

Assessing the Effect of Competitive Insight on Organizational Agility: Evidence from Tuyil Pharmaceutical Company

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SUMMARY

In emerging economies, manufacturing firms operate in volatile environments shaped by intense competition, institutional gaps, and shifting consumer demands. This study examines the effect of competitive insight, operationalised as competitor analysis, industry comparisons, and strategic intelligence, on organizational agility, using a single-firm case study of Tuyil Pharmaceutical Company in Nigeria's pharmaceutical manufacturing sub-sector. Using a survey design and PLS-SEM, data were collected from 174 employees of Tuyil Pharmaceutical. Results show that industry comparison ($\beta = 0.302$, $p < 0.001$), competitor analysis ($\beta = 0.275$, $p = 0.002$), and strategic intelligence ($\beta = 0.246$, $p = 0.005$) each significantly and positively influence organizational agility. The combined predictive power of these consists of 53.8% ($R^2 = 0.538$) of the variance of organizational agility. The results are a single firm case study and so not generalisable to Nigeria's manufacturing sector until a multi-firm replication of this study has been conducted. Finally, the study identifies pharmaceutical firms' need to build a structured competitive insight dimension on which to build their business and aggregate their agility and competitive advantage.

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1. INTRODUCTION

Manufacturing enterprises in emerging economies operate within a fluctuating environment typified by stiff competition, institutional flaws, and shifting customer needs, making strategic information and market-oriented learning resources essential to survival and differentiation (Eniola et al., 2019). In Nigeria, a study on the topic of small and medium enterprises shows that strategic management practices regarding the product quality and organisational culture significantly enhance the performance of organisational structure, meaning that the companies that scan the environment in which they are operating with a systematic approach and subsequently restructure their internal processes enjoy benefits over the competitors that are not so adaptive (Eniola et al., 2019). The dynamics reflect the importance of comprehending the application of strategic intelligence in the Nigerian manufacturers' actions to assert their position in the already crammed markets, safeguarding their firms within the masses (Ashiru et al., 2022).

In highly competitive and heavily examined markets, the companies are putting more emphasis on the internal responsiveness ability to ensure their continued performance (Meng et al., 2023). The revealed firms confirm that MESG performance is conducive to firm-level response to stakeholders' focus, especially during periods of high-level investor attention (Meng et al., 2023). On the other hand, research on CSR in manufacturing indicated that changeability of

organizations is positively correlated with visible activities of responsible behavior which also have downstream effects (Meiryani et al., 2023). Knowing how the competitors and market information are translated into agile internal reactions of manufacturers in Nigeria is therefore very essential in accounting for the performance heterogeneities in regional & global value chains (Ashiru et al., 2022).

The effects of globalisation, technological advances, and the aftermath of the pandemic, have led companies in Nigeria to place high value on access to information in real time and the need for a timely response to it in the form of a strategy to deal with it (Orji & Ojadi, 2021). From the findings of the studies, the role of dynamic capabilities in relation to the Nigerian SMEs during the period of crisis, it is noted that through relationship-based governance and adaptability in decision making it is possible to describe reconfiguration of the resources and maintain stakeholders' trust during the execution process of a radical uncertainty situation (Ashiru et al., 2022). Meanwhile, the national studies reported that there is a need for strategic entrepreneurship to intertwine with strategic management to achieve sustainable growth and the ownership of the temporary legitimacy of a business in the market (Olusegun et al., 2025). All these overlapping pieces of evidence point to the importance of targeting a standalone research effort to investigate managerial actions and how manufacturing firms in Nigeria would leverage competitive information and awareness of general environment in a rather competitive environment to influence and sustain their competitive advantage (Orji & Ojadi, 2021).

This study makes an important contribution to literature by shedding light on the complex link between strategic intelligence in the context of manufacturing companies in Nigeria and organizational agility. It shows the importance of competitor analysis and market analysis, highlighting how firms use those to react in the environments in which they operate, and therefore offers a way to understand the process firms use to become responsive from the inside of the organization in emerging markets. This contribution fills a gap in previous research concerning the economies under study, as many research studies ignore the different problems particular to manufacturers in these economies, and hence it accorded valuable opportunity for discussing various issues to both academics and practitioners in the field of strategic management. The general research problem in this study is thus, "How does the competitive insight as a tool (competitor analysis, industry comparisons, and strategic intelligence) impact the agility of organizations within the manufacturing industry in Nigeria"?

So specifically, the objectives of the study will include: to determine the effect competitor analysis on organizational agility, to investigate the influence of industry comparisons on organizational agility and to examine the influence of strategic intelligence on organizational agility.

2. CONCEPTUAL REVIEW

2.1. Concept of Competitive Insight

Competitive insight is defined in this study as a dynamic, knowledge-based capability involving the systematic collection, analysis, and application of information on competitors, industry standards, and market trends to inform strategic decision-making (Golshan et al., 2025; Nassou & Kamar, 2025). In addition to the data collection, this capability includes organised environmental scan, analysis, and sharing of data, through which disintegrated data regarding competitors, customers and technologies are converted into decision-based knowledge (Golshan et al., 2025). Such interpretive focus aligns with the resource-based and dynamic capabilities paradigms, which consider such knowledge to be an intangible asset allowing the company to adapt products and services, reorganize markets, and maintain a competitive edge in the face of change (Nassou & Kamar, 2025; Radko & Temchenko, 2025).

In the era of big data, the competitive understanding is increasingly mediated by advanced analytics, artificial intelligence and decision support systems, which enhance the rate, amount and granularity of information available to strategic effect (Pu et al., 2025). These technological facilitators enable organisations to shift to be a retrospective reporting entity to be a predictive and prescriptive entity like predicting the strategic path of rivals or simulating market responses to different strategic plans (Adewusi et al., 2024). In conceptual terms, hence, competitive insight is best regarded as a socio-technical system that brings analytical infrastructures and managerial interpretation together, thus allowing firms to transform external signals into timely and consistent strategic decisions, so as to be perceived (Nassou & Kamar, 2025; Pu et al., 2025).

