INTEGRATED
MANAGEMENT
COMMUNITY

Integrated Management Definition

Stakeholder Needs,
Expectations and Aspirations

Personnel

Commerce

Data

Matter & Energy

Goods and
Services
(received,
created and
delivered)
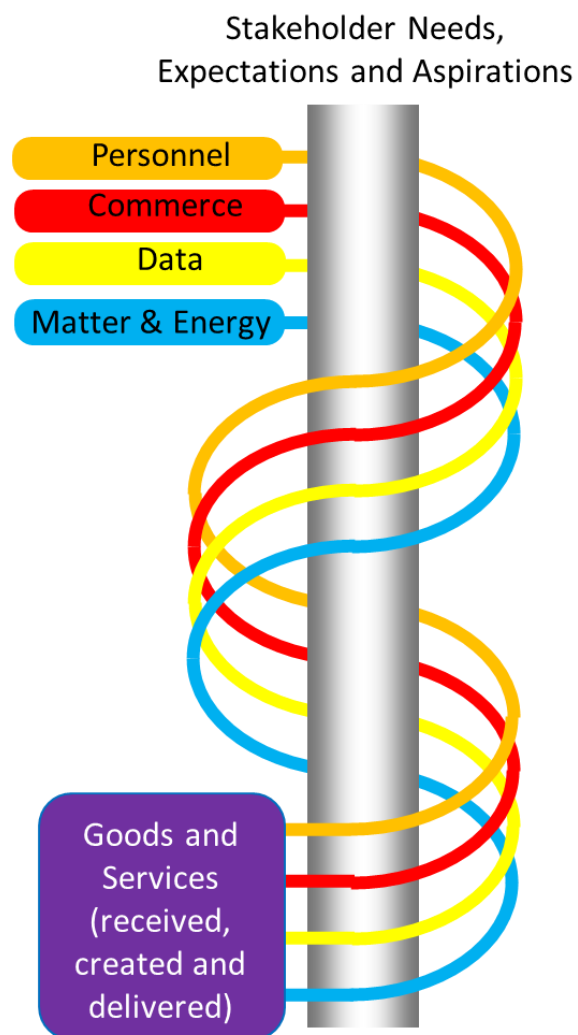
Executive Summary

Integrated management is a joined-up thinking approach to management which addresses the whole functionality of an organisation and how it impacts its various stakeholder needs, expectations, and aspirations. Such an approach is holistic and boundless and is consequently universal in its application. The benefits of integrated management are, that through greater coherence within its structures and processes, and creating more equitable and higher stakeholder value. This is achieved through enhanced effectiveness, efficiency, and resilience. Integrated management globally impacts economic, social, and environmental goals, and is essential in addressing many problems that are experienced as complicated, challenging, or intractable.

Since the formal defining of integrated management in 2002 by the IMC, there has been a paradigm shift towards integrated thinking within organisations. An indicator of this is organisations adopting partial and fully integrated management systems and more holistic ways of assessing the performance and value of organisations. This paper revisits the 2002 integrated management definition, which remains essentially unchanged, and elaborates on its expressed principles and practical application via the MSS1000 single universal management system standard. This aids organisations in formulating their strategy to take a more joined up approach to their management.

For leaders to leverage the full potential value of integrated management, it needs to be applied globally throughout the governance and management of all nations and organisations, irrespective of type and size, and to their interactions. This requires that all participants be appropriately educated and trained so that their competence embraces the understanding of and ability to apply:

➢ The integrated management core definition.

➢ The universal management principles.

➢ Universal standards and frameworks such as MSS 1000.

This implies that all learning and development programs wherever they exist should be reviewed and appropriately restructured and updated based on integrated management thinking, principles, and practice.

Integrated Management Community (IMC)

The Integrated Management Community was established in August 2020 from its predecessor, the IQA/CQI Integrated Management Special Interest Group (IMSIG). Prior to IMSIG morphing into the IMC it was the largest CQI SIG special interest group with a global CQI and non-CQI membership and a global leader in facilitating integrated management.

IMSIG was created around 1995 to advise on simultaneously complying with the new standard ISO 14001 for environmental management systems and the existing ISO 9001 for quality management systems. However, early in the new millennium, IMSIG broadened its perspective to address the management of the totality of an organisation's functionality to optimise stakeholder satisfaction while making the best use of resources. This involved focusing on the theory and the application of integrated management in its widest sense and also integrated management systems which have now become mainstream thinking.

In 2014 IMSIG created the world's first universal management system standard MSS 1000 facilitating fully integrated management systems without boundaries.

Copyright

Ian Dalling was the principal author of issue 1 this document and this revision.

No part of this document may be reproduced in any form without permission being granted by the Integrated Management Community except for the foundation definition provided that the source is clearly acknowledged.

The Chartered Quality Institute formally relinquished all interest in the assets of the CQI Integrated Management Special Interest Group (IMSIG) in 2020.

Revisions

Issue	Date	Changes	Participants
1	23/09/2002	Original issue.	Ian Dalling & IQA IMSIG Steering Committee
2	24/08/2003	IMSIG adopted the formal definition of integrated management taking account of the characteristics listed in section 5 and feedback from an IMSIG presentation to the IQA Professional Policy Board (PPB) on 15 May 2003.	Ian Dalling & IQA IMSIG Steering Committee
2.1	11/05/2007	IQA renamed CQI.	Ian Dalling & CQI IMSIG Steering Committee
3	17/10/2022	CQI IMSIG morphed into IMC. 'Aspiration' added to the IM basic definition. IM definition grammatically restructured into process and outcome format. IM principles added. IM pictogram added. IM benefits added.	Drafting - Ian Dalling (IMC Chair) Reviewers (IMC Hub Members) – Cheryl Burgess, Paul Harding, Charles Malack, David Scrimshire

Table of contents:

Table of figures

1   Introduction

The Integrated Management Community (IMC) originated as an Institute of Quality Assurance (IQA) special interest group in 1996 to assist interested parties and organisations wishing to adopt and implement integrated management. Clearly defining integrated management and how it is applied is part of the IMC's ongoing role. When governance and management are defined without boundaries, they become congruent concepts. Integrated governance and integrated management are therefore considered interchangeable and the same topic.

Integrated management is primarily an attitude to management. It is a joined-up thinking approach which addresses the whole functionality of an organisation, its environment and how it impacts its various stakeholder needs, expectations, and aspirations. Every element is managed with respect to the whole and not in isolation of the whole. Such an approach is holistic, recognises no barriers and is consequently universal in its application. It does not preclude reductionism as long as it is associated with synthesis.

The benefit of integrated management is improved balanced overall performance delivering equitable stakeholder satisfaction and making more effective and efficient use of resources. Typical benefits are elaborated in section 0 of this paper.

