



Risk and Investment Decision Making in the Technological Age: A Dialysis of Cyber Fraud Complication in Nigeria

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Abstract

Economic related risks and dirt of investment at both national and international scales have been reported in research. There is a correlation between the existence of such multi-dimensional risks and business expansion across major cultures. In view of this fact, this study engages the analysis of the effect of cyber fraud on investment decisions in Nigeria. It adopts mixed method design thus culminating into the use of few research instruments. The population of the study is divided into two and six local government areas of Lagos state, Nigeria was selected and used for data collection. It was found that investment decision in this technological era is also mitigated by the existence of risk and this trend conforms to what research have documented for all known investible environments. It is recommended that nations should do more to assuage investors the fear of losing their hard earned resources. This is expected to be achieved by promoting citizen friendly policies that will reduce the likelihood of experimenting with unlawful behaviours that are capable of inhibiting socio-economic development and this will invariably promote a favourable investment atmosphere that will spur economic growth.

Keywords: Risk, Economic Decision, Modernization, Cyber Fraud, Investment.

Introduction

The advent of cyber fraud in E-business environment signalled the growth of unlimited risk to transactionary relationship. The cost of fraud remains a major concern and the trust needed to fix or cement trade relationship also increased vulnerability tremendously. In view of this, effort is made to know the consequences of cyber fraud for E-business especially as it affects investment decision under the cloud of uncertainty promoted and reinforced by the participatory roles of and youth's negative cyber behaviours. The

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discursive aspect of the social theory explaining the attitudinal nature of investors in the cyber environment draws inspiration from the unintended consequences or side-effect closely linked to modernization. Zinn (2008, p. 1) attested that risk looms large in today's society and according to Bryden (1995, p. 57) people represent the real risk. Human greed, malice and error are the primary threat in late modernity.

Theoretically therefore, two form of risks converged in the context of cyber fraud. The first form of risk is the one confronted by the youths and mostly exemplified in the reflexive attempt by the group to resolve uncertainty or allay some economically related anxieties. The second form represents the transactionary risk mostly predatory and confronting the users of the Internet technology in their attempt at engaging relationship often laden with attendant monetary or resource implications. While the first emanated as a result of the strain induced by the society which is contextual of Merton's view, the second grew from and is often projected by the youths against the smooth relationships expected in the cyber environment. There is the interconnectivity between strain and the resultant risks in all capitalist societies. This interconnectivity creates two classes of people, the winners and the losers when explored from Beck's (1994, p. 8) assertion.

Potent reasons adduced to escapade of youths into the environment of cyber fraud include teeming unemployment, poverty and structural inhibitions strangulating the quest of the group towards making a living. The most rampaging is the level of unemployment affecting this group in the Nigeria's population. Commenting, Aregbesola (2015) lamented the state of unemployment in Nigeria and the resultant consequences for the welfare of Nigerian youths. This is in a way is promoting the experimentation with diverse non-conventional behaviours. The ensuing situation for the youths was best captured in a statement credited to one of Nigeria's past leader, chief Olusegun Obasanjo as he pointed out that, "some of them (Youths) were involved in crimes and anti-social activities such as credit card fraud, burglary, drug trafficking and even violent crimes such as armed robbery", (The Nation, 2015, p. 5). The trend of cyber fraud participation remains constant due to the fact that the propelling factors stood partially or wholesomely unattended by the implicated authorities. The existence of fraud then becomes the core determinant of either generating complications or securing favourability in making investment decisions in the technological age. The committal of resources into business is determined majorly by the relativity of security inherent in the investible environment.

With the advent of online induced risks to business, several nations of the world are confronted with dirt of investment capital and invariably, this is retarding economic growth. Consequently, this paper therefore considers the roles of the youths in the expansion or contraction of attractable investment resources in Nigeria especially as it affects online related business. However, its focus is limited to the analysis of the attitudinal predisposition of two category of respondents (mainly youths) to online investment. In part, cyber fraud activism is a modern phenomenon and it represents an improvement in the manner of doing traditional fraud activism. Hence, this paper attempts the examination of the relationship that exists between the existence of economically induced risks and the potentiality of investing in business in a perceived fraud infested environment.

Theoretical Framework: Modernization Theory—Risk analysis

The risk paradigm embedded in modernization theory explores the paradoxes and challenges of reflexive modernity. The epistemological basis of the theory finds expression

in sociological criticism of scientific rationality and technological determinism. The bedrock of this strand of modernization theory investigates scientifically generated risks and technological hazards as plausible explanation to modern problems or challenges. In contrast to pre-existing forms of risk in pre-modern or traditional societies, risk theorists focus on manufactured risks, which are an effect of scientific knowledge, technocratic decisions and political power. Major proponents of this school of thought include Mary Douglas, Ulrich Beck and Anthony Giddens. They offer an alternative sociological imagination to the explanation of the dynamics of contemporary society.

