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The human-centred organization — Rationale and general principles

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National foreword

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**The human-centred organization —
Rationale and general principles**

Organisme centré sur l'humain — Justification et principes généraux



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Foreword

ISO (the International Organization 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 organizations, 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).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 159, *Ergonomics*, Subcommittee SC 1, *General ergonomics principles*.

Introduction

NOTE This introduction serves as an executive summary of this International Standard.

Human well-being is now recognized by the G7 (the world's seven biggest economies) as an important economic measure to complement traditional measures of national output. Organizations are being judged not only on their return on the investment of their owners, but also on much broader issues such as how well they fulfil their responsibility to the society and the impact they have on the environment in both the short and long term. In those areas, organizations often turn to high level standards such as ISO 26000, ISO 31000, and ISO/IEC 38500.

This International Standard explains to executive board members the values and beliefs that make an organization human-centred, the significant business and operational benefits that arise, and the policies they need to put in place to achieve this. This International Standard identifies the key criteria which demonstrate that each principle has been met, the implications for the organization of failing to meet the relevant criteria and what steps can be taken to mitigate the risks of such failure.

Adding value by applying a human-centred approach to enhance total system performance and human well-being is the objective of ergonomics (also known as human factors). ISO 26800 describes the general ergonomics approach and specifies basic ergonomics principles and concepts applicable to the design and evaluation of tasks, jobs, products, tools, equipment, systems, organizations, services, facilities, and environments. There are a number of standards on ergonomics and human factors based on these principles and concepts which can be used by managers, engineers, and designers in selecting, designing, and managing systems and equipment to ensure that they are effective, efficient, and satisfying to use. These International Standards are not normally the direct concern of the executive board of an organization.

This International Standard, in contrast, draws on that extensive body of ergonomics and human factors knowledge and presents the rationale and general principles of *human-centredness* in a concise form for executive board members. It explains the seven principles which characterize a human-centred organization. These principles are the following:

- capitalize on individual differences as an organizational strength;
- make usability and accessibility strategic business objectives;
- adopt a total system approach;
- ensure health, safety, and well-being are business priorities;
- value employees and create a meaningful work environment;
- be open and trustworthy;
- act in socially responsible ways.

In design processes, the term user-centred is often used to reflect that the design of the product, system, or service takes account of human characteristics both to minimize risks and to optimize well-being and performance. The term *human-centred* is used to reflect that organizations not only have an impact on their customers (the users of their products and services), but also on their employees, their families and the wider community.

This International Standard is intended to be useful to all types of organizations (whether large or small) in the private, public, and non-profit sectors. While not all parts of this International Standard will be of equal use to all types of organizations, the principles are relevant to every organization. Each organization will identify which issues are relevant and significant to address through its own considerations and through dialogue with stakeholders. Governmental organizations, like any other organization, may wish to use this International Standard. However, it is not intended to replace, alter, or in any way, change the obligations of the state.

Related International Standards, including some under development on ergonomics processes, are intended to be used by managers who are responsible for implementing the human-centred approach in the organization. They will contain both recommendations and requirements.

The human-centred organization — Rationale and general principles

1 Scope

This International Standard is intended for executive board members and policy makers of all types of organizations (whether large or small) in the private, public and non-profit sectors.

It describes the values and beliefs that make an organization human-centred, the significant business benefits that can be achieved, and explains the risks for the organization of not being human-centred. It provides recommendations for the policies that executive board members need to implement to achieve this. It sets out high-level human-centred principles for executive board members to endorse in order to optimize performance, minimize risks to organizations and individuals, maximize well-being in their organization, and enhance their relationships with the customers. The importance of organizational policy to address human-centredness is emphasized.

This International Standard is not a management system standard. It is not intended or appropriate for certification purposes or regulatory or contractual use.

This International Standard is not intended to prevent the development of national standards that are more specific or demanding.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1

consumer

individual member of the general public purchasing or using property, products, or services for personal use

2.2

customer

organization or individual purchasing property, products, or services for commercial, private, or public purposes

2.3

accessibility

extent to which products, systems, services, *environments* (2.5), and facilities can be used by people from a population with the widest range of characteristics and capabilities to achieve a specified goal in a specified context of use

Note 1 to entry: Context of use includes direct use or use supported by assistive technologies.

Note 2 to entry: When evaluating accessibility, the three measures of usability (*effectiveness* (2.9), *efficiency* (2.10), and *satisfaction* (2.11)) can be important.

[SOURCE: ISO 26800:2011, 2.1, modified]

2.4
ergonomics
human factors

scientific discipline concerned with the understanding of interactions among human and other elements of a system, and the profession that applies theory, principles, data, and methods to design in order to optimize human well-being and overall system performance

Note 1 to entry: This definition is consistent with that given by the International Ergonomics Association.

