

MEASUREMENT SCALE AND VALIDATION FOR UTILITARIAN MOTIVATION: A CASE OF ONLINE CONSUMER BUYING TRENDS

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Abstract

The Unitarian benefits of online utility have been considered to some extent. The approach to this study has been to commence a fully comprehended evaluation that demarcates all the aspects regarding the online consumption's utilitarian motivation. The foremost important step that has been undertaken in this article is the literature review, to motion an aprioristic mean framework of ten dimensions of utilitarian motivations. Second, quantitative analyses (exploratory, descriptive statics and some factor analyses procedures) are practiced depending on questionnaire executed on a sample size of 150 Internet users. Last but not the least, 9 utilitarian motivations is entrenched, following names were assigned to them: assort-mint, economy, and convenience, availability of information, adaptability/customization, and desire for control, payment services, anonymity, and absence of social interaction. The parallel gravity of the entire model is claimable as second-order factor model has been used. It was concluded by conferring some implications for practitioners.

Keywords: Online consumption, Utilitarian value, Full dimensional structure, Measurement scales, Validation

1. Introduction

The intuitive way of the Internet and Web offer numerous chances to build the proficiency of web shopping conduct by enhancing the accessibility of item data, empowering direct multiattribute correlations, and decreasing purchaser inquiry costs (cf. Alba et al.1997). While relatively more has been composed about these more utilitarian parts of the web, the rise of the web as an excitement medium has just as of late picked up in force (Orwell 2001). These new media speak to a gigantic open door for advertisers and engineers of electronic trade, however there are essential innovation based contrasts between routine retail channels and these new channels that must be seen all together for organizations to boost their execution as they enter this uncharted region (Alba et al. 1997; Van nook Poel and Leunis 1999). Understanding the way of these media increases much more prominent

significance given the guarantee that electronic trade will build value rivalry and lessen vender syndication control through a decrease in purchaser inquiry costs (Bakos, 1997). At the heart of this movement to intelligent online types of shopping is a situated of worldwide, interconnected systems, for example, the Internet and the World Wide Web evaluated to create upwards of \$108 billion in retail e trade deals by 2003 (Rosen and Howard 2000). While there are various variables that influence the utilization of web shopping, the goal of our examination is to concentrate on a few extraordinary innovations based qualities of these new media. All the more particularly, this exploration tries to investigate a few determinants of intelligent structures 512 T.L. Childers et al. / Journal of Retailing 77 (2001) 511–535 of shopping by incorporating parts of buyer conduct with exploration from the data frameworks space. The blueprint of the article is as per the following. The following area will present Ideas drawn from exploration on the client acknowledgement of data innovation. Taking after this, attributes of the new media which are required to incline buyers toward their utilization will be talked about alongside particular theories for how they relate to purchaser utilization of intuitive shopping. Every precursor will be explained upon took after by a discourse of the segments encompassing the buyer's mentality toward shopping through these media. Taking after this discourse are the consequences of two studies intended to test the fundamental forecasts of this model.

1.1 Background

This comfort in intelligent shopping expands look productivity through the capacity to shop at home, by dispensing with so much disappointments as battling activity and searching for a stopping space, and staying away from long look at lines, while additionally offering single "quit" shopping that takes out go to and from a mixed bag of stores. Hence, accommodation incorporates both the components of when a customer can shop and where a buyer can shop. Persons who see the online environment as offering more prominent comfort are more prone to consider the new media as both "helpful" and "simple to utilize." Impression of these media encourages the achievement of the shopping assignment (making it more valuable); furthermore make the procedure of shopping (the usability) all the more engaging. What's more, decreases in disappointment ought to reduction shopping's mental expenses, which we anticipate will make the intelligent shopping knowledge more agreeable.

