



Solutions for production safety management

2022

kept

Production safety
management.
Benefits and challenges

04

Structured approach
to diagnosis and transformation
of production safety management

06

Why Kept

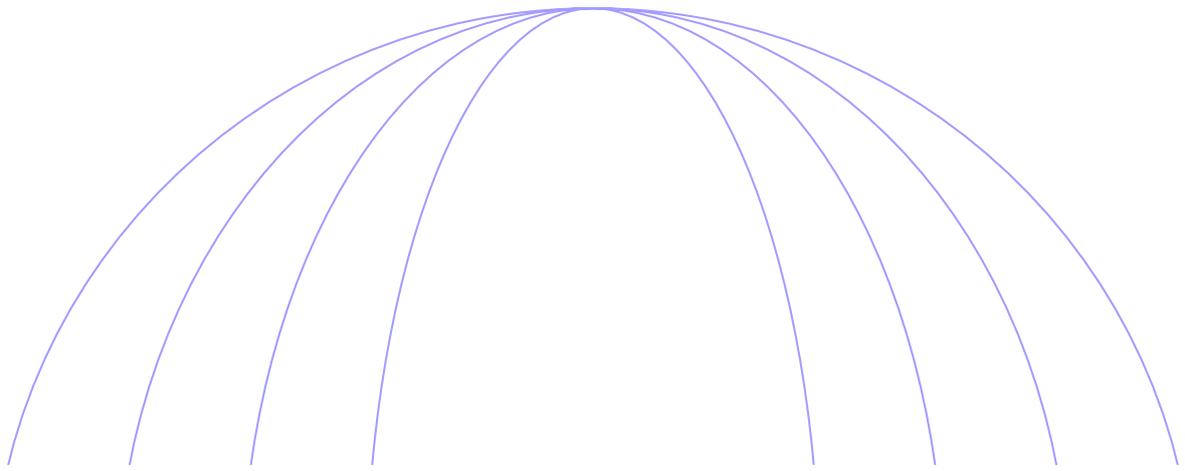
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Kept production
safety solutions

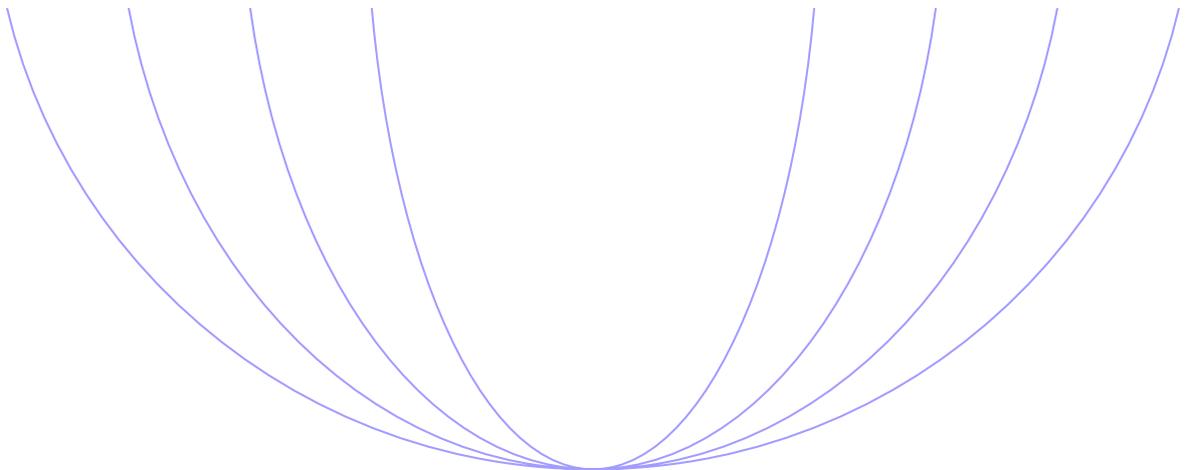
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03

Production safety



#Occupational safety #Transport safety
#Industrial safety # Health protection #Fire safety
Emergency protection



Production safety management.

