Chapter 2
A Systems Approach to Leadership Overview

2.1 Introduction

Developing a high performance organisation is an appropriate and achievable goal in today’s business environment. “High performance” organisations are regarded as “best in class” and do a lot more than survive. They prosper due to their inherent capacity to perform and adapt to a greater extent than their competitors. As a result, high performance organisations deliver greater satisfaction and maximum long term value to their stakeholders. Sustained high performance comes from an organisation’s capacity to deliver results in the short term while rapidly adapting to longer term external and internal changes. In relatively stable conditions creating a high performance organisation is a significant challenge. In conditions of high complexity and uncertainty this challenge becomes much more difficult. The primary challenge for organisational leaders today can be summarised in the question:

*How do you create sustainable high performance in conditions of high complexity and uncertainty?*

Action oriented leaders who are faced with significant competitive pressure are typically interested in the immediate and practical steps of what needs to be done now. They want to achieve the greatest degree of sustainable change, in the shortest time, with a minimum of resource input. Making this question actionable for practising organisational leaders and adding a sense of expediency, it becomes:

*What are the steps I need to take now to move my organisation (or part of it) as quickly and effectively as possible toward sustainable high performance?*
2.2 A Systems Approach to Leadership Overview

A Systems Approach to Leadership (SAL) is a comprehensive approach to sustainable leadership and organisation development designed to answer these two key questions. It is a methodology which overcomes problems inherent in reductionist\(^1\) approaches to work at a “whole system” level to tackle the fundamental issues of sustainable leadership and organisation development. SAL provides a practical solution to the many forms of complex problem that confront all organisational leaders today.

SAL is a methodology consisting of a framework with four major components; an overall strategy, an actionable method, a set of supporting action strategies, processes, skills and knowledge which rest on a foundation of systems models, methods and basic assumptions as shown in Fig. 2.1. Together all four levels make up the approach.

A Systems Approach to Leadership is defined as:

... an holistic approach to leadership and organisation development which can be used by any leader at any organisational level to optimise an organisation (or part of it) to create sustainable high performance in conditions of high complexity and uncertainty.

A Systems Approach to Leadership is built on a framework consisting of:

... a strategy of “whole system” development to optimise all forms of organisational entity (i.e. individuals, teams, business units and whole organisations) for sustained high performance;

... an “in context” method of systematic enquiry, critical reflection and strategic action to move quickly and effectively toward local optimisation.

... a supporting set of integrated action strategies, processes, skills and knowledge.

... foundational assumptions, systems methods and models which link individual cognition (knowledge-in-action) to organisation performance.

The top element of the framework is a strategy which provides an overall purpose and focus for the methodology. The core of the framework is an actionable development method – the Cognition-Systems Method (CSM) which links leadership action “in the moment” to individual and organisation development and ultimately long term performance. Supporting the method at the next level are an integrated set of action strategies, processes, skills and knowledge. At the base of the framework are general and specific systems models and methods as well as foundational assumptions based on a naturalistic world view. Together all four

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\(^1\)Reductionist and holistic approaches are discussed in Chap. 4.
levels constitute the methodology. The base level can be expanded into three components giving a total of six levels as shown in Fig. 2.2.

2.3 Understanding a Systems Approach to Leadership

A good understanding of SAL requires appreciating (a) its inherent holistic character, (b) each of its component parts, and (c) how each of the parts are integrated into the whole framework. The emphasis of this chapter is on the holistic aspects of SAL [points (a) and (c) above]. Outlining each of the component parts occupies the remainder of this book. Presenting a global overview of SAL in a single chapter has two implications. Firstly, it requires omitting many points of detail, and secondly, it means there will be a degree of repetition when each component is explained in
detail in later chapters. This dilemma between whole and part is a natural and unavoidable part of holistic approaches.

The overview of SAL’s major components follows a sequence which starts with the three components of the base level and then moves through the top three levels starting at the top (see Fig. 2.2). Both this chapter and the whole book follow this sequence. The reason for this apparently meandering path is that the overall strategy, method and supporting components have little relevance if the foundational elements are not appreciated. As SAL’s overall strategy is the only component not discussed elsewhere it is outlined in some detail below. The outcomes from SAL and some of its features are presented to close the chapter.

### 2.4 Fundamental Assumptions

SAL is based on a set of foundational assumptions (a world view) consistent with New Physics\(^3\) and a naturalistic environment. In summary these assumptions are that our world is:

- Inherently unknowable
- Highly interconnected
- Probabilistic
- Related to mind and consciousness.

