

8 Conclusions

8.1 Effectiveness of Customer Profiling Process

My first objective of this research is to find out Effectiveness of Customer Profiling Process among the e-Purchasers. Earlier I was planning to measure the **Accuracy** instead of **Effectiveness** of customer profiling process, though I had to modify it due to following reasons.

- e-Commerce sites are not publishing algorithms used for profiling customer behavior.
- It was very hard to find out e-Purchasers who have been profiled by e-Commerce sites.

My main concern in this objective is to investigate CP process on e-Purchasers point of views based on the aspects:

- Whether they supporting the process
- Whether they have a confident on the process
- Whether they ethically accept the process believing less harmful to their privacy.

These aspects were measured through four questions in the questionnaire. Then a formula is constructed for the Effectiveness by means of four attributes (**Convenience, Confidence, Acceptance, Disclosure**) that the questions were based on. Following table shows the summary of results obtained for Effectiveness of CP process for each region.

Region	Effectiveness
Local	51.67%
South Asian	53.26%
Europe	68.18%
North America	59.52%

Table 38: Effectiveness of Customer Profiling – Region Based

Based on the constructed formulae, Effectiveness of Customer Profiling process has positive results for all four regions. But for the local and South Asian regions, it is highly marginal. At the same time more values lie closer to the zero line showing no significant effect towards the effectiveness of this process. So I can conclude that, for local and South Asian e-Purchasers the Customer Profiling Process is not effective.

But the picture is different for European and North American e-Purchasers. Especially for European e-Purchasers the result is highly significant as the positive response in effectiveness is higher around 68%. Meantime the result of the North American e-Purchasers is less significant than European e-Purchasers. But still it shows positive response towards effectiveness of Customer Profiling process. Therefore I can conclude that for North American e-Purchasers the Customer Profiling process is effective whereas it is highly effective for the European e-Purchasers.

When further investigating the statistics, significant factor found which makes difference results in each region. That is, e-Purchasers believe in Customer Profiling process can ease their expectations. Among the local e-Purchasers 52% agree that this process can ease customer expectations whereas it is only 45% for South Asian e-Purchasers. But the values are much higher as 69% and 71% for the North American and European e-Purchasers respectively. This fact more emphasize the final conclusion since if someone believes the customer profiling can create a value for them, then it implies the effectiveness of the process.

By further analyzing the statistical data I found that Customer Profiling Process could be highly effective among following e-Purchasers groups as well. (Please refer the summary tables in pg 55-56)

e-Purchaser Group			e-Purchaser Group		
Region	Attribute	%	Region	Attribute	%
Local	Age 30-39	68.42	South Asian	Male	66.67
	Buying Duration 1-3	65.22		Buying Duration 1-3	64.50
	Buying Duration 3-5	62.50			
North America	Age 20-29	70.58	Europe	Age 20-29	65.39
	Female	66.67		Age 30-39	68.50
	Buying Duration 3-5	84.62		Male	65.96
	Buying Frequency 0-5	73.33		Female	75.00
	Expenditure 50-100 \$	72.75		Age 30-39	68.50
				Buying Duration 1-3	76.19
				Expenditure 50-100 \$	87.50
				Expenditure 300-500\$	87.50

Table 39: Effectiveness of Customer Profiling – High effective groups

Note: Attribute groups with more than 10 data samples were selected only.

8.2 Ethical Interactivity for Competitive Advantage

My main objective of this research is to find out whether there exist any relationship between Positive response behavior (R^+) and Effective Ethical Interactivity (rEI). Here the most important point to be considered is, relationship to be found with rEI not just with EI . The factor r plays major role here. It shows the relative importance of EI with other important purchasing attributes such as Price, Convenience, Quality etc.. When creating a Competitive Advantage, what is important is the its relative position among other purchasing attributes, but not just EI alone.

The factor r was determined by dividing likert value given to EI by the maximum likert value among all purchasing attribute. Therefore it shows the relative position with respect to the maximum preference. By multiplying EI with r I determine the Effective EI (EI^e), which indicates the real value given to EI by e-Purchasers with respect to other purchasing attributes.

8.2.1 Local and South Asian e-Purchasers

According the results obtained no relationship found between R^+ Versus EI^e for the Local and South Asian e-Purchasers. Thus no relations found R^+ with the individual components, Web Adverting (rEI_{WA}), EE-mail Marketing (rEI_{EM}) and Customer Profiling (rEI_{CP}). The relationships are just random ones. This implies that we cannot predict high Response behavior when the e-Purchasers are provided with good ethical interactivity.

Meantime I couldn't find any relationship between R^+ and EI^e under any demographic factor (sex, age group) or under any purchasing attributes (buying frequency, monthly Internet expenditure) as well. But for some e-Purchasers having high monthly Internet expenditure and high buying frequency shows good R^+ when they expect high EI^e . So there's a small possibility to create competitive advantage among e-Purchasers having these purchasing attributes.

For the local e-Purchasers EI is normally distributed with right skewed. This implies that their interest in EI is not so high. When analyzing deeply I found that only 48% has given relatively high position (Scale 4,5 or 6) among other purchasing attributes. For the South Asian region this figure is around 50%, which is much lesser than North American e-Purchasers. But the regional EI distributions is slightly left skewed implying e-Purchasers have little high interest in EI .

Conclusion: Even though the room for creating Competitive Advantage through good Ethical Interactivity is limited among the South Asian e-Purchasers (includes local e-Purchasers), they expect slightly high Ethical Interactivity from E-Marketing practices.

8.2.2 European e-Purchasers

In accordance with the results obtained there exist a slightly strong relationship between R^+ Versus EI^e for the European e-Purchasers. The result can be further verified by the F-test. Following are the hypotheses to be proved or disproved.

H_1 : There exist a linear relationship between R^+ and EI^e

H_0 : There exist no linear relationship between R^+ and EI^e

Source	SS	Df	MS	F	p-value
Regn.	5.74018	1	5.74018	37.1743	0.0000
Error	9.8824	64	0.15441		
Total	15.6226	65			

ANOVA table – European e-Purchasers

$F_{ratio} = 37.1743$ Using $\alpha = 0.01$ $F_{(1, 64)} = 7.0482 \rightarrow F_{(1, 64)} < F_{ratio}$

Therefore F_{ratio} is in the rejection region. \rightarrow Reject the null hypotheses.

$\rightarrow \exists$ Linear relationship between R^+ and EI^e . Also the linear relationship ($R = 0.323 EI^e + 1.5955$) has a **positive gradient**.

