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### Emergence of risk culture and lean culture in Nigeria during pandemic and crisis era: Using confirmatory analysis

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#### Abstract

This research focused on the emergence of risk culture and lean culture in Nigeria during pandemic and crisis era. The study adopted correlation research design and time horizon of cross sectional design with data generated from dealers in the six geopolitical zones in Nigeria on confectionery goods that are the most enterprising entrepreneurs. The study used systematic sampling and non-proportionate stratified random sampling techniques. 540 copies of questionnaire were distributed to the respondents and 497 copies were completed fit for further analysis. The content validity was used for validating the instrument, while the internal consistency reliability was achieved using Cronbach Alpha technique. The reliability coefficient analysis was risk appetite ( $\alpha = 0.821$ ), risk tolerance ( $\alpha = 0.829$ ) and client-focused purpose (α=0.799). The synchronization of the principal component was confirmed using Kaiser-Meyer-Olkin (KMO) of (0.904)/(0.861) and Bartlett's Test matching approx. chi-square (5763.988)/(2158.608) at 0.000 null hypotheses respectively were rejected. Furthermore, Pearson Product Correlation Co-efficient was introduced to test the two hypotheses via SPSS 25 version. From the findings, emergence of risk culture influence lean culture positively. In conclusion, risk appetite and risk tolerance revealed significant influence the client-focused purpose of confectionery goods. Based on the findings and conclusion, this study contributes to the knowledge that Kaizen Culture formed a formidable force applicable to the micro and macro enterprise that influences client-focused purpose, also emergence of risk culture and lean culture synchronization is transformation tool for every enterprise to pursuit her vision and mission. It could be recommended that Risk tolerance should has short-term metrics drawn from the long-term of risk appetite dashboard to avoid deviation from specific goals and corporate objectives.

Keywords: Client-focused purpose, lean culture, lean entrepreneurship, kaizen culture, risk appetite, risk tolerance

#### 1. Introduction

The dual effect of the COVID-19 variant threat on the globe has trailed continuous tension in the enterprise environment. The Delta and Omicron (Deltacron) variant threat has affected the enterprise in the manufacturing, servicing, sales and distribution oriented firms' activities. Also, the COVID-19 variant threat in Nigeria has stubble dealer's merchandizing activities in the confectionery goods enterprise. A regular, repetitive and continuous leaning pattern needs to be orchestrated which could improve enterprise merchandizing activities so as to survive and sustain enterprise during the pandemic crisis (Naseem, Mohsin, Hui, Liyan & Penglai, 2021) [11]. The learning pattern ought to be corporate culture practices in the enterprise in all ramifications that would predict the outcome from input to output process.

Hence, the study will drastically invoke the emergence of risk culture and lean culture to seek out remedies during pandemic and crisis era. Nobody knows the next crisis or pandemic knocking at the door that poses risk to the global enterprise (Ovharhe, Woko & Ezeocha, 2021) [12].

Lean culture as derivative from corporate culture portrays high employee engagement and involvement with strong values, trust and action towards achieving the enterprise vision and mission. Lean culture reflects the enterprise alignment with both internal and external stakeholders that strengthen a unified corporate bond with definite purpose that actualizes enterprise goals. Lean culture solidified cultural enablers that drives employee to work as team, respect one another and promote affective commitment with intention to stay in an enterprise. It associates the functional and operational level to speak the same language that will yield oneness of purpose in the enterprise (Hernandez-Matias, Ocampo, Hidalgo & Vizan, 2020) [4]. Additional, lean culture anchors a continuous improvement philosophy and transformation that foster and militarized customer-focused purpose. It should be noted that the customer-focused purpose in a critical aspect of the lean culture that anchor the value-stream flow of client satisfaction, care, convenience and comfort.

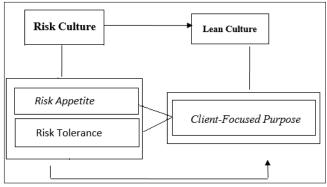
Considering the vital role of lean culture during the pandemic, it could not be achievable without comprehending the riskiness criteria strategy to mitigate the business threat encountered in this crisis era. Risk culture framework is antidote that enables lean culture to be sustainable in this pandemic and crisis period. Risk culture constitutes the entire aspect of corporate culture in an enterprise in terms of decision making, choice of projects, learning enterprise, enterprise learning, lean enterprise, vision pursuit and mission accomplishment (Ching, Mohd-Rahim, Chuing, Zainon & Aziz, 2020) [3]. Risk culture anchors the learning process of enterprise implicit and explicit dimensions. Risk culture articulates the standard, conformity, cohesiveness, traditions, corporate bonds and norms of individuals and group interdependent behavior which explains the modalities of how risk actions are been formulated and frame in alignment with specific goals, mission and vision of the enterprise.

