E-Banking Preferences and Middle Class Values in Ghana

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Abstract The study was premised to assess E-Banking Preferences and Middle Class Values in Ghana in far reaching and inclusive way. The researchers adopted the positivist research paradigm. Overall, five hundred (500) customers were randomly sample from 26 banks in Ghana to participate in the study. A questionnaire containing 35 items were used to collect the data from the target population and the items were scaled on 5-points Likert scale to compute and assess the responses. The data were analysed with the aid of Predictive Analytic Software (PASW). The regression results show that Sheth-Newman Gross Model of Consumption Values was significant in predicting customers' e-banking adoption in Ghana. ANOVA reveals a p-value of 0.000. The study further revealed that 92.2% variation in use of e-banking are due to social values and conditional values. The study again reveals that functional and epistemic values are not significant predictors of use of e-banking (*p-value*>0.05). Meanwhile, emotional value has significant and inverse relationship with use of e-banking (*β*=-24.2%). The descriptive results also revealed that, direct deposit and withdrawal services were the appropriate and satisfactory service preferred by clients showing the mean of 4.1879 and the standard deviation of 0.7. Again, ATM was identified as the next appropriate and satisfactory service preferred by clients revealing the means of 4.0 and standard deviation of 1.0. However, the less appropriate and satisfactory services use by client was Electronic fund transfer at point of sale (EFTPOS) showing the mean of 3.6222 and standard deviation of 0.77975. We herein propose the banks to adopt excellent customer education to improve public confidence in the system such as Deming 14 Principles on Quality Service and the Japanese Kaisen Principles to ensure complete e-banking adoption in the banking industry.

Keywords: *E-banking, customer preference, customer value, business*

1. Background. E-banking Sector in Ghana

Since its inception, the theory of consumption values has drawn scholarly interest in the field of consumer choice behaviour. This theory has been used to predict, describe and explain consumer behaviour, [1], such as to purchase or not purchase a product, why purchase one particular product type, and why choose one particular brand. This model has been well tested and evidenced in multiple products and services domains including airlines' frequent flyer programs [2], sponsorship awareness [3], apparel [4,5], and organic food [6,7]. Information Technology (IT) refers to anything related to computing technology such as networking, hardware, software, the Internet, or the people that work with these technologies. Many companies now have IT departments for managing the computers, networks, and other technical areas of their businesses [8,9]. Information technology helps to store, transfer, retrieve or transmit business information with greater accuracy and efficiency. The multiplicity in the use of IT is documented in several studies such as [10] who argues that the importance of IT cannot be over-emphasized as it facilitates inventory, sales, receivables and payables management. IT has also become critical in several accounting related business areas including payroll information processing, tax records and specialized data for business. This has significantly eliminated physical storage space as information technology helps to scan and store personnel, payroll files, tax files or client files [11]. The internet allows large and small businesses to narrow the gap in the playing field on the internet [12]. Both organizations can take orders, buy merchandise, sell excess or even operate some businesses entirely online. According to [13], electronic commerce (e-commerce) continues to have a profound impact on the global business environment, but technologies and applications also have begun to focus more on mobile computing, the wireless Web, and mobile commerce. Against this backdrop, mobile banking e-banking services has emerged as an important distribution channel, with considerable research devoted to its adoption. However,

this research stream has lacked a clear roadmap or agenda. Therefore, the present article analyses and synthesizes existing studies of m-banking adoption and maps the major theories that researchers have used to predict consumer intentions to adopt it. Communication by email is faster and costs less than sending a paper letter in the mail. Information technology allows organize email files by client or by type of communication, such as orders or billing [14,15]. Business communication files become closed files, placed in storage on CD or on a hard drive with a duplicate copy or backup automated by a program or service. Thus information technology has become an essential partner in business management regardless of the kind of enterprise being operated [16]. We provide a novel technological innovation research based on Social Theory, that; E-banking has the potential to transform the banking business as it significantly lowers transaction and delivery costs.

2. Background of E-banking Sector in Ghana

The banking system in developing countries is significantly different from that in developed countries such as the United State of America, Britain and South Africa. As with most developing countries, Ghana has been undergoing a process of financial sector restructuring and transformation as an integral part of a comprehensive strategy for sometimes [17]. According to [18] banks in Ghana will need to reinvest themselves in this new conducive but challenging environment. This is important because electronic transactions will continue to grow and only countries that make a move towards embracing electronic business will participate in this revenue generation and financial liberalization [19].

Harold and Jeff [20], contend that financial service providers should modify their traditional operating practices to remain viable in the 1990s and the decades that follow. Woherem [21], also claimed that only banks that overhaul the whole of their payment and delivery systems and apply ICT to their operations are likely to survive and prosper in the new millennium. He advises banks to re-examine their service and delivery systems in order to properly position them within the framework of the dictates of the dynamism of Information and Communication Technology.

Under these conditions, the transition to E-banking has become a necessity for banks as it offers major opportunities in terms of competitive advantage and allows banks on one hand to improve efficiency and operational effectiveness and on the other hand to develop a stronger and more durable business relationship with its customers[22] How-ever, the adoption of innovation within an organization in general and the adoption of E-banking specifically is not always an easy thing to bring about as it can be complex and expensive to implement. In this research, we wish to ascertain the impact and adoption of ICT in the Ghanaian Banking industry through the theory of Consumer Values as propounded by [1].

