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STRATEGIC THINKING AND EFFECTIVE DECISION MAKING OF THE TELECOMMUNICATION INDUSTRY IN RIVERS STATE, NIGERIA

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Abstract

This study examined the correlation between strategic thinking and efficient decision-making in the telecommunications sector in Rivers State, Nigeria. The capacity of managers in the Telecommunication industry to foresee dangers, recognize opportunities, consider alternative options and make effective decisions that will optimize immediate benefits and provide long-term competitive advantage is believed to have hampered their services, and this has resulted to delving into this research in order to provide possible solutions. As a consequence, two research hypotheses were formulated in their null forms. A comprehensive census survey approach was used, including 150 participants and using primary source, and a quasi-experimental research approach was adopted. The data were gathered using structured copies of the questionnaire and analysed using Spearman's Rank Order Correlation Coefficients (rho) in SPSS Version 21. The results demonstrated a statistically significant, albeit minor, positive correlation between strategic thinking and successful decision-making. More precisely, there is a positive relationship between cognitive thinking and successful decision-making, with a correlation value of 0.190. Similarly, creative thinking also has a positive association with effective decision-making, with a correlation coefficient of 0.452. The research highlighted the significance of incorporating strategic thinking into leadership development programmes in order to improve the quality of decision-making and satisfaction of stakeholders. The recommendation is for telecoms companies to include strategic thinking modules in their training programmes and cultivate an atmosphere that promotes new ideas.

Keywords:

Strategic Thinking, Cognitive Thinking, Creative Thinking, and Effective Decision-Making

Introduction

Strategic thinking, which blends imagination and instinct to create an organization's vision, is an essential competency for company planners and executives (Tovstiga, 2015; Dhir, et al., 2018). It entails making choices in order to overcome obstacles, enhance brand recognition, or succeed in the marketplace (Dhir, et al., 2018). Proficient executives need to oversee assets, track procedures, and evaluate information to effectively handle erratic circumstances. When it comes to company planning, executives should think forward, consider long-term objectives, and establish limits. To ascertain the company's competitive edge, they need also examine data from a variety of sources. Responsible, intuitive, self-aware, risk-taking, adaptive, leading, believing in the good of things, and continuously producing outcomes are all characteristics of strategic thinkers (Tovstiga, 2015). Thus, a methodical approach to thinking, a strong customer-centric orientation, and customer-centric awareness are among the benefits of strategic thinking (Young, 2016; Goldman et al., 2017). The need for knowledgeable managers and leaders, the intricate nature of the procedure, its time-consuming nature, and the requirement that all departments have a communication strategy are some drawbacks (Benito-Ostolaza et al., 2014). In this sense, anticipating changes, questioning ingrained beliefs, coming to tough conclusions, allying with people who have a vested interest in change projects, and drawing lessons from both triumphs and failures are all components of strategic thinking (Goldman et al., 2015). Thus, engaging experts in strategic thinking may foster market prospects and encourage prompt, innovative, and perceptive decision-making (Tovstiga, 2015).

Strategic thinking is needed in the telecom sector to set its services apart from those of rivals. This entails spending money on data analytics and market research, as well as examining customer behaviour, rival strategy, and market trends. It is critical to predict future technological trends and to strike a balance between the adoption of new technologies and the maintenance and dependability of services (Halevy, 2016). Comprehending the requirements and inclinations of customers is vital, and companies have to devise loyalty schemes, tailored offerings, and prompt customer assistance. Adherence to regulatory compliance is crucial, since it encompasses data privacy statutes, spectrum licencing prerequisites, and service standards (Young, 2016). Operational efficiency is critical, and lean management approaches streamline procedures and save expenses. Identifying possible hazards, creating mitigation plans, and purchasing insurance coverage are all part of risk management. A great work atmosphere, attractive wage packages, and a strong employer brand are all part of talent management. It's also critical to invest in initiatives that promote innovation and staff development. Customer satisfaction and retention depend heavily on the quality of the services provided, necessitating investments in infrastructure improvements, employee training, and quality control systems. Engaging stakeholders and integrating governance, social, and environmental factors into company plans are key components of sustainability (Mugo, 2020).

The decision-making process is a systematic technique that enables professionals to make informed decisions by promoting clarity, efficiency, accountability, risk minimization, and learning and improvement. It entails recognising the issue or opportunity, acquiring relevant information, identifying options, analysing them, making a decision, carrying it out, and assessing the results. Traditional corporate decision-making methods feature five and six steps, respectively, whereas the commonly used seven-step approach includes identifying and choosing the optimal course of action to attain desired goals (Douglas et al., 2015). Decision-making models are organised systems that assist humans in selecting the best choices among options (Takemura & Takemura, 2014). They give clear principles and structures, allowing firms to attain successful results. They provide visibility and simplicity of communication, allowing all parties to participate efficiently (Douglas et al., 2015). Decision models are helpful in a variety of departments, enterprises, and sectors, particularly for

