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RESEARCH ARTICLE

THE INTERPLAY OF SELF-LEADERSHIP AND SYSTEMS THINKING IN ADAPTIVE ORGANIZATIONAL DESIGN

Pravin S[1] and Pouline Juliet[2]

1. Research Scholar, School of ManagementKPR College of Arts Science and Research, Coimbatore.
2. Associate Professor& Research Supervisor, School of Management KPR College of Arts Science and Research, Coimbatore.

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Abstract

The information revolution of the 1990s, even after two decades, continues to exert its influence on world commerce, forcing it to grow in new directions. In such a scenario, organizations today continue to e volve constantly in order to remain competitive in a market characteriz ed by volatility and complexity.One of the challenges, that these establishments face, is that they are often live-tested for structural agility and adaptive human resource availability to withstand sudden technological changes and workplace dynamics. Therefore, there is a growing need for increased flexibility and distributed decision making which challenges traditional hierarchical systems that are known for highly rigid and rule-bound operations. In this context, two significant constructs namely, self leadership and systems thinking, are increasingl y considered as prominent competencies for undertaking adaptive organizational transformation(Khalid & Oosthuizen, 2025).

Introduction:-

Self-leadership, one of the two promising aptitudes discussed in this paper, was originally propounded by Charles C. Manz in the 1980s. This concept refers to the process of self-development through behaviour control, self-influenced thought process, and self-motivation towards achieving personal and organizational goals. This process becomes essential for working in a non-linear, evolving environment where qualities of proactive mind-set and accountability are the need of the hour(Palaima &Skaržauskienė, 2010). Unlike traditional leadership, which is position-based and hierarchical, self-leadership is behaviour-based and can be exercised at all levels of an organization. The concept of self-leadership gains more pertinence when it comes to delivering innovation and responsible task execution, particularly in adaptive systems where individual initiative balances the inadequacies of top-down control.

The second concept discussed in this paper, systems thinking, was popularized by Peter Senge in the year 1990. This concept which was discussed by him in The Fifth Discipline, focuses on integrating the various units of a system and discourages approaching them individually. It encourages a holistic view of problems and promotes thinking with vision (O'Connor &Mcdermott, 1997; Bui, 2020). It also aids in recognizing patterns and feedback loops that influence organizational behaviour. In adaptive systems, where change is continuous and complex, systems thinking allows leaders and individuals to understand how their actions affect the larger organizational ecosystem.

Corresponding Author:-Pravin S
Address:-Research Scholar, School of Management KPR College of Arts Science and Research, Coimbatore.

The two concepts, self-leadership and systems thinking, even though they appear different on the surface level, share an important common ground. Both the concepts require individuals to move beyond reactive behaviour and expect to adopt a reflective and responsible approach to action by way of integration. This convergence is especially relevant in adaptive organizational design which is characterized by the ability to create structures and processes that can evolve in response to environmental stimuli (Pourdehnad, 2016; Pourdehnad et al., 2011). Adaptive organizations require self-leaders because they can think systemically and act autonomously. This becomes essential in an environment that values decentralization, cross-functional collaboration, and continuous learning.

Inspite of the common ground that exists between self-leadership and systems thinking, existing scholarship on contemporary organizational systems treats the two concepts as separate domains. While studies have explored their individual benefits, few research has examined the interplay between the two and how their integration can inform adaptive practices within hierarchical administrative systems. In this regard, this paper argues that joining self-leadership with systems thinking creates a powerful dynamic that enhances organizational adaptability. The primary objectives of this study are threefold:
(1) to examine how self-leadership contributes to the development of systems thinking capabilities among individuals
(2) to explore how the synergy between the two concepts encourage organizational adaptability
(3) to propose a conceptual model linking self-leadership, systems thinking, and adaptive design.
In doing so, this paper aims at filling a critical gap in the literature pertaining to adaptive organizational systems.

