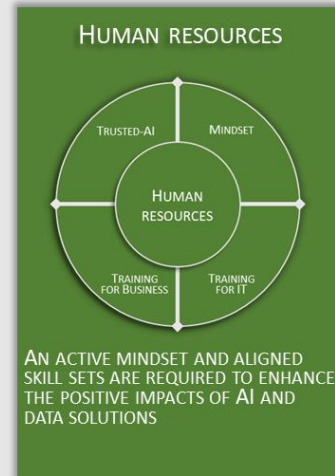


HUMAN RESOURCES

An active mindset and aligned skill sets are required to enhance the positive impacts of AI and data solutions. Reducing AI to just another technology does not reflect reality. Indeed, it brings a level of intelligence that gives it a special role. Therefore, a traditional approach to change management is insufficient.



1. CONDITIONS OF SUCCESS

The integration of new technologies is generally accompanied by change management involving training and process reengineering. When AI is perceived as just an additional technology, these practices are reused.

However, reducing AI to just another technology does not reflect reality. Indeed, it brings a level of intelligence that gives it a special role. Therefore, a traditional approach to change management is insufficient.

In fact, AI is a new stakeholder that needs to be integrated into the organization. In other words, it involves welcoming a new actor who will impact all work processes. It is therefore natural that human resource management takes an interest in it. To be convinced of this, the following fundamental characteristics of AI should be considered:

- It is the only technology that explains to the user how it can help in their activity or, more generally, in their life. In other words, generative AI relies on a dialogue with its user that is not pre-written. This conversational aspect, personalized to each usage context, is revolutionary. It fosters a mutual enrichment between humans and AI. This embodiment justifies its role as a stakeholder in the organization.
- With improvements in generative AI, this conversation becomes increasingly intelligent. For example, at the time of writing this TRAIDA document, the ChatGPT o1 version offers a new deductive working mode that improves use cases for research and planning (see the following paragraph). Conversations between the user and this AI resemble a dialogue between humans.
- Its access is immediate and does not require prior investment in a technical infrastructure. On-demand service platforms democratize the use of AI. Its power is within everyone's reach, at least for common usage. Only massive AI training requires significant computing power and is handled by major tech operators.
- For the first time in human history, a competition of intelligence between humans and machines emerges: a human who works with AI is more productive than a human working alone. The most intelligent AIs will outperform even humans augmented with AI. From a systemic perspective, the collective intelligence of an organization interacts with another intelligence that emerges through interactions with AI assistants. A clarification of the operating rules between these two intelligences is necessary, leading to the concept of trusted AI (see the rest of this document).

If your company considers AI to be just another technology, you may not be convinced by the aforementioned characteristics. Conversely, if you adopt a more impactful scenario of AI, you will pay close attention to the considerations outlined in this TRAIDA document. It does not redefine a traditional change management strategy but explains the specific challenges of AI for human resource management: mindset, training for business, technical team training, and trusted AI.

Example of the enhancement of conversational intelligence with ChatGPT o1

Here is the statement of a basic exercise that is first submitted to ChatGPT 4o, then to version o1, which includes a deductive working mode (chain of thought): *"I have a mathematical problem. A boy has 3 apples, and a girl has 1 apple. Suddenly, an event occurs that makes 20 more apples available. After some discussion between the boy and the girl, they decide to share the apples. How many apples does each of them have after the sharing?"*. This test is conducted on September 14, 2024. The response with ChatGPT 4o is limited to a single scenario, without additional analysis. The dialogue with the user is thus restricted.

The total number of apples available after the event is:

- Boy's original apples: 3
- Girl's original apples: 1
- Newly raised apples: 20

This gives a total of $3 + 1 + 20 = 24$ apples.

Since the boy and girl need to share these apples, let's assume they decided to split them equally:

$$\text{Number of apples each gets} = \frac{24}{2} = 12$$

After sharing, both the boy and the girl would have 12 apples each.

The response with ChatGPT o1 is more comprehensive, with a description of multiple scenarios that allows for a much richer conversation between the human and the AI.

Scenario 1: Equal Sharing of the New Apples

They decide to split the 20 new apples equally.

