

Champiopreneurship: Lean Start-Up and SMES Growth

Ovharhe Orugba Harry (Ph.D)

<https://orcid.org/0000-0002-3631-498X>

College of Health Science and Technology

University of Port Harcourt Teaching Hospital, Nigeria

Abstract - This study examines the relationship between lean start-up and small, medium enterprise growth (SMEs) growth in Delta State. The discussion envisages; Champiopreneurship Growth of SMEs as embedded on Lean Start-Up as evangelized by Eric Ries. The study adopted cross sectional and ex-post facto design. Data were generated by quantitative and qualitative method. The study intends to use purposive sampling techniques. A total population size of 2309 and sample size of 341 was determined using Yaro Yamane's formula at 0.05 level of significance. Also, 333 copies of questionnaire were distributed to the respondents, while 321 copies were completed and retrieved. The instruments were validated with reliability above 0.7 co-efficient, using Cronbach Alpha technique. Research questions and hypotheses were raised which was tested with Pearson Product Moment Correlation, Ordinary Least Square Method and Partial Correlation for the moderating variable via SPSS 25 version. From the findings, the concept of Lean creates positive impact on MSMEs from the branching networking of Multinationals, Conglomerates, Corporations, Holdings and Subsidiaries. In conclusion, Lean merchandizing function in the entrepreneurship world orchestrates dramatic positive influence on MSMEs. Based on the findings and conclusion, this study contributes to the knowledge that commitment to Champiopreneurship metrics leads to MSMEs sustainability, survival, and success as leading edge rather than the bleeding edge. Champiopreneurship adopted 'LEAN AUDIT' and 'W₅H MODEL' as possible remedies for SMEs growth and Champiopreneurship metrics orchestrates SMEs growth. This study highlights lean start up as an essential element of business governance which reveals that its parameters boost the SMEs growth in the short run and long run with the intervention of the champiopreneurship paradigm shift. Lean principle should interface with champiopreneurship metrics to develop and foster SMEs growth. Entrepreneur should aligned lean concept with conglomerates, multinationals and corporations should delves into SMEs growth, which create Champiopreneurship.

Keywords: Champiopreneurship, Start-Up, SMEs, Growth, Innovation, Creativity, Technology Innovation

OVERVIEW

The dream of every entrepreneur is to become a champion. To be a champion is the entrepreneur dynamic ability, capability and capacity to solve problem that will transform the business world with the sense of innovation skill, creation, invention, risk culture and lean-speed to accomplish operational and strategic goals that will drive change in the present and future. This is what CHAMPIOPRENEURSHIP is about (Ovharhe, 2024). Champiopreneurship is breeding new brand of entrepreneurs that will augment dynamism, adaptability and agility with societal values and economic changes which creates better livelihood, wellness and wellbeing for startups, SMEs, large corporations, business institutions, conglomerate, holdings and subsidiaries on anchoring corporate affairs of enterprise. Champiopreneur create new trend of business strategies and tactics to achieve sustainable development goals for the future by synchronization of systems, processes, procedures and policy. This makes the characteristics of champiopreneur is to imbibe the spirit of accomplishing enterprise dreams, mission and vision on its entrepreneurial journey. The spirit of the champiopreneur possesses the charisma, resiliency and enthusiasm to overcome the storm, recklessness and turbulent in the competitive parity to be the market leader without bleeding edges in the business world. Champiopreneur demonstrates trait that actualized the short-term and long-term business growth without fading or backup. The champiopreneurship business growth is streamline with sustainability, survival and success. Come rain, come sunshine the champiopreneur lean against all odds with the knowledge-drive that guides her visionary roles. Business growth must be sustainable with knowledge-driven and vision because where there is no champiopreneurs knowledge-drive and vision the enterprise will perish. This affect the consciousness and mindfulness of the SME (Ovharhe, 2025d).

Entrepreneurs from Silicon Valley anchors that in the 2000s the term ‘lean startup’ was coined by the Steve Blank and Eric Ries which transformed to Methodology. The Eric Ries became the evangelistic mission on the creation of various principles and model of lean startup, this expatiate him to building various apostles with new ideology of entrepreneurs on customer focus and minimum viable product that increases customer patronage and satisfaction (Ovharhe, 2025b).

The lean startup is an integral spectrum of an enterprise secret which should be treasured at all cost (Chibuike & Ovharhe, 2022). The evangelist Eric Ries prospect of lean startup is a new dimensional trend of knowledge that changes the entrepreneurship field with agile, digital, market, product and customer mingle together that revealed speed and continuous feedback loop is the entire process (Chibuike, Ovharhe & Abada, 2022).

Eric Ries crave the indulgence of entrepreneurs to develop potential business model with test marketing concept which could yield desire feedback from the customer about their perception and taste about the acceptability, durability, portability and reachability of the enterprise product and services within the long-term or short-term (Ries, 2011; Ovharhe, Okolo, Woko & Igbokwe, 2022).

The good thing about the lean startup is that its gives opportunities for enterprise to lunch their product, process and service innovativeness in the business environment (Ovharhe, Chibuike & Abada, 2023). . This means the potential business model of the enterprise can undergoes concept testing and test marketing to derive feedback from their prospective and prospective customers/client to accomplished their corporate target (Ovharhe, Ahunanya., Woko, 2022). The enterprise will then utilized the feedback generated from the clients/customers to pursuit their enterprise mission and vision (Ovharhe, 2025c). Every entrepreneur need the lean startup concept to actualized its entrepreneurial dreams and journey both in the short-term and long-term. This is more important in the SMEs that want to start new business with product and services, especially in areas of market positioning strategy and market orchestration strategy (Effa, *et al.*, 2023a; 2023b; Alina, Michael & Alexander, 2017)..

In essence, “lean startup” refers to a business modeling or product and service creation approach that focused on listening to and responding to customer feedback in order to achieve the enterprise dreams and mission. For entrepreneurs’ customer focus and product and service suitability, acceptability and conformity is should be optimum (Ahmad, Mahmood, Ariza-Montes & Han, 2021).

Thus in entrepreneurship, ‘lean startup’ is the process of formulating business model on product and services for the enterprise benefits with the aims of achieving customer satisfaction from feedback in the market environment. The formulation of the business model should be centered on the customer perspective to enhance patronage and turnover that will enable the firm to yield high productivity and profitability. Lean startup is center on the market demands to satisfy customers needs. Hence, entrepreneurs should identify what the customer needs before formulating a business model to accomplish the needs (Bertha, Ferry_& Himadhani, 2020).

The lean startup encircled a process of utilizing customer insight to generate, design and develop a prototype to actualize the enterprise benefits. The customer insight envisages the desires, intentions, demands and needs which will be achieved via affective and cognitive satisfaction from the product design and development. The lean startup is a measure to prevent unnecessary mistake by the entrepreneur to create product or service lunch into the market that will not stand the length of time. With this, entrepreneur should know *when, where, how, what and with or for who to lunch an investment proceedings* (BLAQ Fire Nation, 2025).