Benefits and challenges

04

Industrial companies are vigorously developing integrated production safety management practices (occupational, industrial and fire safety, emergency protection, health protection, transport safety, together referred to as OHS).

Specifically, this involves the implementation of processes, certification of management systems, creation of OHS board committees, organization of OHS directorates at management companies, inclusion of OHS indicators in manager KPIs, action planning and providing for stand-alone line items in investment and operating expenses budgets.

However, activities aimed to implement modern approaches to production safety management are often associated with difficulties arising from misalignments with the rest of the company's management processes. For example, the implementation of the risk-based approach virtually comes to a halt at the budgeting stage, which is organized based on the 'prior year's budget utilization' concept, or it becomes clear at the implementation stage that the majority of employees need special training, while the process of training and engaging internal OHS coaches is yet to develop.

Common issues in production safety management systems



The system is limited to a respective OHS function, while other functions are not involved in production safety management processes



Focus on accident prevention with setting KPIs for individuals authorized to register and record accidents



Accidents are investigated to find the culprit at the level of workers and junior management personnel



Priority to ensure formal compliance with the requirements of supervisory authorities and avoid criticism on their part



Expense budgets are planned based on the last year's actual utilization, with no risk assessment results and real needs considered



Formal approach to implementing changes: issuing regulations without appropriate communication and trainings, follow-up work

Identifying and addressing issues in production safety management systems requires the direct involvement of senior management and an objective view from the outside. The engagement of qualified consultants helps implement a structured approach, quickly get an objective picture and keep important information confidential. The benefits of such an approach are reduction of company losses, increased employee loyalty and enhanced reputation.

Benefits from effective management of production safety:

For a shareholder this provides another channel of information on what is happening on-site and how shareholder decisions are being put into practice.

For management it gives the ability to control risks, prioritize and make decisions based on reliable and structured information, preventing damage to a company's business and reputation.

The cumulative losses of EU countries from diseases and loss of ability to work account for over

450
billion euros
per year

According to the All-Russian Scientific Research Institute of Labor*, losses to the Russian economy due to non-compliance with labor protection standards amounted to

USD 26.7
billion

The Pension Fund of Russia (PFR) paid

USD 14.4
billion
of early pensions to people who worked at hazardous industries

Losses in figures

The Social Insurance Fund (FSS) of Russia paid

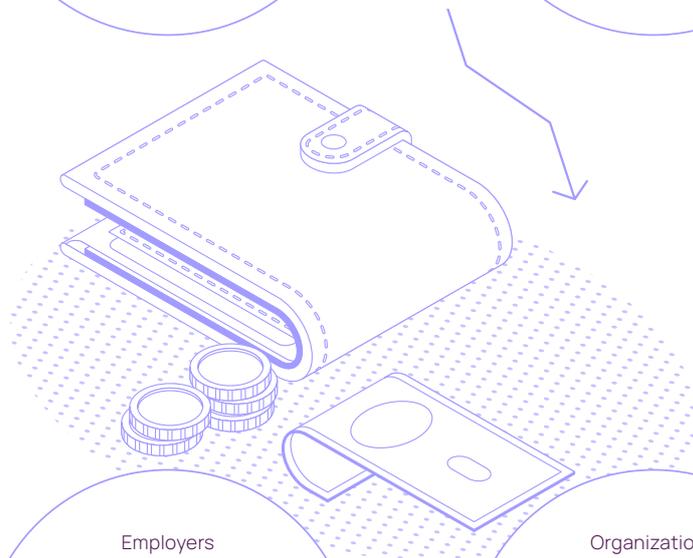
USD 1.1
billion
on insured accidents

Employers spent

USD 1.9
billion
on employee compensation

Organizations missed

USD 9.4
billion
in revenue due to lost working hours and reduced output of products or services

