Chapter 1
Theory of Flexible Systems Management

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Abstract Flexible systems management has been evolving as a paradigm and has taken a more concrete shape, particularly, in the last two decades. A large number of perspectives and frameworks are linked with it. The term flexibility has been defined by various researchers in different contexts in a different manner. Various types of flexibilities in an organization are treated as strategic flexibility, organizational flexibility, people flexibility, operations flexibility, marketing flexibility, financial flexibility, information system flexibility, decision flexibility and so on. Though all these developments contribute towards a theoretical basis of the paradigm of flexible systems management, a well defined and comprehensive theory in this regard is still lacking. This chapter is an attempt to identify the building blocks of flexible systems management and their relationships and causality. This contributes towards answering the fundamental questions of theory building, i.e. 'what', 'how' and 'why'. The building blocks of flexible systems management are identified as: the situation, actor, process, proactive/reactive flexibility, internal/external flexibility, flexibility maturity, learning, action and performance. The chapter provides a critical appraisal of all the building blocks and relationships among them, which can be tested as a full-fledged theory in due course.

Keywords Flexibility · Flexible systems management · Theory building

1.1 Introduction

Flexible systems management has evolved and been enriched over a period of time, particularly in last couple of decades and has been reflected in many different shades in a variety of contexts (Sushil 2012a, 2015a). This has evolved

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more as an applied research area and resulted in the ideations and development of frameworks and models, largely, from the ground reality and work practices being followed in organizations. Some notable field-based contributions in this area comprise of output flexibility for small firms by Fiegenbaum and Karnani (1991), operating flexibility of multinational corporations by Allen and Pantzalis (1996), flexible enterprise by Gewirtz (1996), flexibility at work by Reilly (2001), determinants of organizational flexibility by Hatum and Pettigrew (2006), adaptability by McKeown (2012) and flexibility in decision making by Gerber et al. (2014) among others. Keeping in view the work practices in diverse areas, it has emerged as a multidimensional and polymorphous concept that embraces different types of flexibilities such as strategic flexibility, organizational flexibility, people flexibility, operations flexibility, marketing flexibility, financial flexibility, information system flexibility, decision flexibility and so on.

It has also been reflected in various connotations or dimensions of flexibility such as adaptiveness, adjustment, agility, amiability, autonomy, balance, compromise, customization, elasticity, liberalization, localization, malleability, mobility, openness, responsiveness, resilience, variability, versatility and so on. In the early stages, practical developments in business organizations took place mainly in the area of manufacturing flexibility through development of flexible manufacturing systems (Browne et al. 1984; Sethi and Sethi 1990) and defined in terms of labour flexibility, capacity flexibility, routing flexibility, machine flexibility, materials handling flexibility, maintenance flexibility, process flexibility, product flexibility, supply chain flexibility and so on. Upton (1994, 1995) connected the manufacturing flexibility work with organizational flexibility. Flexible work practices have also evolved over time such as flexi-time, flexi-place and flexible compensation, among others.

Some early thinking and research on flexibility in an organizational context include the contributions of Marschak and Nelson (1962) on flexibility and uncertainty, Ansoff (1975) in organizational and strategic flexibility, Heimann and Lusk (1976) on decision flexibility, Ackoff (1977) on flexible organizations, Eppink (1978) on strategic flexibility, Krijnen (1979) in flexible firm in terms of organizing, Buzacott (1982) in manufacturing flexibility, Aaker and Mascarenhas (1984) and Harrigan (1980, 1985) on strategic flexibility and Mason (1986) on valuing financial flexibility. A number of reviews have been published on different aspects of flexibility over time (e.g. by Shank et al. 1991; Saleh et al. 2009; Sharma et al. 2010; Roberts and Stockport 2014). However, despite development of various concepts, definitions, frameworks, models and systems, the theoretical discussions and attempts of theory building in the area of flexible systems management have been lacking. A good discourse on the theoretical exploration of the magic word ‘flexibility’ has been presented by Kickert (1985) in the context of public administration and policy making. He considered four theoretical approaches, i.e. contingency theory from organization science, cutback policymaking from administration scientific approach, meta-decision making from decision theoretical approach, and control variety from system theoretical and cybernetic approach. He concluded that flexibility is about speed and the degree of change in control

instruments to cope with environmental uncertainty. But, at the end, he also agreed about the lack of clear theory and expressed that to enhance its practical usefulness theory building on flexibility, is warranted. Any theory building attempts to answer fundamental questions such as 'what', 'how', 'why', 'who', 'where' and 'when', as delineated by Whetten (1989).

