

Sunday Sunday Akpan

Special Issue Vol.1 Issue 1, pp. 860-877

Date of Publication: 2015

DOI- <https://dx.doi.org/10.20319/pijss.2015.s21.860877>

This paper can be cited as: Akpan, S. S. (2018). *Before Insurance: A Case for the Embedment of Non-Probabilistic Traditional Risk Management (TRM) Practices in Disaster Prone Environment*. PEOPLE: International Journal of Social Sciences, 1(1), 860-877.

This work is licensed under the Creative Commons Attribution-NonCommercial 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.

BEFORE INSURANCE: A CASE FOR THE EMBEDMENT OF NON-PROBABILISTIC TRADITIONAL RISK MANAGEMENT (TRM) PRACTICES IN DISASTER PRONE ENVIRONMENT

Sunday Sunday Akpan

Ph.D. Research Student, Putra Business School, University Putra Malaysia, Serdang, Malaysia
Sunday.phd15@grad.putrabs.edu.my

Abstract

This paper focuses on a priori risk management alternatives open to individuals and organizations, especially small business organizations (SBOs) in emerging communities. It is an examination of the various TRM practices considered to be non-probabilistic. It proposes a natural way of managing risk prior to considering conventional and contractual risk management method like insurance, especially where it is expensive and probably unaffordable. The emergent of natural disasters at homes, workplaces and habitable environments and the attendant and almost unmitigated loss exposure through insurance system has called for this investigation. And because insurance is just one method of managing risk, there is need to explore other complementary methods that may not necessarily involve the intrigues of probability calculations, premium payment and claim administration. Being a conceptual paper, the method of inquiry is basically a review of extant literature with intensive archival and document readership (ADR). The various TRM loss-related areas examined include property, liability, personnel and non-income loss exposures. The TRM practices found to be useful in managing these loss exposures include parameter fencing, intangible heritage, control of urban

sprawling, preserving traditional mud-brick and timber-laced dwellings, cross training, succession planning, drainage surveillance and good land use and forest conservation etc. In conclusion, these practices are natural ways of preventing the occurrence of undesired event and does not provide for probabilistic calculations and prediction of uncertain future events. Now that catastrophic risk occurrence has assumed a new dimension, TRM constitute a priori expected risk management framework for managing risk by individuals and organizations while thinking about conventional insurance in emerging communities.

Keywords

Insurance, Disaster, Traditional Risk Management, Loss Exposures, Emerging Communities

1. Introduction

In life, we as individuals must take decisions, and in our businesses, we must also take decisions. Decisions, by their nature are futuristic in the sense that decisions guide our future actions; and because the future is and will always remain uncertain, risk is eminent in as much as there is the possibility, as always been, of a negative outcome from an event. It follows therefore that should there be no possibility of a negative outcome arising at all, even remotely, and then we usually do not refer to the situation as having risk (but only uncertainty). Since we take decisions every day, it is truer to say that risk is thus part of every human endeavor. From the moment we get up in the morning, drive or take public transportation to get to school or to work until we get back into our beds (and perhaps even afterwards), we are exposed to risks of different degrees.

According to Lowe (2010), the notion of risk and its ramifications permeate decision-making processes in each individual's life and business outcomes and of society itself. Thus, risk, and how it is managed, are critical aspects of decision making at all levels. To say that risk is an essential part of both business and individuals may not be gainsaying because neither firms nor individuals can operate and survive successfully without taking risks. On a loftier note, it can be argued that every major advance in human civilization, from the caveman's invention of tools to gene therapy (Kennan & than gavel, 2008), has been made possible because someone was willing to take a risk and challenge the status quo.

Risk is thus one of human life certainties, and how individuals and organizations deal with risk can have serious consequences on the achievement of their objectives. There is always

the possibility that we will not achieve the objectives we set for our self because uncertainty is always involved in our plan. In every objective set, there is element of risk which needs to be effectively managed to mitigate its impact on our goals. Risk is difficult to define, but could be described as the possibility that events will develop worse than planned (Hooker, Bulmer, Cooper, Green & Hinton, 1996). According to Redja (2008), risk is “uncertainty concerning the occurrence of a loss (p.3)”. Risk is pervasive and ubiquitous. They can best be managed than completely stopped. It behooves therefore on every individual, groups and organizations to take steps to manage risk to reduce its cost, impact and frequency and ultimately stay and live well. Risk can be managed, handled or treated either by controlling it or by financing it.

Risk control involves the use of some techniques such as avoidance, loss prevention and loss reduction to reduce the frequency or severity of losses. Avoidance means not acquiring the loss exposure in the first place or abandoning an existing loss exposure; example is avoiding flood loss by not citing a building in a floodplain. Prevention means taking necessary steps to reduce the frequency of a particular loss; an example is preventing vehicular and cite accident by strict enforcement of safety rules. Reduction implies adopting measure to reduce the severity of a loss after it has occurred; for example reducing the amount of cash at hand to reduce the loss resulting from robbery or burglary.