Although management is practised daily throughout the world, it is still abstract as it is conducted within the consciousness of one or more managers. Similarly, the success of management is judged within the consciousness of stakeholders each from their own perspective. This is an extraordinarily complicated interaction which is at the heart of the success of all organisations irrespective of their size, type and established for profit or non-profit.

A formal definition of integrated management was created in 2002 and it has essentially remained unchallenged and unchanged apart from the minor addition the word 'aspiration' and a grammatically restructuring into a process and outcome format in this 2022 issue of this paper. However, since formally defining integrated management, there has been a paradigm shift within many organisations towards taking more integrated approaches to management. An indicator of this is the adoption of partial and fully integrated management systems by organisations and also to attempt to assess organisations according to their multiple impacts beyond financial.

This paper reviews, updates and expands on its first edition and elaborates on the basic definition of integrated management and its characteristics to help in its practical understanding through universal management principles and a universal management system standard (MSS 1000).

Creating the universal management system standard MSS 1000, that was first published in 2014, was only possible because of taking a fully integrated approach to management, complying with universal management principles, and making use of a complete hierarchical boundless management topic taxonomy. These principles have been added to this document to provide a fuller understanding of the original definition and to aid in its practical application.

The following stakeholders have been identified as having an interest in the definition and application of integrated management:

> ➢ Integrated Management Community members.

➢ Academics and researchers, and bodies delivering learning and development services.

➢ Bodies compiling standards, codes, and legal instruments.

➢ Everyone with an executive and/or management/governance role with responsibilities within organisations including local and national government.

➢ All those tasked with monitoring organisation performance and certification services.

➢ All those advising or otherwise supporting the governance and management of organisations.

➢ Media organisations, publishers, and authors.

2 Integrated management definition

Prior to the creation of the foundation definition of integrated management defined in 2002, several characteristics were identified by IQA IMSIG as being relevant to a joined-up integrated thinking approach to management and is carried forward in section 2.1. Its value is in providing an historical record of the extensive and challenging collaborative discussion that preceded the formal defining of integrated management in 2002.

The formal definition of Integrated Management is contained in sub-section 2.2. This definition has survived the test of time unchallenged. However, section 2.3 of this paper elaborates this definition to provide a deeper insight and understanding of its structure and its implications for achieving excellence in the conduct of management.

2.1 *Principal characteristics of integrated management*

The following characteristics were identified by the IMC, when it was the IQA IMSIG, as influencing the formal 2002 definition of integrated management introduced in section 2.2. The characteristics are included to provide historical insight into its original formulation.

a) May be applied to any type or size of organisation (commercial, governmental, regulatory etc).

b) Be holistic

  ➤ The Oxford illustrated dictionary describes 'holistic' as the tendency in nature to produce wholes (bodies or organisms) from ordered grouping of unit structures.

  ➤ The Mosby's medical nursing and allied health dictionary defines holistic as "of pertaining to the whole, considering all factors. Mosby also defines holism as a 'philosophical concept' in which an entity is seen as more than the sum of its parts (symbiosis).

  ➤ The Chambers Dictionary defines holism as the fundamental theory of the universe is the creation of wholes, i.e., complete, and self-contained systems from the atom and the cell by evolution to the most complex forms of life and mind; the theory that a complex entity, system, etc, is more than merely the sum of its parts. Holistic is the noun relating to holism.

c) Integrated management makes no distinction in its general approach to managing potential loss (stakeholder downsides) and potential gain (stakeholder upsides) and indeed it is illogical to be managed separately since they are inextricably linked.

d) The benefit of integrated management is that it leads to optimal efficiency (economic use of resources) and optimal effectiveness (meets objectives by satisfying the totality of stakeholders needs in an equitable way).

e) Inclusive – integrated management addresses the totality of the organisation and its stakeholders.

f) Addresses the totality of stakeholder's needs and aspirations in an equitable way. Because Integrated Management recognises no time, geographical or other types of boundaries, it globally addresses future as well as current stakeholder needs. This naturally leads to sustainability. Thus, complete life cycles are addressed such as:

> ➢ Asset, infrastructure, product lifetime,

> ➢ Employee induction, deployment, development, and retirement,

> ➢ Life of an industry, project etc.

g) Must include every facet of management that may impact stakeholders such as:

> ➢ Health,

> ➢ Safety,

> ➢ Environment,

> ➢ Commerce,

> ➢ Ethics etc.

h) Value is always that perceived by a consensus of the stakeholders.

i) Integrated Management requires that all components of an organisation add optimal value both individually and collectively.

j) Integrated Management recognises that uniformity and diversity must harmoniously co-exist within an organisation. Generic approaches and controls are used only if they add value.

k) Take an approach embracing:

> ➢ Simplicity,

> ➢ Least action,

> ➢ Efficient and effective use of total resources (people, materials, energy, time, space etc.).

l) Integrated Management addresses all aspects that contribute to an organisation's performance such as:

> ➢ Its structures and processes,

> ➢ Management system,

> ➢ Culture,

> ➢ Knowledge base,

> ➢ Top management leadership,

> ➢ Stakeholders and human consciousness.

m) Makes intelligent integrated use of existing and any new fragmented approaches to management such as concepts, models, and tools.

n) Integrated management requires managers to recognise and consider all significant influences on their organisation such as:

> ➢ The strategic direction of the business,

> ➢ Relevant legislation and standards,

> ➢ Internal policies and culture,

> ➢ Resource requirements and the needs of those who may be impacted by any aspect of the organisation's operation or existence.

2.2 Foundation definition

Except for the addition of the word "aspiration," the IMS (previously IQA IMSIG) adopted the following formal definition of Integrated Management in 2002.

> *Integrated Management is the understanding and effective direction of every aspect of an organisation so that the needs, expectations, and aspirations of all stakeholders are equitably satisfied by the best use of all resources.*

Figure 1: Integrated Management Foundation Definition

The definition is critically dependent on the understanding of the words; "direction," "stakeholders" and "equitably." These should be interpreted as follows:

Direction implies control and guidance, as appropriate to the needs of the organisation, and does not preclude empowerment to any part of the organisation.

Stakeholders includes all those who can be affected by the organisation's activities, products, services, and any other aspect of the operation of the organisation. Some stakeholders may have a direct interest in the success of the organisation while others may be negatively impacted by its success such as a competitor.

Equitably implies that the stakeholder needs, expectations, and aspirations are balanced in a fair way. Ideally a win-win outcome will be achieved between stakeholders. Where only a win-lose outcome is achievable this will be fair as perceived by the stakeholders overall or an independent representative group of reviewers.

2.3 Definition elaboration

The objective of this section is to elaborate the foundation definition of integrated management developed in 2002 given in section 2.2, to provide a deeper understanding of its meaning and how it can be applied.

