Contingency Theory in Management: Conceptual Phases and Strategic Link with Performance Measurement Systems

Yousra Nassou
PhD in Management Sciences, Research Laboratory: Management and Information Systems, National School of Commerce and Management Tangier, Morocco

Zakaria Bennani
Higher Education Professor, Research Laboratory: Management and Information Systems, National School of Commerce and Management Tangier, Morocco

Abstract

This literature review delves into the dynamic evolution of contingency theory in management, with a specific focus on the relationship between organizational strategy and Performance Measurement Systems (PMS). Employing a systematic literature review methodology, the conceptual phases of contingency theory are examined, spanning from the technological approach to the configurational approach. The analysis underscores the crucial importance of aligning PMS with the overall organizational strategy, as advocated by Kaplan and Norton. Empirical studies by Chenhall, Kaplan and Norton, and Hoque lend support to this correlation, emphasizing its impact on organizational performance. Thus, this review underscores the need for a strategic approach in designing PMS, providing practical implications for managers and prompting avenues for future research.

Keywords: Contingency theory, organizational strategy, Performance Measurement Systems (PMS), organizational performance.


Introduction

Contingency is defined as the possibility that something may or may not occur, dependent on the circumstances and the connection between two generally qualitative characteristics (Plane, 2008). It entails a specific and evolving situation that leads to the rejection of unique and standard prescriptions (Plane, 2008). Thus, it is an object dependent on the circumstances analyzed within a specific context (Du Gay, Vikkelso, 2016). In the field of management, contingency theory marked its evolution in the 1960s to mitigate the dominance of positivist and mathematical approaches in research (Martinet, Pesqueux, 2013; Hatch, 2018).

This literature review delves into the dynamic evolution of contingency theory, which emerged in the 1960s to counterbalance positivist approaches in management. The main objective is to analyze the different conceptual phases of this theory, from the technological approach to the configurational approach, with a particular focus on the crucial relationship between organizational strategy and Performance Measurement Systems (PMS).

The methodology adopted for this study relies on a systematic literature review, incorporating key works by researchers such as Plane, Du Gay, Vikkelso, Woodward, Burns, Stalker, Lawrence, Lorsh, and Mintzberg. Special attention is given to the conceptual phases of contingency theory and its specific
implications on the design of PMS, with a particular emphasis on the role of organizational strategy. Empirical studies, including those by Chenhall (2003), Kaplan and Norton (1996), and Hoque (2004), are also examined to enrich the analysis.

Contingency Theory: Literature Review

Contingency theory has undergone dynamic evolution, marked by different conceptual phases. This literature review provides a detailed exploration of these phases, ranging from the technological approach to the configurational approach, while highlighting contingency factors in management control. The objective is to provide an in-depth understanding of emerging concepts and the interconnections between contingency theory and management control.

Technological Approach: The origin of contingency theory dates back to the 1950s with the innovative works of Joan Woodward, Burns, and Stalker. Joan Woodward (1958) introduced the technological approach, emphasizing the importance of aligning organizational characteristics with technical systems. This approach classified technical systems based on production complexity. Subsequent research by Burns and Stalker (1961) extended this approach by integrating the environment as a contingency factor, distinguishing between mechanistic and organic structures in response to environmental stability.

Structural Approach: The second phase focused on the structural approach, specified by Lawrence and Lorsh. They identified three types of environments: scientific, market, and techno-economic, each linked to a specific mode of structural adjustment. Structural adaptation involved differentiation and integration. Research by the Aston group emphasized the utility of statistical methods for studying organizational structures in a multivariate manner.

Strategic Approach: The third phase emerged in response to criticisms of neglecting individual behaviors. The strategic approach introduced the resource perspective, seeking to understand the relationship between the organization and its environment. Key variables include dependence on other firms and access to resources. This perspective challenges the determinism of contingent approaches, highlighting the role of individual behaviors.

Configurational Approach: The fourth phase, the configurational approach, was initiated by Mintzberg in the 1990s. This holistic approach divides organizations into seven structural archetypes based on design parameters, structuring, and contingency factors. These archetypes provide a comprehensive view of organizational structural diversity, emphasizing the importance of an integrated approach.

Contingency Factors and PMS

The design of PMS is deeply influenced by various contingency factors, each playing a crucial role in how organizations structure and implement their control mechanisms (Anthony (1965, 1988); Burns and Stalker (1961); Chenhall (2003); Hofstede (1981); Mintzberg (1990); Nassou and Bennani (2023; 2024a; 2024b)).

Firstly, the variety of tasks and their analyzable nature, according to the work of Perrow (1967, 1970), has a significant impact on the structure and content of control systems. This variety requires adaptation of control based on task complexity, as emphasized by Chenhall (2003).

Secondly, the ability to measure outcomes, highlighted by Chenhall (2003), influences control choices and the design of performance measurement systems, underscoring the crucial importance of precise outcome measurement for effective control.

Thirdly, goal ambiguity, a concept introduced by Hofstede (1981), directly links to control system design, highlighting the need to clarify goals to ensure effective control.
Fourthly, environmental instability, as studied by Burns and Stalker (1961), impacts organizational structure and control mechanisms, underscoring the importance of adjusting control systems in response to environmental variations.

Fifthly, organizational size, a variable explored by Mintzberg (1990), establishes a significant relationship with the complexity of control systems, showing how size influences the design of internal and external controls.

Lastly, leaders' philosophy, addressed by Anthony (1965, 1988), exerts considerable influence on control choices and system flexibility, highlighting the direct impact of leaders' preferences and orientations on the overall design of management control in an organization.

