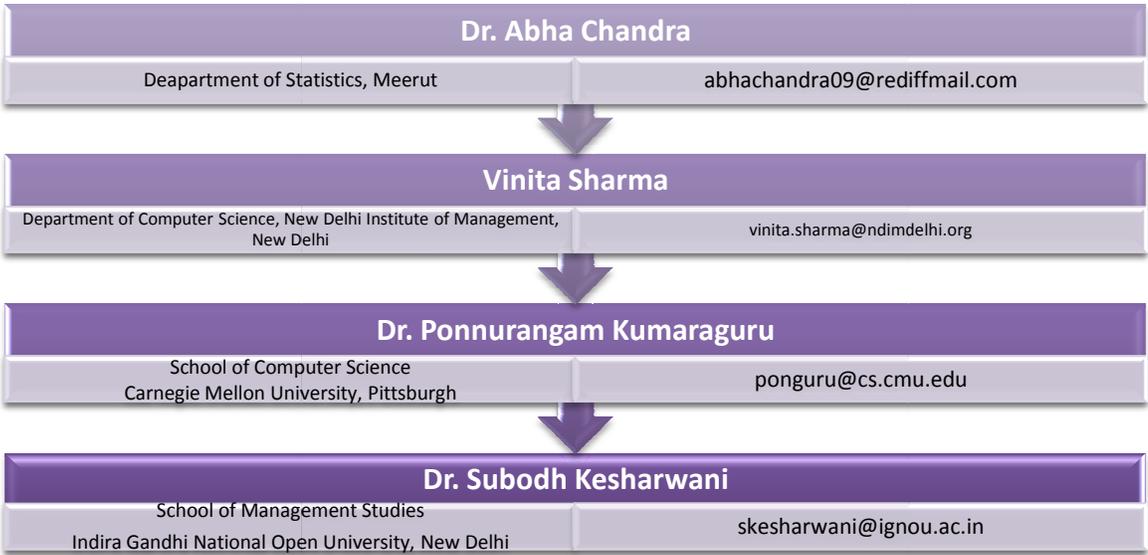




# Psychoanalysis of Privacy Policies of E-Commerce & BPO Websites in Indian circumstances



**Phase-II: Empirical Article**

## ABSTRACT

•Privacy preserved e-society consists of three intangible factors firstly applications, which have data to share with authorized clients; secondly clients who wants data that contains in the applications and finally the privacy control factor which is required to maintain records about the purposes. In a world of virtually countless database capability, security breaches have the possibility to liberate millions of records into the hands of hackers or mischief's. People now a day are more concerned about their personal information, which is supposed to be leaked out from the organizations to which they are trading online. There are many global and indigenious organizations, which conducts trading with Indian group through Internet. The significant point to be noted with respect to these organizations is to make their personal and financial information totally secure so that no unauthorized person or organization should acquire their data to mistreat over the Internet. An empirical study is conducted to evaluate the existence and format of privacy policies of diverse organizations with relevance to India in conducting online business through their websites. The endeavor of this paper is to throw more light on the study, methodology, modus operandi and its results.

## KEYWORDS

- E-commerce
- BPO
- Privacy Policy
- World Wide Web
- Cookies
- Data
- B2B
- B2C

## 1. INTRODUCTION

### 1.1. E-Commerce

E-commerce facilitates businesses to espouse new Internet technology and in particular to ascertain their own E-commerce presence on the World Wide Web. E-

Commerce offers the prospect to abridge commerce through supplier rationalization, transaction competence and contract fulfillment. E-Commerce means integration which is a key division of any integration plan involves balancing the natural desire to maximize the use of existing system resources with the need to provide a robust and compelling sales system. An e-commerce system should robust into a company's IT environment. Business Process Outsourcing (BPO) can be elucidate as the reassignment of an organizations' entire non-core but critical business process/function to an exterior vendor who uses an IT-based service delivery and facilitates an organization to contemplate on its core competencies, develop efficiency, reduce cost and progress shareholders' value. As much as achievable, it is platform-neutral to sustain the technology our customers use, including .NET and J2EE. The E-commerce also balances the utilization of real-time and batch-mode data transfers from ERP and back-end systems to the e-commerce. ERP is the biggest integration and new-fangled application software, which is a key enabler of business, process transformation and IT automation. [11].

