

Management Control System And Organisational Development In Selected Petroleum Marketing Companies In Rivers State

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Abstract: This study establishes the relationship between management control system and organisational development in selected petroleum marketing companies in rivers state. Four hypotheses were established and tested for the study with a population size of one hundred and thirty-two (132) managers, supervisors, operational managers of 20 petroleum marketing companies which were selected based on census study employed. Therefore, 132 copies of questionnaire were distributed to these companies but only one hundred and twenty (120) copies of questionnaire were retrieved and tested with the Pearson Moment Correlation Coefficient. The result of the analysis showed a positive and significant relationship between all the dimensions of management control system and the measures of organizational development of petroleum marketing companies in Rivers State. Based on the result, the study therefore concluded that there is a significant relationship between management control system and organizational development of petroleum marketing companies in Rivers State.

Keywords: Management Control System; Benchmarking; Budgeting; Organizational Development; Innovation Capacity; Change Management.

Introduction

The petroleum marketing sector in Rivers State, Nigeria, plays a critical role in the regional economy, significantly influencing both economic stability and growth. As competition intensifies and operational complexities increase, the need for effective management control systems (MCS) becomes paramount in order to guarantee that the goals of the company are met and resources are optimally utilized. Management control systems, encompassing planning and budgeting, performance measurement, internal control, information systems, and rewards and incentive systems, provide a structured approach to guiding and regulating organizational activities towards achieving strategic goals (Kaplan & Norton, 2019; Merchant & Van der Stede, 2018).

In tandem, organizational development (OD) is crucial for enhancing the adaptive capacity, efficiency, and overall performance of companies. Measures of organizational development, such as employee engagement, organizational culture, change management effectiveness, innovation capacity, and leadership development, are essential indicators of a company's health and readiness to thrive in a dynamic market environment (Gallup, 2020; Schein, 2019). For petroleum marketing companies in Rivers State, the alignment of robust MCS with effective OD strategies is pivotal in navigating industry challenges, including regulatory changes, fluctuating oil prices, and technological advancements (Tidd & Bessant, 2020).

Effective management control systems are indispensable for navigating the complexities of the petroleum marketing industry. They provide a structured approach to decision-making, facilitate efficient resource allocation, and enhance accountability. Furthermore, MCS help organizations to monitor their performance against set targets and make necessary adjustments to strategies and operations. Simons (2021) argues that advanced information systems, a key component of MCS, play a crucial role in providing timely and relevant information, thereby making it possible to make well-informed decisions and revitalise strategies. Nevertheless, when considering petroleum marketing companies in Rivers State, MCS can significantly impact organizational development. Organizational development refers to the planned, systematic efforts to improve organizational effectiveness and capability. It encompasses various aspects such as employee engagement, organizational culture, change management effectiveness, innovation capacity, and leadership development. These measures are critical for building a resilient organization capable of adjusting to dynamic market circumstances and sustain long-term growth.

Recent studies underscore the interdependence between MCS and OD, highlighting that well-implemented control systems not only ensure regulatory compliance and operational efficiency but also foster a culture of continuous improvement and innovation (Simons, 2021; Anthony & Govindarajan, 2018). Effective MCS can drive organizational development by providing the necessary framework for measuring performance, rewarding achievements, and facilitating informed decision-making processes (COSO, 2020; Avolio & Yammarino, 2018). Therefore, investigating what effect of management control systems on organizational development within the context of petroleum marketing companies in Rivers State offers valuable insights into optimizing operational strategies and achieving sustainable growth.

Statement of the Problem

The petroleum marketing industry in Rivers State, Nigeria, faces significant challenges related to operational efficiency, market competitiveness, and sustainability. Despite the strategic importance of this sector, many petroleum marketing companies struggle with implementing effective management control systems (MCS) that align with their organizational development (OD) goals. This misalignment often results in poor resource allocation, suboptimal performance, and an inability to adapt to dynamic market conditions.

Recent studies highlight that robust management control systems are critical for driving organizational development, particularly in sectors with high operational complexities like petroleum marketing. For instance, Kaplan and Norton's (2019) research emphasizes the importance of integrating planning and budgeting processes with strategic objectives to enhance organizational performance. Similarly, Merchant and Van der Stede (2018) argue that comprehensive performance measurement systems are vital for ensuring accountability and continuous improvement. However, in the context of Rivers State, very little is available empirical studies investigating the direct influence of management control systems on the organizational development of petroleum marketing corporations. This gap in the literature is significant, given the sector's contribution to the local economy and the need for these companies to operate efficiently amid regulatory pressures and market volatility.

Moreover, internal control weaknesses, inadequate information systems, and misaligned reward structures are common issues that impede the effective implementation of MCS in these companies. These deficiencies not only affect operational efficiency but also hinder the overall development and sustainability of the organizations (Simons, 2021; COSO, 2020).