All of SAL’s components are based on these basic assumptions which give the framework a high level of internal coherence and make it a natural fit with high complexity and uncertainty. These foundational assumptions also make SAL significantly different to the bulk of traditional leadership and organisational approaches which are largely based on the assumptions of Classical Physics and deterministic environments. Methods based on these assumptions are generally not highly effective in situations of high complexity and uncertainty. The four basic assumptions of Classical Physics are that our world is:

- An objective and independent entity
- Capable of being completely known
- Predictable from application of relevant laws
- Unrelated to consciousness and mind.

These two different assumption sets and the types of situation where each works effectively are discussed at length in Chap. 3 and the organisational approaches based on them in Chap. 4. For many individuals personally adopting the assump-

\(^2\)The assumptions of “the New Physics” presented in this section represent an easily understood approximation of SAL’s philosophy. A brief discussion of the reasons for this and SAL’s underpinning philosophy (Critical Realism) is set out in Appendix A.

\(^3\)These four assumptions capture the ideas central to the New Physics. Paul Davies (1983, 1989) provides readable accounts of the New Physics for those interested in more detail.
tions of New Physics means embracing a different paradigm and thinking in a different way. This shift in core beliefs involves much more than simply acquiring knowledge and is often one of the most challenging aspects of putting SAL into practice. The importance of these foundational assumptions can not be over emphasised and is why Chaps. 3 and 4 are presented before outlining the details of SAL.

### 2.5 Systems Models and Methods

SAL draws on a variety of systems models and methods which fit into two categories. Firstly, there are a range of general systems approaches, and secondly, a set of specific systems models and methods developed as part of SAL for application to leadership and organisations. The general systems approaches are listed below and discussed in more detail in Chap. 6.

- Open systems approaches aim to represent a real world or virtual entity as a system and focus on its interactions with its environment and future evolution. This includes systems principles (the principles of general order) which apply to open systems.
- Systems Dynamics enable an appreciation of the dynamics over extended time of how multiple systems or the internal elements of one system interact and evolve.
- Complexity and Chaos Theory focus on the behaviour of systems close to instability. They consider system limits and sustainability as well as system collapse and renewal. Complexity and Chaos Theory introduce the concepts of spontaneous self organisation and strange attractors.
- “Soft” systems methods enable integration of how individuals think about and make sense of the world into higher level systems.

The systems models and methods specific to SAL are listed below and then briefly outlined. A whole chapter is devoted to each later in the book.

- The Adaptive Systems Model (ASM) considers the internal elements of a system, the dynamics of how they function and are integrated into a singular entity to achieve high performance and long term viability.
- The Cognition-Systems Model of Organisation Performance (CSMP) links individual (leader) thinking to the results an organisation delivers over time.
- Emergent Goal Achievement (EGA) is a method of achieving goals quickly and effectively in conditions of high complexity and uncertainty.

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4Emergent Goal Achievement can be considered as a version of Action Research with an emphasis on action and goal achievement rather than on research.
2.6 Adaptive Systems Model

A general Adaptive Systems Model (ASM) represents how a naturalistic entity functions “in action.” Entities such as whole organisations, business units, teams and individuals closely resemble naturalistic systems and can be represented by ASM. In representing any form of organisational entity a singular whole system, ASM enables judgements about the systems current performance, future viability and all of the factors contributing to these outcomes. The model focuses on the dynamics of an entities internal functioning and how it achieves its goals. Internal functioning elements include conducting core activities, collecting and processing information, accumulating knowledge, making decisions, balancing conflicting priorities and adapting to changes. An Adaptive Systems Model acknowledges an entities inherent natural disposition and tendencies. It enables an understanding of how each individual internal component functions, the subtle dynamics of how they interact and are integrated to create the entities overall (i.e. whole system) properties. Adaptive systems can exist as recursive structures clustered one within another which leads to complex recursive structures consisting of nested systems and sub-systems. A given system may internally contain several levels of sub-system and also be a sub-system of larger systemic structures. The Adaptive Systems Model is outlined in more detail in Chap. 7 and is used as the basis for whole system diagnosis in Chap. 14.