selecting software providers or new technologies, making key choices, or implementing changes (Halevy, 2016). There are many types of decision-making models, including logical, intuitive, recognition primed, and creative. Models simplify complex concepts, represent real-world situations, aid in understanding, decision-making, and prediction by capturing key elements and relationships, promote objectivity in decision-making processes, improve communication and collaboration, and allow for efficient complexity management. They promote problem solving and creativity by offering a systematic framework for testing hypotheses and verifying ideas (Douglas et al., 2015). Decision-making models in business are critical for complicated situations, high-stakes decisions, resource allocation, and strategic planning. They promote collaboration, agreement, and conflict settlement, and are critical in balancing short-term gains with long-term viability. Leaders have an important role in decision-making, and data and analytics are critical in the digital era. Empowering people to make choices increases engagement and motivation. SWOT analysis, cost-benefit analysis, decision trees, and pareto analysis are some of the most used techniques. Ethical decision-making builds trust, credibility, customer loyalty, and business culture. Proactive decision-making enables businesses to address challenges, seize opportunities, and create a successful future (Halevy, 2016).

Conceptual Review

Strategic Thinking

According to Al-Qatamin and Esam (2018), thinking strategically is a process that permeates how individuals consider, reconsider, assess, perceive, and act upon their own and others' futures. Strategic thinking is a very useful and powerful technique. Using strategic thinking can help one make decisions for both their personal and professional lives. Developing a comprehensive range of critical cognitive and analytical abilities is necessary for strategic thinking. According to Adzeh (2017), strategic thinking is a cognitive process that characterises a person's capacity to foresee dangers, recognise opportunities, consider other options, and make choices that optimise immediate benefits and provide long-term competitive advantage. Al'Attar and Afifi (2017) define strategic thinking as a creative process that involves investigating many domains and manifestations of reality, drawing future visions, and developing workable programmes and plans to reach the desired future. It is an intellectual, holistic, multi-dimensional planning approach.

Any organisation that exercises strategic thinking also exercises strategic planning, and it provides for the implementation of plans that are manufactured by imaginative, forward-thinking procedures (Marcelo, 2017). Understanding internal and external elements and how they affect a company's future is a crucial task for strategic thinkers (Halevy, 2016). The evaluation of strategic thinking behaviours should be based on five criteria: conceptual thinking, systematic thinking, intelligent thinking, future thinking, and opportunity thinking (Salavati et al., 2017). Behaviourists define strategic thinking behaviours as conceptualising, analysing, and understanding the interaction between internal and external environments at all levels: individual, group, organisation, and environment (Goldman & Scott, 2016). It is an awareness, feeling, and profound vision of the future that does not ignore the past. Furthermore, it is a covert synthetic process that results in the formulation of plans and the implementation of actions that guide the organisation towards a better reality (Al-Amiri & Kassir, 2017). According to Shaik and Dhir (2020), strategic thinking can help firms identify new opportunities and anticipate changes in the future, enabling them to make strategic decisions. Strategic thinking places a strong emphasis on strategy and how it affects organisational sustainability in addition to how it keeps organisations in step with the ever-changing external environment (Kopnina, 2017).

Therefore, the creative skill in a person that allows them to recognise business possibilities, forecast the future, and avert impending risks in the corporate environment is known as strategic thinking. This comprises defining the organization's goal, creating long-term plans and policies to accomplish these goals, and then allocating resources to carry out the plans. It also gives the firm overarching direction (Adebiyi et al., 2016). High-order thinking, or strategic thinking, is centred on both imagination and future expectations. It concerns how people apply their minds to solve problems and reach decisions (Sharabati, 2022). Employees that exercise strategic thinking facilitate the development of social behaviours that strengthen and stabilise the company's brand and standing in the marketplace (Dushkov, 2018). A review of the literature indicates that strategic thinking is classified as an elite activity based on its results, behaviours, or processes (Elrehail et al., 2021). According to Sloan (2019), strategic thinking is a process that produces a set of goals and outcomes with mutually beneficial outcomes for the benefit of individuals, groups, and organisations. In an organisation, a strategic thinker may be employed as a consultant, administrative developer, or strategic viewpoint; however, he may not hold a directorship in top or middle management roles (Salloom, 2019). Intuition, anticipation, inspiration, spirit, gut instinct, and gut emotion are the foundations of strategic thinking. More than analysis, it is about synthesis (Sharabati, 2022). The foundation of the thought process of strategic thinkers is awareness, judgement, and reflection. According to Dhir et al. (2018), these are the important procedures that come before making decisions, and strategic thinking conveys the leader's conscious state. Hunitie (2018) adds that rather than being a pivotal component in adapting to changes that arise on a regular basis in an organisational setting, strategic thinking is applied in isolation and only in dire circumstances.It raises the standard of living in the workplace. In order to achieve greatness and pursue updates in their disciplines by investing resources, knowledge, and skills, organizations must find innovative solutions to the challenges they face (Salloom, 2019). It manages the impacts both within and outside the body. In order to come up with the best solutions, promote the finished product, achieve modernization and renewal, and facilitate the emergence of ambitious goals, it is also concerned with gathering, reshaping, and developing the opinions and laws governing the work, with the cooperation of the leadership and the staff (Ashammari & Akhras, 2017). According to George et al. (2019), when this way of thinking is viewed as an ongoing, dynamic, and participatory process, an organisation can become more innovative, more forward-thinking, and capable of recognising fresh approaches that help it deal with change.

