IT
Strategy
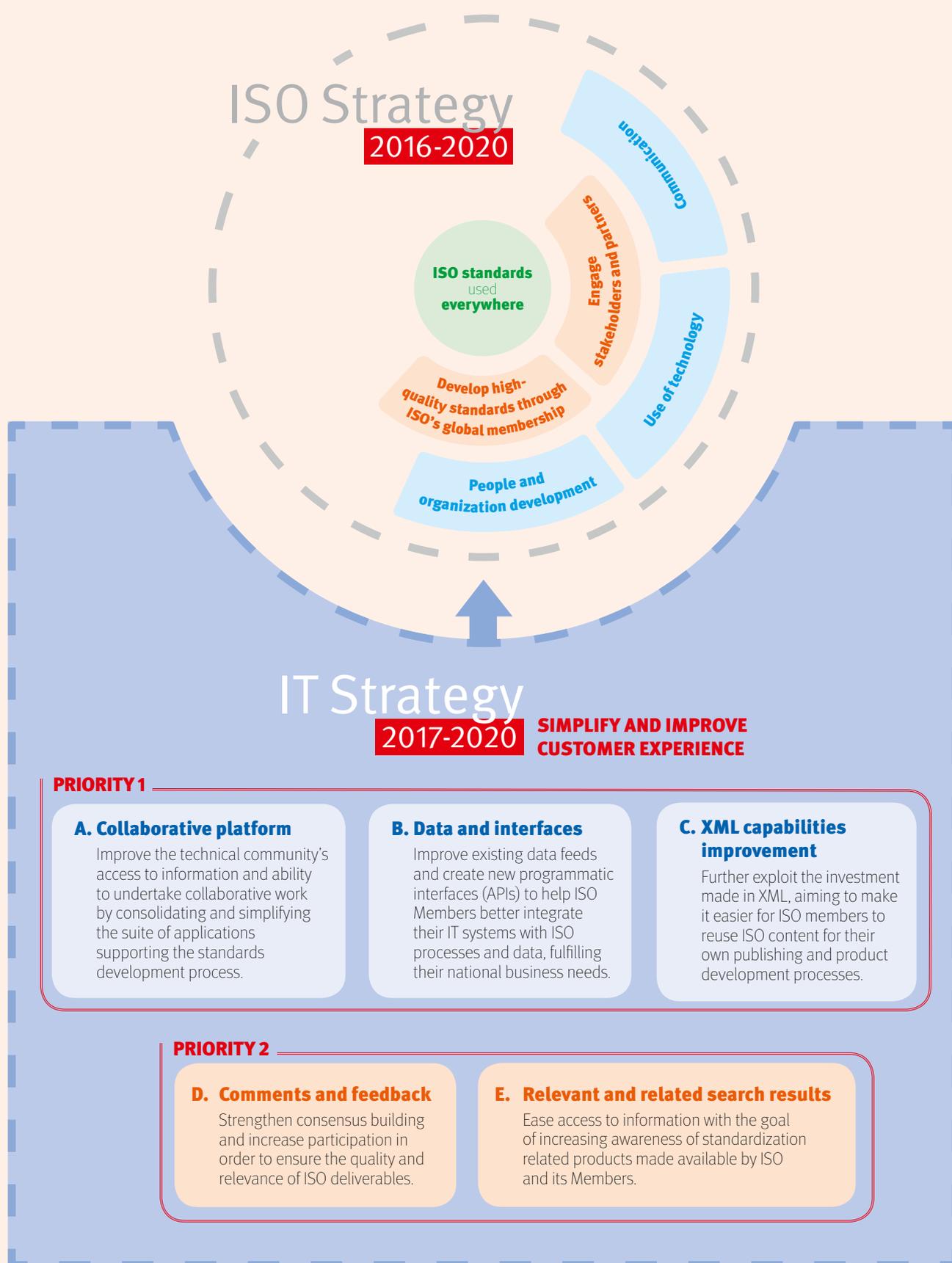
Great things happen when the world agrees

ISO's mission is to bring together experts through its Members to share knowledge and to develop voluntary, consensus-based, market-relevant International Standards that support innovation and provide solutions to global challenges.

ISO IT's mission is to provide user-friendly and cost-effective platforms, applications and services to its Members, Technical experts, Partners, end-Customers and its Staff. Its goal is to share data, content and knowledge more effectively in a secure and reliable environment. Through being a hub which provides its customers with access to both proven and innovative technologies, IT aims at facilitating the production of globally relevant International Standards that are used everywhere.

After completing a market analysis, taking into account the outcomes from the Future Standard Development Environment (FSDE) report, assessing ISO IT's resources and capabilities and conducting a SWOT analysis, an IT strategy based on five Strategic Initiatives was designed to deliver IT's mission.

