

## EFFECT OF KNOWLEDGE SPINSON CAPABILITY DIVESTITURE OF SELECTED OIL AND GAS UPSTREAM COMPANIES IN NIGERIA

*Asikhia, O. U, Ajani, W., Makinde, G.O & Akinlabi, H. B*

*Research Scholar, Department of Business Administration and Marketing, School of Management Sciences, Babcock  
University, Ilishan Remo, Nigeria*

### ABSTRACT

*The study sought to establish the effect of knowledge spins on capability divestiture of selected oil and gas upstream companies in Nigeria. This comes at a time when the oil and gas upstream companies in Nigeria have growing appetite for cleaner and more environmentally friendly energy. While the companies have tried to move from the energy system dominated by hydrocarbons towards the one in which low-carbon sources play the lead role, it is not clear whether they have embraced capability divestiture as one of the turnaround strategies, hence the need for this study. This study was informed by knowledge-based theory. Survey research design was used in the paper. The target population was the 9,437 regular and contract employees of selected oil and gas upstream companies in Nigeria. The sample size for the study was 807 respondents selected randomly from the three selected oil and gas upstream companies in Nigeria. The data collection instrument was a questionnaire. The collected data was analysed using inferential statistics. The findings revealed that knowledge spin had a significant effect on the capability divestiture of selected oil and gas upstream companies in Nigeria. The study concluded that knowledge spins is an important factor for capability divestiture to the selected oil and gas upstream companies in Nigeria and management of the selected oil and gas upstream companies should embrace divestment strategy through disposing some of their assets that are not generating profits and exiting any investment that is least performing or harmful to the health. The paper recommends that the supervising agency of selected oil and gas upstream companies in Nigeria should develop policy guidelines aimed at expanding and improving efficiency of the companies to facilitate high organisational outcome through capability divestiture.*

**KEYWORDS:** *Knowledge Spin, Retention of Knowledge, Revitalizing of Knowledge, Capability Divestiture, Upstream Oil and Gas Companies, Nigeria*

---

### Article History

**Received: 19 May 2022 | Revised: 03 Jun 2022 | Accepted: 04 Jun 2022**

---

## 1. INTRODUCTION

Capability divestiture represents a group of vehicles through which a firm adjusts its ownership structure and reduces its business portfolio scope. It is considered as the most prominent vehicles through which organisations like upstream oil and gas companies sell-off some portion of its assets or division that are not performing up to expectations. According to Ganti and Khartit (2021), upstream oil and gas companies may adopt capability divestiture strategy to improve its value and obtain higher efficiency. In the extreme case, a company may be forced to sell its asset as the result of legal or regulatory action. Companies can also look to a divestment strategy to satisfy other strategic business, human resources, financial,

social, or political goals. Upstream oil and gas companies could use capability divestment to also sell off peripheral assets that enable their management teams to regain sharper focus on the core business. Dittmar and Shivdasani (2003) indicated that the efficiency of segment investment increases considerably following divestitures. A thorough scanning is required to establish the divisions that contribute little to the revenue-base of the firm and getting rid of them to minimize the costs.

The learning theories suggest that knowledge held in a firm is important for the firm's absorptive capability, and therefore, for efficient learning, new knowledge must be generated from sources external to the firm (Cohen & Levinthal, 1990). Related knowledge (i.e., knowledge held in common) opposite of spin off enhances the ability of the firm to evaluate effectively the value of external knowledge, to discard irrelevant knowledge, and to concentrate its learning efforts on valuable knowledge sources (Grant, 1996). However, losing employees through knowledge spin to new ventures can be particularly disconcerting to incumbent firms. Not only do these suffer the loss of valuable human capital that could be used to assimilate external knowledge, but this human capital also may ultimately be deployed by new ventures to compete against the same incumbent firms from which they poached employee talent. To protect the interests of incumbents and to discourage employee mobility, certain states have laws that enforce employee non-compete agreements (Marx, Strumsky, & Fleming, 2009). In their efforts to limit how attractive their employees are to competitors, some firms establish reputations for enforcing their patents (Ganco, Ziedonis, & Agarwal, 2015). In spite of these and other constraints, employees maintain substantial discretion regarding their employment trajectory, and the risk for incumbents of losing valuable employees are considerable (Coff, 1997).

Sapienza, Parhankangas, and Auti (2004) accentuated that a very high overlap between the spin-off firm's knowledge base with that of its parent company means that the knowledge base of the spin-off becomes redundant in relation to its parent firm, hurting its ability to create novel combinations based on external knowledge outsourced from its parent. Ganti and Khartit (2021) indicated that when a parent company distributes shares of its subsidiary to its shareholders. The subsidiary thus becomes a stand-alone company whose shares can be traded on a stock exchange. However, there is profound evidence that a multitude of factors unrelated to divestment objective performance affect corporate divestment decisions significantly. Divestment decisions typically are influenced by declining profit margins and revenues due to changes in the business environment or other related factors like severe knowledge spin.

