



Metacognitive Intelligence and Internationalisation Strategy of Listed Bottling Companies in Nigeria

S. A. Yusuff¹, M. S. Oladimeji², I. K. Muo³

Abstract: **Objective:** the study investigates the effect of metacognitive intelligence on the internationalization strategy of listed bottling companies in Nigeria. **Approach:** the study employed survey research design with a population of seven (7) listed bottling companies having a staff population of (10,500) employees. Stratified and purposive sampling techniques were used to select Nigeria Bottling Company (soft drinks) and Nigerian Breweries (Breweries) due to the peculiarity of their products. Krejcie and Morgan sample size determination were used to select a sample size of (387). The instrument used for this study was a questionnaire. Data obtained were analysed using descriptive and regression statistics to test the research hypotheses at a significance level 0.05. **Results:** the findings of the two hypotheses formulated revealed thus: multi-domestic intelligence ($\beta = 0.047$, $t = 0.730$; $p\text{-value} = 0.466 > 0.05$). Transnational intelligence ($\beta = 0.387$, $t = 7.278$; $p\text{-value} = 0.000 < 0.05$). It was observed that R^2 which is the coefficient of determination indicates that 85% variation in the internationalization strategy of bottling companies in Nigeria explained by other factors not captured in the hypotheses while 15% is explained by metacognitive intelligence variables used. **Implication:** the study concluded that metacognitive intelligence significantly influences internationalization strategy, thereby shaping the strategic decisions made by Nigerian bottling companies when expanding their business activities abroad. Thus, the policy implication was that Nigerian bottling companies should prioritize the development of metacognitive intelligence among their employees. **Value:** the integration of metacognitive skills in internationalization strategy will encourage the employees to reflect on their thought processes, decision-making strategies, and problem-solving approaches in the milieu of international business operations.

¹ PhD in progress, Olabisi Onabanjo University, Ago-Iwoye, Nigeria, Address: Olabisi Onabanjo University, Ago Iwoye, Ogun State, Nigeria, Corresponding author: yusuffadesina21@yahoo.com.

² Professor, Olabisi Onabanjo University, Ago-Iwoye, Nigeria, Address: Olabisi Onabanjo University, Ago Iwoye, Ogun State, Nigeria, E-mail: moruff.oladimeji@oouagoiwoye.edu.ng.

³ Olabisi Onabanjo University, Ago-Iwoye, Nigeria, Address: Olabisi Onabanjo University, Ago Iwoye, Ogun State, Nigeria, E-mail: muo.ik@oouagoiwoye.edu.ng.



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1. Introduction

When a company aims to expand its product sales overseas or broaden its business network to other countries, which is often a significant milestone for many companies, it may encounter various obstacles. These obstacles could include technical hurdles that require solutions, the need to adapt to evolving technologies, or the necessity to grasp cultural values in foreign markets. Business internationalization refers to the process of adjusting business operations to operate effectively in a foreign environment. Businesses do not embark on internationalization without developing a suitable strategy.

Carpenter and Dunung (2012) have identified three corporate-level internationalization strategies that companies can adopt: multi-domestic, global, or transnational (a combination of multi-domestic and global). These three strategies involve balancing the trade-offs between catering to local preferences and achieving global efficiency. In a multi-domestic strategy, decision-making authority is decentralized to local business units in each country, enabling them to efficiently develop products and services that are well-suited to their local markets. Conversely, a global strategy is centralized and controlled by the company's headquarters, with a focus on maximizing global efficiency. The transnational strategy combines elements of both multi-domestic and global approaches. The choice of internationalization strategy depends on the specific characteristics of the business environment.

The business environment can be divided into two primary dimensions: internal and external. The internal environment encompasses factors that are under the control of a manager and represents the strengths and weaknesses of the organization. In contrast, the external environment consists of factors that are typically beyond the organization's control and can be unpredictable in nature. Technological changes occur within the external environment, and economic conditions vary between favorable and unfavorable. Some research studies have explored the impact of meta-cognitive intelligence as a crucial stimulus for enterprises pursuing internationalization strategies. Meta-cognitive intelligence has been recognized as a significant influence on firms' internationalization strategies (Zdravković & Peković, 2021). Given the growing use of meta-cognitive intelligence in developed economies, this study examines how meta-cognitive intelligence affects the internationalization strategies of bottling companies in Nigeria.