This chapter is an attempt to answer some of these questions towards building a theory of flexible systems management. Initially, a discussion is presented to trace the theoretical roots of flexible systems management from a variety of disciplines. Further, some well-established frameworks related to it are discussed. The central part of the chapter is devoted to identify 'what' are the elements or building blocks of flexible systems management and 'how' these are interrelated with reflection on 'why' these are supposed to be related in that manner. This can be treated as a consolidation of thinking and theoretical underpinnings of flexible systems management that may be treated as a base conceptual framework to be tested further for establishing a theory of flexible systems management. Finally, the chapter concludes with discussion on the proposed theoretical framework and directions for future research in this area.

1.2 Theoretical Roots

There are rich theories developed over a period of time in diverse disciplines that directly or indirectly indicate some type of flexibility in systems under consideration. The diverse areas of knowledge from where rich theoretical insights are derived in flexible systems thinking include socio-political thoughts, anthropology, economics, organizational theory, management theories, theories of strategic management and systems theory. A selective set of theoretical roots of flexible systems management are outlined in this section covering agency theory, duality theory, contingency theory, stakeholder theory, change theory and systems theory as depicted in Fig. 1.1. This is only a representative set of dominant theories that have been taken as base for flexible systems thinking and may not be treated as a comprehensive set of its theoretical roots.

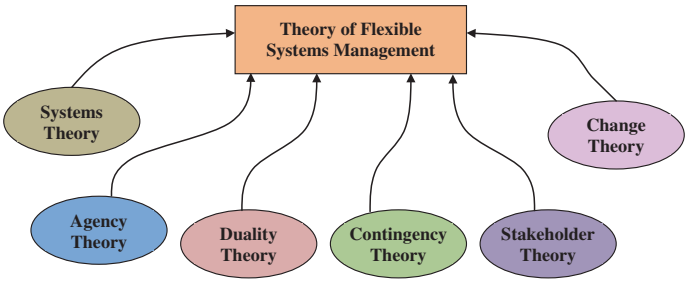

Fig. 1.1 Theoretic roots of flexible systems management

1.2.1 Agency Theory

The philosophical, political, economic and social thinkers have treated individual subjects as 'agency' having freedom to decide and act as self-determined individuals. This freedom may be circumvented by the external situation or structure binding the individual to take a set of actions not solely by free-will but guided by morality, ideology, hierarchy, power relationship, etc. This agency-structure debate in political and sociological circles acts as a basis of flexible systems management in the situation-actor-process (SAP) framework, where the actor is construed to have a free-will or rational freedom of choice, that is guided/restricted by the situation in which he/she is placed and the processes that govern him or her. Ross (1973) has discussed the economic theory of agency; a comprehensive review of agency-theory can also be seen in Eisenhardt (1989). Howard-Grenville (2005) deliberated on the role of agency while examining the persistence of flexible organizational routines.

1.2.2 Duality Theory

According to this theory, there is inherent duality of paradoxically opposite forces in the world, i.e., light-dark, above-below, male-female, continuity-change and so on. Duality theory has been applied widely as it can be seen in the works of Friedman (1972) and Epstein (1981), among others. Lawrence and Lorsch (1967a) have deliberated on the duality of differentiation and integration to be taken up side-by-side in complex organizations. The systemic flexibility treats this duality on the continuum from thesis to antithesis, thereby creating a range of options (some may be paradoxically opposite) and synthesize and dynamically change them by using the freedom of choice of the actors concerned. The core of the concept of flexible systems management has evolved around the concept of duality and management of paradox, which embraces the concept of ambidexterity.

1.2.3 Contingency Theory

Contingency theory reflects on the failure of the universalization of management principles and approaches. This theory, for the first time, gave significance to the 'situation' (context) in which a management action is to be taken up. Lawrence and Lorsch (1967b) have deliberated that structure of an organization depends upon the factors called as contingencies, which have been interpreted by various authors in a different manner. The management style and strategy are governed by 'if-then' relationship with the situation (Luthans 1973; Hoffer 1975). Mintzberg (1979) defined the two situation variables of dynamism and complexity and

accordingly defined four types of organizational structures, with adhocracy associated with dynamic as well as complex environment. The driving force for flexible systems management is also considered as 'situation', but rather than taking 'if-then' proposition, which is predeterminate and reflects pseudo-flexibility with one option for each situation, it is governed by 'both-and' proposition taking a range of options from thesis to antithesis. Depending upon the situation, an appropriate dynamic interplay of these options is to be exercised.

