

## **A PRINCIPAL COMPONENT ANALYSIS ON ELEMENTS OF THE E-IMAGE MODEL: TOWARDS BETTER LEVERAGING OF INTERNET MARKETING IN GHANA**

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**ABSTRACT:** *The purpose of this study was to identify elements of the e-image model that influence Ghanaians to patronise products or services online or that make them yield to online marketing information. In this study, a standard questionnaire was used to collect data from 250 internet market (i.e. e-market) users in Ghana. Principal Component Analysis was used to analyse data. Five components were found to constitute all the elements of the e-image model in a Ghanaian context. The five components retrieved composed of all factors in the e-image model, with a variance of 95% explained. The experience component was merged to the feedback and reputation component, which explained the highest variance of 38.6%. Information content, website characteristics, security and others are the other components in the e-image model that were confirmed in a Ghanaian context without any change.*

**KEYWORDS:** Marketing, Internet Marketing, E-Markets, E-Image, E-Business, E-Market Users

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### **INTRODUCTION**

In recent years, electronic marketplaces (i.e. e-markets) have become fertile grounds for building brands and prompting the growth of electronic businesses (i.e. e-businesses). An e-business is a profit-oriented organisation that implements its marketing activities, and sometimes other management operations, in a virtual environment, precisely the internet (Gregg & Walczak, 2009). An e-market, on the other hand, is a virtual market place that exists on the internet (Gregg & Walczak, 2009; Jusoh & Ling, 2012). Relative to businesses which use e-markets on limited scale, electronic businesses have leveraged the e-market places better in view of the nature of their bands and operations. E-businesses employ e-markets at a larger extent because the promotion of their brands and sales occur within the internet (Katawetawaraks & Wang, 2011; Jusoh & Ling, 2012), unlike other businesses which either use the internet on a small scale or do not use it at all (Jusoh & Ling, 2012). Empirical studies show that e-businesses make, if not all, a greater part of their sales online (Mofrad, Nikfar, Heshmat, 2013; Gregg & Walczak, 2009).

Logically therefore, the growth and financial performance of e-businesses depend largely on using e-market places.

In view of the need to widen the scope of their markets and to reach customers with ease, many businesses have taken on e-business statuses or have improved the extent to which they use the internet or e-markets (Kiang, Raghu & Shang, 2000). This situation is also attributable to the fact that internet-accessing devices such as i-phones, i-pads, computers and the like have proliferated in the face of improved quality, access and affordability of internet services. The passing of time is therefore increasing the extent of adoption of the internet and e-markets by businesses in the light of internet marketing (Nayyar & Gupta, 2011), which constitutes one of the major tools of marketing communication (Ekhlassi, Maghsoodi & Mehrmanesh, 2012). In view of this development, there is the need for businesses to know factors that influence the decisions of users of e-markets.

As to whether e-market users would purchase a product or be persuaded positively by the information enshrined in an e-market depends on the nature of the image they make based on electronic signals (i.e. e-signals) embedded in the e-market place (Gregg & Walczak, 2009; Jusoh & Ling, 2012). The image (which causes an e-market user to purchase a product or makes him yield to information in the e-market place) an e-market user makes based on electronic signals in the e-market place is referred to as *positive e-image* (Gregg & Walczak, 2009). Research has identified various factors or e-signals that influence e-market users' e-image (Gregg & Walczak, 2009). However, these factors have been identified in part or in incomplete clusters in the light of the Technology Acceptance Model (TAM) (Svatošová, 2013; Gregg & Walczak, 2009). Similarly, excessive attention has been focused by researchers on factors directly controlled by a business or e-business. However, apart from these factors, various other e-signals may influence an e-market user's e-image. A typical example of one electronic mechanism that may not be directly under the control of the e-business and which influences e-market users' perceptions to generate trust online is a reputation scoring system (Gregg & Walczak, 2009). This system allows e-market users to rate transactions with e-businesses, creating a history for them.

The few researches that go beyond website components directly controlled by a business or e-business to find other factors that influence e-image of e-market users were not acceptably conclusive in the sense that they could not embrace some other relevant factors (Akuffo-Twum, 2011; Gregg & Walczak, 2009). Gregg & Walczak (2009) were able to provide an acceptably holistic picture of the situation based on the e-image model. However, the scope of their study does not reflect on developing countries, including Ghana, where e-businesses are now at their budding stage and where many businesses are now striving to make the best of internet marketing as a communication tool (Quarshie & Ami-Narh, 2012; Osei-Bonsu, 2000). Moreover, researches that identify the influence of all e-signals or factors on e-market users' e-image are generally lacking (Jusoh & Ling, 2012; Gregg & Walczak, 2009).