W5H MODEL of Lean Startup

The ‘When’ of the concept of lean start-up is the guide to know the timing to lunch the product and services into the market for ‘concept testing’ and ‘test marketing’ Timing is very significant for business especially when it’s new market or new product. Any innovativeness is vital for the best timing in line with the customer or client’s perspective

(Ovharhe, 2025a). Wrong timing can cause the enterprise a great loss. It is because certain business has its season of patronage, needs and demand. Sometimes, the firm must have to understand the competitive parity in the market structure and demand in line with client's responsiveness on patronage (Khaw, Zailani, Iranmanesh, & Heidari, 2019; Krolicki & Noel, 2020).

The '*Where*' entails the market environment either online or offline. The online marketing is digital on business to business (B2B) business to customer (B2C), business to government (B2G). However, the geographical location is critical factor is business modeling, because its define the physical sales territories and sales quotas. The market segmentation will be define in this context

The '*How*' orchestrates the tactic and strategies caption in the business modeling to ignite the merchandizing function of lean. This connotes how to innovate speed, timeliness, low cost, wealth generation by managing waste (Hardy, 2025; Hernandez-Matias et al, 2020).

The '*What*' enable the enterprise to actualized long-term and short-term forecast. Defining waste resources in product, process, service, administration, market and technology that affect merchandizing function in lean (Freeman, 2020).

The '*Who*' is very necessary to be consider during the lurching of a product because the climax on whether 'with' or 'for' to be focused on. With *who* determine the supply chain system like in the case of consignment inventory system (consignee and consignor licensee and licensor, vendee and vendor), while the concept is in line with MSMEs Growth (EUGLOH (2025).

The '*Why*' is the elaboration of the purpose and definition of the fundamental business plans which act as situation process on 'LEAN AUDIT', which navigates to MSMEs growth. Why we augment growth in lean audit is to identify bottlenecks and pitfalls that cripple value capture, value creation, profitability maximization and wealth maximization (Ovharhe *et al.*, 2023).

The '*While*' is the explanatory aspect of business reasons of growth in the business matrix. This synchronized the process that act as magnetic force, which energetically boost the lean process. This process avert waste concept to wealth generation as in pollution and sewage to function as an asset rather than wastage. This call for recycling, conversion and management to profitability index (Kulmaganbetova et al., 2022; Kuckertz et al., 2023).

Lean startup can be streamline on the design of business model to develop a product or enterprise based on market needs and demands for customer suitability and satisfaction. The concept focused on consumer insights for prototype to boost the competitive edge in the business environment. The lean startup can also center on developing new companies predicated on the idea generation that stakeholders of the enterprise should study, experiment, test, and iterate to create successful marketable product and services to client (Ovharhe, 2025a).

Thus, Lean startup is a modeling techniques tactics and strategies for developing businesses and products that aims to shorten product development cycles to ascertain if speculative business model methodology is viable for the enterprise benefits. The enterprise benefits can be ascertained by integrating a business-hypothesis-driven experimentation, iterative product releases, and validated learning. But the bottom-line of the business-hypothesis-driven presumption or speculations boils down to response assimilated from the customer feedback if it's most likely, optimistic or pessimistic. The customer feedback stretches on intuition and flexibility over planning. The lean startup methodology enables enterprise recovery from failures more suitable than traditional ways of product development, market extension and market development.

Entrepreneurs adopting the lean startup methodology always have competitive edge on risk reduction and risk avoidance in the market operations as they invest resource and time to meet the needs of client. They also prevented themselves for market failures and lurch of expensive or unwanted product and services to the market. The lean startup

gives direction of how the entrepreneurs want its business to growth in terms of productivity and profitability (Ovharhe, 2025b). This also extends to employee and customer responsiveness that will determine the productivity. Lean startup should not just focused on the external factors like customer. The mistake with most lean practices only drawn attention to customer satisfaction, it should also consider employee satisfaction and job satisfaction. One of the critical element that promote lean is '*respect for people*', this entails both employee and customer on implicit dimension and explicit dimension respectively. Lean is the door to entrepreneurial entry which mitigates enterprise exist (Ovharhe & Abada, 2023).

Context of Lean Start-Up

In the train of trying to accomplish customer satisfaction and employee satisfaction, the consciousness to eliminate waste practices and increasing value added creation practices should be taking into consideration that will boost the company success without sourcing of huge financial obligations to achieved business plans and perfect product that suit the clients taste and desire (McMackin & Flood, 2019; Möldner, A. K., Garza-Reyes & Kumar, 2020).

Though, prominent ways to achieve this is the consciousness of lean startup which the entrepreneur and intrapreneur focused on customer feedback during the development of products or services is and ensures that the enterprise does not leverage or sink funds on designing products that clients do not want in the market. This could achieve by formulating dashboard and metrics with key performance indicators and continuous deployment process. Lean overrides environmental hazards, pollution, peril among others (Ovharhe & Odepeli, 2024; Ovharhe & Woko, 2024a, 2024b)

When a startup enterprise cannot afford to have its entire investment depend upon the success of a single product or service, the lean startup methodology proposes that by releasing a minimum viable product (MVP) which is not yet finalized, the enterprise can then make use of client feedback to tailored the product on basis of the customer's specifications desire and demands (Ovharhe, 2025c).

With the employment of crowd funding and fund raising, lean startup methodology posits that lean has nothing to do with how much fund raises in the short-term and long-term, rather it has everything to do with assertion of specific clients needs and how to meet those needs with the resource available without venturing into high leverage of indebtedness (Neamaha, Sabbar & Abdulridha 2020).

The Three Main Principles of Lean Startups include:

The mainstream of lean startup is piloted by innovation branching network in product, service, technology, market, administration and networking which orchestrates project planning, customer feedback and product development cycles (Ovharhe, O. H., & Akandu; Ovharhe & Chibuike, 2024a; 2024b; Ovharhe & Abuda, 2024a, 2024b).

i. Experimentation and learning over long-term business planning:

The lean learning phenomenon is streamline by experimentation via reducing waste, adding value, optimizing time and resources. The lean experimentation phase buttress the fundamental root of success or failure of the lean process. The lean experimentation is the process of hypothetical design of the firm or product blueprint, framework that leads to development of prototype of the product and services towards proposed customer needs and demand in the potential market. Lean experiments seek to validate business ideas generation quickly with low cost by testing hypothetical assumptions and learning from customer feedback (Patel & Patel, 2021). Lean experiments enable the entrepreneur and intrapreneur to avoid resources and time wastage on designing tangible and intangible products clients/customers demand or needs. Lean experiments are threshold of the likelihood of Lean Startup approach to creating new products

and services under conditions of extreme uncertainty. Lean Experiments are designed to quickly and cheaply gather evidence to validate or invalidate risky assumptions about your product (Blank, 2013).

ii. Customer feedback over the business owner's intuition:

Blank (2013) link his study to the entrepreneurial mindset using the discovery driven findings by McGrath and MacMillan (2009) which represent the entrepreneur intuition with strong perception with customer relation to generate customer feedback from market outcome. This can be used to speculate the feelings and promptness of the customer perception on the acceptability and opinion about the product and services (Pawar, 2023). This also leads to how the customer sees the product warranty and guaranty in the market. In lean, the notion of the customer is of high regard and should not be taken for granted since they are the end-users of the product and services (Ovharhe, Woko & Ogolo, 2021).

iii. Short, iterative product development cycles over long-term projects.