1.2.4 Stakeholder Theory

Any enterprise works effectively due to the contributions of and towards the benefit of a number of stakeholders such as owners, investors, shareholders, employees, customers, partners, suppliers, distributors, government, regulators, society and so on (Mitroff 1983; Freeman 1984). Thus, the flexibility of enterprise should be linked to all the stakeholders for overall performance (Sushil 2014a). It provides a basis for internal and external contexts of flexibility. In order to get full benefit of performance, all the stakeholders should contribute to the enterprise with their own share of flexibility. At the same time, enterprise should also create a framework for providing flexibility to all the stakeholders.

1.2.5 Change Theory

Change theory treats the reality around as continuously changing. In the context of organizations, the change is seen as the only constant. Flexible systems management addresses the issue of change in a holistic manner, i.e. treat change alongside the continuity in which organization is placed. Almost all the propounders of change have also agreed to such a balance in continuity and change in some form or the other including Weick (1982), Mintzberg (1987), Collins and Porras (1994), Drucker (1999) and Pettigrew (2000). This is also governed by the dynamic capabilities, as theorized by Teece (2009), and results in strategic flexibility (Evans 1991; Sanchez 1995; Young-Ybarra and Wiersema 1999; Warren et al. 2002; Shimizu and Hitt 2004; Nadkarni and Narayanan 2007; Sushil 2015b). Rhenman (1973) categorized the changes to be reversible and irreversible changes. Whereas Eppink (1978) proposed a typology of environmental changes that were operational, competitive and strategic. He mainly dealt with strategic change and corresponding strategic flexibility to cope with unforeseen circumstances or crisis situations by considering two options, i.e. "reduce the relative impact of change" and "increase the response capacity".

1.2.6 Systems Theory

Systems theory deals with the holistic concept of organizations as open systems governed by the causality generated by feedback. The theory of flexible systems management is built on the foundation of systems theory that treats a flexible system to be a more holistic conception than a rigid system. In systems theory a famous law, i.e. "law of requisite variety" was propounded by Ashby (1956) which reflects on the increase in environmental variety to generate more variety in control as a flexibility measure. While the older frameworks have largely treated flexibility as the opposite to rigidity in some way or the other, the upcoming frameworks are more holistic and treat flexibility as a mechanism of managing paradoxes. Systems theory also embraces decision theory (Simon 1947; Mintzberg et al. 1976), which evolved as a cognitive learning process. Argyris and Schon (1978), in their pioneering work on organization learning, defined different types of learning and pointed towards meta-learning, i.e. learning to learn as the basis of flexibility. A large range of organizational and strategic management theories have derived insights from systems theory, which also acted as a base of theory of flexible systems management. The contributions of Ansoff and Brandenburg (1969) on organization design, and Emery and Trist (1969) on causality of organizational environment are worth mentioning along with many other organizational and strategic thinkers. The systems theory has evolved over time by the contributions of many thinkers in the context of general system theory and systems approach (Boulding 1956; Forrester 1968; Churchman 1979). The basic systems concepts of 'hierarchy and emergence' and 'feedback and control' act as building blocks that are enriched by the concept of 'learning' (Checkland 1981). The feedback is not only to be used for control but also for continuous learning as well (Senge 1990). Feedback and learning act as a major building block of the proposed theory of flexible systems management.

1.3 Underlying Frameworks

The dominant frameworks (in the context of flexible systems management) that have been developed and tested in the last two decades are exhibited in Fig. 1.2. Some of the leading frameworks that jell with the paradigm of flexible systems management are meta-flexibility, ambidexterity, super-flexibility and SAP-LAP (based on systemic flexibility).