Cognitive Thinking

As stated by Samson and Nagendra (2017), cognitions are often defined as the content of thoughts or beliefs about an attitude object or statement of fact in question, usually in comparison to a standard or expectation. Fluency, adaptability, originality, elaboration, and several affective traits are examples of cognitive attributes (Setiawan, 2017). Cognitive thinking is a crucial mental process that helps humans think, read, learn, remember, reason, pay attention, and comprehend information. It occurs in the brain using neurons that interact via electrical signals and form thoughts through a chemical process. Cognitive skills play an important part in processing new information, such as learning new skills or performing new tasks. Cognitive biases refer to humans' tendency to be biased towards stereotypes or information that best suits them. Types of cognitive biases include anchoring bias, confirmation bias, negativity bias, actor-observer bias, and the halo effect. Anchoring bias causes people to believe or get attached to the first available piece of information, leading to poor decision-making and flawed judgement. Confirmation bias ensures that people want to believe what they already believe, while negativity bias ensures that people focus on information that supports their beliefs. The halo effect is characterized by the first impression that individuals may have of someone or something. Cognitive processes enable us to think, acquire knowledge, remember, read, pay attention, and make critical decisions.

Six primary cognitive processes include thought, attention, language, learning, perception, and memory. Critical thinking helps individuals evaluate information and conduct logical thought processes. Quantitative skills involve the use of mathematics and statistics to turn ideas into measurements and make important decisions. Logic and reasoning are required for solving difficult problems based on available information (Tabach and Levenson (2018). Emotional intelligence helps individuals understand other people's emotions and manage stress. Focused attention helps individuals prioritize tasks, especially when competing priorities exist. Cognitive processes are interconnected and affect critical functions such as memory and learning. The brain learns and remembers by forming new connections between neurons when presented with new information. Cognitive learning theory uses metacognition to explain how people learn and can enhance memory retention and productivity by understanding thought processes during learning. According to Kyllonen and Zu (2016), people with higher cognitive capacities process information more quickly, which is typically indicated by how they respond to simple cognitive tests at the behavioural level. Samson and Nagendra (2017) assert that cognitive elements have a relationship with workplace autonomy. People-oriented businesses typically place less value on emotions and require greater autonomy from their employees. Furthermore, Tabach and Levenson (2018) found a significant relationship between convergent thinking and the processes of automatization, fact retrieval, and mathematical knowledge creation.

Creative Thinking

The creation of concepts, goods, or novel processes that could be beneficial to organisations is known as creativity (Sabrina, 2017). According to Susrini et al. (2019), creativity is a crucial source of competitiveness for the establishment of any organisation that deals with growth and change. Every human has the capacity for creativity; it is not something that is acquired from outside the person (Hidayat, 2018). According to Sitorus et al. (2019), creative thinking is an individual skill based on its distinctive capacity to produce valuable and original ideas. The process of coming up with new, non-obvious information for a certain goal is known as creative thinking. This new knowledge, whether it is currently known or was previously developed by others, is a suggestion for a process or an element that does not yet exist or is unknown (Abraham, 2018). In turn, creative thinking completely reorganises pre-existing cognitive maps and questions conventional wisdom. Instead of moving forward with stages that have been proven to work, the method becomes diversified and non-sequential, as there is no concern for proposition verification (Rodrigues et al., 2021).Additionally, creativity strives to generate novel solutions that enable the resolution of unforeseen issues and the discovery of fresh chances that grant the company a competitive edge (Tuan & Shaw, 2016). Managers must exercise creative thinking by regularly reevaluating the size of the market sectors in which they are positioned and closely examining their offerings to eliminate any processes, goods, or services that are losing value quickly (Doncean & Doncean, 2022). According to Ardiansyah and Wulansari (2018), employee thinking creativity is a complicated behaviour that combines social and intellectual skills.

Effective Decision Making

Making decisions entails choosing a plan of action consciously based on certain requirements for the intended outcome (Ojo-Agbodu et al., 2022). Making decisions involves interacting between those who wish to finish and the problems that need to be solved (Omarli, 2017). Within organisations, high management has traditionally made choices without consulting those at lower levels of the hierarchy, despite the fact that these individuals are supposed to oversee the decisions' execution (Adu-

Amankwah & Kerster, 2019). Decision-makers need organised choice rules in order to select the greatest option capable of accomplishing the specified objective or solving the problem (Harappa, 2020). Making decisions is the overall process of choosing a different path to accomplish organisational goals. The decision maker's particular environment, the organisational culture, the information base, and prior experience making quick decisions all have an impact on the strategic decision-making process (Ewah, 2018).Making decisions involves selecting one option from a list of two or more. Top management of an organisation must decide on things like the organization's objectives, the kinds of goods and services to provide, funding alternatives, and plant location. Organisation managers and decision-makers will use strategic decisions to categorise or make decisions in order to arrive at a workable or optimal solution (Harappa, 2020). The business profits from wise and successful selections, while poor choices result in losses. According to Omarli (2017), the corporate decision-making process is therefore the most important one in any organisation. Four other aspects also impact the managerial decision-making process: (1) decision-making strategy; (2) problem kind; (3) conditions for decision making; and (4) decision-making style. Personal, psychological, and environmental aspects are additional factors that impact management decision processes, in addition to the previously mentioned ones (Omarli, 2017).According to Wu et al. (2017), incremental and interdependent strategic decision-making is essential for sustainability. It is formed by a range of contextual effects resulting from previous events, current situations, and future perspectives. Making decisions strategically involves thinking through options and acting logically and methodically to select the most viable or successful course of action that aligns with the long-term objectives and expectations of the organisation (Harappa, 2020). Both short- and long-term decisions are part of critical decision-making, which is centred on strategic rather than operational challenges (Ansell & Boin, 2019). In order to match an organization's short- or medium-term goal frameworks with its overall objectives, it is also helpful to develop or express action plans and instruments (Harappa, 2020).