This study aims to fill this gap via looking into the dimensions of management control systems and their influence on the organizational development of selected petroleum marketing companies in Rivers State. Understanding this relationship is crucial for developing strategies that enhance the sector's operational capabilities and competitive edge.

Aims and Objectives

The main objective of the study is to examine the effect of management control systems on organizational development in selected petroleum marketing companies in Rivers State. The specific objectives are:

- i. To determine the relationship between benchmarking and innovation capacity of selected petroleum marketing companies in Rivers State.
- ii. To ascertain the nature of relationship between benchmarking and change management of selected petroleum marketing companies in Rivers State.
- iii. To examine the influence of budgeting and innovation capacity of selected petroleum marketing companies in Rivers State.
- iv. To examine the influence of budgeting and change management of selected petroleum marketing companies in Rivers State.

Research Questions

The following questions were formulated:

- i. What is the relationship between benchmarking and innovation capacity of selected petroleum marketing companies in Rivers State?
- ii. What is the relationship between benchmarking and change management of selected petroleum marketing companies in Rivers State?
- iii. What is the influence of budgeting and innovation capacity of selected petroleum marketing companies in Rivers State?
- iv. What is the influence of budgeting and change management of selected petroleum marketing companies in Rivers State?

Research Hypothesis

- i. There is no relationship between benchmarking and innovation capacity of selected petroleum marketing companies in Rivers State.
- ii. There is no relationship between benchmarking and change management of selected petroleum marketing companies in Rivers State.
- iii. There is no influence of budgeting and innovation capacity of selected petroleum marketing companies in Rivers State.

iv. There is no influence of budgeting and change management of selected petroleum marketing companies in Rivers State.

Conceptual Framework

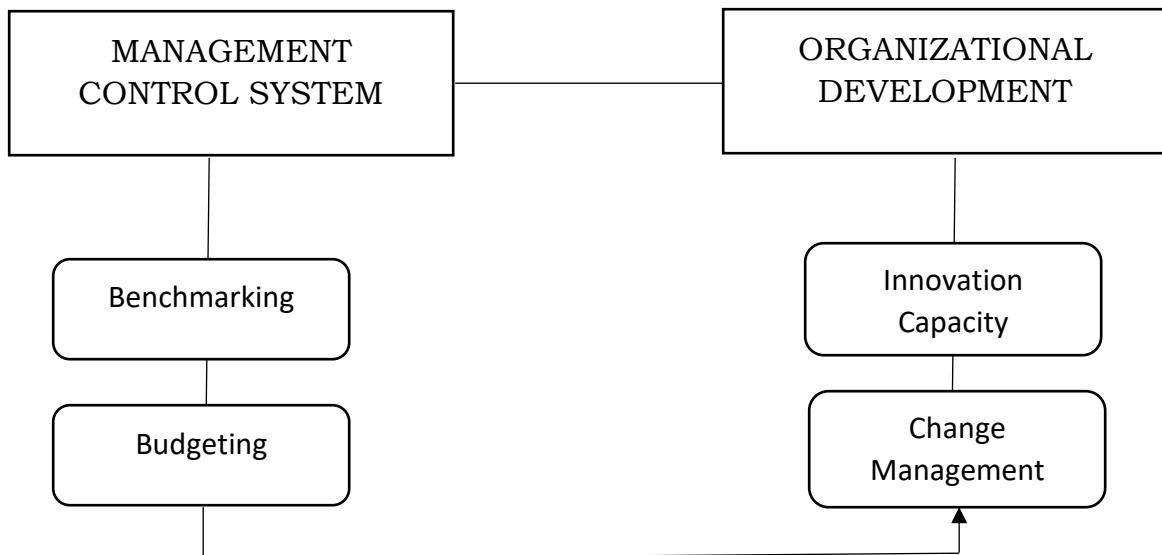


Fig 1: Showing the conceptual framework of management control system and organizational development

Source: Dimensions of Management Control System was adopted from Kaplan & Norton (2019); Merchant & Van der Stede (2018) and Measures of Organizational Development was adopted from Gallup (2020); Schein (2019)

Literature Review

Management Control System

The mission of a Management Control System (MCS) is to communicate strategic milestones and provide performance feedback, thereby contributing to value creation (Kaplan & Norton, 2008). An MCS entails systematic policies and control processes designed to influence management behaviors and actions that accomplish the objectives of the business (Mbore et al., 2019). Proof of this has been presented to be effective in informing further initiatives and policy decisions, leading to quality enhancements. Institutions and their staff and students generally consider process measures to offer better indicators of teaching and learning quality, as these measures are contextualized within the institution. The MCS is conceptualized through principles such as curriculum development, benchmarking, budgeting, and continuous improvement as outlined by Charmer et al. (2008).