The use of e-markets and internet marketing by businesses in Ghana is on the ascendency (Quarshie & Ami-Narh, 2012; Akuffo-Twum, 2011). Relative to the last two decades, many businesses, especially small and medium-size enterprises (SMEs) did not have access to e-markets (Quarshie & Ami-Narh, 2012; Osei-Bonsu, 2000); neither did they have customised websites where they could disseminate information to customers and the general public (Quarshie & Ami-Narh, 2012). Currently, nonetheless, a considerable number of Ghanaian businesses have access to either independent e-market places (e.g. [businessghana.com](http://businessghana.com), [tonatone.com](http://tonatone.com), [adepafie.com](http://adepafie.com) and [checkighana.com](http://checkighana.com)) or customised websites (Quarshie & Ami-Narh, 2012; Akuffo-Twum, 2011). Unfortunately, the use of e-markets and customised business websites is not driven by knowledge about the factors that influence the e-image of e-market users (Quarshie & Ami-Narh, 2012; Akuffo-Twum, 2011). It is therefore very likely that e-markets are being partially savoured in Ghana by businesses, since knowledge of these factors and their consideration in planning and designing e-markets drives the positive e-image of e-market users.

The e-image model houses the major factors that influence the e-image of e-market users; hence its conceptualisation in a Ghanaian context would create a conspicuous picture of how e-markets and customised business websites can be well savoured in Ghana. This paper therefore seeks to use Principal Component Analysis (PCA) to conceptualise the e-image model to determine a special framework of factors that should be considered in planning and building e-markets and websites by businesses and individuals in Ghana.

### **Research Objective**

This paper seeks to create a special framework of factors that influence e-market users' or customers' positive e-image, which forms a basis of the productivity of e-markets or internet marketing to businesses. This paper seeks to create a special version of the conceptualisation of the e-image model in a Ghanaian context, for which Ghanaian business would better build and use customised websites and e-markets.