Error! Reference source not found. breaks the foundation definition down into two linked principal components, i.e.,

> The **First Part** defines the 'structures and processes' within an organisation that deliver its purpose and needed to 'equitably satisfy stakeholder needs, expectations and aspirations.'

The **Second Part** defines the outcome to be realised.

Structure and Process   *Outcome*

> **Making the best use of resources** — *to* → **equitably satisfy stakeholder needs, expectations, and aspirations.**

Figure 2: Elaborated Integrated Management Definition

This grammatical reformulation of the foundation definition reveals the cause-and-effect relationship of its two component clauses. The lefthand part requires the behaviour of the organisation, project, or task to fulfil the outcome expressed in the righthand part.

Thinking of an organisation as a super-organism, integrated holistic coherent behaviour is required to equitably satisfy the needs, expectations, and aspirations of those affected by its behaviour. It is the same aspects of this superorganism that create the multiple and diverse stakeholder impacts. The impacts are the outcome shown on the left of Figure 2 while the organisation's aspects are on the left.

It is more effective and efficient if an organisation's assets are utilized in an integrated and holistic way. Non-integrated behaviours typically manifest as separate silo and/or discipline-based management systems and the adoption of outcome centric fragmented management system standards and certification processes. It is illogical to attempt to manage different dimensions of performance in isolation rather than adopting an unbounded focus on the structural and process aspects of the organisation that deliver its purpose and determine the performance outcomes of interest to its stakeholders.

Figure 2 displays the definition of Integrated Management in terms of action and objective. This forms the basis for a pictogram encapsulating the key elements for the practical application of Integrated Management - see Section 3.

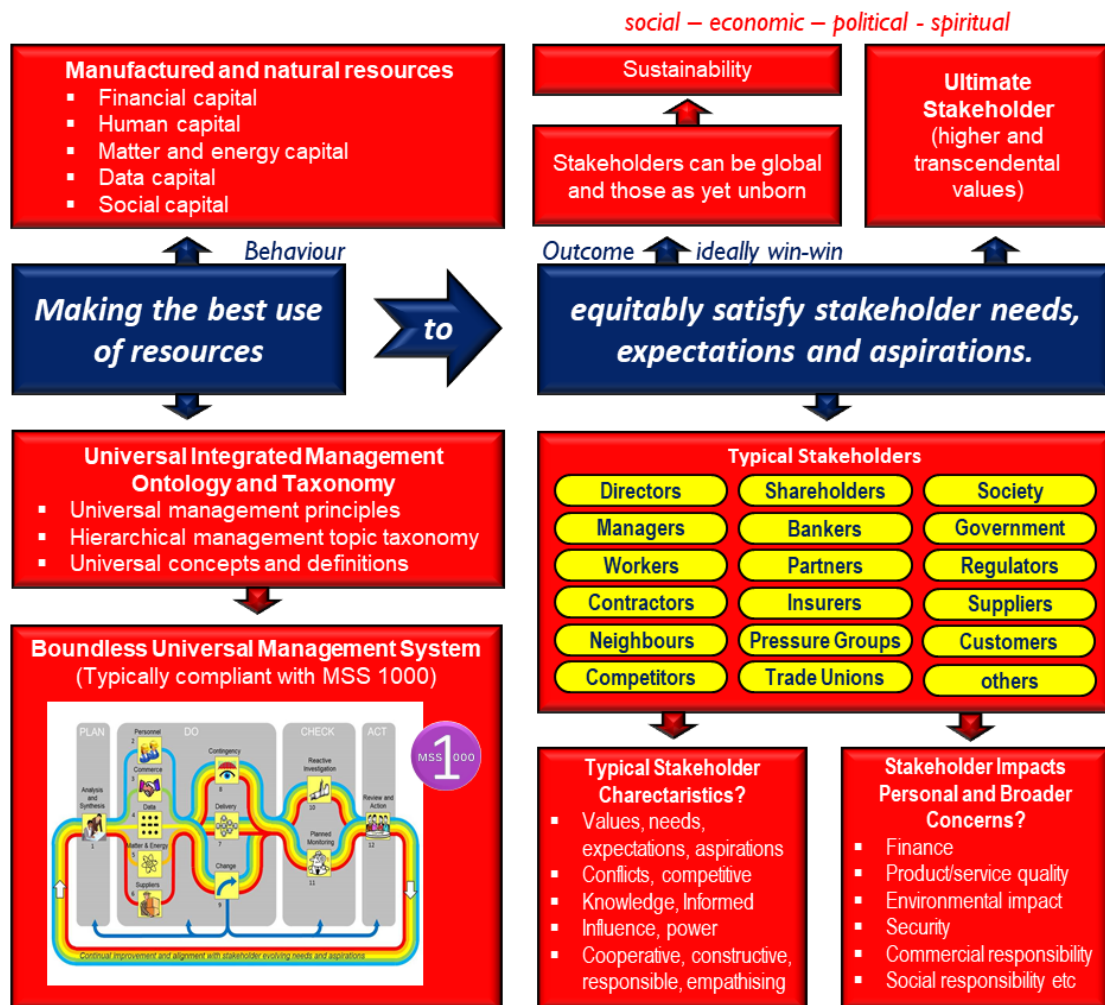# 3   Integrated Management Pictogram

Figure 3: Integrated Management Pictogram

The pictogram shown above in Figure 3 reveals how the two components of the foundation definition described in the previous section link with the wider conduct of Integrated Management. These aspects are elaborated in successive sections of this paper.

4 Challenges of applying integrated management

Section 2 provides a formal foundation definition of integrated management that is academically rigorous. However, although leaders of organisations and managers need to have a sound philosophical understanding of integrated management, they also need to be able to apply this abstract concept in a practical and systematic way to leverage value. This is the purpose of this section.

The principal challenge of managing an organisation in an integrated way is introducing an attitude to management where: everything within the organisation takes account of:

> ➢ everything else,
> ➢ the overall purpose of the organisation and
> ➢ its stakeholders' needs, expectations, and aspirations.

This does not preclude reductionist analysis providing it is associated with synthesis i.e., every point within the organisation is understood with respect to the whole organisation and its stakeholders. This necessitates:

a) A paradigm shift in attitude and thinking.

b) Maintaining a suitable and sufficient competence base within the organisation or accessible externally to be able to manage and operate the organisation in a fully integrated and coherent way. This includes:

   > ➢ The management of prospect and risk

   > ➢ The management of personnel, commerce, data, energy, matter, and suppliers.

   > ➢ The design of normal, contingency and change structures and processes

   > ➢ The establishment and operation of a fully integrated and coherent management system covering all levels and modes of the organisation.

c) Identifying:

   > ➢ The stakeholders

   > ➢ Their needs, expectations, and aspirations

   > ➢ The degree that they are empowered to influence the activities of the organisation

   > ➢ Potential conflicts and the potential for resolution

d) Dealing with variation and uncertainty in the creation and retention of value.

e) Designing, implementing, operating, monitoring, reviewing and continually improving the organisation's structures and processes while making the best use of resources to ideally achieve an equitable stakeholder outcome.

f) Ensuring the above is achieved

   > ➢ Systematically using a fully integrated management system.