Note 2 to entry: The terms ergonomics and human factors are used synonymously throughout this International Standard.

[SOURCE: ISO 26800:2011, 2.2, modified]

2.5
environment

physical, chemical, biological, organizational, social, and cultural factors surrounding one or more persons

[SOURCE: ISO 26800:2011, 2.3]

2.6
human-centred design

approach to system design and development that aims to make systems more usable by focussing on the use of the system; applying *ergonomics* ([2.4](#)), human factors, and usability knowledge and techniques

[SOURCE: ISO 9241-210:2010, 2.7, modified]

2.7
stakeholder

person or organization that can affect, be affected by, or perceive themselves to be affected by a decision or activity

[SOURCE: ISO 31000:2009, 2.13, modified]

2.8
usability

extent to which a system, product, or service can be used by specified users to achieve specified goals with *effectiveness* ([2.9](#)), *efficiency* ([2.10](#)), and *satisfaction* ([2.11](#)) in a specified context of use

[SOURCE: ISO 9241-210:2010, 2.13, modified]

2.9
effectiveness

accuracy and completeness with which *users* ([2.12](#)) achieve specified goals

[SOURCE: ISO 9241-11:1998, 3.2]

2.10
efficiency

resources expended in relation to the accuracy and completeness with which *users* ([2.12](#)) achieve goals

[SOURCE: ISO 9241-11:1998, 3.3]

2.11
satisfaction

freedom from discomfort and positive attitudes towards the use of the product

[SOURCE: ISO 9241-11:1998, 3.4]

2.12

user

person who interacts with a system, product, or service

Note 1 to entry: The person who uses a service provided by a system, such as a *customer* (2.2) in a shop or passenger on a train, can be considered a user.

[SOURCE: ISO 26800:2011, 2.10, modified]

3 Understanding what being human-centred means for the organization

3.1 The benefits of being human-centred

Organizations are subject to many different commercial, management, and regulatory frameworks and being human-centred offers several business benefits. These include the following:

- improved operational effectiveness and efficiency and increased likelihood of achieving business objectives in a timely manner;
- products and services that are easier to understand and to learn how to use, thus, increasing uptake and reducing support costs;
- increased accessibility for staff and customers;
- reduced risk of poor product design and the associated financial consequences;
- greater responsiveness to customers and to the market;
- enhanced health and safety as well as environmental protection;

which can lead to the following:

- enhanced customer confidence and trust with increased customer loyalty;
- increased owner, shareholder, and member confidence and trust and enhanced reputation;
- greater staff confidence and trust which help to improve motivation and loyalty, as well as reduce staff turnover.

These, in turn, lead to better organizational performance which may include organization financial performance, customer experience, and service to the community.

3.2 The responsibility of organizations to be human-centred

There is growing international recognition that corporate (and indeed national) success ought to be measured in terms which go beyond profit and productivity. Organizations are being assessed not just on their return on their owner's investment, but also on much broader issues such as how well they fulfil their responsibility to the society and the impact they have on the environment in both the short and long term. One area that has recently received particular attention from the world's seven biggest economies (G7) is human well-being as an economic measure in addition to traditional measures of national output.

In 1964, the International Labour Organization (ILO) declared the fundamental objective that "*all human beings, irrespective of race, creed or sex, have the right to pursue both their material well-being and their spiritual development in conditions of freedom and dignity, of economic security and equal opportunity*", and that "*everyone has the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment*".

Although these obligations are aimed at nations requiring them to enact legislation to protect such rights and freedoms, the rise of international organizations spanning the globe places these obligations on business, as well as governments.

3.3 The growth of a human-centred approach from design to organizations

The global market demand for accessible and usable systems is increasing. Human-centred design (HCD) has been widely accepted in high technology industries including medical devices, website design, consumer product design, mobile device design, and online services. The human-centred design approach is also being applied to the design of other products, systems, and services for users, employees, and other workers (e.g. volunteers, temporary workers, and consultants). Although initially focused on creating usable technology, i.e. technology which is effective, efficient, and satisfying for its users, HCD is being used to create excellent user experiences (UX), a broader concept which includes the users expectations before and after use, as well as all aspects that impact the user and their interaction with the product. HCD is also being applied in areas where the quality of the product, system, or service is critical. It has an important role in making work more humanized which facilitates participation and improved quality of life for everyone.