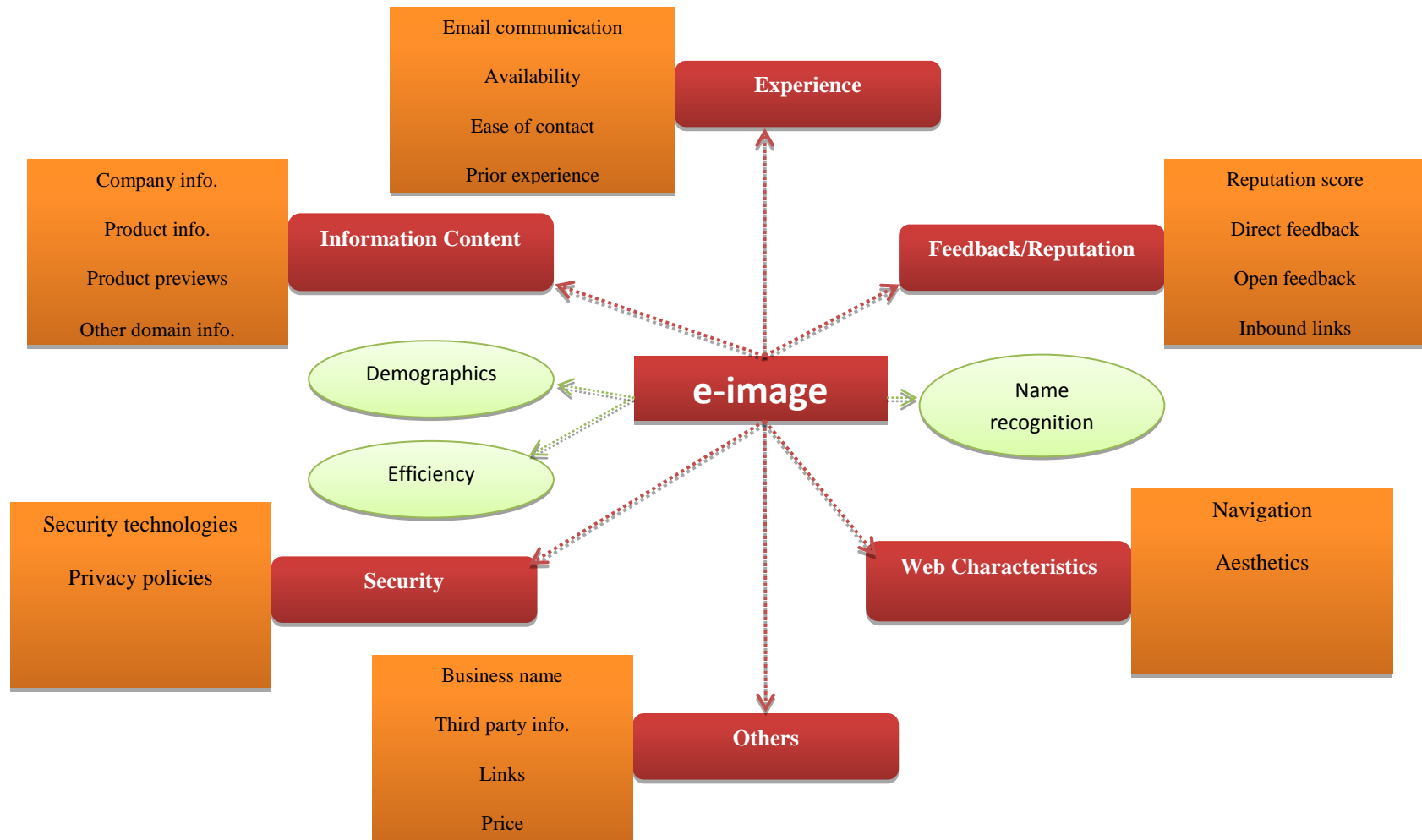
### **REVIEW OF LITERATURE**

Gregg & Walczak (2009) quoted Govers, Go & Kumar (2007) by stating that an image is as good as reality in internet marketing. This is because images, in the context of internet marketing, represent what is real. However, the extent to which an image represents reality depends on how customers or end-users of an e-market translate signals into images (Gregg & Walczak, 2009). These signals form a spectrum of factors on which businesses may or may not have control. Moreover, these signals are so numerous that they are better understood at the stage of planning and designing e-markets or websites by businesses when they are categorised to reflect homogeneity in each category (Li & Zhang, 2003; Gregg & Walczak, 2008). This reasoning is behind the e-image model, which is a conceptualisation of factors that influence e-market users' e-image and their persuasion by information enshrined in an e-marketplace or website.

The e-image model is composed of six (6) components of factors (Gregg & Walczak, 2009). These categories are (Gregg & Walczak, 2009, p. 20): (1) information content; (2) security; (3) website characteristics; (4) feedback and reputation; (5) experience; and (6) other attributes of information in an e-market. The first category, **information content**, consists of accurate product information, company information, clarity of information, access to information, dynamic data, product diagnosticity, photo of product(s), other domain information and search capability (Gregg & Walczak, 2009; Fritz, 2007; Gregg & Walczak, 2008). The second component, **security**, consists of security mechanisms and clear privacy policy (Gregg & Walczak, 2009), where general webpage design, navigation, availability and reliability, usability and personalisation or social presence make up the underlying elements of the third component, **website characteristics** (Gregg & Walczak, 2009). The fourth component, **feedback and reputation**, is made up of brand or company name recognition, reputation ranking system, a direct feedback mechanism, an open review mechanism, rapid response to email queries, credibility and prior experience or reputation (Gregg & Walczak, 2009). **Experience**, the fifth component is made up of email communication, availability and ease of contact and prior experience (Fritz, 2007; Gregg & Walczak, 2008). The sixth component, **others**, is made up of appropriate price, perceived vendor integrity or perceived company competence, efficiency, online company name, and availability of multiple products or shopping cart (Gregg & Walczak, 2009). These components and their elements constitute features of the e-market that drive e-image based on signals they convey to e-market users (Fritz, 2007). Figure 1 is a conceptualisation of the e-image model.

By close observation of empirical studies, these components of electronic signal factors significantly impact end-users' e-image. In the studies of Gregg & Walczak in the years 2008 and 2009, the e-image model was confirmed in a developed country context. Moreover, the e-image model has been empirically supported, at least in part, by Katawetawarakas & Wang, (2011), Banerjee & Banerjee, (2012), Chiang & Dholakia, (2003)), Aghdaie, Paraman, & Fathi (2011), Constantinides, (2004) and Jusoh & Ling (2012) in both developing and developed country contexts. It is therefore expected that the e-image model would be supported by this study in a Ghanaian (developing country) context.