### 1.2. What is Privacy Policy

Privacy is defined as a state or condition of limited access to a person [12]. Privacy Policy describes the practices and policies followed by E-Commerce [13]. Privacy Policy represents the way of collecting data, what is the purpose of utilization of data, whether the enterprise provides access to the data, who are the data recipients (beyond the enterprise), how long the data will be retained, and who will be informed in what cases.[5]. In simple words, Privacy Policy is the document which is supposed to be attached or linked with the website while collecting the personal or non-personal or both the information of the user of that site at that juncture. The major points that a privacy policy generally has may be listed down as follows-

- Presence of Privacy Seal in the document.
- Type of data that is collected from the user.
- How the data is collected from the user i.e. using sources of the website, the data is collected.
- Use of the data collected.
- Use of cookies.
- Data collected is shared with the third parties or not.
- Use of web beacons or links of third parties on the website.
- Security techniques used to make the user's data secure.
- Children's privacy.
- P3P Reference File and Privacy Policy.

### 1.3 What we are going to study

In this paper, we will first study the privacy policies of different Indian B2B, B2C and BPO companies, which are members of NASSCOM (National Association of Software and Services Companies), the Indian chamber of

commerce that serves as an interface to the software industry.

## 2. Methodology

To precede this research work, we collected the list of Indian E-Commerce Organisation's websites from NASSCOM [4]. This long list of websites was then checked whether they included privacy policies or not and what privacy protections were offered to the customers in those privacy policies. After that the present policies were analysed with respect to their format, content and characteristics on the basis of a self-made questionnaire. [1]

### 2.1. Data

A list of 1094 different E-Commerce companies, containing their website addresses (URLs), was collected from NASSCOM.

Out of these organisations, 785 are of B2B type, 43 of B2C type and 53 are of BPO. Also there are 80 companies which provide B2B & B2C services both, 65 companies which provide B2B & BPO services both and 6 companies which provide B2C & BPO services both to the corresponding organisations.

We prepared a Questionnaire which helped us to analyse different Privacy Policies of different domains [1]. There are 36 different questions related to the following topics-

- Existence of Privacy Policy in an E-Commerce web site.
- Type of the web sites.
- Personal and non-personal information taken from the web sites from the customers.
- Data sharing and selling to the third party.
- Options/Choices given by the web sites to the customers related to their personal information.
- Security
- Cookies
- Children under the age of 13 years
- P3P Reference File, P3P Privacy Policy

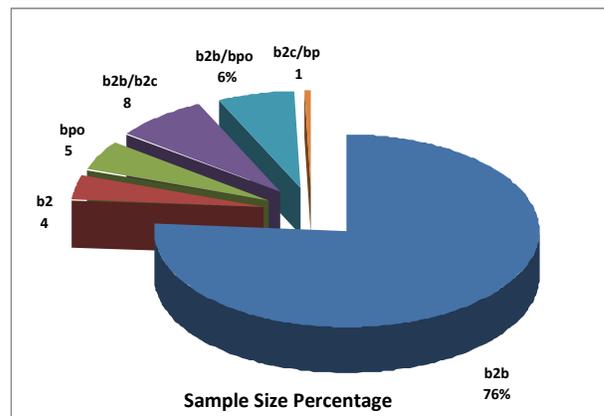
## 3. Analysis

In this section, we analyse that how many privacy policies exist among the list of websites of the organisations given by NASSCOM.

Only 94% websites are accessible out of the list of organisations and out of them only **37% have privacy policy**. Amongst these organisations -

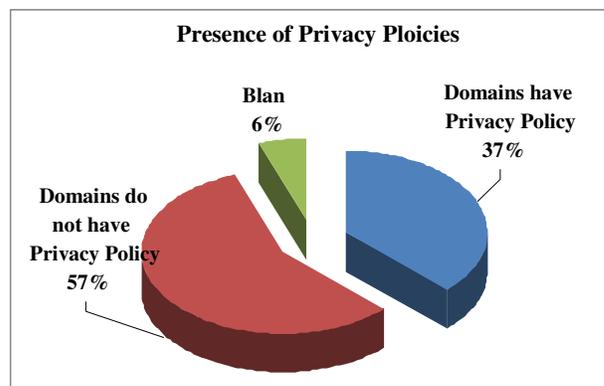
- 72% are of B2B type
- 5% are of BPO
- 4% are of B2C type
- 7% organisations provide both B2B and B2C services
- 6% organisations provide both B2B and BPO services
- 6% organisations provide both BPO and B2C services. (Tables 1 and 2)

The analysis shows that the organisations providing B2B services have posted maximum number of privacy policies on their websites.