Accessibility is the extent to which products, systems, services, environments, or facilities can be utilized by a population with the widest range of characteristics and capabilities. Inclusion of persons with disabilities and the increasingly older population (the so called “silver economy”) will be key societal challenges for most of the world in the years ahead. According to the World Health Organization in 2013, over a billion people, about 15 % of the world’s population, have some form of disability and rates of disability are increasing due to ageing of the population and increases in chronic health conditions.

3.4 Characteristics of the human-centred approach to design

There are a number of standards describing the human-centred approach to design in different industry sectors. The human-centred approach can be applied in many different development processes. Whatever development process is employed, four linked human-centred design activities are required during design and then iterating the solutions until the requirements are met:

- a) understanding and specifying the context of use;
- b) specifying the user requirements;
- c) producing solutions;
- d) evaluating the solutions.

These activities can result in formal documents (for example, as described in ISO/IEC 25060) depending on the process being followed.

3.5 The human-centred approach, regulation, and legislation

One of the problems of using standards, even well respected International Standards in national guidance and regulation, is that technology develops more quickly than standards-making bodies can work. An organization which is able to demonstrate that the human-centred design process was followed properly is provided with the evidence that they are following good practice and technical standard requirements (regardless of developments in the technology). Such evidence is usually required to support management systems, for example, for quality, safety, and occupational health.

Accessibility legislation is widespread. For example, the European Commission proposes to use legislation, standardization, and other instruments to optimize the accessibility of products, the built environment, transport, and ICT (Information and Communications Technology). The commission also regards public procurement as a powerful means to ensure accessibility of products and services in line with the UN Convention on the rights of persons with disabilities. The UN Convention also requires, in Article 9, the development of accessibility standards and, in the general obligations, the promotion, in standards, of approaches to design that will include the widest possible range of users. In addition to national guidance and regulations on equipment and workplace design, some countries have social policies which place responsibilities on employers to consider the wider implications of their use of technology. Following a human-centred design approach can provide evidence of good practice in employment and social areas of legislation and regulation.

4 Principles of the human-centred approach

4.1 General

The human-centred approach works at every level in the organization, starting at the top, with the executive board. Some of the following principles are already addressed, at least in part by existing standards and accepted best practice, for example, social responsibility, but others have yet to be elaborated fully. Some current International Standards relevant to each principle are shown in Annex A. In the following subclauses, each principle is summarized by the heading and then elaborated in the text.

4.2 Capitalize on individual differences as an organizational strength

The organization recognizes individual differences as a strength and takes this into account in all areas of its business. It acknowledges that people differ in their abilities and needs, uses ergonomics, and social data on the nature and extent of these differences.

There is no such thing as a “standard person”. Human beings vary enormously in everything from their body size and shape, to their personality, intelligence, and preferences. Customer-facing organizations recognize this by designing product ranges, for example, clothing manufacturers offer a range of sizes and styles which they hope will appeal to a broad range of customers. Automobile manufacturers make adjustable car seats to suit different drivers. Office managers select furniture which can be adjusted to suit different users to help ensure that they can work effectively, efficiently, and comfortably at their workstations. Anthropometric data (about human body sizes) is available for many countries and can be used to support design decisions.

The human-centred organization goes even further in acknowledging that people differ in their capabilities and needs. It follows a human-centred approach to the design of products, services, and work systems to accommodate the nature and extent of these differences. It recognizes this variation as a strength rather than a problem and takes this into account in all areas of its business. It creates teams, not of “clones” forced to behave in standard ways (for example, strictly following call-centre scripts even if not appropriate), but of individuals who have complementary skills and who can use their problem solving abilities to enhance customer experience, improve resilience, provide a range of viewpoints on an issue, and also improve the quality of their working lives whilst still meeting corporate objectives.

4.3 Make usability and accessibility strategic business objectives

Whether the organization simply uses products, systems, or other technology to do its business or also provides such technology to others, usability and accessibility are the keys to a successful business. The human-centred organization uses International Standards and best practices to ensure that products, systems, and services are accessible and usable (effective, efficient, and satisfying to use) both by personnel and by customers.

In many countries, accessibility (i.e. being usable by people with widely varying abilities and characteristics) is a legal requirement and employers or suppliers who fail to deliver on accessible products and systems face legal penalties. For example, in many countries, website owners have been forced to pay compensation to customers with visual impairments who could not use their websites.

The business and management literature is full of stories of expensive systems which failed to deliver business benefit because they ignored usability. The human-centred approach helps to reduce such risks. For example, European governments now make use of the human-centred design standard (ISO 9241-210) to ensure that government websites are usable and accessible. ISO 9241-210 has also been widely adopted internationally as best practice for designing systems which work.