2.2. Concept of Organizational Agility

Organizational agility is defined here as a firm-level dynamic capability enabling rapid sensing of, and response to, environmental and competitive shifts through fast adjustment, learning from experience, and reflective practice (Tallon & Pinsonneault, 2011). It refers to an organisation's ability to respond to or even shape the market disruption by reorganising their resources and processes before or alongside a disruption (Nguyen et al., 2025). This construct is captured by capturing internal responsiveness and learning routines thus the most appropriate instrument to measure this construct

is from internal employees who are the key informants best suited to assess the ability of organizational adjustments and organizational learning potential (Desalegn et al., 2024).

2.3. Effect of Competitive Insight on Organizational Agility

Conceptual models of competitive intelligence show that more sophisticated understanding of a competitor and market situation correlates with the ability of a firm to sense the changes and realign operations accordingly (Adenuga et al., 2025; Flaig et al., 2021). Highly efficient firms that systematically process what happens outside into their strategic choices tend to have better ability to program value propositions and processes in line with market shifts (Radko & Temchenko, 2025). Therefore, competitive insight is considered to be upstream capacity that facilitates agile reconfiguration, which might become a downstream consequence, but an outcome that needs to be measured and captured as part of this study is not. Thus, a possible downstream outcome of this study (measured outcome) is a reputation standing as a result of competitive insight capability, which is considered to be upstream capacity that makes agile reconfiguration possible.

The theoretical and empirical literature on each of CSR and competitive behaviour highlights that organisations that are timely and systematic to operate their CSR activities based on market intelligence tend to develop high adaptive capacities, which may over time shape the perception of the organisations' stakeholders (Lin, 2023; Bianchi et al., 2019). It points to the importance of this study of the interplay between these dimensions, which are mutually related: competitive intelligence, ethical strategy, and organisational responsiveness (Nassou & Kamar, 2025; Bianchi et al., 2019).

2.4. Effect of Competitor Analysis on Organizational Agility

Competitor analysis creates awareness of the relative performance in service quality, innovation and customer experience which is used to understand how rapidly the firms can be responsive to adjust their operations (Gao et al., 2018; Kim et al., 2025). This additional information, derived from comparing the data from the reviews and social media, helps companies know what to adjust as soon as possible so that they can develop an effective strategy (Taherdoost & Madanchian, 2023). Sentiment systems processed on text, for example, or machines that perform sentiment analysis, also provide real-time signals of comparison, aiming at aiding agile decisions, and any impact on perception of the brand is a potential secondary effect (Ingole et al., 2024; Taherdoost & Madanchian, 2023); Competitor related analytics can therefore be used as an internal responsiveness tool to guide strategic responses to eliminating the performance gaps (Adenuga et al., 2025; Ingole et al., 2024). Thus, we propose the first hypothesis as follows:

H1: competitor analysis has a positive influence on organizational agility

2.5. Effect of Industry Comparisons on Organizational Agility

Industry comparisons orient a firm within a wider categorical context, prompting it to benchmark against sector standards and adjust accordingly (Gomez-Trujillo et al., 2020; Havryliuk, 2025). Systematic reviews show that firms benchmarking against industry peers are better able to reconfigure practices in step with sector expectations, with reputational capital as one possible longer-term effect (Gomez-Trujillo et al., 2020). Comparative positioning studies also indicate that companies with better positioning towards desired industry reference points are more likely to be able to adapt their actions in response to the requirement of industry adaptation than those less favourably positioned (Liu et al., 2020; Creevey et al., 2021). Industry-level benchmarking, therefore, acts as a mechanism for internal adjustment, consequently the focus of this study is not the credibility of the program, which is explored downstream from the activity, rather it is composed of program-specific gains (Gomez-Trujillo et al., 2020; Havryliuk, 2025). Therefore, we would like to propose the second hypothesis:

H2: Industry comparisons have a positive influence on organizational agility

2.6. Effect of Strategic Intelligence on Organizational Agility

It is a thought process of collecting and analysing market, technology and stakeholder information systematically, with a connection to more informed and timely decision making that ensures organisational responsiveness (Nwaiwu, 2018; Adenuga et al., 2025). The study on digital transformation indicates that the implementation of data-driven intelligence systems can assist firms in predicting change and being responsive to it early on in the process, which boosts responsiveness over time (Nwaiwu, 2018; Taherdoost & Madanchian, 2023). Sophisticated intelligence tools, such as AI sentiment analysis, similarly generate finer data that support faster internal adjustment (Kayakuş et al., 2024). When applied ethically and transparently, strategic intelligence supports sustained organisational adaptability, with any reputational benefit treated here as a possible downstream implication (Adenuga et al., 2025; Kayakuş et al., 2024). Thus, we propose the third hypothesis as follows:

H3: Strategic intelligence has a positive influence on organizational agility

3. THEORETICAL REVIEW

3.1. Resource-Based View (RBV) Theory

The Resource-Based View has been developed based on the previous work of Penrose and is formalised by [Wernerfelt \(1984\)](#) and [Barney \(1991\)](#), putting forward the firms as productive resources bundles, instead of industry participants ([Lockett et al., 2009](#)). It is based on the assumption that disparities in performance are caused by heterogeneous, non-mobility resources and capabilities that are valuable, rare, inimitable, and non-substitutable and create long-term competitive advantage ([Ferreira & Ferreira, 2024](#)). RBV shifts the emphasis of external positioning to internal resources that include knowledge, routines, brands, and relational capabilities, and integrates the associated approaches including dynamic capabilities, knowledge based view, and all of which describe the consistent performance heterogeneity.

RBV is based on a few assumptions: resource heterogeneity, i.e., being the firm with various bundles of resources; resource immobility, i.e., the strategic resources cannot be easily transferred, therefore, creating persistent advantage; and the erosion of the unprotected advantages creating superior performance by resources that meet VRIN/VRIO criteria only ([Kraaijenbrink et al., 2010](#); [Ferreira & Ferreira, 2024](#)). The framework assumes that rational managers strategically identify, develop and deploy strategic resources in order to earn rents. The lack of conceptual clarity of the concepts of resource and value, overfocus on fixed internal resources, inadequate definition of the limits of the firm, a lack of focus on stakeholders and dynamism of the environmental forces are among the criticisms ([Nagano, 2020](#); [Freeman et al., 2021](#)).

