

# A Structural Equation Model of Factors Influencing the Perceptions toward the Ethical Issue of Privacy in E-Marketing

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## ABSTRACT

The purpose of the research is to investigate the factors influencing the perceptions towards the ethical issue of privacy in E-marketing. The online consumer marketplace is growing at an exponential rate, to ensure consumer confidence in this new marketplace and its continued growth, consumer concerns regarding the ethical issue of privacy must be addressed. In this work, we have shown the factors extracted from the responses of the respondents and their influence on the development of perceptions towards the ethical issue of privacy in E-marketing. The study identified that privacy policy, concern for consumer's information, security and privacy, information protection and information from children are the five dominating factors which highlight consumer's perceptions towards the ethical issue of privacy in E-marketing. The structural equation modeling has been used to confirm the factor analysis results and to study the influence of each extracted factors on the development of perceptions regarding ethical issue in E-marketing. The results indicate that privacy has become a main impediment for the growth of E-marketing. Passwords for security and safety and unsafe information variables play more dominating role for developing perception.

**Keywords:** E-marketing, Cookies, Spamming, Security, Privacy, Shoppers, Spyware

**JEL Classification:** M3, M38

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## INTRODUCTION

World is changing at a remarkable pace and so does the world of marketing. The rapid adoption of the Internet as a commercial medium has caused business organisations and marketers to experiment with the innovative ways of marketing, thus changing the pattern of marketing strategies. As we enter the twenty-first century, the electronic marketing has become the lifeblood of modern business. Electronic marketing is a revolution in today's business world. Business organisations have been forced to adopt technological

change over the last decade. E-marketing utilises electronic channels to carry through their marketing activities and to attain marketing objectives of the organisation (Petrovic, 2011).

E-marketing has huge potential but, like any new technology, there are also pitfalls that need to be taken care of. The rapid growth and evolution of the E-marketing has created a number of unethical practices along with ethical issues, especially in the area of privacy. As stated by Jeurissen and Van de Ven (2006), ethical problems of target marketing arise when

advertisers violate privacy rights to acquire the information needed to identify target audiences effectively. In a survey, the Federal Trade Commission (FTC) found that 99% of online companies collect personal information from the individuals visiting their web sites (*Seligman and Taylor, 2000*). This increase in the collection and use of data has raised consumers' concern for online privacy. Consumers' growing concern over their privacy is a significant problem for the potential growth of E-marketing. According to a survey of Internet marketers, 92% believe that consumer confidence of online privacy would lead to an increase in online purchasing (*Javis, 2000*).

### KEY INFLUENCING VARIABLES

In the present study, we tried to summarise the results of the studies undertaken by various researchers on different aspects of the ethical issue of privacy in E-marketing.

### SUMMARY OF VARIABLES INFLUENCING THE PERCEPTIONS TOWARD THE ETHICAL ISSUE OF PRIVACY IN E-MARKETING

*Displays of Privacy policies* play an important role in E-Marketing. In a survey conducted by the FTC in 1998, it was noted that only few Web sites provide notice of their information collection practices to consumers (*Attaran, 1999*). *Pescovitz (2000)* revealed mostly respondents who use the Internet have refused to give information to Web sites when they perceive that the information will be compromised as *privacy policy is not easy to understand*. *Kumaraguru and Cranor (2006)* examined Indian e-marketing websites listed in the Google Indian shopping directory and found that only 29% had posted privacy policies.

*Nakra (2001)* opined that marketers have a fiduciary responsibility to take measures to safeguard not only the information, but also the privacy rights of their

customers. *Poll (2000)* found that online consumers were more concerned about the use of personal information and wanted some sort of *laws/acts regulating* how personal information is collected and used. *Ruane (2008)* opined that now numbers of business are under legal obligations to protect consumer's sensitive personal information. These obligations were created more or less through the enactment of federal privacy legislation in the government and Internet sectors.

The development of trust not only affects the intention to buy, but it also indirectly affects the effective purchasing behaviour, in terms of preference and to provide *accurate information* required by marketers. *Jarvenpaa et al. (1999)* studied the reputation of a web merchant greatly influences consumer trust to provide information. *Doney and Cannon (1997)* and *Lohse and Spiller (1998)* revealed that as in offline commerce it is the salesperson that often influences the buyer's trust in the seller, in the Internet context it is the website that does that.

