



SLOVENSKI STANDARD SIST EN 12973:2020

01-marec-2020

Nadomešča:
SIST EN 12973:2000

Upravljanje vrednosti

Value Management

Value Management

Management par la valeur

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Ta slovenski standard je istoveten z: **EN 12973:2020**

<https://standards.iteh.ai/catalog/standards/sist/04ba2b94-f699-4926-8df7-31ad1e4951d/sist-en-12973-2020>

ICS:

03.100.40

Raziskave in razvoj

Research and development

SIST EN 12973:2020

en,fr,de

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 12973:2020

<https://standards.iteh.ai/catalog/standards/sist/04ba2b94-f699-4926-8df7-31ad1c4951f9/sist-en-12973-2020>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 12973

January 2020

ICS 03.100.40

Supersedes EN 12973:2000

English Version

Value Management

Management par la valeur

Value Management

This European Standard was approved by CEN on 27 October 2019.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

SIST EN 12973:2020

<https://standards.itech.ai/catalog/standards/sist/04ba2b94-f699-4926-8df7-31ad1c4951f9/sist-en-12973-2020>



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Content	Page
European foreword.....	5
Introduction	6
1 Scope	9
2 Normative references	10
3 Terms and definitions	10
4 Value Management	11
4.1 Value Management approach	11
4.1.1 General guidance.....	11
4.1.2 Informal approach	15
4.1.3 Formal approach	15
4.1.4 Study-based approach.....	16
4.1.5 Communicating the Value Management approach	17
4.2 Principles	17
4.2.1 Strengthen Value orientation	17
4.2.2 Apply Function Thinking.....	18
4.2.3 Apply a Structured holistic approach	18
4.2.4 Manage complexity, risk and uncertainty	19
4.3 Drivers (levers) for Value Management	19
4.4 Guidance and requirements for successful Value Management	20
4.4.1 Involvement of customers, users and other stakeholders.....	20
4.4.2 Thought processes, behavior and benefits	21
4.4.3 Production of tangible results and benefits	21
4.4.4 Monitoring Value Management.....	21
4.5 Delivering sustainable solutions.....	21
4.6 Value assessment	22
5 Value Management at top management level.....	22

5.1	Value culture and strategy in the organization	22
5.2	Strategic analysis	23
5.2.1	General	23
5.2.2	Vision, mission and strategy of an organization - Indicators	23
5.2.3	Definition of the vision and the mission.....	24
5.2.4	Definition of the strategic axes of the vision.....	24
5.2.5	Definition of the objectives to be achieved	24
5.2.6	Implementation of the vision and the strategy objectives	24
5.2.7	Identification of value drivers (levers).....	25
5.2.8	Definition of Action Plans	25
5.2.9	Definition of the indicators	25
5.3	Risk, uncertainty and complexity	25
5.3.1	Addressing risk and uncertainty.....	25
5.3.2	Addressing complexity	26
5.4	Contributions to portfolios	26
5.5	Contributions to programs.....	26
5.6	Contributions to innovation at all the levels of the organization	26
6	Value Management at operational level.....	27
6.1	Situations for use of Value Management methods	27
6.1.1	General	27
6.1.2	Situation of scoping.....	27
6.1.3	Situation of conceptualization	28
6.1.4	Situation of optimization	28
6.1.5	Situation of re-design	28
7	Developing Value Management capability	28
7.1	General guidance on developing capability	28
7.2	Wider training in Value Management and Value Culture	29
7.3	Value Management team leaders.....	29

EN 12973:2020 (E)

7.4	Supporting structure	29
7.5	Management information	30
7.6	Implementation of Value Management methods	30
8	Methods used in Value Management.....	30
8.1	Core Methods used in Value Management	30
8.2	Guidance on use of Value Management methods	31
8.2.1	General guidance.....	31
8.2.2	Value Analysis/Value Engineering (VA/VE).....	31
8.2.3	Function Analysis (FA)	31
8.2.4	Function Cost (FC)	32
8.2.5	The Functional Performance Specification (FPS).....	33
8.2.6	Design to Cost (DTC) / Design to Objectives (DTO)	33
Annex A (informative)	Methods and tools to be used within Value Management - Specific Value Methods and tools.....	35
Bibliography.....		69

<https://standards.iteh.ai/catalog/standards/sist/04ba2b94-f699-4926-8df7-31ad1c4951f9/sist-en-12973-2020>

European foreword

This document (EN 12973:2020) has been prepared by Technical Committee CEN/TC 279 “Value management, value analysis, function analysis”, the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by July 2020, and conflicting national standards shall be withdrawn at the latest by July 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12973:2000.