This implies that we can expect high Response behavior when the e-Purchasers are provided with good ethical interactivity.

For the European e-Purchasers EI is normally distributed with strongly left skewed. This implies that their interest in EI is much higher than South Asian e-Purchasers.

Conclusion: There's a room for creating Competitive Advantage (through Positive Response behavior) for European e-purchasers by providing them with good Ethical Interactivity in E-Marketing practices.

No relations found with R^+ and the individual components, Web Advertising (rEI_{WA}) and E-mail Marketing (rEI_{EM}). The relationships are just random ones. But there's evidence of a strong relationship between R^+ and EI for Customer Profiling (rEI_{CP}). This can be further clarified by means of F-test.

$F_{ratio} = 42.6228$ Using $\alpha = 0.01$ $F_{(1, 64)} = 7.0482 \rightarrow F_{(1, 64)} \ll F_{ratio}$
Therefore F_{ratio} is in the rejection region.

$\rightarrow \exists$ Linear relationship between R^+ and EI^e for Customer Profiling.


This implies that we can expect high Response behavior when the e-Purchasers are provided with good ethical interactivity in Customer Profiling Process.

8.2.3 North American e-Purchasers

According to the results obtained there exist strong relationship between R^+ Versus EI^e for the North American e-Purchasers. Using F-test the result can be confirmed. Hypotheses to be proved or disproved:

H_1 : There exist a linear relationship between R^+ and EI^e

H_0 : There exist no linear relationship between R^+ and EI^e



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Source	SS	df	MS	F	p-value
Regn.	10.9117	1	10.9117	56.8332	0.0000
Error	7.67978	40	0.19199		
Total	18.5914	41			

ANOVA table – European e-Purchasers

$F_{ratio} = 56.8332$ Using $\alpha = 0.01$ $F_{(1, 40)} = 7.3142 \rightarrow F_{(1, 40)} \ll F_{ratio}$
Therefore F_{ratio} is in the rejection region. \rightarrow Reject the null hypotheses.

$\rightarrow \exists$ Linear relationship between R^+ and EI^e .

Also the linear relationship ($R = 0.5445 EI^e + 0.8857$) has a **positive gradient**. It is higher than the gradient for European e-Purchasers. This implies that we can expect high Response behavior when the e-Purchasers are provided with good ethical interactivity. Also the their response is higher than the that of the European e-Purchasers.

For the local e-Purchasers EI is normally distributed with left skewed. This implies that their interest in EI is little high. When analyzing deeply I found that 76% has given relatively high position (Scale 4,5 or 6) for EI among other purchasing attributes. For the South Asian region this figure is only 50%. This implies that North American e-Purchasers are highly value the Ethical Interactivity.

Conclusion: There's a room for creating Competitive Advantage (through Positive Response behavior) for North American e-purchasers by providing them with good Ethical Interactivity in E-Marketing practices.

No relationships found with R^+ and individual components, Web Adverting (rEI_{WA}) and E-mail Marketing (rEI_{EM}). But there seems to have a strong relationship between R^+ and EI for Customer Profiling (rEI_{CP}). This is the strongest relationship found in the research.

$F_{ratio} = 47.0072$ Using $\alpha = 0.01$ $F_{(1, 40)} = 7.3142 \rightarrow F_{(1, 40)} << F_{ratio}$
Therefore F_{ratio} is in the rejection region.

$\rightarrow \exists$ Linear relationship between R^+ and EI^e for Customer Profiling.

Gradient of this relationship is 0.5723. Therefore we can create a competitive advantage when the e-Purchasers are provided with good ethical interactivity in Customer Profiling Process.

Final Conclusion:

Even though the room for creating Competitive Advantage through Ethical Interactivity is not possible for South Asian e-Purchasers, it is possible for European and North American e-Purchasers and for following purchasing groups as well.

South Asian \rightarrow Buying Frequency 6-10, $r = 6.01$ (Average)

European \rightarrow Age 30-39, $r = 6.57$ (Average)

European \rightarrow Monthly Internet Expenditure 300-500 \$, $r = 7.24$ (Strong)

North American \rightarrow Buying Frequency 0-5, $r = 6.72$ (Average)

North American \rightarrow Buying Duration 1-3 years, $r = 6.35$ (Average)

North American \rightarrow Monthly Internet Expenditure 300-500 \$, $r = 7.41$ (Strong)

r = Correlation Coefficient

8.3 Other Findings

8.3.1 E-Marketing Practices Ethical Analysis

The most of the E-marketing practices cannot be justified under normative ethical concepts.

Utilitarian Principle: This principle approves or disapproves of every action based on it increases or diminishes the amount of happiness of the party whose interest, is in question. One example, which breaks this principal, is the **Customer Profiling**. This is because no one would ever like others to impinge on the personal privacy and if so that would diminish their happiness.

Descartes Rule of change principle: This principle states that an action may bring about small change now that is acceptable, but repeated would bring unacceptable changes in the long run then it should not to be taken. Under this principle use of **Spam or Junk emails** cannot be justified because it starts by sending one or two emails per week and then turn out to send 5-10 emails per week making inconvenience to the users.

Kant's Categorical Imperative principle: It states that if an action is not right for everyone to take it is not right for anyone. In simple terms it is like asking yourself "If everyone did this could the organization or society survive?". Suppose if one particular company is **web-advertising products using phonographic images**. Then it is morally unjustified according to Kantian Ethics since it can make harm to the society.

8.3.2 Reasons behind creating Competitive Advantage via EI

- Generally the level of income is much higher in European and North American countries than in South Asian countries. Therefore price of the product is not a big concern for e-Purchasers of these countries. So they value the Ethical Interactivity equally importance as Price of a product. (Slightly lower than price). But South Asian people have much lesser importance on EI.
- European and North American Internet users have high confidence on buying thorough the Internet. This is because they have high security payment methods and well developed goods delivery mechanisms. Lack of these things make South Asian Internet users to use the Internet as an information gathering media about product and services rather than transaction media.
- Western countries people highly value their personal privacy than Asian people. Because of that they are expecting much higher Ethical Interactivity from an e-commerce site.

- According to statistics collected, average preferential scale given for EI by an e-purchaser in South Asian region is in between 2-3. But this value is around 3-4 among European e-Purchasers and 4-5 among North American e-purchasers

8.3.3 How Competitive Advantage can be automatically created through EI

In this research I used the Nwachukwu et al. (1997) model as the base model to measure Ethical Interactivity of three visible form of E-Marketing: Web Advertising, E-Mail Marketing and Customer Profiling. This model is based on three variables namely: Customer Sovereignty, Individual Autonomy and Harmfulness of product. I'll look into how the Competitive Advantage is created for each visible form of E-Marketing practices by preserving the indicator factors under each of this variables.