Strategic Objectives

ISO Strategy
2016-2020

ISO standards used **everywhere**

Engage stakeholders and partners

Communication

Use of technology

Develop high-quality standards through ISO's global membership

People and organization development

IT Strategy
2017-2020

SIMPLIFY AND IMPROVE CUSTOMER EXPERIENCE

PRIORITY 1

A. Collaborative platform
Improve the technical community's access to information and ability to undertake collaborative work by consolidating and simplifying the suite of applications supporting the standards development process.

B. Data and interfaces
Improve existing data feeds and create new programmatic interfaces (APIs) to help ISO Members better integrate their IT systems with ISO processes and data, fulfilling their national business needs.

C. XML capabilities improvement
Further exploit the investment made in XML, aiming to make it easier for ISO members to reuse ISO content for their own publishing and product development processes.

PRIORITY 2

D. Comments and feedback
Strengthen consensus building and increase participation in order to ensure the quality and relevance of ISO deliverables.

E. Relevant and related search results
Ease access to information with the goal of increasing awareness of standardization related products made available by ISO and its Members.

1. Five strategic objectives

The defined Strategic Objectives cover fixing existing deficiencies, strengthening existing solutions as well as transforming IT processes.

A. Collaborative platform

The opportunity

- Online collaborative authoring products have matured and an increasing part of the ISO technical community has become accustomed to such tools and services. Today, ISO does not offer a comparable capability to its community or stakeholders.
- The standards development environment is mainly " document centric " and is not adapted to an online, " content centric " approach. Such an environment should also help better engage people.
- The existing IT tools supporting the standards development process do not allow for effective project management or traceability of actions and decisions ; neither are they conducive to an anticipated project-based standardization approach.
- The standards development process relies mostly on face-to-face meetings. Current technology used to support virtual meetings (more than 40 per day, and growing) is not capable enough and is not currently integrated with IT tools provided by ISO and ISO members.
- Collaboration in the current environment is restricted to the exchange of e-mails (mainly automated). This causes some frustration and a loss of interest among participants who are flooded with information that is not always relevant.
- Exchanges and discussions between ISO members should be strengthened.

How will ISO seize the opportunity ?

- Launch a new standards development platform (including, but not limited to, efficient, integrated document management capabilities with the aim of replacing the existing OpenText eCommittees platform). Such a platform will consolidate and simplify the existing tools supporting the standards development process and integrate relevant social media capabilities. This platform will also permit participation from mobile devices, provide better support for accessibility and allow improved personalization.
- Develop new online authoring capabilities, adaptable for national and regional purposes.
- Assess current virtual meeting capabilities and, if appropriate, replace them with a more efficient, cost-effective and well integrated solution to deliver a better quality of service, especially with regard to audio quality in combined physical and Web conferences.
- Consolidate existing automated notifications.
- Build a new information exchange platform to strengthen communication, distribution of materials and exchanges between ISO members.

Measures of success

- Standards and publications delivered in a timely manner.
- Increased number of virtual meetings.
- Effective orientation effort for secretaries and experts.
- Decreased number of automated e-mails sent by ISO/CS to its stakeholders.
- Increased use of social media in the ISO standards development process.
- Increased participation of a younger generation.

B. Data and interfaces

The opportunity

- ISO exchanges metadata, content and services with its members and partners in a siloed manner. These are of dissimilar data formats and exchange technologies and ISO does not provide access to "live" data.
- Duplication of data across ISO and its members and partners leads to desynchronization, versioning and data recovery problems.
- Key services can't be easily integrated with third-party information technology systems.
- ISO members are also often members of IEC, CEN and/ or CENELEC, which also provide data feeds using yet another set of tools and formats, requiring extra effort by ISO members to ingest and use this data.

How will ISO seize the opportunity?

- Harmonize data-focused Application Programming Interfaces (APIs) with those of ISO's partner organizations (IEC, CEN, CENELEC…), providing accessible and accurate data to ISO members.
- Make ISO data feeds useful and usable by providing open content and services through improved, robust, real-time technical APIs.
- Provide ISO members and partners with a catalogue of available data feeds and APIs.

Measures of success

- Higher level of adoption of new data feeds and APIs by ISO members and partners.
- Decreased time and effort required to develop new tools and integrate off-the-shelf solutions.

C. XML capabilities improvement

The opportunity

- Despite the significant investment made during the last few years, only a few ISO members have developed their publishing and production processes to benefit from standards available in eXtensible Markup Language (XML) format.
- XML is so far used by ISO at the end of the authoring process to enable publishing in different formats.
- ISO's content dissemination is poorly controlled and existing intellectual property protection mechanisms do not cope well with XML.
- The current ISO content repository (ISOSTD platform hosting reference PDF and XML, EPUB, HTML formats…) is end-of-life and can't support future business requirements.