Ovharhe et al. (2021) [12] frame risk culture dimension as risk attitude, risk behaviour and risk competence that defines an enterprise goals, mission and vision. He further averred that the risk attitude constitute the set of values, belief, norms and standard ways of acting on the riskiness of decision, policy and choice taken. The risk behaviour shows the ways of learning, un-learning and re-learning are been managed on acquisition of knowledge the proceeds change which leads to action. Risk behavior in the long-run will reveals riskiness of decision taking and policy formulation. Hence, risk culture envisage the risk awareness, risk appetite and risk tolerance in the level in which an enterprise can analyses her strength, weaknesses, opportunity and threats in the business environment (Ching et al., 2020) [3]. Whereas, the risk competence consist of the quality of skills, knowledge and the attitude in which how it is been managed and utilized. Risk competence expresses the level of cog-structure and intelligence exhibit to achieve certain task and specific purposes. Risk competence is a managerial guide on how risk alert, risk awareness, risk appetite and risk tolerance could be ascertain, control or managed with knowledge and skills. Risk competence shows level of skills and knowledge

strategy to fine-tune risk avoidance and risk retention in enterprise pursuit goals.

This represents that risk tolerance and risk appetite are the driving landmark of any enterprise to achieved client's focus. It is on this boundary that threat of the crisis and pandemic variant could be mitigated with the emergence of risk culture and lean culture among confectionery goods in Nigeria.

## 1.1. Operationalized Framework Operationalized Framework between Risk Culture and Lean Culture



Source: Researcher's Operationalization, 2022

The predictor proxy in this study is risk culture. Based on the earlier study of Kunz & Heitz (2021) <sup>[6]</sup>; Arzadon, Preez & Sheedy (2021) <sup>[2]</sup>, the explanatory proxy in this study are risk appetite and risk tolerance. Whereas, the criterion proxy is lean culture, where the response proxy of Lean culture is customer-focused purpose opined by Osman, Nordin & Rahman (2020) <sup>[15]</sup>.

#### 1.2. Purpose of the Study

The explored objectives are as followed.

- 1. Risk appetite influences client-focused purpose among confectionery goods.
- 2. Risk tolerance influences client-focused purpose among confectionery goods.

#### 1.3. Research Questions

Based on the specific objectives, the research question were as follows.

- 1. Does risk appetite influence client-focused purpose among confectionery goods?
- 2. Does risk tolerance influence client-focused purpose among confectionery goods?

#### 1.4. Research Hypotheses

The hypotheses were stated below as follows.

**Ho**i: Risk appetite does not significantly influences client-focused purpose among confectionery goods.

**Ho**ii: Risk tolerance does not significantly influences client-focused purpose among confectionery goods.

#### 2. Literature Review

#### 2.1. Paradigm Foundation

#### 2.1.1. Kaizen Approach

The lean philosophy on continuous improvement is demonstrated in the Kaizen concept that means "change for better" as capture from the Japanese language coined by Toyota (Vasileios, 2021) [18]. This implies continuous positive changes on improvement for the enterprise activities.

Hence, it is great relevance to synergized risk culture with lean culture. The Kaizen approach fine-tunes how the riskiness in any enterprise operations could be best practice with lean improvement, lean culture and lean thinking (Osman, Nordin & Rahman, 2020) [15].

The perception of the Kaizen improvement should be pattern, regular and at large in all ramifications to the enterprise. Both macro and micro enterprise seeks improvement as they adapt to change in the business environment. Changes should be optimistic rather than pessimistic. The Kaizen approach promotes improvement on the application of risk appetite and risk tolerance on lean culture. The lean culture and lean improvement provides a fundamental platform for optimizing risk culture as an advantage and strategies in time of turbulent, crisis or pandemic (Kunz & Heitz, 2021) [6].

Generic implementation of the Kaizen approach indulges the commitment and engagement of the entire managerial team from the strategic management (top executive), functional management (middle executive) and the operational management (lower executive). This also involves workforce at all level and in all level for participation of continuous improvement that defines better metric for change. The Kaizen approach focuses on better working condition and atmosphere for the entire workforce to be motivated for continuous improvement (Vasileios, 2021) [18]. By so doing risk appetite at the top level and risk tolerance at the low level will be well implemented (Arzadon, Preez & Sheedy, 2021)

Kaizen approach has great support for quality control, just in time accomplishment, inventory control, elimination of waste, elimination of defect, respect for people, and concern for the enterprise healthiness. The Kaizen approach promotes preferential and specialized treatment for the client-focus purposed. By integrating the Kaizen approach, better application will be for risk appetite and risk tolerance influence on client-focused purpose for the enterprise.