Strategic Thinking and Effective Decision Making

A clear picture of the objectives and ideal future state of an organisation is provided by strategic thinking, which is an essential tool in decision-making. It entails taking into account both the internal and external environments, as well as competitive assessments, market trends, and resource constraints (Martin, 2016). Assessing and mitigating risks is another aspect of strategic thinking that enables decision-making that minimises unfavourable outcomes. Building on this base, effective decision-making assigns resources, assesses choices, and creates backup plans in case anything unforeseen happens (Dehgani et al., 2015). Understanding the company, market, and environment is a key component of strategic thinking, which is a long-term approach to problem-solving and decision-making. In addition to navigating complicated business environments, middle managers also need to anticipate and manage change, foster innovation, strengthen risk management, and match team objectives with organisational strategy. Expanding one's horizons, picking up knowledge from others, promoting teamwork, creating scenarios, and lifelong learning are all part of the process of developing strategic thinking and decision-making abilities. AI and data analytics are examples of technology that can help in decision-making. It takes stepping beyond of one's comfort zone and being receptive to new ideas to overcome obstacles. Teams with strong strategic thinking and decision-making abilities are more creative, flexible, and goal-aligned. By following this procedure, the organisation may be sure that its resources are going to the most promising and strategically aligned possibilities. Strategic thinking works in concert with other thinking processes to provide efficient decision-making that results in thoughtful decisions that support long-term goals. The decisions made here influence the organization's strategic orientation and subsequent decision-making

processes by providing valuable insights for future strategic thinking (Olson & Simerson, 2015; Muriithi et al., 2018).

Theoretical review

This study is based on two theories: normative decision theory and stratified systems theory.

Normative Decision Theory

Vroom and Yetton created the normative decision theory in 1973, which is solely concerned with the decision-making process of the leader (Seyranian, 2009). Normative decision-making models, according to Seyranian (2009), have long been acknowledged as a gauge, benchmark, and criterion for assessing and comparing the level of "rationality" in both individual and collective decision-making. Making judgements based on allocating probabilities to variables and assigning numerical consequences is the main goal of decision theory, a subfield of applied probability theory and analytic philosophy. It is divided into three branches: prescriptive decision theory, which uses conceptual models to describe observed behaviours and assumes consistency in rules; descriptive decision theory, which examines how people make decisions; and normative decision theory, which determines optimal decisions based on an ideal decision-maker who is rational and able to calculate with perfect accuracy. Economists, management scientists, computer scientists, mathematicians, data scientists, psychologists, biologists, social scientists, and philosophers are among the multidisciplinary fields that study decision theory. Typically, computer science discrete mathematics and statistics are used for empirical implementations of this theory. While descriptive decision theory looks on methods, software, and tools to assist individuals in making better judgements, normative decision theory concentrates on determining the best choices.Notwithstanding its drawbacks, normative decision theory inspired proponents of contingency planning to take into account an individual's attitude as a possible factor in their ability to lead effectively (Adzeh, 2017).

Stratified Systems Theory

Stratified systems theory (SST) was created in the late 1970s by psychoanalyst Elliot Jaques and his associates in an effort to match the necessary talents for a given leadership position in bureaucratic organisations (Skyttner, 2005). The creation and integration of complex systems, the formulation of policies, and the formation of organisational resources are only a few examples of the strategic behaviours that are anticipated at the highest levels of the organisation, according to this model. Leaders at the top of the organisation are given these tasks (Jacobs & Clement, 2007). Organisational theory and social theory are connected in Elliott Jaques' Stratified Systems Theory of Requisite Organisation (1977–1999). Declarative, cumulative, serial, and parallel are the four ways people process information at work that he identified when developing the idea of the basic nature of human capabilities. This research showed how each level of mental processing complexity and the tiers of the management hierarchy are interdependent. In addition, Jaques created the Time-Span of Discretion instrument, a ratio-scale indicator of the degree of difficulty associated with each job inside the company. Founded by Jaques and Kathryn Cason, the Requisite Organisation International Institute offers assistance and guidance in putting Requisite Organisation ideas into practice all around the globe. The practical study of organisations and the optimisation of systems and structures that facilitate productive work continue to benefit from the concepts of Jaques. Consequently, to make the right decisions, leaders need to match the complexity of their roles with their cognitive thinking abilities (Jaques & Clement, 1991). According to the stratified systems theory, intellectual growth is an inherent human potential and happens in regular time intervals (Skyttner, 2005).