The driving force in risk analysis is the attempt directed towards investment in the development of new solutions to new problems, deliberate creation or design of new institution or agency entrusted with the role of monitoring the social impact of emerging technologies and the delays in calling for new regulatory systems needed to manage new forms of risks associated with the use or manipulation of new technologies. In Beck's assertion, the optimism attendant upon scientific and technological discoveries has to be rewritten, redefined and reinvented (Beck, 1998). Contrary to the eulogistic posture and the celebration of attainable benefits of modern technologies especially in the field of wealth creation, Giddens and Beck asserts that modern society is pervaded by risk consciousness and the increased awareness of living in an environment of risk, uncertainty, contingency and insecurity nurtured by assumed transformation.

People are beginning to realize that failure to take decisive step may possibly generate catastrophic consequences since human society is continually characterized by increasing vulnerability to the unpredictable, unfamiliar and unprecedented risks manufactured by science and technology (Ekberg, 2007). The reason for this development is not farfetched simply because modern technology ushers in sporadic developments in major parts of the world but equally fails to manage risks that accompany its manipulation for human progress (Van Loon, 2000). This assertion is quite true of Internet technology which speeds up progress in the world of information but fails to address the effects of its uses both culminating in fraudulent manipulations and other anti-social uses. The tempo of global movement leaves no one in doubt that life's current possesses the tendency of sweeping one under the carpet of social relevance if one is not sufficiently decisive in planning life adventures.

The theory of the risk society therefore explains the danger and threats directed toward human identity, acute individuation leading to near defacing or demeaning of human being and the onslaught against socio-economic values and institutions required for the ordering of social relationships in the technological environment. The gradual erosion and the perpetuity of erosion of collective values, the collapse of inherited normative structures and the abrogation of social custom and tradition all contribute to increase human disillusionment in their collective approach to material realities of life. The centrality of comparison of traditional, industrial and risk society gave risk theorists the opportunity to juxtapose modern risk and earlier perspectives.

In their submission, modern risk is characterized by visible dislocation, distortions, disintegration and disorientation associated with the vicissitudes of de-traditionalization (Beck, 1992; Giddens, 1994). Having displaced the ontology of security available to common man in the traditional society in terms of collective support and certainty of provisions from the organic community, modern man is left with nothing but with

survival rationality (strategic thinking as a pre-requisite for survival) in the face of a prevailing unfriendly socio-economic arrangement in the context of modernity.

Consequently, excessive individuation as a feature of modernity in a way generates isolation, alienation, fragmentation and discontent and invariably a threat to socio-economic security. There is a visible dislocation in diverse societies that reflects the banishment of safety and socio-economic security in traditional social structures and that is also inherent in pre-determined social identity. Society is transforming or assuming what Hiskes (1998) and Lupton (1999) describes as socially constructed risk arena. In this form of society, man is left with no other option than to make choices about self-identity (often fatalistic in approach and with grievous consequences), determine and calculate this relations with others and adopt strategies that allow them to get along in an environment seen as excruciating in relation to man's quest for survival. This in a way constitutes an affront against the accuracy needed to predict the modern techno-economic environment by the users and beneficiaries of this newly rapidly evolving structure.

Taking risk or venturing is akin to taking one's destiny in one's hand and making resolution to make it against all odds. The situation is characterized by an open field for all fights, with the ends justifying the means. The non-venturing individual loses out while risk taking men carry the day (Beck & Bec-Gernsheim, 1995). Giddens and Beck identify the shift in risk and posit that the level of perceived risk increase relatively to the level of actual risk in all human societies, a condition that arises from the uncertainty and non-predictability of the socio-economic environment. Modern socio-economic risk, borrowing from Beck (1992), is open to social definition, construction, and daily reconstruction of the material reality of life. With regard to Internet related risks, there are increases in invisible to visible risks and then to virtual risk represented in anonymity enjoyed by cyber technology users.

There are visible shifts from physical responsibility (tangible crimes) to virtual responsibility (intangible crimes) thereby creating and heightening the level of risk in the virtual community. Business transaction within cyber space becomes a phenomenon requiring calculative caution and engaged in as an article of faith. The human approach to risk then becomes subjective and inter-subjective with continual quantification of measurable risk within the realm of reflexive judgment of risk and the ultimate supplementary of known or calculated risks with subjective perception of risk (Lash, 2000). This situation increases the climate of non-predictiveness of cyber technology uses. Modern society, from Beck's assertion, is uninsured (society) exposing a significant portion of human population to the scourge of socio-economic pain and dehumanization.

Modern society exhibits organized irresponsibility, social institutional failure and exposes a vast number of people to uncontrollable risks caused by the non-predictability of the social environment. What makes this society volatile and insecure is the fact that it fosters non-insurable risks represented in the prevalence of fraudulent activism and threat of mass poverty and squalor with visible absence of assurance noted in the diminishing social support inherent in traditional society.