Ghana's banking industry began to experience its technological revolution in the 1990s where most banks adopted electronic and communication technologies such as tele-phones, personal computers and facsimile. The main purpose was to speed up and make service delivery to customers more efficient. The advancement in computer technology created an opportunity for banks to network their branches. The pioneers to this significant electronic novelty were Barclays Bank and Standard Chartered Bank which fits into the research of technological change propounded by [23]. The lead by the banks resulted in an absolute transformation of Ghana's banking landscape. Most banks followed suit in networking their branches. Customers generally benefited from this transformation. Customers were able to transact business not necessarily with their branch but with other branches of the same bank. In 1995, the first Automated Teller Machine (ATM) was installed by The Trust Bank Limited. In order to gain a competitive position in the industry, most major banks also began installing their ATMs network which resulted in a fierce competition. Currently, all banks operate ATMs making it the most successful electronic delivery medium for customers. ATMs have become a factor for customers' choice of a bank.

Another technological innovation is the development of various electronic cards by banks over the years [24]. The first cash card was Sika Card', a product by the then Social Security Bank now SG-SSB Bank, introduced in 1997.This product was a value card onto which a cash amount is loaded electronically. Later, other banks also introduced their electronic cards. In the early part of 2001, Standard Chartered Bank launched its first debit card. Recently its function has been integrated with ATM cards which have resulted in an increase in its availability to the public. Again, Ecobank, Cal Bank and the Trust Bank in a collaborative effort introduced an electronic card named, E-Card'. There-after, PC banking, Internet banking and mobile banking have been introduced. Barclays Bank Ghana for instance on August 28, 2002 launched its mobile banking service, which has been successful due to its convenience and time saving. With technological evolution, banking in Ghana is in its growth phase and continue to attract lot of international attention as can be seen with the influx of international banks into the country. Nigerian owned banks seem to be on the increase Ghana's banking industry [25]. Over the past six years banks that have entered the country include Zenith Bank (originally from Nigeria), Standard bank (the most capitalized bank in Africa; originally from South Africa), United Bank of Africa (originally from Nigeria), UT Bank and Fidelity Bank (formally Fidelity Discount House). All these banks aim at increasing their market share by defining and redefining service delivery position so as to remain in the competitive environment of the banking terrain. This is because delivering quality service and product have become an integral part of banks' growth and their survival in today's competitive banking industry [26]. Even though the sector has experienced significant transformation in the past decades, there are challenges that confront the sector.

3. Literature Review

3.1. Information Technology in the Banking Sector

Banks in particular adopt information and communication technology to improve the efficiency and effectiveness of services offered to customers, improve business processes,

as well as to enhance managerial decision making and workgroup collaborations. This helps strengthen their competitive positions in rapidly changing/emerging business economies [22]. A close examination of banking theories provides insights into why banks exist in the economy. However, over the recent past, financial innovation has greatly changed the business of banking. Instead of just accepting deposits and making loans the old fashioned way, banks nowadays are increasingly active in lending without putting loans on their balance sheets, through either securitization of their asset portfolio or outright loan sales (bonds/debts) [27]. Study by Eshun indicates that, IT innovations introduced by their banks have greatly influenced and enhanced service delivery in a positive way [28]. An-other study by [29] on the impact of information technology on improving banking performance matrix reveals that, there is an impact on the use of technology in Jordanian banks in the market value added (MVA), Earnings per Share (EPS), Return on Assets (ROA), Net Profit Margin (NMP). This has been supported by study by Osei and Harvey (2010) that, banks which maintain high levels of investments in IT increased return on assets (ROA) and return on equity (ROE). Another research conducted by [30] on Technological Innovations in Bank of Africa [Uganda]: An Evaluation of Customers Perception generally revealed that, technological innovation have contributed positively to the provision of banking services in Bank of Africa particularly ATMs and internet banking. that, the adoption of ICT in banks has improved customer services, facilitated accurate records, provides for Home and Office Banking services, ensures convenient business hour, prompt and fair attention, and enhances faster services. However, acceptance of this new technology has not yet been found to be equal in all parts of the globe indicating a lack of a common generalization. Ramayah et al. [31] suggest that users will eventually lose interest in using e-banking if they feel that it is not useful to use e-banking even though the system is rather easy to handle. Despite this, [32] states that, use of technology on banking has steadily been growing worldwide for the past decade, and seems to continue to do so [33], Paper investigates the importance of antecedents of online loyalty such as trust, quality of the Web site, quality of the service and overall satisfaction. Rather than investigating which factors drive customers to use online banking instead of offline banking, this paper addresses the problem of how to keep customers online and loyal to a specific supplier. According to [34], Personal values and consumption values are important factors that guide consumer behaviours and affect consumers' preference of goods or services. Personal values are affected by personality, cultural and social factors. Consumption values are formed with regard to demanded benefits from preferred products. In study, consumers personal values was determined according to Schwartzs personal values list and including self-transcendence and self-enhancement dimension and values of power, achievement, hedonism, universalism, benevolence. In the study of [35], Managers should reinforce Self-service Trust in order to increase Customer Value and Customer Readiness, which would influence customers' willingness to continue using Internet banking. Ram and Sheth [36] examined effects of Consumer Resistance to Innovations: The Marketing

Problem and its solutions considered why customers resist innovations even though they are considered necessary and desirable. They identified functional barriers such as usage, value, and risk, and psychological barriers such as tradition and image. Concludes that successful innovation lies not in bowing down to consumer resistance, but in understanding the causes and developing a marketing strategy to attack them.