1.1. Hypotheses

The following hypotheses guide the study.

- 2.** Multi-domestic intelligence does not influence internationalisation strategy of bottling companies in Nigeria.
- 3.** Transnational intelligence does not enhance the internationalisation strategy of bottling companies in Nigeria.

2. Literature Review

Metacognitive encompasses the mental processes employed by individuals to acquire and comprehend cultural knowledge, which includes understanding and regulating their thought processes related to culture (Dheer & Lenartowicz, 2016). This involves managing and learning from experiences to enable individuals to control their learning effectively. It encompasses activities that individuals engage in to plan and assess their understanding of their cognitive actions, enabling them to recognize their roles as thinkers and learners. Practicing metacognition empowers individuals to solve problems and comprehend information more effectively. Key abilities associated with metacognitive intelligence include planning, monitoring, and revising mental models of cultural norms for different countries or groups of people. Individuals with a high level of metacognitive intelligence are consciously aware of the cultural preferences and norms of various societies before and during interactions. They also question cultural assumptions and adapt their mental models during and after relevant experiences (Chen, 2015).

Metacognitive intelligence involves developing a strategy before engaging in cross-cultural encounters, understanding the assumptions surrounding such encounters, and adjusting mental plans to accommodate different expectations. It also entails recognizing when one has knowledge and when one lacks it and comprehending the underlying patterns of thought. Metacognitive intelligence comes into play when individuals encounter difficulties understanding a concept from another culture; they recognize that their current problem-solving approach is ineffective and decide to try a different one. This, often called meta-cognitive, represents an individual's cultural awareness and consciousness during interactions with people from diverse cultural backgrounds (Du-Plessis, 2011). It relies on high-level cognitive strategies and in-depth information processing, allowing individuals to develop effective approaches to social interaction across various business contexts (Ang et al., 2015).

The multi-domestic strategy prioritizes local responsiveness by distributing decision-making authority to individual business units in each country, enabling them to tailor products and services to suit the specific needs of their local markets. This approach concentrates on competition within each country and aims to optimize

local adaptability. It operates on the premise that markets are distinct and segmented by national borders. It recognizes variations in consumer preferences, industry conditions, political and legal frameworks, and social norms across different countries (Carpenter & Dunung, 2012). By adopting a multi-domestic strategy, a company can adapt its offerings to cater to local customers' unique preferences and requirements, thereby enhancing its competitiveness in each local market and expanding its market share. However, the drawback of this strategy is the need for greater certainty due to the customized approaches in various countries. Additionally, because the company pursues distinct strategies in different locations, it may miss out on economies of scale that could otherwise reduce its overall costs. The multi-domestic strategy is particularly well-suited for diverse cultures and markets.

The transnational strategy aims to merge the strengths of both the multi-domestic and global strategies, striving for a balance between global efficiency and local responsiveness (Child & Yan, 2001). This approach is highly desirable and suitable for many industries, especially in light of the market variations and the increasing similarities resulting from globalization trends (Carpenter & Dunung, 2012). However, the challenge lies in effectively combining the features of multi-domestic and global strategies because it necessitates achieving the dual objectives of flexibility and coordination. Companies must navigate the delicate balance between conflicting local and global objectives. On a positive note, firms that successfully implement a global strategy often outperform competitors employing either multi-domestic or purely global corporate-level strategies (Child & Yan, 2001).