In a nutshell, this study constitutes a risk perception research that involves the measurement of youth's subjective experience of 'being-at-risk' of socio-economic precipitated extinction, or the development of the fatalism of living an 'at risk' identity basically founded upon cognitive illusions with visible judgments about bearable and unbearable risks that characterize Nigeria's environment and diffused risk activism exemplified in cyber fraud and Internet mediated criminality. It finally zeroed on the

decision component of potential investors with a view of calculating the consequences of modern risks for economic growth of nations.

Review of Literature

The private sector provides an estimated 90% of jobs in developing economies (IBRD/IFC, 2013). The sustainability of this sector is quite essential to the survival of nations in this category. While this is crucial, the ingenuity of investors is also important to the longevity of business operation. If business encounters losses over a period of time, it will have to close and thus putting its financiers and employees in jeopardy (Nickels, McHugh & McHugh, 1999). This explains the reason why planning is crucial to the overall success of a business concern. In the course of life, everyone develops their own style for collecting, analyzing and distributing information (Nickels, McHugh & McHugh, 1999, p. 58). This does not exclude the business planners in their evaluation of risks regarding business outcomes. This is also a function of business information seeking behaviours of investors which covers the information about the investible environment and information use behaviour of business executives to float, nurture and sustain outfits and to help determine whether to venture or not to venture in an economically mucky environment.

Decisions are crucial to business survival and for the aversion of investment failures. The actual cause of business failure is linkable to investor's failure to predict the investible environment with some level of accuracy and plan the right resources to make the business succeed, grow and thrive. Engaging business in today's virtual world necessitates taking of SWOT analysis (strengths, weaknesses, opportunities and threats), for investment to be enduring. Consideration is given to both internal and external environment of business. While the internal environment of most businesses is notably peaceful, modern day experiences in the Internet environment portends both calculable and non-calculable risks plaguing the sailing of businesses in e-environment which lies in the domain of the external.

In the world of business, the Internet has been viewed as most advantageous by reason of its possession of and reduction of information asymmetries thus impacting major stakeholders in the e-business environment either positively or negatively. It is uncontested that the virtual environment broadened the business opportunities on a global scale, but it nevertheless expanded the web of threat to many businesses cross culturally and thus eliciting fear and apathetic responses from potential investors.

1. Uncertainty, Risk and Investment Decision

The business environment consists of the economic environment (taxes and regulations), technological environment, competitive environment, social environment and global business environment. Out of the five basic environments of business, the unique concern of this paper is restricted to the implications emanating from the technological environment just as this affects the global business environment cum investment decisions. The importance of decision making is implicated in arresting uncertainty and reducing the cumulative effects of risks in the currently unfolding in the arena of e-business promotion. Risk and uncertainty are closely linked concepts and distinguishing them is not free from controversy. While uncertainty focuses on the

consideration of uncertain deviation, risk focuses on the detrimental or beneficial consequences of uncertain event (Rocquigny, 2012).

Investment decision owes much to the calculation of uncertainty attached to both now and future trends that are endemic in the socio-economic environment. Uncertainty exists to the degree to which we are unable to render the environment predictable (Berger & Bradac 1982), or to the degree to which we have difficulty in formulating probability judgement about various actions (Ford, Babrow & Stohl, 1996). Uncertainty is related to the inability to predict or explain (Salem & Williams, 1984) jointly cited from Kramer, 2014). In determining investment decision, one thing that is so paramount involves the appropriation of investment objectives and this is encapsulated in the investor's attitude toward risk and expected return. Investment decision is mitigated by challenges posed by socio-economic developments, such as systemic crisis, deregulation, economic instability and technological innovation. In general, it is vividly clear that investors are risk averse and will in most cases chose the investment that will give them minimal losses (fair gamble) with expected pay-off of zero (Sharpe, Alexander & Bailey, 1999). Risk in the sense of chance of loss has been the bane of human existence from time immemorial (Onyiriuba, 2008, p. 3).

Risk is a function of uncertainty, the inability to foresee the future correctly. The uncertainties we experience influence our behaviour in general and our communication in particular. Uncertainty tilts towards lack of information and this is equally related to an inability to predict some future behaviour or outcome. Babrow, Kasch and Ford (1998) argue that the possibility of uncertainty looms high in the lack of knowledge due to the complexity of regarding issues, quality and reliability of available information, the probabilities of various outcomes, on the feasibility of venturing into a realm where relatively many things are shrouded in secrecy. In essence, the virtual environment is an open-secret environment and by implication the cyber arena provides for both open and closed relationships. Accessibility to business information and opportunities globally makes the realm open while the outcome environment is infested with uncertainties bearing implications ranging from mild to grave consequences. The uncertainty is promoted by vulnerabilities often occasioned by the pervasive influence of crime. Majorly, the most endemic in the modern e-business environment is online fraud. The existence of fraud portents double edged implication for businesses and customers and thus making interactional processes embedded with risk.