To the Nigerian manufacturing sector, RBV entails competitive insight capabilities (used to collect, analyze, and act on market and competitor data) as strategic, knowledge-based assets that can be valuable, rare and difficult to replicate when integrated into routine, culture and analytics systems ([Pereira & Bamel, 2021](#)). Other companies that have better insight have the ability to foresee moves by competitors, cope with stakeholders expectations and build stronger brand names as an intangible value whereas those who do not have the same react more slowly, and have lower reputational strength, which strengthens industry heterogeneity. RBV then suggests that competitive insight should be operationalised as internal resources and organizational agility as a path-dependent intangible, analyse the capability in relation to the requirements of VRIN/VRIO, and the capability development in an over-time perspective to gain a sustained reputational and performance advantage ([Komakech et al., 2025](#); [Ferreira & Ferreira, 2024](#)).

4. EMPIRICAL REVIEW

Empirical work in this stream converges on the idea that competitive intelligence drives reputational outcomes when it is channelled through a credible, monitored, and interpretable signal, but weakens where that channel is noisy or unmonitored. As noted by [Taherdoost and Madanchian \(2023\)](#), sentiment analysis is a prevalent method for firms to utilize the unstructured information they get from their stakeholders to gain operational intelligence about positioning and reputation, reflecting a new trend towards leveraging AI for competitive insight which is becoming prominent. [Meng et al. \(2023\)](#) apply this argument to a structure context, and find that the reputational value of consistent ESG performance is moderated by investor attention, where competitive insight means reputational benefit is contingent on a credible external audience that pays attention to the firm. [Pan et al.'s \(2024\)](#) meta-analysis, by contrast, identifies source credibility and identification as boundary conditions: competitive/comparative communication (via influencers) enhances brand outcomes only when the source is perceived as credible, and can fail to do so otherwise. Read together, these studies suggest competitive intelligence succeeds in driving organizational outcomes when it is analytically well-processed, channelled through a credible source, and received by an attentive audience, and is more likely to fail where any one of these conditions is absent.

5. METHODOLOGY

5.1. Research Design

This study adopts a quantitative, cross-sectional survey design, appropriate for measuring causal relationships between defined constructs across a target population at a single point in time.

5.2. Research Questions and Hypotheses

The study is guided by the following research question: To what extent does competitive insight influence organizational agility in Nigeria's manufacturing sector? Three hypotheses are tested:

H1: Competitor analysis has a positive influence on organizational agility.

H2: Industry comparisons have a positive influence on organizational agility.

H3: Strategic intelligence has a positive influence on organizational agility.

5.3. Population and Sampling

The target population comprised 388 employees of Tuyil Pharmaceutical Company, Nigeria. Purposive sampling technique was used to select the respondents who have direct interactions on strategic and market related decisions. Using Taro Yamane's formula [$n = N / (1 + N(e^2))$, $e = 0.05$], the required sample size was calculated as 196. A total of 174 valid responses were returned, yielding a response rate of 88.8%. It is acknowledged that the use of a single firm limits the generalisability of findings; this is addressed in the limitations section.

5.4. Measurement Instruments (Operationalisation)

Data were collected using a structured, five-point Likert-scale questionnaire (1 = Strongly Disagree, 5 = Strongly Agree). Each construct was measured using two indicators:

- Competitor Analysis: Data Analytics (DA), Performance Metrics (PM)
- Industry Comparisons: Intelligence Gathering (IG), Strategy Modification (SM)
- Strategic Intelligence: Embracing Change (EC), Resource Redeployment (RR)
- Organizational agility: measured using items adapted from validated scales in the literature

The full questionnaire is provided in Appendix A. Construct validity was assessed through pilot testing and expert review. Internal consistency was confirmed via Cronbach's Alpha. Partial Least Squares Structural Equation Modelling (PLS-SEM), executed using SmartPLS software, was used to analyse the data given its suitability for predictive modelling with small-to-medium samples.

5.5. Model Specification

Organizational Agility (OA) is the dependent variable; competitive insight components are the independent variables:

$OA [FA + LL + RL] = f (\text{Competitor Analysis } [DA + PM] + \text{Industry Comparisons } [IG + SM] + \text{Strategic Intelligence } [EC + RR])$

Where:

OA = Organizational Agility

FA = Fast Adjustment

LL = Lessons Learned

RL = Reflection and Learning

DA = Data Analytics

PM = Performance Metrics

IG = Intelligence Gathering

SM = Strategy Modification

EC = Embracing Change

RR = Resource Redeployment

6. RESULTS

6.1. Response Rate

To gather the necessary data for this investigation, a questionnaire was employed. In total 174 responses were recorded representing 88.8% of the anticipated sample (22 less responses than required). Hence, the authentic responses make up the data used in this analysis.