*Privacy and security* concerns are the main barrier to shopping on the Internet (*Udo, 2001*). *Flavian and Guinalýu (2006)* found that trust in the Internet is influenced by the security perceived by consumers regarding the handling of their private data. *Lardner (1999)* opined that there is great lack of consumer's confidence, which in turn poses a serious problem to full-scale electronic commerce.

One aspect of business is that *untrust* in electronic marketing has great influences on online market. *Hamed et al. (2010)* revealed that there is a significant correlation between trust and trustworthiness and security and privacy information. *Lardner (1999)* opined that lack of consumer's confidence poses a serious problem for E-Marketing. *Flavian and Guinalýu (2006)* revealed that consumer's online trust in the online shopping is influenced by the techniques for handling of their private data. *Kumaraguru and Cranor (2006)* demonstrated *lack of awareness of*

**Table 1: Classification of studies based on extracted factors and variables influencing the perceptions toward the ethical issue of privacy in E-marketing**

Factors	Variables	Researcher(s)
Privacy Policy	Display of privacy policy	Jacobs (1997), Glass (1998), Pescovitz (2000), Kumaraguru and Cranor (2006), Attaran (1999)
	Policies easy to understand	Jacobs (1997), Glass (1998), Pescovitz (2000), Attaran (1999)
	Regulation to protect from privacy	Nakra (2001), Poll (2000), Ruane (2008), Stevens (2010)
	Accurate personal information	Jarvenpaa <i>et al.</i> (1999), Doney and Cannon (1997), Lohse and Spiller (1998)
Security and Privacy	Security and privacy are barriers	Flavian and Guinaliu (2006), Green <i>et al.</i> (1998), Udo (2001), Lardner (1999)
	Untrust	Lardner (1999), Armesh <i>et al.</i> (2010), Flavian and Guinalyu (2006), Hussain <i>et al.</i> (1998), Wang and Emurian (2005), Harridge (2006)
	Lack of awareness	Kumaraguru and Cranor (2006), Hoffman <i>et al.</i> (1999), Hahn and Layne-Farrar (2001)
	Privacy at risk	Samtani (2000), Fatimah (2000), Ramayah <i>et al.</i> (2003), Udo (2001), Flavian and Guinaliu (2006), Green <i>et al.</i> (1998), Lardner (1999)
Information protection	Passwords for security and safety	Attaran (1999), Neumann (1994)
	Unsafe information	Green <i>et al.</i> (1998), Hahn and Layne-Farrar (2001), Acquisti and Grossklags (2005b), McDonald and Cranor (2009), Hochhauser (2003), Jensen and Potts (2004), Culnan (2000), Dhillon and Trevort (2001)
	Major problem	Brown <i>et al.</i> (2007)
Concern for consumer's information	Misuse of personal information	Hoffman <i>et al.</i> (1999), Milne and Rohm (2000), Milne and Rohm (2000), Vasu (2002), Tynan (2000), Aldridge <i>et al.</i> (1997), Smith <i>et al.</i> (1996), Porter (2000)
	Sale of personal information	Sprague and Ciocchetti (2009), Greenstadt and Smith (2005), Adar and Huberman (2001), Jacqueline (2010)
	Max collection of information	Jacqueline (2010), Hoffman <i>et al.</i> (1999)
	Information's control affects purchase	Branscum (2000)
Information from Children	Information from children	Majoras (2007), Attaran (1999), YPRT (2009)
	Parent's personal information	Majoras (2007), Attaran (1999), YPRT (2009)
	Demographic information is safe	Liu <i>et al.</i> (2004), Hahn and Layne-Farrar (2001)
	Botheration to submit information	McDonald and Cranor (2009), Culnan (2000), Jensen and Potts (2004), Hochhauser (2003), Dhillon and Trevort (2001)

*privacy* issues and less concern about privacy in India than has been found in similar studies conducted in the United States. Hoffman *et al.* (1999) revealed consumers are concerned with the information about their private life is more readily and easily available on the Internet as compared to offline technologies.

One major concern associated with B2C electronic marketing is the privacy of consumer information. *Privacy through E-marketing is greatly at risk;*

consumer reluctance to the Internet marketing is partly due to the barrier to shopping on Internet, high privacy and security concerns. Udo (2001) opined that privacy and security concerns are the main obstacle to shopping on the Internet. Samtani (2000) and Fatimah (2000) revealed that Internet marketing activities often lead to several ways of processing personal information. Flavian and Guinalyu (2006) revealed that trust in the Internet is influenced by the security risk perceived by consumers.