Since both lean culture and risk culture is about improvement in learning, it should be important to connote that Kaizen practices learning on changes for better towards improving the enterprise in both implicit and explicit dimensions. Meaning, without learning there will be no improvement, if no improvement occurs there will not be dramatic implicit and explicit change, additionally if no change in an enterprise nothing will be better.

This shows the emergence of risk culture and lean culture is synonymous with Kaizen. The application of Kaizen approach can be individual, micro-enterprise, macro-enterprise, multinationals, ministries, agencies and department (McMackin & Flood, 2019) [8]. Kaizen could be utilized by the not-for-profit making enterprise to strengthen their cord and operations. It will boost participation that creates positive emotions and upward spiral. Kaizen is more in line with upward impression management and integrity management that promote team spirit. Team spirit is a vital recipe for risk culture and lean culture to easily practice and implemented.

Kaizen practices push for creativity, participation, civic virtue and sportsmanship in the workplace for better changes in the individual affective commitment to work. This is while it is now used as "kaizen blitz" or "kaizen event". In the same light, this study would term it "*KAIZEN CULTURE*". Mathematically in algebraic expression, Risk Culture (RC) plus Lean Culture (LC) is equal or proportional to Kaizen Culture (KC): Hence, KC= RC + LC.

The emergence of the risk culture and lean culture in an enterprise could be portraying as the Kaizen Culture. The Kaizen Culture addresses both the riskiness element and the lean element to achieved convenience purpose. The Kaizen Culture address the bottleneck being encounter by enterprise to achieved client-focused that will aid customer satisfaction, customer value and patronage. The Kaizen approach (Kaizen Culture) is a regular and daily practice that might be repetitive with learning to achieve the enterprise or individual goals and objectives.

Traditional Japanese ideas of kaizen follow five basic tenets: teamwork, personal discipline, improved morale, quality, and suggestions for improvement. These five tenets lead to three major outcomes: elimination of waste (also regarded to as enterprise efficiency), good team spirit, and standardization. Ideally, kaizen becomes so ingrained in an enterprise culture that it eventually becomes natural to employees which represent the KAIZEN CULTURE.

#### 3. Conceptual Clarifications

#### 3.1. Concept of Risk Culture

According to Arzadon, Preez and Sheedy (2021) [2] culture is a characteristic of an individuals, group or an enterprise shared perceptions about certain behavioural outcome, prioritised and likely to be rewarded. Enterprise may pursue many different strategic and operational priorities such as legal, political, economic, ethical, technological, competitive and social-cultural context that vary their way of functioning. Culture is a way of learning that influences behaviour on individual and team norm, value, standard, conformity, cohesiveness, affirmation, perception and expectancies that determine outcomes and decisions.

Culture is the backbone of all riskiness function in an enterprise. For risk strategies to be adopted there should be spillover of cultural spectrum in every corporate setting. Corporate culture incubated risk culture. The learning aspect of culture practices that monitor and implement action are product of risk culture. Arzadon, Preez and Sheedy (2021) [2] risk culture is an aspect of broader corporate culture. Risk culture to the behavioural norms, standard, conformity, orientation and value that drives towards the effectiveness and efficiency of action point in an enterprise when encounter or perceive any threat. These exist in forms of risk appetite, risk awareness, risk tolerance, risk alert, risk behaviour, risk attitude and risk competence (Ovharhe, Woko & Ogolo, 2021) [13].

#### 3.2.1. Risk Appetite

Risk appetite enables every enterprise to determine the level of risk they can cope with while capability to manage it. Every enterprise must be able to figure out the level of risk they can live it within the short-term and long-term so they can survive the storm in the business environment (Ovharhe et al., 2021) [12]. The risk appetite reveals the degree of strength an enterprise possesses to control and handle risk. If an enterprise goes beyond its risk appetite capacity, it should be known to them that they are in the bleeding edge. It will not be long before the symptom may start to manifest (Ching et al., 2020) [3]. Their competitor would take advantage of it to override the business. In determining the risk appetite an enterprise should considers it strategic and operational objectives (Ovharhe et al., 2021) [13]. This would enable them to streamline their programme, budget and leverage in line with their vision and mission. In pursuit of the strategic and

operational objectives, the enterprise should know the risk to be absorbed or reduced. The amount of riskiness to absorbed or minimized could be well defined if proper analysis is predetermined on the overall risk in the enterprise. It is very important to structure a framework of risk metrics to measure the risk appetite in an enterprise (Ching *et al.*, 2020) <sup>[3]</sup>. This will enable the enterprise to respond appropriately to the nature and type of risk for easy control and ability to manage the risk appetite. It is important to note that certain factors might affect the risk appetite and tolerance on its metrics.