The oil and gas upstream companies begin divestment of their investments in Nigeria following a growing appetite for cleaner and more environmentally friendly energy. Evidence from Webmaster (2021) analysis showed that international oil companies in Nigeria have divested assets worth 2.2 billion barrels of oil equivalent of hydrocarbon reserves at an estimated monetary value of at least \$5bn. However, this decision created a challenge to the oil and gas upstream industry in ensuring that the industry get right and competent investors to take position and add value to the assets (Kyari, 2021). Kyari added that the new energy sources have obvious wider business implications on the oil and gas upstream industry. Gambo (2021) explicated that the spate of capability divestiture by the oil and gas upstream companies is a symptom of danger for organisation outcomes in the industry.

Empirical studies on knowledge spin focused on the performance effect of knowledge spin dimension (such as revitalizing knowledge and retention of knowledge) in countries like Ghana, India, Canada, Italy and United States of America. But these research works correlated revitalizing knowledge and retention of knowledge individually with organisational performance, financial growth, capability building and business expansion for growth (Ouakouak & Ouedraogo, 2018; Roscoe, Subramanian, Jabbour & Chong, 2019; Aldabbagha, Aqrabawib, & Amman, 2020; Pavalache-

Ilie, 2016), Posada, Martín-Sierra, & Pérez, 2017; Adebayo, Worlu, Moses, & Ogunnaike, 2020). Despite the scholarly works and the contextual differences in the existing studies on employee mobility and capability divestiture, there are still several aspects of employee mobility that demand further research. There is paucity of studies linking knowledge spin with capability divestiture. Therefore, this research work intended to fill the existing gap by evaluating the effect of knowledge spins on capability divestiture of selected oil and gas upstream companies in Nigeria. The rest part of this paper is organized as follows. Section two reviews the related studies. Section three depicts the sample. Section four reports the empirical results. Section five concludes.

## **2. LITERATURE REVIEW**

Knowledge spin or talent leaching outcome is not a new phenomenon. Knowledge spin can be done by giving better career opportunities, flexible work hours, a healthy work environment, and leisure facilities (Rashmi, 2010). Knowledge spin can be observed as a zero-sum game, where the gain of one firm is equal to the loss of another firm (Arthur, 2006). Firms compete for a small pool of talents (Blanchflower, 1994). Efficiency wage theory is a strategy to give more amount than the prevailing market rate to its employees to persuade them. It is used to increase employee satisfaction and to reduce the attrition rate, which is otherwise known as 'economy of high wages. While doing the recruitment, recruiters should be very careful about the pre-hire and post-hire outcomes (Breugh, 2008). Key challenges are personal knowledge sharing challenges, organisational knowledge sharing barriers, and potential technological knowledge spin barriers (Chong & Besharati, 2014). The review of knowledge management initiatives in the oil and gas industry is a challenge for business leaders to maintain knowledge within their organisations. Assessing the knowledge management capability of a company constitutes an essential part of building a competitive advantage and improving profits (Inkinen, 2016). Although 50% of oil and gas workers will retire between 2020 and 2025, leading to knowledge loss, only 40% of oil and gas companies are implementing measures designed to manage knowledge (Sumbal, Tsui, & Lee, 2015).

### **2.1.1 Revitalising Knowledge**

Revitalizing knowledge is the process of improving on the skills of employees, thereby building human capital from time to time in the ultimate interest of the organisation and for competitive sustainability. Knowledge is power as the saying goes and this assertion was the thinking of Castillo, Garone, Maffioli, Rojo and Stucchi (2019) when they explicitly declared that firms adopt different strategies to increase their knowledge base, including by financing research and development (R&D) activities (the "make" strategy) and/or by acquiring knowledge embedded in physical and human capital (the "buy" strategy). Similarly, Agarwal, Echambadi, Franco and Sarkar (2004) observed that employees at firms with better capabilities have a higher potential to create new ventures due to both opportunity recognition and investor confidence, but whether they realize these opportunities and commit to leaving employment to start-up a new venture is likely to depend on how well their employer firm uses the abundance of knowledge it generates. The eminent scholars aver those technological capabilities reflect a firm's ability to generate new scientific discoveries and technological breakthroughs, market pioneering capabilities enable a firm to commercialize technological innovations ahead of competitors. Omotayo (2015) propounded that the management of knowledge is promoted as an important and necessary factor for organisational survival and maintenance of competitive strength. Knowledge management is identified as a framework for designing an organisation's strategy, structures, and processes so that the organisation can use what it knows to learn and to create economic and social value for its customers and community.