- Each gets: $20 \text{ apples} \div 2 = 10 \text{ apples}$

Total Apples After Sharing:

- Boy: $3 \text{ (original)} + 10 \text{ (new)} = 13 \text{ apples}$
- Girl: $1 \text{ (original)} + 10 \text{ (new)} = 11 \text{ apples}$

Scenario 2: Sharing Proportional to Original Apples

They share the 20 new apples in proportion to the number of apples they originally had.

- Total original apples: $3 \text{ (boy)} + 1 \text{ (girl)} = 4 \text{ apples}$
- Boy's share ratio: $3 \div 4 = 0.75$
- Girl's share ratio: $1 \div 4 = 0.25$

Apples Received from the New 20 Apples:

- Boy: $0.75 \times 20 = 15 \text{ apples}$
- Girl: $0.25 \times 20 = 5 \text{ apples}$

Total Apples After Sharing:

- Boy: $3 \text{ (original)} + 15 \text{ (new)} = 18 \text{ apples}$
- Girl: $1 \text{ (original)} + 5 \text{ (new)} = 6 \text{ apples}$

Scenario 3: Equal Sharing of All Apples

They combine all apples and share them equally.

- Total apples: 24 apples
- Each gets: $24 \text{ apples} \div 2 = 12 \text{ apples}$

Total Apples After Sharing:

- Boy: 12 apples
- Girl: 12 apples

The resolution of this problem illustrates the power of the deductive mode in the new version. Its application to complex cases in research & development, mathematics, and planning offers a power equivalent to, or even greater than, human intelligence alone.

In this sense, the introduction of AI in an organization cannot be reduced to the usual technological change management. As mentioned earlier, generative AI like ChatGPT presents itself more as a new stakeholder finding its place in the organization, like a new collaborator with superpowers.

2. IMPORTANCE OF THIS CARD FOR YOUR TRANSFORMATIVE AI

The contribution of this TRAIDA card to your AI strategy depends on the answer to this question: ***'Do you consider AI as just another technology or as the embodiment of a stakeholder to be integrated into your organization?'*** When this question applies to Internet technologies, mobile telephony, or blockchain, the idea of them being stakeholders in your organization does not come to mind. These technologies are tools serving human actors.

With AI, particularly in its generative form, the conversational aspect and the other characteristics mentioned above invite us to consider it as a stakeholder. In this case, it is no longer just a tool serving human actors but a new collaborator to be integrated into the organization. More precisely, an unlimited number of new collaborators trained to intervene in processes in the form of AI assistants. They possess superpowers that humans do not have, such as the ability to instantly assimilate large amounts of knowledge, work continuously, and multiply at a low cost. They also present disadvantages, which the TRAIDA approach controls, such as the lack of reliability due to poor-quality data.

The deeper this AI penetrates the organization, the more human actors must collaborate with it to train, improve, and monitor it. This collaborative working mode reinforces the embodiment of AI as a full-fledged stakeholder that requires a new kind of change management.

MINDSET

In the business world, the purpose of actors is to create value. In other words, an individual whose contribution is not sufficient has no future. Regardless of the level of responsibility and expertise, everyone must participate in the wealth produced by the organization. For this value to be sustainable and growing, it relies on a collective effort. Indeed, no one is skilled in everything, and the complexity of organizations requires a division of tasks with overall coordination. The quality of interactions between colleagues, managers, subordinates, clients, and partners determines value creation. Individuals who work like free agents are rarely long-term creators of wealth. **To succeed, the mindset must therefore be oriented towards the collective.**

Thus, although AI is useful for improving individual productivity, its more strategic and profitable contribution emerges when it acts on interactions between the stakeholders of the organization. To operate at this systemic level, each individual must learn to use AI with a collective mindset. In other words, the more AI penetrates the organization, the more actors must excel in how they communicate, exchange, and collaborate with each other and with AI. This is not about technical skills but general aptitudes in human relations.

Immersed in an AI-augmented company, an individual with limited skills in writing, analysis, sharing, and innovation will find it difficult to fit in. They will not be able to properly train their AI assistants, analyze the responses obtained to enhance the training and improve results, or share them with colleagues and other AI assistants. They will become a hindrance to the organization's velocity, and their work could be called into question. Conversely, an actor with relational skills will interact better with AI and with stakeholders who also use AI. They will be a positive contributor in this new environment of more dynamic, complex, and intelligent interaction.

