

Citation: Ntongai, D. (2022). Strategic Management Model with Special Reference to Strategy Operationalization and its Implications on Execution Success. *Journal of African Interdisciplinary Studies*, 6(11), 175 – 188.

Strategic Management Model with Special Reference to Strategy Operationalization and its Implications on Execution Success

By

David Ntongai M'tuamibwi

Email: David.ntongai@yahoo.com

Abstract

The purpose of this article was to explore the role of strategy operationalization as a determinant of strategy implementation success. The article aims to distinguish strategy operationalization as a distinct phase of strategic management, and how it impacts on the success of strategy execution. The author seeks to explain strategy operationalization, as an interface between strategy formulation and execution. The objective of this article is to develop a strategic management model that include strategy operationalization. This article reviews strategic management models and theories in relation to strategy implementation, and proposes a model that expresses the relationship between strategy operationalization, and strategy execution. The role played by strategy operationalization on strategy execution success. The article develops a conceptual model of strategic management. The article provides new insights with respect to strategy implementation, and demonstrates the role of strategy operationalization.

Key words: strategy operationalization, strategic management models, strategy implementation.

Citation: Ntongai, D. (2022). Strategic Management Model with Special Reference to Strategy Operationalization and its Implications on Execution Success. *Journal of African Interdisciplinary Studies*, 6(11), 175 – 188.

Strategic Management Model with Special Reference to Strategy Operationalization and its Implications on Execution Success

By

David Ntongai M'tuamibwi
Email: David.ntongai@yahoo.com

Introduction

Strategy is the direction and scope of an organization, over the long term, which offers advantages for the organization through configuration of resources within changing environments to meet the needs of market and fulfill stakeholder expectations (Johnson & Scholes, 2005). Strategy is a wide plan created as a response to operating environment so as to achieve the objectives of a company (Barnat, 2005). This means that the business environment greatly influences the process of strategy implementation.

According to Pearce & Robin (2011), a Comprehensive assessment of both external and internal environment of a firm in relation to opportunities, threat, weakness and strengths, will guide a firm in adopting most appropriate course of action and strategy that can lead to realisation of long term goals and vision. Implementation of the long-term plan of an enterprise is through plans, projects and programmes, which must be monitored and evaluated regularly to ensure that they guide the firm towards the predetermined direction.

Strategic management is the process of defining the business of an enterprise, setting vision and mission, identifying long- term goals, crafting the strategy, implementing the strategy, controlling and evaluating the strategy. Approaches to strategic management include formal, entrepreneurial, intuitive and anticipality approach. According to Coulter (2010), success of a strategy requires successful strategy implementation. This involves aligning the strategy with the organization's mission and carrying out various activities that constitute the strategy. Organization leadership tends to support strategy formulation more compared to strategy implementation. According to Kaplan and Norton (2001), this could explain why most strategies fail at implementation stage.

According to Thompson and Strickland (1990), strategic management is a process of developing vision and mission, setting objectives, crafting a strategy, implementing the strategy and evaluating performance by reviewing the situation. These are important phases of strategic management. However the author fail to elucidate the implementation phase in terms of strategy operationalization.

Glueck, (1984) defines strategic management as “a stream of decisions and actions which leads to the development of an effective strategy or strategies to help achieve corporate objectives. Various authors and researchers have studied and described manner in which strategic decision making take place. Steiner, Miner, Gray and Mintzberg, (1990) have categorized these approaches into formal-structured, intuitive-anticipatory, entrepreneurial, incremental and adaptive approaches. This article focuses on formal- structured approach to strategic decision making.

In a formal structured approach, strategic problems are dealt with by a designated group of planners who follow a set procedure to arrive at decisions. Different types of planning such as strategic planning and corporate planning are used.

The purpose of strategic management is to help the organization, achieve its objectives. For this to be achieved, organizations must formulate, successfully operationilize and execute

Citation: Ntongai, D. (2022). Strategic Management Model with Special Reference to Strategy Operationalization and its Implications on Execution Success. *Journal of African Interdisciplinary Studies*, 6(11), 175 – 188.

appropriate strategies. While formulating a relevant strategy is an involving process, implementation of the same might turn out to be more difficult, (Hrebiniak 2008).