Continuous improvement on concept testing and test marketing on the product development is advisable to be on repetitive model to see if there is any progress or mistake. Peradventure, if there is any mistake attention should be drawn to rectify it to meet up to standardization and specification of customer needs. It is important for there to be standards and specifics as proposed by the enterprise to suit the needs and demand of the customer. This will attract trust, patronage, retentions, satisfaction and loyalty from the clients and customer (Rehman, Malik, Baig, Rehman & Hashim, 2021).

Customer Development

Apart from the perception of Eric Ries, the lean startup methodology is overrun on the 'Customer Development' methodology. Steve Blank the co-authenticated frontiers on lean start-up, in his book "*The Four Steps to the Epiphany: Successful Strategies for Products that Win* (2013)", pointed out the pitfalls of a narrow emphasis on product development; instead he argued that startups should focus on what he called '*customer development*', which lay emphasizes on learning about customers needs, demands and their problems as early in the development process as possible. Blank's customer development methodology identified four systematic steps:

- i. **Customer Discovery:** Presumption hypothetical view of customer opinion or perception about product and services are guides in the lean process. This enables the enterprise to fathoms the bottlenecks and pitfalls about the products. Negligence about critical product on the product and services should not be over looks. The interest, desire and action in the product or service should be seen as solution remedies and business viability (Ovharhe & Okolo, 2022)..
- ii. **Customer Validation:** Frequency of patronage, volume of patronage and timing of patronage are virtue use to validate the authenticity of product and services with customer orientation tests for feedback (Sahoo, 2019). Customer validation certified business viability through customer purchase which in the process creates a *sales road map* that is proven on repeatable sales process. Customer discovery exposes new channel of tunnel of transformation of the enterprise products and services from obscurity to visibility demonstrating customer validation corroborates the business model. (Ovharhe *et al.*, 2021).
- iii. **Customer Creation:** Maintaining customer relations is edible recipe for entrepreneurs to caption the psychology, emotion and philosophy of customer and clients. This is better forum that could be link to customer creation. Executes the business plan by scaling through customer acquisition, creating user demand and directing it toward the company's sales channels (Ahunanya et al, 2022; Ovharhe & Ahunanya, 2022; Shafiq & Soratana, 2020).
- iv. **Company Building:** Formalizes and standardizes company departments and operations.

Theoretical Underpinning

Six Sigma Approach

Six-Sigma (6σ) is an approach use for process continuous improvement in an enterprise. While working at Motorola in 1986, Bill Smith an American engineer introduced the six-sigma. Six-sigma phenomena assume 99.99966% of entrepreneurial sustainability as free of defects and error (Khaw, Zailani, Iranmanesh & Heidari, 2019; Patel & Patel, 2021).

Six-Sigma strategies seek to improve entrepreneurial sustainability by sorting out bottlenecks responsible for causes of defects and errors that reduce the specifications and standard of the transformation process into predetermine goods and services in the enterprise. The viability of the six-sigma is towards yielding effective customer satisfaction and product sustainability which is favorable to the enterprise (Shafiq & Soratana, 2020; Patel & Patel, 2021). This is done by statistical analytical method of considering cost-benefit analysis from the empirical and statistical tool employed.

The process aid product sustainability and green entrepreneurship (or entrepreneurial sustainability) towards customer satisfaction by not endangering the environment and livelihood of the client (Geoffrey, 2017). The process also confirm with the five pillars for product survival sustainability; entrepreneur, entrepreneurial, entrepreneurship, entrepreneurial eco-system and enterprise (Soliman, 2020).

Enterprise that adopted and integrate lean entrepreneurship should operate with the six sigma in the long term and short term consideration so the entire process should be beneficial towards sustainability. Also, the entrepreneurial sustainability process should produce long-term defect levels below 3.4 defects per million opportunities (DPMO). The 3.4 dpmo is based on a "shift" of ± 1.5 sigma postulated by Mikel Harry. The statistical metric is based on the tolerance in the height of a stack of discs (Shafiq & Soratana, 2020); (Osman, Nordin & Rahman, 2020); (Teixeira et al, 2019).

For the purpose of this research, Six Sigma asserts that:

- Continuous improvement strategies seek to accomplish viable and forecasting results oriented processes that facilitate entrepreneurial sustainability.
- Enterprise processes should have features that can be identified, defined, measured, analyzed, improved, and controlled.
- Promoting enterprise and product sustainability with the involvement of the lean entrepreneurship (Thangarajoo, 2015).
- Fine-tuning demand that boost increase of return on investment and capital employed
- Synchronizing management involvement and line operations to yield credible results
- Participating in technical dashboard framework of lean policy and lean thinking with proficiency of sustainability (Vuorio et al, 2018).

Six Sigma's drives to continuously improvement of all processes in an enterprise by application of lean culture and lean thinking not bonded to the 3.4 DPMO level (Patel & Patel, 2021). Enterprise fine-tune and regular convenient degree of lean sigma to improve and monitor the possible benefit of entrepreneurial sustainability (Vasileios, 2021). Hence, the lean entrepreneurship should determine the drive for area of specialty and application of the lean six sigma (LSS).

In accounting, synchronizing the LSS on cashier, budgeting and bursary are key area of advantage of lean accounting and lean entrepreneurship (Yachin, 2019). The processes could also involve payment of local purchase order, vouchers, payroll, order processing and salaries. For the entrepreneurial sustainability, the vital key of LSS is integrated with the DMAIC which represents; i. Define, ii. Measure, iii. Analyze, iv. Improve, v. Control methodology. Synchronizing the DMAIC correlates with LSS tactics provides credible means to categorically analyze the processes of the five pillars of sustainability, survival and success in an enterprise (Patel & Patel, 2021).

The backbone of LSS is that it employed quantitative techniques to identify key points of impact (KPI). When the KPI is recognized and streamline, it can be applicable as possible remedies to address entrepreneurial sustainability problems. A framework and dashboard need to be structure to control and manage this scenario. Also, this could strengthen and synchronized the five pillars of success, survival and sustainability (Zunic, et al., 2020).