This document updates, extends and supersedes the previous document EN 12973:2000. New subject matter has been developed to address Value Management within the context of existing management systems and organizational culture. This standard significantly extends guidance for what an organization should do or may do to optimize performance in its current situation and to develop capability and approaches to secure future value improvement. The document also augments previous standard guidance on a common basis for practice and methods.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

[SIST EN 12973:2020](https://standards.iteh.ai/catalog/standards/sist/04ba2b94-f699-4926-8df7-31ad1c4951f9/sist-en-12973-2020)

<https://standards.iteh.ai/catalog/standards/sist/04ba2b94-f699-4926-8df7-31ad1c4951f9/sist-en-12973-2020>

Introduction

The aim of this standard is to present, define and explain Value Management and provide guidance for the introduction of the basic concepts, approaches, essential principles, drivers (levers), methods and tools for effective Value Management.

Value Management is all about:

“Organizational Improvement, setting clear goals, improving productivity, creativity and return on investment.”

This standard sets out guidance on the essential elements of Value Management, which improve value, competitiveness and performance for an organization and support leadership, cross-disciplinary work and operational management.

Value Management in an organization is about proactively increasing value, it being the relationship between the satisfaction of needs and the consumption of resources used in satisfying the needs. The fewer resources used or/and the greater the satisfaction of needs, the greater the value. The application of Value Management approaches and underpinning principles throughout an organization helps strengthen the awareness and understanding among its members and teams of the factors which influence value for that organization, while making decisions on a consistent basis.

This standard presents Value Management within the context of existing management systems and an organizational culture: with value at the forefront of thinking and behavior. It aims to give specific guidance as to what an organization should do, or may do to improve performance. It addresses the concepts of ‘value culture’ (attitudes and understanding of value for the organization), ‘Value Management’ (the underlying concept of the discipline), the ‘Value Management approach’ (the way the organization works to apply the four principles of Value Management), and the deployment of ‘Value Management methods’ (specific value methods and tools such as Function Analysis, Value Analysis, Value Engineering, as well as other methods and tools). The standard gives guidance on developing capability for any organization including supply chains and delivering innovative solutions.

The four principles of Value Management underpinning the Value Management approaches, namely strengthen value orientation, apply function thinking, apply a structured, holistic approach and manage complexity, risk and uncertainty complement and support other management standards being implemented in the organization, for example, quality, risk and dependability. Crucially, the leadership in the organization will be able to carry out their own informal, formal or study-based Value Management approach to improve the organization and its products. European accredited training in Value Management is available to support organizations and individuals.

WHAT is VALUE MANAGEMENT?

Value Management is an underlying concept applied within existing management systems and approaches based on value and function-oriented thinking, behavior and methods, particularly dedicated to motivating people, developing skills, promoting synergies and innovation, with the aim of maximizing the overall performance of the organization.

Value culture implicitly combines function thinking with identifying the needs and finding the best ways to satisfy these. When an organization aspires, and strives for a mature value culture, that culture naturally aligns human behavior to improve value. Value culture using Value Management approaches underpinned by Value Management principles, particularly function thinking, and drivers (levers) and methods as described in this standard support organizations and people in increasing value.

Value Management is inherent within organizational culture, management approaches, selection of methods and tools and decision-making with the aim of maximizing performance. Value Management enables the organizational culture to enhance creativity and effectiveness in addressing the means to satisfy the needs, from the users’ and customers’ perspective.

WHY use VALUE MANAGEMENT?

Value Management as a concept includes the organization's Value Management approach considering its four essential principles and four drivers (levers), supported by Value Management methods and tools.

In parallel with the evolution of Value Management there has been widespread development of system standards and guidance to support organizations. Value Management contributes to and strengthens these systems to help maximize the performance of the organization.