Best formulated strategies may fail to produce expected superior performance for the firm, if not well operationalized and executed. Studies have shown that 57 percent of firms were unsuccessful at executing strategic initiatives over the past three years, (Allio, 2005). Strategy implementation has been conceptualized by different authors; According to Dekluyuer and Pearce, (2003), it is a hands-on operation and action-oriented human behavioral activity that call for executive leadership and key managerial skills. According to Wheelen and Hunger, (1992) it is a process by which strategies and policies are put into action.

Studies have been carried out on factors that influence the strategy implementation process. Hrebiniak, (2008) and Allio, (2005) hold the view that quality of a strategy will affect strategy implementation. Daulatrum, (2005), mehta and Krishnan, (2004), explain the impact of culture on strategy implementation. They ascertain a significant relationship between corporate culture and strategy execution.

According to the above studies, nature of strategies formulated, structure of the organization, institutional relationship and corporate culture directly affect strategy implementation. These studies have not identified strategy operationalization as an important phase that significantly determines the success of strategy execution.

Problem Statement

According to a study by Muchira (2013), there is a strong relationship between organization performance and strategy implementation; however, most strategies fail at the implementation stage. Allio (2005) states that 57% of firms, poorly implement strategies. This could be attributed to a failure to effectively operationalize the strategy before execution. This study therefore seek to establish the role of strategy operationalization in strategy implementation.

Literature Review

Strategy operationalization

Strategy is enacted through a set of social interactions and conversations through which managers project a direction for the firms and activate it, (Denis and Poulean 2007) once long-term objectives are established, corporate level and business strategies are selected, several activities must take place, to ensure successful strategy implementation. The first activity is to operationalize the strategy throughout the organization.

Strategies operationalization involves translating long term objectives into current target by developing annual objectives. This forms the basis for resources allocation. Development of functional strategies is the next aspect of strategy operanalization.

Addressing cross-functional implications of the new strategy through effective organization communication is the next dimension of strategy operationalization. This is followed by development of policy framework setting the landscape across which the new strategy will be executed.

In accordance with the emerging field of strategy –as practice (s-as-p) strategy is viewed as something organization members do and enact. The aim of practice is to describe, theories about a practical activity and interaction of people (Whittington 1996, Johnson et al, 2007).

Citation: Ntongai, D. (2022). Strategic Management Model with Special Reference to Strategy Operationalization and its Implications on Execution Success. *Journal of African Interdisciplinary Studies*, 6(11), 175 – 188.

Strategy implementation

Strategy cannot be executed if it, cannot be understood, (Kaplan and Norton 2001). Organization must translate the strategies into operational terms, align the organization to the strategy, make the strategy every ones job make the strategy a continuous process and mobilize charge. Through executive leadership (Kaplan and Norton, 2001).

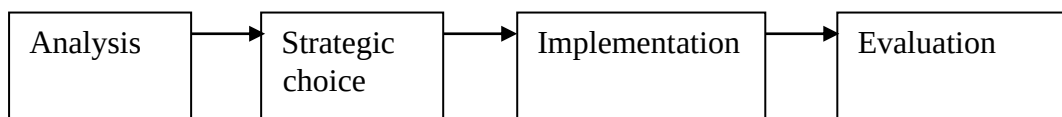
Implementation of strategy is the process through which a chosen strategy is put into action. Schrod, (2002). It involves designing and management of systems to achieve the best integration of people, structure, process and resources in achieving organizational objectives. Strategy implementation describes the process of activating the strategy. It is based on the overall concept, strategic goals and the essential question about the purpose as well as the financial and regulatory framework. The main focus is strategy directed action plans (Mayer, 2016). Strategy execution comprises of activities which align the firm with the new strategy. The internal environment comprises of forces arising from organization structure, current firm technology, leadership, management, tangible and non-tangible resources and organization culture among others.

According to the emerging field of strategy as practice (SAP), strategy is something organization members do and enact. Strategy process involves people making, formulating and implementing strategies (Johnson & Whittington, 2007). Strategy is operationalized through social interactions, routines and conversations through which managers project a direction for their firms and prepare the firm to execute it (Denis & Roulau, 2007). Strategy execution therefore is the process of aligning internal, organization, with the new strategy while configuring the various internal forces to leverage the new strategic initiative. This will lead to successful institutionalization of the new strategy.

Strategic Management Process

Strategic management is a process of developing vision and mission, setting objectives crafting a strategy, implanting the strategy and evaluating performance by reviewing the situation (Thorpson and Strickland 1990).

Several models have been posited by different authors and researchers. Strategic management model identifies concepts of strategy and the elements necessary for development of s strategy, enabling the organization, realize its vision. According to William F. Glueck's model, the phases of strategic management process are illustrated below:



Source: Adapted from William F. Glueck (1984)

This model however overlooks the importance of strategy operationalization.