Empirical Review

Onoriode (2022) examined strategic thinking and performance of small and medium-scale enterprises in South-South Nigeria. In this study, a descriptive research design was used. The approach of stratified random was utilised. 355 people in the study's population, including SMEs running stationery businesses, make up the sample size. Copies of the questionnaire were sent throughout the states in the region (Akwa-Ibom, Bayelsa, Cross River, Delta, Edo, and Rivers) in order to collect data. Version 22 of the Statistical Package for Social Sciences (SPSS) was used to analyse the data. According to the study, strategic thinking has a very strong, positive, and statistically significant impact on the performance of SMEs when it comes to opportunity utilisation and decision making. The study comes to the conclusion that strategic thinking has a beneficial impact on SMEs' performance and that SMEs' performance is reliant on it when it comes to decision-making and opportunity utilisation.

Eromafunu et al. (2022) studied the effective strategic decision-making and strategic decision makers' characteristics in some selected government agencies/commissions in Delta State, Nigeria. The design of the survey inquiry was chosen. Using the Taro Yamane formula, 168 respondents made up the sample size. As a result, self-structured instruments were used to collect primary data (questionnaire). Standard deviation was used in the analysis. The study's conclusions showed that, although there is no correlation between a strategic decision maker's cognitive complexity and effective strategic decision making within the chosen government agencies or commission, there is a significant positive relationship between cognitive diversity and effective strategic decision making. Positive correlation is also found when cognitive diversity is regressed alongside strategic decision making. Thus, it was determined that a strategic decision maker who had both traits should be successful in making strategic decisions.

Osazevbaru (2021) explored the empirical examination of top management characteristics and strategic decision making of employees of government constituted boards and commissions in Delta State, Nigeria. Survey approach is used in this investigation. There were 158 responders in the sample. Data were collected using a well-structured questionnaire. More specifically, the acquired data was analysed using the ordinary least square regression (OLS) technique. Overall, the test of hypotheses results point to a substantial association between risk propensity, age disposition, educational level, and cognitive complexity and strategic decision making. Consequently, it was determined that the traits of top management have a major impact on how strategic decisions are made.

Onyeonoro et al. (2023) investigated the staff involvement in decision making and hotel performance in Abia State, Nigeria. The study used a survey research approach in order to meet its goal. Convenient sampling techniques were applied. There are 175 employees from the ten hotels that were chosen for the sample. A structured questionnaire was used to get information. Simple regression analysis based on ordinary least squares was used to analyse the data that were gathered. The results showed that employee productivity in hotel settings is significantly impacted by worker participation in decision-making. The results also showed that worker participation in decision-making significantly affects hotel performance. The results also showed that employee participation in decision-making significantly affects hotel establishment sales growth. The study comes to the conclusion that improving hotel performance significantly benefits from worker participation in decision-making.

Al-Abbadia et al.(2023) did a research assessment on the impact of strategic thinking on organizational excellence in Jordan's ICT sector. The methodology used in the investigation was

quantitative. As a result, the research sample was chosen using a straightforward sampling technique. The sample size consists of 270 people selected from different ICT companies. In this study, the questionnaire was used to collect data. Structural Equation Modelling (SEM) with Partial Least Squares (PLS) was employed in the study for analysis. The results show that dynamic and systematic thinking had a significant and positive influence on organisational excellence among the aspects examined. The findings concludes that, in the ICT industry, strategic thinking is essential for boosting productivity, competitive advantage, and organisational performance.

Methodology

The research methodology for this study is based on the research philosophy and philosophical foundation, which ensures consistency and coherence in the study. The chosen research design is a quasi-experimental research design, which is suitable for investigating the relationship between strategic thinking and effective decision-making in in the telecommunication industry in Rivers State. The study uses a population of 150 participants due to resource constraints, representativeness, and statistical power, practicality of data collection, human resource information, and ethical considerations. The complete enumeration survey method (census) is used, which ensures maximum precision and accuracy in the findings. The study uses both primary and secondary data sources, including quantitative research to measure and analyze the impact of strategic thinking on effective decision-making. Large-scale surveys with structured questionnaires provide a broad perspective on strategic thinking practices, while real-time and up-to-date quantitative information from company websites makes the data more current. The study adopts the STEDM questionnaire for data collection and instrumentation, which undergoes validity and reliability testing to enhance the credibility of the study. Ethical considerations are considered, ensuring participant confidentiality and privacy. The instrument's reliability is justified through internal consistency, test-retest reliability, parallel forms reliability, item analysis, split-half reliability, consistency with previous studies, plot testing, feedback incorporation, consistency in administration, and cross-validation. For data analysis, the study adopts Spearman's Rank Order Correlation Coefficients (rho), which is robust to outliers, offers reliable results even in the presence of outliers, and does not assume linearity. SPSS Version 21 is equipped with the necessary functionalities for conducting Spearman's Rank Order Correlation analysis, ensuring accurate execution of the analysis

Hypotheses

The following null-hypotheses were formulated:

H_{O1} There is no significant relationship between cognitive thinking and effective decision-making of the telecommunications industry in Rivers State, Nigeria.