To embody these relational skills, TRAIIDA uses the WASI approach, an acronym for the following skills: 'Write, Analysis, Share, and Innovate.' Integrating AI without WASI skills means using it merely as a tool to improve individual productivity. The accumulation of these gains does not guarantee the triggering of sufficient overall benefit for the organization. Yet, as we have already mentioned, the profound profitability of AI lies at the level of interactions between actors. Knowledge is then accumulated and formalized to share, enhance, secure, and project it into AI, thereby generating reinforced gains. In this context, the explanation of the skills highlighted by the WASI approach is as follows:

1. **Write:** Writing down knowledge strengthens mastery and enables improvement. An actor who cannot put their expertise into writing is less effective than someone who can. Regardless of the level of expertise and the field, every individual must be able to document their work regularly to improve.
2. **Analyze:** Analysis is the prerequisite for good knowledge writing. A well-written text does not rely solely on correct syntax and grammar. It is also essential to step back from the knowledge, dedicate time to observation and listening, and synthesize a clear and relevant thought.
3. **Share:** Knowledge is easier to share when it is formalized in writing. Although videos and podcasts are widely used for knowledge dissemination, their quality depends on the clarity of their authors. If they have not put in the effort to write down their knowledge to deepen it, their multimedia content is often mediocre. Moreover, the learner engages their intellect more effectively with a written document than with a video or podcast.
4. **Innovate:** Updating knowledge is faster and richer when it is formalized in writing. By sharing texts, a confrontation of knowledge begins, contributing to innovation. Conversely, it is more difficult to innovate from a series of videos or podcasts, which do not facilitate the mental construction of mapping to grasp the complexity of knowledge. In other words, writing is the most appropriate format for innovation."

WASI skills are useful regardless of AI use, but they become essential with it. Particularly with generative AI, it is important to write knowledge in a rich, clear, and relevant manner to train AI engines. It is also important for actors to have a critical mindset to analyze AI results and engage in discussions with AI to improve responses. Finally, as we have already mentioned, the profitability of AI is much stronger when it operates at the organizational level and not just as an individual productivity tool. To achieve this, sharing and innovation are key skills for actors who successfully operate in the AI universe. Conversely, actors who are not supported to enhance their performance in WASI will not be able to create the expected gains with AI.

TRAINING FOR BUSINESS

Operational training in the use of AI tools should be planned. However, their effectiveness depends on general skills necessary for working with AI, covered in the following training areas:

- **Aptitude for formalizing individual and collective knowledge in writing.** This involves transforming tacit know-how into a wealth of explicit knowledge. The application of this training is based on defining a new role within the organization, with users responsible for overseeing the accumulation of knowledge: the Knowledge Accumulation Leader (ACL). Rather than a central team imposing a common mode of operation from the start of AI implementation, it is beneficial to appoint an ACL in each department of the company. This way, teams can organize autonomously according to their skills, work habits, and availability. Coordination among ACLs encourages the sharing of certain practices and supports the formalization of knowledge at the collective level. Written knowledge is then utilized through the following use cases:
 - a) AI training. This includes knowledge governance to ensure the maintenance of training, the security of the information used, and the ability to audit AI responses.
 - b) The creation of a knowledge graph-oriented database that is paired with generative AI to automatically load documents. Tacit knowledge then becomes explicitly usable to comply with regulations, train new actors, conduct organizational optimization studies, explore opportunities, or perform benchmarking. This reference system also supports governance functions (a) and corresponds to the Enterprise Knowledge Graph (EKG) of TRAIDA (see EKG card).
- **Aptitude for identifying tasks that benefit from partial or total automation with AI.** According to McKinsey (2024), on average, 70% of each actor's activity can be automated by 50%. These ratios are useful for setting individual productivity goals, then extending them to each team and the organization as a whole.
- **Aptitude for supporting personal development so that actors engage positively in their work with AI.** It is important for each individual to understand why formalizing, sharing, and enhancing knowledge is strategic for producing more efficient AI. In this regard, the consideration of AI in career planning is outlined. For example, an individual who does not mention an AI assistant on their resume has a lower level of employability than candidates with the same profile who are proficient in AI.

