita for the time spent annually.

\$781 billion loss in revenue in total annually.

Project Objective:

The main objective of the project was to make privacy policies *concise*, *relatable*, *effective* and *engaging* so that consumers are pushed to be made aptly aware of their online rights regarding the terms of service of a site as well as security of their personal data that they knowingly or unknowingly share with the services. The main vision was to develop short animated videos which explains the privacy policy to the user in relatable terms and that can be retained by the users.

Furthermore, as a part of the project we also had to conduct a comparative study needed to establish the fact that the animated explanatory videos of privacy policy are better than textual privacy policy as far as consumer's time and effort to understand those are concerned.

Research process:

Week 1

Prior to starting off into the research, I had to read to understand the privacy policy of *Google* from end to end. The time taken to do the same was documented and timed. On average it took me about 30 minutes to go through approximately the 3700 words on the policy while having understood it completely.

The recent video privacy policies of *Easyjet*, the *Guardian*, *LinkedIn* and *Google* are reviewed to ascertain the level of explanation and understanding that can be derived from such animated video policies.

Week 2

Following this, a week of online searching and scoping is carried out to search for literary pieces, journals, academic papers or any relevant material concerning privacy policies and online rights on individual privacy. Specific focus is put on write ups concerning understanding privacy policies, critiques and human behaviour regarding policies.

Week 3

A detailed study and comparative analysis of online privacy policies of various online services and businesses are undertaken. The privacy policies to be studied are chosen based on their overall popularity, worldwide recognition, use and overall asset evaluation. Arbitrarily, 16 privacy policies are chosen to be studied. They range from banking services to online retailers, online entertainment to video sharing services, social media to pornographic sites. The privacy policies to be studied are chosen based on their overall popularity, worldwide recognition and use and overall asset evaluation.

The chosen companies were:

Apple Inc. American Express

Google.com Visa

Citibank Microsoft

Instagram Twitter

Whatsapp Netflix

Facebook Ebay

Walmart Pornhub

J. P. Morgan Chase Amazon

The Privacy policies of these businesses and services are thoroughly studied and the point of similarities and dissimilarities are noted down and summarized in a comparison table.

The main topics which are covered more or less similarly in all privacy policies are:

Information collected

Use of collected information

Sharing of the collected information

Account access and Choices regarding service

Security of collected information

Cookies and 3rd party affiliates

Policy updates and Contact details

Other topics like children access and inter-continental privacy shields are unique to this site.

Forbe s World Rank	Type of Company	Policy On drive		Privacy		Privacy Policy Points Changes Owners												
					Collection of Personal Informatio n	Use of	Informatio n Storage and Security	Transparenc y and choice	of personal	Cookies and Other Technologi es	Legalities and disclosure of information	Third party Informati on Sharing	Protecti on against Children	Updation To privacy	Miscellaneo us Privacy Related Materials		Global Operatio n	
#9	Technology	yes		Apple Inc.	yes	yes	yes		yes	yes	yes	yes	yes		yes		yes	
- 9	Technology	yes		Google	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes	yes	yes
#12	FinancialServices	yes		Citibank	yes	yes	yes	-	yes	yes		yes		yes		yes		
	MessagingServices	yes	С	Whatsapp	yes	yes		-	yes	yes	yes	yes	-	yes		yes	yes	
	SocialNetworking	yes	o m	Instagram	yes	yes	yes	yes	yes	yes		yes	yes	yes	-	yes		
#119	SocialNetworking	No access	p a	Facebook	yes	yes	yes		yes	yes	yes	yes		yes		yes		
#17	Retail	yes	n	Walmart	yes	yes	yes	yes	yes	_	yes		yes	yes	yes	yes		
#4	FinancialServices	yes	e 5	JP Morgan Chase	yes	yes	yes		yes	yes	yes	yes		yes				yes
#97	FinancialServices	yes	8	American Express	yes		yes	yes	yes			yes		All S	yes	yes	yes	yes
#173	FinancialServices	yes		Visa	yes	yes		yes	yes	yes	yes	yes						
#19	Technology	yes		Microsoft	yes	yes	. 8	yes	yes	yes	a 1			yes	yes			
	SocialNetworking	No access		Twitter	yes	yes	yes	-	yes		yes			yes			yes	
#996	Entertainment	yes		Netflix	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes		yes
#407	E-commerce			Ebay	yes	yes	yes	yes	yes	yes	yes	yes		yes	yes	yes	yes	
	Entertainment	No access		Pornhub	yes	yes	yes		yes	yes	yes							yes
#83	OnlineRetail	yes	15	Amazon	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes			yes
				cies of Companies chosen for further study and representation y whose privacy policy has been chosen for the demo														

Week 4

Of all the listed companies, the one with the most amount of topics covered in its privacy policy, in this case *Amazon.com*, is picked for the sample study. The privacy policy for *Amazon.com* is thoroughly studied, analysed and scrutinized and then chopped up into sections pertaining to the individual topics that are explained. Additional reasons to choose Amazon.com was due to the fact that it had a diversified business model that spanned the entire world and it had monetary transactions as a major part of its business.