6.2. Descriptive Analysis of Responses and Normality Test

Table 1

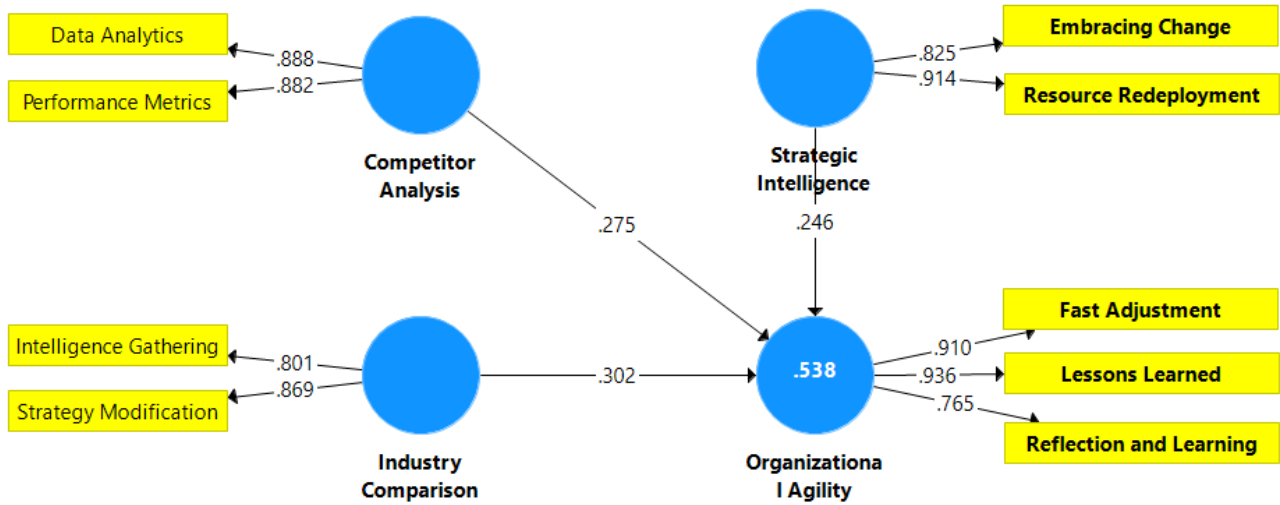
Descriptive Analysis and Normality Test

	Mean	Standard Deviation	Excess Kurtosis	Skewness	Number of Observations Used
Data Analytics	3.322	1.213	-0.802	-0.308	174.000
Embracing Change	2.626	1.224	-0.981	0.235	174.000
Fast Adjustment	3.598	1.334	-0.766	-0.665	174.000
Intelligence Gathering	2.891	1.215	-0.921	0.037	174.000
Lessons Learned	3.580	1.233	-0.964	-0.419	174.000
Performance Metrics	3.103	1.318	-1.170	-0.238	174.000
Reflection and Learning	3.080	1.288	-1.072	-0.070	174.000
Resource Redeployment	3.190	1.238	-1.007	-0.183	174.000
Strategy Modification	3.460	1.333	-1.119	-0.375	174.000

Source: SmartPLS Output, 2026

The results of Table 1 are a descriptive analysis and normality test that offer an overview of the responses with regard to the strategic variables of sensitivity at Tuyil Pharmaceutical Company. The mean descriptive statistics show that Data Analytics (3.322), Embracing Change (2.626), Fast Adjustment (3.598), Intelligence Gathering (2.891), Lessons Learned (3.580), Performance Metrics (3.103), Reflection and Learning (3.080), Resource Redeployment (3.190), and Strategy Modification (3.460) all indicate moderate to high levels of strategic sensitivity overall. The standard deviations of 1.213 (Data Analytics) to 1.334 (Fast Adjustment) represent moderate variability of the responses, and hence, there is a reasonable agreement between respondents. The skewness values, which are ranging between -0.665 (Fast Adjustment) and 0.235 (Embracing Change) are within the accepted range of -1 to +1, and this suggests that the responses are approximately normally distributed, Fast Adjustment, however, exhibits a slight negative skew meaning that they are more inclined to score high. The values of excess kurtosis are all negative, with the range of -1.170 (Performance Metrics) to -0.766 (Fast Adjustment), and this explains how the distribution could be platykurtic, that is, the responses are widespread in shape with fewer restrictive values and this further supports the fruitfulness of the data in the process of parametric analysis. The use of 174 observations across all variables represents a sufficient sample size to provide adequate statistical power to statistically analyze the results. These results suggest that Tuyil Pharmaceutical exhibits a moderate performance in strategic sensitivity especially in quick response and in drawing on experience and that they are essential to sustain competitive edge in the dynamism within the pharmaceutical market. The fact that the mean of Embracing Change (2.626) is relatively lower presents a prospective aspect of improvement and this implies that the organization might have to increase the flexibility to external change to support its competitive advantage.

6.3. Assessment of Measurement Model



Source: SmartPLS Output, 2026

Figure 1: A path model of Competitive Insight and Organizational agility

The relationships that are tested in the structural model, which are illustrated in Figure 1, are those comprising the path model Competitive Insight and Organizational agility. The figure probably indicates arrows of Competitor Analysis, Industry Comparison, and Strategic Intelligence to Organizational agility with a path coefficient of the intensity and direction of the relationships. According to Table 5, the paths are not insignificant since the coefficients of Competitor Analysis 0.275, Industry Comparison 0.302, and Strategic Intelligence 0.246 all have a p-value that falls below 0.05 which indicated positive and statistically significant impacts. The model graphically displays the impact of these elements of competitive insights in total on the Organizational agility with Industry Comparison displaying the highest route, then Competitor Analysis, and lastly Strategic Intelligence. The multicollinearity (Table 4) is nonexistent thus this guarantees the presented paths are unique contributions. The research implication is that the path model will help in better understanding how strategic sensitivities contribute to better organizational agility in Tuyl Pharmaceutical with special consideration to the multifactorial approach to competitive insight. This diagram demonstrates the strategic significance of these elements in motivation of competitive advantage in terms of enhanced organisational responsiveness or agility in the pharmaceutical sector.

Table 2

Construct Reliability and Validity

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Organizational agility	0.843	0.906	0.763
Competitor Analysis	0.722	0.878	0.783
Industry Comparison	0.771	0.822	0.698
Strategic Intelligence	0.788	0.862	0.758

Source: SmartPLS Output, 2026

Table 2 gives the values of reliability and validity of the constructs of competitive insight and organizational agility. The organizational agility presents Cronbach's alpha 0.843, Composite Reliability 0.906, and Average Variance Extracted 0.763, which are good to indicate that the construct has a high internal consistency and convergent validity since the AVE exceeds the 0.5 level, which means that the indicators integrate an excellent part of the variance in the construct. Competitor Analysis the Cronbach's Alpha is 0.722, Composite Reliability is 0.878, and AVE is 0.783, which represents a sufficient reliability and high convergent validity. The Cronbach's Alpha of Industry Comparison is 0.771, Composite Reliability is 0.822 and AVE is 0.698, which suggests good reliability, but mediocre convergent validity. Strategic Intelligences have the Cronbach's Alpha of 0.788, Composite Reliability of 0.862, and an AVE value of 0.758 which affirm good reliability and convergent validity. Those findings indicate that the measuring model is sound and valid, the constructs reflect the intended facets of competitive insight and organizational agility. The study implications are great,

since high reliability and validity of the constructs give a solid basis on the measurement of the effects of competitive insight on organizational agility in Tuyil Pharmaceutical. This strength increases confidence on the structural model to test the hypothesis hence justifying the goal of establishing the effects of competitive insight on organizational agility in pharmaceutical industry.