### 2.1.2. Retention of Knowledge

The study by Musa, Ahmed and Hamza (2020) stated human capital is a stock of competencies, knowledge and personality attitudes embodies in the ability to perform so as to produce economic value. Organisation's knowledge further maintained, are expected to be a repository of most specialized and skilled intellectuals. Central to the realization of organisational goals objectives are the competent workers whose roles are crucial, and their number, quality and effectiveness make the differences in organisational production function and to the wider society. Without well qualified and committed workers, no organisation can really ensure sustainability and quality over a long-term. They concluded by adducing the factors that directly affecting worker's retention in Nigerian companies include but not limited work life balance, carrier opportunities, justice, existing leave policy, company image, among others. Knowledge retention strategy is aimed at giving an organisation a competitive advantage. As such, there is need to explore approaches that an organisation can use to retain critical employees.

### 2.1.3. Capability Divestiture

Capability divestiture is one of the strategies that firms adopted to survive in the turbulent or crisis times. According to Kithinji, Rotich, and Kihara (2021), capability divestiture is the decision by an organization to dispose-off a significant portion of its assets as a way of sustaining its profitability state. It is the process by which multi-establishment corporations shift or relocate existing capital between their own establishments. Taken together, it can be inferred from these characterizations that divestments concern the voluntary release or shift of capital previously tied up in organizational resources (Mata & Portugal, 2010).

Capability divestiture activities including spinning-off divisions and exiting diversified markets are regarded as part of a firm's corporate restructuring strategy. Spinning-off divisions is the process of removing some product or process divisions that are not accurately and extensively aligned to the business operations and revenue generations. A thorough scanning is required to establish the divisions that contribute little to the revenue kitty of the firm and getting rid of them to minimize the costs. However, firms might restructure their business activities in a variety of ways. Delmar, Davids son and Gartner (2003) distinguish three categories of restructuring activities: organizational, financial, and portfolio restructuring. Usually, organizational decisions to remove some passive divisions is intended to increase the efficiency of management teams through changes in the organizational structure such as team sizes, responsibilities and incentive structure (Flickinger, &Zschoche, 2018).

Some of the advantages of capability divestiture is the acquisition of business units that down the road just do not work out. Misfits or partial fits cannot be completely avoided because it is impossible to predict precisely how getting into a new line of business will actually work out. In addition, long-term industry attractiveness changes with time, what was once a good diversification move into an attractive industry may later turn sour. Reduced performance by some business units is bound to occur, thereby raising questions of whether to keep them or divest them. Furthermore, by using divestitures to reduce diversification, firms could lower their costs of managing business units, reconfigure internal governance structures to raise efficiency, transfer assets to more highly valued uses, have a clearer and more tightly bound group of businesses units, and better protect managerial employment risks over time. The mirror image of an acquisition is divestment. A whole new set of reasons are employed when an owner feels the need to divest; it's a 'sellers' market' and the perception is that it won't get any better if the owner waits; relatively substantial capital reinvestment is required to survive or to achieve the next vision for the business (Njuguna, 2010).

## **2.2. Knowledge Spin and Capability Divestiture**

Several related studies have been carried out on knowledge spin components (revitalising knowledge and retention of knowledge) and capability divestiture (Aina & Atan, 2020; Campbell, Granco, Franco & Agarwal, 2012; Seydi, 2020; Somaya, Williamson & Lorinkova, 2008; Syed, Gul, Khan, Danish, UIHAQ, Sawar, Azhar, & Ahmed, 2021). While some reported positive relationships between the variables, others reported insignificant and negative relationships between the variables. Campbell, Ganco, Franco, and Agarwal (2012) using linked employee-employer data from the U.S. Census Bureau on legal services, found that employees with higher earnings are less likely to leave relative to employees with lower earnings, but if they do, are more likely to create a new venture than join another firm. Employee entrepreneurship has a larger adverse impact on source firm performance than moves to established firms, even controlling for observable employee quality. Their findings suggest that in knowledge intensive settings, managers should focus on tailoring compensation packages to help minimize the adverse impact of employee entrepreneurship, particularly among high performing individuals.

Rezaei, Khalilzadeh, and Soleimani (2021) in their study investigated the factors affecting the empowerment and implementation of knowledge management in organisations as well as the impact of knowledge management (KM) on organisational performance and then, the mediating role of human capital in the relationship between KM and performance of Kabul Steel plant, which is the largest in Afghanistan. The findings showed positive effects of variables of structure, culture, leadership, and trust on KM in an organisation. Also, KM influences the organisational performance both directly and through the mediating variable of human capital. Aina and Atan (2020) in their study on the impact of implementing talent management practices on sustainable organisational performance i.e., investigating the effect of talent management practices on the sustainable organisational performance in real estate companies. The proposed hypotheses were verified by SEM. The results of the study showed that talent attraction and talent retention had no impact on the sustainable organisational performance, whereas learning and development and career management were found to have significant impacts.