4.4 Adopt a total system approach

The organization recognizes that people are part of a comprehensive system which can include many elements such as equipment, workspace, physical, social, and organizational environment in which

people work and live. These elements interact and are interdependent and the organization understands this and acts accordingly.

When new systems are designed or systems are changed, the organization takes a socio-technical perspective. This involves proactively designing the organization and the technology system in parallel. The organization recognizes that there are organizational options for different technical solutions and that time needs to be allowed in technical systems development projects to allow these options to be identified and evaluated possibly through trials and simulations or participatory methods. Managing socio-technical systems development requires organizational skills and multidisciplinary teamwork. Such teams typically involve users as well as technical systems experts working closely together.

Key aspects of the socio-technical perspective include the following:

- allowing individuals choice and control over their work and giving them responsibility for its outcome;
- allowing systems to evolve and develop through design iterations rather than expect them to be designed in a single step;
- encouraging interpersonal and interdepartmental communication to facilitate the accomplishment of goals
- ensuring that tasks are designed to make sense as a whole job.

4.5 Ensure health, safety, and well-being are business priorities

The organization takes the necessary steps to protect individuals (both inside and outside the organization) from health, safety, and well-being hazards. It is proactive in its approach to workplace health and goes beyond the minimum required by legislation and the ILO C155 - Occupational Safety and Health Convention, 1981.

It is widely accepted in the occupational health community that suitable work is good for people's health. Unemployment and sickness absence are neither good for business, nor for individuals and their families. There is growing evidence that creating healthy workplaces improves productivity, increases staff retention, reduces errors, and increases quality. It also helps personnel to avoid work-related injuries and ill health and speeds their return to work after absence.

4.6 Value personnel and create meaningful work

The organization provides all individuals with meaningful work and with opportunities to use and develop their skills.

The organization values and acknowledges the contribution that personnel make both financially and through other forms of recognition. It works to ensure that personnel at all levels in the organization (regardless of gender, age, disability, or personal beliefs and orientation) share the vision of the organization and are encouraged to contribute at an appropriate level, both at the individual and at the team level.

The organization creates meaningful tasks for all potential users including customers who engage with the organization.

4.7 Be open and trustworthy

The organization communicates openly and transparently to personnel and to the outside world. When difficult decisions are necessary, they are addressed in a timely and equitable way and communicated sympathetically. It is important for openness and trustworthiness to be bidirectional with effective methods for personnel to communicate upwards and for customers to provide feedback, both positive and negative.

4.8 Act in socially responsible ways

The organization is socially responsible. It behaves ethically and instils pride and confidence in its personnel, customers, and the local community. It does this by following the seven principles in ISO 26000.

These social responsibility principles concern the following:

- accountability for its impacts on society, the economy, and the environment;
- transparency in its decisions and activities that impact on society and the environment;
- ethical behaviour;
- respect for stakeholder interests such as representative organizations of employers and workers and consumer and disability organizations;
- respect for the rule of law;
- respect for international norms of behaviour;
- respect for human rights (for example, avoiding racism and gender disparity).

The concept of social responsibility includes some of the elements of the human-centred organization (health, safety and well-being, valuing personnel, openness, and trust).

5 Risks from failing to apply human-centred principles

5.1 General

In general, risk management should and can be applied to all parts and at all levels in the organization. For executive boards and top-level management, the incentive to identify and manage risks from failing to apply human-centred principles extends well beyond avoiding accidents, ill health, and disasters. Organizations that are confident in their human-centred approach will have more strength and confidence, not only in identifying such hazards, but also in seizing opportunities.

Risks from failing to apply human-centred principles should be assessed like other business risks, otherwise, any statements become empty and vacuous. This International Standard does not promote any particular method or risk assessment approach. The important point is that the entire organization knows that the risk from failing to apply human-centred principles is assessed. ISO 31000 provides principles, framework, and a process for managing all risk, including those arising from use and human behaviour. Applying ISO 31000 can help organizations increase the likelihood of achieving objectives, improve the identification of opportunities and threats, and effectively allocate and use resources for risk mitigation. It is supported by other related standards, including ISO/IEC 31010, which describes ways to help decision makers understand the risks that could affect the achievement of objectives, as well as the adequacy of the controls already in place.

It is important to point out that although traditional risk assessment and management techniques are essential, they do not, by themselves, create a culture that includes the management of risks from failing to apply human-centred principles.