Floh and Treiblmaier [37] investigated the importance of antecedents of online loyalty such as trust, quality of the Web site, quality of the service and overall satisfaction. Rather than investigating which factors drive customers to use online banking in-stead of offline banking, this paper addresses the problem of how to keep customers online and loyal to a specific supplier. A survey among more than 2,000 customers of an Austrian online bank was conducted and a structural equation modelling approach was used to gain important insights into how customer retention in the online banking business can be ensured. Satisfaction and trust were identified as important antecedents of loyalty. Additionally, the moderating role of consumer characteristics (gender, age, involvement, perceived risk and technophobia) was supported by the data. Lee [38] explored on the factors influencing internet banking. Success factors (positive factors) and resistance factors (negative factors) that help customers to adopt online banking. The research explored and integrated the various advantages of online banking to form a positive factor named perceived benefit. In addition, drawing from perceived risk theory, five specific risk facets (financial, security/privacy, performance, social and time risk) are synthesized with perceived benefit as well as integrated with the technology acceptance model (TAM) and theory of planned behaviour (TPB) model to propose a theoretical model to explain customers' intention to use online banking. The results indicated that the intention to use online banking is adversely affected mainly by the security/privacy risk, as well as financial risk and is positively affected mainly by perceived benefit, attitude and perceived usefulness. The implications of integrating perceived benefit and perceived risk into the proposed online banking adoption mode. According to [39] posits that, efficient and reliable services, fulfilment, security/trust, site aesthetics, influence e-service quality. This research seeks to answer the questions; how does e-banking services influences the customers' preferences and the middle class value? What impact does technology and for that matter e-banking has on the banking industry. And to explore its challenges and adoption in a holistic manner. The main objective is to use the theory of consumption values to assess the impact of e-business in Ghana. We also wish to identify the IT infrastructure and adoption by customers used by the Ghanaian banking sec-tor, explore its challenges and adoption in the sector. These would serve as a platform for innovation development for achieving the strategic business objectives like designing new business models and products, Customer intimacy so as to maintain loyal customers, competitive intelligence and advantage for optimal decision making.

3.2. Model

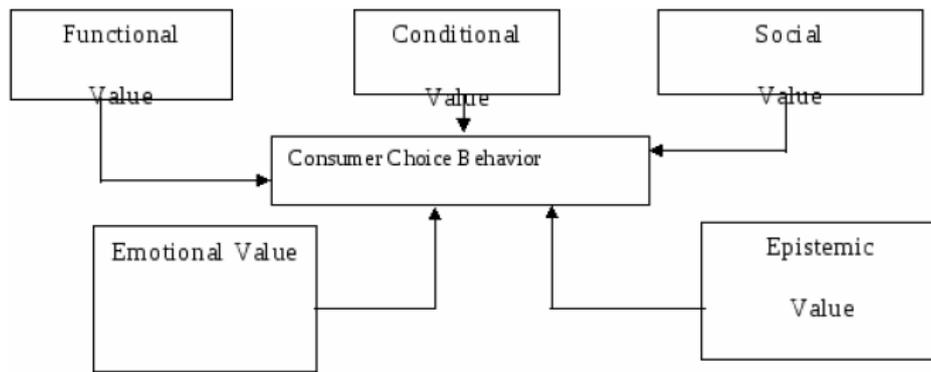### 3.2.1. Sheth-Newman Gross Model of Consumption Values

Figure 1. Sheth Newman Gross Model of consumption Values

According to this model, there are five consumption values influencing consumer choice behaviour. These are functional, social, conditional, emotional, and epistemic values. Any or all of the five consumption values may influence the decision. Various disciplines (including economics, sociology, and several branches of psychology, marketing and consumer behaviour) have contributed theories and re-search findings relevant to these values, [32,40,41]. Each consumption value in the theory is consistent with various components of models advanced by [42,43] and [44]. Five consumption values form the core of the model

3.2.2. Functional Value

To [40] the functional value of an alternative is defined as the perceived utility acquired from an alternative for functional, utilitarian, or physical performance. An alternative acquires functional value through the possession of salient functional, utilitarian, or physical attributes. Functional value is measured on a profile of choice attributes." Traditionally, functional value is presumed to be the primary driver of consumer choice. This assumption underlies economic utility theory advanced by [45] and [46] and popularly expressed in terms of "rational economic man." An alternatives functional value may be derived from its characteristics or attributes, [47] such as reliability, durability, and price. For example, the decision to purchase a particular automobile may be based on fuel economy and maintenance record. By identifying the dominant function of a product (i.e., what benefits it provides), marketers can emphasize these benefits in their communication and packaging.

3.2.3. Social Value

[40,48] defined social value of an alternative as the perceived utility acquired from an alternative association with one or more specific social groups. An alternative acquires social value through association with positively or negatively stereotyped demographic, socioeconomic, and cultural-ethnic groups. Social value is measured on a profile choice imagery. Social imagery refers to all relevant primary and secondary reference groups likely to be supportive of the product consumption [49,50] used intelligent phishing detection system to research on detecting and identifying any phishing websites in real-time, particularly for e-banking, is really a complex and dynamic problem involving many factors and criteria. Because of the subjective considerations and the ambiguities involved in the detection, fuzzy data mining techniques can be an effective tool in assessing and identifying phishing websites for e-banking since it offers a more natural way of dealing with quality factors rather than exact values Consumers acquire positive or negative stereotypes based on their association with varied demographic (age, sex, religion), socioeconomic (income, occupation), cultural/ethnic (race, lifestyle), or political, ideological segments of society [51]. Ames et al. [52] explored on parents attitudes about their children use of technology. The research revealed that, parents from different socioeconomic classes have different values and practices around technology use, and that those values and practices reflect structural differences in their everyday lives. Calling attention to class differences in technology use challenges the prevailing practice in human-computer interaction of designing for those similar to oneself, which often privileges middle-class values and practices. By discussing the

