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Driving Organisational Sustainability in the Nigerian Insurance Sector: The Role of Competitive Intelligence

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Abstract

Traditional insurance is being threatened as the global business environment becomes more competitive. This paper investigates the influence of competitive intelligence on organisational sustainability of the Nigerian insurance industry. The study employed a cross-sectional survey design in data collection from selected companies. Evaluation of the measurement and structural models was done using SPSS AMOS 23 to confirm reliability and validity and also test the hypotheses. The results show that individually, competitor intelligence, product intelligence and strategic intelligence all have a significant relationship with organisational sustainability. However, technological intelligence and market intelligence have no significant relationship with organisational sustainability. The results further reveal that when combined, dimensions of competitive intelligence namely technological, strategic, product, market and competitor, have a positive relationship with organisational sustainability. The study while highlighting the importance of competitive intelligence and organisational sustainability in the Nigerian insurance industry reveals concentration only on a few areas. It thus recommends that there is a need for the insurance industry to recognise and enhance the application and implementation of competitive intelligence across all facets of the organisation's operations.

JEL Classification: G20, J24, M19.
Keywords: Competitive intelligence, Technological intelligence, Market intelligence, Product intelligence, Strategic intelligence, Competitor intelligence, Organisational sustainability.

1. Introduction

Organisational sustainability in recent times, has gained increased attention both within the academic and corporate fields due to its importance in assisting organisations meet their long term obligations. The insurance industry is not one to be left out in the quest for organisational sustainability. Insurance is a contract premised upon a promise from one party

to another to make good the promise at a later date. The insurance contract is a contract of trust which may be likened to a three-legged stool that stands on insurable interest, utmost good faith and indemnity. To meet up with this promise and indemnity, insurance companies need to be sustainable. According to Ukpong and Acha (2019) insurance is a pool of reserves derived from a variety of policy holders and used to pay the insured for unanticipated losses. Swarnapali (2017) described sustainability as an organisation's ability to comfortably meet the needs of its stakeholders both now and in the future. In view of its notion of forward thinking, organisational sustainability and the insurance sector aligns in terms of speaking to the protection of risks (Swarnapali, 2017).

Deploying more complex strategies may be prerequisites for organisations who wish to succeed. Having the right information, at the right time, ability to harness and utilise the information are all relevant factors that have the capacity to aid organisational sustainability. According to Kuye, Sulaimon and Odiachi (2020) implanting sustainability as an essential part of the organisation ensures a better capacity for its survival. As such, it may perhaps have become imperative that sustainability measures are entrenched across all facets of the operations within the insurance industry. To effectively achieve this, there is a need for adequate information that is accurate and useable and which has the capacity to guide decisions. The need therefore, for competitive intelligence. Importance of CI within organisations may have gradually gained acceptance in view of the necessity of a technology inclined global village and the big boost and demand has increased due to the recognition by organisations that quality information had its impact on the organisations results (Du Toit, 2015). Strategic and Competitive Intelligence Professionals (SCIP) (2014), defined competitive intelligence as the process of legally and ethically gathering and analysing information about competitors and the industries in which the organisation operates in order to make better decision and achieve goals. According to Nibakabeho and Kule (2016) competitive intelligence through the dimensions of product, market, technological and strategic alliance intelligence, had the capacity to positively impact the market success of an organisation. Furthermore, Tahmasebifard (2018), noted that competitive intelligence dimensions of market, competitor, technological and strategic intelligence impacted performance and sustainability of an organisation. Following from this, the current study examines competitive intelligence from the dimensions of technological intelligence, competitor intelligence, product intelligence, market intelligence and strategic intelligence which are assumed to have more relevance to the insurance industry.

The challenges of low penetration, advent of insurtechs and foreign investors, exorbitant management expenses, feeble institutional framework and so on (Abidemi, 2010; Adetunji, et al., 2018; Kuye et al., 2020) remain issues that face the industry and hinder sustainability. To improve the financial strength of member companies, the industry embarked on a recapitalisation exercise with an implementation timeline of September 2021. This exercise has come to beg the question of how the industry can be made accountable for the huge sums of funds that are going to be invested. In view of the huge financial investment likely to take place, investors and stakeholders may perhaps begin to ask questions and make demands on the return on their investments. Management of companies will be held more accountable than they were in the past, stakeholders across all spheres will be expecting to benefit from the financial strength of the companies. However, the ability to do these and more as well as ensure it is sustainable, may depend not just on the financial indicators, but on the strength of the companies to derive appropriate information through actionable intelligence and deploy same across board.

Notwithstanding several regulations set up within the insurance industry, organisational sustainability appears to still be a challenge. Extant literatures have viewed these constructs,

with Yu and Zhao (2015) suggesting that organisational sustainability be expansively investigated as it showed great relevance on firm value. Vihari, Rao and Doliya (2018) further agree with this view by observing the beneficial impact of organisational sustainability and the need for its value not to be compromised. Stefanikova, Rypakova and Moravcikova (2015) also propose the usage of competitive intelligence through different business types, noting that it affected positively, the growth and sustainability of organisations.