H_{O2} There is no significant relationship between creative thinking and effective decision-making of telecommunications industry in Rivers State, Nigeria.

Analysis of Hypotheses

Table 1: Cognitive Thinking and Effective Decision-Making

Correlations

			Cognitive Thinking	Effective Decision-Making
Spearman's rho	Cognitive thinking	Correlation Coefficient	1.000	.190
		Sig. (2-tailed)	.	.039
		N	118	118
	Effective decision making	Correlation Coefficient	.190	1.000
		Sig. (2-tailed)	.039	.
		N	118	118

Source: Research Data Output, 2024

With a correlation value of 0.190, the research revealed a somewhat favourable relationship between strategic thinking and effective decision making. Though the relationship is not clear, effective decision making also improves when strategic thinking rises. Given minimal likelihood of random chance, the association is statistically significant. According to the table, leaders and managers should stress cognitive thinking in courses of training to raise operational results and quality of decision-making.

Table 2: Creative Thinking and Effective Decision-Making

Correlations

			Creative Thinking	Effective Decision-Making
Spearman's rho	Creative Thinking	Correlation Coefficient	1.000	.452
		Sig. (2-tailed)	.	.000
		N	118	118
	Effective decision making	Correlation Coefficient	.452	1.000
		Sig. (2-tailed)	.000	.
		N	118	118

Source: Research Data Output, 2024.

The research revealed a somewhat positive relationship between creative thinking and effective decision making; an increase in creative thinking noticeably raises effective decision making. With a low p-value pointing to sincerity, the association is very statistically significant and not random. With 118 observations, the study offered a strong basis for consistent statistical conclusion. Practical consequences include integrating creative thinking into organized choice rule and investigating creative thinking aspects for sound decision-making. Thus, meeting and surpassing effective decision making depends much on creative thinking.

Discussions on Findings

The study indicates that strategic thinking improves the quality of decision-making by revealing a small but noteworthy positive link between it and successful decision-making. This implies that programmes for training and development have to concentrate on strengthening strategic thinking abilities to raise the grade of decisions made. More investigation should look at other cognitive elements affecting the quality of decision-making and create focused treatments to improve the decision-making procedures. Creative thinking and effective decision making show a modest positive association, indicating that programmes for leadership development could include strategic thinking to both meet and surpass effective decision making. The figures also advises looking at more general cognitive processes and creative thinking elements to better grasp how various thinking approaches influence results of decision-making.

Conclusions

Strategic thinking expressed in terms of cognitive and creative thinking and decision-making skills show a modest but noteworthy positive link according to the research. It implies that programmes of training and development should concentrate on enhancing strategic thinking capacity. The research also implies that effective decision making and strategic thinking have a somewhat favourable link. It implies that elements of strategic thinking should be included into leadership development initiatives to satisfy stakeholders. The research also advises looking at creative thinking in decision-making to improve results and effective decision making.

Recommendations

Based on the outcome of the study, the following recommendations were made:

i. Telecommunications firms should include modules in their leadership development and training programmes that are especially geared towards strategic thinking. This includes having cognitive thinking ability that will improve leaders' capacity for strategic thought and wise decision-makin.

ii. Telecommunications firms encourage an environment in which creative ideas are recognised and encouraged at all organisational levels. To enhance the quality of decision-making and operational outcomes by fostering an atmosphere that encourages and promotes creative and strategic thinking.

Reference

Abraham, A. (2018). The neuroscience of creativity. Cambridge: Cambridge University Press.

Adebiyi, A. Olajide, J. A. & Kehinde, O. (2016). Strategic management and small and medium enterprises (SMEs) development: A review of literature.

Adu-Amankwah, K. &Kerster, G. (2019), How to make democratic participation a success: An African Trade Union Challenge Rotterdam Fexua.

Adzeh, K. J. (2017). Strategic leadership: An empirical study of factors influencing leaders' strategic thinking. *American Journal of Business and Management, 6* (1), 1-15

Al'Attar, S. & Afifi, S. (2017). Skills of strategic thinking, decision making, and professional counseling to confront unemployment. Paper presented at the 11th Arab Scientific Conference (8th International) Education and Self-Employment Culture, from Laxity to Brotherhood, Culture Association for Development, Sohag University, and Academy of Scientific Research, Egypt.

Al-Abbadia, L. Alsmairat, M. A. K. Alshawabkeh, R. & Rumman, A. A. (2023). The impact of strategic thinking on organizational excellence: An empirical examination in Jordan's ICT sector. *International Journal of Data and Network Science 8:* 1169–1178

Al-Amiri, A. & Kassir, H. (2017). Relationship between strategic thinking and job performance of mid-level managers: A field study on Islamic Banks in the Yemeni Capital Sana'a. *Journal of Social Studies, 23* (3), 53-74. https://doi.org/10.20428/JSS.23.3.3

Al-Qatamin, A. & Esam, A. (2018). Effect of strategic thinking skills on dimensions of competitive advantage: Empirical Evidence from Jordan. *International Journal of Business and Management, 13* (5), 127-136.