Starting business involves risk. Risk is the chance an entrepreneur takes of losing time and money on a business that may not prove profitable. Investment decision is situated within the continuum existing between risk and profit. It is therefore important for entrepreneurs and business executives to strike a balance between risk and profit. This is what Dransfield (2014) classified as balancing risk and return (p. 7). It is on this basis that the ingenuity of qualitative decision making of business planners and administrators becomes sacrosanct to being relevant and alive in the business environment. The locus of risk can be linked to Applegate, Austin and Mcfarhan's, (2003) assertion that the 21st century technologies are pervading and sharpening industries, markets and organizations. Just as technologies are sharpening all these sectors, business health is consistently been affected by non-directional appreciation of developments in the new order and thereby promoting dwindling return. As a result, business executives are required to secure a full grasps of the working of the Internet environment in order to forestall its unpalatable consequences.

In most environment affecting business, economic and financial forecasting, a long standing challenging issue is to develop an appropriate model which is able to generate accurate and reliable long term forecast (Fung, Ching & Siu, 2010). It is in the wise that business executive should not ignore the uncertainties pervading the Internet environment in their bid to making business decisions. It is vividly clear that businesses are decision making units that need to manage risk if they are to survive and prosper (Fung, Ching & Siu, 2010, p. 6). Why must an average investor make solid decision before venturing? This is because the economic arena is an uncertain place with so many variables that are subject to fluctuation (Fung, Ching & Siu, 2010, p. 433). As technology redefines the operations of businesses and the investible opportunities in this virtual world, the choices the business executives make toward expropriating inherent opportunities in the global environment will go a long way in determining their continuity in business (Applegate, et. al., 2003).

As the Internet is enabling businesses to exploit new opportunities and built new capabilities, it nevertheless creates dilemmic situation for investments. This situation is then calling for new business models and there are considerable difficulties in describing the emerging networked business models that are revolutionizing business and society in the 21st century. Two important area which deserve attention is the impact of modern IT on core business operations and the second being the impact of IT on core business strategy. In most businesses, IT development activities are inextricably linked to the strategy and IT investment decisions are made in the board room by the executives vested with the responsibilities of assuring the survival and success of business concerns. However, far beyond the board room decision making processes is the requirement for the understanding of the technicalities involved in doing today business.

2. Strategizing in Modern Economic environment

Strategy making in all form of businesses mirror the economic environment. Recent developments in the international financial market are driven largely by development in trade, capital mobility, communication technology and environment (Okororie, 2008). These developments have implications for the economic order. The implications in this regard carry both positive and negative connotations. Most factors promoting investment in the international arena include the voracious effects of globalization, financial contagion, trade liberalization, liberalization of current account, feasibility of higher returns on investment, investment flow to emerging markets, growth in commerce, universal banking etc. Nations of the world are not excluded in the engagement of strategies that are capable of promoting optimal utilization of resources on one hand and securing the best living condition for the maximum number of people on the other hand. Consequently, most nations are consistently reaching out to other nations for the purpose of benefiting from both material and technical competencies implicated in comparative advantages.

In the modern business arena, IT related technicalities are quite essential to the overall idea about floating and sustaining business organizations. The overall interest lies in the generation of economic growth. In the case of Nigeria, the strategic engagement tilts towards the attraction of foreign investment, cutting down on wasteful expenditure and corruption and developing the private sector of the economy. The successful outcome of most strategies hinge on the supportive nature of the economic environment and in Nigeria, there exist relative threat to the expected outcome. Negative socio-economic

variables propelling threat include mass unemployment, official corruption, policy summersaults, moral decadence and multiplicity of crime. The existence of these negative variables makes the task of establishing, surviving, growing and making profit in businesses most difficult in this type of environment. Thus as it were, business experts must be judicious or circumspect in their efforts at formulating and sustaining investible decisions in order to avoid deliberating consequences.

In relation to entrepreneurial decision making, Gibbert (2010) asserts that extant literature is limited in its coverage of business strategies. Selective attention is concentrated in research to exploration of strategic content of business on one hand and strategic process on the other hand (Gibbert, 2010, p. 2). He further explains that most research on business strategy focus on contextual factors, decision making processes, intuitive and analytical aspect, it completely ignored specific business managerial practices that determine the origin of, and the connection to, these industries and resources positions. The conceptual development lying at the interface between strategic business process and strategic content research is at preliminary stage for most of the developing nation. When considered from another angle, most technical strategies needed to promote the expansion of business now lie within the domain of IT medium that are concertedly boosting business network on a global scale.