> ➢ While the organisation remains aligned with the stakeholder evolving needs, expectations, and aspirations over time.

g) Consistently maintaining optimal organisation behaviour via enlightened leadership and management system compliance so that an optimal organisation culture establishes and endures.

It should be noted that the culture of an organisation is socially driven and emerges over time from a sustained pattern of behaviour that personnel naturally align with. It cannot be instantly imposed by the management of the organisation or directly managed.

5 Universal management principles

Universal management principles were first published in the universal management system standard MSS 1000:2014 which underpinned its creation. This paper extends and updates these principles.

The principles provide further elaboration to the definition of integrated management and its characteristics covered in earlier sections of this paper, and otherwise define universal constraining laws of management which are a subset of natural law.

Organisations are conceptually superorganisms comprising consciousness, structure, and processes. Optimal synergistic benefit from Integrated Management will be obtained if the principles are respected and applied collectively rather than in isolation. The principles are not necessarily an exhaustive set and others may be added in future. They complement each other and should be applied holistically.

Principle 1 - Management resides in consciousness
Principle 2 - Multi-faceted impacts emerge from aspects
Principle 13 - Management principles are space-time invariant
Principle 14 - Nature and purpose of an organisation
Principle 15 - Structure and process purpose diversity
Principle 16 - Interdependency of structures and processes
Principle 17 - Coherent integrated structures and processes
Principle 18 - Culture cannot be directly created or managed
Principle 19 - Purpose creates organisational cohesion
Principle 20 - Ontology and taxonomy
Principle 21 - Leadership and commitment
Principle 22 - Informed decision-making
Principle 23 - Declaration of policy and compliance
Principle 24 - Equitable stakeholder outcomes
Principle 25 - Continual alignment with stakeholder needs
Principle 26 - Best use of resources
Principle 27 - Empowered accountable management
Principle 28 - Activity based holistic transparent accounting
Principle 29 - Management system ownership
Principle 30 - Unbounded perspective
Principle 31 - Activity aligned competence
Principle 32 - Opportunity taking and uncertainty
Principle 33 - Criticality classification
Principle 34 - Overt and covert management
Principle 35 - Unbounded Data Focus

Principle 1. Management resides in consciousness

Management is conducted within the conscious mind individually or collectively. The definition of Integrated management and these principles are meaningless outside of the conscious mind.

Organisations are conscious super-organisms empowered with a degree of free will to seek, accept and reject opportunities to fulfil their purpose while equitably satisfying customers and

other stakeholders – see also Principle 18: Culture cannot be directly created or managed and Principle 32: Opportunity taking and uncertaintyPrinciple 18.

Consciousness is the home of management and stakeholder thinking and satisfaction. The quality of management action depends on the extent of integrated thinking facilitated by the level of consciousness of the manager and the management teams. The consciousness of a person is the home of their thoughts, decisions, judgement, mental models of reality. It includes the understanding and ability to effectively apply management principles – see Principle 13: Management principles are space-time invariant.

Personnel require a working environment that heightens consciousness, promotes wellbeing, and does not cause stress. This nurtures and facilitates creativity, innovation, and productivity. A fully integrated unbounded management system creates orderliness reducing stress which aids the application of creative intelligence – see Principle 21: Leadership and commitment.

Perceptions of quality, prospect and risk are relativistic and judged according to the individual stakeholder beliefs and perceptions according to their needs, expectations, aspirations, and level of consciousness. Management is conducted by people individually and collectively through people for people to achieve the organisation's objectives and the relativistic needs and expectations of stakeholders – see Principle 24: Equitable stakeholder outcomes and Principle 25: Continual alignment with stakeholder needs.

Motivation and demotivation are experienced within the conscious mind. A consequent decision to take or reject an opportunity depends on the superposition of several motivating and demotivating influences of which organisation culture is just one amongst others – see Principle 18: Culture cannot be directly created or managed and Principle 32: Opportunity taking and uncertainty.

Principle 2.   Multi-faceted impacts emerge from aspects

An organisation's aspects can and usually do have multi-faceted potential impacts. These aspects of the organisation are the common source of the various and often diverse impacts which interest stakeholders directly or indirectly and may include health, safety, environmental, commercial, reputational, goods and service quality issues. For this reason, an organisation only needs a single unbounded Integrated Management System to manage all aspects of its functionality that may potentially impact stakeholder's needs, expectations, and aspirations. This enhances effectiveness and efficiency – refer to Section 0: Integrated Management Benefits.

Principle 3.   Optimising aspects and impacts under uncertainty involves identification of options, and then selecting the optimal opportunity – refer to Principle 30: Unbounded perspective, and Principle 32: Opportunity taking and uncertainty .Ontology and taxonomy

Unified definitions, conventions, concepts, and terminology create orderliness by improving understanding, accelerating learning, reducing human error and human violation, improving communication, and reducing occupational stress.

Logical clustering of management topics (taxonomy) facilitates greater use of less, simpler, and more generically defined management controls.

Ontology and taxonomy are critical to the creation of readily navigable and logical universal management systems and standards - refer to Principle 21: Leadership and commitment and Principle 29: Management system ownership.

Principle 4.   Leadership and commitment

Leadership and commitment to Integrated Management is principally demonstrated by its declared commitment to an equitable holistic stakeholder centric vision, mission, strategic planning, policy and resourcing a boundless Integrated Management System and its compliance – see Principle 21: Leadership and commitment:. This is enhanced by proactive transparent behaviour that permeates all executive and managerial activity – see Principle 23: Declaration of policy and compliance.

Principle 5.   Informed decision-making

Where beneficial, possible, and practicable, decision-making by competent people should be based on or informed by evidence, experience, and systematic analysis within the explicit and tacit knowledge bases within or accessible to the organisation – see Principle 31: Activity aligned competence and Principle 32: Opportunity taking and uncertainty.

Caution should be used in decision making where information is limited. The creation of new structures or processes whose ultimate effects are disputed or unknown should be resisted (precautionary principle). This is applicable to proposals to create novel structures and processes where there is little or no historical data or experience or scientific knowledge. Because such situations are novel it is not possible to conduct meaningful prospect and risk assessments or even bound the risk – see Principle 30: Unbounded perspective and Principle 32: Opportunity taking and uncertainty.

Principle 6.   Declaration of policy and compliance

An organisation must clearly and unambiguously declare its policy governing the delivery of its purpose potentially impacting stakeholder's needs, expectations and aspirations, and its commitment to compliance – see Principle 25: Continual alignment with stakeholder needs.