- 1. The Nature and Type of the Enterprise: The description of the enterprise merchandizing activities engulf the nature and type of business its represent. Every enterprise has its own peculiar way of functioning on manufacturing, servicing, maintenance, supply chain, sales, distribution and logistics. These functions always determine the volume and capacity of risk appetite that the enterprise may practice. The volume of risk appetite in the manufacturing firms may differ from those in the sales and distribution firms. Also, the risk appetite applicable in the logistics and distribution firms may be different from those in the drilling fluid and exploration firms.
- 2. The Enterprise Culture and Climate: The repetitive behavior and regular practice of every enterprise managerial style towards her vision and mission determine the culture of the enterprise. The manner of decision making, value proposition, interpersonal relation, communication among others determines the climate of the firms. Every firm need to analyze the culture and climate to accommodate the level of risk appetite they can adopt. The repetitive pattern should not coincide with the aspect of riskiness, rather it should flow with the risk appetite. There should be no contradiction on the risk appetite adopted by the risk committee on the climate and culture.
- 3. **The Competitive Parity:** The risk metrics should always consider the plight of the firm strength in the business environment when measuring the risk appetite that will be adopted. The enterprise must bench mark her position in the market leadership with the competition so as to evaluate its market share, customer loyalty, supply chain, customer trust, profitability index, sales quotas and sales territories. This will guide the enterprise on the risk appetite decision.
- 4. Vision and Mission: The futuristic plans and pattern to achieved the future matters a lot in all business enterprise. The pathway to achieve the vision must be considered in every risk appetite. This must need the attention of the risk committee in liaison with strategic and tactical management team. Should there be any failure in the phenomenon of risk, it will lead to a lot of catastrophe.
- 5. Strategic and Operational goals to be targeted: The specific goals the enterprise pursuit determine the degree of risk bearable to firm capability to absorb. The top management should be able to link the long-term risk to the short-term risk by involving the line management. This to say that top management should link the risk appetite to the risk tolerance for the operational team to be effective and efficient. Accomplishing the phenomena indicates a great performance excellence in the operational level. Hence, the firm should excel above all odds if this riskiness is achieved.

- 6. The degree of Leverage: The degree of the indebtedness and owners' equity is of great necessity in riskiness decision and policy. Enterprise should be able to the level of risk to take, retain or repel if they want to success in the future. Trading on debenture an preference stock is good, but if not properly managed it gives room for unnecessary burden that increased the weightiness of issues that will affect the goodwill, corporate image and capacity to function effectively. When this happen the enterprise will be bleeding recklessly with bad name and dying product.
- 7. **The Firm Size and Asset Base:** The size of a firm and its asset base gives a competitive edge on ability to cope with certain risk. This also involves the technology base system that the firm employed in her operation for service quality deliverables. The size enable firm to adopt certain risk in a particular aspect of the enterprise while ensuring zero degree defect on risk on the other areas.
- 8. Manpower: Having the right competent human resource at the right time and right position is a reputable performance metric on risk assessment. This is the enterprise trust on its system of operation that could face certain threat and crisis from risk. Risk appetite will be of certain great advantage with adequate manpower resource.

Risk appetite focuses more on the long-term the enterprise can bear and withstand with its capability without any compromise unlike the risk tolerance. But it must be dealt with on daily climax with specific goals. Hence, the risk appetite for particular strategic or operational goals should have different risk metrics for measurement. This means that the residual risk framework must be structure in place as risk metrics to determine the degree of threat and danger any risk could be either detrimental or benefits to the enterprise. The volume of riskiness on firm appetite that will be vacuum on her potential capability is a risk that facilitates growth of an enterprise. Risk appetite must have indicators of preparedness in a broad-based on the existing vacuum to control and managed risk. However, risk appetite changes over time because of certain internal and external environmental factors that converge or convex its capability. Risk appetite are not mere statement or policy, it should be back up with risk assessment framework and risk dashboards the for the risk team to standardized their operation because it is a credible and powerful working tool to win riskiness venture. There should be directional plan or templates indicating compliance management and constituency management with specific cause of action.

Risk appetite must be control by the top management to achieved long-tern result, while risk tolerance should be done by the day to day operational management because it focuses more with daily activities. Risk tolerance should be tailed in every risk appetite so it will flow from the top connectivity to the bottom. Hence Strategic objectives should be caption in the risk appetite, whereas the operational objective should be caption in risk tolerance. This enables the top managers and lines manager to work simultaneously.

#### 3.2.2. Risk Tolerance

The actual functions of an enterprise where proceeds are generated are the frontline. The frontline managers always encounter horrible and tough climax to take or make operational decision in terms of risk that differ from the strategic decision (Kunz & Heitz, 2021) <sup>[6]</sup>. This operational or unstructured decision on the riskiness in an enterprise that involves in the day to day activities is recognized as risk tolerance. The risk tolerance ranges from a degree of minimum and maximum trend from individual level to match the organization strategic risk appetite.