Elimination of Waste, Defect and Error

The critical five element of lean accounting are; 1) Elimination of waste, 2) Elimination of error and defects, 3) Freeing up capacity, 4) Simplification of processes to help gain better understanding, and 5) Speeding up process (Rehman *et al.*, 2021). The critical elements were used as substitute to the traditional accounting (Naseem, fu, Mohsin, Rehman & Baig, 2018); Naseem, Mohsin, Hui, Liyan & Penglai, 2021). The current changes and dynamism call for lead improvement, lean thinking and lean culture to create workable metric for entrepreneurial sustainability via lean accounting process. The focus should be creating workable implementation and monitoring policy to address the financial performance in an enterprise for the short-term and long-term.

Lean implementation to an enterprise is the critical means of addressing waste elimination and actualizing metric for detection of defect and error. If these are achieved the enterprise will experience performance excellence in productivity, customer satisfaction, customer perception, customer value, brand value, profitability and swift patronage (Neamaha, *et al.*, 2020).

Elimination of waste is critical aspect of product sustainability. Customer perception, brand value and customer value are sensitive aspect of attraction to any enterprise about their product sustainability. If wastes are not properly well implemented, it will affect the product sustainability. Hence, lean professionals need to assess and frame the metric design to implement waste elimination process without affecting the product warrantee and guarantee. It is important to note that the product warrantee and guarantee are core value of product sustainability in the enterprise prestige to her client (Geoffrey, 2017).

Enterprise implements lean improvement and lean thinking for great regard for elimination of defect and error affecting the product specification and standard. It is of great delight to experience zero degree defect and error on any product and services over time. Elimination of error and defect give confident to the enterprise reputation in the market. It also enhances customer trust on the firm's product. However, the concept of product sustainability will be accomplished in the long-run and short-run (Osman *et al.*, 2020).

However, a lot of firms in Africa, including Nigeria do employed lean tools to enhance their productivity, customer satisfaction, patronage and profitability with little regard for practicing lean accounting. This is because enterprise does adopt lean thinking and culture without implementing lean accounting processes by holding the traditional method. But, soon the traditional method will collapse on the use of lean accounting, because the traditional method favors the Activity Based Costing approach.

METHODOLOGY

.Expost-facto research design was employed in this study. Also, study was based on correlational and cross sectional design integrated multi-stage cluster sampling technique paradigm. The study intimate the use of primary and secondary data which were justified by the fact that questionnaire items as instrumentation were synchronized.

The clusters population is focused on Delta State industrialized communities of Intrapreneurs, ultrapreneurs, social extrapreneurs, serial entrepreneurs, women and youth entrepreneurs' cohorts as Champiopreneurs from the data base of community assessment framework forum conducted by multinationals as at 2020. But focused was on five ethnical regions that the statutory recognition by the regulatory bodies such as Delta State Chambers of Commerce merchandizing branching network, NNPC (limited), DPR (formerly), SPDC, Chevron etc as at 2025 last Quarter.

Four levels of stakeholders were selected purposively for the study. These are men, women, youth and elites of communities Intrapreneurs heading as Champiopreneurs. The total cohort of the study is twenty one thousands, seven hundred and thirty six (21736) comprising four thousand and forty-five stakeholders (4045) participants of Delta Ibos, two thousand, nine and sixty (2969) stakeholders of Isokos, four thousand four hundred and twenty one (4421) stakeholders of Delta Ijaws and five thousand, one hundred and forty-nine (5149) stakeholders of Delta Urhobos and five thousands, one hundred and fifty two (5152) stakeholders of Delta Itsekiris. The population figures were generated from the establishment community need assessment framework in the selected.

List of Communities in Delta State is shown below in Table

S/NO	REGIONS	LGA	Town	TOTAL
A	DELTA IBOs	Oshimili North	Asaba	697
				457

		Oshimili South	Ibusa	
		Ogwashi	Ogwashi	489
		Ndokwa West	Kwale	458
			Okai	321
			Benekuku	443
		Ndokwa East	Ashaka	423
			Aboh	411
			Ase	346
	TOTAL			4045
B	DELTA ISOKOs			
		Isoko North	Ozoro	557
			Irri	426
			Bethel	435
		Isoko South	Oleh	553
			Olomoro	487
			Emevor	511
	TOTAL			2969
C	DELTA IJAWs	Patani	Patani	533
		Bomadi	Bomadi	511
		Burutu	Burutu	513
			Warri South	Ogbe-Ijaw
			Ogedegbe	516
			Pessu	518
		Warri North	Ogbinbirin	519

			Ogbudogbodo	421
			Odububa	378
	TOTAL			4421
D	DELTA URHOBOS	Ughelli South	Jeremy	624
		Uvwie	Effurun	649
		Udu	Aladja	654
		Warri South	Edjeba	663
			Express	613
			Agbassa Town	645
		Warri North		432
			Oru-megege	
			Kolokolo	456
				Gbokoda
	TOTAL			5149
E	DELTA Itsekiri	Warri Extension	Nana	548
		Warri Extension	Young-Town	513
		Warri Extension	Ode-Itsekiri	614
		Warri South	Ugbuwangue	634
			Jeddo	619
			Ugbeji	645
		Warri North		543
			Koko	
			Ugbege	514
				Tisun
	TOTAL			5152
		GRAND TOTAL		21736

TABLE 3.2. Population Under Study

S/N	Communities Stakeholders	Delta Ibos	Delta Isokos	Delta Ijaws	Delta Urhobos	Delta Itsekiri	Total
1	Men	687	442	698	732	739	3298
2	Women	330	252	367	412	398	1759
3	Youth	2918	2199	3235	3844	3842	16038
4	Elites	110	76	121	161	173	641
GRAND TOTAL		4045	2969	4421	5149	5152	21736

Source: field work

Purposive sampling technique was used to select only stakeholders, which are Intrapreneurs posit as Champiopreneurs that have interest on MSMEs and SDG among the communities in the industrialized areas. Additionally, proportionate stratified random sampling technique was used to select reasonable percentages from each of the categories of community clusters in the industrialize regions. While multi-stage random sampling technique was used to select the choice of potential respondents from the communities.

However, because it is not possible to cover the entire communities, an accessible population was estimated to the total number of 21736 from the available records and there is a 95 % chance that the sample is distributed in the same way as the population (i.e. 0.05) confidence level.

We can determine the sample size by using Taro Yamane's (1967) formula as shown below:

$$n = \frac{N}{1 + N(e)^2}$$

Where, n = sample size sought

e = level of significance or (acceptable sampling error)

N = population

Applying the above formula:

$$n = \frac{21736}{1 + 21736 (0.05)^2}$$

$$= \frac{21736}{1 + 21736 (0.0025)}$$

$$= \frac{21736}{1 + 54.34}$$

$$= \frac{21736}{55.34}$$

Sample size = 393

The calculated sample size obtained was adjusted for non-response rate of 10%. The formula used for this was to divide the number (n) by 1, minus the non-response rate to get the adjusted sample size (N). i.e. $N = n / (1 - (z/100))$.