How will ISO seize the opportunity?

- Participate in international efforts to develop XML schemas supporting standards publishing (NISO XML Standard for Producing Standards Documents) that can be adopted by ISO members and partners.
- Implement NISO XML schemas as the exchange format for standards content

between ISO and its members and further embrace the use of XML technology during the ISO standards development process.

- Identify how XML-based standards can help ISO and its members provide innovative products and services (e.g. common PDF rendering module which supports NISO Standard Tag Suite (STS)-based XML files).
- Extensively and proactively interact with ISO members to provide solutions for structured content and ensure efficient use of XML technology.
- Develop a new repository for XML distribution and dissemination with better access control and increased traceability.
- Improve Web shop experience through the use of XML-based technology, thereby ensuring OBP modules can be reused by ISO members in other contexts (e.g. XML online reader).

Measures of success

- NISO STS published in 2017 with ISO STS backwards compatibility support.
- Increased number of ISO members that use XML in their publishing and production units.

D. Comments and feedback

The opportunity

- ISO currently provides insufficient commenting-related tools for capturing and processing input from committee experts during the standards development process.
- The tools used by committee officials, despite being well-established, are outdated to properly manage the comments and feedback received and record decisions. Thus, some ISO committees have built their own tools to manage those inputs within their committees.
- The comments and feedback data format is neither structured nor standardized.

How will ISO seize the opportunity?

- Standardize data exchange formats and interfaces for commenting/feedback.
- Make available a better commenting collation toolset and enriched online commenting for standards development purposes.
- Develop innovative ways to capture end-users' feedback during the standards development process and once a standard is published [e.g. reaching audiences outside national standards bodies (NSBs) and their national mirror committees with the goal of feeding information back to the relevant NSBs].

Measures of success

- Simplified collation and management of comments.
- Better channelling and processing of public feedback.

E. Relevant and related search results

The opportunity

- ISO provides siloed search capabilities for the public and the ISO technical community across the various applications and Websites it operates. Users looking for ISO-related content need to know the application purposes to find relevant content.
- Standards-based search results in the ISO.org Website and ISO Online Browsing Platform (OBP) are not always accurate or consistent.

How will ISO seize the opportunity?

- Study semantic search across ISO standards and publications.
- Develop overall search functions against ISO metadata and content (from working documents to deliverables).

Measures of success

- Increased public awareness of ISO content and deliverables.
- Reduced number of ISO.org visitors who navigate away from following a search (known as "bounce rate").
- Increased traffic to ISO.org.

2. Convergence with IEC

ISO is seeking common synergies and effective future collaboration with IEC for mission-critical IT solutions. This is highly important as it should help achieve economy of scale in key investments and common members integration.

In addition to the regular exchanges with IEC on IT matters and the ongoing joint projects (e.g. harmonization of technical interfaces…), ISO will ensure IEC is invited to participate in the future ISO IT Governance group and in any relevant key IT projects – details available in the ISO IT Projects Implementation Plan 2017-2020 – which will support the ISO IT Strategy 2017-2020.

3. Tools and services to members

ISO will continue to support its members by providing common tools and services for their participation in national, regional and international standardization.

ISO members, depending on their size and capability in terms of IT, may choose to use the shared systems provided or operated by ISO/CS or implement their own platforms to support their local and regional demands, in conjunction with supporting their international standardization practices mandate. ISO should ensure that both approaches are possible, equally supported and don't prevent ISO members from applying local solutions according to the national delegation principle.

During the next three years, ISO will align the ISO-lutions programme roadmap to the 2017-2020 IT Strategic Objectives, improve current tools to provide a more seamless environment and bring further synergies amongst ISO members by using shared, cost-effective, hosted systems.

ISO will further help its members by continuing to provide professional guidance related to information technology support for business processes as well as best practices related to standards development and marketing and sales. Furthermore, ISO will provide corresponding modular tools developed on request and funded by interested ISO members.

4. ISO IT governance & communication

A new Information Technology Strategic Advisory Group (ITSAG) – details available in the ITSAG Terms of Reference – will be established to provide guidance to the ISO Council on information technology matters. This group will define (and update) the ISO IT Strategy and monitor its implementation.

ISO will also strengthen its communication on key IT topics to ISO members by running regular updates.