The study of Ugo-Agharanya, Igwe, and Isichei (2021) explored leaders' role as a mediating factor between KS and firm's competitiveness. The study found that knowledge spin had a positive effect on firm's competitiveness. The study found that leadership behaviour mediates the relationship between KS and firm's competitiveness. To the best of the researcher's knowledge, no known study has examined the relationship between the variables under examination. A study by Rufai, Ogunniyi, Salman, Oyeyemi, and Salawu, (2019) to examine migration, labour mobility and household poverty in Nigeria: a gender analysis showed that labour mobility increase the amount of remittance sent to households. However, the increase was higher among male migrants than female migrants. More than half of the migrants had poor households, meanwhile, labour mobility has been found to reduce the extent of poverty in Nigeria. Another study by Ofobruku and Yusuf (2016) done, assessed effect of knowledge transfer on employees' performance in selected small business in Asaba, Nigeria suggested that knowledge transfer had positive effect on employees' performance.

A study by Adelekan, Erigbe, Ojo, and Toriola (2019) on knowledge management and manufacturing firms' performance in Nigeria relied on primary data and the findings revealed that the two components of knowledge management adopted for this study have individual positive significant effect on manufacturing firms' performance with coefficients and probability values of: knowledge creation. Ohiorenoya, and Eboeime (2014) in a study the impact of knowledge management practices and performance in Nigerian universities observed that variations in knowledge

management practices led to differences in organisational performance; and knowledge management was effective in all universities except Benson Idahosa University. The following hypotheses is therefore formulated:

**H<sub>0</sub>:** Knowledge spins have no significant effect on capability divestiture of selected oil and gas upstream companies in Nigeria

### 2.3. Theoretical Review

The paper has been informed by knowledge-based theory (KBT). The emphasis of KBT as argued by its proponents and supporter is that the company's KBT views information as the most valuable strategic resource and in that sense, this view is an extension of the company's Resource-based view (RBV) (De Carolis, 2002). Knowledge-based view of the firm (KBV) suggests that firms should be analysed based on their knowledge resources (Grant, 1996). March and Simon (1958) as well as Levitt and March (1988) contend that organisations accumulate knowledge beyond that which is embodied in individuals through organisational learning. Furthermore, in a strategic knowledge-based theory of the firm, knowledge should be included as a multi-level concept. Consequently, while all scholars seem to agree that there are two types of knowledge, explicit and tacit, they have also developed their own typologies in conjunction with their specific theories (e.g., internal vs. external knowledge, know-how vs. know-what). What is often lacking as an underlying definition of knowledge that allows future scholars to generate operationalizable models of the firm and its performance. The KBV was deemed as most appropriate in this study due to its ability to explain the existence of firms as a result of their effective use of knowledge (Rebolledo & Nollet, 2011). As such, knowledge represents itself in the form of information and know-how, and a firm's ability to create and transfer this knowledge can yield competitive differentiation (Kogut and Zander, 1992). Of note here is that knowledge under this view needs to be constructed, and appropriate processes need to be in place in order to do so. However, not every process is able to effectuate valuable knowledge, and thus, organizing principles underlying the creation of knowledge can provide for inimitable resources. This notion refers to the resource-based view of the firm (Wernerfelt, 1984), which can be regarded as the foundation for the KBV. The study adopted the knowledge-based theory to infer the effect of knowledge spin on the capability divestiture of oil and gas upstream companies in Nigeria.

### 3. METHODOLOGY

This study adopted survey research design. The population of the study is nine thousand four hundred and thirty-seven (9,437) regular and contract employees in the selected three (3) major upstream oil and gas companies, operators of Nigeria National Petroleum Corporation, Joint Ventures (NNPC, JVs) with operating headquarters in Lagos State, Nigeria. These oil and gas upstream companies are Chevron Nigeria Limited (CNL), Mobil Producing Nigeria Unlimited, and Shell Petroleum Development Company of Nigeria Limited (SPDC). Sample size of eighty hundred and seven was ascertained using Cochran (1977) formula. An adapted and structured questionnaire was used to gather information from respondents. Validity of the instrument was determined using content and construct validity while the Cronbach alpha was used to ascertain the reliability of the instrument which yielded coefficient alpha of 0.749 and 0.719 for revitalising knowledge and retention of knowledge respectively. The variables were measured with five items each; on a six-point Likert scale ranging from Very High (VH) = 6, High (H) = 5, Moderately High (MH) = 4, Moderately Low (ML) = 3, Low (L) = 2, Very Low (VL) = 1 similar to the one adopted by Rayat and Kelidbari, 2017, Santos, Barriga, Jugend, and Cauchick-Miguel (2019). Multiple Regression Analysis was used to analyze the hypothesis with the aid of Statistical Package for Social Sciences, version 26.0 for windows.