5.2 Complexity of risk

There is a range of risks arising from failing to apply a human-centred approach related to use and human behaviour which are varied, and which can be complex in themselves in their interaction and impact. These risks affect individuals, the organization as a whole and the wider community. The consequences can include the following:

- lack of accessibility for staff or customers;

- poor usability;
- poor product design;
- lack of consideration of diverse human characteristics and capabilities, both mental and physical, leading to compromised safety, health, and well-being;
- lack of information, training, and competence;
- compromised security and safety, resulting in, for example, loss of data integrity and excessive workload;
- financial costs of addressing shortcomings;
- compromised social responsibility.

5.3 Assessing risk

Organizations should identify and assess these hazards within their systems and devise suitable solutions to deal with them.

This assessment should take account of the potential interactions between risks. There is a need to develop a realistic assessment approach that will enable executive boards and management alike to understand the ramifications of such risks and whether these have an impact on the strategic direction of the organization. Assessments and control can be done on different dimensions such as the following:

- strategy – including the likelihood and impact of the hazard;
- people – individuals and organization;
- detail – specific and general;
- tasks – information, planning and action;
- drivers – managers, regulators and cultures.

5.4 Managing and mitigating risk

Tackling risks arising from failing to apply a human-centred approach at the strategic, tactical and operational level should be integrated in the culture of the organization.

The role of the executive board is to

- provide strategic leadership,
- set the tone of risk management and mitigation, and
- to establish the governance structure.

For the executive board, this means creating a dynamic and ongoing process with clear delegated responsibilities, focusing on genuine understanding of such risks to make the organization more successful.

The risk management function should work with operational management to create a framework and culture within all parts and levels of the organization.

The risk management function in the organization should

- determine what needs to be monitored to meet legal compliance and requirements, evaluate, prioritize and document risks arising from failing to apply a human-centred approach, and
- maintain and keep current documented information for both external risks as well as internal risks.

6 Guidance on implementing human-centred principles and minimising risks

6.1 General

The executive board should establish and adopt a policy which specifies how the human-centred approach is to be implemented within the organization. They should consider the principles and balance their application according to the organization's goal and resources.

There are many different ISO standards (e.g. ISO 9241-210 for 4.3 and ISO 26000 for 4.8) and relevant UN/ILO documents which provide guidance on how to implement the principles in the organization.

6.2 Ways of ensuring that the principles have been applied

Table 1 provides some examples of ways to apply human-centred principles in the organization. These include policies which the executive board can implement to support the human-centred approach throughout the organization.

Table 1 — Ways of applying the principles

Principle	Ways of applying the principle
Capitalize on individual differences as an organizational strength	<ul style="list-style-type: none"> — Having a high profile organization-wide ergonomics programme (with appropriate ergonomics data) in order to maximize the potential of each employee. — Celebrating the diversity of the workforce on the company websites and in annual reports. — Acknowledging individuals who make a positive contribution towards diversity. — Investing in office and other technology which is adjustable to a wide range of users. — Ensuring that job and task design take account of different individual capabilities and limitations.
Make usability and accessibility strategic business objectives	<ul style="list-style-type: none"> — Having a board level champion for usability and accessibility. — Applying international usability and accessibility standards to the procurement, development, and use of products, systems, and services. — Following a human-centred design process based on ISO 9241-210 in the development of all systems, both internal and customer facing. — Ensuring that usability and accessibility testing are scheduled in every development project with time and resources to implement any changes found necessary. — Evaluating business activities to ensure that relevant human behaviours are identified and appropriately considered. — Making sure that business activities are consistent with identified human behaviour. — Monitoring business activities to ensure that identified human behaviours remain relevant and that proper attention is given to them.

Table 1 (continued)

Principle	Ways of applying the principle
Adopt a total system approach	<ul style="list-style-type: none"> — Incorporating the social-technical approach within existing systems development methods. — Recognizing that the whole organization can be considered as a system and ensure that the interaction of all components (human, technical, and environmental) are harmonized.
Ensure health, safety, and well-being are business priorities	<ul style="list-style-type: none"> — Having a board level champion for health, safety, and well-being. — Planning proactive health, well-being, and safety initiatives and risk assessment programmes. — Ensuring that reward systems do not inadvertently encourage or reward unsafe behaviour. — Providing suitable training for all staff and managers to make them aware of their responsibilities.
Value personnel and create meaningful work	<ul style="list-style-type: none"> — Creating effective mechanisms for engaging with staff and their representatives to approach difficult issues. — Avoiding an “us and them culture”. — Encouraging a “no blame” continuous improvement culture. — Ensuring payment and reward schemes are motivating, transparent, and fair. — Investing in methods for ensuring that staff understand the whole business and are not restricted just to their immediate task. — Developing ways by which individual employee contributions can be appropriately recognized.
Be open and trustworthy	<ul style="list-style-type: none"> — Having effective comments and complaints schemes so that issues can be addressed early and out of the public glare. — Ensuring that the reasons and thinking behind difficult decisions are communicated effectively. — Ensuring transparency in organizational policy.
Act in socially responsible ways	<ul style="list-style-type: none"> — Adopting ISO 26000 and following its recommended best practices for ethical and community behaviour taking account of cultural differences. — Providing staff with time to engage in socially responsible activities within work time (as well as in their own time). — Offering payroll giving, donation matching, and other incentives to encourage staff volunteering.