The risk tolerance for example involves tough minimum and maximum decision or policy formulated by the front-liners in customer service, customer relation, logistic, purchasing, production, sales, business development, finance, accounting, telecoms, ICT and distribution (Ovharhe *et al.*, 2021) [12]. These are all short-term risk tolerance stream-line from the long-term risk appetite.

The risk tolerance is very necessary because it is the actual bridge and gateway of the enterprise. It is the risk choice on the end users meeting point with the owners of product and services. This make is very necessary to consider the residual risk of threat and mitigation impact it will have in the enterprise. The strategic management need not neglect the risk tolerance to the operational management or line management alone because of it great resultant effect it will have in the enterprise if not properly managed. This means for risk appetite to be effective and efficient much attention needs to be focused on the risk tolerance, because it is the final consideration of risk transformation of the product and services to revenue (Kunz & Heitz, 2021) [6].

A risk metric must be design with framework of dash board to enable a liaison between risk appetite and risk tolerance so the corporate goals and objective of the enterprise will be smoothly achieved. The risk assessment metric from fact detected on the residual risk should endeavor correlation with the overall interest of the functional activities of the enterprise. This is to say, if a certain risk tolerance decision favor the marketing function but detriment to the sales merchandizing activities, it will cripple the entire phenomenon that might even affect the risk appetite negatively. There should be alignment of continuous improvement among the risk tolerance and the risk appetite to meet the short-term and long-term purpose of the enterprise mission (Ovharhe et al., 2021) [13]. It is important to note that risk tolerance is of the micro level, while the risk appetite is of the macro (levelKunz & Heitz, 2021) [6]. The micro level deals with the individual staff and customer relationship, whereas, the macro level deals with the enterprise and the client relationship. The risk metric dashboard should capture the micro level and the macro level to coordination the chain and bond flow from the strategic decision to the operational decisions. The risk metric dashboard should be measure in both quantitatively and qualitatively from its assessment framework. The high degree of risk and low degree of risk should be express in the variance on specific risk prior to defined corporate goals and objectives before being accepted as risk tolerance (Ovharhe et al., 2021) [12].

Risk tolerance dashboard should reflect from high risk level to the low risk level that an enterprise can accept or cope with in alignment with her resources and potentials she has the capability to absorb, control, withstand, lobby, boycott and maneuver with a specific period of time frame. The variation of the high level and low level degree of risk must not be misrepresented to be risk mitigation activities (Ching *et al.*, 2020) [3]. Hence, a sensor must be defined in any risk tolerance metric to actualize the certainties from the

uncertainties likelihood. Risk mitigation should not be confused with risk tolerance. If these occur, the risk tolerance and risk appetite is in jeopardy.

#### 3.3. Concept of Lean Culture

Lean culture is a learning tendency of how enterprise minimized waste, utilized resource to its best optimum capacity with specific time, service quality delivery, enhancing non-defect, reduced cost and enriched output. The learning culture is best on continuous improvement efficiency (Antomarioni, Ciarapica, De Sanctis & Ordieres-Meré, 2019) [1].

Lean culture is a problem solving tools that envisage learning and continuous improvement on cost reduction, elimination of waste, lead time consciousness, promoting team spirit and forgiveness in error (Möldner, Garza-Reyes & Kumar, 2020) <sup>[9]</sup>. Lean culture does not entertain careless error in its processes because it emphasizes on zero degree defect (*Hernandez-Matias* et al., 2020) <sup>[4]</sup>. Lean leadership and lean entrepreneurship brighten entrepreneurs' vision to see the areas of financial deficiency. Lean culture correlates lean entrepreneurship by re-structuring the enterprise towards utilizing maximum capacity for its resources (Osman, Nordin & Rahman, 2020) <sup>[15]</sup>. Hence entrepreneur could utilize its resources by eliminating waste and minimizing cost to yield high profitability (Nagaraj & Jeyapaul, 2020) <sup>[10]</sup>.

Lean culture creates avenue for respects among the employee and employer. In same manner, it creates team spirit among the intrepreneurs, entrepreneurs and co-entrepreneurs as lean entrepreneurship. Lean entrepreneurship depends on culture to operative and survive in the business. Lean culture ideology could not be over emphasizing because of its multifacet function in an enterprise during turbulent and tough times (Loyd, Harrris, Gholston & Berkowitz, 2020) [7]. Lean culture decision and policy is fundamental engine that guide an enterprise to achieved her dreams and vision in the short-term and long-term (Osman, Mamat & Ali, 2020) [15].