#### 4. RESULTS AND DISCUSSION

The researchers distributed a total of 807 copies of questionnaire to the respondents, out of which 750 copies were rightly filled and returned to the researcher. The response rate of the participants to the questionnaire administered is 92.9%. The high response rate was traced to the data collection method of prior notification of the selected oil and gas upstream companies, use of online google form, research assistants, researcher's personal follow up calls to clarify issues and prompt the participants to fill and return the research instrument early. The analysis was conducted by using the inferential statistics and the results of the analysis are presented in Table 1.

**Table 1: Summary of Multiple Regression between Knowledge Spin and Capability Divestiture of Selected Oil and Gas Upstream Companies in Nigeria**

N	Model		Sig.	T	ANOVA (Sig.)	R	Adjusted R <sup>2</sup>	F (5,744)
750	(Constant)	17.604	.000	10.922	0.000 <sup>b</sup>	0.551 <sup>a</sup>	0.303	162.548
	Revitalizing Knowledge	1.034	.000	12.519				
	Retention of Knowledge	-1.106	.000	-17.609				
	a. Predictors: (Constant), Retention of Knowledge, Revitalizing Knowledge Dependent Variable: Capability Divestiture							

Source: Researcher's Field Results, 2022

The results in the above showed that Revitalizing Knowledge ( $\beta = 1.034$ ,  $t = 12.519$ ,  $p < 0.05$ ) has positive and significant effect, while Retention of Knowledge ( $\beta = -1.106$ ,  $t = -17.609$ ,  $p < 0.05$ ) has negative but significant effect on capability divestiture of selected oil and gas upstream companies in Nigeria. The results of the analysis revealed that the two sub-variables of knowledge spin (revitalizing knowledge) have significant effect on capability divestiture of selected oil and gas upstream companies in Nigeria. This indicates that revitalizing knowledge is equally an important factor in the oil and gas upstream companies which could influence increase in capability divestiture among the companies. The correlation coefficient at 0.551 supports this result and it indicates that knowledge spin components have a moderate positive relationship with capability divestiture of selected oil and gas upstream companies in Nigeria. The coefficient of multiple determination Adj.  $R^2 = 0.303$  indicates that about 30.3% variation that occurs in the capability divestiture of selected oil and gas upstream companies in Nigeria could be accounted for by the components of knowledge spin while the remaining 69.7% changes that occurs is accounted for by other variables not captured in the model. The value of  $R^2$  was significant since the  $p$ -value =  $0.000 < 0.05$ . In addition, the F-statistics ( $df = 5, 744$ ) = 162.548 at  $p = 0.000$  ( $p < 0.05$ ) indicates that the overall model is significant in predicting the effect of knowledge spins on capability divestiture, which implies that knowledge spins are important determinants in the capability divestiture rate of selected oil and gas upstream companies in Nigeria. The multiple regression model is thus expressed as:

$$CD = 17.604 + 0.1034 RK - 1.106Ret + U_i \text{-----Eqn v (Predictive Model)}$$

$$CD = 17.604 + 0.1034 RK + U_i \text{-----Eqn v (Prescriptive Model)}$$

Where:

CD = Capability Divestiture

RK = Revitalizing Knowledge

RetK = Retention of Knowledge

According to the regression equation established, holding knowledge spin components to a constant zero, capability divestiture would be 17.604 which is positive. The regression model shows that holding knowledge spin components to a constant zero, capability divestiture would be 17.604 which is positive. The predictive model is the same as the prescriptive model because all the sub-variable of knowledge spin (revitalizing knowledge and retention of knowledge) were significant. This implies that the management of the selected oil and gas upstream companies should attach more importance to these variables. The results of the multiple regression analysis as seen in the prescriptive model indicates that when revitalizing knowledge is improved by one unit, capability divestiture would also increase by 1.034 units. However, when retention of knowledge is improved by one unit, it will result to a decrease in capability divestiture by -1.106 units. This implies that an increase in revitalizing knowledge would lead to an increase in the rate of capability divestiture of oil and gas upstream companies in Nigeria while such increase in retention of knowledge would lead to a decrease in the rate of capability divestiture of oil and gas upstream companies in Nigeria. The result suggests that oil and gas upstream companies should pay more attention towards developing the component of the knowledge spins especially revitalizing knowledge to improve capability divestiture. Therefore, the null hypothesis ( $H_0$ ) which states that knowledge spins have no significant effect on capability divestiture of selected oil and gas upstream companies in Nigeria was rejected.