2.7 Cognition-Systems Model of Organisation Performance

The Cognition-Systems Model of Organisation Performance (CSMP) is central to SAL and places a leader as an adaptive system within a larger adaptive system – the organisation (or part of it) – which functions in a larger environment (see Fig. 2.3). For each system a set of dynamics exist internally within each as well as between each system and its environment. This system within system model consists of four sets of factors which are: the internal functioning of the individual leader, interactions between leader and organisation (or part of it), the internal functioning of the organisation, and interactions between organisation and its environment. Each set of factors forms a layer consisting of many individual elements which are interconnected to, and influence, all others. The overall arrangement becomes a series of nested layers where a disturbance at the centre spreads outwards like the ripples on a pond.

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5 ASM is based on a qualitative interpretation of Beer’s (1979, 1981, 1985) Viable System Model.
With the addition of cognition to individual functioning and results for stakeholders, this model links individual (leader) thinking to the results an organisation delivers over time. The layers in this model become:

- Results for all stakeholders (organisation performance)
- The dynamics of the organisation as a system “in action” through its:
  - Internal design and functioning
  - Interactions with the external environment
  - Leader-organisation interaction
  - Individual leader functioning and cognition.

CSMP is clearly focused on organisation performance which is defined as results for all stakeholders over the longer term. Working backwards through these layers from results to cognition the connections between them are as follows. The results an organisation delivers flow from the dynamics of how it functions “in action” each moment it is in operation. These dynamics can be broadly divided into two groups, its internal design and functioning and interactions with its external environment to service its stakeholder’s needs. An organisation’s internal design and functioning and external strategy are largely determined by the actions, over time, of its leaders. Leaders’ actions are determined by how they function and think individually. Leader thinking (and knowledge-in-action) effectively become a blueprint for the organisation and its performance. Integrating all of these factors into a coherent whole system enables it to be viewed as a model of organisation performance (see Fig. 2.4).

CSMP can be used to represent any individual, at any level of an organisation, in any formal or informal position, and the part of the organisation they interact with in a particular situation. For example, the model can be used to represent formal leaders and their area of organisational responsibility such as a CEO and the entire organisation, a business unit leader and business unit, or a team leader and team. The model can also represent an individual without formal authority and the parts of the organisation they interact with or are able to influence. It could be applied to
temporary, project or virtual teams to represent any member (or leader) of the team and the team as a whole. Note that while the individual is shown as a separate entity (sub-system) they are also inherently part of the overall (larger) system. CSMP is more fully explained in Chap. 8.

2.8 Achieving Goals in High Complexity Environments

Goal achievement is a critical aspect of the long term survival of all forms of organisational entity and a critical leadership issue. In many naturalistic situations outcomes occur in the longer term and the effect of unknown and unknowable elements makes outcomes difficult, if not impossible, to predict. In these situations traditional methods of goal achievement based on deterministic assumptions are not highly effective. Central to SAL is a method of goal achievement, Emergent Goal Achievement (EGA), which delivers outcomes as quickly and effectively as possible in conditions of high complexity and uncertainty.

As its name suggests, EGA uses emergent cycles to progressively converge on desired goals. Each cycle consists of deepening understanding and taking creative action. The method can be thought of as progressive puzzle solving giving movement toward goals and reduced uncertainty (greater understanding or insight). In each cycle creative action improves the situation moving it toward goal achievement as well as generating further learning. Learning deepens understanding (i.e. reduces uncertainty) about the situation and informs the next round of action increasing the ability to move effectively toward desired outcomes. In complex uncertain situations an ability to quickly extract maximum learning is advantageous. EGA involves experimenting strategically and intelligently at the margin of the current situation (and what is known about it) through movement created by taking action (See Fig. 2.5). We unconsciously use a similar approach to construct effective action “in the moment” in chaotic situations such as navigating a busy
sidewalk. EGA can also be regarded as an ongoing process of renewal and development, or continuous learning and improvement. It is the basis of SAL and its development method which are described in more detail in Chaps. 9 and 10.

SAL’s strategy is based on the model of organisation performance (CSMP), Emergent Goal Achievement (EGA) and the Adaptive Systems Model (ASM). Having briefly outlined these it is now possible to explain SAL’s strategy and method.

2.9 Strategy / Approach

There are many possible ways to create high performance organisations. Each uses a particular approach or strategy to engage with this complex problem. SAL’s strategy is one of “whole system” development to optimise all forms of organisational entity (i.e. individuals, teams, business units and whole organisations) for sustained high performance. The key elements of this strategy are briefly discussed below.

2.9.1 Performance

SAL has a clear focus on organisation performance which is defined as results delivered to all stakeholders over extended time. This broad definition of performance balances the many different facets of stakeholder requirements such as financial, social and environmental. A more detailed discussion of performance is in Chap. 8. SAL uses performance as the basis for critically evaluating all aspects of organisational and leadership activity. Both quantitative and qualitative methods are used in assessing the actual performance of an organisational entity.