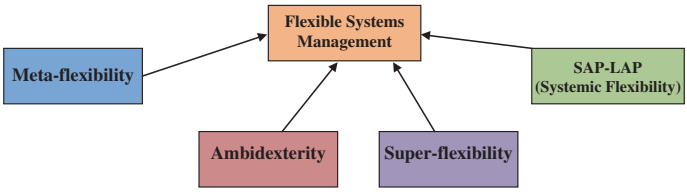

Fig. 1.2 Underlying frameworks of flexible systems management

1.3.1 Meta-flexibility

Volberda (1996, 1997, 1998) made a significant contribution while conceptualizing the framework of a flexible firm. According to him, a flexible firm has meta-flexibility that balances controllability (in terms of organization task) on one hand and dynamic capabilities (as managerial task) on the other. He took two dimensions of variety and speed and provided a taxonomy of steady-state, operational, structural and strategic flexibilities. At the same time, he provided a framework of balancing flexibility against controllability and defined four organizational forms: rigid (low flexibility and low controllability), planned (medium level of both flexibility and controllability), flexible (high level of both flexibility and controllability) and chaotic (very high flexibility and low controllability) organizations. Though Volberda's framework appears to have taken roots in duality theory, a theory of flexible firm still not taken a concrete shape.

1.3.2 Ambidexterity

The concept and framework of ambidextrous organization is proposed by Duncan (1976), and further developed and applied by O'Reilly and Tushman (1996, 2004), Birkinshaw and Gibson (2004), Lubatkin et al. (2006), Raish et al. (2009) and Mom et al. (2009) that visibly incorporates duality theory. An ambidextrous organization is defined as one that is able to effectively balance two opposite requirements at the same time. The most prominent framework, in this regard, is one that deals with a balance of 'exploitation' and 'exploration' strategies at the same time. The 'exploitation' refers to existing strengths, business domain, and systems for the organizations like GM. 'Exploration' on the other hand, refers to new business areas and innovation, as can be seen in organizations like 3M. It concludes by conjecturing and providing fieldbased evidences that the organizations balancing these opposite tendencies prove to be far more effective. Though the concept of ambidexterity does not directly refer to the term flexibility, it by and large provides a parallel framework of strategic flexibility.

1.3.3 Super-Flexibility

Bahrami and Evans (1995) had been working for long to understand the flexibility practices in high-tech and knowledge intensive organizations in Silicon Valley. They have also provided multiple dimensions of flexibility such as adaptability, agility, ambidexterity, hedging, liquidity, malleability, mobility, modularity, plasticity, resilience, robustness and versatility. Finally, they have matured their framework in defining the concept of super-flexibility (Bahrami and Evans 2010, 2011) that, in essence, treats flexibility in real time, i.e. an organization responds to the changing requirements almost on a real-time basis. The framework of super-flexibility comprises of the constructs such as agility, versatility, malleability, robustness and resilience and is defined as the ability to dynamically adjust to fluid conditions, at present and in the future. It provides a balance between withstanding unsettled conditions on one hand, and transforming and reinventing on the other. This gives a new dimension to the flexibility discourse with special reference to the organizations placed in highly turbulent situation. This work summarizes the evolution of concept of flexibility in literature and proposes a field-based framework answering the 'what' part of flexibility, but still a theory of flexibility seems to be at infant stage.

1.3.4 Systemic Flexibility and SAP-LAP

The work on flexibility was synthesized in the form of an evolving paradigm of flexible systems management (Sushil 1997). It clarifies the myths of flexibility (Sushil 2001b) and defines the concept of systemic flexibility that treats all the options from thesis to antithesis on the continuum (Sushil 1997, 1999, 2000a).

> Flexibility is the exercise of free-will or freedom of choice on the continuum to synthesize the dynamic interplay of thesis and antithesis in an interactive and innovative manner, capturing the ambiguity in systems and expanding the continuum with minimum time and efforts.

It brings out three keywords of flexibility as 'options', 'change mechanisms' and 'freedom of choice'. The overarching framework of flexible systems management has been taken as SAP-LAP (situation, actor, process, learning, action, performance) (Sushil 2000b, c, 2001a, 2009). The concept is deep rooted into systems theory and takes both the planes of analysis (SAP) and synthesis (LAP) with learning at the core to create flexibility in organizations as well as individuals. The theoretical underpinnings of this framework are deep rooted in the theories outlined in the previous section. It takes duality theory as the basis of systemic flexibility to manage the paradox of thesis and antithesis on the continuum by taking 'both-and' proposition rather than 'either-or' proposition considered in early stage frameworks. A typical illustration of simultaneously managing the opposing forces of continuity and change is visible in the framework of 'flowing stream strategy' (Sushil 2012b, 2013).