#### 3.3.1. Client-Focused Purpose

The functional and realistic reason behind every enterprise is the customer, without a customer or client there will be no existence of an enterprise. Satisfying your client and customer are the paramount goals of any enterprise. If client are not satisfied, the patronage would be affected, and if patronage if affected stock cannot be transformed to monetary value or cash (Khaw *et al.*, 2019) <sup>[5]</sup>. This is the reason enterprise lean culture is on client-focused purpose, enterprise alignment, continuous improvement and cultural enablers (Osman *et al.*, 2020) <sup>[15]</sup>. Lean culture needs lean entrepreneurship to address issues and pitfalls surrounding the client focus.

Client-focused purpose gives a drive and stimuli to enterprise with clear vision and mission. The overall interest of an enterprise is to give client the best service quality, care, convenience, safety, reliability, trust, satisfaction, value and relationship. All interest of an enterprise cannot be achieved without adequate attention to her client-focused purpose.

Client-focused purposed is the attention and value given to client for utmost satisfaction to drives patronage and proceeds (Khaw *et al.*, 2019) <sup>[5]</sup>. Focus on client resultant output is knit to revenue and profitability increase from each time of patronage. Enterprise needs to develop passionate focus to drive the revenue. Where there is no patronage, there will be no revenue, where no revenue occurs there will be no

profitability. If no profitability the enterprise ceases to benefit positive return on asset, return of equity and return of capital employed. When these happen, the enterprise bleeds to become lifeless entity. Thus, the lean culture of an enterprise is to maximized client's satisfaction and value to increase her worth.

#### 3.4. Risk Culture and Lean Culture

Risk culture framework is vital tools that facilitate lean culture. The framework of risk appetite and risk tolerance provide long-term and short-term guarantee for any sustainability and survival of any lean enterprise (Ovharhe *et al.*, 2021) <sup>[13]</sup>. Lean enterprise will depend on the riskiness strategy to overcome any sudden threat or danger that possesses calamity and pitfall.

The integration of application of the emergence of risk culture and lean culture should not be a threat to an enterprise during the pandemic. Together with effective policies and decisions, credible risk culture encourages desirable lean culture such as open and regular discussion of risk, with concerns about enterprise practices raised and acted upon promptly (Arzadon, Preez & Sheedy, 2021) <sup>[2]</sup>. The best enterprise practices should show risk assessment, residual risk and risk metrics not just to measure the aspect of risk appetite and risk tolerance, rather to measure the areas of lean. The lean metric should have clear definition in a dashboard indicating where to minimized waste, continuous improvement, cost reduction, value analysis and pursuit of zero degree defects (Loyd *et al.*, 2020).

The lean culture promotes team spirit and team work that help to boost ego of optimism and positivism (Antomarioni *et al.*, 2019) <sup>[1]</sup>. This ego stimulates and motivates employee and line management to bedevil anxiety, depression and frustration.

Systematically, culture inspired riskiness strategy and lean client-focus purpose to work interchangeably which produce superfluous result. When enterprise gains excellence in client-focused purpose, patronage and revenue during any pandemic or catastrophe would be mitigated by the risk appetite and risk tolerance.

#### 4. Methodology

The confectionery dealers across the country were targeted especially those entrepreneurs dealing on gum, biscuits, sweet pastries, cakes, and sugar along product lines. The exploratory research design with ex post facto research design were considered fit for the study. The emergence of risk culture and lean culture during COVID-19 pandemic in Nigeria has faces a lot of threat and worrisome trail in the confectionery goods in Nigeria. The dealers of the confectionery goods were targeted as the population from the six geo-political zones that are most enterprising entrepreneurs in the regional zones. The study adopted correlation research design and time horizon of cross sectional design with data generated from dealers in the six geopolitical zones in Nigeria on confectionery goods. The population was drawn from three states on each of the geopolitical zones comprising of 18 states. Hence, with the turbulent scenario created by the COVID-19 pandemic, 540 dealers across the 18 states from the six geopolitical zones were selected from various brands of confectionery goods. Systematic sampling was employed to make a sample with non-proportionate stratified random sampling technique. 4points likert-scale was introduced with twelve self-structured

questionnaire items to the dealers of the confectionery goods. The content validity was used for validating the instrument, while the internal consistency reliability was achieved using Cronbach Alpha technique. The reliability coefficient analysis was risk appetite ( $\alpha$  =0.821), risk tolerance ( $\alpha$ =0.829) and client-focused purpose ( $\alpha$ =0.799). Based on the authenticity of the study, the Kaiser-Meyer-Olkin (KMO) on confirmatory sampling adequacy and Bartlett's Test matching approx chi-square authenticates the sphericity of data appropriateness of the principal component were introduced. The 540 dealers were given the instrument for response on the basis of the option provided. 516 were retrieved, while only 497 were viable for analysis. The Pearson Product Moment Correlation was used to compute the result of the two hypotheses using Statistical Package for Social Science (SPSS) version 25.