1.2 UTILITARIAN VALUE AND COMPULSIVE BEHAVIOUR:

Exploration depicting buyer engagement in impulsive shopping originates before the Internet (and related impulses) by various years. One of the early references (O'Guinn and Faber, 1989, p.147) states "habitual purchasers purchase less to get utility or administration from an obtained product as to accomplish satisfaction through the purchasing procedure itself". These creators characterize urgent utilization (p.148) as "a wild commute or craving to get, utilize, or experience an inclination, substance, or action that leads a person to monotonously participate in a conduct that will eventually bring about mischief to the individual and/or to others". O'Guinn and Faber watch that their definition is valuable in depicting liquor abuse, substance ill-use, dietary problems, thievishness, and impulsive betting and sexual conduct, and quickly, it might likewise apply to obsessive Internet utilization. The craved emotions connected with impulses, for example, those depicted by O'Guinn and Faber (1989) incorporate dreams that allow escape from negative sentiments. Further, their rate has all the earmarks of being higher among people with low self-regard, and to be corresponded with excitement or sensation-looking for. Faber and O'Guinn (1992) discover more elevated amounts of tension, lower levels of self-regard, and different pointers of compulsivity among the 8.1% of their specimen distinguished by their scale as impulsive customers.

Purchasers look for both hedonic and utilitarian reasons online and disconnected from the net, as indicated by Wolfinbarger and Gilly (2001). Online customers may acquire experiential, or hedonic, esteem, through incitement/excitement, energy, and positive influence. They may acquire utilitarian

worth in the event that they are objective centered and get comfort, openness, determination, accessibility of data, and no prerequisite for duty, highlights which are connected with saw usability, opportunity, and control. As more potential customers invest more energy on the web, there is expanding worry about the likelihood of obsessive abundance: mainstream studies found in related sites measure such things as time spent web, dismissing genuine individuals and exercises, saw need to be on the web, and retentiveness about online movement.

The applicable writing on Internet-related impulses, drawn principally from the field of brain science, has not grown adequately to give an obviously explained, predictable photo of this pathology. Youthful (2004) watches that the definition and even presence of Internet fixation are still subject to discussion. Her own examination proposes that not just does such compulsion exist, it can be measured, and she offers a scale for doing as such (Young, 1998). She additionally remarks that PIU has all the earmarks of being most practically identical to enthusiastic betting regarding its implications.

Davis (2001) spotlights on discernments connected with PIU, taking note of the thought that perceptions lead to full of feeling and/or behavioral manifestations is like the thinking behind speculations of despondency. He places that PIU may be either particular (concentrating on a specific conduct that is occupied with all the more effortlessly through the Internet), or summed up (multidimensional abuse of the Internet). Caplan (2002) further creates and tests Davis' scale for summed up PIU, discovering connections between PIU and psychosocial prosperity. Summed up PIU, which would not happen without the Internet, is the sort with which we are concerned in the present examination. Side effects incorporate contemplating the Internet while disconnected from the net, confinement from companions, trouble in halting the movement, and losing view of time passing. These outcomes may be identified with self-regard issues (Hirschman, 1992), and they propose that influenced people utilize the Internet as a departure.

Relating online stream to shopping, purchasing, and PIU considering what we realize from the writing in regards to hedonic quality and impulses, there is plainly a potential for enthusiastic Internet utilization, including shopping. A number of the portrayals of hedonic quality got from shopping are like the wishes satisfied by neurotic utilization of the Internet. In particular, we take note of that such terms as dream, departure from negative emotions, positive influence, fun, liveliness, excitement, uplifted contribution, and joy are generally used to portray the worth got from urgent shopping. These are like reasons given for PIU, which incorporate sensation-looking for and requirement for break or poor self-regard. Therefore, it is conceivable that sites intended to empower stickiness while shopping may additionally advance hedonic worth and compulsivity. Further, e-retailers having such sites may not perform their planned purposes: Wolfenbarger and Gilly (2001, p.51) watch that they may be "neglecting the way that exchange situated clients can assemble binds to an online business over the long haul when they are very much served". Outlining in components to keep customers on the site longer may really conflict with the utilitarian objectives of numerous online purchasers.

A few scientists have tried to analyze Utilitarian and Hedonic Motivations in show. For e.g., Shang et al. (2005) found that apparent value of a shopping site and monetary variables were not as critical as amusement and idealism in foreseeing shopping conduct. Babin et al. (1994) concentrated on utilitarian parts of shopping, and additionally delight. Kim (2006) based on Babin et al. (1994) and Arnold and Reynolds (2003) to investigate hedonic (Adventure, Gratification, Value, Social, and Idea Shopping) and Utilitarian (Achievement and Efficiency) measurements of inspiration in the setting of inward city and non-internal city populaces. Kim's outcomes exhibited that inward city buyers were like non-internal city customers in that both gatherings were roused by utilitarian parts of shopping and quality, yet inward city customers put more accentuation on Hedonic Motivations, to be specific social, amusing encounters that offered a scope of items. HCI exploration has additionally taken a gander at the

concurrence of utilitarian and hedonic parts of frameworks. For e.g., Hassenzahl et al. (2000) shown that clients' assessment of seven product models was subject to both hedonic and ergonomic (utilitarian) observations.