The constructs of SAP-LAP have further evolved taking insights from many well-established theories. For example, the 'situation' construct addresses the significance of contingency theory of management. The 'actor' construct imbibes the insights of agency theory (in terms of 'freedom-of-choice') and stakeholder theory (treating various, stakeholders as actors). The 'process' construct derives its basis from systems theory and theory of change (both incremental and radial). The synthesis in the form of learning, action and performance (LAP) flowers out of the modern systems and cybernetics theory. Though this framework seems to be encompassing a number of theoretical constructs, a fullfledged theory of flexible systems management is still awaited.

1.4 Building a Theory of Flexible Systems Management

Keeping in view that various past works in the area of flexible systems management have largely been related to provide frameworks for assessing and implementing flexibility in different facets of organizations, this section makes an attempt to consolidate them and conceptualize towards theory building. In order to answer the basic questions of theory building, i.e. 'what', 'how' and 'why', it takes SAP-LAP framework as the foundation. This framework, though derives insights from all the theories outlined earlier, takes duality theory and systems theory as the prime basis of conceptualization. The building blocks of proposed theoretical framework, taking SAP-LAP as the foundation are: situation, approach, context, maturity, performance, basic elements of flexibility and feedback (including learning and action). The question 'what' is answered in terms of the building blocks that takes the constructs of SAP-LAP and further builds on them and develop relationships ('how') and explains their causality ('why'). The conceptualization of the proposed theory of flexible systems management is portrayed in Fig. 1.3.

The fundamental building blocks of the proposed theoretical framework are situation, approach, context, maturity, performance, feedback (learning and action) and flexibility elements (actor and process).

1.4.1 Situation

The situation (both external and internal) is considered the prime driver for flexibility in organizations. The organizational reality is circumscribed by forces of both continuity and change. The situation can be both prevailing and anticipated in nature and thus drives the approach to be followed for practicing flexibility by the organizations. The situation acts as the prime mover in the theory of flexible systems management, which ultimately to be addressed by the leaning and various flexibility elements and developing a positive culture that promotes organizations flexibility and agility. Both external and internal situation factors are relevant for

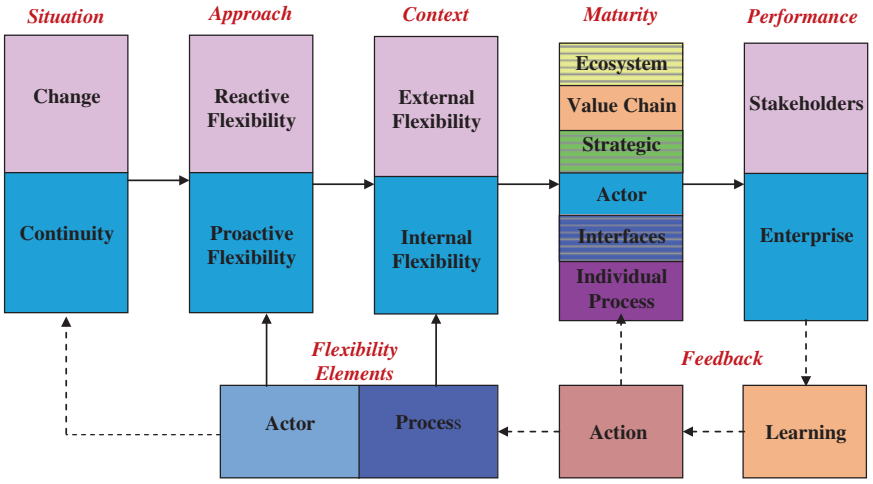

Fig. 1.3 Conceptualization of theory of flexible systems management

organizational flexibility. Early attempts of external factors of change on organization flexibility are reported by Burns and Stalker (1961) and Lawrence and Lorsch (1967a) and are related primarily to environmental structure and its uncertainty. The internal factors are perceived as continuity in terms of core values (Collins and Porras 1994), and organization culture and leadership (Schein 2010).

1.4.2 Approach

The flexibility approach could be reactive as well as proactive in nature. The reactive flexibility addresses the requirements of the prevailing situation; for example, unforeseen crisis, competitors' moves, and shift in customer requirements. Such a reactive flexibility has been addressed by the leading car maker, Honda in Indian context. Keeping in view the fuel cost, the customer preference shifted from petrol-based vehicles to diesel vehicles. Most of the competitors such as Maruti Suzuki, Hundai, Volks Wagon, and Tata came up with models in diesel segment but Honda continued with only petrol segment, which resulted into considerable erosion of its market share. Realizing the shift in the market, Honda responded by carrying out R&D and introducing diesel models like Amaze and Mobilio, which put it back on the pedestal of the market leaders in India. Thus, reactive flexibility in terms of adaptiveness and responsiveness contributes to effectively cope with the prevailing situation. Eppink (1978) has mainly treated the unforeseen environmental uncertainty as the driving force for strategic flexibility.