In Mbore et al. (2019) MCS was referred to as structured, data-driven processes that managers employ to maintain or modify organizational activity designs. Research often overlooks the potential of MCS to actively drive strategic change, which Simons (2000) cited in Mbore et al. (2019) refers to as the interactive use of MCS. An effective MCS aims to achieve organizational success by the dissemination of well-defined aims and objectives, and employees are confident in their tasks. While perfect control is unattainable due to the variability of employee behavior, organizations that are forward-thinking, have clear objectives, and minimize control losses are on the right path to success. In a dynamic business environment, MCS must provide up-to-date data that managers may use to make informed decisions and motivate them to implement beneficial organizational changes. Additionally, MCS plays a crucial role in signaling both internally and externally. By selecting key performance metrics, organizations highlight the importance of strategic aspects to employees. Externally, the disclosure of non-financial performance information—such as innovation, customer satisfaction, timely and reliable service delivery, quality of goods and services, and efficient operations—signals to stakeholders the organization's commitment to these areas (Kuvaas & Dysvik, 2009).

Benchmarking

Continuously comparing one's own goods, services, and procedures to those of the most formidable rivals or acknowledged front-runners in one's field is known as benchmarking (Camp, 1989). It involves identifying best practices, understanding how they are achieved, and implementing improvements within one's own organization.

Recent studies emphasize the evolving nature of benchmarking. Bhutta and Huq (2019) describe benchmarking as an integral component of strategic planning and performance management, essential for maintaining competitiveness in a rapidly changing business environment. Similarly, Anand and Kodali (2020) highlight the role of benchmarking in fostering innovation and operational excellence. Benchmarking has been applied across various sectors, including manufacturing, healthcare, education, and services. In manufacturing, it helps in optimizing production processes and reducing costs (Garcia & Morillo, 2018). In healthcare, benchmarking improves patient care quality and operational efficiency (Kumar & Thomas, 2020). In education, it enhances academic and administrative processes (Brown & van Niel, 2019).

More so, recent research highlights the integration of benchmarking with other management tools. For instance, Mohamad et al. (2022) discuss the synergy between benchmarking and Six Sigma, where benchmarking identifies performance gaps and Six Sigma provides the methodology to close these gaps. Additionally, digital benchmarking platforms and industry-specific benchmarking databases have emerged, facilitating easier and more effective benchmarking processes (Johnson & Pohl, 2023).

Budgeting

According to Hansen and Van der Stede (2020), budgeting aligns organizational activities with strategic goals, making sure that these goals are accomplished through the efficient use of available resources. A budget is a plan for allocating a certain amount of money and keeping track of how well that money is doing in relation to predetermined goals. Budgets act as both planning and control mechanisms. They provide a framework for decision-making and performance evaluation, as noted by Otley and Emmanuel (2021). By setting financial targets, budgets establish performance expectations and create a basis for variance analysis, where actual performance is compared to budgeted figures to identify deviations and initiate corrective actions.

However, recent literature explores various budgeting techniques and their applicability in different organizational contexts. Traditional budgeting methods, like incremental budgeting, which involves making adjustments to the budget from the prior year for the next period, remain prevalent. However, this approach has been criticized for perpetuating inefficiencies and not encouraging innovation (Libby & Lindsay, 2022). Alternative approaches, like zero-based budgeting (ZBB) and rolling budgets, have gained traction. ZBB requires organizations to justify all expenditures anew, promoting cost-efficiency and eliminating outdated expenses (Pyhrr, 2020). Rolling budgets, updated continuously to reflect changing conditions, provide greater flexibility and responsiveness to environmental changes (Ekholm & Wallin, 2020).

According to Abernethy and Brownell, (2019), budgets provide a basis for performance evaluation and accountability, fostering a culture of responsibility and continuous improvement. Research by Davila and Foster (2020) indicates that companies with robust budgeting processes tend to achieve higher financial performance and strategic alignment. Furthermore, budgeting facilitates coordinated efforts across different divisions, making sure that the whole company is pulling in the same direction (Marginson & Ogden, 2020). Finding possible financial hazards and creating plans to lessen their impact is another way it aids risk management (Becker et al., 2021).

Organizational Development

According to Dutta and Banerjee (2014), an organization's growth encompasses all aspects of the company in an attempt to make it more successful and efficient. According to Warren Bennis, organisational development is a multi-faceted approach to training that aims to alter a company's core principles in order to better face and adapt to shifting market conditions, technological advances, and other disruptive forces. Because they affect the attainment of organisational goals, most organisations care about profitability, productivity, morale, and quality of work life. The idea that a company should put as much money as possible into its workers is becoming more popular. Physically demanding jobs now need more mental acuity. Businesses should "work smarter" and use their imaginations more.