8.3.3.1 Web Advertising

- As Szymanski and Hise (2000) stated in their research article, the comfort of secure navigation is a key to internet-user satisfaction. The absence of intrusive techniques such as popup banners can be part of this comfort and hence lead to **consumer satisfaction and loyalty**.
- Absence of deceptive banner advertisements would respect the Customer's Individual Autonomy. It leads to high **trust and confidence** towards the site by the e-Purchaser.
- Promoting harmful products (Weapons) and use of pornography in the web advertising is generally not acceptable by the society. So by giving up these practices in Web Advertising, a site can build a **good image** among the e-Purchasers, believing it as a socially responsible site.

8.3.3.2 E-Mail Marketing

- E-Purchasers highly value the convenience in the Internet services. (Web, email etc.) Therefore by not using junk emails in the marketing process, site can respect the customer comfort. In response to that ethical behavior e-Purchaser can be more **loyal** to the site.
- Without harshly influencing e-Purchasers through junk emails they can be empowered by providing them with true information, only at their request. This would enhance their individual autonomy and build their **trust** toward the site.
- By not promoting harmful products (Weapons) and pornography through junk emails site can enhance its **good image** among e-Purchasers.

8.3.3.3 Customer profiling through information gathering

To measure the Ethical Interactivity in information gathering process I used Gauzente and Rnchhod's seven-factor model. Each of these factors has its own advantages towards creating Competitive Advantages.

1. Notice: By informing the e-Purchaser about what information is collected, how it will be used and whether it will be disclosed to third parties, site can enhance its Institutional Image.
2. Choice: By giving the choice to agree with aspects of information gathering, site can build the trust with e-Purchasers. With e-Purchaser's consent, the collected information can be utilized in target marketing actions.
3. Access: By giving the e-Purchaser to access the information gathered and to review and correct the information, site can enhance the trust with e-Purchaser. Meantime site can maintain reliable databases with accurate information.
4. Security: By assuring the protection of information transfer and subsequent storage site can increase the e-Purchaser trust towards the site. Also it can enhance the site image among e-Purchasers.
5. Contact: By assigning contact person or address for asking questions or registering complaints regarding privacy, site can increase the interactivity with e-Purchasers by communicating with them. At the same time site can develop e-Purchaser's knowledge about products and facilities.
6. Intrusiveness: By acknowledging level of access to the e-Purchaser's information, site can create agreed marketing actions leading to
 - Targeted marketing actions and
 - Profitable marketing actions
7. Horizon (time element): By informing how long companies can access e-Purchaser's information, site can maintain up-to-date databases. It helps the site to identify long-term relationship opportunities.

By adopting a proactive stance such as the Nwachukwu's three-factor model and Gauzente and Rnchhod's seven-factor model, companies can develop high ethical interactivity with e-purchasers. Hence in the long run, increasing ethical interactivity is likely to produce e-Purchasers who feel empowered, creating greater benefits and satisfaction for them. Meantime correct interpretation of these models leads to build a competitive advantage for a business by:

- Creating better value for e-Purchasers
- Building better relationship quality and
- Providing differentiating advantages for e-Purchasers.

8.4 Impact of Internet Laws on Ethical E-Marketing Practices

With reference to the CSI/FBI survey report conducted by the Computer Security Institute, there's a sensible decline in some unethical or illegal practices such as **Unauthorized Access to information** and **Financial Fraud**. This decline is significant since there's a natural growth in the unethical practices due to growth of the Internet community day by day. There are several reasons behind this decrement in unethical or illegal practices. Some of them are:

- ❖ Updates the Internet laws by most of the countries to address unethical or illegal practices. (See Appendix III to observe countries position on Internet laws)
- ❖ Advent of new Internet tools and technologies to identify and protect cyber users from unethical practices. E.g. Spam mail detection using content management systems
- ❖ E-commerce sites realize that influencing cyber users through unethical practices not well to the image of the site in the long run.
- ❖ Even though there's a no major Internet governing body some other governing bodies such as FBI – USA is continuously monitoring the illegal cyber activities.
- ❖ Some site practicing and promoting it and hence other sites have to follow it since it becoming Internet standard.



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I found no strong sources to decide the level of impact from Internet law on unethical marketing practices. But according to a source of World Legal Information Institute (<http://www.paclii.org/paclii/survey/cyberlaw.php>) states that the impact from Internet Law on unethical and illegal activities are lower than the impact from the use of Internet tools and techniques to restrict unethical practices. In that regard modern Internet tools play a major role in protecting Internet users from unethical practices. Source further describes that main reason why this little impact from cyber laws. It is not because of lack of Internet lawsuits to address the illegal issues, but due to lack of Internet governing bodies to monitor and execute legal proceedings against unethical and illegal practices.

When introducing the CAN-SPAM act by US congress expected to have significant decrease in illegal and unethical Spamming activities. But according to their source this didn't success (<http://www.thestandard.com/article.php?story=20040521051346934>) and still there's a increase in unethical Spamming activities. Presenting a report to US congress by Representatives of spam filtering service Postini Inc. and the Consumers Union state US Spamming law committee that the amount of unsolicited commercial e-mail continues to rise after CAN-SPAM became law. Postini, which processes about 1.3

billion e-mails a week, has seen the percentage of spam in that e-mail processed increase from 78 percent to 83 percent since CAN-SPAM went into effect. But Shinya Akamine: president and chief executive officer of Postini, still believe CAN-SPAM act as a positive step in fighting spam because it set the ground rules for what is acceptable behavior. The increase in the amount of spam may have been higher without the CAN-SPAM law, he said. Further he consider is as a great law and says "It prohibits illegal activity, now we believe it's the role of the private sector to actually go out and secure (e-mail)."

Because of these reasons I can conclude that impact from Internet law on unethical e-marketing practices is still in a primitive level. In that regards, the Competitive Advantage created through Ethical Interactivity is a Sustainable one.

There are some suggestions to increase the ethical and legal e-marketing behaviors in the Internet. Some of them are listed below.