Risk financing involve using techniques such as loss retention, noninsurance transfers and insurance to provide for the funding of losses. Retention is about retaining parts or all the losses that can result from a given loss; for example consciously disclosing all properties lost in an events and express decision to share in the loss. It is used when no other option is possibly available and the worst possible losses are less severe and predictable. Noninsurance involves using methods other than insurance and excluding retention and control techniques to transfer to another party a pure risk and its potential financial consequences; for example contracts, leases etc. Insurance involves the pooling of fortuitous losses by transfer of risk to insurers who agree to indemnify insured for such losses, to provide other pecuniary benefits on their occurrence, or to render services connected with the risk, (Redja, 2008).

Overall, risk can be managed traditionally through control measures or enterprise wise through financing measures. However, while the latter have been discussed extensively in most literatures (see, for example, Akpan, 2011, 2013, Redja, 2008; Yusuf & Yusuf, 2010, etc) the former have suffered a dearth of literature. To put it straight, literature on traditional risk

management and its practices are scarce. In this paper, focus is on the traditional approach to risk management. The first two academic books were published by Mehr and Hedges (1963) and Williams and Hems (1964). Their content covered pure risk management, which excluded corporate financial risk. In all, pure risk management is considered the center piece of traditional risk management, but a study that explicitly mentioned how this traditional risk management was practiced is not found. Etta et al., (2006) have made an attempt at explaining the traditional risk management but still did not mention its practices.

Thus far, there is an agreement in literature that traditional risk management involve the management of loss exposures in property, liability, net income, and personnel, but those practices that mitigated the loss exposures have not been mentioned and this become a problem which this study generally seek to address. Therefore, the general objective is to investigate the traditional risk management practices that can mitigate loss exposures. Specific objectives are to:

- Examine the various loss exposures that can be mitigated by traditional risk management practices in emerging communities.
- Identify the various traditional risk management practices in emerging communities.

To achieve these objectives, this paper is discussed in five parts. Following this introductory background as part one, is part two which is a review of relevant literature. Part three present the methodological issues adopted for this investigation. Part four is findings from the theoretical enquiry and TRM conceptualization and modeling, while part five present conclusion and recommendations.

2. Review of Relevant Extant Literature

There are several literatures on risk management. The prehistoric and current paradigm of investigation have been on the history, definition, and critique of risk management (Dionne, 2013), process of risk management (Dabari & Saidin, 2013), antecedent of risk management (Grabowski & Karlene, 1998) and, of risk management failures (Fadun, 2013) among others. In this review little attention would be paid to these paradigms as one can readily grasp any of these literatures and read on them. Our focus is basically and predominantly on TRM practices. It will cover the concept, meaning, evolution and, process of TRM among others.

It is the need to mitigate the impact of risk, that the concept of risk management became noticed and appreciated. Today, individuals and businesses hold risk management as one of their

objective. Murray-Webster (2011) asserted that enterprises including businesses hold risk management to be as important as any other objective, including profitability. Risk management provides a framework for assessing opportunities for profit, as well as for gauging threats of loss.

Proper risk management will reduce not only the likelihood of an event occurring, but also the magnitude of its impact. Assessing and managing risks is the best weapon against project catastrophes.

Empirical investigation reveals that risk management can be traditional or enterprise. TRM focuses on the management of property loss exposure, liability loss exposure, net income loss exposure, and personnel loss exposure. Enterprise risk management focuses on hazard risk, operational risk, financial risks, and business and strategic risks. In this paper, focus is on the TRM practices.

The concept of TRM has not been well discussed in literature. Its understanding therefore depends on few works done in related concept such as disaster response operations and management. It was in this lecture by Quarantelli (1987) and later by Selves (2002) that the concept of TRM was mentioned. In what seems to be the first ever writing on TRM the author while explaining the approaches to disaster response operation and management, cited TRM as one of the two approaches that guide response to disaster. The other approach is professional approach. It therefore follows that the first mentioning of TRM was associated with disaster management.

In confirmation, McIntyre (2006) opined that the traditional model has historically been employed in disasters. According to the author, it has been referred variously to as the civil defense, command and control, bureaucratic or emergency services perspective. Some scholars and practitioners (Edwards-Winslow 2002; Selves, 2002; Neal & Phillips 1995; Britton, 1989) accepted the traditional approach to disasters as the valid way of dealing with response operations and management. Traditional risk management uses a tactical approach whereby viewing a threat as a potential event that might or might not occur and is focused on the direct consequences of that threat. Traditional risk management focuses on pure risks and views each risk separately.

Although there might be variant definitions, for Rubin (2014), traditional risk management is defined from the process perspective. Which is an activity that involve the identification of risks, qualitative analysis of risks, and planning for how to deal with (or

mitigate) risks, and control (or do something about) risks. The focus of traditional risk management as defined by Rubin (2014) is basically on traditional risk management process and plan. In summary, Fig. 1 presents a snap shot of the core issues in traditional risk management process that incorporated traditional risk management plan.