This is important to allow stakeholders to make informed choices where global differences may exist in business ethics, culture, and concepts of social responsibility.

Principle 7.   Equitable stakeholder outcomes

Every aspect of the functionality of the organisation must endeavour to deliver value by directly or indirectly supporting a just and equitable achievement of stakeholder needs, expectations and aspirations. These are satisfied by respecting everything that they value during the conduct of strategic, tactical, and operational processes.

Sustainability naturally emerges from integrated management because it attempts to equitably satisfy stakeholders. Stakeholders may be global and those yet to be born – see Principle 25: Continual alignment with stakeholder needs and Principle 30: Unbounded perspective.

Customers are particularly important stakeholders because they can critically impact the commercial viability and profitability of organisations and their reputation. The viability of organisations in general is impacted by the ways that stakeholders can exercise power.

Many stakeholder needs, expectations and aspirations are directed and enforced by national and local government regulation.

Personnel and teams need to be nurtured, respected, appropriately empowered, and treated justly. Justice is important to the individual and its demonstration is important to help create a disciplined, trusting and participative workforce – see Principle 1: Management resides in consciousness.

Principle 8.   Continual alignment with stakeholder needs

The management system and the strategy, tactics and operations of the organisation need to be continually reviewed and action taken to optimally align them with the evolving needs, expectations and aspirations of the organisation's stakeholders making the best use of resources. Understanding of aspirations helps in anticipating changes to needs and expectations over the longer term. Even though the management system of an organisation may in principle become optimised at any given time, continual change is still required so that it remains aligned with the evolving requirements of stakeholders while taking account of the internal and external environment of the organisation and evolving technical innovation – see Principle 24: Equitable stakeholder outcomes.

Principle 9.   Best use of resources

Human, physical and every other types of resource needs to be used effectively and efficiently in a coordinated, optimal and sustainable way to create and retain value in all its forms – see Principle 15: Interdependency of structures and processes.

Each contributing process element requires a productive coordinated mix of potentially personnel, commerce, data, matter, energy, and suppliers, and the minimisation of all types of waste – see Principle 14 - Nature and purpose of an organisation.

There must be an optimal balance between the effectiveness and efficiency of structures and processes through their intelligent and creative design, implementation, and operation – see Principle 16: Interdependency of structures and processes.

Principle 10.   Empowered accountable management

Managers need freedom to create optimal solutions and should not be unnecessarily constrained by non-value adding management control. Optimal integrated thinking needs to be empowered where it will deliver the most value – see Principle 1: Management resides in consciousness and Principle 30: Unbounded perspective.

Personnel and teams need to cooperate and be appropriately coordinated, nurtured, competent, and empowered through responsible and enlightened management delegation so that thought, action, and decision making occurs at the optimal place and level throughout the organisation.

Organisations naturally contain coexisting uniformity and diversity. Generic management controls within the management system should be used only where they are appropriate and add value – see Principle 16: Interdependency of structures and processes, Principle 20: Ontology and taxonomy, Principle 21: Leadership and commitment and Principle 30:Unbounded perspective,

Principle 11. Activity based holistic transparent accounting

Activity based holistic and transparent accounting reveals the true total costs associated with each element of an organisation's value creating and retaining structures and processes delivering its purpose. This includes the direct and indirect costs irrespective of capital type impacting stakeholders. The principle is important in the understanding and measurement of the true performance of any aspect of an organisation's structure or dynamics informing opportunities for improvement – see Principle 22: Informed decision-making.

Principle 12. Management system ownership

The management system must serve the needs and expectations of all stakeholders, be universally valued, respected, followed by and be responsive to stakeholder suggestions for its continual improvement and evolution – see Principle 24: Equitable stakeholder outcomes.

Management system architecture should be organisation centric and not standards or regulation centric. It should be functional, elegant, suitable and sufficient – see Principle 20: Ontology and taxonomy.

The management system should control its own review, change and evolution. It must remain aligned with the evolution of the organisation's stakeholder needs and expectations and its local and wider operating environment – see Principle 25: Continual alignment with stakeholder needs.

Boundless Integrated Management Systems simplify the operation of the organisation by defining a place for everything and facilitating everything to be in its natural logical place. This creates managerial and operational orderliness, facilitates personnel coordination and cooperation, creativity, and innovation, reduces personnel stress, and promotes holistic integrated thinking – see Principle 1: Management resides in consciousness.

Management systems facilitate the orderly direction and guidance of personnel at all levels to achieve objectives through directing and guiding optimal shared patterns of behaviour.

It should be noted that intelligent threats such as conflicting stakeholders' needs, and expectations require special attention and, where appropriate, covert arrangements – see Principle 34: Overt and covert management.

Principle 13. Management principles are space-time invariant

Management principles and tools are universally applicable across space and time, although the understanding and application of them may evolve and improve.

The physical world evolves including new industries and technologies etc., but genuine management principles are time and space invariant like the laws of nature that science shows are isotropic and homogeneous throughout the cosmos – i.e., the same everywhere with no grain. Fundamental management principles do not need to be continually reinvented or adapted for any specific time or location or situation.

Through proper education and training a manager can own these management principles for life.

The principles facilitate the creation of universal global management standards applicable to any organisations irrespective of type, size, and maturity.

The continual re-engineering of management system standards is unnecessarily disruptive, wasteful, and commercially damaging – see Principle 26: Best use of resources.

Principle 14.   Nature and purpose of an organisation

Organisations are a complicated mix of conscious, structural, and dynamic elements including personnel, commerce, data, matter, energy, and supplier components in varying amounts – see Principle 15: Structure and process purpose diversity, Principle 16: Interdependency of structures and processes and Principle 17: Coherent integrated structures and processes.

Organisations, projects, structures, and processes exist to fulfil a purpose by delivering value to customers and other stakeholders via goods and/or services. The delivery of purpose necessitates the orchestrated creation and retention of equitable stakeholder value in all its forms. Value is relativistic in its nature depending on the observer.

Every element of an organisation has one or more purpose that contributes directly or indirectly to the overall purpose of the organisation. An organisation can only endure while it continues to fulfil its purpose effectively and efficiently – see Principle 19: Purpose creates organisational cohesion.

Principle 15.   Structure and process purpose diversity

The structures and processes of organisations can be created to deliver a variety of diverse single or multiple functions serving one or more purpose(s) respectively - see Principle 14: Nature and purpose of an organisation.

The following purpose classifications examples each have a purpose supporting an important facet of organisational functionality. They may act simultaneously – see Principle 16: Interdependency of structures and processes and Principle 17: Coherent integrated structures and processes.

6A Organisation's Mode of Functioning

Organisations normally operate in their goods and/or service delivery mode but also need to be able to operate in a survival (contingency) mode during a crisis or emergency before returning to their normal mode. An organisation also needs to be able to manage small and large changes to its structures allowing it to evolve and stay aligned with its stakeholder's needs, expectations, and aspirations – see Principle 25: Continual alignment with stakeholder needs.