- ❖ In the networked world, no island is an island. Therefore Internet laws should be defined in a similar manner across jurisdictions (among countries), to combat against illegal cyber activities as a single entity.
- ❖ As I mentioned in the seventh chapter most countries have updated Internet laws. What lagging are, proper governing bodies to execute those laws. Therefore establishing Internet governing bodies in each country is a significant step towards reducing unethical practices in the Internet. These bodies should be coordinated by a single large body, which have high authorities powers in Global level to address the cross-country issues as well. This will promotes better cooperation among law enforcement officials across national borders.
- ❖ Promote the countries, which cannot address modern illegal issues, to update their legal framework. Help the countries to establish best legal framework to suit them.
- ❖ Prevention and self-control is best for avoiding illegal marketing activities. Therefore promote the use of modern Internet tools and technologies to detect and protect Internet users from illegal e-marketing activities.
- ❖ The weak penalties in most updated legal statutes provide limited deterrence for cyber crimes that can have large-scale economic and social effects. Therefore proper penalizing mechanism should be established Globally.
- ❖ Convince the e-commerce sites and Internet firms that the unethical practices would affect to the their company image badly in the long run.
- ❖ Update the Internet users' knowledge of about the Internet laws. Help them by providing legal assistant so that Internet business firms thinks twice before carrying out unethical practices since the targeted users are backed by legal bodies.

Here the most important thing is the establishment of World Wide Internet Governance body to execute the legal proceedings. Even though the impact from the Internet Laws is very low I suggested updating the countries legal setting to address the Internet disputes. This is because; there must be a firmly established legal framework to be used by the Internet Governance body to resolve Internet disputes, especially to solve cross-country e-commerce disputes.

Suggestions to Local and South Asian e-firms

Before promoting the Ethical Interactivity among the local and South Asian e-Purchasers e-firms must focus on some other very important factors. As I mentioned earlier South Asian Internet users are utilizing the Internet as an Information collection media rather than transaction media. This is quite obvious since I have found only 10-15% e-purchasers exist among South Asian Internet users. There are two very significant facts to be addressed before overcoming this issue.

1. Buildup e-purchasers confidence on payment procedures. E.g. e-channelling.com promotes customers to pay the charges via pharmacies, banks and dialog bills.
2. Establishing a sound distribution mechanism to deliver purchased goods to consumers. – There is a good opportunity to startup a distribution firm to deliver goods purchased through Internet, especially from foreign e-commerce site.

At the same time most of the local e-Purchasers do not care the unethical practices of marketers unless it makes a significant discomfort to them. It is indeed clearly seen in the normal marketing campaigns (TV, Radio, Paper advertising) as well. Their most valued purchasing attribute is the **Price of the Product**. Majority of consumers pay minor concern on other purchasing attributes such as product quality, brand name, customer support etc. The Ethical Interactivity is near at the bottom of the list. Main reason behind this fact is the low income level of South Asian e-Purchasers with compared to European and North American e-Purchasers.

European and North American e-Purchasers highly value their privacy and the Ethical Interactivity of e-commerce site. Their concern on Ethical Interactivity is very closer (but little lower) to the other purchasing attributes. Most important thing is they are showing a good response behavior once they are provided with good Ethical Interactivity and if their personal privacy is assured. Therefore if e-commerce site can promote the Ethical Interactivity in a sensible manner among European and North American e-Purchasers, they can create better valued customers in response to that.

8.5 Designing Ethically Interactive Site

The design of the web site is often mainly evaluated in terms of pleasure and interactivity (Eighmey 1997; Boulaire and Mathieu 2000). But latest argument is that, it should integrate ethical considerations as well. Avoiding misleading, deceiving advertising, controlling the add banners that appears and preventing other intrusive advertising will be important in the future. It will also be important to inform consumers that a particular firm takes an ethical stance through the creation and diffusion of Internet ethical charts. Chonko and Hunt (2000) deplore the lack of ethical guidelines in marketing practices, however such a development and its diffusion to consumers will be critical in the future.

There are many Web sites, which provides customized environment (Directories, Web portals) for Internet users. Yahoo.com is the best example. Currently customization process is carried out based on the users interest or preferential areas such as news, sports, music etc. But as Internet software becomes more sophisticated, it will be increasingly possible to tailor sites for individual ethical preferences as well. In fact it is possible for firms to develop personalized sites that depend on each individual's ethical tolerance levels. To measure the Ethical Interactivity level of each user we can use a similar function such as I constructed in this research.

Both the deontological and utilitarian views of ethics can be used to design ethical web sites. In that regards Nwachukwu three-factor model will be the best starting point. This can be justifiable using normal ethical principles.

- Customer Sovereignty: Since we value our convenience and right to be knowledgeable, we should respect the same for others. (Golden Rule)
- Individual Autonomy: No one would like to highly influential by others and anyone imposing things in their thought process. Therefore forcing Internet users to buy products by sending junk emails and using pop-up banners is against the normative ethics.
- Harmfulness of product: No civilized society accepts marketing of harmful products such as Weapons, Cigarettes etc. and use of phonography in marketing products. The argument is "If everyone did this could the society survive?" (Kant's Categorical Imperative principle)

Similarly Gauzente and Ranchhod's seven factor model is the best Ethical Interactivity model for sites which are practicing Customer Profiling through information gathering.

Following listed some useful points to consider when designing Ethical E-Commerce site based on these models.

- Don't send marketing e-mails without prior consent of e-purchasers.
- Don't publish pop-up banners in the site and insert a wording **pop-up banners free site** in clearly visible region of the site.
- Never use deceptive banner advertisements to market any product.
- Refrain from using phonographics and harmful images, which are negatively effect on any culture, religion, society etc.
- If data mining techniques being used to profile customers, state that clearly in the site. Get the user's interest in this process
- Never manipulate children to acquire family information.
- Restrain from using any materials which can be harmful to children
- If site is directly collecting consumer information: (Based on seven-factor model)
 - First get the users consent
 - Inform them about kind of information collected, how it will be used.
 - Give the user choice to agree with aspects of information gathering.
 - Get the prior consent if the information will be disclosed to third parties
 - Allow consumers to review their information and correct any false or obsolete information.
- Adapt the best techniques to protect user data when transfer over the Internet and subsequent storage. In that regard user's data should reside on a secure server, behind a firewall, and be accessible only to authorized personnel. Users should have password-protected access to their profiles to update information or correct inaccuracies. If it's not feasible to provide direct access for users, they should be provided with a simple way to request changes by phone, fax, email or snail mail, and promptly acknowledge all such requests.
- Assign a contact person or address for query questions or registering complaints regarding site privacy. Better to have Internet privacy lawyer for this position.
- Never use consumer information in unethical practices, which can be harmful to their personal privacy.
- Keep a dedicated mail address to obtain users views and ideas on sites ethical interactivity.
- Try to personalize the site view based on the Ethical Interactivity level user.
- Better to maintain user list based on their EI level and participate users in marketing campaigns based on EI level.
- State the duration of Information being kept by the site.
- Cease or Minimize the use of cookies in the site.