On the other hand, to realize higher return and to minimize business risk, the organizations should also anticipate the future changes in situation and adopt

proactive flexibility by innovation, adding variety, enhancing agility and building modular and reconfigurable designs to meet future flexibility requirements. The proactive flexibility would encompass both prospector and defender strategic approaches (Miles and Snow 1978) to deal with future opportunities and threats, respectively.

1.4.3 Context

Both the reactive and proactive flexibilities may be created internally as well as externally at the basic flexibility elements of both the processes and actors. The internal flexibility is delimited to the processes and actors within the organization, e.g. manufacturing flexibility, flexible work practices, information systems flexibility, and so on. The internal flexibility has been deliberated at level of groups by Okhuysen and Eisenhardt (2002), processes by Narassipuram et al. (2008) and projects by Olsson (2006). The external flexibility involves external actors such as vendors, partners, dealers, government and society to address flexibility in external processes of supply chain, strategic alliances and so on. The external flexibility has been treated in the context of outsourcing by Sia et al. (2008), and through the strategic alliances by Young-Ybarra and Wiersema (1999).

1.4.4 Maturity

Depending upon the context, the maturity level of flexibility is determined. A typical flexibility maturity model takes internal flexibility at lower levels and external flexibility at higher levels (Sushil 2014b, 2016). According to this model, there are six maturity levels; lower four levels deal with the internal context and upper two levels are for the external context. In the internal context, the first level is to have flexibility in individual processes, which then matures to second level by interfacing flexibility of one process with another one. Further, it matures by making internal actors or stakeholders flexible and finally, at the fourth (highest internal) level, comes the strategic flexibility (both proactive and reactive).

In order to realize the full potential of flexibility, an organization is supposed to transcend it to external level; first at operational and then at strategic plane. Thus, the fifth maturity level is of operational flexibility in value network by making supply chain partners and processes flexible. The highest (sixth) level of maturity would be attained by imbibing strategic flexibility in the whole ecosystem. All the levels of flexibility maturity will encompass the internal as well as external flexibility in different proportions.

1.4.5 Performance

It is theorized that the higher the maturity level of flexibility, the higher would be the performance. Thus, keeping in view the lower maturity levels for organizational internal context and higher maturity levels for external context, the performance at both the levels of enterprise and stakeholders is conceptualized. The performance of the enterprise as well as stakeholders would interplay with each other. It is of great significance to carry out the valuation of flexibility and presented by Triantis and Hodder (1990) and Schober and Gebauer (2008). The valuation of flexibility should incorporate the costs as well as benefits to both the enterprise and stakeholders.

1.4.6 Feedback and Learning

Flexibility enhancement in any organization tends to take place through feedback in terms of 'learning' and 'action'. The learning derived by the assessment of maturity and performance levels would be converted into appropriate strategic as well as operational actions (at the level of flexibility elements) to upgrade the flexibility at these levels. This will also be going back to recreate the situation in which the organization is placed. Organizational learning develops ability of individuals to respond to the stimuli quickly as well as effectively (Fiol and Lyles 1985; Gaile 2013).

1.5 Research Propositions and Discussion

In view of the above-mentioned building blocks and their inter-relations, the following research propositions are formulated in the process of building theory of flexible systems management. These propositions are based on the theoretical roots, as discussed earlier, and answer the 'how' and 'why' at the relationships among the building blocks of flexible systems management. These propositions need to be examined further in real life situations for validating the proposed theory.

Proposition 1 *The situation is the main driving force for adopting the reactive or proactive approach of flexibility based on prevailing or anticipated situation to be addressed (based on contingency theory and theory of change).*

The situation, both external in terms of change forces (opportunities and threats) and internal defined by continuity forces (strengths and weaknesses), acts as the prime stimuli for adopting an appropriate mix of flexibility approaches. As Krijnen (1979) proposes, a flexible firm responds to the environment in three ways, i.e. adapt, anticipate, or influence. The adaptation to environmental pressures is more an approach of reactive flexibility, which has been treated most

widely in the flexibility literature. But the firms are also supposed to have proactive flexibility to anticipate the environmental changes and to some extent also influence it. It should not only respond to environment in a passive mode, but also more in an active mode. Much of it depends on the positive culture as a part of the internal situation of the organization.