Internationalization broadly refers to any form of cross-border activities conducted by businesses and firms (Daszkiewicz & Wach, 2014). When tracing its historical origins, the internationalization of businesses and firms can be linked to humanity's capacity to travel across seas and borders. Scholars have made numerous attempts to define internationalization, resulting in varying perspectives and criteria. The term 'internationalization' remains somewhat ambiguous, and its definitions differ depending on the specific aspects they encompass. For instance, Cantwell and Piscitello (2015) focus on a firm's core competencies and opportunities within foreign markets or environments when discussing internationalization. Johnson (2004) perceives internationalization as the process through which firms expand their involvement in international operations. Awolusi (2013) defines internationalization as the process through which firms become increasingly aware of the direct and indirect impacts of international dealings on their future, leading them to establish and conduct transactions with other countries. Crick (2004) takes it a step further by defining internationalization as the process of adjusting a firm's operations, including its strategy, structure, and resources, to adapt to international environments.

2.2. Empirical Review

Yusuf, et al (2023) explore the prevalent practice of emotional labour in industries where workers are expected to adhere to organizational regulations or expressive norms aimed at influencing customers' emotions to align with the employer's objectives. This is particularly evident in service-oriented sectors like banking, where employees often engage in sustained emotional labour. Despite the limited comprehensive research on its impact on employee commitment, this study aims to investigate the influence of emotional dissonance on employee commitment. Employing a descriptive survey research approach, data were collected from 78 employees using well-structured questionnaires. The findings of the study indicate a significant effect of emotional dissonance on employee commitment at the 5% significance level. Specifically, emotional dissonance was found to impact employee commitment across various dimensions: EEXP ($\beta=0.501$, $t_{0.05}>1.645$), PHWB ($\beta=0.346$, $t_{0.05}>1.645$), and BRNT ($\beta=0.231$, $t_{0.05}<1.645$). Furthermore, emotional dissonance was observed to negatively affect workers' attitudes and contribute to increased healthcare and administrative costs, reduced job satisfaction, and higher employee turnover rates. In light of these findings, the banking sector is advised to establish flexible work environments and streamline processes through effective care coordination. Additionally, attention should be given to addressing different forms of work-related exhaustion, including physical and emotional exhaustion, employee fatigue, and emotional dissonance, within dynamic industrial settings.

Güner and Erbay (2021) examine the metacognitive strategies employed by middle school students during individual problem-solving tasks. The study involved 37 eighth-grade middle school students who were presented with a non-routine word problem and asked to provide written responses. Following the problem-solving task, students completed a self-monitoring questionnaire, prompting them to retrospectively reflect on the metacognitive strategies utilized during the process. To gather in-depth insights, semi-structured interviews were conducted with six students, comprising three who provided correct responses and three who gave incorrect answers to the problem. Analysis of the data was conducted using a model of metacognitive activity during problem-solving. The findings indicate that metacognitive skills significantly influence students' success in problem-solving. Specifically, students with high levels of metacognitive skills demonstrated proficiency in employing appropriate strategies, mathematical notation, and logical reasoning, leading to correct problem solutions. Conversely, students with limited metacognitive skills encountered challenges in comprehending the problem, selecting suitable strategies, and arriving at accurate answers. Despite students' perceptions, the study concluded that their practices of verifying, identifying, and rectifying errors in their solutions were lacking.

García-Álvarez de Perea, et al (2019) carried out an investigation focusing on multinational enterprises (MNEs) operating within the agri-food sector, with a particular emphasis on how they navigate the challenges of internationalization and their role in contributing to the attainment of Sustainable Development Goals (SDGs) in Spain. The study delves into the archetypal strategies and pace of internationalization adopted by MNEs within the agri-food sector. This inquiry was conducted externally and employed an empirical research approach. In particular, the research aimed to explore the impact of the interplay between demand-side innovation and management control systems (MCSs) within companies operating in this industry. The research design employed a qualitative methodology to gain insights into the contextual factors that shape the experiences of international MNEs within the agri-food sector. The data collection involved conducting semi-structured telephone interviews with three managers from multinational enterprises. The study's findings indicated that, at their core, MNEs share fundamental similarities. Furthermore, the research revealed that intense competition within the industry fosters collaborative innovation efforts, directing progress toward meeting the demands and expectations of consumers.