One might think of planned development activities as being on a continuum, from little adjustments meant to fine-tune specific aspects of the organization to continuous changes that significantly transform its operations. Incremental changes typically focus on minor components, such as improving decision-making processes within workgroups. In order to improve upon the current situation, these modifications examine the present strategy, structure, and culture of the organisation. In contrast, continuous changes aim to fundamentally alter how the organization functions. All the way down to the individual level, these changes are impacting many aspects of the organisation, such as structure, culture, incentive systems, information processing, and work design (Cummings & Worley, 2009). Nonetheless, every part of the business, from upper management on down to departments, teams, and employees, must be involved in constant transformation. This comprehensive change is facilitated by senior management with the assistance of

development consultants, who help define a vision for development, initiate necessary efforts, and establish structures to transition from the present state where we want to be in the future. Continuous change need specialised work teams due to its complexity compared to gradual change. Making the company more flexible to a changing environment is crucial, positioning them as high-involvement organizations (Amany, 2019).

Workers' perspectives shift as well; they now see their employment as providing more than just a paycheck. They long for more challenging work, more meaningful interactions with supervisors and coworkers, more meaningful duties, and more recognition and a sense of accomplishment. According to Dutta and Banerjee (2014), performance drops when these demands aren't satisfied. In complex situations, new organisational techniques are the way to go to meet today's consumers' demands for constantly increasing quality, rapid product or service delivery, fast turn-around time on adjustments, competitive pricing, and other characteristics. The key to a successful organisation is being prepared for both the problems of the present and the future. Being able to quickly adjust and respond is crucial for surviving and striving for greatness.

Innovation Capacity

Innovation capacity involves various activities aimed at improving the efficiency of the company (Abdulai Mahmoud & Hinson, 2012; Castela et al., 2018; Song, 2015). The capacity to continuously innovate by taking existing information and turning it into new systems, processes, and products that serve the needs of stakeholders and enterprises is what this term refers to. Any aspect of a business, from products and services to procedures and leadership and human resources as well as organisational and marketing efforts, is open to innovation (Csath, 2012). Businesses can't survive in today's cutthroat market unless they consistently innovate.

The first line of research divides innovation capacity into two scenarios. In the first, it acts as a component with three branches: has an effect on company performance either directly (Omri, 2015), indirectly (Abdulai Mahmoud & Hinson, 2012) via encouraging another intermediary to attain better performance, or mediates between several elements, such as market orientation and corporate social responsibility, to improve company performance. In the second situation, several aspects of innovation ability collaborate to encourage the possibility of invention (Boly et al., 2014; Martínez-Román et al., 2011; Saunila & Ukko, 2014; Taneja et al., 2016). Leadership, company culture, knowledge management, abilities, optimising external knowledge, and staff innovation are all parts of this dimension. Forsman (2011), Baba (2012), Tamayo-Torres et al. (2016), Agostini et al. (2017), Resource exploitation, networking capacities, risk-taking, and involvement (Raghuvanshi et al., 2019; Raghuvanshi & Garg, 2018), and a combination of competencies such as academic proficiency, entrepreneurship, marketing, knowledge-building, competence in managing change, and development capabilities are all parts of innovation capacity.

Change Management

When it comes to driving organisational performance and results, change management is all about getting people ready, giving them the tools, they need, and supporting them as they embrace change. Kotter (2018) underscores the necessity of effective change management in adapting to the fast-paced business environment and maintaining competitiveness. In his eight-step method for leading change, he stresses the significance of establishing a guiding coalition and instilling a feeling of urgency. Change may be more easily implemented when there is open dialogue and buy-in from staff, according to Armenakis and Harris (2020). They argue that transparent communication helps to mitigate resistance by addressing employee concerns and building trust. Prosci (2021) presents the ADKAR model, which centres on five essential components: Awareness, Desire, Knowledge, Ability, and Reinforcement. The model helps organizations structure their change initiatives by ensuring that employees move through each stage of the change process. Additionally, digital transformation has brought about new approaches to change management. Vial (2019) discusses the impact of digital technologies on organizational change, highlighting the need for agile methodologies that allow for continuous adaptation and improvement.

Lawrence (2019) suggests that involving employees beginning of the transformation process can assist in lowering resistance and cultivating a feeling of ownership. Another challenge is the alignment of change initiatives with organizational culture. Cameron and Quinn (2021) note that organizational culture can either facilitate or hinder change efforts. They propose the Competing Values Framework as a tool for diagnosing and aligning culture with change initiatives. For example, a study by Smith et al. (2022) examines a multinational corporation's transition to a telecommuting paradigm in the midst of the COVID-19 outbreak. The study found that clear communication, leadership support, and flexibility were critical in successfully managing this significant organizational change. In another example, Brown and Eisenhardt (2018) consider the ERP system's deployment at a tech firm. Their findings indicate that a phased approach, combined with extensive training and support, was instrumental in overcoming initial resistance and achieving successful adoption.