However, despite the importance of these constructs, they appear not to have been extensively reviewed as none of the studies conducted identified the role of competitive intelligence on organisational sustainability of underwriting and brokerage firms. There is also no study within the Nigerian setting that scrutinises this critical association between the study variables. One study in Nigeria on competitive intelligence deals with the impact in manufacturing firms of strategic intelligence on technological know-how (Ezenwa, Stella and Agu, 2018) and notes that competitive intelligence played a vital role in the strategic planning of an organisation and its achievement of a competitive advantage. Another study on organisational sustainability looks at transport companies and notes the impact of mentorship on the success of the program (Onwuka, Ekwulugo, Dibua & Ezeanyim, 2017). This study, identifying the above, found it necessary to carry out an empirical study of this nature. This study thus, seeks to bridge the gap and examine the degree to which, competitive intelligence influences organisational sustainability of underwriting and brokerage firms within the Nigerian insurance industry. Research questions were also raised in line with the objectives.

2. Literature Review

2.1. Institutional Theory

According to Fligstein and Dioun (2015), institutional theory stresses informal considerations and rational frames that form the social structure of marketplaces, agreeing with DiMaggio and Powell (1983) that the markets are fields where organisations size up each other, imitate moves and form niches to reproduce positions. Institutional theory underscores the normative influence of the environment on the activity of an organisation. Considering that the insurance industry does not operate in isolation, but rather within the society and guided by the laws and regulations of both the government and the society, institutional theory becomes relevant as it guides the companies in the establishment of their processes and structures. However, this theory has its limitations within this study as it does not fully take into cognisance the human factor operational in this environment.

2.2 Resource Based View Theory (RBV)

According to Wernerfelt (1984) a resource is anything which can be regarded as a strong or a weak portion of an organisation. The resource-based view theory premises that there exists limited resources and capabilities that are path dependent in view of their causal ambiguity and social complexity (Barney, 1991). An organisation's resource can be described as that mixture of its assets, processes, information, capabilities and attributes that are directly controlled by the organisation and aids it conceive and implement differing strategies likely to enhance the effectiveness and efficiency of the organisation (Hoopes et al., 2003; Kimani and Juma, 2015). It is worthy to note however, that, resources can only be deemed a strategic tool when they aid the firm to improve significantly in performance (Massey, 2016). In the context of this study, competitive intelligence may be deemed a strategic tool with the capacity to aid the insurance industry achieve improved performance through the provision of useable and actionable intelligence across the various spectrums. The extent to which these

intelligence are harnessed and utilised as an intangible resource capability, goes a long way in deciding how firms within the industry can achieve organisational sustainability.

2.3 Conceptual

2.3.1 Organisational Sustainability

The competitive landscape is an aggressive one and there are different phenomena which firms have to deal with in the market place to survive. There have been various definitions of sustainability. The definition is sometimes confusing especially, when there is an attempt to relate it to a particular industry, however, this study will endeavour to explore sustainability within the study context. Organisational sustainability represents an organisations ability to meet the necessities of the present generation whilst still ensuring that it does not jeopardise its ability to meet the needs of future generations, taking into consideration economic efficiency, environmental care and social fairness (Misso et al., 2018).

2.3.2 Competitive intelligence (CI)

Competitive intelligence for business came strongly into being quite a while ago focusing on the development of data for competitors of an organisation in its quest for sustained business advantage to gather information and pass to the necessary quarter (Bulger, 2016). As intelligence advanced, competitive intelligence became renowned for its significance to the organisation as they require competitive intelligence as a means, not only to deliver on their performance mandate, but also continuously remain sustainable. According to Ojo and Olaniyi (2017) competitive intelligence is the process of developing foresight that is actionable with respect to competitive dynamics and non-market factors that will aid the organisation in gaining competitive advantage.

2.3.3 Dimensions

Competitive intelligence has been shown in literature to be a strategic tool to organisations and usually viewed from different perspectives such as process, context and dimensions (Salguero et al., 2019; Amiri et al., 2017; Nibakabeho and Kule, 2016). According to Ezenwa et al., 2018) competitive intelligence is a business tool with the capacity to assist an organisation's decision-making process. This study examines CI through the following dimensions:

3. Competitor Intelligence

Competitor intelligence gives the organisation details about their competitors in terms of their rating, products, services, financial muscle, capabilities and so on (Bulger, 2016). According to Deschamps and Nayak (1995) competitor intelligence assesses the competitive strategy such as new entrants, organisational structure and new products substitutes, of a competitor over time. It assists organisations gather information relating to the activities, strengths and weaknesses of their competitors (Tahmasebifard, 2018). Competitor intelligence is important in that, if detected late, it could affect resources and funds used in supporting an organisations strategy.

3.1 Product Intelligence (PI)

Product intelligence has been extensively examined as a strategy in respect of its effects on performance (Nibakabeho and Kule, 2016). Existing literature argues that product intelligence influences organisational performance (Park, 2002). In product intelligence, issues in respect of product differentiation, new product development, and product launch as well as technology facilitation are reviewed. An intelligent product is deemed as one that has autonomy, reactivity and personality (Barber, 1996; Bradshaw, 1997).