Attaran (1999) opined that mostly *passwords* cracking software contains common numeric combinations, full dictionaries as well as nicknames and abbreviations. The passwords used by individuals to gain access to systems can be stolen while stored or while in transit, either within a system or a local network or across a global network such as the Internet. Even many of the encrypted passwords now in use are not safe enough to prevent theft (Neumann, 1994).

Consumers are willing to share information over the Internet, but they do not *feel safe on the Internet*. Green *et al.* (1998) revealed that consumer concern regarding privacy is having an impact on the consumer Internet market. Culnan (2000) revealed that in online shopping people feel that they have been unfairly treated or that they have not received proper privacy notice. Acquisti and Grossklags (2005b) revealed that consumers after buying may not know how the web merchant uses the personal information that they revealed as a part of the transaction. This lack of information negatively affects individual behaviour in different ways.

Aldridge *et al.* (1997) and Hoffman *et al.* (1999) revealed that consumers hesitate to engage in electronic commerce, such as sharing personal information with E-vendors and making purchases over the internet. That is, lack of consumer trust, both in the attributes of specific web-based vendors and in the overall web environment, has remained a *hindrance to electronic marketing*.

Porter (2000) and Smith *et al.* (1996) opined that the Internet enables online companies to engage in E-marketing activities as well as to collect, store and exchange personal information obtained from online consumers. Companies can *misuse that information* to gain greater insights into customers' behaviour, support marketing strategies and meet their needs. Aldridge *et al.* (1997) and Hoffman *et al.* (1999) revealed that consumers hesitate to engage in electronic

commerce, such as sharing personal information with E-vendors and making purchases over the Internet.

Adar and Huberman (2001) revealed that completing the transaction is the primary use of the personal information. Without any agreements for other uses, privacy is violated if the web merchant later uses that personal information in a manner outside of this primary use or allows the information to be disclosed to a party not involved in the primary use. The common models in use today are self-regulation and governmental regulation. Self-regulation places the responsibility in the hands of web marketers that gather, use and *sell personal information of consumers* (Greenstadt and Smith, 2005). Sprague and Ciocchetti (2009) explored the developing phenomenon of the ongoing collection and dissemination of personal identifying information, explaining the nature and form of personal identifying information, including the consequences of its collection; they also explored threats associated with data collection unauthorised disclosure due to data breaches.

Web marketers can collect not only the similar information available in most physical transactions identity, but also can *collect more detailed* additional personal information. Personal information is easily available because of the widespread utility of the Web technologies (Jacqueline, 2010).

Branscum (2000) revealed people lost all control over how personal information is collected and used by companies. Consumers refused to give information because they thought it was inappropriate in the circumstance, and mostly *decided not to purchase a product* because of a concern over the use of their information collected in the transaction. The consumers after buying may not be aware of how the merchant use the personal information they revealed as part of the transaction. This lack of information arguably affects individual behaviour in different ways (Acquisti and Grossklags, 2005b).

Majoras (2007) opined to protect children; act generally mandates that web merchants must provide notice of their privacy policies, obtain verifiable parental consent prior to collecting *personal information from children*, allow parents to review and delete personal information that their children have provided and maintain reasonable procedures to protect the security of personal information collected from children. *Parent controls are also available through online service*. Advise your kids not to give out their real name and address in chat room and on bulletin board. Encourage them to post messages only with your supervision (Attaran, 1999). Children also bear information privacy risks when their personal data are collected online automatically, upon request by an information service provider or voluntarily, when they fill their personal information in online forms (YPRT, 2009).

Liu *et al.* (2004) revealed that biographical information includes *demographic information* such as income, personal preferences, interests and hobbies.

Web merchants may use biographical information to profile customers, target future communications for marketing purposes and customise web pages for individual customers. Many people are concerned that information about their private life is more readily available and more easily captured on the Internet as compared to offline technologies (Hahn and Layne-Farrar, 2001).

It is usually *botheration for consumers to provide complete information to marketers online*. McDonald and Cranor (2009) opined that privacy policies fill the information gap between the consumer and the vendor by providing a complete picture of the vendor's information practices. Culnan (2000) revealed that while in online shopping people may feel that they have been unfairly treated or that they have not received proper notice. The use of digital systems allows data capture at a much larger rate. Not only is it easier than ever to collect the data, it is also much easier to search these data (Dhillon and Trevort, 2001).

