

DRAFT INTERNATIONAL STANDARD

ISO/DIS 56006

ISO/TC 279

Secretariat: AFNOR

Voting begins on:
2020-08-10

Voting terminates on:
2020-11-02

Innovation management — Tools and methods for strategic intelligence management — Guidance

ICS: 03.100.01; 03.100.40; 03.100.70

iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO/DIS 56006](#)

<https://standards.iteh.ai/catalog/standards/sist/e39a22b4-b8e5-44fe-9266-944190f22429/iso-dis-56006>

THIS DOCUMENT IS A DRAFT CIRCULATED FOR COMMENT AND APPROVAL. IT IS THEREFORE SUBJECT TO CHANGE AND MAY NOT BE REFERRED TO AS AN INTERNATIONAL STANDARD UNTIL PUBLISHED AS SUCH.

IN ADDITION TO THEIR EVALUATION AS BEING ACCEPTABLE FOR INDUSTRIAL, TECHNOLOGICAL, COMMERCIAL AND USER PURPOSES, DRAFT INTERNATIONAL STANDARDS MAY ON OCCASION HAVE TO BE CONSIDERED IN THE LIGHT OF THEIR POTENTIAL TO BECOME STANDARDS TO WHICH REFERENCE MAY BE MADE IN NATIONAL REGULATIONS.

RECIPIENTS OF THIS DRAFT ARE INVITED TO SUBMIT, WITH THEIR COMMENTS, NOTIFICATION OF ANY RELEVANT PATENT RIGHTS OF WHICH THEY ARE AWARE AND TO PROVIDE SUPPORTING DOCUMENTATION.

This document is circulated as received from the committee secretariat.



Reference number
ISO/DIS 56006:2020(E)

© ISO 2020

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO/DIS 56006](https://standards.iteh.ai/catalog/standards/sist/e39a22b4-b8e5-44fe-9266-944190f22429/iso-dis-56006)

<https://standards.iteh.ai/catalog/standards/sist/e39a22b4-b8e5-44fe-9266-944190f22429/iso-dis-56006>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2020

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
3.1 Intelligence.....	1
3.2 Strategic Intelligence.....	1
4 Fundamentals of strategic intelligence	1
4.1 Purpose of strategic intelligence.....	1
4.2 Strategic intelligence requirements.....	2
4.3 Core of the strategic intelligence process.....	2
4.4 Strategic intelligence timing.....	2
4.5 Expected strategic intelligence outcomes.....	2
4.6 Strategic intelligence essentials.....	3
5 The strategic intelligence cycle	3
5.1 Operational planning and control.....	3
5.2 Framing.....	4
5.3 Gathering and analysis.....	5
5.3.1 Data gathering and verification.....	5
5.3.2 Data analysis to extract information.....	6
5.4 Interpretation.....	7
5.5 Recommendation.....	7
5.6 Strategic intelligence validation.....	8
6 Intelligence dissemination	8
6.1 Leadership recommendations.....	8
6.2 Documentation, communication, and distribution control.....	8
Bibliography	10

Foreword

ISO (the International Organisation for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organisations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 279, *Innovation management*.

Any feedback or questions on this document should be directed to the user's national standards body.

Introduction

Organisations operate in a volatile, uncertain, complex and ambiguous environment which is characterised by expanding knowledge flows, increasing global competition and rate of change. This creates the need to anticipate change, influence the environment and make timely and informed decisions regarding innovation.

Global knowledge and information-based environments require strategic-thinking leaders to utilise this knowledge to define their organisational and innovation strategy. This supports organisations in responding to changes in their environment such as technological, market, regulatory, policy, etc.

To this extent, it is necessary to isolate or synthesize data and information with high-confidence and to convert it into knowledge for making strategic decisions, and taking advantage of untapped opportunities.

Strategic intelligence is the outcome of a structured process for collecting, processing and communicating data, information and knowledge to decision-makers, that can be applied continuously or on specific projects to be launched.

The process backbone lies on the capability of ensuring objectiveness of scope and criteria, reliability of data sources and information derived, transparency of the actions performed to interpret and communicate the knowledge. As such, it is both an element of risk reduction as well as strategic growth, and enables organisations to set strategic direction and deploy their innovation initiatives.