As indicated in Fig. 1, the process begins with risk identification. Under this phase, the various possible and conceivable risk events are jointly considered definitively in term of their relatedness and severity. Their probability of occurrence is ascertained to be near certainty. The consequences of the occurrence are judged based on expected cost that will be incurred in taking remedial action. The impact analysis, most likely would involve qualitative permutation with priority given to most severe risk event. It may not involve quantitative application of sophisticate analytical tool (this being more needful in formal insurance), but intuitive judgments. Following successful prioritization, the plan for which TRM option is then commenced and implemented. The last activity in the cycle is control. This is done in the aftermath of implementation to check against possible variations that may create room for another risk.

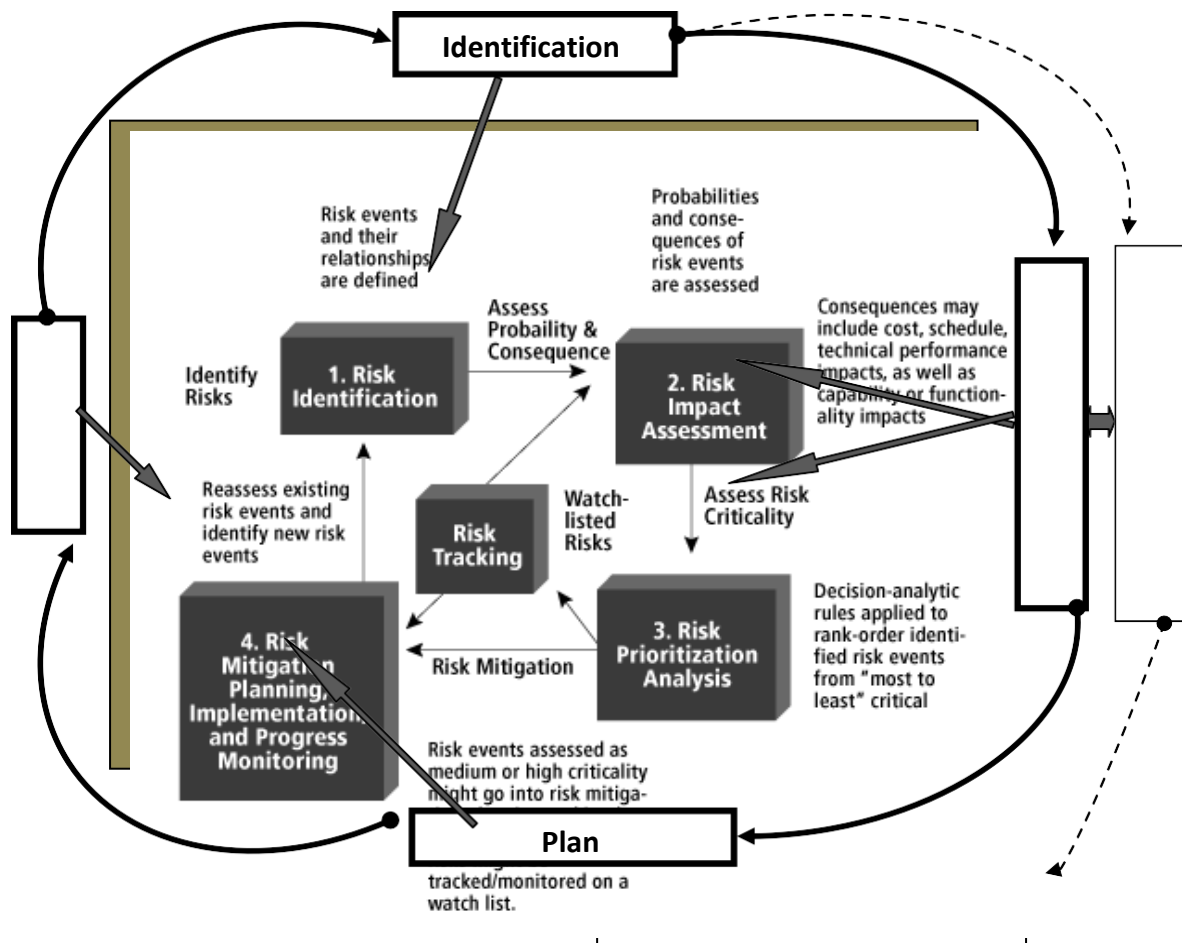


Figure 1: *An Extended Component of TRM Process and Plan*

Source: *Adopted from Rubin (2014) and Adjusted by the Researcher*

2.1 The Role of Traditional Risk Management

Traditional risk management plays significant role in project management (Rubin, 2014). In figure 2, we explore the application of traditional risk management in project management for instance. In the picture below, we take the mental model of uncertain events that that our vendor might fail to deliver a component on a promised date. First, we can easily identify the uncertain event (this is not a Black Swan)—vendors do frequently fail to meet a promised date. We might even be able to derive a not-to-horribly-wrong probability that the vendor will be late. The consequences of not getting the component when promised are likely well understood and reasonably calculable.