**Figure - 1: The e-image Model**



Source: Adjusted from Gregg & Walczak (2009)

Elements of the components of the e-image model constitute electronic signal factors that drive end-users' e-image and perceptions. It is based on the Signalling Theory, which states that in information asymmetric environments, hidden knowledge of quality, and other features of a business, may be conveyed through purposeful signals by the business (Spence, 1973; Rao, Qu & Ruekert, 1999). Though the e-image model is based on existing research, it is necessary to determine if all its factors have a significant impact on e-market users' e-image of e-adverts, e-sales and other internet information disseminated by businesses in Ghana, and to identify what factors are deemed most important when Ghanaians surf the internet for information or to make purchases.

Therefore, the goal of this study is to find out if these components and their factors significantly influence decisions of e-market users in Ghana to purchase products online or to yield to e-adverts and other forms of e-information. The e-image model provides a guiding framework that is expected to be confirmed or reviewed in a Ghanaian context. However, this study would not touch on socio-cultural and demographic factors that may influence the e-image of e-market users. To ensure that there is sufficient clarity in results and conclusions, the researchers intend to embark on a special empirical study in which these socio-cultural and demographic factors are considered based on findings of this study.

### **Hypothesis**

Based on the empirical evidences that back the e-image model, the following alternative hypothesis is tested in this study:

**H<sub>1</sub>:** All factors of the e-image model significantly influence e-market users' e-image in a Ghanaian context.

### **METHODOLOGY**

A self-administered questionnaire was used to assess what information respondents consider important when making a variety of decisions about businesses and purchases online. Gregg & Walczak's (2009) survey instrument was adapted and used in this study. In the questionnaire, respondents were asked to specify the importance of each e-image factor using a 7-point Likert scale (Please see Appendix A). Questionnaire administration was carried out in February 2014 to customers of [businessghana.com](http://businessghana.com), [tonatone.com](http://tonatone.com) and [ckeckigh.com](http://ckeckigh.com) who were contacted in a convenience sampling approach. This sampling method was used because customers of [businessghana.com](http://businessghana.com), [tonatone.com](http://tonatone.com) and [checkighana.com](http://checkighana.com) were widely dispersed in Ghana and could therefore not be contacted within the limited time and financial resources available. The researchers therefore chose customers who were reachable and were readily willing to respond. Meanwhile, the researchers ensured that customers contacted were those who had ample experience with using [businessghana.com](http://businessghana.com), [tonatone.com](http://tonatone.com) or [checkigh.com](http://checkigh.com).

Out of 250 questionnaires administered, 233 were completed and collected back from respondents. Thus there was an encouraging response rate of 93% in this study. The average age

of respondents was about 34 years, with about 67% of them being self-employed. About 56% of all respondents used the e-market on daily basis, while the remaining proportion of respondents used e-markets, at least, once in a week but not on daily basis.

The Statistical Package for Social Sciences (SPSS) was used to analyse data. Data was analysed using the Principal Component Analysis (PCA) in view of the need to demarcate manifest variables and the assumption that data obtained in this study were normally distributed. The Shapiro-Wilk's test was used to test data for normality, in which all manifest variables were found to be normally distributed at 5% significance level ( $p > .05$ ). A reliability test using Chronbach's alpha gave rise to a high reliability coefficient of .83. Findings of the normality and reliability tests formed a basis for making valid conclusions in this study.

## FINDINGS AND ANALYSIS

In this part of this paper, findings are presented with respect to the alternative hypothesis stated. This hypothesis states that all factors of the e-image model significantly influence the e-image of e-market users in Ghanaian context. This hypothesis is tested at 5% significance level using Principal Component Analysis. The following tables are associated with testing this hypothesis.

**Table 1: KMO and Bartlett's Test & Anti-image Correlations**

KMO and Bartlett's Test	KMO Measure of Sampling Adequacy		.896
	Bartlett's Test of Sphericity	Approx. Chi-Square	905.21
		Sig.	.000
Anti-Image Correlations	Accurate product information		.891
	Company information		.783
	Clear explanations		.903
	Quality of information		.873
	Access to information		.706
	Dynamic data		.899
	Product diagnosticity		.832
	Photo or image of product		.921
	Other domain information		.983
	Search capability		.943
	Security mechanisms		.891
	Clear privacy policy		.933
	General webpage design		.877
	Navigation		.893



Availability/reliability	.900
Usability	.943
Personalization or social presence	.799
Brand/company name recognition	.809
Reputation ranking system	.845
Feedback mechanism (direct)	.709
Review mechanism (open)	.899
Rapid response to email queries	.932
Credibility	.954
Prior experience/reputation	.922
Appropriate price	.903
Perceived vendor integrity	.956
Efficient	.865
Online company name/username	.873
Availability of multiple products/	.911

Table 1 shows statistics of two tests that are used to verify if the PCA employed in testing the hypothesis was valid based on data used. The two main tests in the table are the KMO and Bartlett's Tests, which are coupled with anti-image correlations. From the table, the KMO measure of sampling adequacy is high (.896) in the light of a high significance of the Bartlett's test of sphericity ( $X^2 = 905.21$ ,  $p = .000$ ). Moreover, the anti-image correlations of all manifest variables are high, with the least anti-image correlation being more than .700, which mostly serve as a lower cut-off value for valid PCAs.