3.2 Strategic Intelligence (SI)

Strategic intelligence is also sometimes referred to as strategic alliance intelligence or structural organisational intelligence includes non-human knowledge reserves within the organisation and takes into account things such as intellectual capital, creativity and innovation, processes and so on (Nibakabeho and Kule, 2016). Strategic intelligence also calls the need for political knowledge in terms of regulations, environmental laws and so on as they are factors that have the ability to determine the success of a business (Lee et al., 2011)

3.3 Technological Intelligence (TI)

Technological intelligence is very important especially in the current light of technological advancement. Technological intelligence has a strong influence on an organisation's ability to innovate. It is a source of new product innovation, competitive advantage and sustainability. Getting something outstanding out of CI requires collaboration between the cultural and the technological perspective (Koriyow and Karugu, 2018). Technological intelligence assesses the cost implications of new technologies, its advantages and the future discontinuities (Rouach and Santi, 2001). It assists an organisation identify new opportunities, processes and technologies ahead of their competitor and also facilitates quicker knowledge of customer preferences (Chen et al., 2004; Paiva and Goncalo, 2008)

3.4 Market Intelligence (MI)

Market intelligence is developed from current characteristics of the competitive happenings within the marketing mix of pricing, place, product and promotion. Scanning for CI is one of the major avenues for organisations to derive information needed for marketing intelligence, but does not work in isolation as members of the organisation are still required to develop competitive perceptions and strategic responses (Qiu 2008). Market intelligence assists organisations identify new markets, improve on their mix of target markets as well as the ways in which these markets are served satisfactorily (Nibakabeho and Kule, 2016).

2.4 Competitive Intelligence and Organisational Sustainability

The WCED declaration (1987) noted that sustainable development is a process of change through which individuals, organisations and governments exploit existing resources, direct investment and apply technological and institutional changes in line with the present and future needs. In view of the similarity of both concepts in terms of creating relief to stakeholders, organisational sustainability and the Nigerian insurance sector are a relevant combination.

Technological innovation is a major source of economic growth and a company who wishes to survive, must innovate, as this is fundamental to any viable organisation. Technological intelligence plays an important role in ensuring the survival of an organisation's business ecosystem and also achieves sustainable performance. Organisations, who do not pose on the steps of innovation, are more likely to fail. Koriyow and Karugu (2018) observed that organisations that effectively combine technological intelligence with customer innovation have a higher tendency to enjoy sustainable growth. This study thus hypothesises that:

Ho_1: Technological intelligence will have no significant relationship with organisational sustainability in the Nigerian insurance industry.

Sustainability is a major criterion for any insurance company and the NAICOM corporate governance code makes this a part of its objectives (Sulaimon et al., 2018). Organisations that have extensive information regarding their competitor, have the opportunity and ability to adequately differentiate the value added services they give to their customers ahead (Tseng,

2009). Furthermore, Tahmasebifard (2018) analysed the effect of competitive intelligence and its subtypes on market performance and observed that though all subtypes had an effect on market performance but competitor intelligence had the greater effect. Thus, this study hypothesises that:

Ho_2: Competitor intelligence does not relate to organisational sustainability in the Nigerian insurance industry.

To effectively achieve sustainability in the industry, there is a need for a holistic view of the industry integrating sustainability in their operations across the tripods of environment, economic and social. Environmental dynamics is an integral part of the insurance sector with risk management as its core while economic prosperity has the capacity to alter the level of organisational sustainability of the insurance industry (Papadopoulos et al., 2014). Social sustainability on the other hand, creates opportunity for strengthening community ties, create awareness, boost market share and improve penetration. Marketing intelligence is used by organisations to identify new markets and new ways to serve target markets (Nibakabeho and Kule, 2016) and has been reported to have a significant influence on organisational success. Thus, this study hypothesises that:

Ho_3: Market intelligence does not have an effect on organisational sustainability in the Nigerian insurance industry.

Sustainability has the ability and the potential to impact business results positively and is vital in ensuring long-term profitability (Kara and Firat, 2018). A sustainable organisation is one whose business model ideally points to sustainable values in terms of creating and delivering same, and capturing economic value while at the same time trying to maintain its natural, social and economic capital or attempt to regenerate same beyond its original boundary (D'Amato et al., 2018). Depending on where an organisation stands at each point of the product life cycle, product intelligence is applicable. Intelligent products provide so much capability that are not readily available and has been shown in literature (Nibakabeho and Kule, 2016) to enable organisations develop sustainability and that market success was positively correlated to product intelligence. The study therefore hypothesises that:

Ho_4: Product intelligence do not contribute to organisational sustainability in the insurance industry in Nigeria.

Berns et al., (2009) observed that organisations who embrace sustainability in their operations tend to benefit in terms of improved image, increased competitive advantage, cost savings, high employee morale leading to high retention rates, effective risk management, new source of revenue and good stakeholder relationship. All the above and more, are reasons organisations across all sectors are encouraged to adopt a sustainability model more so the insurance industry. SI are usually formed to reduce uncertainties. Market shifts has brought more attention to the need for strategic partnerships. Ezenwa et al., (2018) examined the effect of strategic intelligence on technological know-how in a manufacturing firm. The findings revealed that strategic intelligence significantly affected technological know-how and recommended adequate investment in CI process, facilities and activities. Hence this study hypothesises that:

Ho_5: Strategic alliance intelligence will have no significant influence organisational sustainability in the Nigerian insurance industry.