Table 3

Discriminant Validity

	Organizational agility	Competitor Analysis	Industry Comparison	Strategic Intelligence
Organizational agility	0.873			
Competitor Analysis	0.653	0.885		
Industry Comparison	0.677	0.747	0.836	
Strategic Intelligence	0.623	0.618	0.685	0.871

Source: SmartPLS Output, 2026

Table 3 evaluates discriminant validity using the Fornell-Larcker criterion, in which the square root of each construct's AVE should exceed its correlation with every other construct. AVE of Organizational agility is 0.873, correlates of 0.653(Competitor Analysis), 0.677 (Industry Comparison) and 0.623 (Strategic Intelligence) are less than square root, which is the confirmation that AVE is discriminant valid. The AVE of Competitor Analysis is also adequate, with correlations to Industry Comparison (0.747) and Strategic Intelligence (0.618) both meeting the criterion. Industry Comparison square root of AVE = 0.836, with a correlation of 0.685 to Strategic Intelligence, and Strategic Intelligence square root = 0.871; both are satisfactory on the discriminating validity criteria. These findings suggest that the constructs are independent of each other and they do not interact with their measurement of different areas of competitive insight and organizational agility. This means that the constructs of the study are clear and therefore the analysis of the effect of competitive insight on the organizational agility is not clouded by other overlapping measures. This immediacy reinforces the research to control the particular impacts of the elements of competitive insight on organizational agility which is in line with the objective of knowing their impact in the competitive advantage of Tuyil Pharmaceutical.

6.4. Multicollinearity

This assesses the correlation between the independent variable. It is to know if two independent variables are not correlated and producing the same result. The variance inflation factor (VIF) is used in this study to assess likely correlation between the independent variables.

Table 4

Inner VIF Values

	Organizational agility
Organizational agility	
Competitor Analysis	2.377
Industry Comparison	2.769
Strategic Intelligence	1.980

Source: SmartPLS Output, 2026

Table 4 is used to indicate the Value of Variance Inflation Factor (VIF), which measures the presence of multicollinearity between the independent variables that affect Organizational agility. The values of VIF are Competitor Analysis 2.377, Industry Comparison 2.769 and Strategic Intelligence 1.980 which are much lower than the value of 5, are not indicative of any serious cases of multicollinearity. The low values of VIF indicate that the independent variables are distinct enough and do not cause repeated effects on Organizational agility and hence the stability and significance of the results obtained through the structural model. This is an important finding as it indicates that the influence of Competitor analysis on organizational agility is measurable without the confounding effect of high relationships between these two variables because of the high correlation between them. This means that Tuyil Pharmaceutical would be able to target an improvement in all the competitive insights components without the fear that they are interconnected, which would

strengthen the strategic decision-making process supporting organizational agility and competitive advantage within the pharmaceutical industry.

Table 5

Bootstrapping Results Showing Path Coefficient for Structural Model

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Competitor Analysis -> Organizational agility	0.275	0.272	0.090	3.048	0.002
Industry Comparison -> Organizational agility	0.302	0.319	0.093	3.250	0.001
Strategic Intelligence -> Organizational agility	0.246	0.237	0.087	2.834	0.005

Source: SmartPLS Output, 2026

Table 5 indicates the bootstrap estimates of the structural model, which looks at the role of Competitor Analysis, Industry Comparison, and Strategic Intelligence on Organizational agility. The statistical significance of the relationship between Competitor Analysis and Organizational agility ($b = 0.275$) has a sample mean of 0.272, a standard deviation of 0.090, a T-statistic of 3.048 and a p-value of 0.002 thus confirming a statistical significance of the relationship between Competitor Analysis and Organizational agility. Likewise, the relationship between Industry Comparison and Organizational agility has a pathway that is defined as: $b = 0.302$, mean=0.319, SD=0.093, T=3.250 and $p = 0.001$, which is significant positive. The correlation between Strategic Intelligence and Organizational agility gives the correlation of $b = 0.246$ with a sample mean=0.237, standard deviation=0.087, T-statistic=2.834 and p-value= 0.005, which is also a big positive influence. Taken together, these have all showed that the three components of competitive insight play important roles in promoting organizational agility in Tuyil Pharmaceutical. These findings support the study objective by showing that the competence development of competitor analysis, industry comparison, and strategic intelligence is significantly associated with organizational agility and thus provides the organisation a competitive edge in the pharmaceutical industry by making strategically informed decisions and market positioning.

Table 6

Coefficient of Determination Score

	R Square	R Square Adjusted
Organizational agility	0.538	0.530

Source: SmartPLS Output, 2026

Table 6 records the coefficient of determination of the Organizational agility; it has a R^2 of 0.538 as well as adjusted R^2 of 0.530. These statistics show that Organizational agility as a variable can be explained by Competitor Analysis, Industry Comparison, and Strategic as its total variance, with the adjusted value accounting for the number of predictors. Based on Chin's (1998) benchmarks for PLS-SEM (R^2 ranges between 0.19- weak, 0.33- moderate, 0.67- substantial), this implies that the R^2 of 0.538 represents moderate-to-substantial level of explanatory power. The moderately strong explanatory power justifies the supposition that competitive insight had a significant influence on organizational agility at Tuyil Pharmaceutical. This subsequently effects the organisation's ability to respond to market change being significantly influenced by the strategic sensitiveness framework. By capitalising on these insights, Tuyil Pharmaceutical can strengthen its adaptive capacity and competitive position in the Nigerian pharmaceutical market; any resulting gains in brand standing are a possible longer-term implication rather than a measured outcome of this study.