3.2.4. Emotional Value

Emotional intelligence is emerging as a potential factor which might help business technological development and innovations. Howell et al., in 2010, examined the predictive relationship between emotional intelligence and the following programme outcomes for commercial banking business based on the strategic value chain analysis, in order to accelerate information technology adoption for commercial banking business. In a related development, nostalgic restaurant can be a hot pot restaurant decorated with furnishing relating to the origin or earlier use of the "hot pot" in Taiwan. The study here uses SEM to test the hypotheses relating to nostalgia affecting consumption. The results indicate that (1) nostalgia has both direct and indirect impacts on consumption intention; (2) consumption affected by nostalgia varies depending on the individual; and (3) younger customers' predisposition to want cheap prices is an important consideration in marketing nostalgia to younger customers, [53] Consumption emotion refers to the set of emotional responses elicited specifically during product into institutional development. Sage or consumption experience, as described either by the distinctive categories of emotional experience and expression (e.g., joy, anger, and fear) or by the structural dimensions underlying emotional categories such as pleasantness/ unpleasantness, relaxation/action, or calmness/excitement [54]. Goods and services are frequently associated with emotional responses (e.g. the

fear aroused while viewing horror movie). Customer e-loyalty is an important issue in the very competitive environment of e-banking. Different studies show that e-loyalty is influenced by e-satisfaction, e-trust and e-service quality. However, little attention has been given in the literature to fully understand the full relationships among them [55] For example, A number of different attempts have been made to identify the various emotions that people experience. Izard [56] develops the taxonomy of affective experience approach that describes the basic emotion that people feel. He measures emotions using ten fundamental categories: interest, joy, surprise, sadness, anger, disgust, contempt, fear, shame, and guilt. This approach has been used extensively by consumer researchers [57]. From his study it can be concluded that, emotional intelligence is an important phenomenon and has positive influence in marketing banking products and to switch to technology use.

3.2.5. Epistemic Value

The concept of epistemic communities professional net-works with authoritative and policy-relevant expertise is well-known thanks to a 1992 special issue of International Organization [58] "Epistemic Agency," is about varieties of epistemic agency, and about how such agency is related to normativity, freedom, reasons, competence, and scepticism [59,60] defined epistemic value as the perceived utility acquired from an alternatives capacity to arouse curiosity, provide novelty, and/or satisfy a desire for knowledge. An alternative acquires epistemic value by items referring to curiosity, novelty, and knowledge. Internet technologies have a great potential for changing fundamentally the banks and the banking industry [61] According to them, opportunities, which the e-banking services and technologies offer to the banking sector in order to fulfil existing customer needs and to attract new prospective customers, are the driving forces for banks in order to design, develop and operate their own e-banking systems. Their study examined the challenges and opportunities of e-banking for the Greek banking sector, during the e-commerce era, and also presents the results of a survey of banking executives working at banks offering e-banking services. It was envisaged that, entirely new technological ways of executing banking services must be adopted.in order to remain competitive, The alternative may be chosen because the consumer is bored or satiated with his or her current brand (as in trying a new type of food), is curious (as in visiting a new shopping complex), or has a desire to learn (as in experiencing another culture); thinking and reasoning in science [62] The concept of epistemic values has been influenced by theory and by several important areas of research. Exploratory, novelty seeking, and variety seeking motives have been suggested to active product search, trial, and switching behaviour [63]. One of the most significant contributors to the study of the optimal stimulation and arousal has been [64] The philosophy of information is concerned with the nature, management, and use of information. Thus, it should be able to help us make better decisions about how to manage information (e.g., decisions about intellectual property laws, collection development policies, and Internet evaluation techniques). These decisions have knowledge acquisition as one of their principal goals. Thus, one way to improve these decisions is to clarify our epistemic values [58,65]. In this research, we propose that epistemology and decision analysis must be combined in an attempt to assist people in e-banking services.

3.2.6. Conditional Values

Faroughian et al. [66] defined the conditional value as the perceived utility acquired by an alternative as a result of the specific situation or set of circumstances facing the choice maker. An alternative acquires conditional value in the presence of antecedent physical or social contingencies that enhance its functional or social value. Conditional value is measured on a profile of choice contingencies. Based on the concept of stimulus dynamism advanced by [67] recognized the importance of learning that takes place as a result of experience with a given situation. Tan et al. [68] evaluated e-banking and m-banking adoption factors and preferences. The results provide banks with prioritisation of determinants for developing appropriate strategies to encourage the adoption of e-banking and m-banking as a results of conditional satisfaction of customers to such factors as perceived usefulness, perceived ease of use, convenience, technological efficacy, ease of use and security. Internet technologies have a great potential for changing fundamentally the banks and the banking industry. The opportunities, which the e-banking services and technologies offer to the banking sector in order to fulfil existing customer needs and to attract new prospective customers, are the driving forces for banks in order to design, develop and operate their own e-banking systems. This paper examines the challenges and opportunities of e-banking for the Greek banking sector, during the e-commerce era, and also presents the results of a survey of banking executives working at banks offering e-banking services. The main findings demonstrate that banks expand to e-banking services in order to remain competitive [61]. The five consumption values identified by the theory make differential contributions in specific choice contexts. For example, a consumer may decide to purchase coins as an inflation hedge (functional value), and also realize a sense of security (emotional value) from the investment. Social, epistemic, and conditional values have little influence. Of course, a choice may be influenced positively by all five consumption values For example, to a first-time home buyer, the purchase of a home might provide functional value (the home contains more space than the present apartment), social values (friends are also buying homes), emotional values (the consumer feels secure in owning a home), epistemic value (the novelty of purchasing a home is enjoyable), and conditional value (starting a family).

The final model was thus represented as shown in Figure 2.