Client experience and inspiration. While inspiration has been examined in the connection of engagement, its study has been limited to inherent and extraneous inspiration. As per Lowry et al. (2008), hedonic frameworks are connected with naturally roused expectations, for example, to have fun, though utilitarian frameworks are utilized for outward purposes, for example, to finish a work assignment. This definition is dangerous in light of the fact that it combines the wellspring of the inspiration (inward versus extraneous to the person) with the coveted result of a movement (to make a buy or to have some good times). It might be best to concentrate on the capacity to finish any undertaking – paying little respect to whether the inspiration is inherent or extraneous to the individual – as an utilitarian part of framework utilization, and the quality included, experiential components of style, intelligence, capacity to inspire positive feelings, for e.g., as qualities of hedonic frameworks (Childers et al., 2001; Fiore et al., 2005). Another trouble with the relationship of inborn/extrinsic inspiration and hedonic/utilitarian advances (Lowry et al., 2008) is that there is such a meeting in the middle of "fun" and "work" frameworks and applications and a scope of individual variables communicated in clients that naming the system as "hedonic" or "utilitarian" are restricting. In any case, hedonic and utilitarian inspirations, which have set up estimation instruments, could be utilized to better comprehend engagement and the intentional and pleasurable inspirations that bring individuals to the interface. Generally, hedonic and utilitarian inspirations and engagement both mean to consolidate the useful and pleasurable into clients' encounters and keep clients inwardly, subjectively, and physically included in the cooperation. Understanding the connections in the middle of inspiration and engagement may be utilized to educate the configuration and assessment procedures of intuitive advantage.

1.3 Impact of Online Consumption

Consequently, the structure of the online environment can serve at any one point so as to both encourage and debilitate route for item data relying on its effect on customer pursuit costs. In a physical retail location setting, purchasers explore for fancied items by recognizing the spatial representations of the store's design and by comprehension the rationale used to compose, to arrange, and to orchestrate stock (Titus and Everett 1995). Shoppers finish this by perceiving how items are bunched by their normal qualities (e.g., paper things, or equipment) or through introduction helps, for example, passageway markers, and registry maps or through addressing in store staff (Titus and Everett 1995). Past exploration has exhibited that the navigational capacities of people in physical stores are upgraded by improved floor arranges (Weisman 1981) and the vicinity of a "grid type" pathway design (Evans et al. 1984). Use of these prompts is encouraged by the relative institutionalization of store formats, even crosswise over contenders, and by the dependability of the physical store designs over the long haul. By correlation, the capacity to explore a retail situation turns out to be even more basic when one considers the dynamic way of the web. Case in point, not at all like a retail store with this educated and perceptible visual design, sites for the most part take after "interior patterns" which are not known from the earlier by the customer (e.g., a landing page may be taken after by a changing design of non-standardized subpages). Consequently, every site speaks to a remarkable navigational experience that is always being upgraded and reconfigured in this element electronic environment. Subsequently, alongside a yearning for more noteworthy navigational opportunity must come up with a more noteworthy resilience for confusion, since a shopper is frequently exploring through uncharted domain. It is consequently expected that persons who have this more noteworthy craving for decision through substitute types of route will see the procedure of shopping or the simplicity of utilizing these intelligent

media as more great. Another advantage anticipated that would impact the selection of online situations is discernments of comfort as showed by the chance to shop at home 24 hr. /7 days a week (Hofacker 2001). In this time crunched environment of today with numerous worker families, a "man living in Florida can shop at Harod's in London (through the web) in less time than it takes to visit the neighborhood Burdines retail chain" (Alba et al. 1997, p. 41, accentuation included). Since buyers once in a while visit numerous physical retail locations before buy (Newman and Staelin 1972), intuitive shopping can bring down the expenses of securing pre-purchase item data while in the meantime build pursuit advantages by giving a more extensive exhibit of item options at a little incremental expense (Bakos 1991). These advantages in the lessening of pursuit expenses collect especially when the buyer is under time weight (Beatty and Smith 1987) making the availability point of interest of intelligent shopping particularly worthwhile to customers.