Making technical decisions are probably difficult for most nations such as Nigeria which are currently suffering the dirt of investible capital on one hand and relatively deficient infrastructural base required to promote business on the other hand. The limitation affecting today business becomes more pronounced when one considers business decision making in the virtual environment. As a matter of fact, if the contextual factors promoting business and the technical inputs needed to expedite business take off is at preliminary stages, one will be forced to take the position in the context of current research that the interface between the two strategic landmark so identified and their relationship with developments in the virtual business environment is not yet explored. In a crisis ridden economic environment, the business landscape is neither stable nor predictable. In the instance of non predictability of business environment therefore, investible decision is marred by the consideration for resource safety or protection which often propels investors' aversion to the committal of finance into business due to the potentiality of perceived, predictable or actual loses to business. Investors today are employing imagination in the engagement of the cyber environments on how best to minimize risks.

Risks or uncertainties make investment decision less predictable and controlling outcome also remains difficult (Hoegl, Gibbert & Marzursky, 2008; Farjoun, 2008; Moldoveanu, 2009; Gibbert, 2010). The business practice affecting the committal and non committal of capital into business and the platform upon which business investment should be adapted is quite central to our understanding of the overall practices of business magnates in this present technological driven environment. Synergizing between business decision making and the characteristic of virtuality is quite novel in literature. Looking at the unique characteristics of the virtual environment, business decision making becomes most problematic by reason of the virtuality encapsulated in anonymity, spaceless relationship and the attendant risks that are basically inducible through business venturing.

The fear of becoming or being vulnerable constitutes the setbacks in the modern e-business concerns. Mostly affected are the customers or at best the consumers who utilize

business products. Successful e-business relies on customers feeling confident about using their credit and debit cards online over the Internet, through the web pages of business organizations (Elliot, 2004). Fraudulent transactions occur in a number of ways. One is the attempt at gathering credit card information details in order to use such details for personal interest. Apart from credit card fraud, businesses often suffer from identity theft, investor fraud (shareholder) and web account fraud; hence a seasoned business executive must take precautions to avert the problems associated with online fraud. There are other gamuts of electronically induced crimes which constitute affront to the smooth sail of e-business in the modern day global economic environment which are outside the purview of this paper and which are devastating in their effects to business. Future research may be apt at looking at gamut of relationship in the global trade environment that are potentially capable of promoting the much needed harmonious co-existence among stakeholders and a digression is also central to capture most negative inducers majorly located in virtual based crimes.

Methodology

The study utilized mixed method design. Survey data was collected from six Local Government Area of Lagos State, Nigeria. During the field work, two instruments were used with varying category of respondents. The first set of respondents comprise of youth deliberately selected from the general public of the study area. They were reached with the view of knowing what cyber fraud entails, its prevalence rate, causative factor and probable solution to its effect on socio-economic relationship. The second instrument targeted the youths suspected to be perpetrators of cyber fraud. The structure of the questionnaire for the latter category consist of probing questions intended to know the technicalities involved in the perpetration of cyber fraud. The consequences of cyber fraud for business investment were also elicited.

In locating the respondents for questionnaire administration, three sampling procedures were adopted. First, the entire Lagos State was delimited along political boundary lines hence the quota sampling was used to delimitate Lagos State into three senatorial districts. Second, clustering was adopted to pick six Local Government selected for the study, Lagos West being the largest of the three with ten Local Government areas was allotted four while Lagos East and Lagos Central both having five Local Government councils were given one representation each. Third, random selection was engaged to pick the six Local Government Areas that were used for the research.

In the context of qualitative methods, two qualitative designs were used and these are focus group discussion (FGD) and in-depth interview (IDI). A session of Focus Group Discussion (FGD) took place in Ikoyi prison and a total of six sessions of in-depth interviews were conducted, two with EFCC representative in both Abuja and Lagos, two fraudsters who participated in the FGD and two other respondents from the general public of the study area. One hypothesis was tested to determine the relationship between the prevalence of cyber fraud and investment decision making. Chi square was used to establish causal relationship between variables upon which the effect of cyber fraud on investment decision was deduced.

Results and Discussion

In analyzing the consequences of cyber fraud, several factors have the attributes of being counted. In part, there exist socio-psychological impact on one hand and also some other effects inducible through the economic cost of fraud on the other. However, holding these several effects of cyber fraud constant, the study restricts itself more to the capturing of the impact of on-line fraud on e-business. And in quantifying the implications of the rising rate of cyber fraud for e-business globally, attempt was made to know the feelings of the respondents if the negative activities of the on-line fraudsters have heightened the state of fear in the e-business environment and thus making it inimical to potential on-line investors to embrace Internet business dealings. In the research findings gathered, the views expressed by the two categories of respondents clearly shows that there is a substantial threat to economic interactional flow in the cyber space when examined from most happenings tied to fraud activism in the e-environment. There exist the awareness of potential danger in venturing into on-line investment arena and so also is the unwillingness of research subjects to advice others or personally embrace investment via the Internet. This is clearly depicted in table 1.