6.3 Risks from failing to apply human-centred principles

[Table 2](#) identifies typical risks from failing to apply human-centred principles

Table 2 — Typical risks of not applying the principles

Principle	Typical risks of not applying the principle
Capitalize on individual differences as an organizational strength	<ul style="list-style-type: none"> — Wasted effort trying to force everyone to be the same. — Increased errors, system failures from mismatches between people, their work environment, and technology. — Lost potential of benefiting from individuals who “do not fit the usual mould”.
Make usability and accessibility strategic business objectives	<ul style="list-style-type: none"> — Products, systems, and services do not deliver business benefit. — Competitors steal market share. — Returned and failed products damage profitability. — Inaccessible products and services miss out on significant potential market from people with accessibility needs. — Potential litigation for failing to address accessibility legislation.
Adopt a total system approach	<ul style="list-style-type: none"> — Systems are developed in piece-meal and inefficient fashion resulting in the creation of gaps in flow and quality of products and service delivery. — Huge waste of resources “fire-fighting”. — Retrofitting fixes adds to costs and time to market.
Ensure health, safety, and well-being are business priorities	<ul style="list-style-type: none"> — Accidents and injuries are expensive to handle and resolve. — Reduced productivity from sickness absence and from personnel feeling obliged to attend work regardless of health or other issues (i.e. presenteeism). — Reputational damage being seen as uncaring or unprofessional organization. — Product liability costs of recalls and redesign. — Management time spent dealing with problems rather than managing proactively.

Table 2 (continued)

Principle	Typical risks of not applying the principle
Value personnel and create meaningful work	<ul style="list-style-type: none"> — Poorly motivated staff who are underproductive and more likely to make errors or ignore poor quality. — Undervalued staff more likely to leave. — Added time and expense in replacing staff depriving the organization of skills and experience. — Inequality in recognition that discourages staff from fully engaging in the business. — Disengaged staff are less likely to treat customers well or care about quality. — Missed opportunity to develop personnel's organizational commitment and pride.
Be open and trustworthy	<ul style="list-style-type: none"> — Difficult decisions seen as threats by staff and cooperation suffers. — "Whistle blowers" forced to go public and organization suffers reputational damage.
Act in socially responsible ways	<ul style="list-style-type: none"> — Many businesses only do business with socially responsible organizations. — Customers choose not to do business with organizations which cannot prove their social and ethical credentials. — Some organizations become targets for highly visible public protest. — Damage to reputation, brand, and corporate image.

7 Guidance on integrating a human-centred approach throughout the organization

7.1 General

Being human-centred is relevant across all areas of the organization. Integrating the human-centred approach into all business operations and initiatives need not be costly. For the organization as a whole to describe itself as human-centred, all areas of it should follow this approach and being human-centred should be fundamental to the way the organization does business.

Most organizations will already be following at least some of the principles in this International Standard. [Table B.1](#) shows extracts from corporate websites of organizations which demonstrate their belief that a given principle is important to their business. These are only examples and many organizations around the world make similar claims (see [7.4](#) for guidance on making such claims). The information in Annex B reflects the situation at the time of completion of this International Standard. Inclusion in this list of examples in [Table B.1](#) is not a sign of endorsement or compatibility with ISO 27500 or endorsement of the organizations by ISO.

7.2 The relationship of an organization's characteristics to the human-centred approach

The organization should extend its normal processes for decision making to embed the human-centred approach throughout its activities. As part of this process, organizations should consider how its key characteristics relate to the human-centred approach. Organizations should also be aware of the current attitudes, level of commitment to, and understanding of the human-centred approach by its leadership. While there should be a champion for the human-centred approach at executive board level, the executive board should also explicitly endorse the approach.

7.3 Practices for integrating a human-centred approach throughout the organization

The organization should apply its existing management disciplines and approaches when integrating the human-centred approach throughout the organization. The human-centred approach should receive similar priority on the executive board agendas as other business-wide initiatives such as quality and risk. This will include considerations of the necessary responsibilities, resources and manpower, business processes, competencies, facilities, reward structures, quality and risk management, communications (both internal and external), design, and development processes.

Human-centred practices should also cascade down the organization into the day to day business routine.