In addition to these facts ethical e-commerce site should include the following statements in the site.

Privacy Policy Notice: Comprehensive description of the site's information practices – what the site does with the information it collects from visitors to the site. It is located in one place and may be reached by clicking on an icon or hyperlink. A Privacy Policy Notice should address one or more of the elements of fair information practices. (notice, choice, access, and security). Most important thing is it should be publicly viewable, easily accessible and written in plain language

Information Practice Statement: A discrete statement that describes a particular use or practice regarding consumers' information and/or a choice offered to consumers about their information.

Post Notice and Disclosure: A privacy policy should be publicly viewable, easily accessible and written in plain language. Post a privacy statement on the Web, within one click of the home page, as well as at any point where customer information is collected, such as online registration forms and email surveys. If it's delivered by email, the statement should disclose how users can unsubscribe from the list. And the shorter the statement is, the less fearful users will be about revealing information.



Consent Mechanisms: Best practices dictate giving users choices about what information they reveal and getting consent to use that information. Users should also be able to indicate their preference for receiving additional information about any event, or products and services related to the event. Site can gain consent in several ways:

- **Single Opt-in:** Users give permission to receive communications about a membership or registration.
- **Notified Opt-in:** Once informed that they are on an email list, users consent to receive information relevant to that list.
- **Multiple Opt-in:** Each subsequent communication asks attendees to verify that they want to continue to receive information.
- **Opt-out:** Users receive communications until they ask to be removed from the list.

In simple terms this means, communicating with users only when they want Site to, and tracking when those communications go out. Ask users what specific information they want to receive, send only that information, and send it sparingly.

References and Webliography

- Al-Khatib, J.A., K.D. and S.J. Vitell: 1995, 'Consumer Ethics in Developing Countries: An Empirical Investigation', *Journal of Euromarketing* 4 (2), 87-109.
- Adam, S. 2003, 'An Exploratory Investigation of Attitude Toward the Website and the Advertising Hierarchy of Effects', pp.620-631.
- Babin, B.J. and L.A Babin: 1996, 'Effects of Moral Cognitions and Consumer Emotions on Shoplifting Intentions', *Psychology & Marketing* 13 (8), 785-802.
- Bloemer, J.M.M. and H.D.P. Kasper: 1995, 'The Complex Relationship Between Consumer Satisfaction and Brand Loyalty', *Journal of Economic Psychology* 16, 311-29.
- Brown R : 2003, 'What is e-Marketing', <http://www.seochat.com/c/a/Website-Marketing-Help/What-Is-eMarketing/> , Date Accessed: 2005-8-12
- Bruner II, G. C. Kumar. "Web Commercials and Advertising Hierarchy of Effects," *Journal of Advertising Research*, 2000, Vol. 40, Nos. 1 & 2, pp.35-44.
- Chabrow Eric Federal, Data Miners Urged To Better Address Citizen Privacy
<http://informationweek.com/story/showArticle.jhtml?articleID=170101285>, Date Accessed: 2005-8-9
- Chan, A., S. Wong and P. Leung: 1998, 'Ethical Beliefs of Chinese Consumers in Hong Kong', *Journal of Business Ethics* 17 (11), 1163 -1170.
- Chen, Q. and W. D. Wells. 1999. "Attitude toward the Site." *Journal of Advertising Research* 39 (5): 27-37
- Claburn Thomas, Private Phone Records Sold Online, Privacy Group Complains
<http://informationweek.com/story/showArticle.jhtml?articleID=170101910>, Date Accessed 30-8-2005
- Chonko, Lawrence B. and Shelby D. Hunt. 2000. "Ethics and Marketing Management -A Retrospective and Prospective Commentary." *Journal of Business Research* 50: 235-244
- Culnan, Mary J. 1999a. Privacy and the Top 100 Web Sites : Report to the Federal Trade Commission [Online] Available: <http://www.msb.edu/faculty/culnanm/gippshome.html>, Date Accessed 2005-04-21
- Culnan, Mary J. 1999b. Georgetown Internet Privacy Policy Survey: Report to the Federal Trade Commission [Online], Available:
<http://www.msb.edu/faculty/culnanm/gippshome.html>, Date Accessed 2005-04-21

- Eighmey, J. 1997. "Profiling User Responses to Commercial Web Sites" *Journal of Advertising Research* 37 (3): 59-66
- Erffmeyer, R.C., B.D. Keillor and D.B. Leclair: 1999, 'An Empirical Investigation of Japanese Consumer Ethics', *Journal of Business Ethics* 18 (1), 35-50.
- Federal Trade Commission 1989, Statement of Policy regarding Comparative Advertising, <http://www.ftc.gov/bcp/policystmt/ad-compare.htm>, Date Accessed 29-8-2005
- Federal Trade Commission 2004, Dot Com Disclosure, <http://www.ftc.gov/bcp/online/pubs/buspubs/dotcom/index.html>, Date Accessed 2005-08-15
- Gauzente C & Ranchhod A 2001, "Ethical Marketing for Competitive Advantage on the Internet", *Academy of Marketing Science Review*, Volume 2001 No. 10
- Ghose, S. and W. Dou. 1998. "Interactive Functions and Their Impacts on The Appeal of Internet Presence Sites." *Journal of Advertising Research* 38 (2): 29-43
- Kotler P 2003, *Marketing Management*, Pearson Education, Delhi
- Kotler, P.; Adam, S.; Brown, L.; and G. Armstrong. *Principles of Marketing*, 2nd edn, Pearson Education Australia, 2003, p.429
- Kalinli O 2003, How to Write a Theses with one title, <http://www.grad.iit.edu/latex/LaTeX/sample3.pdf>
- Kelly, Eileen P. 2000. "Ethical and Online Privacy in Electronic Commerce." *Business Horizons* May/June 43(3): 3
- Kirby C, FTC drops call for new Internet privacy laws, <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2001/10/05/BU162345.DTL> , Date Accessed 18-8-2005
- Hegarty, W.H. and H.P. Sims: 1978, 'Some Determinants of Unethical Decision Behavior: An Experiment', *Journal of Applied Psychology* 63(4), 451-457.
- Laudan C & Laudan P 2004, *Management Information System*, Prentis Hall, New Delhi
- MiraPoint, Meeting the Challenge of Email Security and Regulatory Compliance, http://whitepaper.informationweek.com/cmpinformationweek/search/viewabstract/77203/index.jsp?pos=7&referer=SEARCH_RESULTS&trkpg=search_research_researchname Date Accessed 18-8-2005
- Murphy, Patrick E. and Gene R. Laczniak. 1981. "Marketing Ethics: A Review with Implications for Managers, Educators and Researchers." in *Review of Marketing*. Eds B.M. Enis and K.J. Roehring, AMA, 251-266.