Schendel and Hofers model comprises of goal formulation, environmental analysis, strategy implementation and strategic control. Omitting the critical role of strategy operationalization.

Citation: Ntongai, D. (2022). Strategic Management Model with Special Reference to Strategy Operationalization and its Implications on Execution Success. *Journal of African Interdisciplinary Studies*, 6(11), 175 – 188.

According to Thompson and Strickland (1990), model, strategic management process comprises of 5 steps as explained below.

These are;

- (i) Identifying and formulation of the vision,
- (ii) Setting performance objectives
- (iii) Crafting a strategy
- (iv) Implementing the chosen strategy
- (v) Evaluating performance

The model fails to articulate the importance strategy operationalization in strategic management.

Between crafting a new strategy and implementing the strategy, certain events take place. These include communicating the strategy to the entire organization, developing a policy to support the new strategic initiative and translating long-term goals into short-term objectives. This also the firm to align the internal environment with the new strategy.

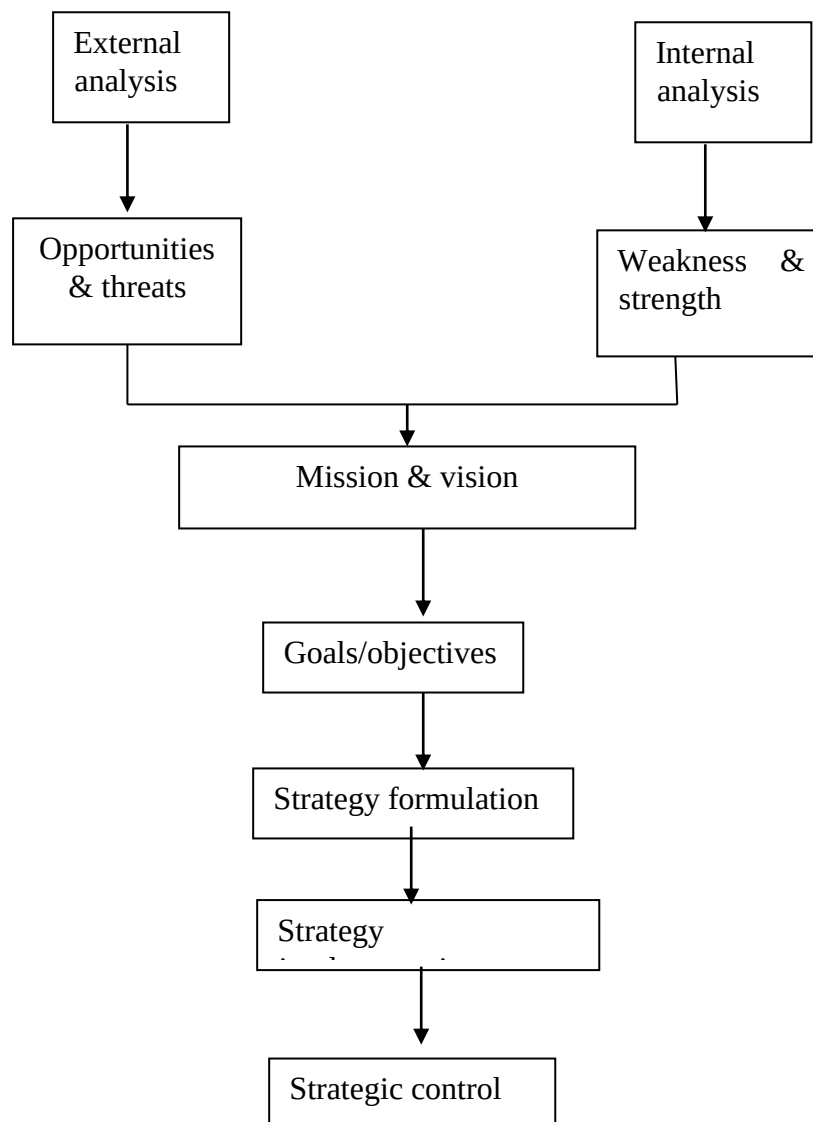
Korey's model is based on three discrete phases which do not clearly identify role of strategy operationalization.

- (i) Preliminary analysis
- (ii) Strategic planning phase
- (iii) Strategic management phase

Model by Peter Wright, Charles Pringle and Mark Kroll (1994), does not include strategy operationalization phase. This model comprises of 5 phases.