Fig. 2.5 An overview of Emergent Goal Achievement
2.9.2 Whole System Development

SAL focusses on developing all forms of organisational entity as “whole systems” towards optimisation. It can be applied to individuals, teams, business units, whole organisations as well as virtual teams and other innovative structures. Developing whole system capability goes beyond “looking good” to tackle the core issues underpinning immediate performance as well as competitiveness and long term viability. Sustainable development of any “whole system” requires developing all CSMP layers in a coordinated way. It means that as well as improving aspects of the organisation’s functioning, there also needs to be a corresponding development in the way leaders interact with the organisation and their knowledge-in-action.

2.9.3 Leaders as System Builders

SAL’s strategy can be used by any individual, at any level of an organisation, in any formal or informal position. Each individual (leader) has a capacity to influence all situations they interact with to some extent. An individual’s potential for influence will depend on their formal and informal position in the organisation. Those in more senior roles or with high levels of informal influence are more likely to be able to muster greater resources and have greater impact than those at lower levels or those without significant levels of informal influence. Senior leaders are more likely to be able to initiate large scale change efforts supported by external consulting and training. Individuals at lower levels are more likely to only have themselves and what they are personally able to do. Each leader’s situation has a set of limits constraining what they are able to do. The challenge for each leader is to maximise their impact within these constraints.

A strategy of whole system development positions a leader in the role of whole system designer, builder and facilitator. This role has a high “value adding” impact on any organisation and is important for leaders at all levels. The role involves taking action to understand, design, create and transform all forms of organisational entity to improve performance and viability. As leaders are inherently part of the systems being developed, the development process also means developing themselves and their own practice as well as some part of the organisation.

2.9.4 Continuous Development

SAL’s strategy uses a development method which works “in context” and is conducted parallel to normal organisational activity. SAL proposes ongoing evolution as a part of normal activity and everyday business rather than just “once off” project style step change. Leaders at all levels are encouraged to do as much as they can to develop themselves and the entities around them.
The development steps can be both large and small. While no learning or improvement initiative is too small and each one makes a difference, sometimes large steps (e.g., projects) are necessary and appropriate. All systems have a tendency to naturally decay over time which can be minimised and in some situations reversed by continuous development⁶. When continuous development is adopted as a part of normal activity, over time, it usually results in significantly greater improvement than single step improvement. This is due to the cumulative effect of improvement being adopted as a cultural norm and distributed throughout an entity.

A key leadership decision is balancing resource allocation between ongoing business and future development. The percentage of total resources and time allocated to each depends on an assessment of present and future needs and resource availability. Too little resources allocated to future development means neglecting future performance. Too many resources allocated to future development runs the risk of excessively reducing current performance.

### 2.9.5 Multiple Methods

SAL’s holistic perspective enables it to integrate a wide range of other, usually more detailed, approaches for understanding and improving organisation performance⁷. These can include reductionist approaches which focus on a specific aspect of leadership or organisation performance. The use of reductionist approaches within a whole system framework minimises any undesirable effects that may occur when they are used in isolation.

### 2.10 The Cognition-Systems Method

The actionable component of SAL is the Cognition-Systems Method, which aims to maximise effective action in conditions of high complexity and uncertainty. CSM is designed for practical application in real workplaces to solve the complex problems inherent in organisations today. It can be used by anyone anywhere in an organisation to solve general problems and develop whole systems. As a method of systemic (i.e., leadership and organisational) development CSM can be used to create sustainable high performance. In this mode CSM is used by individual leaders as an “in context” method for developing both themselves and the parts of the organisation they interact with. CSM focusses on the dynamics of an entity.

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⁶Entropy is the term used to describe the tendency of a closed systems toward decay and greater randomness.

⁷As set out in Appendix A SAL is a systems multimethodology with the capacity to employ a wide range of different methodologies.
“in action” associated with real and pressing issues. It seeks to reinforce the dynamics supporting high performance and reduce the dynamics associated with dysfunction and sub-optimisation.

CSM consists of two intimately linked action fronts (individual and organisational) which work off each other and cannot be separated (see Fig. 2.6). Individual work focusses on individual knowledge-in-action, learning and skill development. Organisational work involves developing all forms of organisational entity and provides a context for individual work. CSM is a “data driven” or evidenced based approach which relies on both qualitative and quantitative data. Collecting and evaluating quantitative data in a systematic and disciplined way can be achieved relatively simply yet effectively using a variety of established procedures. Qualitative methods are usually less familiar to many leaders than quantitative methods. How to effectively use these and other methods supporting SAL is briefly outlined below and more fully discussed in Chaps. 11–15.