According to [69] both intrinsic and extrinsic values impact attitudinal loyalty ultimately leading to behavioural loyalty which is directly affected by utilitarian value. Oppen et al. [69] also posits that, the associations between Internet perceived risks and the relatively equal influence of product and e-channel risks in consumers' trust, and that online purchasing intentions are equally influenced by product and e-channel consumer trust. They also illustrate the relationship between marketing strategies and perceived risks, and pro-vide managerial suggestions for further e-purchasing.
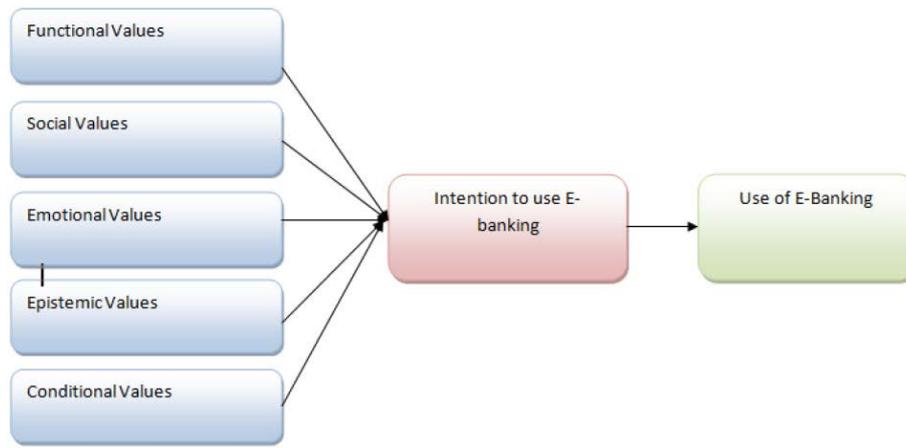
Figure 2. Sheth Newmans Consumer Value Theory

4. Methodology

In order to statistically evaluate E-Banking Preferences and Middle Class Values in Ghana in far reaching and inclusive way we used quantitative technique. In other words the positivist paradigm was deployed. Data were gathered through both primary and secondary sources. To obtain more accurate primary data, questionnaires were filled. It contained two sections demographic section and subjective section. Demographic section is consisted of gender, age, income, education, economic status and religion while other section includes questions of use of e-banking services, preferred e-banking services, Conditional Values, Functional Values, Social Values, Emotional Values and Epistemic Values. The questionnaire contained 35 items to collect the data from target population (Banking Industry). And the items are scaled on 5-points Likert scale to compute and assess the responses. Four hundred and ninety-five (495) responses were received from the 500 questionnaires which were randomly distributed to customers. The data were analysed with the aid of Predictive Analytic Software (PASW).

5. Results and Analysis

5.1. Modelling

5.1.1. Regression Analysis

Regression analysis is one of the most commonly used statistical techniques in social and behavioural sciences as well as in physical sciences. Its main objective is to explore the relationship between a dependent variable and one or more independent variables (which are also called predictor or explanatory variables). Linear regression explores relationships that can be readily described by straight lines or their generalization to many dimensions [70]. The method of least squares chooses estimates, $b0$ and $b1$, respectively for the parameter, $\beta0$ and $\beta1$. The principle of least squares is to estimate the regression line by the line which minimizes the sum of squared residuals or equivalently, estimate the regression parameters $\beta0$ and $\beta1$ by the values which minimize the sum of squares residuals. The estimates $b0$ and $b1$ of $\beta0$ and $\beta1$ for y on x and from n pairs of observations (Xi, Yi) are as follows:

$$b_1 = \frac{n\sum xy - \sum x \sum y}{n\sum (x)^2 - (\sum x)^2} \qquad (1)$$

and

$$b_0 = \frac{\sum y - b_1 \sum x}{n}. \qquad (2)$$

The regression coefficient, "$b0$", is the estimated value of y when the value of x is 0; and the regression coefficient, $b1$, is the change in y for a unit change in the predictor variable, x. Geometrically, the least squares equation $y=b0+b1x$ represents a straight line that best fits the data. The regression coefficient $b0$, is the y-intercept and the coefficient $b1$, is the slope of the line.

5.2. Regression Results

Table 1. Regression Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.632[a]	.399	.393	.54338	2.774

a. Predictors: (Constant), Conditional Values, Functional Values, Social Values, Emotional Values, Epistemic Values
b. Dependent Variable: Use of E-Banking.

The model summary table above shows the summary of results. R square explains the total variation in dependent variable (use of e-banking) due to the effects of the independent variables (Conditional Values, Functional Values, Social Values, Emotional Values, and Epistemic Values). The analysis reviews a positive correlation between the use of e-baking and the customers' value R is 0.632. Still on the model summary regression coefficient (R2) is 0.399. This means that the independent variable explains 39.9% of the variation in the dependent variable. Durbin Watson was calculated to observe the type of correlation among the variables either positive, negative or zero. The value of Durbin Watson is 2.77 which show that there is a relatively high positive correlation between use of e-banking and the middle class value in the banking industry. The Durbin Watson score confirms the correlation coefficient in the model summary table which denotes a high positive relationship between the

dependent and independent variables. The model summary table above further explains the relationship.

Table 2. ANOVA Results

ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	95.850	5	19.170	64.925	.000ᵇ
	Residual	144.384	489	.295		
	Total	240.234	494			

a. Dependent Variable: Use of E-Banking
b. Predictors: (Constant), Conditional Values, Functional Values, Social Values, Emotional Values, Epistemic Values.