A1 'Normal' - directly and indirectly delivering the organisation's goods and/or services.

A2 'Contingency' – in reserve ready to activate when abnormal circumstances demand.

A3 'Change' - enabling the organisation to adapt or modify any aspect of its normal or contingency physiology or dynamics in a considered and controlled way, temporarily or permanently.

6B Organisation's Breadth of Focus

In an organisation, strategy is generally decided by the board of directors, and tactics by the department heads for implementation by the junior managers and employees via operational processes.

Strategy takes a longer slower and operations a shorter faster perspective with respect to; planning, implementation, and improvement cycles. Appropriate effective and efficient integrated two-way communication and dialogue must exist throughout the levels and totality of the organisation to support its optimal functionality – see Principle 16: Interdependency of structures and processes and Principle 17: Coherent integrated structures and processes.

B1 Strategic – planning or methodology for achieving long-term objectives.

B2 Tactical - directly implementing strategy, planned and ad hoc activities meant to deal with the demands of the moment, and to move from one milestone to other in pursuit of the overall goal(s).

B3 Operational – implements a tactical plan and directly delivering a good or service.

6C Component Type

An organisation is created from personnel and other elements that act together to deliver its purpose – see Principle 14: Nature and purpose of an organisation.

This grouping may also be used to classify organisation inputs and outputs.

C1 'Personnel' – employment life cycle, nurturing and competent deployment.

C2 'Commerce' – internal and external trading of goods and services.

C3 'Data' – data life cycles and processing.

C4 'Matter and Energy' – life cycles of use of matter of and energy.

C5 'Suppliers' – selection and life cycle control of suppliers.

C6 'Combinations of the above' – structures and processes comprising two or more of the above.

6D Performance Criticality

See Principle 33: Criticality classification.

Principle 16.   Interdependency of structures and processes

Natural or human made structures host processes, while processes create, maintain, change, and destroy structures. Nothing exists in isolation within or outside of an organisation. The interrelationships between entities are as potentially important as the entities. The whole is greater than the sum of the parts requiring organisations to be managed in an integrated way to deliver synergistic benefits – see Principle 23: Declaration of policy and compliance, and Principle 26: Best use of resources.

Principle 17.   Coherent integrated structures and processes

Stakeholder needs and expectations can only be effectively and efficiently delivered by strategic, tactical, and operational structures and processes which are fully integrated and operate coherently and harmoniously together throughout the organisation at every level – see Principle 16: Interdependency of structures and processes.

A process has the potential to impact all facets of an organisation's performance which may in turn impact the needs and expectations of its stakeholders – see Principle 2: Multi-faceted impacts emerge from aspects.

Fragmented systems tend to degrade functionality, damage communication, cause delay, create waste, and underutilise valuable finite resources.

However, systems should only be integrated so long as it adds value. Non-integration may be necessary when managing security – see Principle 34: Overt and covert management.

Effective and efficient structures and processes depend on the universal coordinated application of Plan-Do-Check-Act at strategic, tactical, and operational levels of the organisation and facilitates continual learning and improvement. This necessitates vertical and horizontal integration without barriers or silos. Synergistic benefits emerge from coherent integrated management thinking and actions achieved through competence, cooperation, coordination and the free flow of information and ideas – see Principle 31: Activity aligned competence and Principle 35: Unbounded Data Focus.

Principle 18.   Culture cannot be directly created or managed

Culture is an emergent socially driven property which naturally forms by personnel's motivation to align with established norms to receive the benefits of being part of the group. Culture is experienced within the conscious mind – see Principle 1: Management resides in consciousness

The organisation culture will slowly change if changes to behavioural norms can be sustained for long enough. This can be achieved by sustained consistent robust leadership and enforced compliance with the management system – see Principle 21: Leadership and commitment.

Culture can strongly motivate and demotivate facets of personnel behaviour along with others.

Characteristics of organisation culture can be a mixture of beneficial and harmful. Culture tends to have a sustaining and dampening effect on managerial influence on behaviour.

Principle 19.   Purpose creates organisational cohesion

Purpose is the cohesive golden thread that holds organisational entities together and determines the interconnectedness and interdependence of its structures and processes. Purpose is the glue that sticks an organisation together. Unless redundant, every component structure and process has a purpose that serves the overall principal purpose of the organisation which is the delivery of goods and/or services – see Principle 14: Nature and purpose of an organisation.

Component purposes can be diverse resulting in a variety of impacts of interest to stakeholders – see Principle 2: Multi-faceted impacts emerge from aspects.

Organisation performance may be improved by a process innovation serving the same purpose e.g., automation – see Principle 32: Opportunity taking and uncertainty

Principle 20.   Ontology and taxonomy

Unified definitions, conventions, concepts, and terminology create orderliness by improving understanding, accelerating learning, reducing human error and human violation, improving communication, and reducing occupational stress.

Logical clustering of management topics (taxonomy) facilitates greater use of less, simpler, and more generically defined management controls.

Ontology and taxonomy are critical to the creation of readily navigable and logical universal management systems and standards - refer to Principle 21: Leadership and commitment and Principle 29: Management system ownership.

Principle 21.   Leadership and commitment

Leadership and commitment to Integrated Management is principally demonstrated by its declared commitment to an equitable holistic stakeholder centric vision, mission, strategic planning, policy and resourcing a boundless Integrated Management System and its compliance – see Principle 21: Leadership and commitment:. This is enhanced by proactive transparent behaviour that permeates all executive and managerial activity – see Principle 23: Declaration of policy and compliance.

Principle 22.   Informed decision-making

Where beneficial, possible, and practicable, decision-making by competent people should be based on or informed by evidence, experience, and systematic analysis within the explicit and tacit knowledge bases within or accessible to the organisation – see Principle 31: Activity aligned competence and Principle 32: Opportunity taking and uncertainty.

Caution should be used in decision making where information is limited. The creation of new structures or processes whose ultimate effects are disputed or unknown should be resisted (precautionary principle). This is applicable to proposals to create novel structures and processes where there is little or no historical data or experience or scientific knowledge. Because such situations are novel it is not possible to conduct meaningful prospect and risk assessments or even bound the risk – see Principle 30: Unbounded perspective and Principle 32: Opportunity taking and uncertainty.

Principle 23.   Declaration of policy and compliance

An organisation must clearly and unambiguously declare its policy governing the delivery of its purpose potentially impacting stakeholder's needs, expectations and aspirations, and its commitment to compliance – see Principle 25: Continual alignment with stakeholder needs.

This is important to allow stakeholders to make informed choices where global differences may exist in business ethics, culture, and concepts of social responsibility.