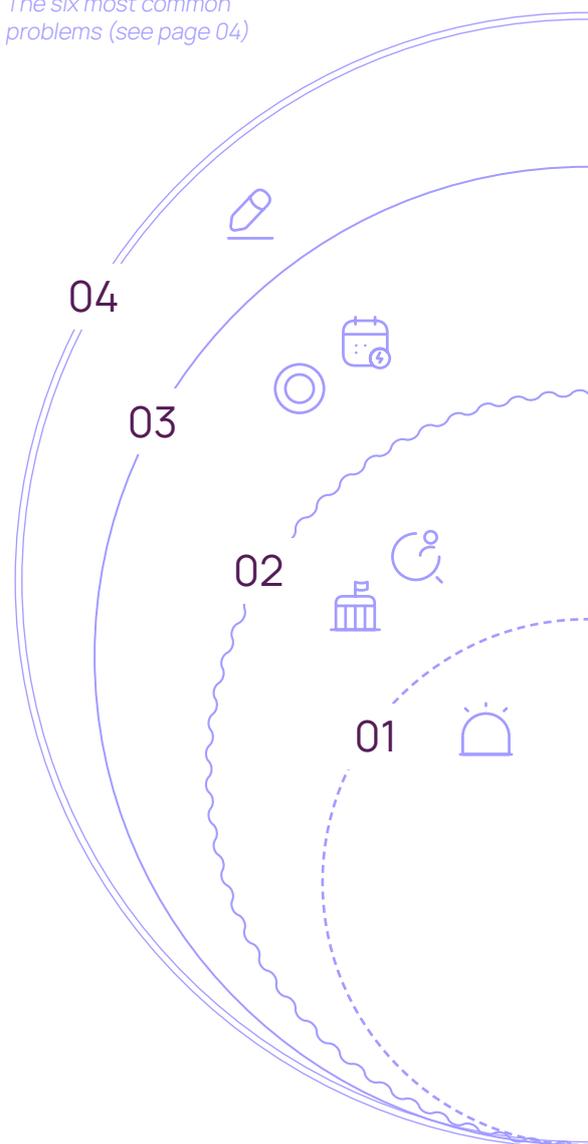


Structured approach to diagnosis and transformation of production safety management

- 01 Fundamental level**
(shareholders, board of directors, OHS committee)
Policy, strategy, KPIs, commitments, interaction with shareholders, the board of directors and the OHS committee
- 02 Corporate culture level**
(CEO, operating efficiency / HR managers)
Values, corporate ethics, behaviors, safety culture
- 03 Process level**
(operating efficiency / HR / OHS managers / Chief Digital Transformation Officer (CDTO))
Business processes and their interrelations
- 04 Functional level**
(OHS managers)
Implementation of business processes and changes therein by appropriate functions and divisions

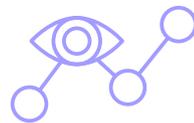
The six most common problems (see page 04)

Given that issues in production safety management systems may be present at all the four levels, it is critical that consultants have proven diagnostic and transformational tools for each level, as well as experience in implementing changes to related business processes and functions, developing strategies, goals and engaging with the business at all levels of governance.





Our team has a great track record in performing assessments of and transforming corporate management systems that goes far beyond production safety



Kept's own highly flexible methodology allows us to tailor methods to various industries, structures and levels of production safety development



We participate in the improvement of national legislation governing production safety requirements for businesses and maintain a high level of knowledge and competence of our team



We are a highly professional and well-balanced team of experts with advanced expertise in production safety management services



We deliver meaningful results together with our clients, minimizing the risks, optimizing the resources and increasing the efficiency of management processes

Kept production safety solutions

Fundamental level

Diagnosis

- Reviewing compliance of a company's policy and strategy with requirements of applicable international and national standards and guidelines
- Reviewing alignment of the company's KPI system with its policy and strategy
- Assessing the relevance of the OHS committee's agenda
- Verifying KPIs for a reporting period for inclusion in the annual report
- Reviewing the compliance of the company's policy and strategy with its commitments (e.g. in terms of ensuring the safety of works performed by contractor organizations)



International and national standards and guidelines containing requirements to a production safety management policy and system:

1. ISO 45001: Occupational health and safety management systems
2. GRI 403: Occupational health and safety
3. ILO-OSH 2001: Guidelines on occupational safety and health management systems
4. IOGP Report 423: HSE management guidelines for working together in a contract environment
5. GOST R 12.0.007-2009: System of Occupational Safety Standards (SSBT). Occupational safety management system at an organization

Transformation

- Developing and updating policy and strategy with due account for the specifics of the company's business and corporate governance, as well as the Vision Zero principles
- Developing and updating the KPI system used by the company to assess the effectiveness and efficiency of production safety management processes
- Assessing the company's commitments (including in terms of programs of measures to reduce injuries and prevent accidents at hazardous production facilities) to develop a medium- or long-term plan for implementing the strategy
- Supporting interaction with the company's board of directors/OHS committee, including the formation of the committee's agenda, verification of materials put on the agenda



Vision Zero framework for production safety management

Industrial accidents and occupational diseases are neither predetermined nor inevitable – they always have causes. Each accident can be prevented, which means that it is possible to achieve Zero.

To do so, you need to build a safety management strategy based on the Zero goal, and the seven golden rules of Vision Zero will help structure the strategy:

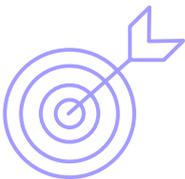


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Corporate culture level

Diagnosis

- Reviewing the compliance of the corporate values, code of ethics and other corporate documents with the UN Sustainable Development Goals and other sustainability principles
- Reviewing the standards of conduct during work performance (behavioral audits)
- Assessing the level of the company's safety culture using quantitative methods; performing an analysis for various personnel groups, including identification of the team's existing attitude towards safety
- Reviewing the influence of psychological and emotional factors on an employee's condition



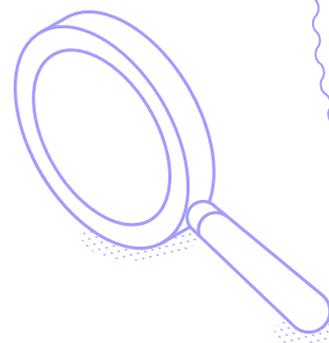
The UN Sustainable Development Goal related to OHS