### 3.1. Existence of Privacy Policies

Only about 37% organisations have posted privacy policies on their websites. Table 3 provides the information of existence of the privacy policies. Also, 5% websites' URL out of the total list was inaccessible. (Table 3).



### 3.2. Shortcomings of Privacy Policies posted on websites

Amongst all, we found that 6% organisations (12 pairs) have either same copy of policies or same formats of the policies. (See Table 4).

It is observed that in case of about 7% websites of the organisations, there is an inactive link for privacy policy on their home page (See Table 5).

Out of all, 4 organisations have very long Privacy Policies (See Table 7) whereas 6% privacy policies are exceptionally small and most of them do not include minimum number of points which are required to make a privacy policy (See Table 6). eFunds International Private Limited has two different types of privacy policies: Data Privacy and Internet Privacy. (See Table 7)

The website of "Sella Synergy India Ltd," has Non-English privacy policy, hence, not understandable by the most of the people. (See Table 8)

Privacy Policy of **Hewlett Packard Consumer Support Delivery** (A Div. of Global e-Business Op. P Ltd) seems to be one of the **perfect policies** which includes moderate number of points and easy to understand. (Table 8)

Web site of "Juno Online Services Development Pvt. Ltd." is very lengthy. The statements in the policy should be written in a manner so that the user can grasp the theme quickly. (Table 8).

### 3.3 Privacy Statements' Analysis

In this section we analysed different types of statements and points that privacy policies include generally. Some points give positive and some negative feeling to the user towards the safety of their personal information.

First of all we analysed that there is no differentiation of the Personally Identifiable Information (Name, Address, email id etc) and Non Personal Identifying Information (IP address) in almost all the privacy policies which makes the user confused as many users are not aware of the technical terms like IP address, cookies etc.

The presence of Privacy Seal in privacy policy makes the users more certain for the safety of their personal information but we found that only 5% organisations' policies have privacy seal in it (Table 9).

As mentioned earlier, cookies play an important role in loosing the privacy of the user. It is better if the user is told the function of cookies and what personal information can be disclosed through it in the privacy policy posted on the website. We analysed that 67% Privacy Policies declare (only) that the organisations' websites place a cookie to track the users. Most of the privacy policies indicate the presence of cookies to the user, without explaining what specific personal information may be disclosed through them. (Table 10).

Almost every business website has "Career" section in it through which it is collecting Resume from the users. Hence, they should also post privacy policy as the resume gives personal and non-personal information of the user. But we analysed that only 7% such Privacy Policies mention that their website collects Resume and also gives reasons for collection. (Table 11).

We also observed this fact that about 19% such organisations collect Personal Information from the users which even do not have privacy policy posted on their website. So, it is much sure that the personal information of the user is unsafe in the database of such organisations (Table 12).

Privacy Policies of 66% domains declare that they disclose personal information to the third parties (See Table 13). The user is unaware of those third parties in most of the cases and is unable to access their privacy policies which makes him / her feel more unsafe.

Privacy Policies of 22% domains declare that they provide security to the personal data of the users, out of which 7% provide security "During Transmission" (e.g. using SSL) and 97% provide security to the personal data "After

Collection" (See Table 14). When the user finds such statements in any privacy policy, he / she may feel relaxed.

One more point of relaxation for the user is that few privacy policies have mentioned that their websites do not collect personal information from the children under 13 years of age without their parent's approval. But only 21% such privacy policies exist which do not register/market/sell products to the children under 13 years of age (Table 15).

## 4 Discussion

This paper has shown that only 37% of the organisations have posted their privacy policies on their web sites. However, as privacy policies are becoming increasingly expected on commercial web sites around the world, Indian organisations are beginning to post those [2]. Also, the organisations which had privacy policies posted did not express completely the necessary information for the customers.

## 5. Summary

The authentic implementation of e-Commerce these days is moreover dissimilar from its real-life counterpart, and for the most part it's a "Web page" with listing of items and prices. The social facet such as personalization, collaboration, security, interactivity, etc. is lacking. We for that reason argue to come together the solution

with a social place, where customers who participate in should get foolproof security. The study shows that 67% websites have cookies which may be one of the main reasons of loosing customer's privacy. Secondly, around 66% websites disclose personal information of the users to Third Parties which may or may not have their own privacy policies and is to be counted as one of the reasons for the same.