2. Literature Review

2.1 The theory of Self-leadership

Manz's concept of self-leadership is fundamentally characterized by drives namely, self-awareness, intrinsic motivation, and personal accountability. In this regard, self-leadership is different from that of the traditional concept which relies on hierarchical authority (Stewart et al., 2019).Under self-leadership, individuals are expected to guide themse
lves. They should train themselves to achieve their goals through a combination of behavioural, cognitive, and motivational strategies.

Manz's framework includes three core strategies: behaviour-focused strategies, natural reward strategies, and constructive thought pattern strategies (Brown & Fields, 2011).Behaviour-focused strategies help individuals regulate their actions through observation, goal setting, rewarding, and cueing by oneself. And the second one, natural reward strategies, include the mind-set to treat tasks as inherently enjoyable. And, constructive thought pattern strategies involve techniques such as positive self-talk and mental imagery to reshape thinking in ways that support performance (Neck & Manz, 1992).

Empirical studies have shown that self-leadership enhances work engagement, creativity, job satisfaction, and organizational commitment. It also helps develop qualities necessary for dynamic organizational settings such as adaptability, resilience, and proactive behaviours that are displayed by individuals who are self-leaders(Manz, 1986).However, despite these advantages, self-leadership has often been examined in isolation from larger organizational or systemic contexts, which limits understanding of its broader impact on organizational transformation.

2.2 The theory of systems thinking in organizations

Systems thinking is a holistic framework for understanding how elements within a system interrelate and evolve over time (Senge, 1990, as cited in Hoe, 2019). The focus of this concept is on feedback loops, delays, and emergent patterns. It summarily rejects the linear cause-and-effect models that are adopted in a traditional setup. Peter Senge (1990), in The Fifth Discipline, identified systems thinking as one of the five core disciplines of a learning organization, alongside personal mastery, mental models, shared vision, and team learning.

In a modern organization, systems thinking has the potential to facilitate a more integrated understanding of problems in an organization. For example, instead of blaming a single department for poor performance, a systems thinker would explore how various units, processes, and incentives contribute to the issue. It helps develop strategic foresight, collaborative learning, and adaptive decision-making in the face of a crisis (Kim & Senge, 1994).

Systems thinking is particularly critical for adaptive organizational design, which requires awareness of how internal changes affect the broader structure and environment (Jaradat et al., 2018). Studies by Senge (2006), Sterman (2000), and others emphasize that successful adaptation depends on an organization's ability to perceive interconnectedness and long-term consequences. However, cultivating this mind-set often requires a cultural shift and individual-level competencies such as reflection, autonomy, and responsibility that align closely with self-leadership traits.

2.3 Adaptive organizational design

Adaptive organizations are management structures which can respond effectively to internal and external changes while maintaining core values and goals. They are characterized by decentralized decision-making, cross-functional collaboration, continuous learning, and flexible structures (Uhl-Bien et al., 2007). Such organizations keep their roles fluid and deals with problems collectively. They are very particular in rejecting rigid hierarchical operation.

Such adaptive systems require itsindividuals to show initiative, make informed decisions by anticipating potential problems. They should show innovation besides following instructions.This shows that structural capacity is not the only criterion but also requires the individual's leadership capacity in order to function in a truly adaptive sense (Lichtenstein, 2011).Scholars like Heifetz (1994) have emphasized the need for "leadership without authority," where individuals lead by action rather than position. In this context, self-leadership becomes essential.

However, the integration of adaptive principles into traditionally hierarchical systems encounters resistance for most part. It can also be seen that organizational inertia, lack of clarity, and low autonomy hinder the translation of adaptive theories into practice (Mihajlov & Mihajlov, 2025). Bridging this gap requires individuals who can tackle complexity that isprecisely the capability nurtured through systems thinking and self-leadership.

2.4 Interplay between self-leadership and systems thinking

Some emerging studies (e.g., Houghton et al., 2012; Sarker et al., 2019) suggest that individuals with strong self-leadership capacities are more capable of adopting systems perspectives. A self-leader is more likely to recognize patterns in organizational behaviour, think beyond immediate tasks, and take ownership of long-term outcomes which are the key aspects of systems thinking. They are more suitable for balancing short-term pressures with strategic vision and resolve interdepartmental tensions (Stewart et al., 2019).