Table 7

Assessment of the Effect Size (f^2)

	Organizational agility
Organizational agility	
Competitor Analysis	0.069
Industry Comparison	0.071
Strategic Intelligence	0.066

Source: SmartPLS Output, 2026

Table 7 shows the effect size (f^2) of each independent variable when dealing with Organizational agility. The Competitor Analysis results in $f^2 = 0.069$, Industry Comparison $f^2 = 0.071$ and Strategic Intelligence $f^2 = 0.066$. Following Cohen's (1988) benchmarks ($f^2 \geq 0.02$ small, ≥ 0.15 medium, ≥ 0.35 large), all three predictors fall within the small-effect range. Although statistically significant, their individual practical contributions are modest. The effect size of Industry Comparison is the greatest; and makes it the most prominent predicting factor amongst the three compared, with Competitor Analysis and Strategic Intelligence coming in at close. The implications of these findings are that although Competitive Insight on all fronts contributes to Organizational agility, Industry Comparison with a marginally greater impact probably because of its interest in benchmarking against industry is an absolute necessity as far as a highly competitive sphere such as pharmaceuticals is concerned. As such, Tuyil Pharmaceutical must focus on benchmarking the industry to be in a position to promote organizational agility and continue developing a sound competitor analysis and strategic intelligence to retain and develop its competitive advantage in a reputation-driven market.

7. DISCUSSION OF FINDINGS

The findings support all three hypotheses. Industry Comparison is the strongest predictor of organizational agility ($\beta = 0.302$, $p < 0.001$), followed by Competitor Analysis ($\beta = 0.275$, $p = 0.002$) and Strategic Intelligence ($\beta = 0.246$, $p = 0.005$). Together these predictors explain 53.8% of the variance in organizational agility ($R^2 = 0.538$), which represents a moderate level of variance.

As per the Resource Based View, the notion of the primacy of Industry Comparison aligns with systemic comparisons conducted by firms with their sectors leading on a standard, which involve aligning the use of resources with external expectations, giving a sense of perceived credibility and stakeholders' trust (Gomez-Trujillo et al., 2020). This aligns with Havryliuk (2025), who states that the benchmarking of industry-level is a multiplier of respect. This study however, takes the argument to the pharmaceutical manufacturing environment in Nigeria where institutional legitimacy is salient to the stakeholders in the environment.

The impact of the Competitor Analysis is consistent with Kim et al. (2025) who found that a systematic approach to competitor monitoring helps to gain product differentiation and make consumers feel superior. In case of Tuyil, firms which monitor other firms' actions can reliably distinguish their products further, something that is correlated to the agility of a firm.

The relatively weak but higher value is for Strategic Intelligence, which could be due to some of the manufacturing companies in Nigeria, having inadequate data analytics infrastructures (Nwaiwu, 2018). While industry comparison mechanisms need to have relational awareness, strategic intelligence requires technological investment and this may not be universally available. This is slightly different from Adenuga et al. (2025) who saw strategic intelligence as the top influence on reputation, given the nascent-adopting economy in which this study takes place.

Combined these results confirm the findings of Radko and Temchenko (2025), which unfolded that competitive intelligence leads to positive enhancement of brand equity, and add to them by disintegrating the concept of competitive intelligence into its various aspects and by testing each one of them separately.

8. CONCLUSION

8.1. Answering Research Goals

This study set out to examine the effect of competitive insight on organizational agility in Nigeria's manufacturing sector. All three hypotheses were supported: competitor analysis (H1), industry comparisons (H2), and strategic intelligence (H3) each positively and significantly influence organizational agility at Tuyil Pharmaceutical.

8.2. Theoretical Contribution

The study extends the Resource-Based View by empirically demonstrating that competitive insight, as a knowledge-based, intangible capability, functions as a strategic asset that drives organizational agility in an emerging economy context. It further contributes by disaggregating competitive insight into three measurable dimensions, providing a replicable framework for future research.

8.3. Managerial Implications

Nigerian manufacturers should institutionalise competitive intelligence functions. In particular, businesses should be looking for quarterly competitor benchmarking of and against sector leaders, more structured competitor monitoring systems and the development of data analytics skills to inform better strategic decisions and brand positioning.

8.4. Social Implications

A stronger organizational agility among Nigerian manufacturers can improve consumer trust, attract investment, and contribute to sector credibility, all of which have broader economic implications for Nigeria's industrial development.

8.5. Limitations

This study is limited by its single-firm, cross-sectional design, reliance on self-reported data, and focus on the pharmaceutical sub-sector of Tuyil Pharmaceutical Company. As a single-firm case study, the findings cannot be generalised to Nigeria's broader manufacturing industry without multi-firm replication across other sub-sectors.

8.6. Future Research Directions

Future studies should replicate this framework across multiple firms and sectors, adopt a longitudinal design, and explore potential mediating variables such as organisational culture or digital capability maturity.

8.7. Takeaway

Competitive insight is not merely an operational tool; it is a driver of organisational agility or responsiveness. Firms that invest in understanding their competitive environment are better positioned to adapt quickly in Nigeria's dynamic manufacturing landscape, with stronger stakeholder standing as a possible downstream benefit.

8.8. Recommendation

The study suggests that Tuyil Pharmaceutical should focus on developing its competitive insight resources to strengthen organizational agility and remain competitive. In particular, the organisation needs to invest in strong industry comparison behaviours, as the factor had the greatest impact on the organizational agility; benchmarking frequently against the industry leaders will help the organisation adhere to best practices and respond more quickly to market shifts. To conduct competitor analysis, Tuyil needs to develop its surveillance systems in order to sift strategic moves of rivals hence differentiating through innovative product offerings and specialized marketing strategies that are unique to the pharmaceutical industry. The advanced data analytics and intelligence-gathering instruments need to be invested in to augment strategic intelligence so that strategic decisions are made, hence allowing agility in the dynamism of a business market environment. In order to correct the relatively low scores attributed to Embracing Change (as shown in [Table 1](#)), Tuyil must institute a culture of adherence to change through specific training and change-management programs and therefore ensure that employees have the capacity to react to changes in the market. These are action measures that will

superbly improve the sensitivity level of the strategic orientation of Tuyil as a company, and consequently strengthen its organizational agility and competitive stance in the Nigerian pharmaceutical sector.