In simple environments, a focus on functional needs and value as a basis for decision-making sets clear direction towards a sustainable solution for the organization. In dynamic or volatile environments, consideration of uncertainty and complexity and development of a holistic approach to accommodate multiple scenarios may become a guiding principle that sets a direction towards a sustainable solution for the organization.

External or internal customers and users may all hold differing views in prioritizing the needs. Effective Value Management will recognize, respect and integrate these perspectives as far as is relevant to improve value.

The most visible benefits arising from effective Value Management include:

- better business decisions, which can be supported by customers and users by providing decision-makers with a sound basis for their choices;
- increased effectiveness by organizing and using limited time and resources to best effect; delivering better environmental, social, economic, and financial outcomes;
- improved products for users and customers by clearly understanding, prioritizing and satisfying their real needs;
- enhanced competitiveness by facilitating technical and organizational innovation and resource efficiency;
- aligning members of the organization to its goals, critical success factors and values through improved internal communication and knowledge; and
- enhancing communication and efficiency through multi-disciplinary and multi-task teamwork.

The benefits of Value Management are available to all: providers and consumers in all sectors of society, individuals, organizations, networks and governments.

WHO is VALUE MANAGEMENT primarily addressed to?

- any person aiming to achieve, deliver or improve sustainable performance;
- executive leaders and authorities seeking to increase satisfaction for users, customers and stakeholders to enhance the performance of their organization;
- managers and people, at all levels, who use a Value Management approach to support decision-making; and
- all those involved in Value Management development, deployment or training.

The Value Management approach is the way an organization, which aims to deliver value, applies the four essential Value Management principles and the four drivers (levers) for Value Management to strengthen its approach. This standard sets out guidance for informal, formal and study-based Value Management approaches to apply the Value Management principles and drivers (levers) for Value Management, relevant for the organization within specific circumstances and scenarios with the aim of maximizing the overall performance of the organization. The essence of a successful approach is based on establishing a clear understanding of the relationship between the satisfaction of need and the resources used to satisfy it.

The development of the value culture within the organization is fundamental to optimizing performance. The development of this culture requires training in function thinking appropriate to the activities, responsibilities and accountability of the individuals.

A mature value culture shapes attitudes and working practices and encourages groups to collaborate and tackle challenges to achieve agreed goals. An appropriate value culture reduces waste and unnecessary effort and encourages the focus of limited resources on those areas which will give the greatest value.

Value Management embraces specific management tools, which may be applied in a rigorous and systematic manner to address all kinds of issues ranging from design or production of a single component or service to addressing vision, mission and/or development of strategic goals.

In larger organizations, a structured framework should be created and introduced to assist managers in applying Value Management approaches, principles, drivers (levers) and methods consistently across the organization. In such organizations, individuals may have specific and well-defined roles within the process. In smaller organizations (such as Small and Medium-sized Enterprises), such roles may be less defined, and an individual may effectively perform several of these as part of their duties.

This standard includes guidance for:

- successful Value Management; [SIST EN 12973:2020](https://standards.iteh.ai/catalog/standards/sist/04ba2b94-f699-4926-8df7-)
<https://standards.iteh.ai/catalog/standards/sist/04ba2b94-f699-4926-8df7->
- improving the contributions which Value Management can make for an organization;
- making sustainable decisions not only about environmental resources and responsibilities, but also regarding social, and economic well-being of communities and financial performance of the organization; and
- balancing and aligning the needs of customers and users of a product and other stakeholders with an interest in or influence on a product.

Throughout this document the word ‘product’ has a wide meaning, which embraces any tangible or intangible result of activities or processes, including any goods, intellectual property, process, service, system, strategy or organization.

1 Scope

This document aims to:

- a) guide and give ideas for leaders, managers, and teams to plan the deployment of Value Management approaches and the effective application of Value Management core / specific methods;
- b) help organizations improve performance, productivity, profitability and effectiveness;
- c) address Value Management at the managerial level;
- d) support people in strengthening value culture;
- e) give guidance for strengthening Value Management and Value Management methods at different levels within the organization;
- f) identify the conditions for effective Value Management;
- g) give guidance for value-based decision-making;
- h) stimulate and support innovation; and
- i) establish a basis for developing training and certifying procedures for individual competences in Value Management.