5. Run, grow and transform

Currently, more than 50 % of ISO's IT Department capacity is absorbed by the day-to-day tasks of keeping its IT infrastructure running and supporting end-users. The ISO IT Department will work towards focusing its capacity to improve existing services and its ability to support innovative and robust business-driven projects.
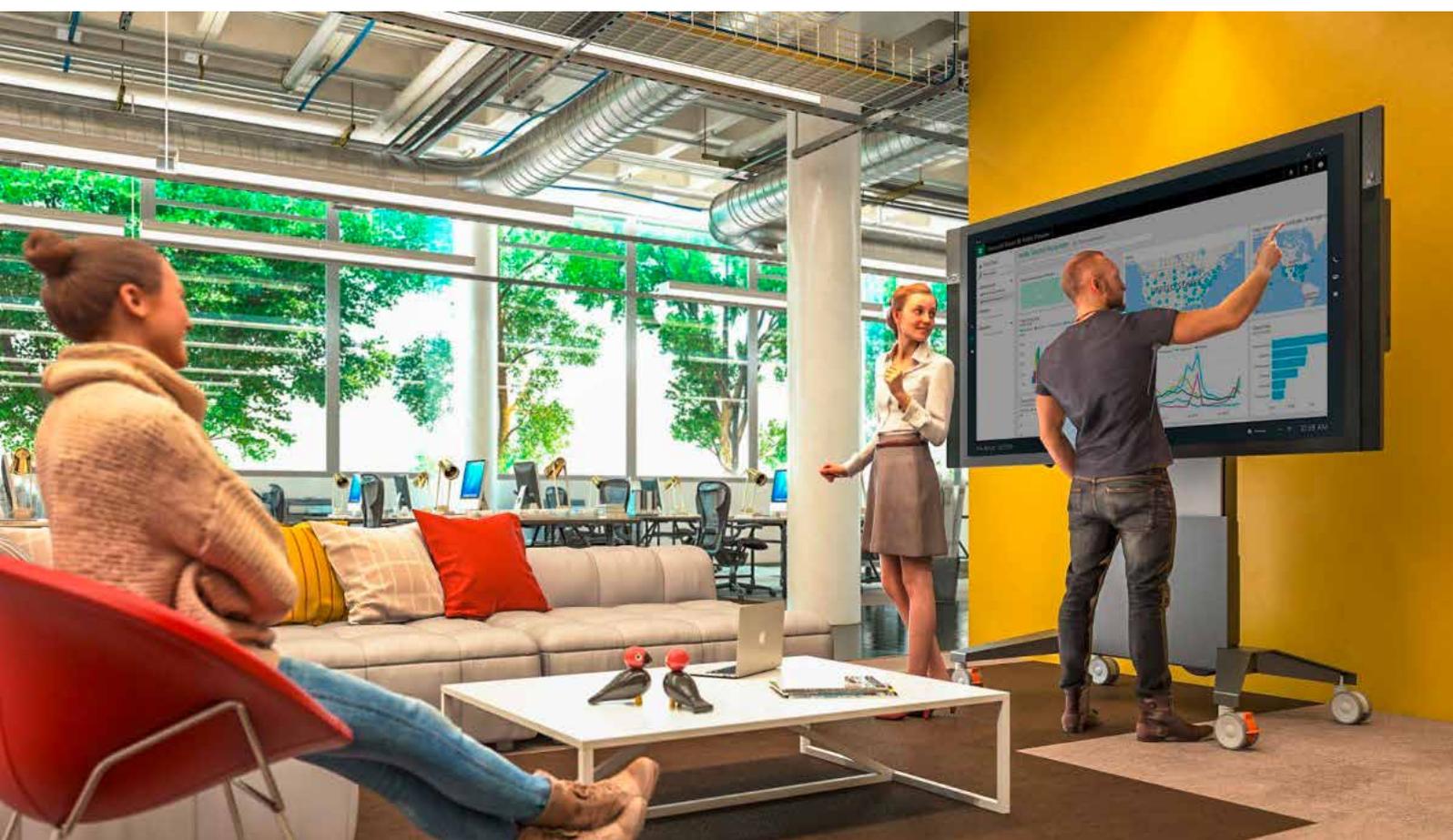
The ISO IT Department will continue to investigate new technologies and trends that are shaping the future of standards development practices as well as marketing and sales.

The ISO IT Department will also consolidate its core IT systems to guarantee it provides cost-effective and relevant solutions by increasing its operational effectiveness.

To ensure IT solutions are operated in a secure and reliable environment and to reduce potential cyber risks, the ISO IT Department will also reinforce its IT security practices.

The ISO IT Department will maintain its high-level quality of service in the support provided to its end-users.

The ISO IT Department will continuously work on providing ISO/CS staff with the right tools and environment to maintain high productivity and ensure the best possible service is provided to the ISO community as a whole.