These diverse contingency factors interact in a complex manner to shape the configuration of control systems, underscoring the need for a contextual and adaptive approach to management control in contemporary organizations.

**Strategic Alignment of Performance Measurement Systems (PMS):**

Early investigations into management control, notably the foundational work of Kaplan and Norton (1996, 2001), categorically emphasized the imperative of aligning PMS with organizational strategy. This correlation is particularly evident in companies' strategic choices. Those embracing defensive strategies and cost leadership seem to prefer formal PMS emphasizing financial measures. In contrast, companies oriented towards prospecting or innovation prefer informal PMS relying on non-financial measures.

In-depth investigations, such as those by Hoque (2004) and Olson and Slater (2002), accentuate the crucial relevance of alignment between the overall company strategy and specific performance measurement choices. These studies advance that this alignment constitutes a major catalyst for improving organizational performance. These findings align consistently with conclusions drawn by Jusoh, Ibrahim, and Zainuddin (2006), highlighting that companies engaged in prospective and innovative strategies, characterized by a diversity of PMS, achieve significant and positive performance levels.

This close connection between organizational strategy, PMS alignment, and performance provides deeper insights into how strategic choices influence control mechanisms. It also underscores the need for thoughtful strategic approach in the design and implementation of PMS, surpassing mere adaptation to strategic choices to generate concrete impact on overall organizational performance.

**Organization Strategy and SMP**

The central role of strategy in designing performance measurement systems has been underscored by several empirical studies, including those conducted by Abdel-Kader and Luther (2008), Teeratansirikool et al. (2013), and Benyoussef and Ooubouali (2020). According to Porter (1980), strategy is defined as the means by which a company seeks to acquire and maintain a competitive advantage over its peers within an industry, thus highlighting the strategic importance of long-term planning for businesses. On the other hand, the strategy adopted by SMEs influences the choice of measurement tools used to evaluate their performance (OUTSEKI. J, et al. 2023).

Teeratansirikool et al. (2013) emphasize that companies formulate strategies to achieve long-term goals and use control systems to measure progress toward these goals. This strategic approach also entails the need for continuous adjustments to adapt to changes in the competitive and economic context.

The contributions of Miles and Snow (1978), Gupta and Govindarajan (1984), as well as Porter (1980), have been fundamental in developing classificatory typologies of strategies adopted by companies, such as Prospector-Defender, Builder-Harvester, and Differentiation-Cost Leadership. These typologies provide a framework for differentiating companies based on their strategic orientations.

Companies adopting a Prospector strategy aim to explore new market opportunities, while those favoring a Defender strategy seek to consolidate their existing position. Builder and Harvester strategies focus respectively on operational efficiency and maximizing the exploitation of existing resources, while
Differentiation and Cost Leadership emphasize creating unique products or services and rigorous cost management.

These classifications offer an essential conceptual framework for understanding companies' strategic choices and their impact on the design of performance measurement systems. By integrating these perspectives, practitioners can develop measurement systems more aligned with their organization's specific strategic objectives, thereby enhancing their ability to monitor, evaluate, and adjust performance in a dynamic environment.

Examining the association between the adequacy of SMPs to organizational strategies, such as Just-in-Time (JIT) and Total Quality Management (TQM), as well as with value drivers such as customer orientation, quality, and flexibility, reveals a complex landscape of interactions influencing firm performance (Chenhall, 1997; Perera et al., 1997). Some studies, including Chenhall's (1997), suggest improved organizational performance when non-financial measures are integrated in harmony with customer-oriented strategies. However, conflicting results, such as those of Perera et al. (1997), do not reveal a significant link between the use of non-financial measures in conjunction with customer-focused manufacturing strategies and organizational performance, thus highlighting the complexity of the relationships between SMPs and organizational strategy.

This underlying complexity necessitates a contextual approach, taking into account the nuances specific to each organization and the peculiarities of its environment. Furthermore, these results underscore the need for careful consideration when choosing and aligning SMPs, with explicit recognition of the value drivers specific to each organizational context. Thus, managing SMPs in conjunction with manufacturing strategies and value drivers emerges as an area where decision-making must be grounded in a deep understanding of specific organizational dynamics.

Conclusion

This comprehensive review of literature on contingency theory underscores the crucial importance of the relationship between organizational strategy and Performance Measurement Systems (PMS). Building on the conceptual phases of the theory, from the technological approach to the configurational approach, the analysis highlights the dynamic evolution of this theory and its impact on SMP design.

The adopted methodology, based on a systematic literature review integrating key works by researchers such as Plane, Du Gay, Vikkelsø, Woodward, Burns, Stalker, Lawrence, Lorsch, and Mintzberg, offers a perspective on the implications of contingency in the management domain. By particularly emphasizing strategic alignment, this work underscores that companies' strategic choices directly influence the formal or informal nature of SMPs, with defensive strategies favoring financial measures and prospective strategies favoring non-financial measures. This correlation between strategy and SMPs, supported by researchers like Kaplan and Norton, plays a crucial role in seeking maximal organizational performance.

These findings can provide valuable guidance for practitioners, emphasizing the need for deep strategic reflection when designing and implementing SMPs to optimize their relevance and effectiveness in various organizational contexts. In summary, this study contributes to shedding light on the complex dynamics between contingency, strategy, and SMPs, thus opening avenues for future research aimed at deepening our understanding of these interactions in the realm of contemporary management.

References