#### 5. Results and Discussions

Nevertheless, using the factor analysis on the proxies on determinant statistics, analyzing the threshold before which will show multi-collinearity and auto-correlation among the proxies, revealed that:

The Kaiser-Meyer-Olkin (KMO) of (0.904) and Bartlett's Test matching approx chi-square (5763.988) at 0.000 significance for measuring the sampling adequacy and sphericity to show the level of acceptability on confirming the principle component is less the 0.05 level of significance, meaning the corresponding proxy liaison with the first null hypotheses is rejected. Thus, indicating viability of the principle component.

The Kaiser-Meyer-Olkin (KMO) of (0.861) and Bartlett's Test; approx. chi-square (2158.608) at 0.000 significance for measuring the sampling adequacy and sphericity to show the level of acceptability on confirming the principle component is less the 0.05 level of significance, meaning the corresponding proxy correlates with the second null hypotheses is rejected. Thus, indicating viability of the principle component.

This section uses inferential statistics to analyze the null hypotheses. The statistical tool employed was the Pearson Product Moment Correlation.

#### **Test of Hypothesis One**

Ho<sub>i</sub>: Risk appetite does not significantly influences client-focused purpose among confectionery goods.

**Table 1: Pearson Test for** Risk appetite and client-focused purpose among confectionery goods.

Correlations					
Risk Appetite Client Focused					
	Pearson Correlation	1	.848**		
Risk Appetite	Sig. (2-tailed)		.000		
	N	497	497		
	Pearson Correlation	.848**	1		
Client Focused	Sig. (2-tailed)	.000			
	N	497	497		
**. Correlation is significant at the 0.05 level (2-tailed).					

Source: Author's Field Survey (2022)-SPSS version 25 output

In table 1, it can be observed that the Pearson correlation (PC) coefficient is 0.848 which shows a strong and positive correlates between risk appetite and client-focused. The 0.000 significance value is not greater than the 5% (p = 0.000 < 0.05) will results to the rejection of the null

hypothesis. This revealed that the directional hypothesis should be adopted that says risk appetite does significantly influence client-focused purpose among confectionery goods.

Based on the findings Osman et al (2020) [15] strongly believe that synchronizing corporate culture into the lean culture is often perceived as one of the mechanisms to transform an enterprise. They supported the emergence of risk culture and lean culture because its saves time, monetary resource and energy. For an enterprise to be successful in pandemic, crisis and turbulent periods, the concept of risk culture should be integrated with lean culture to anchor a positive pivot. Also, Ching et al., 2020) [3] opined that inadequate risk management and lack of risk culture can threaten enterprise viability and its life cycles especially during pandemic and crisis era. They conceptualized a model which portrays the relationship between risk culture and enterprise risk management implementations. The explanatory proxy of risk appetite aims to empirically test the relationship among risk culture and the criterion variable. Their findings suggested that risk culture is expected to have direct effects and significantly influence criterion variable proxies.

#### Test of Hypothesis Two

**Ho**ii: Risk tolerance does not significantly influences client-focused purpose among confectionery goods.

**Table 2:** Pearson Test for risk tolerance and client-focused purpose among confectionery goods

Correlations					
Risk Tolerance Client-focuse					
	Pearson Correlation	1	.859**		
Risk Tolerance	Sig. (2-tailed)		.000		
	N	497	497		
	Pearson Correlation	.859**	1		
Client-focused	Sig. (2-tailed)	.000			
	N	497	497		
**. Correlation is significant at the 0.05 level (2-tailed).					

Source: Author's Field Survey (2022)- SPSS version 25 output

In table 2, it can be observed that the Pearson correlation (PC) coefficient is 0.859 which shows a strong and positive correlates between risk tolerance and client-focused. The 0.000 analyzed output significance value is not greater less than the 5% (p = 0.000 < 0.05) which results to the non-acceptance of the null hypothesis. Hence, the directional hypothesis accepted while the null hypothesis is neglected indicating that risk tolerance significantly influences client-focused purpose among dealers of confectionery goods.

Arzadon *et al.* (2021) <sup>[2]</sup> orchestrate that auditing risk culture from proper risk assessment as practical guide could enable to boost the strength and success of an enterprise. This could be applicable to the risk tolerance and client-focused purpose on the confectionery goods. More so, Kunz and Heitz (2021) <sup>[6]</sup> research work strives by providing risk culture into management control systems. This review identifies 103 articles, which can be structured along three categories: Assessment of risk culture, relation between risk culture and management controls and development of banks' risk culture over time. Along these categories the identified findings are interpreted and synthesized to a comprehensive model and consequences for theory, business practice and regulation are derived. In the nutshell, risk tolerance, risk assessment and metric is fundamental engine for credible risk culture