## SIGNIFICANCE OF THE STUDY

The usage of the Internet as a means to purchase goods and services has been growing over the past two decades globally. Yet, people still avoid making online transactions or purchases on the Internet due to the fear of losing their personal and private information as a result of prevailing unethical practices in the new electronic environment. The review of the existing literature reveals that a number of studies have been carried out on various aspects of privacy in E-Marketing, but a very few comprehensive studies in this area could be found which could explain the structural relationship of factors influencing the perceptions toward the ethical issue of privacy in E-marketing. As the consumer can only decide what is right or wrong or even permissible in the field of privacy in E-marketing, hence study regarding their perception becomes significant. In the light of the above discussion, comprehensive and detailed study regarding the structural relationship of factors influencing the development of perceptions toward the ethical issue of privacy in E-marketing is of dire need. In order to find the relationship, one Ho (hypothesis) has been developed, as all the perceptual variables have no significant relationship on the perceptions towards the ethical issue of privacy in E-marketing. The results of the study would be more useful for the marketers to develop the online marketing strategies and to frame the comprehensive privacy policy for their customers on the disclosure of personal information in order to lessen their concerns for privacy.

## DATA BASE AND METHODOLOGY

The research required the study of individuals who were exposed to E-marketing as well as the problem of privacy. The study involved the analysis of primary data collected through sample from one of the prosperous states of India i.e., Punjab and Union Territory of Chandigarh. The samples of 568 respondents were drawn from the major districts of

Punjab and Union Territory of Chandigarh. The sampling technique used for data collection was non-probabilistic judgmental sampling. A total of 640 survey questionnaires were sent out of which 598 questionnaires were received. Each of the responses received had been screened for errors, incomplete or missing responses. After the screening process was carried out, only 568 responses were considered complete and valid for data analysis. This represents a success rate of 94.66%, which was reckoned to be good in view of time and cost constraints. A non-disguised structured questionnaire was used for data collection. Questionnaire was pre-tested and as a result of pre-testing it was modified and revised suitably. The validity and reliability of the data was verified by using the different methods. Since no single method is considered to be perfect, so a series of diagnostic criteria have been relied upon in order to assess internal consistency (Hair et al., 2009).

### PERCEPTIONS TOWARDS THE ETHICAL ISSUE OF PRIVACY IN E-MARKETING

Rapid development in information technology and the increase of Internet use enable the online marketers/companies to collect, store and exchange consumer information that can be used for targeted marketing. Thus, an issue of privacy in e-marketing has been receiving more attention and consumers' growing concern over their privacy is a significant concern for the potential growth of E-marketing.

### SCALE DEVELOPMENT AND REFINEMENT

A scale was developed to identify the factors revealing the perceptions towards the ethical issue of privacy in E-marketing. The literature for the same was reviewed as shown in the literature survey and 19 perceptual variables were identified and were selected to study the perceptions of the respondents. These items were then rated on a five point Likert scale by the respondents. Scale reliability analysis was performed

and two items i.e., "submission of personal information is botheration for customers and demographic information is safe" were deleted finally resulting into 17 items. The respondents were asked to rate seventeen variables, on five point Likert scale, which ranged from strongly disagree to strongly agree for the purpose of factor analysis. Item-wise reliability analysis was performed on selected variables to retain and delete scale items for developing a reliable scale. The reliable scale finally developed consisted of 17 items as already explained. Inter-item correlations and Cronbach's alpha statistics were employed to conduct the scale reliability analysis and to know extend to which items were correlated with the remaining items in a set of items under consideration.

### RELIABILITY, VALIDITY AND UNIDIMENSIONALITY

As a test for reliability of construct measurement, Cronbach's alpha was typically used (Nunnally, 1978). Cronbach's alpha of scale is 0.903 which was the best indicator to go ahead as the value of Cronbach's alpha coefficient of 0.6 and above is good for research in social science (Cronbach, 1990). Similarly, Sekaran (2000) suggests that the value of alpha should be at least 0.70 as the basis of internal consistency whereby two constructs pass the reliability test. Factor two is more reliable with Cronbach's alpha of 0.858 and it is also known as the scale reliability alpha. The first factor has Cronbach's alpha of 0.855, third factor has Cronbach's alpha value of 0.848, fourth factor has Cronbach's alpha of 0.797 and last fifth factor has Cronbach's alpha of 0.828; hence all these constructs can be accepted as reliable constructs representing a set of newly developed factor (Heijden et al., 2001).