STANDARD PREVIEW
(standards.itech.ai)

Figure 1 presents the envisaged organization of documents relative to the Value Management field and the standards available at the CEN level for all users of this document.

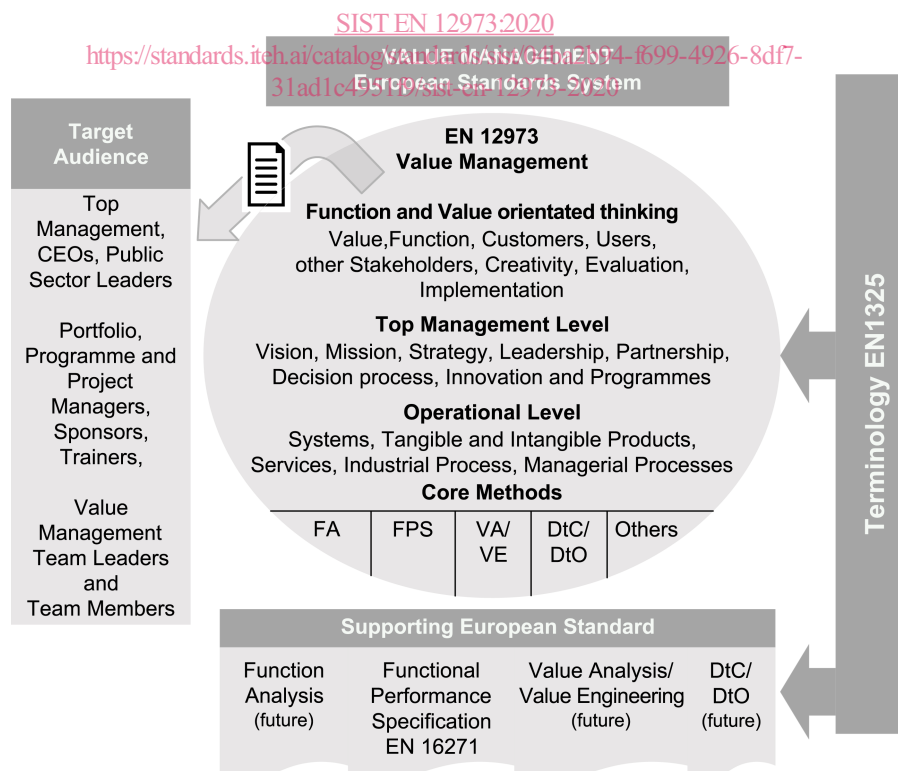


Figure 1 — Documents in relation to Value Management

EN 12973:2020 (E)

A system for certification of individual professional competence is maintained by the National Value Associations in Europe. The qualification “Professional in Value Management” (PVM) is recognized across Europe by National Value Associations as an indicator of competence. This qualification is also recognized in other countries outside Europe.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1325, *Value Management - Vocabulary - Terms and definitions*

EN 16271, *Value management - Functional expression of the need and functional performance specification - Requirements for expressing and validating the need to be satisfied within the process of purchasing or obtaining a product*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1325 and the following apply.

NOTE When a term, which is defined in this vocabulary, is used in the definition of another term, it is printed in bold type.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

<https://standards.iteh.ai/catalog/standards/sist/04ba2b94-f699-4926-8df7-31ad1c4951f9/sist-en-12973-2020>

3.1 value

an assessment (sometimes measure) of how well an organization, project or product satisfies both the need of the users and the objectives of stakeholders considering the impacts, uncertainties and resources required to satisfy the need

Note 1 to entry: Product is defined in EN 1325:2014 as result of activities or processes, any goods, process, service, system, strategy or organization. A product can include service, hardware, processed materials, software or a combination thereof. A product can be tangible (e.g. assemblies or processed materials) or intangible (e.g. knowledge or concepts), or a combination thereof. A product can be either intended (e.g. offering to customers) or unintended (e.g. pollutant or unwanted effects).