## DISCUSSION

The results of regression analysis revealed that knowledge spin (revitalizing knowledge and retention of knowledge) had a positive significant effect on capability divestiture of selected oil and gas upstream companies in Nigeria. Empirical findings on knowledge spin, especially those by Abbas (2017) found the evidence of knowledge sharing among academics in the four universities through workshops, seminars and conferences, membership of professional associations/societies and readiness to share knowledge and other resources with colleagues. This study is also in congruence with the findings of Bojan et al, (2012); Nasiripour, et al (2013) who found a positive relationship in their various study. Campbell, et al; (2012) study is in concordance with this study and their findings suggest that in knowledge intensive settings, managers should focus on tailoring compensation packages to help minimize the adverse impact of employee entrepreneurship, particularly among high performing individuals. In support of this study is Brauer and Schimmer, (2019) who have studied various aspects of divestitures and reported a positive significant relationship. The findings of (Haynes et al., 2002, 2003; Bergh and Lim, 2008), is also in agreement with this study that knowledge spins had significant effect on capability divestiture of selected oil and gas upstream companies in Nigeria. Similarly, Agarwal et al; (2004) observed that employees at firms with better capabilities have a higher potential to create new ventures due to both opportunity recognition and investor confidence, but whether they realize these opportunities and commit to leaving employment to start-up a new venture is likely to depend on how well their employer firm uses the abundance of knowledge it generates engenders capacity acquisition. Omotayo (2015) propounded that the management of knowledge is promoted as an important and necessary factor for organizational survival and maintenance of competitive strength.

## 5. CONCLUSION AND RECOMMENDATIONS

### 5.1. Conclusion

The study sought to establish the effect of knowledge spins on capability divestiture of selected oil and gas upstream companies in Nigeria. The results showed that Revitalizing Knowledge had positive and significant effect on the capability divestiture of selected oil and gas upstream companies in Nigeria. The analysis further revealed that retention of Knowledge significantly and negatively affects the capability divestiture of selected oil and gas upstream companies in



Nigeria. The study concluded that knowledge spins had significant effect on the capability divestiture of selected oil and gas upstream companies in Nigeria. The outcome of this study also revealed that oil and gas upstream companies uses different strategies to divest towards attaining organisational outcomes.

## 5.2. RECOMMENDATIONS

The study recommends that the regulatory policy makers of oil and gas companies in Nigeria should develop policy guidelines aimed at expanding and improving efficiency of the companies to facilitate high organisational outcome. Also, managers of oil and gas upstream companies should divest existing business units and encourage the generation of new, high-growth subsidiaries or businesses.

## REFERENCES

1. Abbas, K.D. (2017). *Knowledge sharing and dissemination among academics in Nigerian universities: patterns and trends*. *Journal of Balkan Libraries Union*, 5(1), 21-27.
2. Adebayo, O. P., Worlu, R. E., Moses, C. L. & Ogunnaike, O. O. (2020). *An integrated organizational culture for sustainable environmental performance in the Nigerian context*. *Multidisciplinary Digital Publishing Institute (MDPI)*, 12(20).
3. Adelekan, S., Erigbe, P. A., Ojo, O. & Toriola, A. (2019). *Knowledge management and manufacturing firms' performance in Nigeria*. *ResearchGate*.
4. Agarwal, R., Echambadi, R., Franco, A. M., & Sarkar, M. B. (2004). *Knowledge transfer through inheritance: Spin-out generation, development, and survival*. *Academy of Management Journal*, 47(4), 501–522.
5. Aina, R. & Atan, T. (2020). *The impact of implementing talent management practices on sustainable organizational performance*. *Sustainability*, 12(8372).
6. Aldabbagha, I., Al Agrabawib, R., & Al-Ahliyya Amman, (2020). *The impact of organisational culture on fostering creative behaviour: Evidence from Jordan*. *International Journal of Innovation, Creativity and Change*, 13(7).
7. Arthur, D. (2006). *Recruiting, interviewing, selecting & orienting new employees*. 4<sup>th</sup> ed., AMACOM, American Management Association, 2006.
8. Bergh, D. D., & Lim, E. N. K. (2008). *Learning how to restructure: absorptive capacity and improvisational views of restructuring actions and performance*. *Strategic management journal*, 29(6), 593-616.
9. Blanchflower, D. G., & Burgess, S. M. (1994). *Job creation and job destruction in Britain: 1980-90*. *Centre for Economic Policy Research*, 1994.
10. Bojan, B., & Bojan, P. (2012). *The role of knowledge management in increasing enterprise's innovativeness*. *Economics and Organisation*, 9(1), 92-110.
11. Brauer, M. & Schimmer, M. (2015), *Performance effects of corporate divestiture programs*, *Journal of Strategy and Management*, 3(2), 84-109.