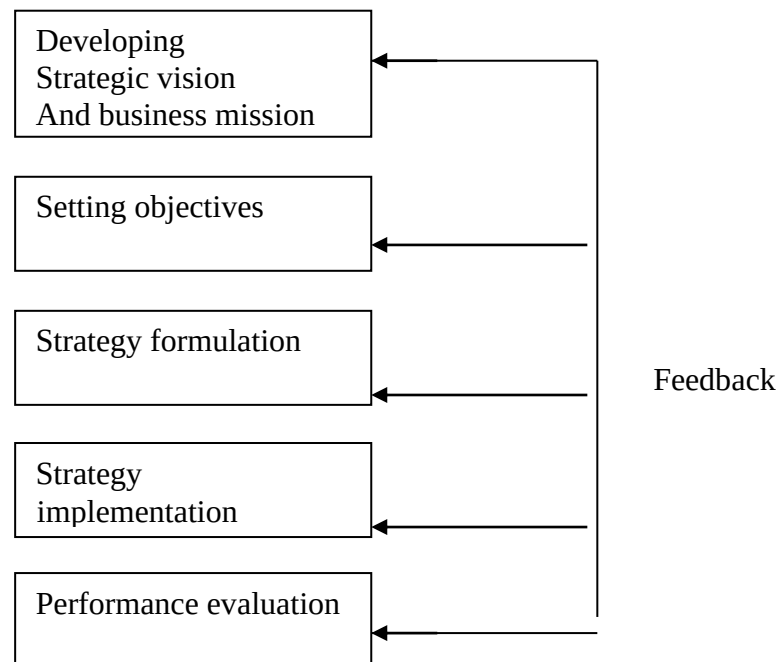
- (i) Analyzing the external environment for opportunities and threats
- (ii) Appraising internal strength and weaknesses
- (iii) Establishing mission and goals
- (iv) Strategy formulation

Citation: Ntongai, D. (2022). Strategic Management Model with Special Reference to Strategy Operationalization and its Implications on Execution Success. *Journal of African Interdisciplinary Studies*, 6(11), 175 – 188.



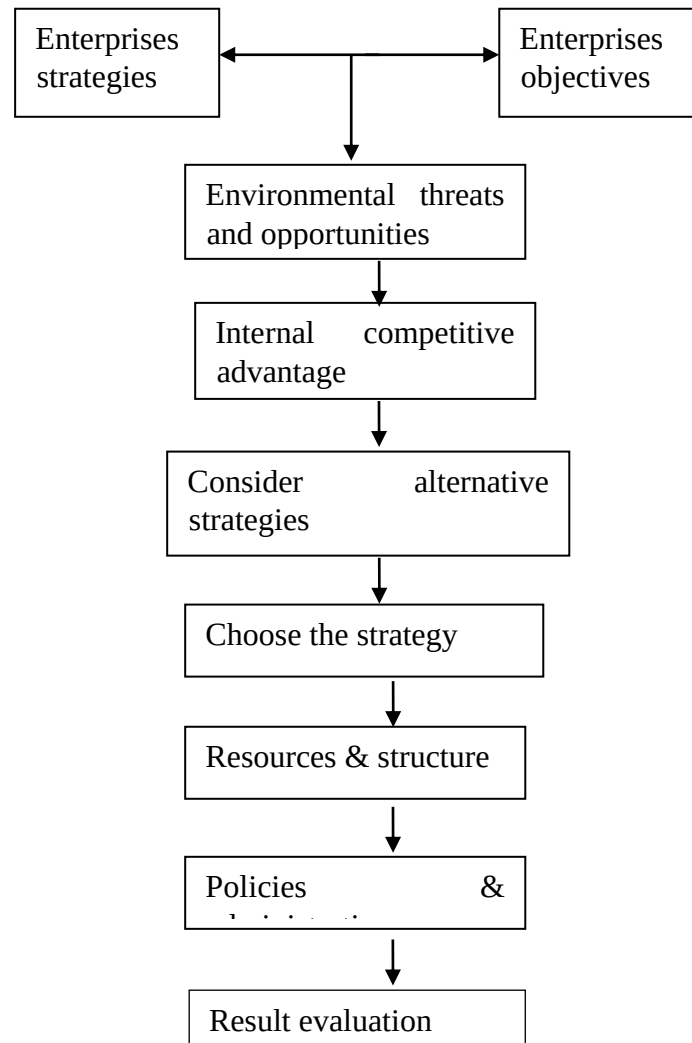
Citation: Ntongai, D. (2022). Strategic Management Model with Special Reference to Strategy Operationalization and its Implications on Execution Success. *Journal of African Interdisciplinary Studies*, 6(11), 175 – 188.