Table 1. Consequences of Cyber Fraud on Investment Decision

Variables	General Public		Suspected Fraudsters	
	No. of Respondents	Percent	No. of Respondents	Percent
	n=805		n=426	
The existence of cyber fraud is capable of causing fear in the business environment/It is becoming more risky to use Internet to transact business.	715	Agree 88.6(798)	336	Agree 78.0(413)
Would you advise anyone to rely on Internet investment nowadays/would you prefer investing personal resources on-line?	238	29.5(787)	156	36.2(402)
Yahoo business involves betrayal of mutual trust in economic relationship.	--	--	324	75.2(411)

Analyzing the data of the table 1, 88.6 percent of the respondents in the general public completely agreed that the current dimension of cyber fraud is capable of causing fear to would-be investors who may want to rely on the cyber space for business interaction while 78.0 percent of suspected perpetrators of cyber fraud jointly agreed on the pervasiveness of risk in cyber business globally. The diminishing trust on the capability of the cyber space in fostering safe and secured business transactions were further punctuated when evaluated from the responses given to the question on whether respondents will be willing to encourage others to embrace on-line investment or personally invest via the on-line medium.

Research result shows that an insignificant number of respondents in the general public making-up 29.5 percent signified their willingness to impress it on others to adopt the innovations inherent in the modern virtual or e-business environment while the estimated few constituting 36.2 percent in the suspected category confirmed their willingness to invest private resources on-line. The agreement on the prevalence of risk in cyber business and the observe posture against supporting investment on-line clearly indicated the threat that on-line fraud pose to e-business. This vividly shows that the activities of the fraudsters are causing substantial disenchantment to the embracement of e-business globally. There exist a rising risk and increment in the threats consistently posed by cyber thieves. Approaching the measurement of risks from another point of view, attempt at interrogating the awareness of the culpability and testing the moral acumen of youths commonly found in the arena of cyber fraud was engaged Respondents were asked whether cyber fraud activity constitutes an element of betrayal in business relationship. In their responses as indicated in table 1, 75.2 percent of suspected fraudsters agreed to the notion that their engagement in fraud related activities on-line represent an outright betrayal of trust in international business. Further information supporting this position also came from the qualitative research inputs. This gave a clearer picture to why online risk persisted with its attendant consequences linked to cyber fraud in on-line business.

Findings during the In-depth interviews revealed a kind of unperturbed posture from those benefiting from fraud proceeds although they themselves agreed in principle to the notion that one should not rely on on-line investment today. The two principal respondents in this regard have this to say:

Respondent C. It is quite true that yahoo activity is discouraging on-line transaction and simultaneously reducing the benefits nations of the world might have derived from e-business. However, one thing is needful, and this is the reduction of poverty and corruption in Nigeria. You can't continue to look at people making it either genuinely or otherwise and you will fold your hands. If you can't steal from government and you can't get a better job, you must get your own from somewhere. Moreover those defrauded are not known and in most cases not Nigerian people. They cannot even feel it because they are adequately insured. (Knowing that such money comes always from Europe) The money therefore is no one's money and the pain often caused is directed at institutions in most cases rather than individuals.

Respondent F. I won't believe it is discouraging e-transaction. If it does, why can't they stop it? The proceeds going to fraud is just minute and cannot be said to pose any substantial risk to international business. Do you know the flow of e-

cash on International scale per day? How much of such cash has been intercepted by Nigerian youths as you claimed that we are responsible for fraud? Please take your rest, you are yet to see fraud in its real sense. It is just at its cradle. Apart from cash flow, what about different orders flowing through the cyber space? How many of such items ended up in Nigeria? Ours in Nigeria is just nothing when compared to what is going on in Europe and other Western Countries.

Analyzing the two responses above, it may be pretty untrue that the youths giving to fraud via their use of the Internet do not know its consequences for international business. By their educational background (both are holders of first and second degrees respectively), effects of fraud is never hidden to this set of respondents, for instance, they are a breasted of developments in the field of on-line fraud even at a global scale. Experiences have shown in Nigeria that once arrested by law enforcement agencies of the state and accosted with the evidence for their evil deeds, Fraudsters often put up a form of defence in support of such nefarious activities. They end up rationalizing their misdemeanours. They are very apt at locating the causes of their evil deeds in either omissions traceable to the state or any other predicaments they might have suffered in time past and as such the justification of volunteering themselves as threats to business expansion. Also in their responses, it is noted that the Western countries are reputed for high mass of on-line fraud and thus depicting an attempt to locally counter the near global perception often expressed by news commentators across the globe on one hand and that which prompted this research on the other hand that Nigeria is the centre of on-line fraud.