Principal component analysis was conducted as a means of data reduction, to see if the face validity of the items held (Pallant, 2001). Prior to performing PCA, the suitability of data for factor analysis was assessed. The Kaiser-Meyer-Olkin (KMO) measure

**Table 2: Scale reliability analysis for seventeen-items (the ethical issue of privacy)**

Variables	Initial	Extraction	Mean	Std. deviation	Corrected item-total correlation	Cronbach's alpha if item deleted
Security and privacy are barriers	1.000	0.695	3.20	0.954	0.566	0.818
Lack of trust	1.000	0.679	3.29	0.925	0.536	0.899
Lack of awareness	1.000	0.700	3.23	0.803	0.551	0.886
Privacy at risk	1.000	0.714	3.25	0.854	0.588	0.884
Passwords for security and safety	1.000	0.810	3.01	0.929	0.588	0.829
Unsafe information	1.000	0.709	2.91	0.950	0.587	0.897
Major problem	1.000	0.639	3.11	0.934	0.601	0.867
Misuse of personal information	1.000	0.729	3.32	1.067	0.569	0.848
Selling of personal information	1.000	0.668	3.38	0.957	0.516	0.890
Max collection of information	1.000	0.775	3.45	0.910	0.536	0.887
Information's control affects purchase	1.000	0.703	3.38	0.912	0.581	0.895
Information from children	1.000	0.844	3.28	1.129	0.565	0.893
Parent's personal information	1.000	0.839	3.23	0.940	0.517	0.889
Display of privacy policy	1.000	0.802	3.23	1.008	0.576	0.893
Policies easy to understand	1.000	0.623	2.96	.928	0.513	0.891
Regulation to protect from privacy	1.000	0.774	3.21	1.180	0.582	0.896
Accurate personal information	1.000	0.667	3.24	0.943	0.633	0.898

**Item Means:** Mean = 3.216, Minimum = 2.910, Maximum = 3.454, Range = 0.544, Max/Min = 1.187, Variance = 0.022,  $N = 17$ , No. of cases = 568

was 0.885 exceeding the recommended value of .6 (Tabachnick and Fidell, 1996; Kaiser, 1974) and Bartlett's test of sphericity (Bartlett, 1954) reached statistical significance, supporting the factorability of the correlation matrix.

In order to identify the underlying dimensions of privacy in E-marketing, exploratory factor analysis was employed and five factors were extracted namely; 'privacy policy, security and privacy, information protection, concern for consumer's information and information from children'. Each factor was defined by at least three scale items except the last factor. Bartlett's test of sphericity also has a value of  $X^2=4929.971$ ,  $Df=136$ , which is significant ( $p < 0.5$ ). All these requirements are sufficient for validating factor analysis. All the factors having loading more than 0.6 are considered best and in the ethical issue of

privacy the loading ranged from 0.677 to 0.858. Items with factor loadings  $< 0.5$  were removed. The five factors so generated have eigenvalues ranging from 1.041 to 6.702. The validations of factor analysis results were also done by calculating correlation between summated scales and correlation between representative factors and summated scales. The score of the correlation between the five factors for the ethical issue of privacy in E-marketing was  $< 0.488$ ; therefore they are independent from each other, and multicollinearity is not occurring at all.

PCA revealed the presence of five components with seventeen values exceeding 1, explaining 72.77% of the variance. Here, it is pertinent to mention that corrected-item-total correlation  $> 0.5$  and inter-item correlation  $> 0.3$  are good enough for reliability of the scale (Hair et al., 2009). The value for communalities

using principal component analysis ranged from 0.623 to 0.844 (Table 2). Here, it is pertinent to mention that communalities >0.5 is sufficient for the explanation of constructs (Hair et al., 2009). Hence, all the requirements of reliability, validity and unidimensionality are met.

### STRUCTURAL RELATIONSHIP OF FACTORS INFLUENCING THE PERCEPTIONS

The structural equation modeling (SEM), which includes the measurement model and path analysis, is an efficient way to find the causal relationships between constructs and their underlying measurement suitability; Amos software with maximum likelihood estimation (ML) is used to implement the SEM. Confirmatory factor analysis (CFA) has been employed to test the reliability and validity of the questionnaires after collecting the questionnaires. The loading factor values of each manifest variable are higher than 0.6 [the suggested threshold value is 0.6 (Bagozzi and Yi (1988))], indicating that internal consistency and convergent validity are good; composite reliability (Construct reliability) and Cronbach's  $\alpha$  value of each construct are higher than 0.8 except one factor (in which the suggested threshold value is 0.7), also the average variance extracted of each construct is greater than 0.5, indicating good reliability.