This study also finds that no *Universal Standard* format for a Privacy Policy has been designed and declared yet. Some policies are too small whereas some of them are too large and difficult to understand by the customer.

We came to know that few organisations have privacy policies, but the content written in those policies does not prove them as privacy policies. Actually, it is a document which is not concerned with the personal information of the customers at all. These policies need modifications. There should be an Authority to monitor and control the proper format and points included in the privacy policy so that no such privacy policies will be made by the organisations in future.

There is no general privacy law in India (1998). [10]. India does not have any data protection law equivalent to that in the UK and there have been recent cases of information being leaked from call centers to criminals who have then blackmailed the companies involved. The Data Security Council of India (DSCI) is being set up by Indian IT industry group NASSCOM (June 2007). [8] NASSCOM Information Technology Action Plan said [7] that a

National Policy on Information Security, Privacy and Data Protection Act for handling of computerised data shall be framed by the Government within six months. However, a recent study tells that more than 40 countries around the world have passed, or are preparing to pass, laws that protect the privacy and integrity of personal consumer data. *India is not however one amongst them.* Some time back, NASSCOM did take some initiatives to push through a drafting exercise but it appears that the exercise has not been pursued further [9].

**6. Limitations**

There are few limitations of this research which may be discussed as:

There is no standard format of privacy policy. Some policies are too small whereas some of them are too large and difficult to understand. At least few standard points should be made mandatory in a privacy policy that a website should include.

How will we come to know that the user is more than 13 years of age? Suppose a kid enters his age 18 and registers / buys things himself on the site then how can this procedure be stopped i.e. inserting wrong age?

How can we check that the companies are implementing their privacy policies? If they are not implementing the policies after displaying on the net then how can we make them implement?

**7. Future work**

Significance of privacy seal is still an unclear point in general. Further studies can be done to check the awareness and to get suggestions of people from different backgrounds on this topic. Further work may be done to make a standard format of Privacy Policy which should be universal.

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**9. Appendix**

Table 1: Percentage of The Type of Domain of the Web sites

	Percentage	Number
<b>b2b</b>	71.755 %	785/1094
<b>b2c</b>	3.930 %	43/1094
<b>bpo</b>	4.844 %	53/1094
<b>b2b &amp; b2c</b>	7.312%	80/1094
<b>b2b &amp; bpo</b>	5.94%	65/1094
<b>b2c &amp; bpo</b>	0.548 %	6/1094
<b>other / blank</b>	5.667 %	62/1094

Table 2 : Percentage of Domains that are accessible or not

	Percentage	Number
<b>URL accessible</b>	94.332 %	1032/1094
<b>URL not accessible</b>	04.570 %	50/1094
<b>Blank (URL not in the record)</b>	01.096 %	12/1094

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Table 3 : Percentage of Domains that have Privacy Policy

	Percentage	Number
Domains have Privacy Policy	37.111 %	406/1094
Domains do not have Privacy Policy	57.221 %	626/1094
Blank (not in the record/ not accessible)	5.667 %	62/1094

Table 4 : Same Policy Holders

Pair No.	Company	URL of website	Remarks
1	Accenture Services Pvt Ltd	www.accenture.com	Policy is same
	A G Technologies Pvt Ltd	www.ag-technologies.com	
2	GE Infrastructure-India Technology Center (A Div of GE India Exports P Ltd)	www.ge.com	Policy is same
	GE Medical Systems (India) Pvt Ltd	www.gehealthcare.com	
3	Hewlett Packard Consumer Support Delivery (A Div. of Global e-Business Op. P Ltd)	www.hp.com	Policy is same
	Hewlett-Packard India Sales Pvt Ltd	www.hpindia.com	
4	IBM Daksh Business Process Services Pvt Ltd	www.daksh.com	Policy is same
	IBM India Pvt Ltd	www.ibm.com/in	
5	Keane India Ltd	www.keane.com	Policy is same
	Keane Worldzen India Pvt Ltd	www.keaneworldzen.com	
6	NetEdge Computing Global Services Pvt Ltd	www.netedgecomputing.com	Policy format is same
	Network Programs (India) Ltd	www.networkprograms.com	
7	Philips Electronics India Ltd	www.philips.com	Policy is same
	Philips Software Centre Pvt. Ltd.	www.bangalore.philips.com	
8	Infosys Technologies Ltd.	www.infosys.com	Policy is same
	Progeon Ltd	www.progeon.com	
9	SAP India Pvt. Ltd.	www.sap.com	Policy is