Goal 8

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Target 8.8

Protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

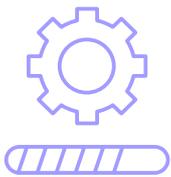


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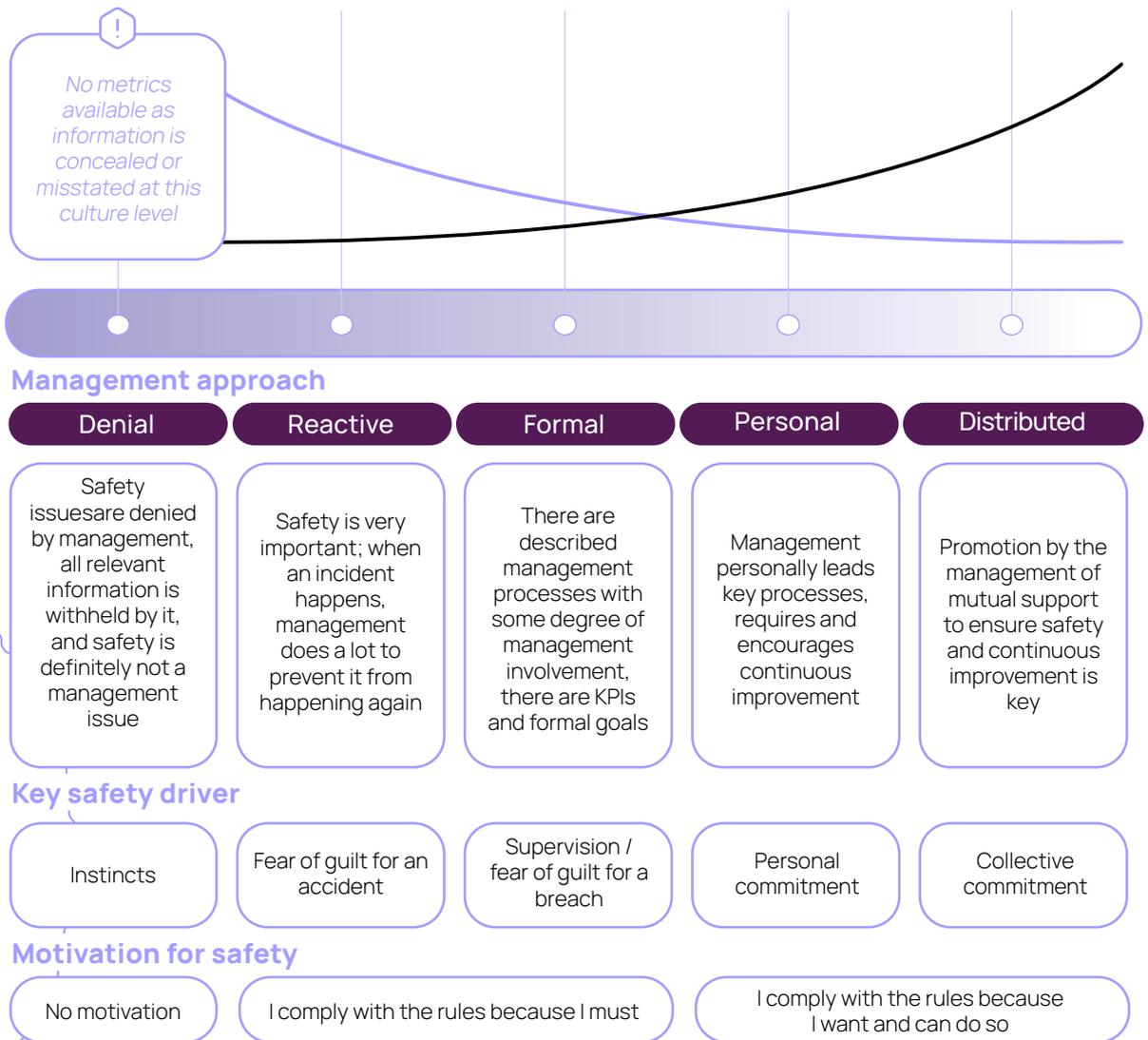
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Transformation

- Developing and updating the values, corporate code of ethics and other documents that formalize the corporate culture
- Developing and implementing the safety culture transformation tools (depending on the current level, e.g. “Internal Investigations” to shift to “Reactive”, “Cascaded KPI System” to shift to “Formal”, “Safety Contact Person” to shift to “Personal”, “Safety Action Team” to shift to “Distributed”, etc.)



Levels of production safety culture development according to Kept model



Transition to a target level of production safety culture development is only possible through consecutively passing each level with the implementation of appropriate transformation tools.

Reaching the target level is a strategic task that takes three to five years to achieve.

— Maturity of operational safety management and the degree of managerial involvement

— Number of incidents and actual deviations from safety requirements

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Process level

Diagnosis

- Describing the company's 'as-is' business processes from Level 1 (production safety management) to Level 5, modeling business processes, with their description provided in a notation (ePC, BPMN, 4FM)
- Reviewing the structure of business processes, identifying any misalignments or omissions
- Reviewing the allocation of accountability for business processes and resource endowment



Business process notation types

ePC

An extended notation used to describe an event-driven process

BPMN

Flow objects are divided into three main types: events, activities and gateways

4FM

Flow objects are divided into two main types: activities and gateways



Illustrative business process attributes



Input data



Triggering event



Output data



Process interdependencies



Process owner



Process resources



Metrics



Regulations

03

02

01

Transformation

- Developing a target business process model, updating the existing model
- Detailed elaboration and attribution of business processes
- Restructuring the OHS function providing the rationale behind the proposed effective number of staff; reengineering the OHS processes
- Preparing business processes for digitalization projects, including development of a technical assignment for automation of business processes of the production safety management system

Part of Kept process model in an ISO 45001 and ISO 14001 integrated health, safety and environmental management system