Thompson and strickland's model of strategic management



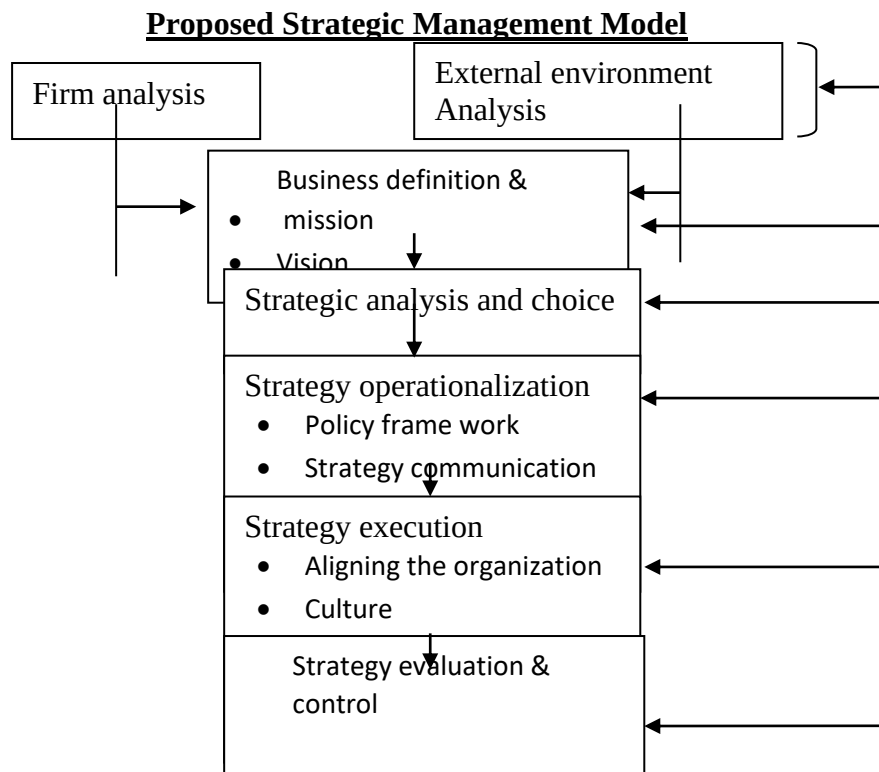
Citation: Ntongai, D. (2022). Strategic Management Model with Special Reference to Strategy Operationalization and its Implications on Execution Success. *Journal of African Interdisciplinary Studies*, 6(11), 175 – 188.

Glueck and Jauch 's strategic management model



As observed from above strategic management models, none of them has critically identified and explained the important role of strategy operationalization phase in strategic management process and how it influences strategy execution phase. Glueck and Jauch's model demonstrates strategic planning process from environmental analysis to evaluation. The model fail to indicate the interface between strategic choice and strategy execution. Similarly, Thompson and Strickland model indicate strategy implementation without special attention to operationalization.

Citation: Ntongai, D. (2022). Strategic Management Model with Special Reference to Strategy Operationalization and its Implications on Execution Success. *Journal of African Interdisciplinary Studies*, 6(11), 175 – 188.



Source; Ntongai D. (2022)

The proposed model has the following phases

Phase 1

Environmental analysis;

This phase involves analyzing the firm (internal environment) to establish inherent strengths and weaknesses in the firm. The phase also involves analyzing the external environmental, both industry and remote to establish opportunities and threats.

Phase 2

Business definition

With the result of environmental analysis, the firm can define its business, along various dimensions such as customer groups, customer function and alternative technology. The firm articulates its mission and vision.

Phase 3

Strategic analysis and choice

This phase involves choosing the preferred courses of action that takes the firm to the desired future state, in the light of business definition and environment analysis.

Phase 4

Strategy operationalization

This phase is important in that it determines the success of strategy execution. It involves developing a policy framework that will guide strategy execution.

It also involves accurate communication of the strategy to the entire organization. Long term objections are translated into actionable short-term goals, leading to functional level strategies and resources are set, that will be used in the execution of strategy stage.