Theoretical Framework

Contingency Theory

When applied to MCS, the idea of contingency theory states that the design and effectiveness of control systems depend on situational factors unique to each organization. Otley (2016) emphasizes that variables such as organizational size, strategy, environmental uncertainty, and technology significantly influence how control systems should be structured and implemented. A study by Bedford and Malmi (2015) found that organizations with well-aligned control systems, tailored to their specific contexts, exhibited better performance outcomes. Similarly, research by Frow et al. (2010) demonstrates that adaptive control systems enable organizations to navigate environmental uncertainty more effectively. On the other hand, Worley and Mohrman (2014) on organizational agility found that firms that adapted their development strategies to their specific environmental and internal conditions were more successful in sustaining performance improvements. Similarly, Kotter (2018) illustrates how tailored change management processes, considering organizational readiness and cultural factors, lead to more effective transformations.

Systems Theory

System theory, which was first proposed in the 1940s by the renowned scientist Ludwig von Bertalanffy, posits that one way to look at an organization is as a web of interconnected and linked pieces that cooperate to accomplish a goal (Bertalanffy, 1968). This argument has been widely adopted in various fields, including management control systems (MCS) and organizational development (OD), providing a holistic perspective that emphasizes the interconnectedness of organizational components. System theory facilitates the alignment of control systems with organizational development strategies, ensuring that all parts of the organization are working towards common goals (Burnes, 2018). By considering the organization as a system, managers can enhance organizational resilience through better anticipation of risks and more effective management of resources (Cameron & Quinn, 2021).

Empirical Review

With this study, Tu Le et al. (2024) aimed to systematically review the literature on management control systems (MCS). From 1970 until 2023, studies on McDonald's stated crucial characteristics, which the study aims to analyse. We retrieved and analysed data from the openAlex and gale Academic oneFile databases in the study using vosviewer software and qualitative methodologies. The article combed over 2279 articles, with 2031 coming from openAlex and 248 from gale Academic oneFile. Articles mentioning "management accounting system" and "sustainable development" formed the basis for the publication collection. The articles are categorised and organised according to six viewpoints after collecting. Among the topics covered by the papers, the most common one was "control management," which appeared 1,850 times over the research period (1970–2023). 'Business' appears 1658 times and 'computer science' 1570 times in the following articles. With 1,273 appearances, the subject of "Management Control System" came in at number four. According to the data, there is a high concentration of general studies on MCS from 2020 to 2023, with the most significant number of publications (37). Lower-level research encompasses studies on cultural control, control methods, strategic control, detailed control, and administrative control. Planning and performance measurement, two control techniques, were also heavily discussed. Additionally, the analysis identified the nations, academic institutions, and journals that have published the most articles and citations related to MCS research, as well as the most significant authors in this field. Researchers and scholars can benefit from the present study because it draws on other studies that have examined crucial aspects of MCS. As a result, it offers a fresh perspective and thorough evaluation by showcasing the works that have been and will be done in the field of MCS research. In addition, our study uncovers potential areas of future research and goals within MCS.

A research was conducted by Gomez-Conde et al. (2023) on the topic of management control systems and innovation strategies in start-ups that are part of business incubators. To address the lack of information on how management control systems (MCS) affect new companies, this study sets out to do more research in this area. We evaluate the effects of aligning MCS with innovation strategies on the performance of a sample of start-ups that have gone through the business incubator, building on findings from the management control literature. Performance is enhanced when financial (non-financial) MCS are associated with an emphasis on exploratory (exploitative) innovation strategies, according to regression analysis results. Collectively, the results provide insight on how business-incubated start-ups' MCS and innovation strategies interact, which impacts the businesses' chances of success or failure.

Aldiabat et al. (2022) investigated evaluating the mediating role of resistance to change in organisational development and effectiveness. With resistance to change serving as a mediator, this study aims to investigate how organisational development affects organisational performance in Jordanian institutions. To get a feel for the participants' thoughts, the researchers turned to descriptive analytics. In addition, a questionnaire was created and sent out to academic staff members at Jordanian universities by the researchers. Four hundred thirty-six members of the academic staff make up the study's sample. According to the findings, organisational resistance is positively impacted by individual resistance, constant improvement, on the other hand, significantly reduces aversion to change. Furthermore, there was a moderating relationship between organisational performance and resistance to change. The study addresses a knowledge vacuum in the literature by providing empirical evidence on the links between organisational effectiveness, resistance to change, and organisational growth in the context of higher education. It would appear that this is the first study to experimentally test the hypothesis that organisational development and organisational effectiveness are indirectly related through resistance to change.