12. Breugh, J. A. (2008). *Employee recruitment: Current knowledge and important areas for future research*. NeuroImage, Academic Press, 9<sup>th</sup> Aug. 2008, [www.sciencedirect.com/science/article/abs/pii/S1053482208000326](http://www.sciencedirect.com/science/article/abs/pii/S1053482208000326).
13. Campbell, B., Ganco, M., Franco, A. & Agarwal, R. (2012). *Who leaves, where to and why worry? Employee mobility, entrepreneurship, and effects on source firm performance*. Strategic Management Journal, 33, 65-87.
14. Castillo, V. Figal-Garone, L., Maffioli, A. & Rojo, S., Stucchi, R. (2019). *The effects of knowledge spillovers through labor mobility: An employer–employee analysis*. The Journal of Development Studies, 56, (3) 469-488.
15. Chong, C.W., & Besharati, J. (2014). *Challenges of knowledge sharing in the petrochemical industry*. Knowledge Management & E-Learning: An International Journal, 6, 171-187.
16. Cochran W.G. (1977). *Sampling techniques (3<sup>rd</sup> ed.)*, New York: John Wiley & Sons.
17. Coff, R.W., 1997. *Human assets and management dilemmas: Coping with hazards on the road to resource-based theory*. Academy of Management Review, 22(2), 374-402.
18. Cohen, M., Levinthal, D. (1990). *Absorptive capacity: a perspective on learning and innovation*. Adm. Sci. Q. 35 (1), 128–152.
19. De Carolis, D. (2002). *The role of social capital and organizational knowledge in enhancing entrepreneurial opportunities in high-technology environments*. In C. W. Choo & N. Bontis (Eds.), *The strategic management of intellectual capital and organizational knowledge* 699–709. New York, NY: Oxford University Press.
20. Delmar, F., Davidsson, P., & Gartner, W. B. (2003). *Arriving at the high-growth firm*. Journal of business venturing, 18(2), 189-216.
21. Dittmar, A., & Shivdasani, A. (2003). *Divestitures and divisional investment policies*. Journal of Finance, 58, 2711 - 2743.
22. Flickinger, M., & Zschoche, M. (2018). *Corporate divestiture and performance: an institutional view*. Journal of Management & Governance, 22(1), 111-131.
23. Gambo, (2021). <https://www.vanguardngr.com/2021/11/navy-vows-to-stamp-out-piracy-crude-oil-theft-in-maritime-sector>. Retrieved 29/11/2021.
24. Ganco, M., Ziedonis, R. H., & Agarwal, R. (2015). *More stars stay, but the brightest ones still leave: Job hopping in the shadow of patent enforcement*. Strategic Management Journal, 36, 659-685.
25. Ganti, A., & Khartit, K. (2021). *Divestment*. <<https://www.investopedia.com/terms/d/divestment.asp>>
26. Grant, R. (1996). *Toward a knowledge-based theory of the firm*. Strateg. Manage. J. Winter special issue, 109–122.
27. Haynes, M., Thompson, S., & Wright, M. (2003). *The determinants of corporate divestment: Evidence from a panel of UK firms*. Journal of Economic Behavior & Organization, 52(1), 147-166.
28. Inkinen, H. (2016). *Review of empirical research on knowledge management practices and firm performance*. Journal of Knowledge Management, 20, 230-257. <https://doi.org/10.1108/JKM-09-2015-0336>.

29. Kithinji, Rotich, & Kihara (2021). Influence of divestment strategy on performance of large manufacturing firms in Kenya. *American Journal of Strategic Studies*, 3(2), 21 – 33.
30. Kogut, B. & Zander, U. (1992). Knowledge of the firm, combinative capabilities and the replication of technology. *Organisation Science*, 3, 383-397.
31. Kyari, M. (2021). IOCs divesting from Nigeria must address abandonment, decommissioning Of Oil Assets. Available at <https://www.thecable.ng/kyari-iocs-divesting-from-nigeria-because-of-net-zero-commitments>.
32. Levitt, B., & March, J. G. (1988). Organizational learning. *Annual review of sociology*, 14(1), 319-338.
33. March, J. & Simon, H. A. (1958). *Organizations*. New York, NY: Wiley.
34. Marx, M., Strumsky, D., & Fleming, L. (2009). Mobility, skills, and the Michigan non-compete experiment. *Management science*, 55(6), 875-889.
35. Mata, J., & Portugal, P. (2010). Closure and divestiture by foreign entrants: the impact of entry and post-entry strategies. *Strategic Management Journal*, 21(5), 549 - 562.
36. Musa, B. M., Ahmed, I., & Hamza, H. D. (2016). Workers' retention strategies in Nigeria: A review. *Journal of Arts and Social Sciences*, 2(1), 54-63.
37. Nasiripour, A. A., Radfar, R. & Badpa, M. (2013). Assessment of knowledge-sharing role in innovation (case study: Isfahan R&D scientific small city). *International Journal of Academic Research in Economics and Management Sciences*, 2(6), 150–157.
38. Njuguna, N. (2010). Financial inclusion through the agent banking model and credit reference bureaus. *BIS Review* 88/2010.
39. Ofobruku, S. A., & Yusuf, B. (2016). Effect of knowledge transfer on employees' performance in selected small business in Asaba, Nigeria. *Arabian Journal of Business and Management Review*, 6(2).
40. Ohiorenoya, J.O, & Obadan, J.A. (2014). Knowledge sharing in small and medium scale businesses in Benin City, Edo State, Nigeria. *European Scientific Journal* 10(1), 435-445.
41. Omotayo, F. O. (2015). Knowledge management as an important tool in organisational management: A review of literature. *Library Philosophy and Practice (e-journal)*. 1238. <http://digitalcommons.unl.edu/libphilprac/1238>.
42. Ouakouak, M. L., & Ouedraogo, N. (2019). "Fostering knowledge sharing and knowledge utilization: The impact of organizational commitment and trust. *Business Process Management Journal*, 25(4), 757–779.
43. Pavalache-ilie, M., (2016). Workspace appropriation and attachment. *Bulletin of the Transilvania University of Brasov, Series VII*, 9, (2)58.
44. Posada, M., Martín-Sierra, C. & Pérez, E. (2017). Effort, satisfaction, and outcomes in organizations. *Journal of Artificial Societies and Social Simulation*, 20, 2-9.
45. Rashmi, D. (2010). *Recruitment management*. 1<sup>st</sup> ed., Himalaya Publishing House.