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Functional level

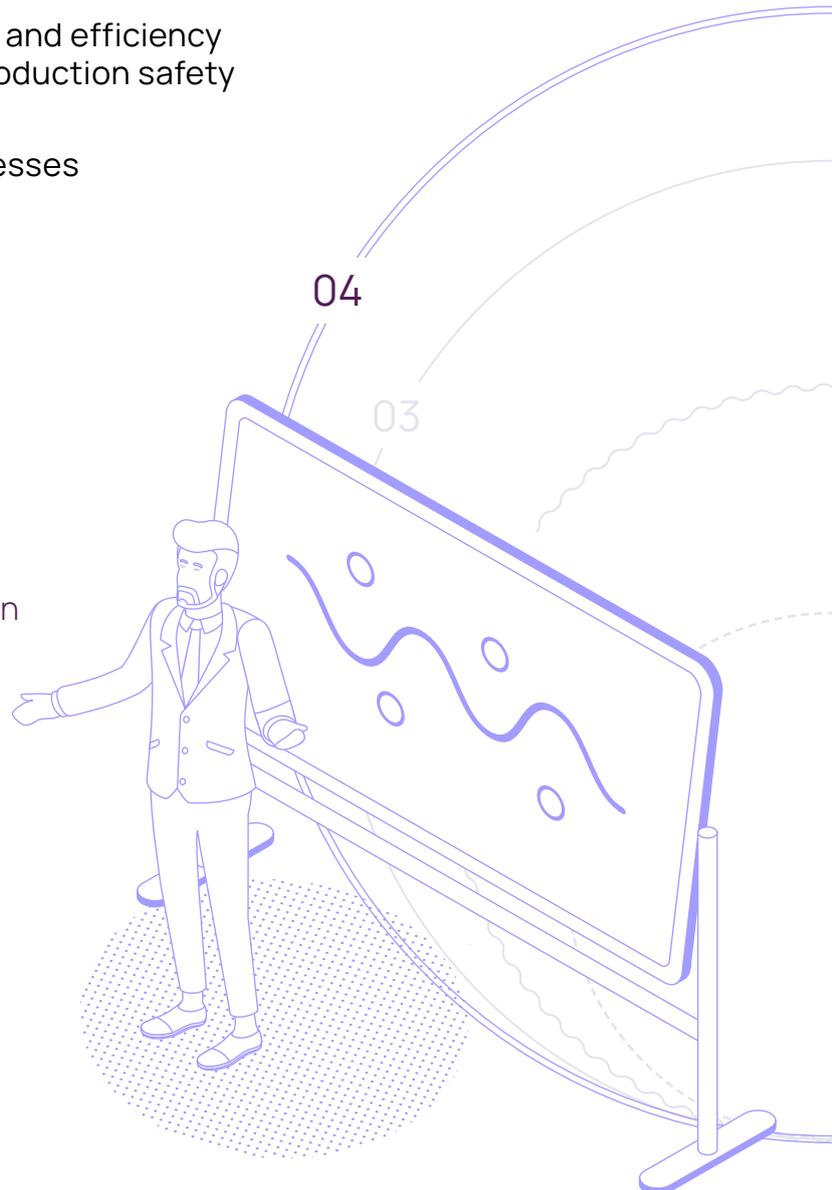
Diagnosis

- Performing a diagnostic audit of industrial safety management system processes (taking into account the requirements of international standards, industry and corporate standards) at the company, division and enterprise level
- Assessing personnel knowledge and skills as regards production safety, according to the competency model
- Regular monitoring of the effectiveness and efficiency of the implemented processes of the production safety management system
- Verifying the outcomes of specific processes (verifying the risk assessment results, internal investigation results, etc.)