2.5 Empirical Review

Examining competitive intelligence in insurance companies, Nader et al., (2017) found that competitive intelligence significantly influenced competitive advantage. The study

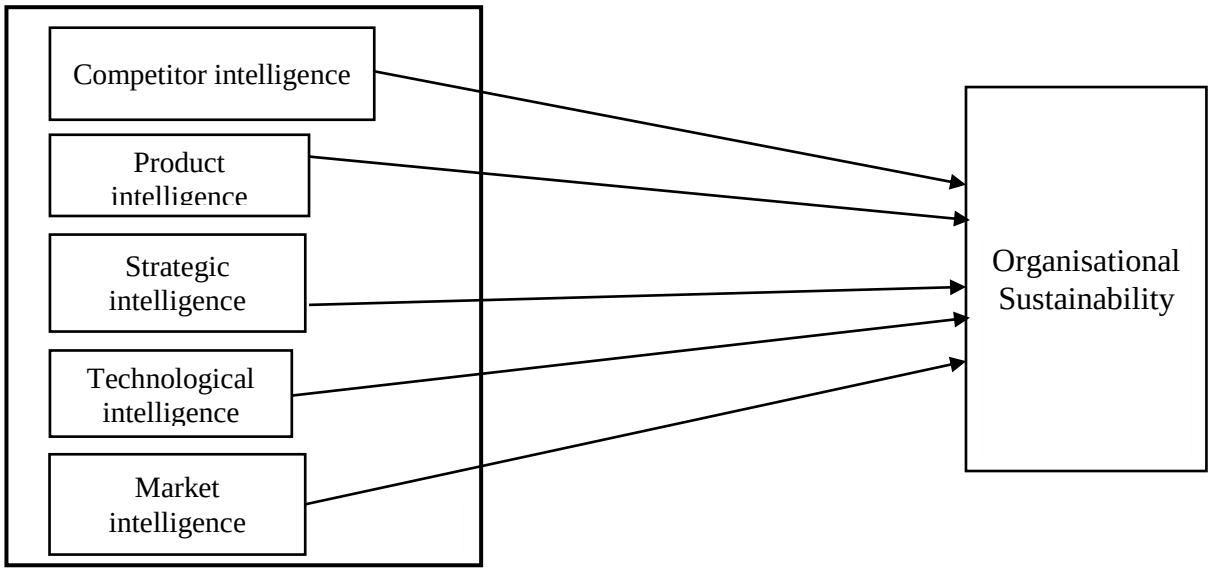
recommended an improvement of knowledge management so as to assist the organisation achieve its' goals. In a study investigating competitive intelligence on sustainable growth, Stefanikova et al., (2015) found that there exists a significant relationship between CI and sustainable growth of an enterprise. The study thus concluded that organisations implement competitive intelligence across all categories of businesses.

Tur-Porcar, Roig-Tierno and Mestre (2018) examined entrepreneur sustainability from environment. The results of the study found that organisations who aim to grow sustainably, need intelligence. Moratis and Melissen (2019) reviewed the need for alternative approaches to furthering sustainability and making the necessary societal transition arguing that intelligence was required. The study posited that relevant stakeholders such as government and organisations review sustainability more from the viewpoint of sustainability intelligence. Nader, Said, Chalak and Rezaeei (2017) examined competitive intelligence as a competitive advantage tool for insurance companies using focus, planning, data analysis and communication as dimensions. The study found that CI had a positive effect on competitive advantage and recommended reinforcement of knowledge management and informal relations. Abolarinwa and Yaya (2015) reviewed competitive intelligence utilisation among health workers in Nigeria noting that there was a need for CI as it enabled the organisation stay on top of its market and assisted the decision making process. Demir, Budur, Omer and Heshmati (2021) looked at the relationship between organisational sustainability and knowledge management. The results showed a relationship between both variables and recommended that organisations develop systems to store, generate and share knowledge. On the other hand, a review of organisational sustainability from the human resource perspective, showed that human resource planning enhanced organisational sustainability (Eketu & Ogbu, 2017).

2.8 Conceptual Model

The study set out to examine the relationship between competitive intelligence and organisational sustainability through the dimensions of technological, product, market, competitor and strategic intelligence. An assumption is being made that there exists a possible relationship and the model therefore proposes:

Figure 1. Conceptual model



Source: Researchers (2020).

3. Methodology

The study employed a cross-sectional research design with all responses derived at a single point in time. The study population comprised professional staff of registered insurance practitioners from underwriting and brokerage firms in Nigeria (NAICOM, 2019; NCRIB, 2019). The target population consisted of employees of selected underwriting and brokerage companies. The study area was Lagos State which is regarded as the commercial nerve centre of Nigeria, with majority of the operators and insurance portfolios domiciled therein and a huge contribution of about N196.56billion of the N400billion year 2018 premium income (NIA, 2019). Multistage sampling technique was used in the study. In the first stage, the insurance industry was categorised into underwriting companies and brokerage firms. The choice of these two sub-groups is based on their contribution to the total industry premium income. The second stage involved selection of companies to be used in the study. The selection of 50 companies was done reflecting 10% of the study population (De Vans, 1996) The criteria for the choice included shareholders fund, gross premium income, years of operation and ownership structure. The next stage involved determining the sample size with 318 derived using Yemane (1967) formula. The next stage was administration of the questionnaire to respondents. The collection instrument was a self-administered questionnaire comprising both socio-demographic variables and study variables. A total number of 400 questionnaire was administered with 345 returned out of which 330 was deemed useable representing a return rate above 70% return rate.