Principle 24.   Equitable stakeholder outcomes

Every aspect of the functionality of the organisation must endeavour to deliver value by directly or indirectly supporting a just and equitable achievement of stakeholder needs,

expectations and aspirations. These are satisfied by respecting everything that they value during the conduct of strategic, tactical, and operational processes.

Sustainability naturally emerges from integrated management because it attempts to equitably satisfy stakeholders. Stakeholders may be global and those yet to be born – see Principle 25: Continual alignment with stakeholder needs and Principle 30: Unbounded perspective.

Customers are particularly important stakeholders because they can critically impact the commercial viability and profitability of organisations and their reputation. The viability of organisations in general is impacted by the ways that stakeholders can exercise power.

Many stakeholder needs, expectations and aspirations are directed and enforced by national and local government regulation.

Personnel and teams need to be nurtured, respected, appropriately empowered, and treated justly. Justice is important to the individual and its demonstration is important to help create a disciplined, trusting and participative workforce – see Principle 1: Management resides in consciousness.

Principle 25.   Continual alignment with stakeholder needs

The management system and the strategy, tactics and operations of the organisation need to be continually reviewed and action taken to optimally align them with the evolving needs, expectations and aspirations of the organisation's stakeholders making the best use of resources. Understanding of aspirations helps in anticipating changes to needs and expectations over the longer term. Even though the management system of an organisation may in principle become optimised at any given time, continual change is still required so that it remains aligned with the evolving requirements of stakeholders while taking account of the internal and external environment of the organisation and evolving technical innovation – see Principle 24: Equitable stakeholder outcomes.

Principle 26.   Best use of resources

Human, physical and every other types of resource needs to be used effectively and efficiently in a coordinated, optimal and sustainable way to create and retain value in all its forms – see Principle 15: Interdependency of structures and processes.

Each contributing process element requires a productive coordinated mix of potentially personnel, commerce, data, matter, energy, and suppliers, and the minimisation of all types of waste – see Principle 14 - Nature and purpose of an organisation.

There must be an optimal balance between the effectiveness and efficiency of structures and processes through their intelligent and creative design, implementation, and operation – see Principle 16: Interdependency of structures and processes.

Principle 27.   Empowered accountable management

Managers need freedom to create optimal solutions and should not be unnecessarily constrained by non-value adding management control. Optimal integrated thinking needs to be empowered where it will deliver the most value – see Principle 1: Management resides in consciousness and Principle 30: Unbounded perspective.

Personnel and teams need to cooperate and be appropriately coordinated, nurtured, competent, and empowered through responsible and enlightened management delegation so that thought, action, and decision making occurs at the optimal place and level throughout the organisation.

Organisations naturally contain coexisting uniformity and diversity. Generic management controls within the management system should be used only where they are appropriate and add value – see Principle 16: Interdependency of structures and processes, Principle 20: Ontology and taxonomy, Principle 21: Leadership and commitment and Principle 30:Unbounded perspective,

Principle 28.   Activity based holistic transparent accounting

Activity based holistic and transparent accounting reveals the true total costs associated with each element of an organisation's value creating and retaining structures and processes delivering its purpose. This includes the direct and indirect costs irrespective of capital type impacting stakeholders. The principle is important in the understanding and measurement of the true performance of any aspect of an organisation's structure or dynamics informing opportunities for improvement – see Principle 22: Informed decision-making.

Principle 29.   Management system ownership

The management system must serve the needs and expectations of all stakeholders, be universally valued, respected, followed by and be responsive to stakeholder suggestions for its continual improvement and evolution – see Principle 24: Equitable stakeholder outcomes.

Management system architecture should be organisation centric and not standards or regulation centric. It should be functional, elegant, suitable and sufficient – see Principle 20: Ontology and taxonomy.

The management system should control its own review, change and evolution. It must remain aligned with the evolution of the organisation's stakeholder needs and expectations and its local and wider operating environment – see Principle 25: Continual alignment with stakeholder needs.

Boundless Integrated Management Systems simplify the operation of the organisation by defining a place for everything and facilitating everything to be in its natural logical place. This creates managerial and operational orderliness, facilitates personnel coordination and cooperation, creativity, and innovation, reduces personnel stress, and promotes holistic integrated thinking – see Principle 1: Management resides in consciousness.

Management systems facilitate the orderly direction and guidance of personnel at all levels to achieve objectives through directing and guiding optimal shared patterns of behaviour.

Principle 30.   Unbounded perspective

The focus when assessing and managing any entity and its stakeholder impacts must span its complete potential life cycle in space and time from inception to cessation including legacy impacts. This focus is not restricted by space and time constraints and contributes to the realisation of sustainable outcomes – see Principle 1: Management resides in consciousness. For example, it requires that design considers manufacturing, installation, operation, decommissioning and demolition impacts etc. – see Principle 2: Multi-faceted impacts emerge

from aspects, Principle 13: Management principles are space-time invariant, Principle 24: Equitable stakeholder outcomes, Principle 25: Continual alignment with stakeholder needs.

Principle 31.   Activity aligned competence

The competence of personnel and teams must align with the current and perceived future needs of the organisation's structures and processes established to fulfil its purpose while making the best use of resources – see Principle 26: Best use of resources and Principle 30: Unbounded perspective.

Competence can be available to the organisation internally via its employees and externally via consultants, government bodies, trade bodies and other suppliers.

The fundamental principles for managing organisations are universal - Principle 13: Management principles are space-time invariant. However, the development of management controls needed to guide and direct the creation and delivery of goods and/or services may require specialist competences - Principle 15: Structure and process purpose diversity. This may include professionals able to advise on controlling health, safety, environmental, commercial, reputational, goods and service quality issues and able to advise on legal compliance and taking of opportunity involving balancing prospects and risks – see Principle 32: Opportunity taking and uncertainty.

Since processes may be improved by changing the type of component (person, machine etc) of a process, the concept of competence can be applied to anything fulfilling a role or purpose. For example, we can talk about the competence of a supplier as a whole.

Employees need to be managed throughout their life cycle within the organisation's life and evolution to collectively provide the competences required to support its structures and processes.

Principle 32.   Opportunity taking and uncertainty

The dual objectives of an organisation are to create value and to retain value while fulfilling its purpose and operating under uncertainty. Value is a relativistic stakeholder judgement – see Principle 1: Management resides in consciousness and Principle 24: Equitable stakeholder outcomes.

To fulfil their purpose, organisations must first identify the options open to them and then endeavour to seek and take optimal opportunities. Opportunities invariably include likely outcomes judged to be upsides and/or downsides by stakeholders. This continual decision-making process is conducted strategically, tactically, and operationally and constitutes the organisation's behaviour which in turn determines performance according to the stakeholders. As far as practicable it should be evidence based or informed – see Principle 22: Informed decision-making

This involves optimising the individual and aggregation of prospects and risks associated with equitably satisfying the needs and expectations of customers and other stakeholders while making the best use of resources. This requires that organisations have a suitable and sufficient portfolio of competence appropriate to them according to their size, purpose and stakeholders – see Principle 20: Ontology and taxonomy and Principle 31: Activity aligned competence.