On-line fraud in the view expressed rated fraud activism in Nigeria as non-substantial and incomparable to what is obtainable elsewhere in the world. Credence was further given to this position by one of EFCC staff engaged in an In-depth interview in Abuja. The EFCC representative has this to say:

EFCC Rep (Abuja): We are yet to register cyber fraud in the true sense of it in Nigeria. Majority of what we called cyber fraud here is just a minute of what they are harvesting in the Western world. In relation to volume, sophistication and resources involved, Nigeria's contribution is relatively nothing.

When one evaluates the position of the EFCC representative, it should be realized that cyber fraud is still at its infantile stage in Nigeria. Nevertheless, the pursuit and consequences of fraud related activities cannot be glossed over even though fraud ramification may be insignificant if compared to the volume of cases of cyber infringements prevalent in the advanced world. One should not underplay its consequences for transactionary relationships on the platform of e-business. Any omission in this wise would spell a dire consequences for the economic development of any nation and equally further impoverish the citizenry in most Third World Countries as Nigeria.

There is also no doubt that the risk currently in vogue globally threatens socio-economic development of nations particularly those classified as Third World nations who are seriously in need of foreign investment. Apart from the existence of myriad of factors that are debilitating to investment, concerted efforts are required to address or tame the potential risks prevalent in the on-line environment. Inferentially, if business risk trend in the e-environment remained unchecked, it is capable of lowering the flow of investible foreign capital and it is also capable of drastically reducing the standards of living of

citizens in the countries concerned. When one considers this position, one may be tempted to pose the question why? Answer to this is not farfetched, it is because the world is sporadically moving towards the late stage of transition into ‘electronic relationship’ and any impediment in this direction, portends a bleak future for any affected nation who may not catch up with the tide of its movement. This in our view represents the real cost of on-line fraud especially within the context of setbacks imposable on the flow of e-business to nations in dire need of economic boost and industrial capital.

Apart from the real cost of fraud to nations, there is a Victimology of on-line fraud. In a way, one should rarely know that victims of on-line fraud also suffer dire consequences. This mostly affects the beneficiaries of e-business outputs. Once defrauded, victimization becomes impactful in the following areas; loss of productivity often occasioned by reason of the expenditure of time needed to assist the law enforcement agencies in booking the offence and the offenders, traumatic experiences emanating from the loss of sensibility or fathoming out what has happened and this further leading to health fatalism and concomitantly, socio-psychological complications capable of lowering the confidence level of victims and putting them in persistent state of fear. Exploring further and on a final note, institutions are not exempted in the web of on-line fraud victimization. In a way, they are the most affected in term of cost and factors affecting the continuity of operation of organizations or survival hence the need to promote business friendly decisions in the cloud of uncertainties.

In view of the enormity risk in the cyber environment, a cross tabulation of cyber induced risk and on-line investment attitude was done. A single hypothesis was tested and it is stated in this form “there is a significant relationship between risk associated with cyber fraud and attitude to online investment.” This hypothesis was borne out of the need to quantify the effect of cyber fraud on investor’s attitude towards on-line investment. The determinant of the level of significance was done by looking at the chi value and the strength of association was equally considered through the estimate given by the phi value.

Table 2. Chi-square test illustrating relationship between Cyber Fraud Risk and On-line Investment Decision

On-line Investment Decision	Trying to get money/property online		Total
	Yes	No	
Agree	101 (66.0%)	52 (34.0%)	153 (100%)
Disagree	224 (91.8%)	20 (8.2%)	244 (100%)
Total	325 (81.9%)	72 (18.1%)	397 (100%)
Chi-Square Tests	Pearson Chi-Square = 42.127		Likelihood Ratio = 41.417
Symmetric Measures		Value	Approx. Sig.
	Phi	-.326	..000
	Cramer's V	.326	.000

The cross tabulation (Table 2) shows that in the relationship between risk associated with cyber fraud and attitude to invest on-line, 397 respondents presented their views on both issues while 66.0 percent of participants in cyber fraud concurred that a relationship exist between visible or quantifiable risk endemic in cyber fraud environment and the attitudinal disposition to investment, 34.4% of non participants agreed. In essence, the decision to invest on-line is mitigated by the climate of risk in the e-business environment. The Chi-Square value indicated 42.127 at p-value of 0.000 indicating a statistical significant relationship between the two variables compared. This result supports what is known in risk-investment research. Several researches have shown that the perception and quality of risk determines or influences the nature of response (Rein, 1992, p. 65; Furedi, 2002, Furedi, 2006). The phi correlation coefficient was also adopted to test the strength of the relationship between risk in on-line environment and attitude towards investment. The result at a value of -0.326 showed that there is a significant relationship between the two variables. There is a strong relationship observed. The finding further accentuates the ever increasing risk dominating the E-business environment and it is quite in line with most reported findings in cyber risk research. This result that is statistically generated is supported by literature which states that the higher the dosage of risks prevalent in an investible environment the higher the apathetic reaction to the committal of capital to investment. It is established that there is synergy between the availability of risk and the volume of investment generatable in any nation. It is therefore non-surprising that the depth of on-line propelled investment is at its low ebb in the area of study.