The study variables are measured using existing scales validated in literature. All scales were 5 point Likert scales of disagree at (1) and totally agree at (5). Technological intelligence (TI), Competitor intelligence and Market intelligence were measured from scales adapted from Deschamps and Nayik (1995). While technological intelligence was measured with a 7-item scale with measures ranging from items such as "my organisation assesses intelligence pertaining to new technology" to "my company collects and shares intelligence pertaining to future technology"; competitor intelligence was measured on a 6-item scale with questions ranging from things such as "the organisation continuously monitors competitors' strategy" to "the organisation collects and shares information across the company relating to new industry entrants". Market intelligence (MI) was measured on a 10-item which measured things such as "The organisation gathers and disseminates intelligence pertaining to current trends in customer needs and preferences" to items such as "Our organisation collects and disseminates intelligence pertaining to new shifts in marketing that have major impacts". Strategic intelligence (SI) on the other hand, was measured from an adapted 10-item scale developed by Rouach and Santi (2001). Items measured ranged from "Our organisation continuously collects and disseminates intelligence regarding current and future regulations that have a relation to company activities" to "The organisation collects, analyses and disseminates information about human resource matters that have a relation to company activities". Product intelligence (PI) was measured on a 5-item adapted scale from Nibakabeho and Kule (2016), with a 5-point Likert scale of disagree at (1) and totally agree at (5) in respect of new product, structure of other firms and their strategy as well as details or information of new entrants amongst others, while sustainability measurement items was adopted Dow Jones sustainability indexes (DJSI) key indicators (Lapinskaitte and Radikaite, 2015; Kocmanova, Docekalova, Skapa and Smolikova, 2016). The DJSI is used as the measurement tool because it is a global guide and it integrates both financial and non-financial information. Cronbach Alpha of all scales was above the validated threshold. SPSS AMOS 23 was used to test the study model with the use of a variance based structural equation modelling (SEM) (Reinartz, Haenlein and Henseler, 2009).

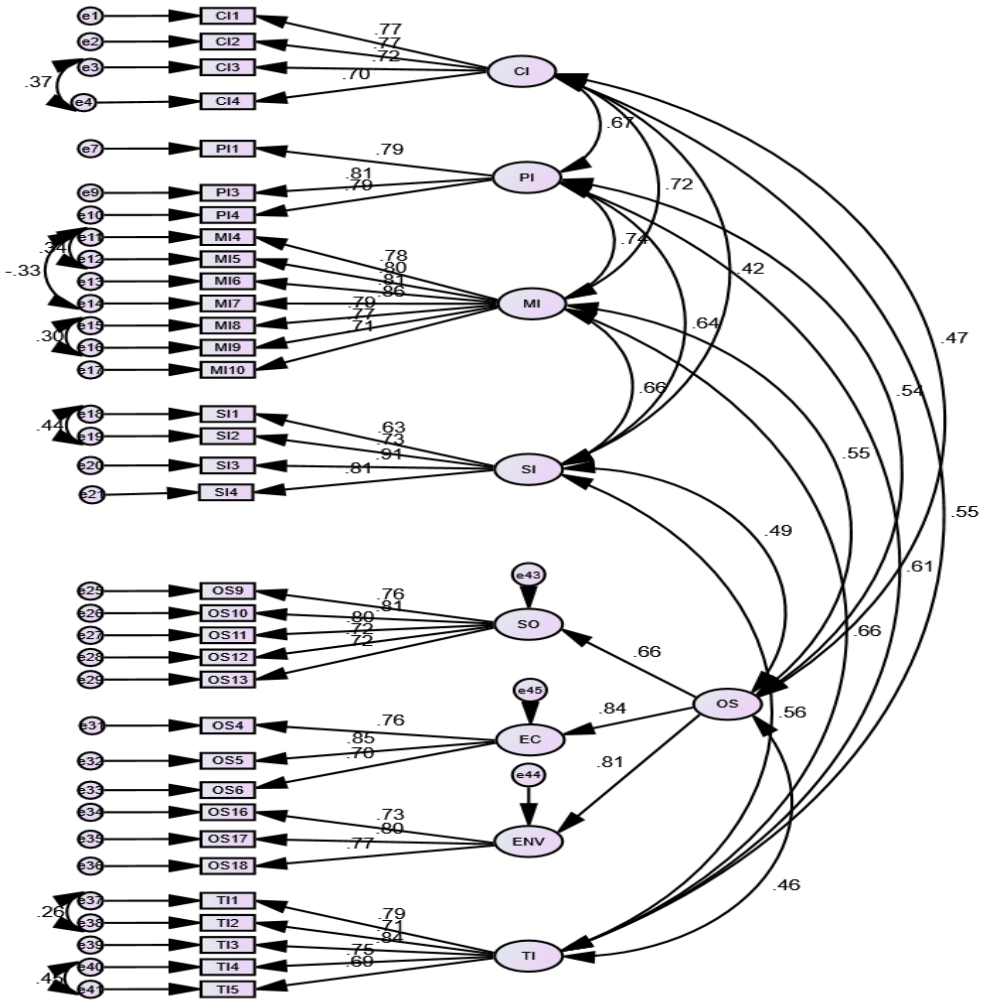
4. Results

For each of the stated hypothesis, a Confirmatory Factor Analysis (CFA) was first conducted employing AMOS 23 to ascertain the model fit and also the validity before testing the study hypotheses. A number of established fit index needs to be obtained before a model is deemed acceptable. A model is deemed acceptable if the Root mean Square of approximation (RMSEA) is ≤ 0.06, Comparative fit index (CFI) ≥ 0.90 and Standard root-mean-square residual (SRMR) ≤ 0.08 (Hu & Bentler, 1999; Kline, 2011). Also, having three to four of the indices are sufficient evidence for the model fit (Hair, Black, Babin and Anderson 2010).

4.1 Measurement Model

The result of the measurement model shows the factor loading for each of the indicators of the latent variable.