Note 2 to entry: The concept of value is very close to the notion of effective and efficient use of resources in defining, prioritizing and delivering needs; (or achieving the best balance) between contributions arising from any artefact (result of knowhow, phenomenon originating in human activity, whether in physical or intangible form) and the sum of the consumed resources and of impacts concurrent to their provision.

Note 3 to entry: The diagram below illustrates the general concept of value assessment.



Figure 2 — Value

3.2

value management

underlying concept applied within existing management systems and approaches based on **value** and function-oriented thinking, behavior and methods, particularly dedicated to motivating people, developing skills, and promoting synergies and innovation, with the aim of maximizing the overall performance of the organization

3.3

value culture

an attitude, awareness and sufficient knowledge of what the concept of **value** represents and abilities of an organization and its stakeholders to relate **function thinking** with solutions seeking before decision-taking

Note 1 to entry: Value culture relies upon effective function thinking.

3.4

function thinking

mind-set of considering separately the need to be satisfied and the means for delivering this need, informed by awareness of functions and relationships between functions

3.5

value driver (lever)

attribute which when changed has a significant impact on the **value** of the subject under consideration

Note 1 to entry: The term **value driver (lever)** may be translated as enabler, which has significant influence on the **value** of the subject under consideration. The **value driver (lever)** may be an environmental condition, parameter, element, any constituent of the subject under consideration, or of the system it is part of, which, when changed, has a significant impact on the **value** of that subject.

PREVIEW
(standards.itech.ai)

SIST EN 12973:2020

4 Value Management

4.1 Value Management approach

4.1.1 General guidance

The Value Management approach should be tailored to the organization and situation under question. Important developments since publication of the previous edition of this standard should be recognized to distinguish between the Value Management approach and the traditional applications of core methods on complex products and systems for the organization. This standard introduces the concepts and it should not be treated as procedural guidance. Core / specific methods and tools are described in Clause 8.

An organization typically sets out or develops various approaches to management, which bring a focus on customer service, organizational and product performance, develops a culture, motivates people and applies skills, with the aim of improving the overall performance of the organization.

The way the organization applies the Value Management essential principles and the drivers (levers) for Value Management becomes its distinctive Value Management approach to establish a value culture across the organization, stimulate innovation and deliver continuous improvement with the aim of maximizing the overall performance of the organization.

The organization should apply each Value Management principle and strengthen each driver (lever) for Value Management to enhance its global efficiency and improve its Value Management approach in order to maximize relevance and optimize performance, productivity, efficiency and effectiveness.

Four essential Value Management principles and four drivers (levers) for Value Management which typically have a significant impact on value are listed in Figure 3 and are explained in 4.2 and 4.3 respectively.

Principles	Drivers (levers)
1 Strengthen value orientation	1 Collaborative style of managing
2 Apply Function Thinking	2 Motivate positive human dynamics
3 Apply a structured holistic approach	3 Consider both internal and external environment
4 Manage complexity, risk and uncertainty	4 Apply proven methods and tools

Figure 3 — Summary of Value Management principles and drivers (levers)

The organization should assess its existing value culture and Value Management approach.

The organization should make decisions on value orientation to help the organization set direction for any future scenario.

The organization should strengthen its Value Management approach to improve value realized by the organization.

The organization should develop and design its Value Management approach to suit the environment of the organization. Combinations of the three following approaches may be adopted:

- An informal or intuitive Value Management approach, which relies upon existing value culture to guide decisions and actions to apply Value Management principles and deploy the drivers (levers) for Value Management and thereby enhance organizational performance;
- A formal Value Management approach, which relies upon the way in which the organization deploys specific processes, sets goals and applies methods to apply Value Management principles, and deploy the drivers (levers) for Value Management and thereby enhance organizational performance. This is particularly relevant in a complex and uncertain situation;
- A Value Management study-based approach, which relies upon deployment of Value Management methods through project focused activities, sometimes within a Value Management program of specific projects, to enhance performance within a discrete part of an organization or network under consideration. The Value Management study-based approach may be seamlessly integrated into the organization's normal business processes.

The organization should communicate the Value Management approach or approaches to all employees and other relevant stakeholders.