Jie and Harms (2017) identify and nurture potential international entrepreneurs as a crucial objective within entrepreneurship education. Drawing upon the theory of planned behaviour (TPB), we posit that International Entrepreneurial Intention (IEI) serves as a precursor to international entrepreneurship (IE). Moreover, we propose that cross-cultural competencies act as precursors to IEI and as moderators in the relationship between TPB components and IEI. Within a TPB framework, we incorporate two facets of cross-cultural competencies (global mindset and cultural intelligence) to ascertain the factors influencing students' IEI. Our analysis, conducted on a sample of 84 students using OLS regression and moderation analysis, reveals no significant direct effects from cultural intelligence and global mindset on IEI. Moderation analyses indicate a negative and significant moderating impact of cultural intelligence on the relationship between personal attitude and IEI, as well as on subjective norms and IEI. Hence, the mere enhancement of a global mindset and cultural intelligence does not contribute substantially to students' IEI. Entrepreneurship education must encompass additional measures, such as fostering the perception of international entrepreneurship as a desirable career path.

Wehrman (2018) conducted a study examining the significance of internationalization concerning other factors influencing firm growth. The research also sought to uncover additional impacts of internationalization in Research and Development (R&D), intangible assets, and capital structure. The study integrated various theoretical perspectives. It adopted an explanatory approach grounded in financial data analysis, employing multiple regression analysis and t-tests to achieve two primary objectives. The study did not identify internationalization as an explanatory variable for both quantitative and qualitative growth in the exploratory

analysis conducted on the overall sample and the high-growth group. These entities faced continuous challenges to maintain operating margins above the break-even point. The conclusion was that multinational enterprises tended to be drawn into internationalization rather than actively driving this process. However, once they reached a certain size, further growth was only achievable through internationalization, albeit at the expense of profitability.

Alhalwaki and Hamdan (2019) conducted a quantitative investigation into the evolution of internationalization strategies. Their study unveiled several factors that impact internationalization strategies within higher educational institutions in the Kingdom of Bahrain. Sultana, et al (2019) explored the impact of cultural differences on the performance of expatriates in Malaysia. Their research involved an examination of 55 papers focusing on cultural diversity, employee performance, and cultural intelligence. The findings revealed that expatriates often encounter conflicts stemming from disparities between foreign and local values, which directly affect their performance.

3. Methodology

The study employed survey research design with a population of seven (7) listed bottling companies having a staff population of (10,500) employees. Stratified and purposive sampling techniques were used to select Nigeria Bottling Company (soft drinks) and Nigerian Breweries (Breweries) due to the peculiarity of their products which makes a total of (387) samples. Krejcie and Morgan sample size determination were used to select a sample size of (387). The instrument used for this study was a questionnaire. Data obtained were analysed using descriptive and regression statistics to test the research questions. The analysis was conducted using SPSS software.

4. Results and Discussion

4.1. Descriptive Analysis

Table 1. Descriptive Statistics of the Respondents

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Internationalisation Strategy	355	4.10	1.154	-1.302	0.129	0.714	0.258

multi-domestic Intelligence	355	3.83	0.917	-0.984	0.129	0.984	0.258
Transnational Intelligence	355	3.58	1.113	-0.804	0.129	-0.226	0.258
Valid N (listwise)	355						

Source: Researchers Field Survey, (2024)

The table provided presents details regarding the variables under examination, including respondents' mean, standard deviation, skewness, and kurtosis. Each variable's mean and standard deviation for the respondents are as follows: Internationalization strategy: Mean = 4.10, Standard Deviation = 1.154. The lower standard deviation indicates a concentration of values around the mean. Multi-domestic intelligence: Mean = 3.83, Standard Deviation = 0.917. Similar to the internationalization strategy, the standard deviation is lower than the mean, suggesting data concentration around the mean. Transnational intelligence: Mean = 3.58, Standard Deviation = 1.113. The standard deviation is lower than the mean, indicating concentration around the mean for transnational intelligence. It is assumed that the dataset closely aligns with the average, illustrating data concentration around the mean. In cross-sectional data with 355 observations, skewness and kurtosis values below +/-1.96 suggest normality. The skewness and kurtosis results for metacognitive intelligence variables and internationalization strategy imply a normal distribution. This suggests a linear relationship between the data for the two independent variables and the dependent variable.