The P-value for the statistics is (p-*value*=0.000)<0.05. This means that same of the independent variable is a significant predictor of the DV (standardized reading scores). In other wards ANOVA table illustrates that significance level is 0.000 which is less than 0.05. Hence, the predictor (Conditional Values, Functional Values, Social Values, Emotional Values, and Epistemic Values) has significant influence on the constant (use of e-banking). The ANOVA table below show further explains the variance in the prediction.

Table 3. Use of E-Banking

Coefficientsᵃ

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.297	.272		4.762	.000
	Functional Values	.057	.063	.041	.906	.365
	Social Values	.236	.038	.337	6.187	.000
	Emotional Values	-.204	.058	-.242	-3.525	.000
	Epistemic Values	.009	.057	.011	.157	.875
	Conditional Values	.562	.066	.585	8.577	.000

a. Dependent Variable: Use of E-Banking

The standardized coefficients (beta) of the study variables measure the effects of independent variable on the dependent variable. Results show that the social values and conditional values have positive and statistically significant *p-value* < 0.05effects on use of e-banking. Beta (β) values for these values were 33.7% and 58.5% respectively. It can be explained that 92.2% variation in use of e-banking fulfillment are due to social values and conditional values. The study further reveals that functional and epistemic values are not significant predictors of use of e-banking *p-value*>0.05. Meanwhile, emotional value has significant and inverse relationship with use of e-banking. Moving on from the above, it appears rather that multicollinearity is not a major concern. This is because the Variance Inflators Factor scores are less than three (*VIF*<3).

Residual Statisticsᵃ

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2.7324	4.5013	3.8747	.44049	495
Residual	-.93921	1.20738	.00000	.54063	495
Std. Predicted Value	-2.593	1.422	.000	1.000	495
Std. Residual	-1.728	2.222	.000	.995	495

a. Dependent Variable: Use of E-Banking.

1. Descriptive Analysis

Variables	No. of Respondents	Percent (%)
IT services	155	31.3
Traditional services	217	43.8
Both	123	24.8
Total	495	100.0

Source: Field Survey, (2016).

The result indicated that, majority (43.8 %) of the client's preferred Traditional services in the bank. Another 31.3% of the clients preferred IT services in the bank. About 24. 8% of the client however, preferred both the Traditional and IT services in the bank.

E-service Frequencies				
Variables		Responses		Percent of Cases
		N	Percent	
Uses of e-services by customers	Direct deposit and withdrawal services	402	11.2%	81.2%
	Pay by phone system	310	8.6%	62.6%
	Point of sale transfer terminal	434	12.1%	87.7%
	ATM	433	12.1%	87.5%
	Internet banking	371	10.3%	74.9%
	Branch Networking	402	11.2%	81.2%
	Electronic fund transfer at point of sale(EFTPOS)	464	12.9%	93.7%
	Electronic cheque conversion	495	13.8%	100.0%
	Personal computer banking	278	7.7%	56.2%
Total		3589	100.0%	725.1%

a. Dichotomy group tabulated at value 1.

NB: 3589> N (sample size 495) due to multiple choice answers given by respondents.

The study thus examined the frequencies of e-services by customers. From the table, High rate of Electronic cheque conversion was identified representing 13.8% as the most frequent e-service use by clients. It was further revealed 12.1% for Point of sale transfer terminal and ATM respectively as the next frequent e-service use by client in the banking sector. Also, 11.2% of the clients attributed the direct deposit and withdrawal services and Branch Networking respectively as the frequent e-service use in the banking sector. Again, 10.3% of the clients stated that Internet banking was the frequent e-service used in the banking sector. Moreover, 7.7% of the clients mentioned Personal computer banking as the frequent e-service used in the banking sector. Without a qualm the aforesaid factors identified by clients were frequently used at the banking sector of the economy. In case of the multiple choice answers given by clients total 495 sample uses from the multiple choice answers of 3589. As revealed form the table, 81.2% agreed that direct deposit and withdrawal services were the frequent electronic service used in the banking sector. It was further revealed 62.6% of the client agreed that, Pay by phone system was the frequent electronic service used in the banking sector. Also, 87.7% of the clients frequently use Point of sale transfer terminal e-service in the banking sector. Again, 87.5% of the clients frequently use ATM e-service in the banking sector. Notwithstanding, 74.9% of the customers frequently use Internet banking e-service in the banking sector. Furthermore, 81.2% of the clients frequently use Branch Networking e-service in the banking sector. It was identified that, 93.7% of the clients uses Electronic fund transfer at point of sale (EFTPOS) e-service in the banking sector. The result indicated that 100% of the clients anonymously agreed that Electronic cheque conversion was frequently e-service used in the banking sector. Finally, 56.2% of the clients agreed that Personal computer banking was the frequent e-service use in the banking sector.

Descriptive Statistics

Internet banking services	N	Mean	Std. Deviation
Direct deposit and withdrawal services	495	4.1879	.72760
Electronic fund transfer at point of sale(EFTPOS)	495	4.0000	1.00202
Internet banking	495	4.0000	.70854
Pay by phone system	495	4.0000	.79217
Point of sale transfer terminal	495	3.9354	.89977
Branch Networking	495	3.8747	.78218
Personal computer banking	495	3.7495	.83076
Electronic cheque conversion	495	3.7475	.90145
ATM	495	3.6222	.77975
N	495		

Source: Field Survey, (2016).

The table indicates the various banking services and the customers' preferences to these services. The result revealed that, direct deposit and withdrawal services were the appropriate and satisfactory service preferred by clients showing the mean of 4.1879 and the standard deviation of 0.72670. Again, it was identified Electronic fund transfer at point of sale (EFTPOS) were the next appropriate and satisfactory service preferred by clients revealing the means of 4.0000 and standard deviation of 1.00202. However, the less appropriate and satisfactory services use by client was ATM showing the mean of 3.6222 and standard deviation of 0.77975.

