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NAVIGATING THE TRANSITION TO A DIGITAL WORLD OF WORK

a good practice guidebook for employees and employers

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TABLE OF CONTENTS

PROLOGUE

As one of the most impactful trends in the modern world, digitalization is changing the way we work, communicate, and live at a whirlwind pace. These unprecedented transformations require for rapid adaptation both from workers and organizations to preserve their place on the business map. However, adapting complex business and work processes to such profound changes is a challenging endeavor, with incontestable impact on employees, employers, and organizations at large. In an attempt to support their transition to a digital world of work, the current guide provides useful recommendations for the successful navigation of digital transformation, with a focus on mitigating negative consequences and maximizing benefits.

1. WHAT IS DIGITALIZATION?

Digitalization entails the changes in socioeconomic, business, and day-to-day processes by using digital technology (i.e., the conversion of any type of information into digital form). The very definition of digitalization is dependent upon its role in the multiple-step process of digital transformation. Digitalization is oftentimes used interchangeably with the term digitization or digital transformation. However, they are all different, but interrelated concepts that act as stages in a more complex process.

Digitization is the first step and refers to converting physical information into digital form. A simple example of digitization is scanning a paper document to turn it into a pdf document on your computer. *Digitalization* uses digital information resulted from digitization to enable or improve business or operational processes. For example, a step-by-step work process that was usually performed by one or more employers is now driven automatically, by a software or any type of digital system. Consequently, work processes become more cost and time-efficient. Last but not least, *digital transformation* relies on digitalization to create and transform businesses at large. A good example of digital transformation are the changes made by a company to sell products online, not only in store.

We can see how, although these concepts are different, they are completely dependent upon each other. Therefore, any action we take to adjust and integrate digitalization into our work processes also affects digitization and digital transformation. In other words, each step is equally important in the successful transition towards the new world of work.

Below, we will discuss factors that influence organizations to integrate digital processes into their business, as well as potential challenges they may face. Such factors are important both for the employers and the employees to increase motivation and openness to the transition to digitalization, to facilitate realistic assessments of what it entails and the cautions that should be taken. These factors set the ground and inform the measures both employers and employees should take to facilitate adaptation to the new world of work.

1.1. Driving Factors of Digitalization

It is a well-known fact that some organizations or industries navigate the transition to the digital transformation more easily than others. Studies focusing on what motivates them to consider digitalization have identified the driving factors of digitalization for companies from all types of industries. Among the main themes that emerged as driving factors were:

a. *operational advantages* – including reduced manpower, enhanced work accuracy, effective communication among business partners, reduced operational costs etc.

b. *market opportunities* – digitalization also supports companies in the efficient adoption of processes and services to address market needs that other companies have not addressed yet.

c. *labour problems* – digitalization is particularly helpful in those organizations where there is a dearth of personnel either because of the lack of skilled workforce, or limited financial resources to support wages

d. *customers' pressure* – in a world that is becoming increasingly digitalized, customers now pressure organizations to become more efficient, which is oftentimes equivalent with digitalization. To maintain their competitive advantage, organizations must therefore pay attention to their customers' requirements and expectations.

e. *competition* – more and more companies are integrating technology in their activities, improving their services and pressuring others to keep pace with them. Competition is one of the main drivers of change since it is directly related to profitability, the core aim of most organizations.

f. *quality image* – digitalized and automated processes allow for the proper control of the quality of a certain service; this sort of transparency ensures competitive advantages particularly for those organizations that sell products or services whose quality determines the probability that those products will be sold.

This is, most likely, not a comprehensive list of the factors that motivate companies to integrate technology in their activity, although most of them can be included in one of those categories. Importantly, different organizations are motivated to consider digitalization by different factors. This is due to the fact that driving factors are usually derived from the needs of a certain company. Therefore, managers should pay close attention to what the company needs or lacks to become more competitive and invest selectively in the digitalization of those processes.

1.2. Benefits

Although perceived benefits are a driving factor in and of themselves, we will approach them separately for the purpose of specificity and as a way of acknowledging the essential role they played in the rapid digitalization of the world of work.

Major benefits identified by organizations include:

a. *time efficiency* – digitalized and automated processes (from specific to general ones, such as communication) are much less time consuming, which further translates into other benefits (increased production, reduced costs etc.).

b. *reduced wastage* – digitalization and automation are more precise and cleaner and reduce the impact of human error, thus reducing waste.

c. *less defect* – the precision of digitalized processes is much higher than that of manual ones, particularly for certain types of activities (e.g., product production)

d. *less labour dependency* – the transition to digitalization has lead to a dearth of qualified personnel in certain areas of work, which requires ways to replace workers with technology. Moreover, less labour dependency also reduces the financial pressure associated with paying wages.

e. *less human contact* – human contact has been seen as a limitation particularly during the COVID-19 pandemics; indeed, this medical crisis catalyzed digitalization in many areas with the aim of reducing the risk of spreading the virus through human contact. During the pandemic, organizations that were prompt and open to digitalization had a higher rate of success.