**Table 3: Fit indices and guidelines for model analysis (the ethical issue of privacy)**

Fit index	Guidelines (recommended)	Model values
Chi-Square	–	374.34
CMIN/DF	Between 1 and 5	3.29
NFI	>0.9	0.925
TLI	>0.9	0.936
GFI	>0.9	0.930
AGFI	>0.9	0.905
RMSEA	<0.05	0.050
P	<0.05	0.000

For the overall assessment of the measurement, multiple fit indexes are reported in Table 3 from which

we can find out that the model was reasonably consistent with the data, with all the fit indexes better than the recommended values.

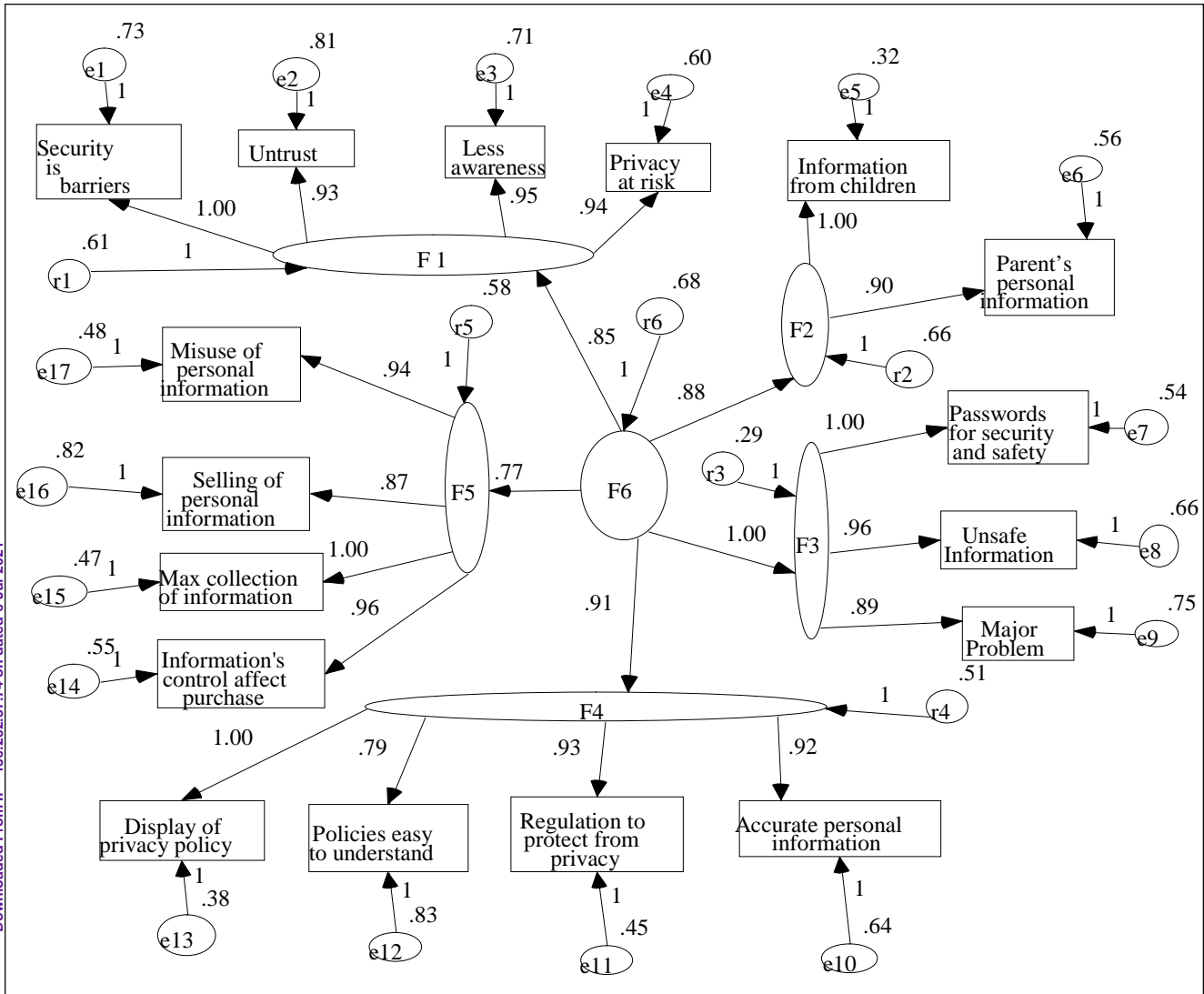
### PATH ANALYSIS

In the following part, structural relationships among perceptual factors and consumer's perceptions/attitude toward the ethical issue of privacy in E-marketing have been represented.