Despite these observations, there is limited empirical work that explicitly examines how self-leadership enables or enhances systems thinking in practice. Besides this, the joint impact of the two constructs, self-leadership and systems thinking, on adaptive organizational design, in the context of hierarchical administrative systems, remains underexplored. Any research that addresses become significant for organizations aiming to build sustainable leadership pipelines and redesign for agility.

Conceptual Model

3.1Rationale for the model

The model proposed in this paper conceptualizes how individual-level psychological and cognitive competencies can influence system-level adaptability.While self-leadership equips individuals with the ability to direct their own behaviour, systems thinking empowers them to see how their actions are embedded within broader networks. The rationale behind the model proposed is that individuals who possess self-leadership and systems thinking ability initiate feedback loops, identify inefficiencies, and advocate for structural or procedural change. Thus, the integration of these constructs enables both vertical and horizontal adaptability in the system.

3.2 Components of the Model

3.2.1 Self-leadership capacities (individual components):

Self-leadership is fundamentally anchored in the individual's ability to manage themselves effectively. This has four components namely, self-regulation, personal accountability, goal alignment, and intrinsic motivation. Self-regulation is the first component which refers to one's capacity to monitor, evaluate, and adjust their own thoughts, emotions, and behaviours. It enables individuals to stay focused and resist distractions. It also makes them adapt constructively to challenges that they face in achieving their goals. Closely linked to self-regulation is personal accountability which forms the secondcomponent of self-leadership. This denotes the internalized sense of ownership over one's decisions and actions, even in the absence of external supervision. This quality ensures that individuals take responsibility for both outcomes and processes which establishes trust and dependability within organizational systems. The third component, goal alignment, represents the process by which an individual's personal objectives are made to coincide with the organization's broader mission. This allows for a sense of purpose

and direction in both self-driven performance and collective success. Intrinsic motivation becomes the fourthcomponent of self-leadership which refers to the internal desire to engage in tasks out of interest, satisfaction, or personal value. This acts as the driving force that sustains long-term effort, creativity, and resilience within the individual.

3.2.2 Systems thinking capacities (cognitive components):

Similar to that of self-leadership, systems thinking involves a set of cognitive capacities viz. interconnected reasoning, pattern recognition, feedback orientation, and long-term perspective. These componentsenable individuals to understand complexity and interdependence within organizations. Interconnected reasoning refers to the ability to perceive relationships among different parts of a system. It allows the recognition of how changes in one area influence outcomes in another area. This mind-set moves beyond linear thinking to embrace holistic analysis. The next component of systems thinking is pattern recognition which involves identifying recurring trends, behaviours, or structural dynamics. This helps individuals anticipate problems or opportunities before they fully emerge. Feedback orientation is the next key component of systems thinking which refers to the awareness about how actions create ripple effects in reinforcing and balancing. It also creates awareness about how these loops can either sustain or destabilize a system. Long-term perspective is the fourth component which encourages individuals to think beyond immediate results and consider future implications. Together, these cognitive habits support thoughtful decision-making, adaptability, and strategic foresight in complex organizational settings.

3.3 Dynamics of the Model

The model suggests that self-leadership strengthens systems thinking by encouraging individuals to move beyond task-level engagement and reflect on the systemic consequences of their actions. In turn, systems thinking enhances self-leadership by deepening the individual's understanding of organizational complexity and interdependence. This, thereby, reinforces their sense of urgency and responsibility.This interplay of self-leadership and systems thinking produces a feedback loop in which empowered individuals contribute to a culture of adaptability. Over time, this dual reinforcement enables organizations to evolve from rigid hierarchies to learning-oriented, agile systems.

3.4 Visual Representation

Figure 1. Interplay of self-leadership and systems thinking leading to adaptive organizational design.

Self-leadership and systems thinking as interconnected constructs at the individual level.
Their joint influence on adaptive processes such as decision decentralization, communication flow, and innovation.
A feedback loop showing mutual reinforcement between empowered individuals and adaptive structures.