Proposition 2 *Both the internal and external contexts of flexibility are addressed by flexibility of actors as well as processes (based on agency theory, stakeholder theory and systems theory).*

Responding to the situation by flexibility approach would depend on the context as well, which could be internal as well as external. A lot of discussion on internal and external flexibilities has been done by many flexibility thinkers. The work of Ansoff (1968) is worth noting on this part of the theory of flexible systems management, which has been further developed by Eppink (1978) and Volberda (1998). Both internal and external flexibilities are created by the flexibility at the levels of actors as well processes. The internal actors and processes create internal flexibility in organizing and decision making to enhance response capacity. On the other hand, external actors (stakeholders) and processes would contribute to external flexibility having scope beyond the organizations.

Proposition 3 *The flexibility maturity level is dependent upon the internal/external context; the lower flexibility maturity levels are related to internal flexibility and higher maturity levels are related to external flexibility (based on systems theory).*

The internal/external context of flexibility has a direct bearing of the flexibility maturity of the organization. The lower four levels of maturity are internal to the organization created as the flexibility capacity within it at the level of processes, interfaces, actors, and strategies. The upper two levels of flexibility maturity are created beyond the organization. An organization has to be first flexible internally and then take it to the linkages beyond it in the value network and ecosystem as a whole. It treats only two levels of flexibility, i.e. operational flexibility and strategic flexibility to define the flexibility maturity in contrast to three levels taken by Eppink (1978), i.e. operational, competitive and strategic.

Proposition 4 *The flexibility maturity level influences the organizational performance; both for the enterprise and stakeholders (based on stakeholder theory).*

The higher the flexibility maturity of an organization, the better it would be in handling the environment (internal as well as external), and thereby enhance its performance. The performance would be enhanced for the enterprise not only in financial terms, but also in terms of long-term survival and growth. In addition to this, it will also contribute to the performance of all the stakeholders in terms of higher value through flexible and sustainable offerings and relationships.

Proposition 5 *Feedback from assessment of maturity level and performance is reflected in learning to determine actions required at the level of actors as well as processes in order to respond to the situation and recreate the situation (based on systems theory and theory of change).*

The feedback from the flexibility maturity and performance will lead for further flexibility enhancements. It will create organizational learning to take actions for developing flexibility capacity at the levels of actors as well as processes. The development of flexibility as an initiative stimulated by learning will respond to the situation on one hand, and will create a positive culture to create organizational agility and innovation on the other.

Thus, the proposed theory of flexible systems management envisages that both the external and internal stimuli related to various situations influence the approach and context of flexibility to be adopted. This turn, will help in evolving the flexibility maturity of the organization impacting the performance, both from organizational and stakeholders' perspectives. The learning generated in the process leads to taking of actions on various elements of flexibility and the evolution goes on.

1.6 Conclusion

The work on different aspects of flexible systems management have been done in past to bring out the relevance and importance of flexibility of different types in the management of organizational systems. The research work on flexibility (reported in literature) is more of applied nature and is largely restricted at the level of frameworks, definitions, and real-life illustrations and implications. The theoretical underpinnings of flexible systems management have, in general, been lacking in most of the past researches except a few that deliberated on some theoretical basis of flexibility in organizations. In view of this research gap, the chapter has made an attempt to propose a theory of flexible systems management. First, it traced the theoretical roots and then reviewed dominant frameworks related to it. The systems theory, agency theory, duality theory, contingency theory, stakeholder theory and theory of change are considered as the main channels that seep into the flexibility theory. The paradoxical nature of flexibility is reflected in a number of past definitions such as meta-flexibility, super-flexibility, ambidexterity, and systemic flexibility. The SAP-LAP framework has been examined for synthesis of various theoretical constructs and treated as the foundation for identifying building blocks of the proposed theory of flexible systems management. The basic questions of theory building, i.e. 'what', 'how' and 'why' have been answered around these building blocks and their conjectured relationships that are summarized in the form of research propositions of the theory of flexible systems management.

In order to build a more comprehensive theory, the constructs taken in macro conceptualization will have to be defined in terms of various variables in flexibility theory. Further, this requires testing of this theory conceptualization in empirical settings and case contexts. At this stage, this attempt can at best be treated as a stepping stone towards building a comprehensive theory of flexible systems management.

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