Apart from the fact that there are pockets of suspected on-line fraudsters consistently experimenting with diverse virtual crimes, there is also dirt of businesses solely relying on modern e-business technologies for their operations. The public image hitherto created about the business environment of Nigeria at the media arena probably reinforced this current predicament of Nigeria in expanding its business frontiers. The literature assertion that loss is inimically to the overall business interest and that such mitigates business decisions draw substantial strength of support within the empirical community of current research. Overtly, businesses are on the down flow and ordering of commodities appears insufficient to sustain business survival apart from the existence of dwindling profitability across the industrial sector of the economy.

On the whole, business decisions in the modern times are hampered by the listed happenings in the business environment. Consequently, it should be established that there is a registrable synergy between the theoretical leanings of this study and the observational analyzes derived from the obtained data. Risk is ubiquitous in the modern on-line business environment (as identified by the categories of respondents used for the study) and correspondingly, investment decisions are driven by the nature, potency and the probabilities that are associated with the amelioration of risks. Once an investors or group of investors cannot predict with some level of exactness the nature and potency of risk, the mitigation of such risk becomes unbearable on a short run while in the long run, nations induced with risks experience acute economic excommunication with the eventuality of abysmal progress in the real GDP alongside the deterioration to the condition of living of the citizens. It is on this basis that nations of the world should strive to avoid this condition, cut the circuit of on-line fraud and create a more conducive environment for investment.

Conclusion

The challenges relating to risks in e-business operations have been accentuated in the literature. The gamut of risks confronting businesses in the modern age is astronomically high and has the potential of promoting relatively multi-dimensional expression of scepticism among today investors. Current study establishes that investors are more likely to be disenchanted in their committal of resources into the business environment that is unpredictable and less promising. Worse still, research subjects that are suspected perpetrators of cyber fraud expressed their unwillingness to invest privately owned resources online and concomitantly, their counterpart in the general public of the research area equally asserted their non-readiness to encourage anyone to invest their resources online as a result of risks associated with online business. They both submitted that there are myriad of risks attendant of the e-business environment both now and in the foreseeable future. The consequences of fraud activism therefore cannot be underestimated just as several numbers of people and nations may be affected by the current trends. There is the possibility of shrinking the required economic growth or expansion in the global environment and this is a factor of development emanating from the fraudulent behaviours of youths across major cultures. The long run implication of cyber fraud on businesses can be quite devastating most especially for nations struggling to survive economically. In the case of Nigeria, the challenges confronting economic growth are multi-faceted.

It may be recalled that several democratic administrations in Nigeria have embarked on trips to foreign countries to woo investors into Nigeria in order to boost economic growth; it is however saddening that several factors are consistently inhibiting the influx of such needed support. Most macro and micro indices of measuring economic growth have clearly shown that Nigeria is not making commendable progress. Apart from the induceable risks that are often projected by online fraud, the infrastructural base of Nigeria is relatively less business friendly. The challenges linkable to the power sector of the national economic create room for vulnerabilities and in most cases culminating into reduced profitability of business. NESG (2015) reliably informed that 41% of businesses generate their own electricity in Nigeria despite the concerted effort of governments at improving the situation. It should be simply noted that any nation desiring a meaningful socio-economic development must at least address her power base and this is grossly lacking in Nigeria due to inconsistency in policies regarding power sector reforms.

Official corruption has also been the bane of development and thus promoting the decline in sectoral growth. Massive unemployment of youths has been unabatedly reported by the national Bureau of Statistics (NBS). In the first quarter of 2015 the unemployment rate was put at 7.5% and mostly affected are the youths (Emerio, 2015). Youth unemployment therefore substantially represents an induceable factor that should require stakeholder's urgent attention in order to arrest the tide of risks associative of business investment in Nigeria. Concerted efforts toward the improvement of these few identified areas will sporadically accelerate the pace of economic growth that is not exclusive to the researched area but will also assist other nations of the world that are transitional in their economic structure and requiring external intervention for growth and development.

In thinking about future research effort, it is important to note that current study only captured a section of the probable factors that may account for non-committal of resources into business due to online fraud. Further attention should be paid to the views of the

investors on the vulnerability inherent in the e-business arena and subsequently the factors which may either spur or discourage them from adopting online investment option in the global economic arena. Future studies may also be interested in the gendered dimension to taking investment decisions in the atmosphere of risk.

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