An organization can leverage strategic intelligence as an enabling factor to achieve its business objectives and to implement innovation initiatives, for a range of purposes such as:

- identifying new business opportunities
- increasing competitive advantage [ISO/DIS 56006](https://standards.iteh.ai/catalog/standards/sist/e39a22b4-b8e5-44fe-9266-944190f22429/iso-dis-56006)
- anticipating risk and uncertainty <https://standards.iteh.ai/catalog/standards/sist/e39a22b4-b8e5-44fe-9266-944190f22429/iso-dis-56006>
- enabling technology transfer opportunities
- forecasting technological and business drivers
- spotting out weak signals to anticipate change
- overcoming barriers that limit value creation
- implementing a structured approach to problem solving

Principles

Strategic intelligence conforms to the following principles, derived from the innovation management system:

a) Realisation of value

Strategic intelligence impacts on the vision, mission and innovation activities of an organisation. As such, it should support the creation of value for all relevant stakeholders. This includes long-term and short-term value; explicit and implicit value; financial and non-financial value (as for example competence growth, technological and/or competitive advantage, societal benefit, sustainability improvement, etc.)

b) Future-focused leaders

When pursuing innovation initiatives, leaders across the organisation should foster strategic intelligence as an enabling factor for long-term value creation.

c) Strategic direction

ISO/DIS 56006:2020(E)

The organisation should integrate the management of strategic intelligence in the definition of its business and innovation strategies.

d) Culture

The organisation should foster and sustain shared values, beliefs, and behaviours across the organisation with a view to support and promote the use of strategic intelligence for long-term value creation for the organisation.

e) Exploiting insights

The organisation should ensure to access a diverse range of internal and external data, information and knowledge sources to systematically build expertise in support of strategic intelligence.

f) Managing uncertainty

The organisation should foster strategic intelligence in support of evaluating and managing innovation uncertainties and risks.

g) Adaptability

The organisation should align the need of strategic intelligence with its vision and mission, addressing and even anticipating changes at different time scale in the external and internal context

h) Systematic approach

The organisation should manage strategic intelligence based on a systematic approach (instead of on an *ad-hoc* basis) with a view to reducing organisational risks and enhancing value creation potential for the organisation.

ISO/DIS 56006
<https://standards.iteh.ai/catalog/standards/sist/e39a22b4-b8e5-44fe-9266-944190f22429/iso-dis-56006>

Innovation management — Tools and methods for strategic intelligence management — Guidance

1 Scope

This standard proposes guidelines for supporting the strategic intelligence within innovation management. It aims at addressing the following areas concerning strategic intelligence at strategic and operational levels:

- Creating a strategic intelligence management strategy to support innovation in an organisation;
- Establishing strategic intelligence management in the innovation process;
- Applying strategic intelligence tools and methods in the innovation process.

Strategic intelligence is transversal and cross-sectorial by nature. It is not limited to innovation activities and can apply to all areas where knowledge is required for strategic action.

This document is not for certification purposes.

This document does not cover data protection.

iteh STANDARD PREVIEW

2 Normative references (standards.iteh.ai)

There are no normative references in this document.

ISO/DIS 56006

<https://standards.iteh.ai/catalog/standards/sist/e39a22b4-b8e5-44fe-9266-944190f22429/iso-dis-56006>

3 Terms and definitions

3.1 Intelligence

Result of gathering, analysing and interpreting data, information and knowledge.

NOTE Intelligence can be of different kinds, for example (but not limited to) market intelligence, technology intelligence, competitive intelligence, IP intelligence, business intelligence.

3.2 Strategic Intelligence

Intelligence directed to top management with recommendations to make decisions impacting the vision, strategy, policy and objectives as well as innovation activities of the organisation.

For other definitions, refer to the ISO 56000 terms and definitions corpus.

4 Fundamentals of strategic intelligence

4.1 Purpose of strategic intelligence

Intelligence is required at every stage of the innovation process, from idea generation, to engineering conception, and business model determination. Knowledge is the key resource in generating innovative concepts: knowledge of technology progress, of markets, business trends, geopolitics, etc.