When N= adjusted sample size, n=calculated sample size (393), z%= expected non-response rate, 10% (0.1)

$$\begin{aligned}
 N &= \frac{n}{1 - z/100} \\
 &= \frac{393}{1 + 10/100} \\
 &= \frac{393}{1 - 0.1} \\
 &= \frac{393}{0.9}
 \end{aligned}$$

Therefore n = 437 respondents

This means that the sample size for this study was 437 of the respondents. Thus, Bowley’s proportionate analytical technique was used to identify the % sample size. However, the number of copies of the questionnaire to be administered to each of the respondents in the industrialized communities under study as shown on table 3.2. The researcher’s discretion is applied to distribute the questionnaire.

List of Stakeholders and number of Respondents

S/N	Communities Stakeholders	Delta Ibos	Delta Isokos	Delta Ijaws	Delta Urhobos	Delta Itsekiri	Total
1	Men	14	9	14	15	14	66
2	Women	7	5	7	8	8	35
3	Youth	58	44	65	77	77	321
4	Elites	2	1	2	3	7	15
GRAND TOTAL		81	59	88	103	106	437

Source: Researcher’s discretionary quotient

Therefore n = 437 respondents

$$\begin{aligned}
 \text{Percentage of Sample} &= \left(\frac{\text{Sample Size}}{\text{Population Size}} \right) \% \\
 &= \left(\frac{n}{N} \times \frac{100}{1} \right) \% \\
 &= 437/21736 \times 100 \\
 &= 2\%
 \end{aligned}$$

From the data above, it indicates that 2% which is 437 of the population (21736) was taken as the sample size, because the study involves only stakeholders at all levels.

The responses on the questionnaire from the first administration was correlated with the responses from the second administration using Pearson Product Moment Correlation for reliability of the entire instrument. Again, Cronbach alpha was used to establish the inter-item and inter-scale reliability of the questionnaire.

The researcher assembled all the returned copies of the questionnaire, sort out the ones that are properly filled and separate them from the ones not properly filled (if any). The copies of questionnaire were coded for analysis using SPSS version IBM 25, and item-by-item, while sub-scale and overall analysis was implored in this study. Descriptive statistics of percentage mean and standard deviation with inferential statistics of partial correlation with multiple linear regression analysis were used for data analysis. The Multiple Regression Model were appropriate for the analysis because all the variables in this study are measured in ordinal scale.

-Model Specification

The Multiple Regression Model based on Partial Correlation Model are appropriate for our analysis because all the variables in this study are measured in parametric.

Where; Lean Start-Up (LEAN), Micro Small Medium Enterprises (MSMEs), Champiopreneurs (CPM)

$$\text{Thus, MSMEs}_t = f(\text{LEAN}_t, \text{CPM}_t) \dots \dots \dots (1)$$

-Linear Equation

$$\text{MSMEs}_t = a_0 + a_1(\text{LEAN}_t) + a_2(\text{CPM}_t) + U_t \dots \dots \text{equ}(2)$$

-Log Linear Equation

$$\log \text{MSMEs}_t = \log a_0 + a_1 \log(\text{LEAN}_t) + a_2 \log(\text{CPM}_t) + U_t \dots \dots \text{equ}(3)$$

Test of Hypothesis

HO_a: Champiopreneurship does not significantly moderate the relationship between Lean Start-up and MSMEs in Delta.

Table 3: Partial Correlation test for evaluating the moderating effect of Champiopreneurship on lean and MSMEs.

Control Variables		Correlations	
		Lean	MSMEs
Champiopreneur	Lean	Correlation	1.000
		Significance (2-tailed)	.
		Df	0
	MSMEs	Correlation	.876
		Significance (2-tailed)	.000
		Df	321

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

The study observes from the probability level of 0.000 that the control variable/moderating variable significantly moderates/controls the existent relationship between Champiopreneurship and flexibility. The positive correlation value of 0.876 shows that an increase in the intensity of the moderating variable is likely to subsequently increase the existing relationship between lean and MSMEs by up to 88.3%.

CONCLUSIONS, RECOMMENDATIONS AND CONTRIBUTION TO SCHOLARSHIP

CONCLUSIONS

This study highlights lean start up as an essential element of business governance which reveals that its parameters boost the SMEs growth in the short run and long run with the intervention of the champiopreneurship paradigm shift, there's hope for the people, nations and businesses on investors and other stakeholder's roles. The lean start-up has positive significant on the criterion variables. The study also reveals that there exists a strong correlate among lean start up and SMEs growth with the moderating role of Champiopreneurship.

RECOMMENDATIONS

Based on the findings and conclusions the following recommendations were made

1. Lean principle should interface with champiopreneurship metrics to develop and foster SMEs growth
2. Entrepreneur should aligned lean concept with conglomerates, multinationals and corporations should delves into SMEs growth, which create Champiopreneurship.
3. SMEs entrepreneur should delve into lean culture, thinking and venturing to enhance Champiopreneurship
4. Governments of all nations should devote energy to create more SMEs growth that consist of 70% above, which increases per capital income, GDP, GNP and circulation cycle of cash to fosters Champiopreneurship
5. Frequent lean training should be organized for those involved in SMEs growth in spirit of Champiopreneurship

CONTRIBUTION TO SCHOLARSHIP

This study has contributed to the existing knowledge as follows:

- Champiopreneurship adopted 'LEAN AUDIT' and 'W₅H MODEL' as possible remedies for SMEs growth.
- Champiopreneurship metrics orchestrates SMEs growth in the long-term and short-term