1.4 Our Quantitative Analyses:

We were able to obtain following goals: (1) the pragmatic findings of the element of 10 dimensions of motivation that was followed by the specified literature review; (2) the use of the multiple item scales for analyzing each item in each case, showed the relationship between each item with their corresponding dimension, also including the analysis of consistency with the remaining items that lied in the corresponding scale. The quantitative study was divided by us in two phases one being the methodological aspects of the field work and other the exploratory factor analysis

2. Methodology

2.1 Sample

The respondents that we chose were on the basis of the fact that they were all regular internet users whether they used internet for online shopping or not. Sample has been derived from sources like University, College and offices (private usually). Though this kind of sample may not completely represent the entire percentage of internet users but it was found quite productive and validity was high. We conducted the survey around the months of November and December of 2016 at several university schools in the city of Lahore (Pakistan). No of questionnaires we conducted were 150. No of total questionnaires were 150. We took ages ranging from less than 25 to 45 years plus. Note that these ages scale range was same for all the respondents. Nominal scale for gender was taken that showed that approximately 34.7% were male and 64.7% were females.

2.2 Questionnaire

We based our questionnaire on the information that we have presented in Appendix A that is dependent on a scale involving various items analogous with the utilitarian motivations which was originally taken into account, we initially attended. Dimensions and scales in the qualitative juncture were also distilled. We used the 5 –point likert-type scales. (1.Strongly agree to 5.Strongly disagree). One might notice diversity in the item's scale that forms an assessment for every single dimension. This took place because of the actual scale considering different number of items.

We allowed the survey to be self-executed in papery form. The authors themselves supervised its preparation, along with assistance from other scholars who collaborated in this phase of the study.

3. Data Analysis

To test the reliability measures and potency we gauged Cronbach's alpha by using SPSS 16 for every single constituent and performed a confirmatory factor analyses. We also deduced some fractions of factor analysis that were possible (Claus-Peter H. Ernst, Jella Pfeiffer, Franz Rothlauf). We utilized

test of Cronbach's and the significance value of alpha was 0.918 for all 10 number of constituents. Which was a great result for our confidence in the data? Table 1 shows the tabular evidence

Table 1: Reliability Statistics

Cronbach's Alpha	N of Items
.918	10

All items loaded high (more than .720) and significant ($p < .01$) on their parent factor; Table 2 presents the precise summary of the mean and standard deviation. Hence, our measurement model is well-specified since it meets all desirable reliability, convergent/discriminant validity, and model fit thresholds (Hair et al., 2009).

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
D1	150	1	5	2.25	.969
D2	150	1	5	2.71	1.012
A1	150	1	5	2.67	.988
A2	150	1	5	2.69	1.042
C1	150	1	5	2.87	1.041
C2	150	1	5	2.78	1.067
AS1	150	1	5	2.80	1.081
AS2	150	1	5	2.71	1.045
E1	150	1	5	2.91	.958
E2	150	1	5	2.76	1.047
AV1	150	1	5	2.73	1.061
AV2	150	1	5	2.75	1.010
AD1	150	1	5	2.77	1.071
AD2	150	1	5	2.69	1.016
P1	150	1	5	2.79	.999
P2	150	1	5	2.83	.958
AB1	150	1	5	2.70	1.110
AB2	150	1	5	2.73	1.041
AN1	150	1	5	2.61	1.067
AN2	150	1	5	2.83	1.064
Valid N (list wise)	150				

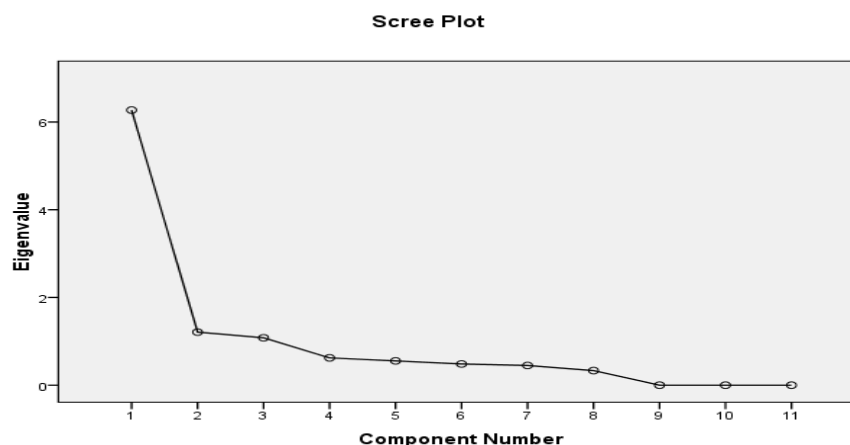
We also deduced results from one-sample T- test and to our expectations the results were positive as

well as per given evidence below in Table 3.