Declaration of competing interests

The authors declare no conflict of interest.

Data availability statement

The data that support the findings of this study are available from the corresponding author, (Oluwayomi Omotayo Olota , olota.oo@unilorin.edu.ng) upon reasonable request.

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Generative AI declaration statement

The authors declare that no generative artificial intelligence (AI) tools or services were used in the research, writing, analysis, or any other aspect of this work

REFERENCES

- Adenuga, M., Akonobi, A., Benson, C., Essandoh, S., Aifuwa, S., Babalola, A., & Ogbuefi, E. (2025). A theoretical model for strategic market positioning, competitive intelligence, and brand perception analysis. *Journal of Frontiers in Multidisciplinary Research*, 6(2), 297-307. <https://doi.org/10.54660/jfmr.2025.6.2.297-307>
- Adewusi, A., Okoli, U., Adaga, E., Olorunsogo, T., Asuzu, O., & Daraojimba, D. (2024). Business intelligence in the era of big data: A review of analytical tools and competitive advantage. *Computer Science & IT Research Journal*, 5(2), 415-431. <https://doi.org/10.51594/csitri.v5i2.791>
- Ashiru, F., Adegbite, E., Nakpodia, F., & Koporcic, N. (2022). Relational governance mechanisms as enablers of dynamic capabilities in Nigerian SMEs during the COVID-19 crisis. *Industrial Marketing Management*, 105, 18-32. <https://doi.org/10.1016/j.indmarman.2022.05.011>

- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. <https://doi.org/10.1177/014920639101700108>
- Bianchi, E., Bruno, J., & Sarabia-Sánchez, F. (2019). The impact of perceived CSR on corporate reputation and purchase intention. *European Journal of Management and Business Economics*, 28(3), 206–221. <https://doi.org/10.1108/ejmbe-12-2017-0068>
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295–336). Lawrence Erlbaum Associates.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Routledge. <https://doi.org/10.4324/9780203771587>
- Creevey, D., Coughlan, J., & O'Connor, C. (2021). Social media and luxury: A systematic literature review. *International Journal of Management Reviews*, 24(1), 99-129. <https://doi.org/10.1111/ijmr.12271>
- Desalegn, E. G., Guedes, M. J. C., Gomes, J. F. S., & Tebeka, S. M. (2024). Disentangling organizational agility from flexibility, adaptability, and versatility: A systematic review. *Future Business Journal*, 10(1), Article 117. <https://doi.org/10.1186/s43093-024-00405-6>
- Eniola, A., Olorunleke, G., Akintimehin, O., Ojeka, J., & Oyetunji, B. (2019). The impact of organizational culture on total quality management in SMEs in Nigeria. *Heliyon*, 5(8), e02293. <https://doi.org/10.1016/j.heliyon.2019.e02293>
- Ferreira, N., & Ferreira, J. (2024). The field of resource-based view research: mapping past, present and future trends. *Management Decision*, 63(4), 1124–1153. <https://doi.org/10.1108/md-10-2023-1908>
- Flaig, A., Kindström, D., & Ottosson, M. (2021). Market-shaping strategies: A conceptual framework for generating market outcomes. *Industrial Marketing Management*, 96, 254-266. <https://doi.org/10.1016/j.indmarman.2021.06.004>
- Freeman, R., Dmytriiev, S., & Phillips, R. (2021). Stakeholder theory and the resource-based view of the firm. *Journal of Management*, 47(7), 1757-1770. <https://doi.org/10.1177/0149206321993576>
- Gao, S., Tang, O., Wang, H., & Yin, P. (2018). Identifying competitors through comparative relation mining of online reviews in the restaurant industry. *International Journal of Hospitality Management*, 71, 19-32. <https://doi.org/10.1016/j.ijhm.2017.09.004>
- Golshan, A., Sardar, S., Ardestani, S., & Sadeghian, P. (2025). A Fuzzy analytical network process framework for prioritizing competitive intelligence in startups. *Analytics*, 4(1), 3. <https://doi.org/10.3390/analytics4010003>
- Gomez-Trujillo, A., Velez-Ocampo, J., & Gonzalez-Perez, M. (2020). A literature review on the causality between sustainability and corporate reputation. *Management of Environmental Quality: An International Journal*, 31(2), 406–430. <https://doi.org/10.1108/meq-09-2019-0207>
- Havryliuk, R. (2025). Brand image, reputation, and awareness: A representative analysis of the concepts of "image" and "reputation". *Scientific Notes of Taurida National V.I. Vernadsky University. Series: Economy and Management*, 36 (75)(3), 2. <https://doi.org/10.32782/2523-4803/75-3-2>
- Ingole, A., Khude, P., Kittad, S., Parmar, V., & Ghotkar, A. (2024). Competitive sentiment analysis for brand reputation monitoring. In *Second International Conference on Emerging Trends in Information Technology and Engineering (ic-ETITE'24)* (pp. 1-7). Vellore: Vellore Institute of Technology. <https://doi.org/10.1109/ic-etite58242.2024.10493574>
- Kayakuş, M., Açıkgöz, F., Dinca, M., & Kabas, O. (2024). Sustainable brand reputation: evaluation of iPhone customer reviews with machine learning and sentiment analysis. *Sustainability*, 16(14), 6121. <https://doi.org/10.3390/su16146121>
- Kim, S., Park, S., Kwak, M., & Kang, C. (2025). Examining product quality and competitiveness via online reviews: An integrated approach of importance performance competitor analysis and Kano model. *Journal of Retailing and Consumer Services*, 82, 104135. <https://doi.org/10.1016/j.jretconser.2024.104135>