REFERENCES

- [1]. Aebersold, K. (2023). Take a deep dive into the 6 types of ecommerce business models.[https://www.elasticpath.com/blog/6-ecommerce-business-models-b2b-b2c#:~:text=Business%20to%20Consumer%20\(B2C\),Consumer%20to%20Consumer%20\(C2C](https://www.elasticpath.com/blog/6-ecommerce-business-models-b2b-b2c#:~:text=Business%20to%20Consumer%20(B2C),Consumer%20to%20Consumer%20(C2C)
- [2]. Ahmad, N., Mahmood, A., Ariza-Montes, A., & Han, H. (2021). Sustainable businesses speak to the heart of consumers: Looking at sustainability with a marketing lens to reap banking consumers' loyalty. *Sustainability*, 13(7). <https://doi.org/10.3390/su13073828>
- [3]. Ahunanya, V., Ovharhe, O. H., Emenike, C. G., & Otto, G. (2022a). Consignment inventory system and entrepreneurial success among micro warehousing firms. *International Journal of Social Science & Management Research*, 8(5), 18- 28.DOI:10.56201/ijssmr.v8.no5.2022.pg18.28
- [4]. Ahunanya, V., Ovharhe., O. H., Emenike, C. G., & Otto, G. (2022b). Consignment inventory system and obsolescence management in the drilling fluid firms in Nigeria. *International Journal of Social Science & Management Research*, 8(5),1-27.DOI: 10.56201/ijssmr.v8.no5.2022.pg1.17
- [5]. Alexandre, D., & Jean-Marie, P. (2021). Inventory management in supply chains. *Journal of Physics Conference Series*, 69(1), 67-72. DOI:10.1007/978-1-84996-017-5
- [6]. Alina, S., Michael, F., & Alexander, K. (2017). Do entrepreneurs really earn less?*Springer Small Business Economics*, 49(2), 251-272
- [7]. Benjamin, L. (2020). 72% of entrepreneurs suffer from mental health issues. Here's why and what to do about it.
- [8]. Bertha, M. S., Ferry, J., & Himadhani, M. (2020). Analysis of the uncertainty sources and SMEs' survival. *Policy for Innovative, Interventions and Entrepreneurship Journal*, 1(1), 1-27. <https://doi.org/10.1080/08276331.2020.1764737>
- [9]. Blank, S. (2013). Why the lean start-up changes everything. *Harvard Business Review*, 91(5), 63–72.
- [10]. BLAQ Fire Nation (2025). How spiritual entrepreneurs can align with their purpose and build thriving careers. <https://blaqfirenation.com/how-spiritual-entrepreneurs>
- [11]. Chibuikwe, C. U., & Ovharhe, O. H. (2022). Emergence of risk culture and lean culture in Nigeria during pandemic and crisis era: Using confirmatory analysis. *International Journal of Multidisciplinary Research and Growth Evaluation*, 3(1), 263-271. DOI: <https://doi.org/10.54660/anfo.2021.3.1.14>
- [12]. Chibuikwe, C. U., Ovharhe, O. H., & Abada, A. M. (2022). Synchronization of lean accounting alert and entrepreneurial sustainability among micro firms in Nigeria during pandemic and catastrophe: Using confirmatory factor analysis. *The International Journal of Business & Management*, 10(1), 1- 13. <https://doi.org/10.54660/anfo.2021.2.6.15>
- [13]. Choudhary, P. (2025). Spirituality in the workforce: Exploring the intersection of personal beliefs and professional environments. *IJNRD*, 10 (3), 525-534

- [14]. Christensen, C. M. (1997). *The innovator's dilemma: When new technologies cause great firms to fail*. Boston: Harvard Business School Press.
- [15]. Effa, G. A., Ovharhe, O. H., Ezirim, A. C., & Igwe, S. (2023a). Procurement sustainability policy and logistics performance in Nigeria. *International Journal of Marketing and Communication Studies (IJMCS)*, 7(1), 56-72. DOI: 10.56201/ijmcs.v7.no1.2023.pg56.72
- [16]. Effa, G. A., Ovharhe, O. H., Ezirim, A. C., & Igwe, S. (2023b). Strategic procurement initiatives and logistics performance in Nigeria. *International Journal of Marketing and Communication Studies (IJMCS)*, 7(1), 38-55. DOI: 10.56201/ijmcs.v7.no1.2023.pg38.55.
- [17]. EUGLOH (2025). Boost your entrepreneurial spirit ! 2025. <https://www.eugloh.eu/courses-trainings/activities/boost-your-entrepreneurial-spirit-2025/>
- [18]. Evans, D. (2020). *Coronavirus shows that supply chains are outdated and unfit for modern manufacturing*. *Forbes*. Retrieved May 21, 2020.
- [19]. Freeman, M. A. (2020). Are entrepreneurs touched with fire. <https://econa.net/wp-content/uploads/2020/08/Are-Entrepreneurs-Touched-with-Fire.pdf>. <https://www.linkedin.com/pulse/entrepreneurs>
- [20]. Geoffrey, J. (2017). *Profits and innovation. A history of green entrepreneurship*. Oxford University Press.
- [21]. Hardy, V. L. (2025). Intergenerational connections: The interplay of mentorship and social justice in social work. <https://www.socialworker.com/extras/2025-social-work-month->
- [22]. Hernandez-Matias, J. C., Ocampo, J. R., Hidalgo, A., & Vizan, A. (2020). Lean manufacturing and operational performance: Interrelationships between human-related lean practices. *Journal of Manufacturing Technology Management*, 31(2), 217-235. doi:10.1108/JMTM-04-2019-0140
- [23]. Jena, L. K. (2021). Does workplace spirituality lead to raising employee performance? The role of citizenship behavior and emotional intelligence. *International Journal of Organizational Analysis*, 30(6), 1309–1334.
- [24]. Jha, R. (2024, May 21). Workplace spirituality and employee well-being. *ISME Management Journal*. <https://www.isme.in/workplace-spirituality->
- [25]. Kelvin, H. (2020). *Introduction to the Theory of Yin-Yang*. Independent. ISBN 979-8667867869
- [26]. Khaw, S. M., Zailani, S., Iranmanesh, M., & Heidari, S. (2019). Do lean manufacturing practices have negative impact on jobsatisfaction. *International Journal of Lean Six Sigma*, 10(1), 257-274. doi:10.1108/IJLSS-11-2016-0072
- [27]. Krolicki, N. C., & Noel, R. (May 21, 2020). 'Just-in-time' economy out of time as pandemic exposes fatal flaws. *www.abc.net.au*. May 1, 2020. Retrieved May 21, 2020.
- [28]. Kuckertz, A., Bernhard, A., Elisabeth S.C., Berger, E.S.C., Dvouletý, O., Harms, R., Jack, S., & Kibler, E. (2023). Scaling the right answers. Creating and maintaining hope through social entrepreneurship in light of humanitarian crises. *Journal of Business Venturing Insights*. 19, 1-7
- [29]. Kulmaganbetova, A., Kozhakhmetov, Z., Tlessova, E., Sharapayeva, B., Baimbetova, A., Kirdasinova, K., & Mamutova, K. (2022). The innovative potential of SMES in Kazakhstan in the course of entrepreneurial online education. *World Review of Entrepreneurship, Management and Sustainable Development*. ICSSR- IMPRESS. DOI: 10.1504/WREMSD.2022.10046357
- [30]. Lamaster, N., Hastings, J., Husch, S., & Hooker, T. (2019). *The entrepreneur rec therapist: The business education you miss in school*. Amazon Self Publishing 2714, Rollingwood Dr. Tyler, Texas 75701, USA
- [31]. Lathabhavan, R. (2021). Sustainable business practices and challenges in Asia: A systematic review. *International Journal of Organizational Analysis*, ahead-of-print (ahead-of-print).
- [32]. Loizos, C. (26 May 2011). "Lean Startup' evangelist Eric Ries is just getting started". *PeHUB*. Retrieved 4 June 2015. <https://www.scribd.com/document/377073019/Lean-Startup>
- [33]. McGrath, R. G., & MacMillan, I. C. (1995). Discovery driven planning. *Harvard Business Review*, 73(4), 44–54.
- [34]. McMackin, J., & Flood, P. (2019). A theoretical framework for the social pillar of lean. *Journal of Organizational Effectiveness: People and Performance*, 6(1), 39-55. doi:10.1108/JOEPP-06-2018-0039
- [35]. Möldner, A. K., Garza-Reyes, J. A., & Kumar, V. (2020). Exploring lean manufacturing practices' influence on process innovation performance. *Journal of Business Research*, 106, 233-249. doi:10.1016/j.jbusres.2018.09.002
- [36]. Neamaha, M. F., Sabbar, A., & Abdulridha H. (2020). Lean accounting techniques in the e-commerce and its impact on efficiency of performance: An empirical study in the branches of insurance companies. *International Journal of Innovation, Creativity and Change*, 14(7), 1388-1389
- [37]. Osman, A. A., Mamat, R., & Ali, M. (2020). Lean transformational sustainability models: A critical review. *Advances in Business Research International Journal*, 6(2), 1-18. doi:10.24191/abrij.v6i2.1058
- [38]. Ovharhe, O. H., & Abada, A. M. (2024). Creative accounting and entrepreneurship opportunities. *Journal of Accounting and Financial Management (JAFM)*, 10 (5), 175-190. DOI: 10.56201/jafm.v10.no5.2024.pg175.190
- [39]. Ovharhe, O. H. & Woko, B. E. (202b). Environmental pollution and infant mortality on entrepreneurial opportunities: A champipreneurship approach. *International Journal of Geography & Environmental Management (IJGEM)*, 10 (3), 144-171. D.O.I: 10.56201/ijgem.v10.no3.2024.pg144.171
- [40]. Ovharhe, O. H. (2022a). Sustainable development goals: Multicollinearity between therapeutic entrepreneurship and rehabilitation therapy among African nations. *International Journal of Small Business and Entrepreneurship Research*, 10(3), 1-59. DOI: <https://doi.org/10.37745/ijber.2013/vol10n3157>
- [41]. Ovharhe, O. H. (2025). *Frugal Innovation and Social Entrepreneurship with Social Extrapreneurs and Ultrapreneurs*. In R. Manna., A. Singh., & K. Dixit. (Eds.). (2025). *Frugal Innovation in Entrepreneurship*. IGI Global. <https://doi.org/10.4018/979-8-3693-4050-9>
- [42]. Ovharhe, O. H., & Odepeli, S. (2024). Environmental pollution and maternal mortality among female entrepreneurs. *International Journal of Geography and Environmental Management (IJGEM)*, 10(2), 172-197. D.O.I: 10.56201/ijgem.v10.no3.2024.pg172.197
- [43]. Ovharhe, O. H., Woko, E. B., & Ezeocha, V. U. (2021). Remote working: Entrepreneurial risk and entrepreneurial survival in the micro firms in Niger-Delta, Nigeria (COVID-19 Pandemic Prospects). *International Journal of Small Business and Entrepreneurship Research*, 9(4), 11-28. DOI: <https://doi.org/10.37745/ijber.2013/vol9n11-28>
- [44]. Ovharhe, O. H., & Abada, A. M. (2024). Creative Accounting and Entrepreneurship Opportunities. *Journal of Accounting and Financial Management (JAFM)* 10(5) 175-190. DOI: 10.56201/jafm.v10.no5.2024.pg175.190