10	SAP Labs India Pvt Ltd	www.saplabs.co.in	same  url is same for both organisations, so same policies
	Siemens Public Communication Networks Pvt Ltd	www.Siemens.com	
	Siemens Shared Services India Pvt Ltd	www.Siemens.com	
11	Tata Consultancy Services Ltd	www.tcs.com	Policy is same
	Tata Infotech Ltd.	www.tatainfotech.com	
12	UBICS Technologies Pvt Ltd	www.ubics.com	Policy is same
	UBS Service Centre (India) Pvt Ltd	www.ubs.com	

Table 5 : List of Organisations having Links for Privacy Policies but do not have any policy

S.No	Company	URL	Remarks
1	Amrut Software Pvt Ltd	www.amruts.com	Inactive link for policy
2	Bebo Technologies Pvt Ltd	www.bebotechnologies.com	Inactive link for policy
3	CG-Smith Software Pvt Ltd	www.cg-smith.com	Inactive link for policy
4	City Info Services Pvt Ltd	www.cityinfoservices.com	Policy under construction
5	CommVault Systems (India) Pvt Ltd	www.commvault.com	Inactive link for policy
6	Compare Infobase Pvt Ltd	www.infobase.co.in	Inactive link for policy
7	Damco Solutions (P) Ltd	www.damcogroup.com	Inactive link for policy
8	Datamatics Ltd.	www.datamatics.com	Inactive link for policy
9	Dewsoft Solution Pvt Ltd	www.dewsoftindia.com	Inactive link for policy
10	eMR Technology Ventures Pvt Ltd	www.emrtechventures.com	Inactive link for policy
11	Exceed Technologies Pvt Ltd	www.exceedintl.com	Inactive link for policy
12	Gurukulonline Learning Solutions (P) Ltd	www.gurukulonline.co.in	Inactive link for policy
13	HCL Technologies BPO Services Ltd	www.hclbpo.com	Inactive link for policy
14	Infozech Software Ltd.	www.infozech.com	Inactive link for policy

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15	Integrated Software Solutions (India) Pvt Ltd	www.iss-global.com	Inactive for policy	link
16	Intellicom Contact Centers (A Div. of Jindal Transworld Pvt Ltd)	www.intellicomcenters.com	<i>nothing is written in the policy</i>	
17	i-Strat Software Pvt Ltd	www.istrat-india.com	Inactive for policy	link
18	IT Elite Systems Pvt. Ltd.	www.itelitesystems.com	Inactive for policy	link
19	IT Microsystems (India) Ltd	www.itmicrosystems.com	Inactive for policy	link
20	Kanbay Software (India) Pvt Ltd	www.kanbay.com	Inactive for policy	link
21	SEEC Technologies Asia Pvt Ltd	www.seecasia.com	Inactive for policy	link
22	Smart Chip Limited	www.smartchiponline.com	Inactive for policy	link
23	smart Data Enterprises (India) Ltd	www.smartdatainc.net	Inactive for policy	link
24	Software Technology Parks Of India	www.stpi.in	Inactive for policy	link
25	Source Quest AP Consulting Pvt Ltd	www.sqapc.com	Inactive for policy	link
26	STAG Software Pvt Ltd	www.stagsoftware.com	Inactive for policy	link
27	Texcity Software Parks Ltd	www.rcsindia.com	Inactive for policy	link
28	TRRS Imaging Ltd	www.indecommglobal.com	Inactive for policy	link

4	Career Launcher India Ltd	www.careerlauncher.com		
5	Citibank N.A.	www.citibank.co.in		
6	Citigroup Information Technology Operations and Solutions Ltd	www.citigroup.com		
7	Comat Technologies (P) Ltd.	www.comat.com		
8	Contact Singapore	www.contactsingapore.org.sg		
9	Corbus (India) Private Limited	www.corbus.com		
10	Cordiant Technologies (P) Limited	www.cordiant.com		
11	Edurite Technologies Pvt Ltd	www.edurite.com		
12	e-Zest Solutions Pvt. Ltd.	www.e-zest.net		
13	FCG Software Services (India) Pvt Ltd	www.fcg.co.in		
14	Four Soft Limited	www.four-soft.com		
15	HCL Technologies Ltd	www.hcl.in		
16	Hexaware Technologies Limited	www.hexaware.com		
17	Lehman Brothers Services India Pvt Ltd	www.lehman.com		
18	Liquid Krystal India Pvt Ltd	www.liquidkrystal.com		
19	neolT.Com Pvt Ltd	www.neolT.com		
20	Niteo Technologies (P) Ltd	www.niteo.com		
21	S7 Software Solutions Pvt Ltd	www.s7solutions.com		
22	Winfoware Technologies Pvt Ltd	www.winfoware.com		
23	Zensar Technologies Limited	www.zensar.com		