Table 3: One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error
autonomy	150	2.6800	.82389	.06727
desire for control	150	2.4800	.80660	.06586
convenience	150	2.8233	.89017	.07268
assortment	150	2.7567	.90624	.07399
economy	150	2.8333	.82468	.06733
payment service	150	2.8133	.79964	.06529
absence of social interaction	150	2.7167	.95083	.07764
adaptability	150	2.7400	.89503	.07308
availability of information	150	2.7400	.89503	.07308
anonymity	150	2.7400	.89503	.07308

. Taking into account some of the deficiencies observed – for example, the distribution of data (a non-normal distribution), as well as the type of data (rating scales) – the use of a polychoric correlation matrix is advised. These model conditions, along with the sample size (i.e. large, within a structural equation modeling context), imply the application of the robust weighted least squares estimation method, recommended as the most adequate method for dealing with these shortcomings and for providing proper solutions (see [Martínez López et al. 2013](#)). A clear image can be seen through the Table 4. That is attached with the appendix due to lack of space. Another phase for the factor analysis showing the screen plot of our variables is as under.



We can clearly see the great variations between the initial two variables. We also computed adjusted R square and Standard Error Estimate followed by the ANOVA table. Both are shown as under

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.713 ^a	.508	.480	.67655

a. Predictors: (Constant), adaptability, economy, desire for control, assortment, autonomy, convenience, payment service, absence of social interaction

Table 5: ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	66.701	8	8.338	18.215	.000 ^a
	Residual	64.539	141	.458		
	Total	131.240	149			

a. Predictors: (Constant), adaptability, economy, desire for control, assortment, autonomy, convenience, payment service, absence of social interaction

b. Dependent Variable: utility motivation for online consumption

Coefficients along with their corresponding variables were also computed by us. Table 6.

Table 6: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.119	.254		.469	.640
	autonomy	-.011	.087	-.010	-.126	.900
	desire for control	.165	.089	.142	1.863	.064
	convenience	-.079	.084	-.075	-.933	.352
	assortment	.145	.081	.140	1.795	.075
	economy	.107	.086	.094	1.245	.215
	payment service	.192	.098	.164	1.956	.052
	absence of social interaction	.339	.087	.343	3.896	.000
	adaptability	.101	.088	.097	1.155	.250

a. Dependent Variable: utility motivation for online consumption

Not to mention the excluded variables that goes without saying that their appearance was as important as any.

Table 7: Excluded Variables

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	anonymity	. ^a	.	.	.	.000
	availability of information	. ^a	.	.	.	.000

a. Predictors in the Model: (Constant), adaptability, economy, desire for control, assortment, autonomy, convenience, payment service, absence of social interaction

b. Dependent Variable: utility motivation for online consumption

Npar tests including the CHI square frequencies that we deduced, their summaries are given in the Table 8.

Table 8: Test Statistics

	autono my	desire for control	conven ience	assortme nt	econom y	payme nt servic e	absenc e of social interact ion	anony mity	availabilit y of informati on	adaptabil ity	utility motivation for online consumpti on
Chi-Square	62.160 ^a	65.680 ^a	39.653 ^a	32.293 ^a	84.480 ^b	54.800 ^a	45.120 ^b	34.320 ^a	34.320 ^a	34.320 ^a	47.640 ^b
df	7	7	7	7	8	7	8	7	7	7	8
Asymp. Sig.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 18.8.

b. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 16.7.

4. Conclusion

This study has carried an approach to, and very thorough and complete proposal for, the dimensional structure of the utilitarian motivations in online consumption. The final result is a validated structure of nine dimensions and their respective measurement scales. These are, in order of importance and according to the intensity of their underlying relationship to a utilitarian meta-motivation created using a second-order construct: assortment, economy, and convenience, availability of information, adaptability/customization, and desire for control, payment services, anonymity, and absence of social interaction.