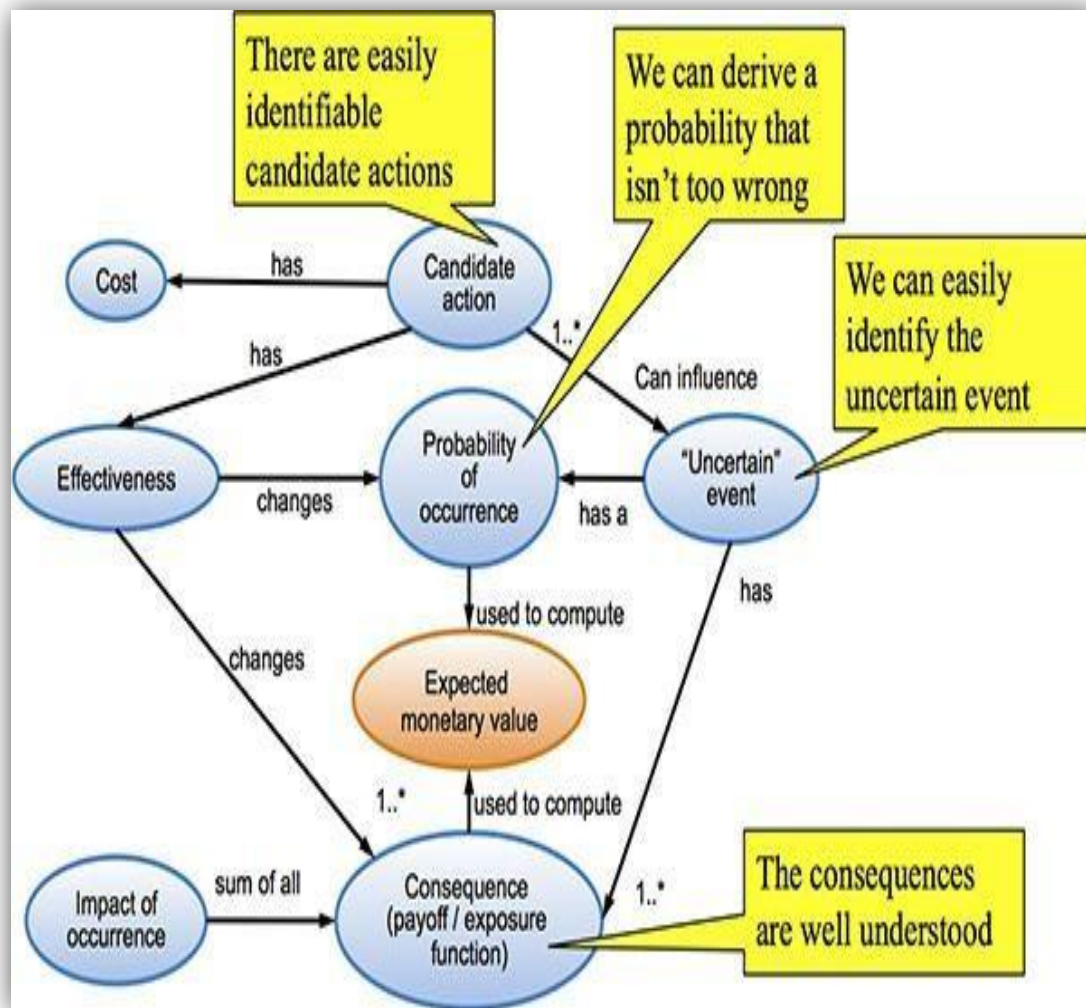


Figure 2: Role of Traditional Risk Management in a Hypothetical Event Situation

Source: Adopted from Rubin (2014) and Adjusted by the Investigators

As indicated in Figure.2 TRM presupposes that an individual's action can easily be identified and once it is identified, it carries with it a tripod attributed of cost, effectiveness and uncertainty over its outcome. The effectiveness can change the probability of occurrence as well as the consequences which can be used to compute the expected monetary value. The candidate action can also influence the uncertain event which can easily be identified too. The uncertain event has the probability of occurrence and consequence that can be used to compute expected monetary value. The probability of occurrence that is not too wrong can be derived from the action and together with the effectiveness of the candidate's action and uncertainty and the

consequences of the both is used to compute expected monetary value. Finally the consequences and its impact are well understood.

2.2 Traditional Risk Management Loss Exposures

Empirical literature provided four areas of traditional risk management from which we could assess traditional risk management practices. These core concerns (property loss exposure, liability loss exposure, net income loss exposure and, personnel loss exposure) and the appertained traditional practices are discussed as follows:

- **Property Loss Exposure:** Property owners face the possibility of both direct and indirect (consequential) losses. If a car is damaged in a collision, the direct loss is the cost of repairs. If a firm experiences a fire in the warehouse, the direct cost is the cost of rebuilding and replacing inventory. Consequential or indirect losses are nonphysical losses such as loss of business. For example, a firm losing its clients because of street closure would be a consequential loss. Such losses include the time and effort required to arrange for repairs, the loss of use of the car or warehouse while repairs are being made, and the additional cost of replacement facilities or lost productivity. Property loss exposures are associated with both real property such as buildings and personal property such as automobiles and the contents of a building. A property is exposed to losses because of accidents or catastrophes such as floods or hurricanes.
- **Liability Loss Exposure:** The legal system is designed to mitigate risks and is not intended to create new risks. However, it has the power of transferring the risk from one shoulder to another. Under most legal systems, a party can be held responsible for the financial consequences of causing damage to others. One is exposed to the possibility of liability loss (loss caused by a third party who is considered at fault) by having to defend against a lawsuit when he or she has in some way hurt other people. The responsible party may become legally obligated to pay for injury to persons or damage to property. Liability risk may occur because of catastrophic loss exposure or because of accidental loss exposure. Product liability is an illustrative example: a firm is responsible for compensating persons injured by supplying a defective product, which causes damage to an individual or another firm
- **Net Income Loss Exposure:** This is a condition that presents the possibility of loss caused by a reduction in net income. A primary loss causes a Net Income loss. Always results in

another loss occurring first. A net income loss may not occur if a risk management control was in place before the loss.

- **Personnel Loss Exposure:** Personnel loss exposure is when an employer has the possibility of loss through the death, injury or disability of employees. A condition that presents the possibility of loss caused by a person's death, disability, retirement, or resignation that deprives an organization of the person's special skill or knowledge that the organization cannot readily replace.

2.3 Traditional Risk Management Practice for Mitigating Loss Exposures

In several writings such Edwards-Winslow (2002); Selves (2002); Phillips (1995); Britton (1989), Akpan & Michael (2015), Akpan & Ayandele (2015), Akpan & Etuk, (2014), amongst others, a number of traditional risk management practices have been identified expressly and implicitly. However, these traditional risk management practices were considered as being peculiar to all countries in the world and there was no mentioning of any country. It is assumed therefore that, in Nigeria, these practices were also adopted to protect or mitigate the above mentioned loss exposures. The traditional risk management practices embedded in the studies of the afore-cited authors is examined beginning from the paragraph that follows.

According to the authors, a research in areas affected by seismic activities has shown that buildings constructed with traditional techniques have proven very resilient to quakes, when well maintained. An appropriate use of the land and the conservation of forests, on the other hand, have been identified as major contributors to preventing landslides and floods, which cause each year more casualties than earthquakes in many parts of the world.

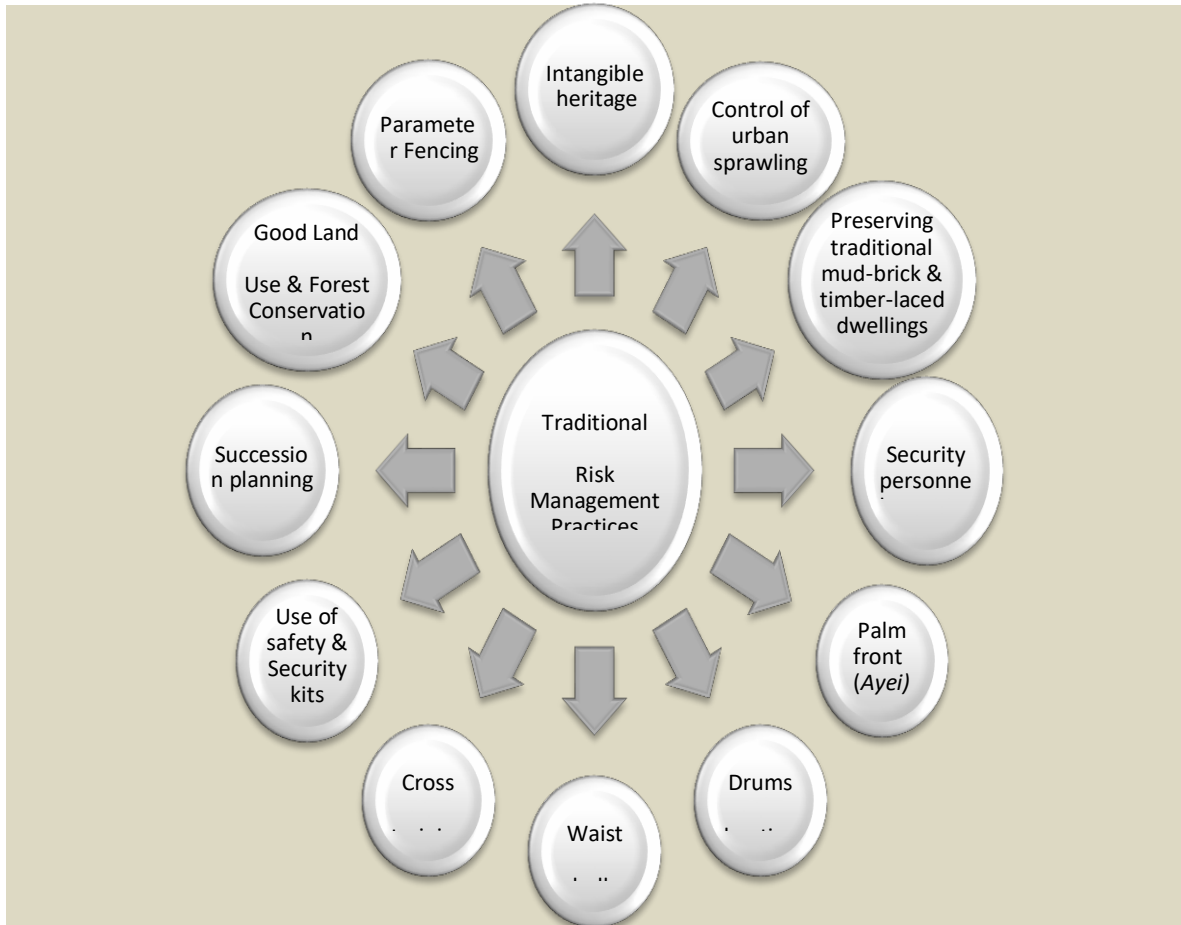
Intangible heritage can also be of help. The recent case of the fishermen from the Andaman Islands, who knew from their forefathers that when the sea withdraws, humans must do the same, is a testimony to the ways in which traditional knowledge can save lives. Another relevant example is the passing, generation to generation, of the traditional knowledge on the complex procedures which ensure the protection from fire of the World heritage site of the Kiyomizu Dera Temple of Kyoto, in Japan.