The significance of the Bartlett's test of sphericity, the high value of the KMO measure of sampling adequacy and the high strength of the anti-image correlations are usually reflections from very high correlations among manifest variables. PCAs are generally valid with high correlations among manifest variables. It is therefore evident that a valid PCA was employed in this study.



**Table 2: Communalities**

	Initial	Extraction
Accurate product information	1	.947
Company information	1	.970
Clear explanations	1	.921
Quality of information	1	.993
Access to information	1	.981
Dynamic data	1	.967
Product diagnosticity	1	.895
Photo or image of product	1	.928
Other domain information	1	.915
Search capability	1	.785
Security mechanisms	1	.882
Clear privacy policy	1	.919
General webpage design	1	.996
Navigation	1	.955
Availability/reliability	1	.975
Usability	1	.969
Personalization or social presence	1	.981
Brand/company name recognition	1	.979
Reputation ranking system	1	.979
Feedback mechanism (direct)	1	.972
Review mechanism (open)	1	.985
Rapid response to email queries	1	.937
Credibility	1	.913
Prior experience/reputation	1	.948
Appropriate price	1	.874
Perceived vendor integrity	1	.998
Efficient	1	.998
Online company name/username	1	.998
Availability of multiple products/	1	.998

Table 2 shows the communalities of all manifest variables included in the PCA. An extraction value ranges from 0 to 1 (as in the case of correlation coefficients), and it is expected to be high (i.e. at least .50) if a variable is to be retained in the PCA as part of a component or latent variable. From the table, the communality of each manifest variable is very high, indicating that each of them makes significant influence on e-market users' e-image. Thus none of the manifest variables ought to be removed from Table 2. At this stage, the number of components retrieved

and the variances explained by them are not known. The next table comes with the variances explained by the components or latent variables.

**Table 3: Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.206	38.641	38.641	11.206	38.641	38.641	7.449	25.685	25.685
2	8.139	28.065	66.706	8.139	28.065	66.706	5.828	20.098	45.783
3	4.142	14.281	80.987	4.142	14.281	80.987	5.562	19.181	64.963
4	2.746	9.470	90.457	2.746	9.470	90.457	5.261	18.142	83.105
5	1.324	4.567	95.024	1.324	4.567	95.024	3.456	11.919	95.024

Extraction Method: Principal Component Analysis.

Table 3 shows variances explained by the components retrieved. From the table, 5 components are retrieved as shown in the extreme left column of the table. The first component accounts for about 38.6% of variance. The variance explained could be a measure of the degree of influence a component makes on the e-image of e-market users in Ghana. The second component accounts for a variance of about 28.1%; the third component explains about 14.3% of variance; the fourth component accounts for about 9.5% of variance; and the fifth component accounts for about 4.6% of variance. The five components (i.e. all the manifest variables in Table 2) account for about 95% of variance, an indication of a strong influence made by the five components on the e-image of e-market users in Ghana. What is not known at this stage, however, is what manifest variables constitute each component extracted. The rotated component matrix in Table 4 provides information about this.

**Table 4: Rotated Component Matrix<sup>a</sup>**

	Component				
	1	2	3	4	5
Accurate product information	.237	.918	.022	.145	.166
Company information	.305	.843	-.037	.405	.036
Clear explanations	.069	.852	-.063	.418	.106
Quality of information	-.186	.822	-.057	.501	-.169
Access to information	.491	.761	.037	.285	.279
Dynamic data	.635	.640	.096	.294	.242
Product diagnosticity	.824	.405	.110	-.026	-.200