Citation: Ntongai, D. (2022). Strategic Management Model with Special Reference to Strategy Operationalization and its Implications on Execution Success. *Journal of African Interdisciplinary Studies*, 6(11), 175 – 188.

Phase 5

This is the actual execution of the strategies.

This phase involves aligning the internal organization to the strategy; culture, structural and commitment of resources- people and skills. It involves actual carrying out of Tasks and sub-task that constitute the new strategy.

Phase 6

Strategy evaluation

This phase is continuous. It involves both strategic and operations control. The objective is to ensure that the chosen strategy is relevant and is guiding the organization towards the desired direction. It ensures activities are carried out as per the plan.

Information and learning from evaluation and control are used to revise the other phases for optimal performance.

Conclusion

The objective of this article was to elucidate the role of strategy operationalization in strategic management process. Strategy operationalization is an important phase that determines the success of strategy execution. The author proposes a model that emphasize the role strategy operationalization , in strategic management process.

CONCLUSION

Strategy implementation is an important phase of strategic management. This phase has two components; strategy operationalization and execution. Successful strategy execution will depend on how well strategy operationalization is done.

RECCOMENDATIONS

When implementing strategies in organizations, measures should be put in place to ensure the strategy is well operationalized before actual execution. This involve developing a policy framework, translating long-term goals into short-term objectives and communicating the new strategy effectively to the entire organization.

Citation: Ntongai, D. (2022). Strategic Management Model with Special Reference to Strategy Operationalization and its Implications on Execution Success. *Journal of African Interdisciplinary Studies*, 6(11), 175 – 188.

References

- Allio, MX. (2005). A Short, Practical Guide to Implementing Strategy. *Journal of Business Strategy*.
- Alvesson, M., (1990). On the Popularity of Organizational culture. *Acta Sociologica*, 33 (1), 31-35.
- Beer, M. (2000). The Silent Killers of Strategy Implementation and Learning Strategic Implementation: Five Approaches to an Elusive Phenomenon. *Sloan Management Review, and Eisenstat*. 29-42.
- Bollen, K. A. (1989). *Structural Equations with Latent Variables*. New York: John Wiley & Sons
- Borio, C., Gambacorta, L., & Hofmann, B. (2015, October). *The influence of monetary policy on bank profitability*. BIS Working Articles (514), pp. 1-30.
- Bourgeois III, L. J., and Brodwin D.R. (1984). „Strategic Implementation: Five Approaches to an Elusive Phenomenon“. *Strategic Management Journal*, 5, 241-26
- Brown, M. E., Trevino, L. K., & Harrison, D. A. (2005). *Ethical leadership: A social learning perspective for construct development and testing*. *Organizational Behaviour and Human Decision Processes*, 117-124.
- Burnes, B. (2004). *Managing change: A strategic approach to organizational dynamics*. (4thed) Cambridge: Prentice Hall.
- Certo, Samuel C. and Peter, J. Paul (1988), *Strategic Management: Concepts & Applications*, New York: Random House Inc., p. 5.
- Chimhanzi, J. (2004). The impact of marketing/1{R interactions on marketing strategy implementation. *European Journal of Marketing*.
- Comerford, R. A. (1985) *Strategic Management*; Boston: Kent Publishing
- Cooper, D. R., & Schindler, P. S. (2014). *Business Research Methods (Twelfth ed.)*. Boston: Irwin McGraw Hill International.
- Coulter, M. (2010). *Strategic Management in Action*. New Jersey: Pearson Education, Inc.
- Cronbach, L. J., & Furby, L. 1970. *How should we measure "change" -- Or should we?* *Psychological Bulletin*, 74: 68-80.
- Daulatrum B. Lund (2003) organization culture and job satisfaction. *Journal of Business and industrial marketing vol 18 NO.3 Pg 219-236*
- Davenport, T.H. & Porsak, L. (1997), *Working Knowledge: How Organizations Manage What They Know*, Harvard Business School Press, Cambridge, MA
- Dennis, J. Casley & Krishna Kumar (2007). *Project monitoring and evaluation in agriculture*. Johns Hopkins University Press.
- Floyd, S.W., and Wooldridge, B. (1997). „Middle Managements Strategic Influence and Organizational Performance“. *Journal of Management Studies*, 34, 465-485.
- Forman, J., and Argenti, P.A. (2005). „How Corporate Communication Influences Strategy Implementation, Reputation and the Corporate Brand: An Exploratory Qualitative Study“. *Corporate Reputation Review*, 8, 245-264.
- Giddens, A. 1984: *The constitution of society*. Cambridge policy press
- Glueck, William J. & Jauch, Lawrence R. (1984), *Business Policy and Strategic Management, 4th edition*, New York: McGraw-Hill Book Company, p. 5

Citation: Ntongai, D. (2022). Strategic Management Model with Special Reference to Strategy Operationalization and its Implications on Execution Success. *Journal of African Interdisciplinary Studies*, 6(11), 175 – 188.