Strategic intelligence promotes decision making based on knowledge, assists in managing uncertainty, risks and opportunities and is integral to the innovation management system activities

4.2 Strategic intelligence requirements

To accomplish this purpose, the strategic intelligence team needs to

- acquire data, information and knowledge from internal and external sources
- collaborate and cooperate with interested parties,
- gain additional perspectives, e.g. present and future trends, internal and external factors, demand and supply for intended products/services, needs of providers and users related to new or changed products, services, processes, models, methods, competitors and collaborators, regulatory changes, intellectual property protections, consumer safety and ethics, and sustainable development considerations.
- develop influencing activities to increase acceptance of innovation, e.g. evolution of regulatory requirements, standards, and innovation ecosystems.
- identify external interested parties: customers, suppliers, internal and external auditors (compliance with standards, regulations etc.), governments at all levels (compliance with regulations, statutes, laws), consumer groups (concerns regarding fairness, ethics, safety, etc.), regulatory bodies, industry and trade associations
- identify internal interested parties: employees, union representatives (if applicable), management (performance, costs), shareholders/owners (earnings).
- analyse external trends (e.g. megatrends, policies, regulations, economy, society, technology, environment, legal),
- identify internal tendencies (e.g. resources, competencies, assets, business models) and
- understand interested parties' issues that are relevant to its purpose and that affect its ability to achieve the intended outcome(s).

4.3 Core of the strategic intelligence process

The primary strategic intelligence cycle is referred to as the DIKI model:

Data → Information → Knowledge → Intelligence

The process requires use of various tools and methods, e.g. data mining, analytics, artificial intelligence, machine learning, prediction techniques, environmental scanning, technology watching, monitoring relevant technologies, ethnographic research, to support the DIKI model.

4.4 Strategic intelligence timing

Ideally the DIKI loop should be a continuous cycle. However, due to practical reasons, it may not be feasible. Extraction of Knowledge and Intelligence can be either calendar driven or triggered by an external event that requires leadership attention or decision.

4.5 Expected strategic intelligence outcomes

The following outcomes are expected:

- a set of recommendations to the leadership for use in strategic planning and decision making.
- a set of recommendations to the strategic intelligence team on new or alternative directions and any additional data requirements for confirmations. This includes appropriate levels of confidentiality, protection, disclosure and maintenance of the proprietary nature of Intelligence, also considering intellectual property-related aspects,

4.6 Strategic intelligence essentials

Strategic intelligence cycle requires:

- a) Infrastructure or access to
 - a. Specialized databases such as intellectual property, business, marketing and other commercial databases, with appropriate licences and permits,
 - b. specific techniques and tools for search, retrieval, analysis and treatment of data and information, text mining, Big data, machine learning, social network analysis, voice and other methods,
 - c. workspace infrastructure, and associated utilities, such as facilities, IT hardware/software,
 - d. general services and logistics.
- b) Recommended competencies – a team of multidisciplinary expertise (for example):
 - a. team/project management
 - b. subject matter expertise e.g. technology scenario analysis, business environment and market analysis, innovation management, sustainability, human resources & social sciences, etc.;
 - c. industry sector expertise, e.g. chemical, energy & power, O&G, automotive, aerospace & defence, manufacturing, healthcare, government & public administration, etc.;
 - d. data analytics, e.g. statistics, big data analytics, AI/Machine Learning, forecasting, etc.

NOTE 1 These are minimum requirements for a multidisciplinary expertise. Depending on the size of the organisation, the number of people involved, the type of information or other reasons, the same person can fulfil one or more roles, needing to add the relevant skills.

NOTE 2 The strategic intelligence team should foster knowledge exchange and have sufficiently developed interpersonal skills such as emotional intelligence and intuition.

Some of the reasons for poor intelligence generation may include

- inadequate collection of data, information and knowledge,
- missing requirements, deadlines or costs,
- wrong or poor communication of intelligence,
- wrong or poor execution of the strategic intelligence cycle (e.g. lack or wrong execution of one or more steps).

5 The strategic intelligence cycle

5.1 Operational planning and control

The strategic intelligence needs of an organisation in the context of innovation depend on the identification of the relevant data, information and knowledge in its external business environment and industry (for example: market, competitors, technical, stakeholders). It should be aware that the business environment is dynamic and continually changing. The strategic intelligence team should consider the following external and internal aspects as a minimum:

- business areas of the innovation projects identified;
- competitors;
- markets including customers;