### DISCUSSION OF RESULTS

The values for various fit indices, chi-square, level of significance and effect of factors/items on perception towards the ethical issue of privacy are shown in Table 4. The results in Figure 1 showed that path loading on *Privacy Policy* (coded-4) factor ranged from 1.0 to .79. The path loading of 1.0 for *Display of privacy policy* and 0.93 for *Regulations to protect from privacy* showed that these items play a more important role for this construct as compared to other items. Consumers' demand display of privacy policy and regulations to protect the consumer's privacy to build their confidence in E-marketing. The other items are also loaded significantly on this factor. Here, it is important to note that the effect of *privacy policy* factor (0.91) on *privacy* (coded-6) is second highest. So it is concluded that web marketers should take care of all the items of this construct to build the confidence of consumers in online purchase. The path loading on *concern for consumer's information* (coded-5) factor had the range from 1.0 to 0.87. There are four items in this factor which are loaded significantly. The maximum loading is for *maximum collection of information* (1.0) and *information control affect the purchase decision* (0.96) showing the dominance of this factor. The effect of this factor on *privacy* is 0.77 which is least as compared to other factors. In this factor it is suggested that web marketers should not collect maximum personal information from the consumers and whatever information is collected it should not be misused or used without the permission

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**Figure 1: Structural relationships among perceptual factors and consumer's perceptions/attitude toward the ethical Issue of privacy in E-marketing**

F1- Security and privacy. F2- New generation media. F3 - Information protection. F4 - privacy policy. F5 - Concern for consumer's information. F6 - Perception towards privacy.

of consumers. The *security and privacy* factor has loading from 1.0 to 0.93. The results showed that the path loading of items *security is barrier* (1.0), *lack of awareness* in online purchase than offline purchase (0.95), *privacy at risk* (0.94) and *untrust* (0.93) played more dominating role for this factor. All the loadings are different and sufficient to explain this factor. The effect of *security and privacy* factor (0.85) on *privacy* is significant. Consumers do not trust in the online

purchase because of *privacy at risk* and it is less secure than traditional market. Another factor *protection of information* (coded-3) has a loading range from 1.0 to 0.89. This factor has three variables with significant loading. The variance of this factor on *privacy* is 1.0; hence this factor is most important for privacy concern in e-marketing. Consumers are using various passwords to protect their information online but still they are not safe, it is a major problem for the

consumers as well as web marketers. The last factor is *information from children* (coded-2) having only two items: *parent's information from children* (1.0) and *personal information from children* (0.90). The variance of this factor on *privacy* is 0.88. Companies should not collect the personal information as well as parent's information from the children.

**EFFECT ESTIMATES OF FACTORS AND VARIABLES**

Here an attempt has been made to identify the effect estimates of factors and their variables in Table 4.

The path analysis conducted using the SEM technique revealed that the maximum variance in the perception

regarding the issue of privacy is explained by the independent variables *information protection* then followed by *display of privacy policy*, where as the variable *concern for consumer's information* explains the least in the issue privacy. Here, it is also interesting to note that among the independent items (statements constituting the construct), total effect was very high for *passwords for security and safety* (1.0) and *unsafe information* (0.965) signifying that these items play more important role in explaining the variation in the perception of respondents towards the ethical issue of privacy. The other items also showed significant effect on perception toward the issue of privacy. The Ho5 hypothesis has been rejected as the all the perceptual variables have significant path loading on the

**Table 4: Effect estimates of perceptual factors influencing consumer's perceptions toward the ethical issue of privacy in E-marketing**