- Gupta, A. K., & Govindarajan, V. (1984). Business unit strategy, managerial characteristics and business unit effectiveness at strategy implementation. *Academy of Management Journal*, .x (i).
- Hrebiniak L. G. (2008). *Obstacles to effective strategy implementation*. Organizational Dynamics, New York.
- Hrebiniak, L. G. (2006). *Obstacles to Effective Strategy Implementation*. Organizational Dynamics, 35(1), 12-31
- Husain, Z. (2013). *Effective Communication Brings Successful Organizational*. The Business & Management Review, 3(2), 43-50
- Ireland, R. D., & Hitt, M. A. (2005). Achieving and Maintaining Strategic Competitiveness in the 21st Century: The Role of Strategic Leadership. *Academy of Management Executives*, 19(4), 43-55.
- Ireland, R. D., Hitt, M. A., & Sirmon, D. G. (2003). A model of strategic entrepreneurship: The Construct and its dimensions. *Journal of Management*, 29(6), 964-987.
- Jarzabkowski, P. 2003 Strategic practices: An activity theory perspective on continuity and change '. *Journal of Management Studies* 40/1: 23–55.
- Jauch. L. R. and Glueck, W. (1988) *Business Policy and Strategic Management*. 5th Edition. McGraw-Hill, New York.
- Johnson, G. & Scholes, K. (2002). *Exploring Corporate Strategy*. 6th Edition, India. Prentice Hall.
- Judge, W.Q., and Stahl, M.J. (1995). „Middle-Manager Effort in Strategy Implementation: a Multinational Perspective“. *International Business Review*, 4, 91-111.
- Kaplan, R S., & Norton, D. P. (2004). *Strategy Maps: Converting Intangible Assets into Tangible outcomes*. Boston, MA: Harvard Business School Press.
- Kaplan, R. S., & Norton, D. P. (1992). *The Balanced Scorecard - Measures that Drive Performance*. Harvard Business Review, 71-77.
- Kaplan, R. S., & Norton, D. P. (1996). *The Balanced Scorecard: Translating Strategy into Action*. Boston, Massachusetts: Harvard Business School Press.
- Kaplan, R. S., & Norton, D. P. (2001a). *The Strategy-focused organization: How Balanced Scorecard Companies thrive in the new business environment*. Boston, MA: Harvard Business School Press.
- Kaplan, R. S., & Norton, D. P. (2001b). *Transforming the balanced scorecard from performance measurement to strategic management: Part 1*. Accounting Horizons, 15(1), 86-102.
- Kaplan, R. S., & Norton, D. P. (2005). *Creating the Office of Strategy Management*. Harvard Business School Press.
- Lehner, J. (2004). *Strategy Implementation Tactics as Response to Organizational, Strategic, and Environmental Imperatives*“. Management Review, 15, 460-480
- Lewis, L. K. (2000). *Communicating Change: Four cases of quality programs*. *Journal of Business Communication*, 37, 128-155. Retrieved from, <https://books.google.com.ng/books?isbn=1412926785>
- Locke, E. A., & Latham, O. P. (1990). *A theory of goal setting and task performance*.
- Lopez, S.P., Peon, J. M. M., & Ordas, C.J.V. (2004). Managing knowledge: the link between culture and organizational learning. *Journal of Knowledge Management*, 8(6), 93-103.
- Mankins, M. C., & Steele, R. (2005, July-August). *Turning Great Strategy into Great Performance*. Harvard Business Review.

Citation: Ntongai, D. (2022). Strategic Management Model with Special Reference to Strategy Operationalization and its Implications on Execution Success. *Journal of African Interdisciplinary Studies*, 6(11), 175 – 188.