Finally, raising awareness of the systemic aspect of AI and data management is necessary, supported by the TRAIDA masterclass planned as part of the technical team training (see the following section).

TRAINING FOR IT

For technical teams, that is, IT professionals, the following training areas are priorities for scaling AI in the company:

- **Semantic modeling:** This is the essential discipline for creating ontologies that form the core of the semantic platform for AI recommended in TRAIDA (see the documents on ODS, MDM, and EKG data repositories).
- **Enterprise architecture and enterprise governance:** These are the two pillars for managing complexity and the governance of AI associated with data management solutions (see the respective TRAIDA documents).
- **Transformative AI and Data solutions:** This refers to the TRAIDA framework with all its technical, governance, and business cards so that each IT professional is aware of the systemic aspect of AI impacts and data management. This is a quick one-day awareness session in the form of a TRAIDA masterclass that also includes business actors.

Operational training on AI tools, AI automatic code generation techniques, the use of AI for testing, data science, etc., should be planned according to the IT professionals' profiles.

Finally, the general skills we mentioned for business teams are also useful for technical teams.

Based on these training areas, each company adapts its own support programs for business and technical teams, depending on the existing and missing skills, as well as the transformation projects to be managed.

TRUSTED AI

We mentioned earlier that the introduction of AI into the organization is similar to welcoming a new stakeholder. It has exceptional capabilities for machine learning on large volumes of information to replicate and enhance human work, automate decision-making, and perform tasks, including those in the physical world using robots.

Each AI assistant becomes the companion of an actor, a team, or a decision-maker and deeply integrates into management processes.

It is likely that the first action in your workday will be to ask your AI assistant about the tasks to perform and how to approach them, including automatic responses to emails, reports to review, summaries to draft, recruitment suggestions, expense and savings proposals, activation of robots in a workshop, etc.

With hundreds of AI assistants spreading throughout the organization, it is essential to implement trustworthy AI to maintain control.

Thus, in addition to the best TRAIDA practices that enhance data quality and governance, an independent artificial intelligence is trained to monitor the functioning of the information system. This particular AI contributes to achieving trusted AI within the company. For example, it observes the behavior of AI assistants to detect anomalies that may violate predefined compliance rules, especially in terms of security and ethics.

This supervisory AI, also called the second brain or nerve center, must be considered in the human resource management approach for the following reasons:

- It requires the establishment of a trustworthy AI manager whose role is to collect all the documents and rules the information system must follow to train the supervisory AI. They collaborate with the enterprise architecture and governance managers, who formalize these rules and manage their maintenance.
- The very existence of this supervisory AI indicates that new AI stakeholders spreading throughout the company, notably in the form of assistants, must be monitored. It is thus relevant for human resource management to contribute to the proper governance of these new stakeholders, for example, by setting objectives and defining usage rules that comply with the company's HR and ethical policies.

From a technical perspective, the trusted or supervisory AI relies on a knowledge graph-oriented database augmented with generative AI to build the reference framework of rules to follow (see the TRAIDA EKG – Enterprise Knowledge Graph card). This reference framework is fed with all documents describing the expected behavior of the information system and regulatory texts. During its execution, this AI compares the outputs of the information system (data flows, calculation results, activation of AI assistants...) with the rule reference to detect any abnormal operating cases.

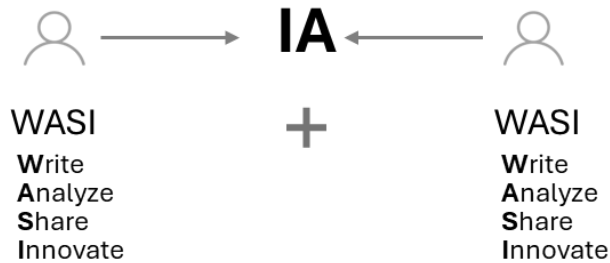
3. BLUEPRINT

General skills necessary for working with AI

- #1: Formalizing individual and collective knowledge in writing
- #2: Identifying tasks that benefit from partial or total automation with AI
- #3: Supporting personal development so that actors engage positively in their work with AI



AI is a new stakeholder that needs to be integrated into the organization



4. YOUR SITUATION & OBJECTIVES