This study was conducted out by method of literature review which gave us right to make it ready a very thorough and complete beginning proposal of 11 utilitarian motivations in online consumption.

This is an original help to make it successful of this investigation. Furthermore, it was organized and carried out from the thinking of general concept of online consumption. Next step was, we made a qualitative investigation carried out in two stages (an initial phase involving two focus groups with Internet users, followed by a second phase of interviews with experts) to define the dimensions considered and their relating or belonging measurement scale. We came at 10 utilitarian dimensions and 49 items. Finally, exploratory and confirmatory quantitative analysis of the dimension we concluded 9 utilitarian motivation and 36 items.

Implications for practitioners:

The significant and variety of utilitarian motivation in the activity of online consumption need that companies specially those selling online and e-vendors keep them in mind while designing websites. We present some practical implications and reflections for the identified utilitarian motivations.

- **Assortment**

Companies should give their customers with proper amount of products and services in response to their searches. Higher amount can be annoying. Furthermore, firms should prevent having the customer spend too much time on browsing among the assortment. To fulfill this firm can facilitate the search for that product which more attracts the customers.

- **Economy**

To promote this motivation, it is suggested to have competition among prices and offer detailed, concrete product promotions which may attract the attention of the consumer to the website. Some business companies provide discount coupons

These companies give discount of up to 70% on their products. The function behind this coupon is simple they simply achieve the attraction of the customers.

The other website makes comparison between online consumption shopping known as shopping robots or shoots.

- **Convenience**

Online consumption is providing convenience to their consumers, now it is not necessary to visit the store physically for shopping. E- Vendors are providing convenience through mobile websites too. Here, it would be interesting to allow consumers to add to their shopping cart from these devices so that they do not have to necessarily be in front of the computer to start, continue or finish their purchase. Customers take picture of product, barcode and application and show it to retailer which give him or her accurate or real time price information.

- **Availability of information**

Online consumers can not physically touch the product; they make decisions based on information provided by the online stores. Companies should have their own commercial websites, access to product information which may be of interest to consumers. For this purpose we suggest that companies should manage the information by itself with user's commentaries or evaluations regarding the products. Furthermore, availability of information refers not only to the information about the product or service, but also to the ease of access the consumer has to the information of interest.

- **Adaptability/customization**

Companies should provide a feature of customization which allows the customers to personalize the product they want to purchase. The idea is that the consumer can configure items and obtain a customized and more exclusive product which meets his or her tastes and needs. The American company Dell provides this facility to their customers to purchase the laptop of their own wants and needs. Companies should also provide applications on websites which allows the customers to customize the products via mobile devices. However, they are some situations which make it difficult for the companies to provide the option of customization. One situation is that customers itself doesn't

known what actually they want? On the other hand, the online process surrounding the personalization of a product can sometimes be overwhelming and discouraging.

- **Desire for control**

In order to offer consumers greater control over browsing, it is recommended that businesses equip their commercial websites with usability, in a way which permits consumers to perceive the freedom to comfortably browse the different pages of the website.

- **Payment services**

We offer different mode or methods of payment to the customer like (e.g. COD, bank transfer, credit card, Pay-Pal, etc.) according to their desire need. Currently, one of the most necessary applications to which payment companies such as PayPal are dedicating resources and research and development, are payment systems via mobile devices. Square wallet is noteworthy now a day which allows credit and debit cards to be linked to the telephone. Payment via mobile also helps to locate the location of the customers. Starbuck Company has started using this mode of payment recently in some 7000 stores as a way to improve their customers' payment experience.

- **Anonymity**

It is suggested that some consumers able to express themselves even without identify themselves. For this purpose companies should allow the customers to use chat rooms, forums and other places found on electronic platform without reveal her or his identity. Through this way consumer can protect her or his privacy. Other than the payment in which identification of the customer is necessary, consumers want to maintain their anonymity in the step previous to the purchase process. For example, eBay is aware of this type of sought-after benefit. They allow consumers to navigate and browse all the products without having to identify themselves until the moment of making a purchase, bidding or adding a product to their shopping cart. They give an option in which consumer does not necessarily need to log-in, instead of use a guest account.

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