Figure 2: Measurement model



Source: Researchers (2020).

The study ensured that all constructs both exogenous and endogenous was given the permission to associate with another. As such, the overall measurement model of the constructs confirmed the non-existence of multicollinearity.

Further calculations in Table 1 show the results of the factor loadings which ranges between 0.63 and 0.86. This aligns with the requirements of Hair, Black and Babin (2010) who stated that factor loadings should be higher than 0.5%. The factor loadings of the study measures as shown therefore, satisfies the fundamental requirements.

The preliminary CFA first built and tested a six-factor model (competitor intelligence, product intelligence, market intelligence, strategic alliance intelligence, technological intelligence and organisational sustainability). The result reveal a model fit of the data (χ^2/df= 2.20, RMSEA = 0.06, CFI = 0.92, SMRS = 0.05). Poor fits were obtained across the other alternative models indicating that the latent variables in the proposed model are distinct**.** The result of the single-factor model (Harman's single factor test) indicated that common method of biases (CMB) had no significant threat on the study data. It is thus implied, that the CFA for the study model is acceptable and as such, the need to validate the instruments, before testing the study hypothesis.

From the table, the CR of the study variables are above the recommended threshold of .70 in line with Fornell and Larcker (1981). The result of the convergent validity of the latent variables, which measures how the indicators of the latent construct correlate with each other, reveals that the average variance extracted (AVE) for all the latent construct of the study are above 0.5 (Fornell and Larcker, 1981). While the discriminant validity which shows how indicators of each latent variables are unique was also valid; since the square root of the AVE as indicated by the diagonal value of each variable were all greater than the correlations of each variable. Thus, the composite reliability, convergent validity and discriminant validity for the study were confirmed.

Table 1: Confirmatory Factor Analysis Summary Results

Constructs	Code	Item description	Standardized Factor Loading	CR
Technological Intelligence	T1	My organisation collects intelligence pertaining to new technologies and assesses the costs and benefits	.79	-
	T2	My organisation analyses the intelligence pertaining to new technologies and assesses the costs and benefits	.71	15.264
	T3	My organisation disseminates the intelligence pertaining to new technologies and assesses the costs and benefits	.84	15.222
	T4	The management of the organisation collects intelligence pertaining to future technologies and assesses the costs and benefits	.75	13.593
	T5	The management of my organisation analyses the intelligence pertaining to future technologies and assesses the costs and benefits	.69	12.284
Competitor Intelligence	C1	The organisation continuously monitors competitors strategy and information on their competitive activities are disseminated through the company	.77	-
	C2	My company gathers intelligence on competitors structure and disseminates same through the company	.77	13.185
	C3	My organisation collects information in respect of new products and services of competitors	.72	12.234
	C4	The organisation analyses information in respect of new products and services of competitors	.70	11.893
Product Intelligence	P1	Our company gathers information with respect to customized products and customer preferences	.79	-
	P3	The organisation gathers intelligence on developed products and disseminates same across the system	.81	14.887
	P4	Our organisation collects and analyses information on personalised products	.79	14.532
Market Intelligence	M4	The company analyses information on new market opportunities	.78	19.166
	M5	Our organisation filters information on new market opportunities	.80	-
	M6	The firm shares information on new market opportunities	.81	16.461
	M7	The company gathers intelligence pertaining to new and creative segmentation opportunities	.86	17.737
	M8	My organisation analyses intelligence pertaining to new and creative segmentation opportunities	.79	15.948
	M9	The organisation disseminates intelligence pertaining to new and creative segmentation opportunities	.77	15.224
	M10	Our organisation collects and disseminates intelligence pertaining to new shifts in marketing that have major impacts	.71	13.802
Strategic Intelligence	SI1	Our organisation continuously collects intelligence regarding current and future regulations that have a relation to company activities	.63	-
	SI2	My organisation continuously disseminates intelligence regarding current and future regulations that have a relation to company activities	.73	14.636
	SI3	My company continuously collects intelligence regarding financial and tax rules that are related to company activities The company continuously disseminates intelligence regarding financial and tax rules that are related to company activities	.91	12.531

	SI4		.81	11.829
Organisational Sustainability	OS4	The company has an effective customer engagement system	.76	-
	OS5		.85	13.988
	OS6	The organisation has a standard brand management process	.71	12.060
	OS9	Our organisation is involved in corporate citizenship and philanthropy	.76	14.673
	OS10	The organisation invests in human capital development	.81	-
	OS11	Our organisation is attentive to employee well being	.79	15.577
	OS12	The organisation promotes fair trade and has a clear career path	.72	13.631
	OS13	The company encourages leadership diversity	.72	13.787
	OS16	The organisation's labour practice is standard	.73	-
	OS17	The organisation's management is mindful of environmental reporting and waste management	.80	12.732
	OS18	The company pays attention to its consumption of water and energy My organisation complies with standards on social reporting with respect to information on product and quality of service	.77	12.442

Source: Field study (2020)

Table 2: Summary of Fitness Indices

S/N	Index Description	Good fit Range of values	Index Value	Remark
1.	CFI	≥ 0.90	0.92	Fitness Achieved
2.	RMSEA	≤ 0.06	0.06	Fitness Achieved
3.	x^2/df	<3.00	2.20	Fitness Achieved
4.	SRMR	≤ 0.08	0.05	Fitness Achieved