4.2. Test of Research Hypotheses

Table 2. Linear Regression Analysis of the Variables

Variable	β	Std. Error	t-statistic	P-value
(Constant)	2.530	0.272	9.312	0.000
Multi-Domestic Strategy	0.047	0.065	0.730	0.466
Transnational Strategy	0.387	0.053	7.278	0.000
R = 0.386 ^a				
R-Square = 0.149				
Adjusted R-Squared = 0.144				
Std. Error = 1.068				
F-Statistic = 30.760				
P-value (F-statistic) = 0.000 ^b				

Durbin-Watson = 1.802
a. Predictors: (Constant), Multi-domestic Intelligence and Transnational Intelligence
b. Dependent Variable: Internationalisation Strategy

Source: Researchers Field Survey, (2024)

Table 2 showed the regression results for the effect of metacognitive intelligence on the internationalization strategy of bottling companies in Nigeria. The findings of the two hypotheses formulated revealed thus: multi-domestic intelligence ($\beta = 0.047$, $t = 0.730$; $p\text{-value} = 0.466 > 0.05$). Transnational intelligence ($\beta = 0.387$, $t = 7.278$; $p\text{-value} = 0.000 < 0.05$). It was observed that R^2 which is the coefficient of determination indicates that 85% variation in the internationalization strategy of bottling companies in Nigeria explained by other factors not captured in the hypotheses while 15% is explained by metacognitive intelligence variables used. Thus, the null hypothesis one is hereby rejected while hypothesis two does not rejected. The study's findings align with the conclusions of Güner and Erbay (2021) that metacognitive skills are significantly influence companies success in problem-solving. Also, Umme and Mohd-Ridzuan (2019) corroborated that expatriates often encounter conflicts stemming from disparities between foreign and local values, which directly affect their internationalization strategies. The finding against the conclusion of Jie and Harms (2017) that enhancement in global mindset and cultural intelligence does not contribute substantially to international entrepreneurial intention of companies.

5. Conclusion and Policy Recommendations

Based on these findings, the study concludes that metacognitive intelligence has a significant impact on the internationalization strategies of bottling companies in Nigeria. When bottling companies possess a deep understanding of the norms, values, and beliefs of the local business, they are better equipped to select and implement appropriate strategies for specific markets in the international business environment. Metacognitive intelligence plays a pivotal role in determining whether the host community embraces or rejects a bottling company. It was observed that both fundamental intelligence components exert either individual or collective influence on the internationalization strategies of bottling companies in Nigeria. The more familiar a bottling company becomes, the more adaptable, accepted, and successful it will likely be within the international community. This aligns with the individualism-collectivism theory. The anticipation of success when an organization expands its operations to another country is consistently high. The findings presented in this study recommend that Bottling Company employees, particularly expatriates, should possess a metacognitive intelligence level that not only aligns with the host community but also maximizes the organization's potential. Emphasizing the development of metacognitive intelligence among the listed bottling company

employees is crucial. This approach not only reduces the risk of rejection by the host community but also significantly enhances the company's prospects for success.

To implement the insights and recommendations from this study, it is worth noting that this study exclusively focuses on listed bottling companies. Efforts should be made to expand the scope of the study to encompass all types of bottling companies. Also, the following policy implications were suggested:

1. Nigerian bottling companies should prioritize the development of metacognitive intelligence among their employees.
2. Integration of metacognitive skills in internationalization strategy will encourage the employees to reflect on their thought processes, decision-making strategies, and problem-solving approaches in the milieu of international business operations.
3. Nigerian bottling companies should foster a learning culture that encourages continuous reflection and improvement.
4. They should also invest in technology and data analytics tools to support metacognitive decision-making processes.
5. Thus, encourage collaboration and knowledge sharing among employees to leverage diverse perspectives and expertise.

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