- [45]. Ovhharhe, O. H., & Akandu, C. J.(2024). Innovation Accounting and Innovation Entrepreneurship. *World Journal of Innovation and Modern Technology* (WJIMT). 8(2), 31-49 DOI: 10.56201/wjimt.v8.no2.2024.pg31.49
- [46]. Ovhharhe, O. H., & Chibuike, C. U (2024). Creative Accounting and Creative Entrepreneurship. *Journal of Accounting and Financial Management (JAFM)* , 10(7), 157-174. DOI: <https://doi.org/10.56201/jafm.v10.no5.2024.pg157.174>
- [47]. Ovhharhe, O. H., & Chibuike, C. U. (2024). Innovation Accounting and Frugal Innovation. *World Journal of Innovation and Modern Technology* (WJIMT) , 8(2), 50-70.DOI: 10.56201/wjimt.v8.no2.2024.pg50.70
- [48]. Ovhharhe, O. H., & Chukwuemeka, S. P. (2023). Sustainable Development Goals: Therapeutic Entrepreneurship and Mental Health Conditions. *British Journal of Multidisciplinary and Advanced Studies*, 4(1), 81–119. <https://doi.org/10.37745/bjmas.2022.0107>
- [49]. Ovhharhe, O. H., & Igbokwe, E. L. (2021). Analytical intervention of remote working correlates on risk culture and entrepreneurial adaptability in South-South Geopolitical Zone, Nigeria: Covid-19 Perspective. *Journal of Education and Practice, IISTE*, 12(3), 34-44, DOI: 10.7176/JEP/12-34-05
- [50]. Ovhharhe, O. H., & Okolo, B. S. (2022). Sustainable development goals: Lean entrepreneurship and Green entrepreneurship. *International Journal of Research and Scientific Innovation*, 9(10), 59-71. ISSN: 2321-2705
- [51]. Ovhharhe, O. H., & Woko, B. E. (2024a). Environmental pollution and life expectancy among Intrepreneurs. *International Journal of Medical Evaluation and Physical Report (IJMEPR)*, 10(2), 9-32. DOI: 10.56201/ijmepr.v8.no3.2024.pg9.32
- [52]. Ovhharhe, O. H., & Woko, B. E. (2024b). Environmental pollution and infant mortality on entrepreneurial opportunities: A champipreneurship approach. *International Journal of Geography and Environmental Management (IJGEM)*, 10(2),144-169.
- [53]. Ovhharhe, O. H., Ahunanya, V., Woko, E. B. (2022). Consignment inventory system and entrepreneurial survival in Lagos State. *International Journal of Social Science & Management Research*, 8(5), 29-42. DOI: 10.56201/ijssmr.v8.no5.2022.pg29.42
- [54]. Ovhharhe, O. H., Chibuike, C. U., Abada, A. M. (2023). Lean Accounting And Lean Entrepreneurship. *American Journal of Social Development and Entrepreneurship.*, 2(2) 1-8, DOI: <https://doi.org/10.54536/ajsde.v2i2.1578>
- [55]. Ovhharhe, O. H., Okolo, B. S., Woko, E. B., Igbokwe, L. (2022). Light entrepreneurship and customer funded business model. *International Journal of Social Sciences and Management Research*, 8(5), 87-106.DOI: 10.56201/ijssmr.v8.no5.2022.pg87.106
- [56]. Ovhharhe, O. H., Okolo, B. S., Woko, E. B., Igbokwe, L. (2022). Light entrepreneurship and customer funded business model. *International Journal of Social Sciences and Management Research*, 8(5), 87-106.
- [57]. Ovhharhe, O. H., Woko, E. B., & Ogolo, T. M. (2021). Competitive risk strategy and entrepreneurial satisfaction among fast moving consuming goods in Nigeria during covid-19 pandemic using confirmatory factor analysis. *International Journal of Multidisciplinary Research and Growth Evaluation*, 2(6), 267-272.<https://doi.org/10.54660/anfo.2021.3.1.14>
- [58]. Ovhharhe, O. H., & Abada, A. M. (2023). [IFRS adoptions on entrepreneurship entry and entrepreneurship exit: The Nigeria experience from 2006-2017](#). 2(2), *American Journal of Social Development and Entrepreneurship*. DOI: <https://doi.org/10.54536/ajsde.v2i2>
- [59]. Ovhharhe, O.H. (2022b). Sustainable development goals: Therapeutic entrepreneurship and entrepreneurship Injelititis among West Africa Countries. *World Journal of Entrepreneurial Development Studies* (WJEDS) 7(1), 87-113.
- [60]. Ovhharhe, O.H. (2024). *Business intelligence and innovation moderating roles on entrepreneurship and management using champipreneurship approach*. In K. Kankaew, P. Nakpathom, A. Chnitphattana, K. Pitchayadejanant, & S. Kunnapapdeelert (Eds.), *Applying business intelligence and innovation to entrepreneurship advances in business strategy and competitive advantage* (p. 171-223). IGI Global.com. <https://doi.org/10.4018/979-8-3693-1846-1.ch009>.
- [61]. Ovhharhe, O. H. (2025a). *Frugal Innovation and Social Entrepreneurship with Social Extrapreneurs and Ultrapreneurs*. In R. Manna., A. Singh., & K. Dixit. (Eds.). (2025). *Frugal Innovation in Entrepreneurship*. IGI Global. <https://doi.org/10.4018/979-8-3693-4050-9>
- [62]. Ovhharhe, O. H., Ovhharhe. O. J., & Emaziye (2024). Concept of agricultural entrepreneurship and innovation. Dennis Osadebe University Publication.
- [63]. Ovhharhe, O. H. (2025b). KSA and entrepreneurship growth strategies. *Management and Human Resource Research Journal*, 14(12), 1–22. Retrieved from <https://cirdjournals.com/index.php/mhrrj/article/view/1387>
- [64]. Ovhharhe, O. H. (2025c). Leveraging technology innovation and creativity in entrepreneurship opportunities. *Business Management and Entrepreneurship Academic Journal*, 7(12), 18–35. Retrieved from <https://cirdjournals.com/index.php/bmeaj/article/view/138>
- [65]. Ovhharhe, O. H. (2025d). Entrepreneurship spirituality and light entrepreneurship. *Business Management and Entrepreneurship Academic Journal*, 7(12), 1–17. Retrieved from <https://cirdjournals.com/index.php/bmeaj/article/view/1386>
- [66]. Patel, A.S., & Patel, K.M. (2021). Critical review of literature on Lean Six Sigma methodology. *International Journal of Lean Six Sigma*, 12(3), 627-674. <https://doi.org/10.1108/IJLSS-04-2020-0043>
- [67]. Pawar, B. S. (2023). A review of workplace spirituality scales. *Journal of Organizational Change Management*, 37(4), 802–832.
- [68]. Rehman, M., Malik, E., Baig, S., Rehman, H., & Hashim, M. (2021). Lean accounting awareness: A qualitative study on lean accounting perception. *International Journal of Management (IJM)*, 12(6), 28-42. DOI:10.34218/IJM.12.6.2021.002
- [69]. Ries, E. (2011). *The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses*. Amazon Self publishing 2714 Rollingwood Dr. Tyler, Texas 75701, USA
- [70]. Robert, P. G., Chao, M., Shanshan, Q., & Tae, J (2017). Entrepreneurial spawning and knowledge-based perspective: A meta-analysis. *Springer Small Business Economics*, 49(2),355-378
- [71]. Roberta Cohen in Marsella, A. J. (2007). *Fear of persecution: Global human rights, international law, and human well-being*. Lexington, Mass: Lexington Books.
- [72]. Roger, R.,Steven, K., & Matthew, M. (2016). Peace through entrepreneurship: Investing in a startup culture for security and development”. *Springer Small Business Economics*, 49(3), 717-720
- [73]. Roger, T. A. (2002). *Yin and Yang*”, in *encyclopedia of Chinese philosophy*, ed. by Antonio S. Cua. Routledge
- [74]. Sahoo, S. (2019). Lean manufacturing practices and performance: The role of social and technical factors. *International Journal of Quality & Reliability Management*, 37(5), 732-754. doi:10.1108/IJQRM-03-2019-0099
- [75]. Seeley, B. (2022). *Navigating entrepreneurship and mental health: Lessons I learned that may help you, too*. Forbes Councils Member
- [76]. Shafiq, M., & Soratana, K. (2020). Lean readiness assessment model – a tool for Humanitarian Organizations' social and economic innovation. *Journal of Humanitarian Logistics and Supply Chain Management*, 10(2), 77-99. doi:10.1108/JHLSCM-01-2019-0002
- [77]. Shahzad, N., Syed, M.M., Faraz, A., & Moin, A. (2020). Inventory management through lean logistics and warehousing techniques. *International Journal of Management Sciences and Business Research*, 5(10), 159-167