Ansell, C. & Boin, A. (2019). Taming deep uncertainty: The potential of pragmatist principles for understanding and improving strategic crisis management. *Administration and Society, 51* (7), 1079–1112. https://doi.org/10.1177/0095399717747655

Ardiansyah, I. M. &Wulansari, N. A. (2018). Explaining black box person-organization fit to the emergence of employee creativity. Matrix: *Journal of Management, Business Strategy and Entrepreneurship*, 167-178.

Ashammari, G. & Akhras, N. (2017). Strategic thinking & its relationship with the big five personality traits among the heads of academic departments at Jouf University. *Journal of Educational & Psychological Sciences, 18* (3), 447-475. https://doi.org/10.12785/JEPS/180315

Benito-Ostolaza, J. M., & Sanchis-Llopis, J. A. (2014). Training strategic thinking: Experimental evidence. *Journal of business research*, *67*(5), 785-789.

Dehgani, A. Nahand, E. S. & Ve Moghni, H. (2015). Identifying Components of Strategic Thinking and Their Role in Improving the Desicion-Making Process for Managers (Case Study: Organization for the Protection of Consumers and Producers). *World Essays Journal*, *3*(2), 150-160.

Dhir, S. Dhir, S. & Samanta, P. (2018). 'Defining and developing a scale to measure strategic thinking,' *Foresight, 20* (3), 271-288.

Dhir, S., Dhir, S., & Samanta, P. (2018). Defining and developing a scale to measure strategic thinking. *Foresight*, *20*(3), 271-288.

Doncean, M. & Doncean, G. (2022). Critical and creative thinking. *Journal of Public Administration, Finance and Law* (24), 123-132

Douglas, J., Bigby, C., Knox, L., & Browning, M. (2015). Factors that underpin the delivery of effective decision-making support for people with cognitive disability. *Research and practice in Intellectual and Developmental Disabilities*, *2*(1), 37-44.

Dushkov, G. (2018). Strategic thinking key for future success in organization. *International Journal of Recent Scientific Research, 9* (5), 26675-26678. http://dx.doi.org/10.24327/ijrsr.2018.0905.2102

Elrehail, H. Rehman, S. U. Chaudhry, N. I. & Alzghoul, A. (2021). Nexus among cyberloafing behavior, job demands and job resources: A mediated-moderated model. Education and Information Technologies, 1-19.

Eromafunu, G. E. Akpoyibo, G. & Isaac, A. P. (2022). Effective strategic decision-making and strategic decision makers' characteristics: The role of cognitive diversity and complexity. *European Journal of Business and Innovation Research, 10* (6), 18-33

Ewah, S. (2018). Managing the dynamics of strategic decision making. *International Journal of Social Sciences and Management Review, 01* (01), 60-70

George, B. Walker, R. & Monster, J. (2019). Does strategic planning improve organizational performance? A Meta-Analysis. *Public Administration Review, 79* (6), 810-819. http://dx.doi.org/10.1111/puar.13104

Goldman, E. & Scott, A. R. (2016). Competency models for assessing strategic thinking. *Journal of Strategy and Management, 9* (3), 258-280. https://doi.org/10.1108/JSMA-07-2015-0059

Goldman, E. F., Schlumpf, K. S., & Scott, A. R. (2017). Combining practice and theory to assess strategic thinking. *Journal of Strategy and Management*, *10*(4), 488-504.

Goldman, E. F., Scott, A. R., & Follman, J. M. (2015). Organizational practices to develop strategic thinking. *Journal of Strategy and Management*, *8*(2), 155-175.

Guo, K. L. (2020). Decide: a decision-making model for more effective decision making by health care managers. *The health care manager*, *39*(3), 133-141.

Halevy, H. (2016). "Strategic thinking," in Advances in Experimental Social Psychology.

Halevy, N. (2016). Strategic thinking. In *Advances in experimental social psychology* (54, 1-66). Academic Press.

Harappa, D. (2020). Strategic Decision Making: Harappa Learning Private Ltd.

Hidayat, H. (2018). Model employee productivity seen from automation machine related creativity in Furniture Company in East Java. *Journal of General Management, 2* (1), 44-60.

Hunitie, M. (2018). Impact of strategic leadership on strategic competitive advantage through strategic thinking and strategic planning: A bi-meditational research. *Business: Theory and Practice, 19*, 322-330. http://dx.doi.org/10.3846/btp.2018.32

Jacobs, T. O. & Clement, S. D. (2007). Contributions of stratified systems theory to military leader development and organization redesign in the US Army. Retrieved from http://dmcodyssey.org/wp-content/up-loads/2013/09/part-three-chapter-4-p197-209.pdf

Jaques, E. & Clement, S. D. (1991). Executive leadership: A practical guide to managing complexity. Arlington, VA: Cason Hall.

Kopnina, H. (2017). Sustainability: New strategic thinking for business. Environment, Development and Sustainability, 19 (1), 27-43

Kyllonen, P. C. & Zu, J. (2016). Use of response time for measuring cognitive ability. *Journal of Intelligence, 4* (4), 123-129. doi: 10.3390 / jintelligence4040014

Marcelo, D. (2017). Strategic thinking: The role in successful management.

Martin, T. N. (2016). Smart decisions: The art of strategic thinking for the decision making process. Springer.