Table 3: Reliability and validity

	CR	AVE	MSV	MI	SI	TI	PI	CI	OS
MI	0.92	0.62	0.55	**0.79**					
SI	0.86	0.61	0.43	0.66**	**0.79**				
TI	0.87	0.57	0.43	0.66**	0.56**	**0.76**			
PI	0.84	0.63	0.55	0.74**	0.64**	0.61**	**0.80**		
CI	0.83	0.55	0.52	0.72**	0.42**	0.55**	0.67**	**0.74**	
OS	0.82	0.60	0.30	0.55**	0.50**	0.46**	0.54**	0.47**	**0.77**

*Sig. * p < 0.05, ** p < 0.01.*

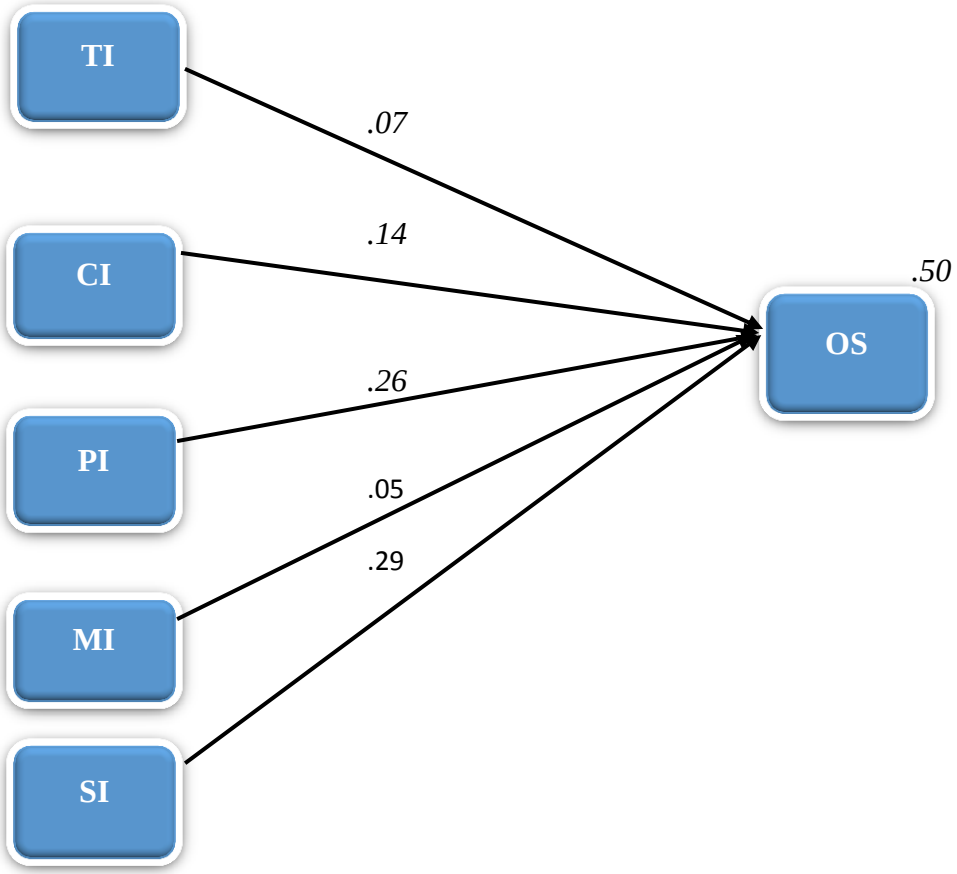
*Key: **CR**: Composite Reliability; **AVE**; Average Variance Extracted; **MSV**: Maximum Shared Variance; **MI**: Market intelligence; **SI**: Strategic intelligence; **TI**: Technological intelligence; **PI**: Product intelligence; **CI**: Competitor intelligence; **OS**: Organisational sustainability*

Source: Field Survey 2020

4.1 Structural Model

From the CFA the imputed scores for each latent variable were employed to test hypothesis one. The result shows the influence of the exogenous variables on the endogenous variable.

Figure 3: Structural Model



Key: ***TI***: *Technological intelligence;* ***CI***: *Competitor intelligence;* ***PI***: *Product intelligence*; ***MI***: *Market intelligence;* ***SI***: *Strategic alliance intelligence;* ***OS***: *Organisational sustainability*

Source: Researchers (2020)

Table 3: Path analysis result

Variables	B	Beta	C.R	Sig	R
TI	.05	.07	1.12	.26	
CI	.09	.14	1.97	**	
PI	.14	.26	3.54	**	.705
MI	.03	.05	.55	.58	
SI	.25	.29	4.62	**	

*Dependent variable: Organisational sustainability; **p < .01, * p < .05; C.R.: Critical ratio*
Source: Field Survey 2020

The finding of Hypothesis One shows that technological intelligence does not significantly influence organisational sustainability (β = .07, C.R = 1.12; p > .05). However, findings of Hypothesis Two reveal that competitor intelligence has a significant influence on organisational sustainability (β = .14, C.R = 1.97; p < .05). Results of Hypothesis Three

further reveal that market intelligence does not significantly influence organisational sustainability (β = .05, C.R = .55, p > .05), thus accepting the null hypothesis. On the other hand, the results of Hypothesis Four reveal that product intelligence significantly influences organisational sustainability (β = .26, C.R = 3.54; p < .05), while Hypothesis Five results show that strategic alliance intelligence has a significant positive influence on organisational sustainability (β = .29, C.R = 4.62, p < .05).