- [78]. Soliman, M. (2020). Lean accounting and value stream costing for more efficient business processes. *NovićevićČečević, Đorđević/Economic Themes*, 58(4), 573-592. DOI 10.2478/ethemes-2020-0032
- [79]. Teixeira, H.F., Santos, N. M. B. F., Akkari, A.C.S., & Munhoz, I.P. (2019). Lean accounting: Economic-financial performance of companies with lean manufacturing. *International Journal of Advanced Engineering Research and Science*, 6(5), 444-451. 10.22161/ijaers.6.5.59
- [80]. Thangarajoo, Y. (2015). Lean thinking: An overview. *Journal of Industrial Engineering and Management*, 04(02). 10.4172/2169-0316.1000159
- [81]. Vasileios, I.(2021). Lean and kaizen: The past and the future of the methodologies. *Licensee IntechOpen. Creative Commons Attribution License (<http://creativecommons.org/licenses/by/3.0>)*. DOI:10.5772/intechopen.96169.
- [82]. Vuorio, A.M., Puumalainen, K., & Fellnhofner, K. (2018). Drivers of entrepreneurial intentions in sustainable entrepreneurship. *Int J Entrep Behav Res*, 2(24), 359–381
- [83]. Yachin, J.M. (2019). The entrepreneur–opportunity nexus: Discovering the forces that promote product innovations in rural micro-tourism firms. *Scand. J. Hosp. Tour*, 19, 47–65.
- [84]. Zunic, E., Delalić, S., Hodžić, K., & Beširević, A. (2020). Smart warehouse management system concept with implementation. Conference: 2018 14th *Symposium on Neural Networks and Applications (NEUREL)*. DOI: 10.1109/NEUREL.2018.8587004