- Nickerboker B 2005, America wrestles with privacy vs. security,
<http://www.csmonitor.com/2005/0722/p03s01-uspo.html>, Date Accessed 2005-10-16
- Nwachukwu Saviour L.S., Scott. J. Vitell, Faye W. Gilbert and James H. Barnes. 1997.
"Ethics and Social Responsibility in Marketing: An Examination of Ethical Evaluation of Advertising Strategies." *Journal of Business Research* 39: 107-118
- Peltier J.W., Schibrowsky J.A. and Davis J.: 1998, 'Using Attitudinal and Descriptive Database Information to Understand Interactive Buyer-Seller Relationships', *Journal of Interactive Marketing* 12 (3), 32-45.
- Rallapalli, K.C., S.J. Vitell, F.A. Wiebe and J.H. Barnes: 1994, 'Consumer Ethical Beliefs and Personality Traits: An Exploratory Analysis', *Journal of Business Ethics* 13 (7), 487-495.
- Ranchhod, Ashok. 1998. "Advertising into the Next Millennium." *International Journal of Advertising* 17 (4): 427-446.
- Singhapakdi, Anusorn. 1999. "Perceived Importance of Ethics and Ethical Decision in Marketing." *Journal of Business Research*, 45(1): 89-99
- Smith R 2000, Deceptive and Misleading on-line advertising and business practices, Australian Institute of Criminology,
http://www.aic.gov.au/conferences/other/smith_russell/2000-10-crf.pdf,
Date Accessed 2005-07-12
- Stevenson, J. S.; Bruner II, G. C. and A. Kumar. "Web Page Background and Viewer Attitudes," *Journal of Advertising Research*, 2000, Vol. 20, Nos. 1 & 2, p.29-34
- Szymanski, D.M. and Hise, R.T. 2000. "E-Satisfaction: An Initial Examination." *Journal of Retailing* 73 (3): 309-322.
- University of South Pacific, Law via the Internet 2005,
<http://www.paclii.org/paclii/conference/2005/>, Date Accessed 2005-10-16
- Wells W et.al. 2003, *Advertising Principles and Practice*, 5th edn. Prentice Hall, Upper Saddle River, N.J. pp.178-179.

Appendix I - Research Questionnaire

Questionnaire: Ethical E-Marketing For Competitive Advantage (EMCA)

This questionnaire is concerned with finding out whether ethical e-marketing could create a competitive advantage for an e-commerce web site. I would be thankful if you can spend some time and fill the questionnaire based on your experience in e-purchasing. All replies will remain anonymous and will be treated in the strictest confidence. The questionnaire should take no more than half an hour to complete.

Personal Details

Age: ☐ Less than 20 ☐ 20-29 ☐ 30-39 ☐ 40-49 ☐ Over 50

Sex: ☐ Male ☐ Female

Country: _____ Ethnicity _____

Marital Status: ☐ Married ☐ Single Other _____

Highest Educational qualification:

☐ Secondary Education ☐ Graduate ☐ Professionally Qualified ☐ Other

Current Occupation: _____

Level of Income (Per month \$.): ☐ < 500 ☐ 500 - 1,000

☐ 1,000 - 2,000 ☐ 2,000 - 3,000 ☐ 3,000 - 4,000

☐ 4,000 - 5,000 ☐ 5,000 - 10,000 ☐ > 10,000

How long have you been purchasing through the Internet? (Years)

☐ < 1 ☐ 1-3 ☐ 3-5 ☐ 5-10 ☐ More than 10

Purchasing frequency (Per month): ☐ 0-5 ☐ 6-10 ☐ 10-20 ☐ > 20

Average total expenditure (e-purchase) per month (\$.):

☐ < 50 ☐ 50 - 100 ☐ 100 - 300 ☐ 300 - 500 ☐ 500 - 1,000 ☐ > 1,000

E-Marketing Related Details

Please indicate your response to the statements provided below in a scale of 1 to 5. i.e

- (1) – Strongly Disagree (2) – Disagree
(3) – No Idea/Neutral (4) – Agree (5) – Strongly Agree

1. Information gathering process would de-motivate carrying out transaction through a web site.
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐
2. Pop up banners hinder the convenience in the buying process.
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐
3. Consumers cannot be attracted through pop up banners.
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐
4. Normally I do not consider the content in the popup banners.
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐
5. I would be concerned about the popup banner if it was regarding product promotion.
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐
6. I believe customer-profiling process would ease consumers' expectations.
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐
7. Customer-profiling through data mining process is acceptable.
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐
8. Customer-profiling process is not violation of personal privacy.
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐
9. Junk emails can influence the personal buying behavior.
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐
10. Customer can be empowered through sending emails about their products.
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐

When revealing any information to a site what is your position on concerning about following factors? Please answer them according to your order of preference.

5 – Extremely Concern

4 – Highly Concern

3 – Concern

2 – Less Concern

1 – Not Concern

1. I would be informed about the kind of information collected.
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐
2. I would be informed about the third parties of whom information is given.
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐
3. I would be informed about the aspect of information is gathered.
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐
4. I would be given a chance to agree or disagree with the aspect of information gathering.
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐
5. I would be able to access my information at any time to verify and correct them.
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐
6. Trusted and safe security measures are taken to protect the information when transferring through the networks.
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐
7. A contact person is assigned to ask questions or register complaints on privacy.
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐
8. The site doesn't promote or advertise harmful products (Cigarettes, Liquor).
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐
9. I feel the collected information cannot harmfully influence my privacy.
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐
10. Information is discarded within a specified time period (preferably within one year).
(1) ☐ (2) ☐ (3) ☐ (4) ☐ (5) ☐

What are the set of attributes you prefer most when selecting an e-commerce site?
Please rank them in a scale of 1-6 according to your preference/relative importance.

Attribute	(1 – less important ... 6- most important)	Order of importance
Brand name (Product reputation, Quality)		
Price of the product		
Convenience (Information Gathering, Payment procedure)		
Ethical Interactivity (how issues in last ten questions have been addressed)		
Building customer relationships. (After sales service, Customer care)		
Other (Please specify):		

What is your behavior in response to a good ethical interactivity (have well addressed the issues in above last ten questions) of an e-commerce site?
Please rank them in a scale of 1-4 according to your preference.