Photo or image of product	.322	.690	-.361	.378	.272
Other domain information	-.231	.501	-.547	.250	.499
Search capability	.367	.646	-.428	.029	.067
Security mechanisms	.083	.131	-.013	.163	.912
Clear privacy policy	.209	.263	.168	.087	.878
General webpage design	-.256	.220	-.138	.925	.086
Navigation	-.140	.277	-.286	.880	.058
Availability/reliability	.086	.376	-.337	.833	.135
Usability	.041	.415	-.296	.816	.205
Personalization or social presence	-.114	.379	-.098	.887	.168
Brand/company name recognition	.945	.096	-.169	-.167	.142
Reputation ranking system	.945	.096	-.169	-.167	.142
Feedback mechanism (direct)	.964	.124	-.045	-.041	.154
Review mechanism (open)	.959	.194	.107	.027	.122
Rapid response to email queries	.930	-.021	.246	.013	.107
Credibility	.797	-.054	.314	-.124	-.401
Prior experience/reputation	.550	.349	.100	-.237	-.676
Appropriate price	.225	.290	.802	.274	.146
Perceived vendor integrity	.016	-.075	.961	-.255	-.051
Efficient	.016	-.075	.961	-.255	-.051
Online company name/username	.016	-.075	.961	-.255	-.051
Availability of multiple products	.016	-.075	.961	-.255	-.051

a. Rotation converged in 6 iterations.

Table 4 shows the rotated component matrix alongside all manifest variables retained. To locate constituents of a component, one looks down the column that makes up each component to locate a cluster of high values called *factor loadings*, for that column. In each column, these values are highlighted. The manifest variables that correspond to factor loadings highlighted are the constituent elements of the component concerned. The first component in the table is made up of personalization or social presence; brand/company name recognition; reputation ranking system; feedback mechanism (direct); review mechanism (open; rapid response to email queries; and credibility. With reference to Table 3, this component explains the highest variance of 38.6%. Figure 2 gives a pictorial detail about components extracted and the variances contributed by them.

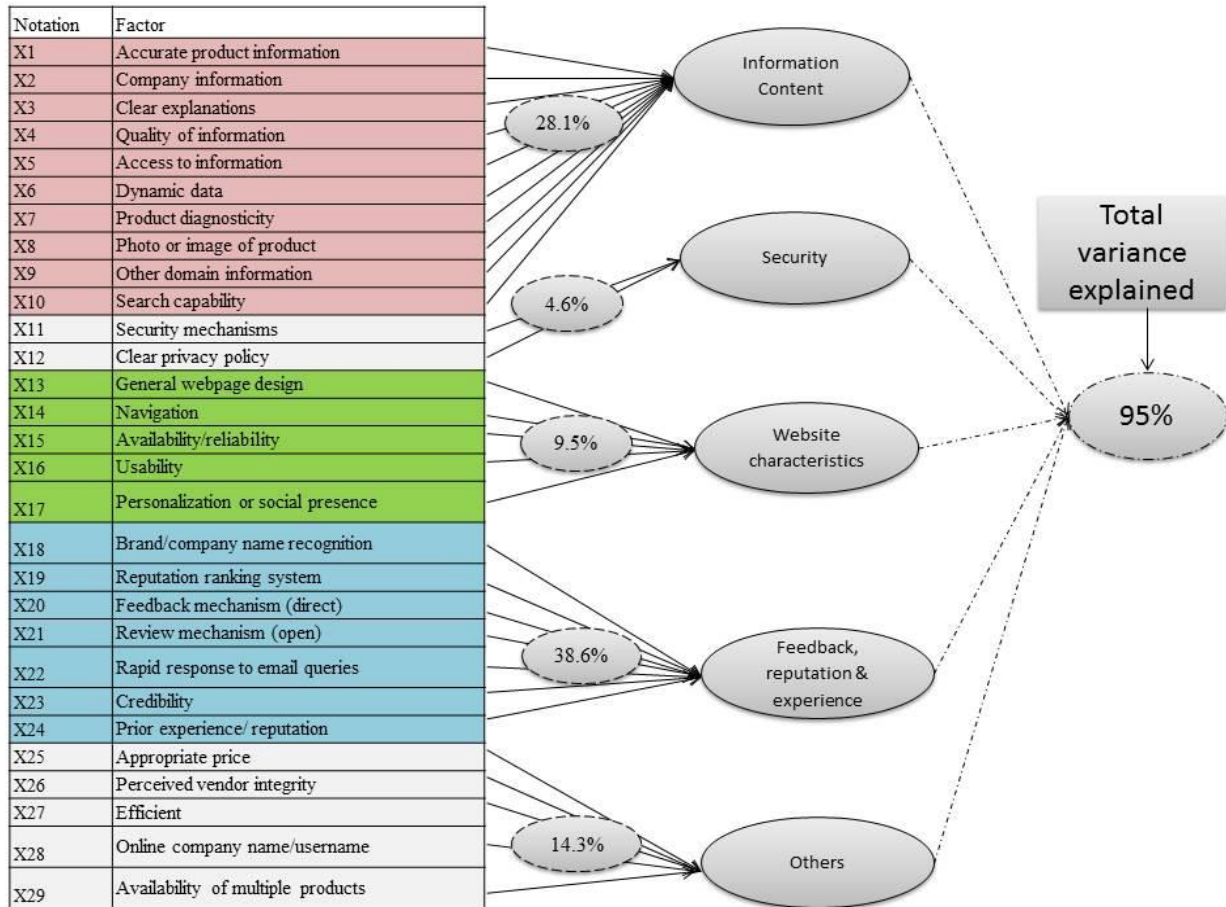
**Figure - 2: Conceptualisation of Components Retrieved**