The privacy policy is deconstructed into its component topics such as the topic of Personal Information collection or How it is used. Individual topics are studied and a script is written for each topic. This script is verified and attested to by the management along with suggestions which are incorporated into subsequent versions. Final version of Script is prepared. Thereafter the look and feel of the animation is finalised. The look we wanted was that of a standard corporate explainer video with simple animations and retention-based text pop-ups.

Based on the script rough voice-overs are recorded. Due to absence of professional talents it is decided to work with my own voice.

Week 5-6

During this time, production on the animated videos are undertaken. Assets are developed using Adobe Illustrator which is incorporated into Adobe After Effects for animation process and later into Adobe Premier for final outcome as a full scale animated video.

As per managerial suggestions and reviews multiple iterations are carried out.

Week 7-8

Awaiting further studies including focus groups and public studies a request of permission was sent for verification by higher authorities which were only just agreed upon by the time I left.

Further Studies:

The next leg of the research will incorporate focus group studies. A group of individuals will be shown the privacy policy videos whereas a different group of individuals will be given the printed copies of the privacy policy. The time taken for each group to understand the policies will be documented. A questionnaire based on the privacy policies will be provided to both groups and the time and effort taken to answer it accurately will be documented and evaluated. The comparison of the results of the group studies will determine the final outcome of the research. In the future grand scale group studies may be conducted for more affirmative/ accurate outcomes.

Scope of Project:

As a 2008 paper sums up, the time lost reading privacy policies can be directly or indirectly equated to loss of revenue. By utilizing video policies, we can considerably cut down on time consumed by reading privacy policies and hence save money. In this age of digital information, a video is a much better and assured way to make sure the consumer connects to, understands and retains the points discussed in a privacy policy for their own good. It can also pave way for other relevant and expansive studies in the field of data security and online privacy is conducted.

Business Scope:

The videos can be utilized as templates to form an entire array of video clips explaining the privacy policy for a client or service provider which can be monetized (much like *Wix.com* or *Weebly.com*- website builders). Furthermore, this has the possibility of developing into a full-fledged design service opportunity wherein customized videos can be produced as per the client's demands or needs, with monetary benefits. Since this will be one of a kind unique service without a parallel as of now there may be other unexplored avenues of business related to this as well.

Conclusion:

It has been an excellent opportunity for me to be included in this path-breaking study concerning privacy policies. My summer internship at TCS-TRDDC, Pune, has been an enriching and fulfilling experience and I wish I could have been able to further the studies conducted at the office to its complete fruition. However, I wish the team all the very best and hope to hope to see video privacy policies become the norm online in due time.

References:

- 1. Revealed: 50 million Facebook profiles harvested for Cambridge Analytica in major data breach https://www.theguardian.com/news/2018/mar/17/cambridge-analytica-facebook-influence-us-election
- 2. Click to agree with what_ No one reads terms of service, studies confirm _ Technology _ The Guardian https://www.theguardian.com/technology/2017/mar/03/terms-of-service-online-contracts-fine-print
- 3. How to Craft a Privacy Policy for Your Website _ Social Media Examiner https://www.socialmediaexaminer.com/how-to-craft-a-privacy-policy-for-your-website/
- 4. Privacy Commissioner_ Website privacy policies are too long and complex_ Office of the Australian Information Commissioner OAIC https://www.oaic.gov.au/media-and-speeches/media-releases/privacy-commissioner-website-privacy-policies-are-too-long-and-complex
- 5. Tikkinen-Piri, Christina, Anna Rohunen, and Jouni Markkula. "EU General Data Protection Regulation: Changes and implications for personal data collecting companies." *Computer Law & Security Review* (2017). https://www.researchgate.net/publication/317403843 EU General Data Protection Regulation Changes and implications for personal data collecting companies
- 6. McDonald, Aleecia M., and Lorrie Faith Cranor. "The cost of reading privacy policies." *ISJLP* 4 (2008): 543. https://kb.osu.edu/dspace/bitstream/handle/1811/72839/1/ISJLP V4N3 543.pdf
- 7. Better Business Bureau Security Privacy Made Simpler https://www.bbb.org/us/storage/16/documents/SecurityPrivacyMadeSimpler.pdf
- 8. TIME-privacy-policy-analysis-report https://centerforplainlanguage.org/wp-content/uploads/2016/11/TIME-privacy-policy-analysis-report.pdf
- 9. Why Privacy Policies Are So Inscrutable The Atlantic https://www.theatlantic.com/technology/archive/2014/09/why-privacy-policies-are-so-inscrutable/379615/
- 10. Stokes, S. (2002). Visual literacy in teaching and learning: A literature perspective. *Electronic Journal for the Integration of technology in Education*, *1*(1), 10-19. http://www.k12photoed.org/wp-content/uploads/2014/03/Visual Literacy stokes.pdf