Response Behavior	(1 – less likely ... 4 - most likely)	Preference
I would buy the products on that site		
I would help to popularize the site image		
I would frequently do business with them		
I would replace the sites with bad Ethical Interactivity with this site		
I would disclose my personal information to this site		
It cannot influence my buying behavior		
Other (Please specify):		

Thank you for participating in the EMCA survey.

Please e-mail the completed questionnaire to dharmendra.attanayake@ifs.lk.

Appendix III – Sample Statistics

(Effectiveness of Customer Profiling Process)

Indians Samples

Sample	Age	Sex	Duration	Frequency	Expenditure	E	Result
1	30-39	M	3-5	0-5	1,000-5,000	-0.14	Not Effective
2	40-49	F	<1	0-5	< 1,000	-0.29	Not Effective
3	30-39	M	<1	0-5	< 1,000	0.143	Effective
4	30-39	M	3-5	6-10	< 1,000	-0.71	Not Effective
5	20-29	F	<1	0-5	1,000-5,000	-1.14	Not Effective
6	<20	M	1-3	6-10	1,000-5,000	-0.71	Not Effective
7	40-49	M	<1	0-5	< 1,000	0.571	Effective
8	20-29	M	5-10	0-5	1,000-5,000	1	Effective
9	30-39	M	1-3	0-5	1,000-5,000	0.429	Effective
10	20-29	F	<1	0-5	< 1,000	-0.14	Not Effective
11	30-39	M	1-3	6-10	5,000-10,000	-0.43	Not Effective
12	30-39	M	5-10	>20	< 1,000	-0.14	Not Effective
13	20-29	M	1-3	6-10	1,000-5,000	1.429	Effective
14	30-39	M	3-5	10-20	5,000-10,000	0.714	Effective
15	30-39	F	<1	0-5	< 1,000	0.143	Effective
16	40-49	M	<1	0-5	1,000-5,000	1.143	Effective
17	20-29	M	<1	6-10	5,000-10,000	1.143	Effective
18	30-39	M	1-3	0-5	5,000-10,000	0.714	Effective
19	30-39	F	<1	0-5	1,000-5,000	-0.57	Not Effective
20	20-29	M	5-10	10-20	10,000-20,000	1	Effective

Pakistan Samples

Sample	Age	Sex	Duration	Frequency	Expenditure	E	Result
1	20-29	M	5-10	6-10	5,000-10,000	0.571	Effective
2	40-49	F	1-3	0-5	1,000-5,000	0.857	Effective
3	20-29	M	<1	0-5	< 1,000	0.286	Effective
4	30-39	M	<1	0-5	1,000-5,000	-0.71	Not Effective
5	20-29	M	1-3	0-5	1,000-5,000	-0.86	Not Effective
6	20-29	M	<1	0-5	1,000-5,000	1	Effective
7	20-29	M	<1	0-5	< 1,000	0	Not Effective
8	30-39	M	5-10	6-10	1,000-5,000	-0.14	Not Effective
9	30-39	M	3-5	0-5	< 1,000	0.429	Effective
10	20-29	F	<1	0-5	< 1,000	0.571	Effective
11	30-39	M	1-3	6-10	1,000-5,000	1	Effective
12	20-29	M	<1	0-5	< 1,000	-1.43	Not Effective

United Kingdom Samples

Sample	Age	Sex	Duration	Frequency	Expenditure	E	Result
1	20-29	M	1-3	6-10	100-300	0.2857	Effective
2	40-49	M	5-10	0-5	50-100	0.1429	Effective
3	20-29	F	3-5	6-10	100-300	0	Not Effective
4	30-39	M	3-5	10-20	>1,000	0.4286	Effective
5	>50	F	>10	0-5	<50	0	Not Effective
6	20-29	M	<1	6-10	100-300	0.8571	Effective
7	30-39	F	3-5	0-5	50-100	1.5714	Effective
8	30-39	F	3-5	10-20	500-1,000	1	Effective
9	40-49	M	1-3	6-10	<50	-0.286	Not Effective
10	30-39	M	<1	6-10	100-300	-0.143	Not Effective
11	30-39	F	3-5	>20	500-1,000	0	Not Effective
12	20-29	M	1-3	6-10	300-500	0.4286	Effective
13	20-29	F	1-3	6-10	50-100	0.8571	Effective
14	20-29	M	<1	0-5	<50	-0.857	Not Effective
15	40-49	M	>10	10-20	300-500	0.5714	Effective
16	30-39	M	3-5	6-10	<50	1.4286	Effective
17	20-29	F	1-3	6-10	300-500	0.2857	Effective
18	30-39	F	1-3	0-5	100-300	0.2857	Effective

Netherlands Samples

Sample	Age	Sex	Duration	Frequency	Expenditure	E	Result
1	40-49	M	1-3	6-10	<50	0.1429	Effective
2	30-39	F	1-3	0-5	50-100	0.2857	Effective
3	20-29	M	3-5	>20	500-1,000	-0.143	Not Effective
4	30-39	M	3-5	6-10	100-300	0.1429	Effective
5	20-29	M	1-3	0-5	50-100	0.7143	Effective
6	20-29	M	1-3	6-10	300-500	0.5714	Effective
7	40-49	M	<1	0-5	<50	-0.143	Not Effective
8	30-39	M	5-10	6-10	50-100	0.2857	Effective
9	20-29	M	3-5	6-10	100-300	0.8571	Effective
10	20-29	F	<1	0-5	<50	0	Not Effective
11	30-39	M	1-3	6-10	50-100	-0.286	Not Effective
12	20-29	M	1-3	6-10	50-100	0.1429	Effective

Swedish Samples

Sample	Age	Sex	Duration	Frequency	Expenditure	E	Result
1	30-39	M	3-5	0-5	<50	0.7143	Effective
2	20-29	F	1-3	6-10	50-100	0.1429	Effective
3	30-39	M	3-5	6-10	<50	0	Not Effective
4	40-49	F	>10	>20	500-1,000	0.4286	Effective
5	30-39	M	3-5	0-5	100-300	0	Not Effective
6	30-39	M	1-3	6-10	100-300	-0.143	Not Effective
7	40-49	F	3-5	10-20	50-100	-0.429	Not Effective
8	>50	M	5-10	6-10	300-500	1.5714	Effective
9	30-39	M	1-3	6-10	<50	0.4286	Effective
10	20-29	M	<1	0-5	100-300	0	Not Effective
11	30-39	M	>10	10-20	300-500	-0.714	Not Effective
12	20-29	F	<1	0-5	100-300	0.4286	Effective
13	30-39	F	1-3	6-10	50-100	1	Effective
14	40-49	M	>10	6-10	100-300	0.2857	Effective
15	20-29	M	5-10	>20	>1,000	-0.571	Not Effective
16	20-29	F	<1	0-5	<50	0.2857	Effective
17	30-39	M	3-5	6-10	100-300	-0.429	Not Effective
18	40-49	M	5-10	6-10	50-100	0.7143	Effective
19	20-29	F	1-3	6-10	100-300	0.2857	Effective
20	30-39	M	3-5	0-5	<50	0.7143	Effective