practices. Without diligence assess on residual risk, the doctrines of risk tolerance and risk appetite cannot transform enterprise predetermine goals. Furthermore, Naseem et al (2021) [11] fine-tuned a highly transmittable and pathogenic viral infection, COVID-19, has dramatically changed the world with a tragically large number of human lives being lost. The objective of this study is to analyze investor psychology and stock market behavior during COVID-19. The psychological behavior of investors, whether positive or negative, toward the stock market can change the picture of the economy. The results showed that investor psychology was negatively related to three selected stock markets under psychological resilience and pandemic pressure. The study suggests that policy-makers should design a plan to fight against COVID-19. However, if outcome of their findings it is because of lack of attention and consideration were not adhering to risk culture and lean culture. Thus, the design plan should be idea from the risk metric assessment that will show a policy framework on risk dashboard to address the panic and turbulent in the pandemic. Hence, risk appetite and risk tolerance should synchronize client-focused purpose. It could be easily said that the point of departure from their study could be address by the emergence of risk culture and lean culture during COVID-19 pandemic.

### 6. Conclusion, Recommendations and Contribution to Scholarship

#### 6.1. Conclusion

Risk culture shows positive relationship on lean culture among entrepreneurs that are dealers in confectionery goods. Both concepts are vital for transforming threat and turbulent in an enterprise especially in the COVID-19 pandemic. The interconnectivity among the variable are awesome to mitigate riskiness of threat and crisis in turbulent times. In conclusion, risk appetite and risk tolerance positively influence the client-focused purpose. Risk culture and lean culture postulate improved pattern of regular repeated learning, unlearning and re-learning to mitigate risk for waste elimination, lean improvement, lean entrepreneurship, cost minimization and facilitating swift patronage for confectionery goods.

#### **6.2. Recommendations**

The following recommendations are itemized below.

- 1. Risk appetite should be streamline from the long-term to the short-term with specific instructions on risk assessment and risk dashboard.
- 2. Risk tolerance should has short-term metrics drawn from the long-term of risk appetite dashboard to avoid deviation from specific goals and corporate objectives
- 3. Client-focused purpose should adopt as major proxy of lean culture because of its role in continuous improvement.
- 4. Risk committee or team must be establish, trained and equipped to face turbulence time.

#### **6.3.** Contribution to Scholarship

This study has contributed to the existing knowledge as follows:

- Kaizen Culture formed a formidable force applicable to the micro and macro enterprise that influences clientfocused purpose
- Risk appetite and risk tolerance are credible tools that enable enterprise to mitigate threat in turbulent time such as the COVID-19 pandemic

- Emergence of risk culture and lean culture synchronization is transformation tool for every enterprise to pursuit her vision and mission
- Client-focused purpose shows lean entrepreneurship as competitive advantage
- Mathematically, it could be expressed algebraically that Risk Culture (RC) plus Lean Culture (LC) is equal or proportional to Kaizen Culture (KC): Hence, KC= RC + LC

#### Appendix

#### **Ouestionnaire**

Please Tick [] in the appropriate place

#### **Personal Data**

#### 1. Name of Enterprise ......

#### 2. Gender

a.	Male	[]
b.	Female	[]

#### 3. Marital Status

a.	Single	[]
b.	Married	[]
4. Ag	ge	
9	20.20	r ı

a.	20-29	[]
b.	30-39	[]
c.	40-49	[]
d.	50-59	[]
e.	60 and above	[]

#### 5. Educational qualification/equivalent:

a.	FSLC	[]
b.	SSCE	[]
c.	HND/OND	[]
d.	First Degree	[]
e.	Masters	[]
f.	Ph. D	[]

#### 6. Number of years in the Enterprise:

a.	less than 2 years	[]
b.	2-5 years	[]
c.	6-10 years	[]
d.	above 10 years	[]

Please carefully tick ( $\sqrt{}$ ) the option as it relates to your perception of the questions.

- 1 = Strongly Agree
- 2 = Agree
- 3 = Disagree
- 4 = Strongly Disagree

#### **Risk Culture**

S/N	Part A: Risk Appetite	1	2	3	4
1	Risk metrics should be on long-term because				
1.	of the burden firm can bears				
2	Strategic function are accomplished with				
۷.	long-term consideration of risk assessment				
3.	Risk appetite is suitable for turbulent times				
4	Risk appetite is the reason firms can survive				
4.	in the long-term				

	Part B: Risk Tolerance		2	3	4
1	Risk are best certain when they reveal daily, weekly				
1.	and monthly features on dashboard				
2.	2. Our dash-board framework consist of daily activities				
2	Assessing risk from daily activities provides room				
٥.	for adaptability				
4.	Risk metrics on the daily affairs are easily control				

#### Lean Culture

	Part C: Client-focused purpose		2	3	4
1	Client are the reason for any enterprise				
2	Client are the pillars of enterprise continuous improvement				
3	Lean policy should focus on client				
1	Enterprise longevity depend on how to meet client demands				
4	or needs				

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