- Komakech, R., Ombati, T., Kikwatha, R., & Wainaina, M. (2025). Resource-based view theory and its applications in supply chain management: A systematic literature review. *Management Science Letters*, 15, 261–272. <https://doi.org/10.5267/j.msl.2024.6.004>
- Kraaijenbrink, J., Spender, J. C., & Groen, A. J. (2010). The resource-based view: A review and assessment of its critiques. *Journal of Management*, 36(1), 349–372. <https://doi.org/10.1177/0149206309350775>
- Lin, W. (2023). The role of corporate social responsibility and corporate social irresponsibility in shaping corporate reputation: An analysis of competitive action and innovation strategies. *Corporate Social Responsibility and Environmental Management*, 31(2), 1451–1468. <https://doi.org/10.1002/csr.2640>
- Liu, H., Schoefer, K., Fastoso, F., & Tzemou, E. (2020). Perceived brand globalness/localness: A systematic review of the literature and directions for further research. *Journal of International Marketing*, 29(1), 77–94. <https://doi.org/10.1177/1069031x20973184>
- Lockett, A., Thompson, S., & Morgenstern, U. (2009). The development of the resource-based view of the firm: A critical appraisal. *International Journal of Management Reviews (Wiley-Blackwell)*, 11(1), 9–28. <https://doi.org/10.1111/j.1468-2370.2008.00252.x>
- Meiryani, Huang, S. M., Soepriyanto, G., Jessica, Fahlevi, M., Grabowska, S., & Aljuaid, M. (2023). The effect of voluntary disclosure on financial performance: Empirical study on manufacturing industry in Indonesia. *PLoS ONE*, 18(6), e0285720. <https://doi.org/10.1371/journal.pone.0285720>
- Meng, T., Yahya, M. H. D. H., Ashhari, Z. M., & Yu, D. (2023). ESG performance, investor attention, and company reputation: Threshold model analysis based on panel data from listed companies in China. *Heliyon*, 9(10), e20974. <https://doi.org/10.1016/j.heliyon.2023.e20974>
- Nagano, H. (2020). The growth of knowledge through the resource-based view. *Management Decision*, 58(1), 98–111. <https://doi.org/10.1108/md-11-2016-0798>
- Nassou, Y., & Kamar, M. (2025). From data to strategy: The role of economic intelligence in business performance. *European Journal of Science and Modern Technology*, 1(5), 15–19. [https://doi.org/10.59324/ejsmt.2025.1\(5\).02](https://doi.org/10.59324/ejsmt.2025.1(5).02)
- Nguyen, T., Le, C. V., Nguyen, M., Nguyen, G., Lien, T. T. H., & Nguyen, O. (2025). The organisational impact of agility: A systematic literature review. *Management Review Quarterly*, 75(3), 2709–2757. <https://doi.org/10.1007/s11301-024-00446-9>
- Nwaiwu, F. (2018). Review and comparison of conceptual frameworks on digital business transformation. *Journal of Competitiveness*, 10(3), 86–100. <https://doi.org/10.7441/joc.2018.03.06>
- Olusegun, J., Dangana, A., Gaddafi, M., & Madu, M. (2025). Strategic entrepreneurship and sustainable growth of SMEs in Nigeria. *Journal of African Resilience and Advancement Research*, 9(2), 26–42. <https://doi.org/10.70382/hujararv9i2.021>
- Orji, I., & Ojadi, F. (2021). Investigating the COVID-19 pandemic's impact on sustainable supplier selection in the Nigerian manufacturing sector. *Computers & Industrial Engineering*, 160, 107588–107588. <https://doi.org/10.1016/j.cie.2021.107588>
- Pan, M., Blut, M., Ghiassaleh, A., & Lee, Z. (2024). Influencer marketing effectiveness: A meta-analytic review. *Journal of the Academy of Marketing Science*, 53, 52–78. <https://doi.org/10.1007/s11747-024-01052-7>
- Pereira, V., & Bamel, U. (2021). Extending the resource and knowledge based view: A critical analysis into its theoretical evolution and future research directions. *Journal of Business Research*, 132, 557–570. <https://doi.org/10.1016/j.jbusres.2021.04.021>
- Pu, Y., Li, H., Hou, W., & Pan, X. (2025). The analysis of strategic management decisions and corporate competitiveness based on artificial intelligence. *Scientific Reports*, 15, 17942. <https://doi.org/10.1038/s41598-025-02842-x>
- Radko, V., & Temchenko, O. (2025). Reframing the concept of competitive advantage: Between stability and adaptability. *Economic Scope*, 2025(200), 328405. <https://doi.org/10.30838/ep.200.90-95>

Taherdoost, H., & Madanchian, M. (2023). Artificial intelligence and sentiment analysis: A review in competitive research. *Computers*, 12(2), 37. <https://doi.org/10.3390/computers12020037>

Tallon, P. P., & Pinsonneault, A. (2011). Competing perspectives on the link between strategic information technology alignment and organizational agility: Insights from a mediation model. *MIS Quarterly*, 35(2), 463–486. <https://doi.org/10.2307/23044052>

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171-180. <https://doi.org/10.1002/smj.4250050207>

APPENDIX

QUESTIONNAIRE

Questions relating Competitive Insight and Organizational agility: A study of Tuyil Pharmaceutical, Ilorin

Instruction: Please tick (✓) in front of statements that correspond with the degree of your answer.

Note the following contraction: Strongly Agree SA; Agree = A; Undecided- U; Disagree D; and Strongly Disagree = SD.

COMPETITIVE INSIGHT						
S/N	Competitor Analysis	SA	A	U	D	SD
1.	Our organization uses data analytics tools to systematically monitor and evaluate competitor strategies.					
2.	We track performance metrics to benchmark our position against competitors.					
Industry Comparisons		SA	A	U	D	SD
3.	Our organization actively engages in intelligence gathering to stay informed about industry trends and competitor actions.					
4.	Insights from industry comparisons regularly lead to modification of our strategies and business practices.					
Strategic Intelligence		SA	A	U	D	SD
5.	Our organization readily embraces change in response to strategic intelligence gathered from the competitive environment.					
6.	We effectively redeploy resources based on insights derived from strategic intelligence.					
S/N	Organizational agility	SA	A	U	D	SD
7.	Our brand makes fast adjustments to its market positioning whenever competitive intelligence signals a shift.					
8.	We consistently incorporate lessons learned from past market experiences to improve our organizational agility.					
9.	Regular reflection on brand performance outcomes enables us to enhance how we are perceived by stakeholders.					

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