The relationship between management control systems and performance in small and medium family enterprises was investigated by Duréndez et al. (2016). The primary purpose of this article is to investigate the impact of family on performance and the utilisation of management control systems (MCS). A total of 900 small and medium-sized enterprises (SMEs), including both family-run and non-family enterprises, from Spain were surveyed for this purpose. Research shows that management control systems (MCS) improve company performance and are less commonly used by family businesses compared to non-family organisations. Firm managers and practitioners can benefit from this study since it can inspire them to create systems that enhance the firm's competitiveness and allow control over the firm's direction.

Methodology

This study adopted the descriptive survey method. The accessible population were 20 selected petroleum markets companies in Rivers State. From the various petroleum companies, the researcher selected a total of 132 respondents. The study therefore adopted the convenience sampling technique for the study. Since the population was within the control of the researcher, the population was adopted as the sample size. Hence a census study was employed in determining the sample size. Data collected for the study was through the distribution of questionnaire. A total of one hundred and thirty-two (132) questionnaires were distributed but only one hundred and twenty (120) of the questionnaires that were retrieved. Statement items for management control system was adopted from Kaplan & Norton (2019); Merchant & Van der Stede (2018) 8 items (4 items for each scale) while organizational development statement items were adopted from Gallup (2020); Schein (2019) 8 items (4 items for each scale). The reliability of the statement items was tested using the crobach alpha to test the level of consistency and it was above the benchmark of 0.7. The Pearson Correlation Coefficient was employed to test the hypotheses.

Test of Hypotheses

Here we take a look at how the study's dependent variables—innovation capacity and change management—relate to the dimensions of the independent variables—budgeting and benchmarking.

Table 1: Relationship between benchmarking and innovation capacity of petroleum marketing companies in Rivers State

		Correlations	
		Benchmarking	Innovation Capacity
Benchmarking	Pearson Correlation	1	.646**
	Sig. (2-tailed)		.000
	N	120	120
Innovation Capacity	Pearson Correlation	.646**	1
	Sig. (2-tailed)	.000	
	N	120	120

**. Correlation is significant at the 0.05 level (2-tailed).

Source: Survey Data, 2024

The table 1 revealed that there is a significant relationship between benchmarking and innovation capacity ($p = 0.000$), however the relationship is moderately positive ($\rho = .646$). Hence, we find that benchmarking is associated with innovation capacity. As benchmarking practices increase, innovation capacity tends to increase as well.

Table 2: Relationship between benchmarking and change management of petroleum marketing companies in Rivers State.

		Correlations	
		Benchmarking	Change Management
Benchmarking	Pearson Correlation	1	.537**
	Sig. (2-tailed)		.013
	N	120	120
Change Management	Pearson Correlation	.537**	1
	Sig. (2-tailed)	.013	
	N	120	120

**. Correlation is significant at the 0.05 level (2-tailed).

Source: Survey Data, 2024

Data in table 2 reveal that there is a moderate positive correlation between benchmarking and change management ($\rho = .537$ and $p = 0.013$) hence we analysis reveal that recruitment is significantly associated with organizational growth.

Table 3: Relationship between budgeting and innovation capacity of petroleum marketing companies in Rivers State.

		Correlations	
		Budgeting	Innovation Capacity
Budgeting	Pearson Correlation	1	.678**
	Sig. (2-tailed)		.001
	N	120	120
Innovation Capacity	Pearson Correlation	.678**	1
	Sig. (2-tailed)	.001	
	N	120	120

**. Correlation is significant at the 0.05 level (2-tailed).

Source: Survey Data, 2024

Table 3 revealed that there is a significant relationship between budgeting and innovation capacity ($p = 0.000$), however the relationship is strongly positive ($\rho = .678$). Hence, we find that budgeting is associated with innovation capacity.

Table 4: Relationship between budgeting and change management of petroleum marketing companies in Rivers State.

		Correlations	
		Budgeting	Change Management
Budgeting	Pearson Correlation	1	.722**
	Sig. (2-tailed)		.001
	N	120	120
Change Management	Pearson Correlation	.722**	1
	Sig. (2-tailed)	.001	
	N	120	120

**. Correlation is significant at the 0.05 level (2-tailed).

Source: Survey Data, 2024

Table 4 revealed that there is a significant relationship between budgeting and change management ($p = 0.000$), however the relationship is strongly positive ($\rho = .722$). Hence, we find that budgeting is associated with change management.

Discussion of Findings

According to the first hypothesis, there is a positive correlation ($\rho = 0.646$) and a statistically significant association ($p = 0.000$) between benchmarking and the innovation ability of petroleum marketing companies in Rivers State. The results accord with those of the research by Gomez-Conde et al. (2023). The second hypothesis demonstrated that, for petroleum marketing companies in Rivers State, there is a moderately significant link ($p = .0013$ and $\rho = 0.537$) between benchmarking and change management. As a result, we draw the conclusion that change management is related to benchmarking. The findings of this study are in agreement with those of Gomez-Conde et al. (2023) and Aldiabat et al. (2022). With a p -value of 0.001 and a correlation value of 0.678, the third hypothesis shows that petroleum marketing companies in Rivers State have a strong association between their budgeting and innovation capabilities. Budgeting is necessary for innovation, as this suggests. Research by Duréndez et al. (2016) and Bhutta and Huq (2019) lend credence to this study. With a p -value of 0.001 and a correlation value of 0.678, the fourth hypothesis reveals that petroleum marketing companies in Rivers State have a strong association between budgeting and change management. Research by Frow et al. (2010) and Amanh (2019) provide credence to this study.