The Value Management approach when introduced to an organization can be applied effectively at all levels of the organization:

- top management;
- program level;
- portfolios of projects;
- business re-structuring, or re-positioning or improvement initiatives;
- operational level.

It can also be applied for the achievement of targets, such as:

- establishing project briefs;
- identification of the business and project strategy;

- selection of the preferred option;
- optimization of the design and method of delivery;
- evaluation of the project post completion;
- validation of change;
- increase satisfaction for customers, users and other stakeholders.

The organization should assess the effectiveness of its Value Management approach by reference to:

- value delivered by the approach;
- the extent to which needs, and objectives are satisfied;
- improvements in collective intelligence, resilience, relevance, performance, productivity and competitiveness of an organization; and
- the quality levels achieved by the organization.

Stakeholders shall understand the needs which shall be satisfied by the organization or product under consideration, when making a decision to improve value.

The Value Management approach is shown in Figure 4.

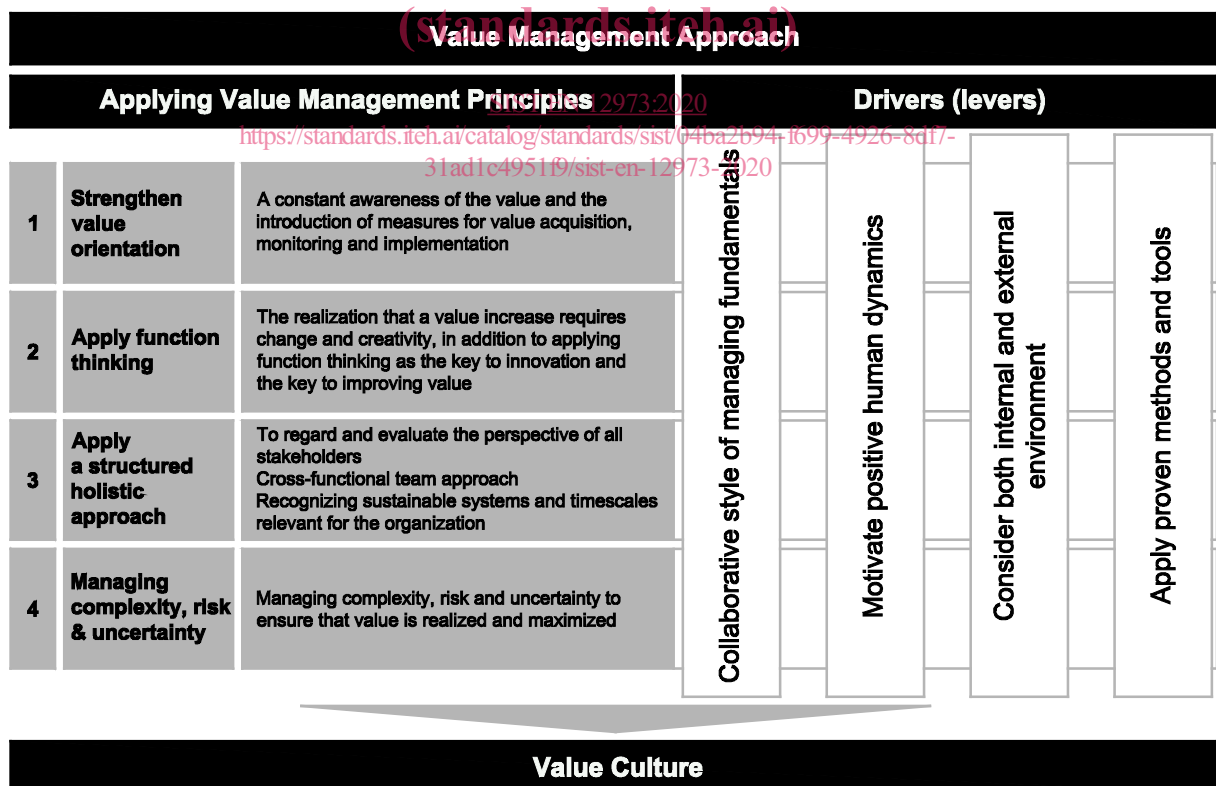


Figure 4 — The Value Management Approach