Technology factors of Online Shopping and its impact on Attitude with special reference to Student Community

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Abstract - Even though various security mechanism got adopted, hackers always penetrate and overseeing the transaction. Various strategies or technological intervention are being adopted to enhance the safety of the transactions. The factors of internet security, website speed and context of the products are playing vital role on the successful online promotion. These issues are complex and very difficult to solve this through existing mechanism. Through this analysis, all the technological aspects as mentioned above have been analyses and suitable measures were adopted to overcome this problem. This study aimed to analyse various technical factors such as Awareness, download time, Representativeness, Technical experience, Duration of Internet usage and components such as frequency of shopping, product purchased, Time spent, Money spent and Mode of Payment its impact on attitude through ANOVA. This study shows that almost all factors have positive impact in the attitude related to the Technological factors considered for the study.

Keywords - Mode of Payment, Time spent, Money Spent, Frequency of shopping, Product purchased

1. Introduction  
Exchange of transactions through internet is called as Online Shopping. It refers to exchange of products through web [1]. It is also referred by the creating relationship through electronic media by initiating sales. It is the process of exchanging the products through internet enabled environment [2]. It belongs to the category of Business to Consumer (B2C), [3] indicates in his article, all part of Ecommerce includes the various dimensions like C2C, B2C and C2C. The world wide eb was introduced to the market in the year of 1990 and further it was used by the companies like Amazon, Nescafe and other formidable companies. Later it was expanded to all kind of transactions like payment, online sales and in all walks of life.

[4] has used Enterprise Resource Planning (ERP), Data mining and Data Warehousing. [5] have said that the data security is very important aspect in the internet security So the security protocols in the industry got strengthen in the recent days because of the fraud and other related issues. Since all the transactions are routed through online payment, the internet companies have to safeguard their transactions.

2. Review of Literature  
The success of online shopping companies is based on technological infrastructure [6]. The important aspects of technological factors are internet infrastructure, download time and representatives towards colours and design [7]. Consumer always expects better interconnectivity between them and the company. Through this seamless interconnectivity the consumer can communicate about the issues, problems, feedback and other difficulties that arise [8]. The process of modernization of its websites to latest tools and software, which enables the customer to have world class experience while using it.

The young and modern-day consumers do not have patience to wait for longer download time. If the time extended beyond the limit, the consumer may abort the shopping [9]. Further, [10] found in his study that the consumer does wait for only eight seconds to download information. If the website has higher downloading time, difficulty in access and slow response will negatively affect the consumer’s interest towards online shopping. This also creates bad experience among them. [11]. As the consumers did not have any opportunity to see the product directly, they have to rely on the website. Due to the adoption of various technologies, the colour and design appeared in the website might have changed a little bit thus leading to dissatisfaction among consumers [12].

3. Sampling Method  
Descriptive research is a kind of research which describes the current situation and its impact on the results.13,500 students have been selected for the study [13]. The post graduate students have been chosen for the study[14]. Simple Random sampling method was used to find out the samples from the universe. Two stage sampling method was used. In the first stage, number of samples was restricted to 7500 and the final sample size of 752 have been shortlisted for the study. All are Post Graduate students studying various PG courses.

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4. Interpretation

**Attitude based on Technology Factor**

H₀₁: Frequency of online shopping and the technology factor influencing the attitude

**Table 1: Attitude based on Technology Factor**

| Online shopping   | N  | Subset for alpha = .05 |
|-------------------|----|------------------------|
|                   |    | 1          | 2          |
| Oftenly          | 145| 20.0207    |            |
| usually          | 414| 20.7391    | 20.7391    |
| Very Often       | 193| 21.155     | 4          |
| Sig.             | .076| .419      |

In Table 1, it compares the technology factor and the result based on the frequency of online shopping was found to be high with respect to respondents shopping very often (M=21.15, 95% CI [20.69, 21.61]) the respondents based on the technology factor influencing the attitude of the respondents.

**Time spent and Attitude towards shopping online**

H₀₂: The time spent for online shopping and the technology factor

H₂: the time spent for online shopping and the technology factor

**Table 2: Attitude based on Technology Factor**

| Time spent for shopping online | N  | Subset for alpha = .05 |
|-------------------------------|----|------------------------|
|                               |    | 1          | 2          |
| Less than 2 hours        | 193| 20.1503    |            |
| 2 to 4 hours             | 280| 20.7893    | 20.7893    |
| More than 4 hours        | 279| 21.0108    |            |
| Sig.                      | .092| .749      |

In Table 2, (M=21.01, 95% CI [20.62, 21.39]) is the difference in the time spent the Technology factor influencing the attitude of respondents than other two categories.

**Products often purchased and Attitude based on Technology Factor**

H₀₃: product often purchased and its influence the attitude.

H₃: product often purchased and its influence the attitude

**Table 3: Purchased and Attitude based on Technology Factor**

| Product often purchased online | N  | Subset for alpha = .05 |
|--------------------------------|----|------------------------|
| Kitchen items / Gardening / Hobby items | 54 | 20.203 | 1 |
| Clothing / Accessories / Shoes | 330| 20.606 | 1 |
| Computer / Electronics / Softwares | 278| 20.672 | 7 |
| Others                          | 26 | 20.923 | 1 |
| Books / DVD / CD                | 64 | 22.000 | 0 |
| Sig.                            | .751| .138      |

In Table 3, (M=22.00, 95% CI [21.20, 22.79]) level of difference in the products often purchased on the Technology factor influencing the attitude is shown in Table 4.

**Money spent and Attitude based on Technology Factor**

H₀₄: online shopping and technology the factor

H₄: online shopping between the respondents a

**Table 4: Technology Factor**

| Average amount spent for shopping online | N  | Subset for alpha = .05 |
|----------------------------------------|----|------------------------|
| Less than Rs.500                        | 402| 20.4254                |
| Rs.500 to 1000                         | 134| 20.9907                |
| More than Rs.1000                       | 216| 21.0970                |
| Sig.                                    | 1.000| .055      |

In Table 4, (M=21.09, 95% CI [20.563, 21.417]) is the difference in the money spent based on the Technology factor influencing the attitude than the other two categories.

**Mode of payment preferred and Attitude based on Technology Factor**

H₀₅: mode of payment preferred during online shopping and the technical factor

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Table 5: Mode of payment preferred and Attitude based on Technology Factor

| Mode of Payment preferred when shopping online | N   | Subset for alpha = .05 |
|----------------------------------------------|-----|------------------------|
|                                              |     |                        |
| Internet Banking                             | 133 | 20.0075                |
| Cash on Delivery                             | 341 | 20.9120                |
| Debit / Credit Card                          | 278 | 20.7914                |
| Sig.                                         | 1.000 | .927                 |

In Table 5, (M=20.91, 95% CI [20.54, 21.27]) is the difference in the mode of payment based on the Technology factor.

5. Findings & Conclusions
The quick opening of sites is the most preferred factor among the factors selected so the vendors should design websites which are technically advanced with seamless easiness. The significant influence of technological factors on attitude shows that the stakeholders of online shopping business have to develop very dynamic and technologically advance websites to keep the consumers in the positive side of the attitude.

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