Conclusion and Recommendations

The study on Management Control Systems (MCS) and Organizational Development in selected petroleum marketing companies in Rivers State has demonstrated significant relationships and influences between the tested variables. The findings indicate that benchmarking positively correlates with innovation capacity and change management, while also budgeting is greatly affected by both innovation capacity and change management within these companies.

Based on the conclusion, the study recommends that:

1. Petroleum marketing companies should systematically implement benchmarking practices to enhance their innovation capacity. Establish a dedicated benchmarking team responsible for continuous monitoring of industry standards and innovations, and integrate their findings into the company's strategic planning and operational processes is one way to achieving this.
2. To improve change management, companies should leverage benchmarking to identify and adopt successful change management strategies from leading organizations.
3. Companies should strengthen their budgeting processes to ensure sufficient resources are allocated for innovation initiatives. To achieve this, petroleum companies should implement a zero-based budgeting approach where every innovation-related expense must be justified from scratch, ensuring that all allocated funds are directly contributing to innovation goals.
4. To support change management, budgeting should be closely aligned with change initiatives, ensuring that adequate financial resources are available for training, development, and other change management activities. This can be achieved by developing a change management budget plan that includes detailed financial requirements for each phase of change management, and ensure regular financial reviews to adjust allocations as needed to support ongoing change initiatives.

References

Abernethy, M. A., & Brownell, P. (2019). Management control systems in research and development organizations: The role of accounting, behavior and personnel controls. *Accounting, Organizations and Society*, 24(3), 189-204.

Aldiabat, B. F., Aityassine, F. L., & Al-rjoub, S. R. (2022). Organizational development and effectiveness: Testing the mediating role of resistance to change. *Polish journal of management studies*, 25(1), 58-71.

Amany, Sh., (2019). Enhancing change management at university education institutions in Egypt in the light of Gemba Kaizen Model. *Journal of the AArU*, 39(1), 1-18.

Anand, G., & Kodali, R. (2020). Benchmarking the benchmarking models. *Benchmarking: An International Journal*, 27(5), 1553-1572.

Anthony, R. N., & Govindarajan, V. (2018). *Management control systems*. McGraw-Hill Education.

Armenakis, A. A., & Harris, S. G. (2020). Reflections: Our journey in organizational change research and practice. *Journal of Change Management*, 20(1), 41-59.

Avolio, B. J., & Yammarino, F. J. (2018). *Transformational and charismatic leadership: The Road ahead*. Emerald Publishing.

Becker, S. D., Mahlendorf, M. D., & Schäffer, U. (2021). Management control as a system or a package? Conceptual and empirical issues. In *Performance measurement and management control* (pp. 33-54). Emerald Publishing Limited.

Bertalanffy, L. V. (1968). *General system theory: Foundations, development, applications*. George Braziller.

Bhutta, K. S., & Huq, F. (2019). Benchmarking—best practices: An integrated approach. *Benchmarking: An International Journal*, 26(6), 1831-1851.

Brown, G., & van Niel, J. (2019). Benchmarking academic performance in higher education. *Journal of Higher Education Policy and Management*, 41(1), 31-49.

Brown, S. L., & Eisenhardt, K. M. (2018). The art of continuous change: Linking complexity theory and time-paced evolution in relentlessly shifting organizations. *Administrative Science Quarterly*, 63(1), 1-34.

Burnes, B. (2018). *Managing change: A strategic approach to organizational dynamics*. Pearson.

Cameron, K. S., & Quinn, R. E. (2021). *Diagnosing and changing organizational culture: Based on the competing values framework*. Wiley.

Cameron, K. S., & Quinn, R. E. (2021). *Diagnosing and changing organizational culture: Based on the Competing Values Framework*. Wiley.

Camp, R. C. (1989). *Benchmarking: The search for industry best practices that lead to superior performance*. Productivity Press.

COSO. (2020). *Internal control - integrated framework*. Committee of Sponsoring Organizations of the Treadway Commission.

Cummings, T., & Worley, C. (2009). *Organization development & change*. (9th ed.). South-Western Cengage.

Davila, A., & Foster, G. (2020). Management accounting systems adoption decisions: Evidence and performance implications from early-stage/startup companies. *The Accounting Review*, 80(4), 1039-1068.