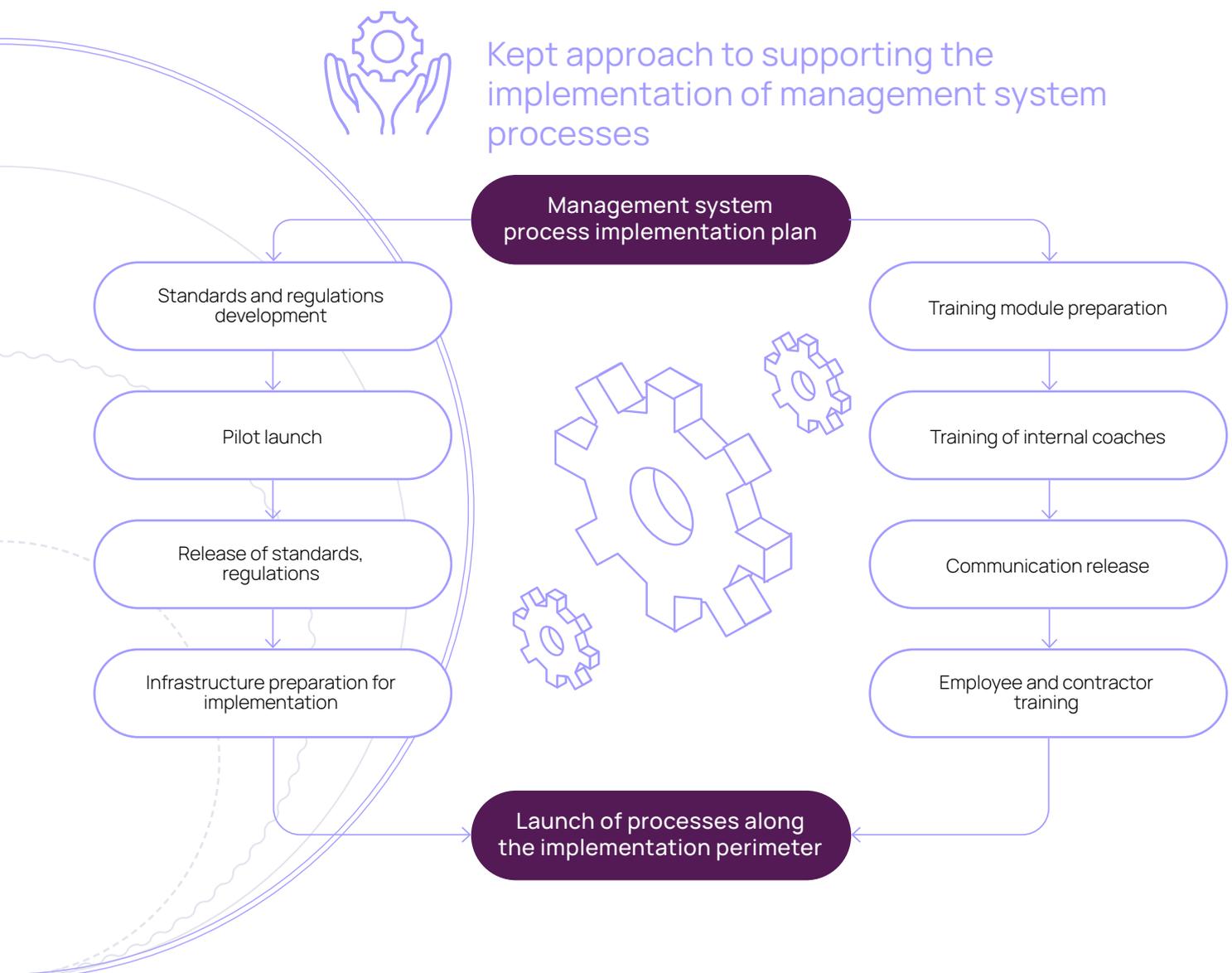
Kept approach to diagnostic audit

- 1 > Planning and information collection (remote)
- 2 > Audit (site visit)
- 3 > Non-conformance detailing and verification (site visit)
- 4 > Preparation of a final report



Transformation

- Launching risk assessment processes, internal accident investigation processes, the near miss recording process, internal OHS audits, contractor safety management and other transformational processes
- Supporting the implementation of OHS processes (preparing the competency model, developing communications and training materials, training internal coaches, training top managers, monitoring the effectiveness and efficiency of the implemented processes)
- Quantitative and qualitative assessment of OHS risks with the use of HAZOP and other risk assessment methods, including the client's methodologies
- Introducing the risk-based approach to the management of production safety investment programs



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