Heritage and the traditional skills that have maintained it over the centuries, therefore, can be essential to enhance prevention and mitigation of disasters. Many observers noted, for instance, that a control on the chaotic urban sprawling along the coast of the Southern Indian countries would have probably saved tens of thousands of lives and reduced considerably the

extent of the damage from the tsunami. Similarly, the preservation of traditional mud-brick and timber-laced dwellings would have most likely reduced the tragic death toll of the Bam earthquake (2003). If one considers that nearly 50 % of the Iranian population still lives in earthen constructions located in highly seismic areas, it is easy to understand the importance of an appropriate conservation policy for traditional settlements. The same reasoning, of course, applies to several other countries of Central Asia and regions of the world, such as Latin America, Sub-Saharan Africa and the Maghreb.

In the studies of contemporary authors, succession planning, use of safety kits, palm front (Ajei), use security personnel, cross training, waist bells, drums beating were said to constitute traditional risk management practices in the ancient primordial times. Explaining further, the said that succession planning as a risk management technique seeks and identifies employees who will be able to fill top management positions when they become vacant and this will prevent the risk of personnel loss exposure. Safety kits used prevent accidental loss exposure at workplace as well as property loss exposure. Inference from the work of the authors implies that palm front was used in the ancient and even contemporary times as warning signs to prospective trespassers and occupiers of property. It thus served as a preventive mechanism, evading the risk of forceful possession of an asset or property. It has been adjudged the easiest way to managing property loss exposure.

Moreover, the use of security personnel is to prevent thieves or armed robbers and burglars from robbery and burglary, thereby preventing the loss of property and valuables and



even loss of life. Cross training is a risk management technique that trains employees in a wide range of skills so they can fill any of the roles needed if another employee is absent. This is also another method of managing risk that may result from employee lost either by attrition, resignation, death or fatal injury and any incapacitation. The use of waist bell is a sound that warns that something injurious is approaching and people were, by this sound, not allowed to go out in order to avoid being affected or infected.

Figure 3: *Traditional Risk Management Practice*

Source: *Inference from Retrospective Investigations*

3. Methodological Issues

Research imbibes the use of methodology which is a “range of approaches used in research to gather data which are to be used as a basis for inference and interpretation, for explanation and prediction” (Cohen & Marion, 1980). This study is basically a phenomenal investigation. It is an examination of past literatures on TRM that were not investigated from the perspective of its practices. The design employed in carrying out this study is therefore secondary research method. By this method, the researchers embarked on a qualitative rather than quantitative examination of past literatures within the ambience of risk management.

Information gathered are linked with the omitted dimensions in literature to bridge the gap that had been created. This paper is a conceptual paper. By this, it involved document investigation and it does not involve a survey of peoples’ opinion concerning the subject of investigation. The source of information was basically secondary which include texts books, journals, magazines, seminar papers, speeches, newspapers, workshop materials, internet contents and other related printed materials. The method adopted in collecting the information was archival and document review technique (ADRT). The results are reported in such manner that conforms to the conventional research tradition and ethics.

4. Findings and Discussions

In this paper, it is evident that risk management is ultimately about human wellbeing. Possibly, a risk-free society is a desirable state of every entity (individual, organizations and nations). It is also shown that human have roles to play in securing the wellbeing and risk-free society through conscious efforts that are basically traditional. In this paper, we have found a number of strategic and complementary practices that could help reduce some risks in our homes, workplaces and environments. These strategies and the various risk categories they could help mitigated are reclassified, modeled and presented in Figure. 3.