2. Demographic Analysis

1. Respondents Age and Gender distribution.

Age	Gender		Total
	Male	Female	
26-30years	31	0	31
31-40 years	31	31	62
41-50years	124	123	247
51+	155	0	155
Total	**341**	**154**	**495**

Source: Field Survey, (2016).

The Table 1 reveals the Age and Gender distribution of the respondents. It was indicated that, the majority (155) male customers were 50+years while none on other side were female. It further shown that, 124 male customers were within age group 41yrs-50yrs whilst 123 customers on other were females. Another 31 males customers were within the age group 32yrs-40yrs although 31 customers were also females. However, the majority (31) male customers were within the age 26yrs-30yrs while none on other side were female. We can deduce that, the male dominates in all the age group categories.

2. Respondents Education level and Age distribution

Education level	Age				Total
	26-30years	31-40 years	41-50years	51+	
no education	0	0	30	0	30
Primary education	0	0	31	0	31
SHS	0	0	31	0	31
Bachelor/ HND	0	31	93	93	217
Master student	31	31	62	62	186
Total	**31**	**62**	**247**	**155**	**495**

Source: Field Survey, (2016).

The result revealed that, 31 of the client pursuing Master level of education were within the group 26yrs 30yrs, another 31 were also within the age group 31yrs 40yrs, again 62 clients were respectively within the groups 41yrs -50yrs and 50yrs above. It was further probed that, some of the clients had acquired Bachelor /HND level of education, 31 were within the age group 31yrs 40yrs, another 93 were within the age group 41yrs 50yrs and 50yrs above respectively. Again only 31 of the clients have acquired education to Primary and SHS level, which were within the age group 41yrs-50yrs respectively. However, it was identified that 30 of the clients within the age group 41yrs 50yrs have not step their feet in classroom before.

3. Respondents Education and Gender distribution

Education	Gender		Total
	Male	Female	
no education	0	30	30
primary education	0	31	31
SHS	31	0	31
Bachelor/ HND	186	31	217
Master student	124	62	186
Total	**341**	**154**	**495**

Source: Field Survey, (2016).

The Table shows Education and gender Distribution. It was revealed that, most (186) of the male customers have acquired Bachelor/HND level of education while as only 31 females customers on the hand have acquired Bachelor/ NHD level of education. It further probed that, most (124) of the male customers were pursuing their Master degree while few (62) female customer were also pursuing their master degree. Again, 31 male customers dominate over their female counterparts in their education endeavour at the SHS level. However, the female customers for once dominated over their male counterpart at both Primary level and no education level respectively. This is indication that, previously, males had the chance to go school while females were deprived.

4. Respondents Economic status and Gender distribution

Economic status	Gender		Total
	Male	Female	
High	124	31	155
Moderate	217	123	340
Total	**341**	**154**	**495**

Source: Field Survey, (2016).

The above Table indicates customers' economic status and their Gender distribution. The result shows that, majority (217) of the male customers agree to the fact that, economically it was moderate for them meanwhile only 123 females customers also agree to the fact that economically it was moderate. Again, it was revealed that, 124 male clients agree that, economic wise their status was high while 31 females also attest that their economic status was high. This is an indication that the state of clients living hood was manageable. They were neither poor nor rich.

5. Respondents Income and Gender distribution

Income	Gender		Total
	Male	Female	
1000-19999	93	61	154
10000-100000	62	0	62
100000+	186	93	279
Total	**341**	**154**	**495**

source: Field Survey, (2016).

The table reveals Income and Gender distributions of clients E-Banking Preferences and Middle Class Values in Ghana. As Indicated from the result, most (186) of the male clients had income above Ghc100000+ while only 93 female clients had income above Ghc100000+. Again it shown that, 93 male clients had income within Ghc1000-19999 whilst only 61 female clients had income within Ghc1000-19999. Notwithstanding all (62) the male clients had income Ghc10000-100000 over their counterpart female clients.

6. Respondents Religion and Gender distribution.

Religion	Gender		Total
	Male	Female	
Christianity	155	31	186
Islamic	62	92	154
Traditionalist	93	0	93
Others (specify)	31	31	62
Total	**341**	**154**	**495**

Source: Field Survey, (2016).

The Table reveals Religious and gender distribution of clients. The result revealed that, most (155) of the male clients were Christians however, 31 females clients other on the hand also Christians. Again, 93 male clients were Christians as none of the female clients were Christians. It was further revealed that, most of female clients were Muslims while as 62 male client on the other hand also male clients. However, 31 of the male and female clients were respectively in other religion.

7. Respondents Income Level and Age Distribution

Income level	Age 26-30years	31-40 years	41-50years	51+	Total
1000-19999	31	0	92	31	154
10000-100000	0	0	31	31	62
100000+	0	62	124	93	279
Total	**31**	**62**	**247**	**155**	**495**

Source: Field Survey, (2016).

The result revealed that, client who were financial sound, majority (124) were within the age group 41yrs - 50yes, another 93 were 50yrs and above while 62 within the age group 31yrs-40yrs. It was furthermore, indicated that, thus clients whose income level range from GhC10000 ghc100000 thirty one (31) of the clients were within 41yrs 50yrs and 50yrs and above respectively. It was finally discovered that 92 of the clients were within the age 41yrs 50yrs while as 31 clients were respectively within age group 26yrs 30yrs and 50 above.