Figure 2 shows the components extracted and their constituent elements. The first component has to do with *feedback, reputation and experience* (Please refer to Figure 1 and reviewed literature), which is composed of personalization or social presence; brand/company name recognition; reputation ranking system; feedback mechanism (direct); review mechanism; rapid response to email queries; and credibility. This means that the *experience* component is merged to the *feedback and reputation* component to make a single component in a Ghanaian context. Accurate product information; company information; clear explanations; quality of information; access to information; dynamic data; product diagnosticity; photo or image of product; other domain information; and search capability are the constituent elements of the second component, *information content*, which accounts for a variance of 28.1%. The third component, *others*, is composed of appropriate price; perceived vendor integrity; efficiency; online company name/username; and availability of multiple products, and this accounts for 14.3% of variance. The fourth component, *website characteristics*, consists of general webpage design; navigation; availability/reliability; usability; and personalization or social presence. This component accounts for 9.5% of variance, while the fifth component, *security* (composed of security

mechanisms and clear privacy policy), accounts for about 4.6% of variance. The overall variance contributed is 95%.

In view of the variances explained by the components, *feedback, reputation and experience*, make the highest influence on end-users' e-image in a Ghanaian context. This is possibly because the *experience* component, made up of email communication, availability, ease of contact and prior experience, is engulfed by *feedback and reputation*. If *experience* should be separated from *feedback and reputation*, it is likely that *information content* would contribute the highest influence on the e-image of e-market users in Ghana. Obviously, the e-image model is confirmed in a Ghanaian context, though *experience* is merged to *feedback and reputation*. Since the expectation of the researchers is retention of all factors of the e-image model, the alternative hypothesis is accepted. Thus all factors of the e-image model significantly influence the e-image of e-market users in Ghanaian context.

## DISCUSSION

According to the finding of this study, elements of the e-image model largely influence Ghanaians to patronise products or services online or to yield to online marketing information. This general finding builds up to the broad spectrum of related findings that can be placed in two categories. The first has to do with the studies of Gregg & Walczak, (2009), which provides a full examination of the elements of the e-image model in a developed country context. In harmony to this study, their study confirmed the e-image model with all the six components (i.e. *feedback, reputation, experience, information content, website characteristics, security and others*) retained. Based on the statistical tools they adopted in data analysis, however, there was no information about how much variance each component explained on positive e-image. The empirical studies of Gregg and Walczak published in 2008 and 2009 are the only identifiable researches that examined the e-image model in whole. Other researches such as those of Katawetawaraks & Wang, (2011), Banerjee & Banerjee, (2012), Chiang & Dholakia, (2003)), Aghdaie, Paraman, & Fathi (2011), Constantinides, (2004) and Jusoh & Ling (2012) examined the e-image model in part. This means that none of these studies examined all the six components of the e-image model. Collectively however, their findings confirm the e-image model and constitute the second category of this study's related finding. This implies that this study's finding is likewise supported by their collective finding.

A section of findings of this study is unique to Ghana. The first example of such findings is the result that elements of the model explained 95% of variance, which is a high measure of the influence made by elements of the e-image model on e-market users in Ghana. This finding is an indication of how relevant the e-image model is to planning and developing e-markets for Ghanaians. The studies of Katawetawaraks & Wang, (2011), Banerjee & Banerjee, (2012), Chiang & Dholakia, (2003)), Aghdaie, Paraman, & Fathi (2011), Constantinides, (2004) and Jusoh & Ling (2012) were based on varying parts of the e-image model; hence the variances obtained in them cannot be compared to the variance realised in this study (i.e. 95%). Evidently, researches based on the e-image model are lacking, a reason for which it is impossible to

compare the overall variance obtained in this study to those obtained in researches carried out both in developing and developed country contexts. This comparison would have provided a broader outlook of e-market usage in Ghana relative to other developed and developing countries.