Duréndez, A., Ruíz-Palomo, D., García-Pérez-de-Lema, D., & Diéguez-Soto, J. (2016). Management control systems and performance in small and medium family firms. *European Journal of Family Business*, 6(1), 10-20.

Dutta, A. B., & Banerjee, S. (2014). Review of organizational development through employee involvement & change management. *International Journal of Human Resource Management and Research (IJHRMR)*, 4, 53-58.

Ekholm, B., & Wallin, J. (2020). Is the annual budget really dead? *The European Accounting Review*, 11(2), 519-539.

Frow, N., Marginson, D., & Ogden, S. (2010). Continuous budgeting: Reconciling budget flexibility with budgetary control. *Accounting, Organizations and Society*, 35(4), 444-461.

Gallup. (2020). *State of the global workplace report*. Gallup.

Garcia, R. P., & Morillo, A. R. (2018). Benchmarking in manufacturing: A critical evaluation. *International Journal of Production Research*, 56(10), 3120-3135.

Gomez-Conde, J., Lopez-Valeiras, E., Malagueño, R., & Gonzalez-Castro, R. (2023). Management control systems and innovation strategies in business-incubated start-ups. *Accounting and Business Research*, 53(2), 210-236.

Hansen, S. C., & Van der Stede, W. A. (2020). Multiple facets of budgeting: An exploratory analysis. *Management Accounting Research*, 15(4), 415-439.

Hughes, M. (2020). *Managing change: A critical perspective*. Cengage Learning.

Johnson, T. W., & Pohl, M. B. (2023). The rise of digital benchmarking platforms. *Journal of Technology Management*, 38(2), 45-59.

Kaplan, R. S., & Norton, D. P. (2008). *The execution premium: Linking strategy to operations for competitive advantage*. Harvard Business Press.

Kaplan, R. S., & Norton, D. P. (2019). *The balanced scorecard: Translating strategy into action*. Harvard Business Review Press.

Kotter, J. P. (2018). *Leading change*. Harvard Business Review Press.

Kumar, A., & Thomas, J. (2020). Benchmarking in healthcare: Improving quality of care through comparison. *International Journal of Health Care Quality Assurance*, 33(7), 585-598.

Kuvaas, B., & Dysvik, A. (2009). Perceived investment in employee development, intrinsic motivation and work performance. *Human Resource Management Journal*, 19(3), 217–236.

Lawrence, P. R. (2019). How to deal with resistance to change. *Harvard Business Review*, 97(4), 123-136.

Libby, T., & Lindsay, R. M. (2022). Beyond budgeting or budgeting reconsidered? A survey of North-American budgeting practice. *Management Accounting Research*, 21(1), 56-75.

Marginson, D. E. W., & Ogden, S. G. (2020). Budgeting and innovation. *Financial Accountability & Management*, 21(1), 91-111.

Mbore, C. K., Sang, J., & Komen, J. (2019). Management control system, institutional leadership and institutional performance of technical training institutions in Kenya. *International Journal of Science and Research (IJSR)*, 8(10), 1125 – 1136.

Merchant, K. A., & Van der Stede, W. A. (2018). *Management control systems: Performance measurement, evaluation, and incentives*. Pearson.

Mohamad, S., Saleh, S. Z., & Amin, H. (2022). Integrating benchmarking with Six Sigma: A pathway to operational excellence. *Journal of Operational Excellence*, 14(3), 97-112.

Otley, D. (2016). The contingency theory of management accounting and control: 1980–2014. *Management Accounting Research*, 31, 45-62.

Otley, D., & Emmanuel, C. (2021). *Readings in accounting for management control*. Springer.

Prosci. (2021). *ADKAR: A model for change in business, government and our community*. Prosci Research.

Pyhrr, P. A. (2020). *Zero-based budgeting: A practical management tool for evaluating expenses*. Wiley.

Schein, E. H. (2019). *Organizational culture and leadership*. Wiley.

Simons, R. (2021). *Levers of control: How managers use innovative control systems to drive strategic renewal*. Harvard Business Review Press.

Smith, J., Brown, K., & Jones, L. (2022). Navigating the shift to remote work: Lessons from a multinational corporation. *Journal of Business Research*, 135, 421-432.

Tidd, J., & Bessant, J. (2020). *Managing innovation: Integrating technological, market and organizational change*. Wiley.

Tu Le, O. T., Hong Le, A. T., Thanh Vu, T. T., Cam Tran, T. T., & Van Nguyen, C. (2024). Management control systems for sustainable development: a bibliographic study. *Cogent Business & Management*, 11(1), 2296699.

Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *Journal of Strategic Information Systems*, 28(2), 118-144.

Worley, C. G., & Mohrman, S. A. (2014). Is change management obsolete? *Organizational Dynamics*, 43(3), 214-224.