7.4 Reviewing and continually improving the organization's actions related to the human-centred approach

The integration and the impact of the human-centred approach should be monitored and reviewed in line with other continuous improvement initiatives.

Organizations should make their reports about the impact of being human-centred on their business operations comparable with their reporting on other business initiatives. The nature of such reports will depend on the type, size, and capacity of the organization.

Annex A (informative)

International Standards relevant to each principle of the human-centred approach

The following International Standards are directly relevant to each principle and can be used to identify other, more detailed, standards. They are provided as examples in [Table A.1](#).

Table A.1 — Examples of International Standards relevant to each principle of the human-centred approach

Subclause	Principle	Relevant standards
4.2	Capitalize on individual differences as an organizational strength	ISO 6385, ISO/TR 7250-2, ISO 9241-5
4.3	Make usability and accessibility strategic business objectives	ISO 9241-11, 20, 100, 171, and 210, ISO/IEC 25060, ISO/IEC 62366
4.4	Adopt a total system approach	ISO 26800, ISO 6385, ISO/TS 18152
4.5	Ensure health, safety, and well-being are business priorities	ISO 11399, ISO 28803, OHSAS 18001, ISO 31000
4.6	Value personnel and create meaningful work	ISO 26800
4.7	Be open and trustworthy	ISO 26000
4.8	Act in socially responsible ways	ISO 26000

Annex B (informative)

Examples of organizations whose websites indicate support for the principles

The information provided in this Annex is intended to provide some examples of organizations which say they follow certain human-centred principles on their websites which may help other organizations to benchmark their own activities. These examples have been identified by searching the internet for company websites which mention one or more of the principles. In each case, we quote their text for one principle as an example. This process favoured the identification of large organizations, but many other organizations of varying sizes will have similar policies. The company details have been redacted.

The information in [Table B.1](#) reflects the situation at the time of completion of this International Standard. Inclusion in this list of examples is not a sign of endorsement or compatibility with ISO 27500 or endorsement by ISO.

Table B.1 — Extracts from the websites of organizations

Subclause	Principle	Extracts from the websites of organizations
4.2	Capitalize on individual differences as an organizational strength	<p>Large Diverse Multinational (LDM)</p> <p><i>“Diversity and performance go together”. Chairman of the Board and Chief Executive Officer. LDM is committed to employing a diverse workforce throughout the world, and to providing all employees with opportunities to reach their growth potential and contribute to the progress of the communities we serve.</i></p> <p>International Bank (IB)</p> <p><i>...as an employer, we are striving for true diversity. We’re creating a working environment that is open, supportive and inclusive at every level....IB has more than 30 employee network groups covering areas such as gender, ethnicity, age, sexuality, disability, religion, culture and working parents.</i></p>
4.3	Make usability and accessibility strategic business objectives	<p>Major Broadcast Company (MBC)</p> <p><i>...we are committed to ensuring that MBC digital services are as accessible to disabled and elderly people as reasonably possible.</i></p> <p><i>We aim for a consistently high level of usability for our entire audience across all of our websites, following best-practice accessibility guidelines. We engage with disabled, non-disabled and elderly people throughout website development to fully understand user requirements and ensure we produce sites that meet these.</i></p> <p>International Car Manufacturer (ICM)</p> <p><i>ICM is particularly committed to helping employees with reduced capacity or disabilities. People with disabilities made up 7.22 percent of the total workforce of ICM in 2012, once again well above the statutory quota.</i></p>
4.4	Adopt a total system approach	<p>Another International Car Manufacturer (AICM)</p> <p><i>The AICM Production System is an integrated socio-technical system, developed by AICM, that comprises its management philosophy and practices. The system organizes manufacturing and logistics for the automobile manufacturer, including interaction with suppliers and customers.</i></p> <p>International Electronics Company (IEC)</p> <p><i>Since the introduction of the “first product” more than 120 years ago, innovation and a people-centric approach have always been at the core of our company. When we bring the two together – people and innovation – we create the next generation of technology and things that people truly want and need. These are meaningful innovations that help people to be healthy, live well and enjoy life.</i></p>

Table B.1 (continued)

Subclause	Principle	Extracts from the websites of organizations
4.5	Ensure health, safety, and well-being are business priorities	<p>European Manufacturing Company (EMC)</p> <p><i>EMC strives to provide a healthy and safe work environment that stimulates employees to perform effectively, to assume responsibility and to continue to develop towards their personal and professional goals.</i></p> <p>Global Insurance Brand (GIB)</p> <p><i>GIB is committed to provide and maintain a safe and healthy working environment for all employees. Health and safety conditions at all of GIB's sites are compliant with local regulations. On top of these legal requirements, GIB has developed a "GIB Human Resources Standard" which includes a "Health and Safety" section. The GIB Standards are a set of detailed rules and policies which every local entity must adhere to and implement in order to ensure a consistent management of the Group, its risks and ethics. ... Adherence to the Standards is expected to be promoted and monitored by all local Chief Executive Officers.</i></p>