The realisation of five components for the e-image model in this study is collectively supported by Katawetawaraks & Wang, (2011), Banerjee & Banerjee, (2012), Chiang & Dholakia, (2003)), Aghdaie, Paraman, & Fathi (2011), Pu & Chen, (2007), Constantinides, (2004) and Jusoh & Ling (2012). However, the finding that *feedback, reputation and experience; information content; website characteristics; security and others* explain 38.6%, 28.1%, 9.5%, 4.6% and 14.3% of variance respectively is also unique to Ghana. These variances reflect the utmost relevance of *feedback, reputation and experience* to planning and developing e-markets for Ghanaian users, followed by *information content, others, website characteristics and security*, in that order.

## CONCLUSION

Elements of the e-image model largely influence Ghanaians to patronise products or services online or to yield to online marketing information. In this regard, all components or factors of the model explained 95% of variance, which reflects a high extent of the influence made by elements of the model on positive e-image in Ghana. Five components were found to constitute all the elements of the e-image model in a Ghanaian context, instead of the original six components in the model. The shortfall was not as a result of an elimination of any of the elements but was as a result of merging the *experience* component to the *feedback and reputation* component, which explained the highest variance of 38.6%. *Information content, website characteristics, security and others* are the other components in the e-image model that were confirmed in a Ghanaian context without any change. These four components were found to explain variances of 28.1%, 9.5%, 4.6% and 14.3% respectively.

With respect to the variances explained, it is obvious that the first component (i.e. *experience, feedback and reputation*) makes the highest influence on the positive e-image of Ghanaian e-market users. This implies that the experience of e-market users, feedback from e-businesses and reputation of these e-businesses are collectively the most influential on e-market users in Ghana. Nonetheless, each of *feedback, reputation and experience, information content, website characteristics, security and others* make significant influence on users of e-markets in Ghana, likewise their underlying elements.

## RECOMMENDATIONS FOR THE ORGANISATIONS

To encourage internet marketing and to enhance patronage of services and products online in Ghana, the development of e-markets by businesses and individuals must be informed and based on the reconceptualised e-image model in a Ghanaian context (Please refer to Figure 2). This would ensure that both businesses and online consumers sufficiently benefit from the use of e-



markets in Ghana. Meanwhile, priority must be given to components of the model when planning and developing e-markets based on the variances explained by them in this study. This is because a variance explained by a component roughly measures the importance of incorporating the component into planning and developing e-markets in Ghana. Future researchers are also encouraged to carry out this study on different populations to widen and enhance its scope of findings in a Ghanaian context.

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## Appendix A

### e-image Questionnaire

#### **Problem Situation 1: You are considering making a major purchase and are trying to select which online vendor to order from.**

(The first question asks respondents to rate each of the following factors from 1 to 7 with 1 representing not important and 7 representing extremely important. A second question asks each respondent to select the two most important factors from the 25 for making this decision.)

- A. The site is easy to navigate.
- B. The site has an attractive appearance.
- C. The site has a design appropriate to the type of site.

- D. The site provides accurate information.
- E. The site provides believable information.
- F. The site provides timely information.
- G. The site provides relevant information.
- H. The site provides easy to understand information.
- I. The site provides information at the right level of detail.
- J. The site presents the information in an appropriate format.
- K. The site provides appropriate security measures.
- L. The site provides a forum that allows users to discuss products and services.
- M. The site has appropriate prices.
- N. The site makes it easy and convenient to make purchases.
- O. The site provides appropriate product information.
- P. The site provides appropriate company information.
- Q. The site provides customer service information.
- R. The site provides customer feedback about products.
- S. The site provides other domain information (links to relevant sites, white papers, and/or blogs related to the company's line of business).
- T. The company has a good reputation rating (provided by former customers).
- U. The company makes it easy to communicate.
- V. The company responds promptly to email inquiries.
- W. The company's online name is appropriate for the line of business.
- X. The company name and/or brands are well known.
- Y. The company is well known across the Internet (other sites/blogs discuss/link to them).

### **Open Ended Items**

1. What things about an online site help create a positive impression of the site, its products and the company?
2. What things about an online site create a negative impression of the site, its products, and the company?

*Source: Adapted from Gregg & Walczak (2009)*