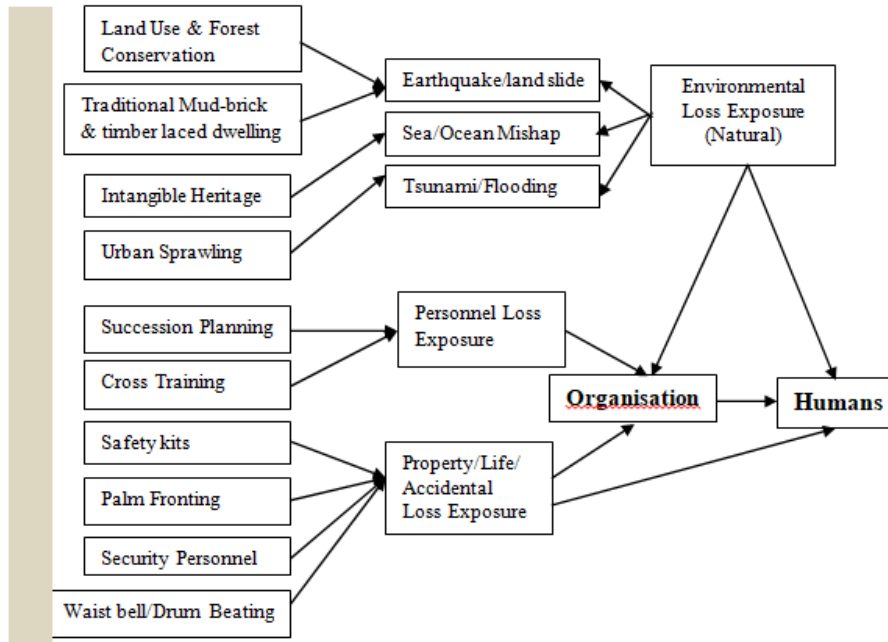


Figure 4: An Extended TRM Model for Individuals and Organization

Source: Researcher's Inference and Configuration

As indicated in the above model, two TRM exposures were found in literature to be directly related to the identified TRM practices. These are property and personnel loss exposures. Net income and liability loss exposures are not directly and may not be adequately mitigated through TRM practices. However, the TRM loss exposure not mentioned expressly is what may be called Environmental loss exposure. An abridged discussion on the model presented above is that some categories of risk are from natural occurrences and they constitute environmental (natural) risk. These risks can affect organizations and can also affect individual or human directly. Personnel loss exposure can directly be mitigated through succession planning and cross training and it can affect only organizations directly. Property, life and accidental loss exposure can be mitigated by safety kits, palm fronting, security guards and drumming. Waist belling and it has the ability to affect organizations and individuals directly.

5. Conclusion and Recommendation

In this paper, we have investigated the concept of traditional risk management and its practices. We sought in this paper to specifically identify or examine core traditional risk management practices in emerging communities for both individual and SBOs. The findings from literature investigation, present a renewed interest in yet another paradigm of risk

management which we considered as non-probabilistic. The summary of these findings are presented in Figure 3., while specific risk dimensions they could help mitigate, control or prevent and the ultimate goal of such risk management effort is presented in Figure 4.

The identified risk management practices are basically and more of risk controlling techniques than risk financing which involve contractual relations and focuses on insurance. It is to be noted that the TRM practices suggested above are and cannot supplement insurance, rather it is to complement insurance. The underlying idea is that prior to taking insurance policy, the potential insured should do the needful so that when finally decided to buy insurance policy, every material facts and primordial preventive measures must have been taken into consideration. They do not connote the transfer of risk to another party. This is perhaps why these practices are considered as traditional rather than scientific or modern. How effective are these practices then or now is a function of subjecting these measures to empirical test using quantitative approach.

Also, the traditional risk management practices are the natural way of managing risk. This is because, as a person, it is expected that you should do what is needful to protect yourself and properties or assets. The practices are merely proactive measure that attempt to prevent the occurrence of undesired event. So for practitioners, the chance of an event occurring is near certainty. These may not have been an effective method of managing risk, and this may also have been the reason for the emergent of a more scientific and better method and practices of risk management as we have today. Thus traditional risk management practice identified above are considered to be forerunners of the new paradigm of risk management practices referred hereto as the modern or enterprise risk management practices.

From the review, the researcher concludes as follows:

- Land use and forest conservation, preserving traditional mud-brick and timber-laced dwellings, intangible heritage and urban sprawling are TRM practices can gauge loss exposures and risks relating to environmental degradation.

- Succession planning and cross training can help control personal loss exposures in organizations

- Use of safety and security kits, use of palm front (Ayei) or caution tape, use of security personnel, drum beating, use of waist bell can serve well in controlling loss exposures relating to property, life and accident either in organizations or in individual case.

Based on the above, it is instructive to state that the TRM practices are more a natural way of preventing the occurrence of undesired event and does not provide for calculability of probabilities of uncertain events. In view of the above finding and conclusions, the following recommendations are made:

- The various traditional risk management practices identified appears to have been effective at managing pure risk only. Now that risk management has assumed a new dimension there is need to integrate these traditional approach with the enterprise approach to build an integral risk management framework that will take care of any type of risk for an organization.