### 2.11 Individual and Organisational Actions Strategies, Processes and Skills

Putting CSM into practice relies on a set of action strategies and processes which are each useful in their own right for working effectively with high complexity and uncertainty. These occupy separate chapters and together total one third of this book. The content of each chapter and relevance to SAL is briefly outlined below.
2.11.1 Preparing Yourself for the Journey

The personal challenges of attempting to create high performance are significant and involve managing your own motivation and satisfaction on the journey. Chapter 11 explores the personal and emotional dimensions of motivation and energy. It shows how to function optimally in conditions of high complexity and uncertainty and maximise your chance of success and enjoyment.

2.11.2 Naturalistic Enquiry

Collecting and interpreting qualitative data in naturalistic environments is significantly different to collecting quantitative data in deterministic environments where an observer is able to establish “the facts” with one set of observations or measurement. Qualitative data in naturalistic environments is largely subjective and can include individual perceptions, emotions and thoughts. Collecting and interpreting this type of data relies heavily on processes of social interaction and the individual perception, skill and knowledge of the researcher. Chapter 12 recognises that there will always be some degree of uncertainty and unknown elements in naturalistic situations but shows how to reach robust conclusions that enable action.

2.11.3 Critical Reflection and Learning

As individual knowledge-in-action is central to sustainable change, the skills of critical reflection and learning are essential both at a personal and organisational level. Details of processes to critically reflect and learn from events are presented in Chap. 13.

2.11.4 Whole System Diagnosis and Adaptive System Organisation Design

Chapters 14 and 15 show how to conduct whole system organisational diagnosis and development. Designing organisations as adaptive systems is central to creating sustained high performance.

2.12 A Systems Approach to Leadership Outcomes

As a whole methodology, SAL provides a coherent and comprehensive approach to working in organisational settings to achieve sustainable high performance. Alignment and coherence are achieved through a clear overall purpose and integration of
individual framework elements which share a common set of foundational assumptions. Many of SAL’s components are individually useful in leadership and organisation development. The deep integration and common purpose of all individual components generates synergies which give SAL an overall impact much greater than the sum of its individual parts.

SAL quickly and effectively develops both leader and organisation on the journey to sustained high performance. Specific outcomes for individual leaders include deeper insight and greater leadership effectiveness in interacting with individuals, teams and the wider organisation. These individual skills enable creating sustainable high performance in all forms of organisational entity (i.e. individuals, teams, business units and whole organisations). These capabilities more closely resemble a performing art and are best assessed “in action” rather than through a written or verbal test. Organisational outcomes are the “main event” and include improved performance and long term viability.

2.12.1 Competitive Advantage

Significant individual and organisational advantage goes to individuals and organisations who can adapt the fastest and most appropriately to emerging trends while maintaining high performance in the short term. SAL has a high potential for delivering these outcomes. Its capacity to improve both current performance and future viability make it of significant importance to leaders and organisations. Those who embrace this frontier and embark on the challenging but rewarding journey of systemic development can achieve significant personal and organisational competitive advantage. When it is used effectively the process generates a significant return for the time and effort expended.

2.12.2 In Depth (Not a Quick Fix)

While SAL can provide significant short term benefit for individual leaders and their organisations, it is definitely not a “quick fix” approach. SAL is designed to be as simple and usable as possible, but is also complex enough to effectively tackle the most complex of organisational situations. That is, it is “requisitely complex.” While sustainable improvement may sometimes happen quickly and easily, it usually takes significant time, effort, courage, learning and skill development.

2.13 Conclusion

Sustainable leadership and organisation development will always remain a complex and challenging undertaking. SAL is an holistic approach which simplifies this challenge while retaining the highest possible level of effectiveness. It uses
multiple methods within a systems framework to enable leaders to work effectively in high complexity environments. SAL is a practical approach which integrates the internal world of individual cognition with the dynamics of all forms of organisational entity and ultimately organisation performance. Its combination of strategy, method and supporting elements enable those wishing to undertake the development journey to add maximum value to an organisation with a minimum of time effort and resources. Each of the following chapters sets out the relevant components summarised in this chapter.
A Systems Approach to Leadership
How to Create Sustained High Performance in a Complex and Uncertain Environment
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