5. Discussion

The results obtained in the test of Hypothesis One revealed that technological intelligence had no significant influence on organisational sustainability, thus the hypotheses was accepted. The dimensions were reflected with technological intelligence (β = .07, C.R = 1.12; p > .05). This finding is contrary to the findings of Nibakabeho and Kule (2016) who noted that competitive intelligence dimension of technological intelligence was significantly related to market success. The results of this study also does not conform with the results of Asikhia et al., (2019) who observed the significant effect of technological intelligence on firm performance. However, the result aligns with Bose (2008) who observed that its contribution was not so significant.

The study results of Hypothesis Two revealed that competitor intelligence was significantly related to organisational sustainability. The dimensions were supported with competitor intelligence (β = .14, C.R = 1.97; p < .05). The findings align with Bulger (2016) who noted the significance of competitor intelligence and product intelligence to the growth of an organisation. The results also agree with the study of Tahmasebifard (2018) who noted that competitive intelligence dimensions impacted performance and organisational sustainability.

Hypothesis Three results as seen from the findings showed that market intelligence had no significant influence on organisational sustainability. The dimension was supported with (β = .05, C.R = 0.55; p > .05). The findings are in contrast to the findings of existing studies (Nibakabeho and Kule, 2016; Nasiri and Mozafari, 2015) who both noted the significant effect of market intelligence to a business. The study results of Hypothesis Four revealed that product intelligence had a significant influence on organisational sustainability. The dimensions were supported with product intelligence (β = .26, C.R = 3.54; p < .05). The results of hypothesis four, agree with the study of Bulger (2016) who noted the significance of competitor intelligence and product intelligence to the growth of an organisation. Thus, the alternate hypothesis was accepted.

The results derived in the test of Hypothesis Five revealed that strategic intelligence had a significant influence on organisational sustainability, thus the alternate hypothesis was accepted. The dimensions were reflected with strategic intelligence (β = .29, C.R = 4.62; p < .05). The study findings with relation to the contribution of strategic intelligence corroborate existing studies (Calof, 2017; Levine et al, 2017) who noted the benefits of partnerships. Though with varying results, the results from the study aligns with existing studies that noted the beneficial effect of competitive intelligence and its importance as a strategic planning tool for organisations (Salguero et al., 2019; Ezenwa et al., 2018).

6. Conclusion

Competitive intelligence has been found to play an important role in sustainability of organisations. This study examines competitive intelligence and organisational sustainability of underwriting and brokerage firms within the Nigerian insurance industry. Competitive

intelligence in the context of this study refers to intelligence tools with specific reference to technological, competitor, market, product and strategic intelligence. Further to the tests of hypotheses derived from the data collected in the study and in line with the findings, the study concludes that dimensions of competitor, product and strategic intelligence have a significant influence on organisational sustainability. The study results further suggest that strategic intelligence has a higher potential to improve organisational sustainability when compared to the other variables. This was followed by product intelligence.

These results corroborate the real life situation of companies within this sector, who largely concentrate on alliances and product intelligence. The study also suggests that technological intelligence did not have a significant relationship; hence, this is an area where the insurance sector needs to focus attention in terms of differentiation strategies. The study concludes that other dimensions of competitive intelligence have the capacity to result in increased advantage to the insurance industry in Nigeria.

This study has practical implications, one of the most relevant being the emphasis on strategic alliance intelligence to the detriment of technological intelligence and marketing intelligence by underwriting and brokerage firms in the Nigerian insurance industry. Previous studies have observed the impact of competitive intelligence on organisational sustainability. We suggest that competitive intelligence is a strong influence on organisational sustainability with strategic intelligence coming in strongly. Our study also shows that unlike previous studies in other sectors, there is no strong relation between technological intelligence and organisational sustainability in the Nigerian insurance sector. We thus suggest that these types of relations will lead to poor fits and to achieve long-term sustainability, firms within this sector need to discover means of turning their intelligence to valuable resource.

The current technological wave demands that real time actionable information be available and useable. There is a need therefore, for industry members to invest in competitive intelligence activities as having the right information at the right time is pertinent. The study therefore recommends that the insurance industry closely review their competitive intelligence program and expand the process and implementation across the organisation. Organisations within this sector are advised to pay attention to technological intelligence and market intelligence as these also have the potential to impact positively the organisation.

7. Contribution to knowledge

The results of this study have contributed to existing literature in the field of organisational sustainability in the context of the Nigerian insurance industry by reviewing and empirically establishing the link with competitive intelligence practices within underwriting and brokerage firms in the Nigerian insurance industry. The study has added to existing literature by showing a contrast between technological intelligence and organisational sustainability as well as marketing intelligence and organisational sustainability. It has shown the level at which they operate in the Nigerian insurance industry. The research findings may also serve as an academic reference while also assisting the government in policy implementation.

8. Limitation and Future Research

The study respondents were gotten from selected insurance companies and brokerage firms as such, the findings may not be generalizable. Future studies can expand the number of companies; other sub-sectors of the industry may also be reviewed. Data used was another limitation as this was cross-sectional having been collected at a particular time. Future studies

can employ longitudinal data for possible differences. Though the findings of the study provided positive support for some hypotheses, technological and market intelligence had no significant relationship with organisational sustainability, thus creating an assumption that there may exist other operational factors that may have influenced their relationship with organisational sustainability. Future studies should consider a replication taking into consideration other possible variances.

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