Table B.1 (continued)

Subclause	Principle	Extracts from the websites of organizations
4.6	Value personnel and create meaningful work	<p>Major Internet Company (MIC)</p> <p><i>Ten things we know to be true</i></p> <p>9. You can be serious without a suit.</p> <p><i>Our founders built MIC around the idea that work should be challenging, and the challenge should be fun. We believe that great, creative things are more likely to happen with the right company culture—and that doesn't just mean lava lamps and rubber balls. There is an emphasis on team achievements and pride in individual accomplishments that contribute to our overall success. We put great stock in our employees—energetic, passionate people from diverse backgrounds with creative approaches to work, play and life. Our atmosphere may be casual, but as new ideas emerge in a café line, at a team meeting or at the gym, they are traded, tested and put into practice with dizzying speed—and they may be the launch pad for a new project destined for worldwide use.</i></p> <p>International Tyre Company (ITC)</p> <p><i>Trust, self-management and personal growth nurture the commitment required to drive sustainable performance. By introducing empowering organizations, ITC wishes to develop the autonomy of each employee, enabling them to find fulfilment in their work and develop overall performance. This type of performance is based on more delegation, versatility, cooperation, mutual support and responsibility for production operators on their stations both within teams and at all levels of the plant.</i></p>
4.7	Be open and trustworthy	<p>International Computer Business (ICB)</p> <p><i>ICB's new survey of 1,700 Chief Executive Officers is signalling a new shift in corporate culture – one that will embrace a new spirit of openness, transparency and employee empowerment.</i></p> <p>Electronic Company (EC)</p> <p><i>EC is committed to “winning by the rules”. We regard sound and transparent management practices as the foundation to achieving individual success and global competitiveness. Throughout our global operations, EC pledges to comply with local laws and regulations, compete fairly, and uphold the highest standards of business conduct.</i></p>

Table B.1 (continued)

Subclause	Principle	Extracts from the websites of organizations
4.8	<p>Act in socially responsible ways</p> <p>ISO 26000, Table 1 lists many organizations which claim social responsibility</p>	<p>Car Manufacturer (CM)</p> <p><i>For CM, a corporate management system based on values and the principles of sustainability must also include social responsibility with regard to our workforce. For this reason, the concerns of our employees in Germany and around the world play a major role in our business decision-making processes.</i></p> <p>Manufacturing Company (MC)</p> <p><i>The company's corporate social responsibility (CSR) strategy was inspired by the founder's conviction that, "In a free enterprise, the community is not just another stakeholder, but is, in fact, the very purpose of its existence." MC's approach to its business has evolved from this concept and the wealth it has created is continuously returned to the people through its community initiatives.</i></p>

Bibliography

- [1] ISO 6385, *Ergonomic principles in the design of work systems*
- [2] ISO 9241, *Ergonomics of human-system interaction*
- [3] ISO 26000, *Guidance on social responsibility*
- [4] ISO 26800, *Ergonomics — General approach, principles and concepts*
- [5] ISO 28803, *Ergonomics of the physical environment — Application of International Standards to people with special requirements*
- [6] ISO 31000, *Risk management — Principles and guidelines*
- [7] ISO/TR 7250, *Basic human body measurements for technological design*
- [8] ISO/IEC 25060, *Systems and software engineering — Systems and software product Quality Requirements and Evaluation (SQuaRE) — Common Industry Format (CIF) for usability: General framework for usability-related information*
- [9] ISO/IEC 62366, *Medical devices – Application of usability engineering to medical devices*
- [10] MANIFESTO C. 2013, The Standish Group, 60 State Street, Suite 700 • Boston, MA 02109
- [11] OHSAS 18001, Requirements for Occupational Health and Safety Management Systems
- [12] Roads to Resilience – building dynamic approaches to risk to achieve future success. Executive Summary Cranfield School of Management
- [13] The Convention on the Rights of Persons with Disabilities and its Optional Protocol (A/RES/61/106), adopted on 13 December 2006
- [14] Workshop report: Ergonomics contributions to company strategies. In: Ergonomics as a tool in future development and value creation. Neumann WP and Dul J. Proceedings of the 37th Annual Conference Nordic Ergonomics Society (NES), Oslo, Norway, October 10-12, 2005

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