- Again, the effectiveness of each practices has not been ascertain in study, it is thus recommended that these practices be subjected to empirical test to know which is most effective in a particular risky situation an organization may face. In other words, it would make more sense academically and practically to investigate the capability of the identified traditional risk management practices at protecting and preventing risk in property, non-income, personnel and liability loss exposures in the contemporary risk management era. Therefore, empirical test of the potency and the degree of effectiveness of these TRM practices at adequate risk mitigation is an area for further investigation.

References

- Akpan, S. S. (2011). Insurance Industry and Public Relations: The Need for Strategy Review. *Advances in Entrepreneurship Development*, 1(1): 59-68
- Akpan, S. S. (2013). Life Insurance Business in Akwa Ibom State: Challenges and Strategic Option. *IOSR Journal of Business and Management*, 9 (1):31-37.
<http://dx.doi.org/10.9790/487X-0913137>
- Akpan, S. S. & Ayandele, I. A. (2015) Remodeling Strategic Staff Safety and Security Risks Management in Nigerian Tertiary Institutions *Expert Journal of Business and Management*, 3 (2): 150-165.
- Akpan, S. S. & Etuk, S.G. (2014) Risk Reduction and Trust Building Strategy for Consumers: An Explanatory Power of Branding. *Journal of Research in Business and Management*, 2 (1): 01-08

- Akpan, S. S. & Michael, N. P. (2015) Analyzing Petrol Scarcity Risk in Nigeria: Strategic Management Survey and SWOT. *International Journal of Risk and Contingency Management*, 4(1), 21-38.
- Bam, E. (2003). Breakthrough Ideas for 2004, *Harvard Business Review* 2: 13–16.
- Britton, H. (1989). *Risk Quantification: Management, Diagnosis and Hedging*, UK: John Wiley & Sons Ltd.
- Dabari, I. J. & Saidin, S. Z. (2013) Antecedents of the Level of Risk Management Practices in Nigerian Local Government, *Management* 3(7): 475-479
- Dionne, G. (2013). Risk management: History, definition and critique, *JEL*, 1-34
- Edwards, W. (2002) *Integrated risk management - Technologies & strategies for managing corporate risk*. New York, NY: McGraw-Hill.
- Etti, B., Patrick L. B. & Yehuda, K. (2006) Risk Management for Enterprises and Individuals. *J. of organizational Management*, 3 (2): 23-35
- Fadun, O. S. (2013) Risk Management and Risk Management Failure: Lessons for Business Enterprises. *International Journal of Academic Research in Business and Social Sciences*, 3(2): 225-239
- Grabowski, M., & Roberts, K (1997) Risk mitigation in large-scale systems: Lessons from high-reliability organizations *California Management Review*, (Summer 1997), 152-159.
<http://dx.doi.org/10.2307/41165914>
- Hooker, N. D., Bulmer, J. R., Cooper, S. M., Green, P. A. G. & Hinton, P. H. (1996). Risk-based Capital in General Insurance, *B. A. Journal*, 2 (II): 265-323.
<http://dx.doi.org/10.1017/s1357321700003445>
- Kannan, L. & Than gavel, H. (2008) Risk management lessons worth remembering from the credit crises of 2007. *The J. of Portfolio Management*, Spring 2008, 21-44
- Lowe, S. W. (2010). *Risk Management*. London: The Chartered Insurance Institute.
- McIntyre, K. (2006). Risk management: The unifying framework for business scholarship. *Risk Management and Insurance Review*, 10(1), 1-12.
- Mehr, R.I., Hedges B.A., (1963). *Risk Management in the Business Enterprise*. Irwin Homewood, Illinois.

- Murray-Webster, H. (2011). What is risk? Towards a common definition Inform: Journal of the Institute of Risk Management, 11-12. Retrieved 22 April 2012, from: <http://www.risk-doctor.com>
- Neal, J. & Phillips, D. (1995) Enterprise risk management - sub-optimality to optimality. Journal of Insurance & Risk Management, 2(4):75-84
- Phillips, N. (1995). Risk mitigation in large-scale systems: Lessons from high-reliability organizations. California Management Review, (Summer 1999), 152-159.
- Quarantelli, M. (1987) Risk management lessons worth remembering from the credit crises of 2007 - 2009. The Journal of Portfolio Management, Spring 1987, 21-44.
- Rejda, G. E. (2008). Principles of Risk Management and Insurance (10th Edn.), USA: Pearson Education, Inc., pp.1-36.
- Rubin, K. (2014). Agile & Risk Management: The Role of Traditional Risk Management. <http://whc.unesco.org/en/disaster-risk-reduction>
- Selves, G. (2002) financial failure and risk management. Sermaye Piyasası Dergisi, 10(2), 100-109.
- Williams, A., Heins, M. H. (1964). Risk Management and Insurance. New York: McGraw Hill Inc. <http://dx.doi.org/10.2307/250938> <http://dx.doi.org/10.2307/250928>
<http://dx.doi.org/10.2307/251389>
- Yusuf, H. O. & Yusuf, T. (2010) Nigerian Insurance Companies in an Age of Regulation A Paper Presented at the 3rd ECPR Regulatory Governance Standing Group Conference on 'Regulation in an Age of Crisis', University College Dublin, 17-19 June.