Mugo, P. (2020). Porter's five forces influence on competitive advantage in telecommunication industry in Kenya. *European Journal of Business and Strategic Management*, *5*(2), 30-49.

Muriithi, S. M. Louw, L. & Radloff, S. E. (2018). The relationship between strategic thinking and leadership effectiveness in Kenyan indigenous banks. *South African Journal of Economic and Management Sciences, 21*(1), 1-11.

Ojo-Agbodu, A. A. Idowu, K. A. & Adedayo, O. A. (2022). Effect of data gathering and analysis on decision making among micro, small and medium-sized enterprises. *Accounting and Taxation Review, 6* (1), 59-73.

Olson, A. K. & Simerson, B. K. (2015). Leading with strategic thinking. John Wiley & Sons, Inc.

Omarli, S. (2017). Which factors have in impact on managerial decision-making process? An integrated framework. Essays in Economics and Business Studies, 83-93

Onoriode, O. H. (2022). Strategic thinking and performance of small and medium-scale enterprises in South-South Nigeria. *Nigerian Journal of Management Sciences, 23* (2), 190-196

Onyeonoro, C. O. Amaechi-Chijioke, J. I. Ukwuoma, J. K. & Onyeonoro, F. N. (2023). Staff involvement in decision making and hotel performance in Abia State, Nigeria. *European Journal of Telecommunications and Tourism Research, 11* (1), 40-66

Osazevbaru, H. O. (2021). Empirical examination of top management characteristics and strategic decision making. *Business Trends, 11* (2), 35-49.

Rodrigues, R. I. Ferreira, A. & Neves, J. (2021). Strategic thinking: The construction and validation of an instrument. *Polish Psychological Bulletin, 52* (3), 241–250

Sabrina, R. (2017). Relationship between job stress and creativity against employee job performance in East Kalimantan TVRI. *Psikoborneo, 5* (1), 11-22.

Salavati, S. Amerzadeh, M. Mohammadi, B. A. Piroozi, B. & Amirihoseini, S. (2017). Evaluation of strategic thinking and its affecting factors among managers and personnel in a medical sciences university in Iran, *International Journal of Human Rights in Healthcare, 10* (4), 248-255, https://doi.org/10.1108/. https://doi.org/10.1108/IJHRH-04-2017-0013

Salloom, A. M. (2019). Strategic thinking and strategic decisions-making. *International Journal of Research in Social Sciences and Humanities, 9* (III), 457-469

Samson, A. & Nagendra, B. K. (2017). Cognitive factors and its impact on job satisfaction- A study on selected information technology enabled service companies in Bengaluru. SDMIND Journal of Management, 39-45.

Setiawan, R. (2017). The influence of income, experience, and academic qualification on the early childhood education teachers' creativity in Semarang, Indonesia. *International Journal of Instruction, 10* (4), 39–50. https://doi.org/10.12973/iji.2017.1043a

Seyranian, V. (2009). Contingency theories of leadership. In J. M. Levine & M. A. Hogg (Eds.), Encyclopedia of group processes & intergroup relations (pp. 152–156). Thousand Oaks, CA: Sage.

Sharabati, A-A. A. (2022). "The interrelationships among governance, strategic management, and decision-making: A systematic literature review." *Journal of the Association of Arab Universities for Research in Higher Education 42* (2), 27.

Shaik, A. S., & Dhir, S. (2020). A meta-analytical review of factors affecting the strategic thinking of an organization. *foresight*, *22*(2), 144-177.

Sitorus, J. Anas, N. & Waruhu, E. (2019). Creative thinking ability and cognitive knowledge: Big Five personality. *REiD (Research and Evaluation in Education), 5* (2), 2019, 85-94

Skyttner, L. (2005). General systems theory: Problems, perspectives, practice. Hackensack, NJ: World.

Sloan, J. (2019). Learning to think strategically. Routledge.

Susrini, R. Muis, M. & Rasjid, W. (2019). Organizational climate influence in promoting creativity through innovative behavior (case study on PT. Telkom (Persero) TBK. Witels MAKASSAR). *Hasanuddin Journal of Applied Business and Entrepreneurship, 2* (1), 95-105.

Tabach, M. & Levenson, E. (2018). Solving a task with infinitely many solutions: Convergent and divergent thinking in mathematical creativity. In N. Amado, S. Carreira & K. Jones (Eds.), broadening the scope of research on mathematical problem solving (219–242). Cham: Springer.

Takemura, K., & Takemura, K. (2014). Decision-Making Process. *Behavioral Decision Theory: Psychological and Mathematical Descriptions of Human Choice Behavior*, 127-141.

Tovstiga, G. (2015). *Strategy in practice: A practitioner's guide to strategic thinking*. John Wiley & Sons.

Tuan, N. & Shaw, C. (2016). Consideration of ethics in systemic thinking. *Systemic Practice & Action Research, 29* (1), 51-60. http:// dx.doi.org/10.1007/s11213-015-9352-5

Wu, T. Wu, Y. J. Tsai, H. & Li, Y. (2017). Top management teams characteristics and strategic decision–making: A mediation of risk perceptions and mental models. *Sustainability, 9* (12), 1-15.

Young, L. (2016). Developing strategic thinking. *Australian army journal*, *13*(2), 5-22.