Table 6 : List of the Organisations having very small Privacy Policies

S.No.	Company	URL
1	Apollo Health Street Pvt Ltd	www.apollohealthstreet.com
2	Bechtel India Pvt. Ltd.	www.bechtel.com
3	Capital One Services (India) Pvt Ltd	www.capitalone.com

Table 7 : List of the Organisations having very long Privacy Policies

S.No.	Company	URL
1	eBay India Pvt Ltd	www.eBay.in

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2	eFunds International Private Limited	www.efunds.com
3	GE Consumer & Industrial - India Innovation Center (A Div. of GE India Exports)	www.geconsumerandindustrial.com
4	VeriSign India Pvt Ltd	www.verisign.com

**Table 8 : Different Policies than others**

S.No.	Company	URL	Remarks
1	First Indian Corporation Pvt Ltd	www.firstindiancorp.com	different from others
2	Ford Business Service Center Private limited	www.ford.com	includes different points
3	Hewlett Packard Consumer Support Delivery (A Div. of Global e-Business Op. P Ltd	www.hp.com	perfect policy
4	Juno Online Services Development Pvt Ltd	www.juno.com	lengthy policy
5	SCA Technologies India Pvt Ltd	www.sca-tech.com	not a privacy policy
6	Sella Synergy India Ltd	www.sella.it	non english policy
7	SNS Technologies Pvt Ltd	www.snstech.com	not a privacy policy
8	TPI Advisory Services India Pvt Ltd	www.tpi.net	not a privacy policy

**Table 9 : Percentage of All Domains that Display a Privacy Seal**

	Percentage	Number
Display a Privacy Seal	5.418%	22/406

**Table 10: Percentage of Domains that Post Disclosures about the Domain's Use or Non-Use of Cookies**

	Percentage	Number
Domain has Third Party Links	38.916%	158/406
Say that Domain uses Cookies	66.748%	271/406
Say that Domain does not use Cookies	31.773%	129/406
THIRD PARTIES may place cookies/ Web Beacons on the domain	9.359%	38/406

**Table 11: Percentage of Domains that collect Resume**

	Percentage	Number
Domains collect Resumes	40.127%	439/1094
Domains do not collect Resume	27.056%	296/1094
Domains do not have Privacy Policy but collect Resume	28.274%	177/626
Domains have Privacy Policy, which collects Resumes, accepts that website contains Resume and give reasons for collecting Resumes	6.896%	28/406

**Table 12: Percentage of Domains that collect Personal Information (IPs)**

	Percentage	Number
Collect Personal Information	45.703%	500/1094
Collect Personal Identifying Information (only e mail)	35.923%	393/1094
Collect Personal Identifying Information other than e-mail	35.557%	389/1094
Collect Non-Identifying Information	25.045%	274/1094
Does not collect Personal-Identifying Information	21.115%	231/1094
Domains do not have Privacy Policy but collect Personal Information	18.53%	116/626

**Table 13: Of those Domains with a Privacy Policy, Percentage Privacy disclosure to Third Parties**

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	Percentage	Number
Domain discloses personal information it collects to the third party	65.517%	266/406
Privacy Policy has option OPT IN	1.47%	6/406
Privacy Policy has option OPT OUT	3.488%	14/406
Privacy Policy has option of CHOICE	22.660%	92/406
Privacy Policy has NO option	38.916%	158/406

Table 14: Percentage of those Domains that have Privacy Policy and provide Security

	Percentage	Number
Provide Security	22.120%	242/406
Provide Security during Transmission	07.404%	81/242
Provide Security after collection	96.694%	234/242
Provide Security in both the stages	31.818%	77/242

Table 15: Percentage of Privacy Policies that include something about Children under 13 years of age

	Percentage	Number
Says that domains do not collect information from the children under 13 years without their parent's approval	21.182%	86/406

Says that domains do not register/market/sell products to the children under 13 years of age 17.487% 71/406



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