46. Rayat, M., & Kelidbari, H. R. (2017). *The effects of business intelligence on the effectiveness of the organization (Case Study: Airline Companies in Iran)*. *Review of European Studies*, 9(3), 176.
47. Rebolledo, C. & Nollet, J. (2011). *Learning from suppliers in the aerospace industry*. *International Journal of Production Economics*. 129(2), 328-337.
48. Rezaei, F., Khalilzadeh, M., & Soleimani, P. (2021). *Factors Affecting Knowledge Management and Its Effect on Organizational Performance: Mediating the Role of Human Capital*. *Hindawi Advances in Human-Computer Interaction Volume 2021*.
49. Roscoe, S., Subramanian, N., Charbel J. C. Jabbour & Chong, T. (2019). *Green human resource management and the enablers of green organisational culture: Enhancing a firm's environmental performance for sustainable development*. *Business Strategy and the Environment*, 28(5), 737-749.
50. Rufai, M., Ogunniyi, A., Salman, K. K., Oyeyemi, M. & Salawu, M. (2019). *Migration, labor mobility and household poverty in Nigeria: A gender analysis*. *Multidisciplinary Digital Publishing Institute, Economics*, 7(4), 101.
51. Santos, I., Barriga, G., Jugend, D. & Cauchick-Miguel, P. (2019). *Organizational factors influencing project success: an assessment in the automotive industry*. *Produção*. 29(2), 10.1590/0103-6513.20180108.
52. Sapienza, H. J., Parhankangas, A., & Autio, E. (2004). *Knowledge relatedness and post-spin-off growth*. *Journal of Business Venturing*, 19, 809 – 829.
53. Seydi, A. O. (2020). *Strategies to Improve Knowledge Management Initiatives in Oil and Gas Companies/ Doctoral studies*.
54. Somaya, D., Williamson, I., & Lorinkova, N. (2008). *Gone but not lost: The different performance impacts of employee mobility between co-operators versus competitors*. *The Academy of Management Journal*, 51(5), 936 - 953.
55. Sumbal, M., Eric T., Eric, S. & Barendrecht, S. (2017). *Knowledge retention and aging workforce in the oil and gas industry: a multi perspective study*. *Journal of Knowledge Management*, 21(4), 907-924.
56. Syed, A., Gul, N., Khan, H., Danish, M., Haq, N., Sarwar, B., Azhar, U., & Ahmed, W. (2021). *The impact of knowledge management processes on knowledge sharing attitude: the role of subjective norms*. *Journal of Asian Finance, Economics and Business*, 8(2021), 1017–1030.
57. Ugo-Agharanya, A. C., Igwe, A., & Isichei, E. E. (2021). *Mediating effect of leaders' behaviour on organisational knowledge sharing and manufacturing firms' competitiveness*. *Interdisciplinary Journal of Information, Knowledge, and Management*, 16, 55-75.
58. Webmaster (2021). *FG to allow only companies with capacity to buy divested oil assets*. Available at <https://www.vanguardngr.com/2021/12/fg-to-allow-only-companies-with-capacity-to-buy-divested-oil-assets/>
59. Wernerfelt, B. (1984). *A resource-based view of the firm*. *Strategic Management Journal*, 5(2), 171-180.