Factors/Variables affecting consumer's perceptions toward privacy	Decisions effect estimates			Values
	Total	Direct	Indirect	
Privacy Policy	0.905	0.905	0.000	Chi square= 374.342 DF=114 RMR= 0.052 GFI= 0.930 AGFI= 0.905 PGFI= 0.693 NFI= 0.925 RFI= 0.910 IFI= 0.947 TLI= 0.936 Significance level = 0.000
Concern for consumer's information	0.769	0.769	0.000	
Security and privacy	0.887	0.887	0.000	
Information protection	1.000	1.000	0.000	
Information from children	0.884	0.884	0.000	
Display of privacy policy	0.905	0.000	0.905	
Regulation to protect from privacy	0.845	0.000	0.845	
Policies easy to understand	0.718	0.000	0.718	
Accurate personal information	0.830	0.000	0.830	
Max collection of information	0.769	0.000	0.769	
Misuse of personal information	0.725	0.000	0.725	
Information's control affects purchase	0.742	0.000	0.742	
Sale of personal information	0.672	0.000	0.672	
Lack of awareness	0.801	0.000	0.801	
Security is barriers	0.847	0.000	0.847	
Privacy at risk	0.798	0.000	0.798	
Untrust	0.786	0.000	0.786	
Passwords for security and safety	1.000	0.000	1.000	
Unsafe information	0.965	0.000	0.965	
Major problem	0.891	0.000	0.891	
Parent's personal information	0.799	0.000	0.799	
Information from children	0.884	0.000	0.884	

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perceptions towards the ethical issue of privacy in E-marketing; hence, *privacy policy, concern for information, security and privacy, information protection and information from children* have significant influence to develop perceptions or attitude towards the ethical issue of privacy in E-marketing.

This section helps us to understand the privacy concerns in E-marketing and the items which are playing more important and less important role in e-marketing, so that web marketers can take appropriate actions and decision to influence the attitude of consumers. The majority of respondents felt that role of password protection in various online applications is not sufficient to ensure security of the user's information on the Internet. Respondents concern with privacy of their personal information is having a significant effect on the consumer's Internet market.

It can also be inferred that most of the respondents who shop online may denies giving information when they perceive that the information will be compromised and this happened when marketer's privacy policies are unclear and difficult to understand.

### **PRACTICAL IMPLICATIONS GENERATED FROM THE STUDY**

- The findings highlighted the importance of trust in future purchase as trust is a criterion consumers use to evaluate merchants on the Internet. Therefore, it is crucial for online merchants to attract potential customers to make purchases by increasing their trust. The results suggest that web marketers should build customers' trust in online buying. It is important for them to recognise the trust factor so that they can take the necessary steps to boost their sales.
- In addition to that there is also a need for marketers to frame a comprehensive privacy policy for their customers on the disclosure of personal information in order to lessen their concerns for privacy. The policy should clearly state that the

information collected would be kept confidential and not shared or passed on to another party without their consent. There should also be an avenue for customers to request for the removal of their personal information from the online retailer's database. The clear privacy policies of marketers build consumer's confidence in E-marketing. Consumers are more concerned with their personal information; they don't want to get it misused by the marketers or any third party. And marketers should not collect the personal information from the children. Surprisingly, security of personal information is absent in the E-marketing technique. But without security, no customers would shop around. However, security is only a necessary condition; alone it cannot attract customers and promote E-marketing activities.

### **LIMITATIONS OF THE STUDY AND FUTURE RESEARCH DIRECTIONS**

- Since the data collection was confined to only principal districts of Punjab i.e. Amritsar, Jalandhar, Ludhiana or Patiala and Union Territory of Chandigarh. The replication of the study at different regions of India would enable better generalisability of the findings of the study.
- The study was limited to individual shopping behaviour. Punjab and Chandigarh being a collectivistic State and UT, most of the shopping happens in a family set up. Consideration of family shopping behaviour might have interesting findings.
- The present study was cross sectional in nature and given the corresponding drawbacks of the same, longitudinal studies should be conducted in future to test the proposed model so as to re-evaluate directions of causality among the study variables. As perceptions change over time, longitudinal research may be helpful.

## CONCLUSION

In the light of the above analysis and discussion, the conclusion drawn implies that the E-marketing is a powerful marketing technique, which has strong impact upon the perceptions of the consumers. Consumers are also of the opinion that online marketers are unethically collecting their personal information and misusing the same for their vested interest; sometimes they even go to the extent of selling the same information without the consent of online consumers. It is important to create consumer

trust in E-marketing and it is only possible if the issue of security in privacy of consumers is insured while they are purchasing online. Moreover, the consumer's also feel that the online merchants must use the collected personal information in an ethical manner and in consultation with the concerned person. In the case of E-marketing, consumers do not have control over their personal information as spyware leads to monitoring the consumer's visits, collecting personal data, misusing personal information and also violating the privacy without the consent of consumer and even without his knowledge.

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