Discussion:-

4.1 Key Insights

One of the most significant insights from the model is that self-leadership acts as a foundational enabler of systems thinking. Individuals who develop self-regulatory habits such as goal setting, self-observation, and constructive self-dialogue are more likely to cultivate the reflective capacities required for systems-level awareness. When individuals take responsibility for their actions and outcomes, they are more inclined to understand how their roles intersect with larger organizational processes.

On the other hand, systems thinking enhances self-leadership by expanding the cognitive scope of individual agency. It encourages individuals to see their behaviour not just in terms of task completion, but in relation to systemic patterns, feedback loops, and long-term outcomes. This shift from isolatedbehaviour to interdependent functioning creates a dynamic situation in which individuals are both autonomous and aligned with organizational vision. This becomes one of the essential characteristics of adaptive systems.

Thus, the interplay between self-leadership and systems thinking generates a reinforcing cycle: self-led individuals are better system thinkers, and system thinkers are more strategic and proactive self-leaders. These competencies together produce individuals who are capable of sensing environmental changes. They also anticipate organizational challenges, for which they initiateinternal changes.

4.2 Implications for management and leadership development

This conceptual synergy has significant implications for leadership development in organizational context. This model is well suited for leadership training in adaptive organizations where leadership is expected from every individual to lead from their position, regardless of rank. This model provides the necessary framework for training programs which must include modules onself-awareness and personal mastery, critical thinking and systems literacy, and scenario planning and feedback orientation. By linking self-leadership with systems thinking, individuals at all levels can efficiently engage with complexity and collaborate across departments, and lead adaptive efforts within their spheres of influence.

4.3 Relevance to hierarchical and administrative systems

One of the critical applications of this model is in hierarchical and bureaucratic administrative systems, such as government departments, educational institutions, and large-scale corporations. These organizations often suffer from inertia, slow decision-making, and fragmented communication.However, by cultivating self-leadership and systems thinking among mid-level administrators, these systems can become more agile and responsive. For instance, a self-leading district officer in public administration may proactively introduce community-centric reforms, rather than waiting for higher directives.An academic department head with systems thinking may redesign workflows by identifying interdepartmental redundancies, improving both efficiency and morale.At the same time, this bottom-up transformation does not undermine hierarchy but enhances it by making it more fluid and responsive to context. When individuals in the middle layers of the hierarchy take ownership of systemic problems and solutions, adaptive change becomes embedded in the organizational culture.

4.4 Challenges and limitations

The integration of self-leadership and systems thinking is promising but it is not without challenges. This is because organizational culture plays a significant role in enabling or stifling these capabilities. For example, in cultures dominated by micromanagement or punitive control, self-leadership may be discouraged, and systems thinking may be seen as impractical.Additionally, systems thinking requires cognitive and emotional maturity, which may not be uniformly present across all organizational levels. Without adequate support such as training and mentoring, individuals may resist or misunderstand systems-based approaches.

Recommendations:-

Based on the insights from this study, several practical recommendations can be made: organizations should expand their leadership development programs to include modules on self-leadership strategies (e.g., self-goal-setting, self-

reflection) and systems thinking principles (e.g., feedback loops, mental models). Adaptive systems require individuals to take initiative. Steps must be taken to break isolated behaviour through collaborative projects and reflective learning sessions. During organizational restructuring or digital transformation initiatives, this integrated model can serve as a guiding framework to ensure that change is both people-centred and systemically informed.

Conclusion:-

As the prevalent literature suggests, there is a need for organizations to evolve from rigid, top-down structures to adaptive, learning-oriented systems in the face of uncertainty and rapid change. This paper has shown that such evolution is not solely a matter of structural redesign but also of human development. The integration of self-leadership and systems thinking provides a compelling pathway for this transformation.

The conceptual model presented here demonstrates how the interplay of self-leadership and systems thinking can reinforce adaptive organizational design. Empowered individuals, when supported by systems-oriented thinking, become catalysts for change from within. Their ability to act autonomously, while understanding the broader implications of their decisions, positions them to lead in decentralized, dynamic environments.

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