Polish Samples

Sample	Age	Sex	Duration	Frequency	Expenditure	E	Result
1	20-29	M	3-5	6-10	100-300	0.4286	Effective
2	30-39	F	3-5	0-5	50-100	0.1429	Effective
3	30-39	M	<1	6-10	300-500	0.8571	Effective
4	20-29	M	1-3	0-5	<50	-0.429	Not Effective
5	40-49	M	5-10	0-5	<50	1.1429	Effective
6	40-49	M	3-5	6-10	300-500	0.2857	Effective
7	20-29	M	1-3	6-10	100-300	-0.286	Not Effective
8	20-29	M	3-5	0-5	<50	0.4286	Effective
9	30-39	M	3-5	6-10	50-100	0.5714	Effective
10	20-29	F	<1	0-5	<50	1.4286	Effective
11	40-49	M	5-10	10-20	500-1,000	0.4286	Effective
12	20-29	M	3-5	0-5	100-300	-0.429	Not Effective
13	40-49	M	1-3	6-10	50-100	0.5714	Effective
14	30-39	F	<1	0-5	<50	0.2857	Effective
15	30-39	M	1-3	0-5	50-100	0.5714	Effective
16	20-29	M	<1	6-10	100-300	0.1429	Effective

Canadian Samples



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Sample	Age	Sex	Duration	Frequency	Expenditure	E	Result
1	30-39	F	3-5	0-5	<50	0.57143	Effective
2	40-49	M	5-10	>20	500-1000	0.42857	Effective
3	20-29	M	<1	6-10	100-300	-1.1429	Not Effective
4	30-39	F	3-5	10-20	300-500	0	Not Effective
5	30-39	M	1-3	0-5	<50	-0.1429	Not Effective
6	20-29	M	3-5	10-20	300-500	0.14286	Effective
7	<20	M	<1	0-5	50-100	1.42857	Effective
8	30-39	M	1-3	6-10	100-300	0	Not Effective
9	20-29	F	<1	0-5	50-100	0.28571	Effective
10	30-39	M	<1	0-5	<50	0.28571	Effective
11	30-39	M	1-3	6-10	50-100	0.57143	Effective
12	>50	F	1-3	0-5	<50	-0.4286	Not Effective
13	20-29	M	3-5	0-5	<50	1	Effective
14	30-39	M	1-3	6-10	100-300	0.42857	Effective
15	30-39	M	5-10	6-10	50-100	-1	Not Effective

USA Samples

Sample	Age	Sex	Duration	Frequency	Expenditure	E	Result
1	20-29	M	3-5	0-5	<50	0.57143	Effective
2	30-39	M	1-3	6-10	300-500	0	Not Effective
3	40-49	M	>10	>20	100-300	0.14286	Effective
4	20-29	F	<1	6-10	100-300	0.28571	Effective
5	>50	M	>10	10-20	300-500	-0.1429	Not Effective
6	30-39	M	5-10	0-5	<50	-0.1429	Not Effective
7	20-29	M	3-5	6-10	50-100	-0.1429	Not Effective
8	<20	M	<1	6-10	100-300	0	Not Effective
9	30-39	M	3-5	10-20	500-1000	0.57143	Effective
10	20-29	F	<1	0-5	<50	-0.4286	Not Effective
11	40-49	M	1-3	0-5	50-100	1	Effective
12	30-39	F	3-5	>20	>1000	0.28571	Effective
13	20-29	M	1-3	0-5	50-100	0.57143	Effective
14	20-29	M	5-10	6-10	<50	1.28571	Effective
15	30-39	F	3-5	6-10	500-1000	0.14286	Effective
16	20-29	M	3-5	6-10	100-300	1.28571	Effective
17	>50	M	<1	6-10	<50	0	Not Effective
18	20-29	F	3-5	0-5	50-100	0.14286	Effective
19	20-29	M	1-3	10-20	300-500	0	Not Effective
20	30-39	M	3-5	6-10	50-100	1	Effective
21	30-39	F	>10	6-10	100-300	-0.8571	Not Effective
22	40-49	M	5-10	6-10	100-300	0	Not Effective
23	20-29	F	<1	0-5	<50	1.57143	Effective
24	20-29	M	1-3	6-10	50-100	-0.1429	Not Effective
25	30-39	M	5-10	6-10	100-300	0.42857	Effective
26	20-29	F	1-3	10-20	300-500	0.14286	Effective
27	20-29	M	3-5	0-5	50-100	0.57143	Effective

APPENDIX III

Countries with Updated IT Laws

Figure 2: Countries with Updated Laws										
Country	Data Crimes			Network Crimes		Access Crimes		Related Crimes		
	Data Interception	Data Modification	Data Theft	Network Interference	Network Sabotage	Unauthorized Access	Virus Dissemination	Aiding and Abetting Cyber Crimes	Computer-Related Forgery	Computer-Related Fraud
Australia	✓	✓	✓	✓		✓			✓	✓
Brazil		✓			✓	✓		✓		
Canada	✓	✓	✓	✓	✓	✓	✓			✓
Chile	✓	✓	✓	✓	✓					
China		✓		✓			✓			
Czech Republic		✓	✓		✓	✓				✓
Denmark		✓		✓						✓
Estonia		✓	✓	✓	✓	✓	✓	✓		✓
India		✓	✓	✓	✓	✓	✓	✓		✓
Japan	✓	✓	✓	✓	✓	✓		✓	✓	✓
Malaysia		✓				✓		✓		✓
Mauritius	✓	✓		✓	✓	✓	✓	✓	✓	
Peru	✓	✓	✓	✓	✓	✓				✓
Philippines	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Poland		✓	✓	✓				✓		
Spain	✓	✓	✓					✓		✓
Turkey		✓	✓	✓	✓		✓	✓	✓	✓
United Kingdom		✓		✓	✓	✓		✓		
United States	✓	✓	✓	✓	✓	✓	✓	✓		✓

Readers' Comments & Suggestions



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