- McMillan-Capehart, A. (2003). Cultural diversity's impact on firm performance: The moderating influence of diversity initiatives and socialization tactics. *Unpublished doctoral dissertation, Louisiana Tech University, USA*.
- Mehta, S. and Krishnan V.R..(2004). Impact of organizational culture and influence tactics on transformational leadership. *Journal of Management and Labor Studies*, 29(4), 282-291.
- Mintzberg, H. (1990) *Strategy formation: Schools of thought. Perspectives on strategic management*, Harper Business, New York.
- Naranjo-Valencia, J.C., Jimenez-Jimenez, D., & Sanz-Valle, R. (2011). *Innovation or imitation? The role of organizational culture*. *Management Decision*, 49(1), 55-72.
- Ndung'u, N. (2009), "Financial sector performance in Kenya", Retrieved December 30, 2016 from <http://www.bis.org/review/r090626c.pdf>
- Nelson, R., and S. Winter 1982 *an evolutionary theory of economic change*. Cambridge, MA: Harvard University Press.
- Nilsson, F., and Rapp, B. (1999). „Implementing Business Unit Strategies: The Role of Management Control Systems“. *Scandinavian Journal of Management*, 15, 65-88.
- Nohria, N., & Beer, M. (2000, May-June). Cracking the Code of Change. *Harvard Business Review*.
- Pearce, J. A. (2013). Using social identity theory to predict managers' emphases on ethical and legal values in judging business issues. *Journal of Business Ethics*, 112, 497-514.
- Pearce, J. A., & Robinson, R. B. (2011). *Strategic Management: Formulation, Implementation, and Control*. New York: Mc Graw Hill/Irwin.
- Porter, M. E. (1992). Disadvantages: America's Failing Capital Investment System. *Harvard Business Review*.
- Porter, M. E. (1996). What is strategy? *Harvard Business Review*, 74(6), 61-75.
- Quinn, R. & Sonenshein, S. (2008) *Four General Strategies for changing human Systems*. In: T.G. Cummings (ed.), *Handbook of Organizational Development* (pp. 69–79). Thousand Oaks, CA: Sage publications
- Raps, A. and Kauffman, D (2005). *Strategy implementation: an insurmountable obstacle?* *Handbook of Business Strategy*, 6(1), 142-145.
- Schein E. (2004). *Organizational culture and leadership*. Thousand Oaks: Sage publications
- Schein, E.H.(1995), Organizational and managerial culture as a facilitator or inhibitor of Organizational Transformation, *Working Paper 3831, MIT Sloan School of Management, Cambridge, MA*.
- Schneider, B., Ehrhart, M. G., & Macey, W. H. (2013). Organizational climate and culture *Annual Review of Psychology*, 64, 362-385.
- Singh, A. K. (2011). HRD Practices & Managerial Effectiveness: Role of Organization Culture. *Indian Journal of Industrial Relations*, 47(1), 138-145.
- Singh, D.T. (1998). „Incorporating cognitive aids into decision support systems: the case of the strategy execution process“. *Decision Support Systems*, 24, 145–163.
- Strickland, T. (2001). *Strategic Management concepts and cases* (12ed) MC GrawHill Irwin
- Thompson, A. & Strickland, A. J. (2007). *Strategic management: concepts and cases* (12th and 3rd York: McGraw-Hill.
- Thompson, A. A., Strickland, A. J., & Gamble, J.E. (2008). *Crafting and Executing Upper Saddle River, NJ: Prentice Hall*
- Wheelen, T. L & Hunger, J.D. (2006). *Strategic Management and Business Policy* (10 ed) Pearson Prentice Hall.

Citation: Ntongai, D. (2022). Strategic Management Model with Special Reference to Strategy Operationalization and its Implications on Execution Success. *Journal of African Interdisciplinary Studies*, 6(11), 175 – 188.

Wheelen, T.L. and Hunger, J.D. (2004). *Strategic management and business policy (19thed)*. Englewood Cliffs, NJ: Prentice Hall.

White, R.E. (1986). „Generic Business Strategies, Organizational Context and Performance: An Empirical Investigation“. *Strategic Management Journal*. 7, 217-231. 1257.

Whittington, R. (2002). ‘*The work of strategizing and organizing: for a practice perspective*’ Strategic Organization, 1(1), 119-129.

Whittington, R. (2006). *Completing the practice turn in strategy research*. Organization

Whittington, R. (1996) Strategy as practice ’. Long Range Planning 29: 731–735.

Whittington, R. (2001) ‘learning to strategize: Problems of practice’. *SKOPE Research Paper 20*. Oxford: University of Oxford.

Whittington, R. (2002) ‘Practice perspectives on strategy: Unifying and developing a field ’. *Academy of Management Conference Proceedings, Denver, CO, August*.