Organisations must be aware of the limitations of opportunity assessment. Likely outcomes cannot be known with absolute certainty because:

- The sources and mechanisms of value creation and loss prevention may not have been exhaustively identified,
- Their likely potential realisation cannot be known with certainty,
- Their likely magnitude cannot be known with certainty,
- The current and future needs, expectations, and aspirations of stakeholders cannot be known with certainty.

Organisations must be able to justify to stakeholders the methodologies and processes utilized in making value creation and retention decisions – see Principle 25: Continual alignment with stakeholder needs. The processes may be required to be compliant with commercial and criminal legislation and regulation. The precautionary principle should always be followed where novel technologies are being envisaged and/or there is ignorance of the governing laws of nature.

Principle 33.   Criticality classification

The management control of structures and processes is simplified by classifying them according to the potential to impact performance positively and negatively – see Principle 15: Structure and process purpose diversity and Principle 32: Opportunity taking and uncertainty. This facilitates proportionate graded application of management control e.g., only staff with an assured competence being permitted to work, or certified equipment being permitted to be used, on particular classifications of structure and/or process.

This enables an organisation to make the best use of its resources to maximise stakeholder satisfaction - Principle 26:: Best use of resources.

Principle 34.   Overt and covert management

An organisation's arrangements should be managed overtly and covertly, as appropriate, to equitably satisfy the needs, expectations and aspirations of its customers and other stakeholders – see Principle 24: Equitable stakeholder outcomes.

Covert arrangements are necessary to guard intellectual property, malicious threats to assets and restricting competitors' access to valuable information and knowledge. This may require separately controlled discreet management systems and ownership: see Principle 29: Management system ownership.

Overt and covert management arrangements should be informed by opportunity assessment embracing prospect and risk assessment – see Principle 22: Informed decision-making and Principle 32: Opportunity taking and uncertainty.

Principle 35.   Unbounded Data Focus

Data permeates an organisation's internal and external environments, interfaces with the conscious mind and can contribute to the creation, retention and loss of value in multiple ways – see Principle 1: Management resides in consciousness, Principle 14: Nature and purpose of an organisation, Principle 15: Structure and process purpose diversity, and Principle 16: Interdependency of structures and processes.

Data can directly and indirectly impact stakeholder needs, expectations and aspirations. Data must therefore be carefully controlled and guided throughout the organisation's structures, processes, goods, services, supply chains, delivery chains and environment to ensure that its quality, integrity, processing, communication, sharing, structure, confidentiality, encryption, security etc satisfies the needs, expectations, and aspirations of stakeholders. This requires a boundless impact perspective – see Principle 17: Coherent integrated structures and processes, Principle 30: Unbounded perspective and Principle 32: Opportunity taking and uncertainty.

Data can be static and retained on media to provide a store of explicit knowledge and also be dynamic flowing through and between processes and contributing to their coherence – see Principle 15: Structure and process purpose diversity, and Principle 17: Coherent integrated structures and processes.

The development of advanced data technologies, including artificial intelligence should not be permitted if they negatively impact human consciousness and/or stakeholder needs expectations and aspirations – see Principle 1: Management resides in consciousness, and Principle 32: Opportunity taking and uncertainty.

6 Integrated Management Benefits

The creation of a concept and practice of integrated management was naturally motivated by a perception that it would bring benefits and a wish to overcome the shortcoming of non-integrated management approaches. This is what drives all innovation and improvement. This section attempts to provide a logical justification of the benefit of an integrated approach management. In addition to providing a hypothetical philosophical justification, it provides a systematic framework for research to be conducted on organisations to confirm that the benefits are being realised.

The general benefits of integrated management and integrated management systems include:

Enhanced stakeholder satisfaction while making the best use of resources.

a) Greater effectiveness, efficiency and control of the organisation's structures and processes that deliver the organisation's purpose.

b) More focused coherent, effective, and efficient use of management resource.

c) Improved integration of prospect and risk management and performance when operating under uncertainty.

d) Higher likelihood of stakeholder equitable satisfaction and conflict resolution.

e) Improved commercial and social responsibility performance.

f) Greater robustness, agility, and resilience.

g) More concise minimalist management system with all aspects adding value without repetition.

h) Enhanced communication through simplicity and uniformity.

i) Enhanced organisation competence through easier compliance, less temptation for violations, enhanced motivation for employee participation and ownership of the management system leading to stress reduction and nurture of creativity.

j) Enhanced stakeholder participation, cooperation, understanding and satisfaction through simplification and better communication.

k) Simplified and reduced personnel training needs delivered better, quicker, and cheaper.

l) Reduced and more integrated reactive event investigation and planned monitoring (audits/inspections) including certification surveillance.

m) Improved management and process transparency leading to more efficient and effective management review, and action planning.

n) Faster change, innovation and delivery dynamics supporting optimal organisation learning and alignment with the evolving needs, expectations, and aspirations of stakeholders.

o) Better implementation and return from improvement and regulatory compliance initiatives through full integration with existing arrangements.

p) Enhanced competitiveness and business security.

q) Increased profitability through lower costs, improved productivity, creativity, and innovation.

r) More effective, efficient, quicker, transparent, and cheaper certification of organisations management arrangements.

s) More efficient, effective, quicker, transparent, and cheaper demonstration of regulatory compliance.

t) Simpler transparent interorganisational relationships and contracts.

7 Conclusion

A formal definition of integrated management was created in 2002 and has essentially remained unchallenged and unchanged apart from the minor addition of 'aspiration' added to 'needs and expectations' in this paper. However, since formally defining integrated management, there has been a paradigm shift within organisations towards a more integrated approach to management. An indicator of this is the adoption of partial and fully integrated management systems by organisations. This paper revisits the 2002 integrated management definition, grammatically restructures it, and elaborates it via a pictogram and universal management principles facilitating its practical application via a single universal standard.

For leaders to leverage the full potential value of integrated management it needs to be widely applied throughout organisations and the relationships between organisations. This requires all participants be appropriately educated and trained so that:

➢ The integrated management rational is understood in terms of its core definition.

➢ The universal management principles are understood and able to be universally applied.

➢ The universal management system standard MSS 1000 is understood and able to be universally applied.

This requires that all learning and development programs wherever they exist should be reviewed and appropriately restructured and updated based on an integrated management approach.

Integrated management is primarily an attitude to management where every element is managed with respect to the whole. It must pervade the totality an organisation's functionality and presence to achieve optimal performance.

8   References

Management System Specification and Guidance MSS 1000:2014.

9   Definitions

General management definitions are those defined in Management System Specification and Guidance MSS 1000:2014.