6. Conclusion and Recommendations

Our study aimed at understanding the factors that influences the middle class to adopt and use e-banking services offered by various banks in Ghana. Our evidence support the notion that technology plays a critical role in banking service delivery. This is evident in the percentage of respondents that are making use of the various technological platforms offered by the banks across the country. However our study has observed that middle class customers do not simply use e-banking services. On the contrary they are influenced by several factors, five of which have been identified. Functional attributes of e-banking which stimulate middle class use was determined to be the highest factor. Respondents agree that with e-banking services, accessibility of one's account has become very easy and customers are able to actively participate in the management of their funds thereby ensuring that their money is properly managed in their best interest. Further there is the belief that cost of doing business with and through the banks is reduced and customers can do business with the banks from their comfort and convenience wherever they may be at the time. While e-banking has ensured that access to general information about products and/or services provided by banks has become very simple as well as less costly, the use of IT based products have greatly reduced the number of times one had to visit the bank in a month as well as the time one would have to spend in the banking hall on each visit. The study also indicated that social value such as the influence of significant others such as peers, class category, social image, relations are important factors in the use of e-banking services. Similarly, the effect of emotional value such as pleasantness, excitement, relaxation, self-gratification associated with using e-banking and epistemic value represented by questions the effect of curiosity, novelty, need to acquire knowledge to use e-banking were all found to be very high. To enhance middle class customer use, it is recommended that there should be periodic educational campaigns about the technological facilities and their usage by the banks to promote customer patronage. This helps customers to know all the technology services provided by the bank, how it is used and familiarized themselves with it. This will help both customers and banks to fully benefit from technology as expected. It will also help erode some of the fear and perception that customers have concerning technology facilities and its us The ATM machine should be monitored always to make sure it has the capacity to provide its 24/7 service as expected of it. There should always be measure to load adequate fund in the machine, especially for weekend usage. Additional services should also be added into the ATM machine since it is the most common facility that customers are accustomed to. This will help ease queues and pressure in the banking hall if such services can be received via ATM machines. Management and staff should be educated regularly to appreciate the impact of technology on their services. It will also help them to be abreast with any current trend in technology facility that will help the services delivery of the bank. IT officers should be included in strategic decision making so that they can add their voice in making decisions. This will enable IT officers explain to management that, though the initial installation cost of technology is expensive, it will become zero and even negative in the future. This will encourage management in invest in it without fear of losing money. We propose that, successful innovation lies not in bowing down to consumer resistance, but in understanding the causes and developing a marketing strategy to attack them.

Finally, security measures are supposed to be tightening day by day to make sure customers are safe in using technology facilities. At first it might be very difficult to steal one million dollars from a bank, but now with the help of technology, this can be done within a few seconds. Measure on how customers will protect their information should be posted at every strategic position. Example as GCB has adopted, before you will have access to their website, they have this note for you Please be informed that, Ghana Commercial Bank Ltd. has never and will never ask or direct its valued customers to update their internet banking information online (Login ID, password, transaction pin, etc.). Any email sent to you to that effect should therefore be disregarded. It is a scam from fraudsters. This will help to reduce insecurity on customers' information to wrong people. We propose successful innovation lies not in bowing down to consumer resistance, but in understanding the causes and developing a marketing strategy to attack them.

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APPENDIX A QUESTIONNAIRE

The objective of this questionnaire is to collect information about the impact of Electronic Banking (e-banking) in Ghana

Section A

1. Sex: Male ( ) Female ( )
2. Age:18to30()31 50()51andabove()
1 Educational level: No Education ( ) Primary ( ) Senior Secondary ( ) Diploma/HND/Bachelor () Graduate/Postgraduate ( )
2 Religion: Christianity ( ) Islamic ( ) Traditi1 onal worshipper ( ) other ( )
3 Frequency of using the bank: Daily ( ) Weekly ( ) Monthly ( ) Other:
4 Economic status: High () moderate ()

Section B

The following statements relate to your feelings about the particular bank you have chosen. Please show the extent to which you believe this bank has the feature described in the statement. Here, we are interested in a number from 1 to 5 that shows your perceptions about e-banking. You should rank each statement as follows: Strongly Disagree Strongly Agree 1 2 3 4 5
Statement Score
1 The bank has modern looking equipment.
2 The bank's physical features are visually appealing.
3 The bank's reception desk employees are neat appearing.
4 Materials associated with the service such as ATM and electronic transfers are visually appealing at the bank.
5 You have access to direct deposit and Withdrawal Services
6 The bank started providing electronic equipment for the delivery of their services as soon as technology was introduced to the business world.
7 Your first reaction to e-banking was positive
8 Technology has impacted the banks service delivery.
9 The bank provides its service at the time it promises to do so with technology
10 The bank insists on error free records.
17. Employees in the bank tell you exactly when the technology will be effected
The Bank has point of sale terminal
11 Employees in the bank give you prompt service. Electronic Account Opening and withdrawal
12 The bank has Electronic Salary Processing and Internet Banking.
13 You can confidently use the new technology?
14 You think technology has positive impact on banking transactions?
15 Employees in the bank are always willing to help you with the use of the technology
16 Employees in the bank are never too busy to respond to your request.
17 The behavior of employees in the bank instills confidence in you.
18 You feel safe in your transactions with the banks electronic gadgets?.
19 Employees in the bank are consistently courteous with you.
20 Employees in the bank have the knowledge to answer your questions.
21 You have access to SMS Alert, Electronic International Transfer?.
22 The bank has operating hours convenient to all its customers.
23 The bank has ATM machine
1 You are motivated to use ATM machine
2 The bank trained customers on the use of ATM Machines
3 You will encourage friends and relatives to use the electronic services offered by the bank
4 The bank welcome customers ideas for technology innovation and adoption35. Over all, e-banking is efficient and effective for competitive advantage