f. *better quality* – digitalization allows for better control of work processes, leading to higher-quality products and services.

g. *better hygiene* – digitalized and automated processes are easier to control not only in terms of quality, but also in terms of hygiene. This benefit is a direct consequence of less contact both between people (workers, workers and clients etc.) and between workers and materials or tools.

h. *flexibility* – technology allows for more versatile processes and activities, with reduced costs.

i. *productivity and production efficiency* – which is one of the most important and main aims of digitalization in the work place. The most common example refers to manual work methods that are digitalized or automated, become faster and producing fewer errors.

j. *cost efficiency* – technology in the workplace diminishes costs by reducing the amount of time spent on routine or unnecessary tasks, the chance of human errors, inventory loss, information loss etc.

1.3. Opportunities

Opportunities are conditions that digitalization creates for organizational developments. The main opportunities of digitalization include:

a. *Customers' confidence in quality* – when a certain product or service is digitalized or automatized, the chances of human error are smaller, which increases product quality. Moreover, given the popularity of digitalization in the world of work, customers become increasingly reluctant to use the products or services of a certain organization if work methods are not updated, casting doubt on the quality of their outcomes.

b. *Better-imaged products* – automation facilitated precision and allowed for experimentation in product production, which led to products that look more professional.

c. *Improved people and culture* – digitalization encourages collaboration and facilitates connections between people from various cultural backgrounds, thus promoting cultural variety and inclusive attitudes.

d. *More supply to meet higher demand* – as a result of increased production efficiency through automation and digitalization of work processes, organizations can deliver their services or products to a higher number of clients or in higher amounts.

e. *More high-end customers* – organizations using state-of-the-art technology can target high-end customers.

1.4. Facilitating Factors

Not all organizations can integrate technology and make the transition to digitalized work processes at the same pace. Indeed, a more advantageous configuration of factors (some of them

highly contextual, such as a country's level development or geographical position) facilitates digitalization. Facilitating factors are grouped into three categories:

a. *resource* – this category refers to the resources that are pre-existent in an organization and have the needed characteristics to favor digitalization. Examples of such resources are financial resources (bigger, more profitable companies can invest more and faster in digitalization), technology (some organizations have the needed technology to implement digital transformations), and human resources (more numerous and better skilled employees).

b. *support* – this category comprises sources of support available for a certain company, such as funding to financially sustain digital transformation, training, technology, and proper guidance.

c. *skill* – engineering, IT & digital, system integration are only a few of the skills that, when available, facilitate digitalization.

1.5. Impeding Factors

Despite the fact that digitalization is now happening faster than ever, there are still organizations and countries that are facing difficulties in transitioning to digital work processes. This is the effect of multiple factors that act together and hinder progress, sometimes despite considerable effort and motivation to adjust. Contrasting the previous set of factors, impeding factors slow down or prevent the transition to digitalization. These factors can be grouped into two categories:

a. *challenges* – the most common challenges faced by organizations are getting the right people to implement changes and take responsibility for complex digitalization projects, lack of funding (with successful digitalization requiring big investments), technical challenges, lack of knowledge and of trainers to provide the needed education, and changing people's mindset. The last one may be one of the most difficult to target, making it the focus of many of the recommendations in the current guide.

b. *ecosystem factors* – comprising a lack of resources relevant for digitalization in the immediately available environment of a certain organization. Factors included in this category are insufficient service providers and digital-ready graduates and the lack of info sharing platforms.

Many of these factors are highly present in underdeveloped countries or in rural areas, creating vicious cycles that make it very difficult for organizations to make even small steps towards digitalization.

1.6. Negative consequences and risks of digitalization – how does digitalization impact employers and employees?

In this chapter, we will briefly acknowledge the impact that digitalization has on employers and employees. Acknowledging the impact of digitalization is essential to inform courses of action aimed at increasing positive impact and decreasing negative impact to facilitate adaptation to the new world of work.

Given the fact that the focus in the previous chapter was rather on the benefits and opportunities that digitalization creates, this chapter will emphasize the risks and potentially negative consequences of digital transformation.

One of the risks most often associated with digital transformation is the potential **loss of** one's job or even the **disappearance of certain jobs** on the job market because of their replacement with technological developments, machines, or Artificial Intelligence. Indeed, digitalization and automation inevitably replaced jobs including routine tasks, dangerous activities, repetitive or monotonous work, manual work, and low-skilled tasks, which is legitimately perceived as a threat to employees working in such domains or to employers that do not have the possibility to transition to digitalization, thus decreasing their competitive advantage on the market. Although a critical analysis reveals that digitalization created more jobs that it replaced, these jobs oftentimes require higher and costly education that many people cannot afford. Organizations as well as society at large should consider creating affordable educational opportunities so that, instead of losing their jobs, employees have the chance to improve the abilities they need to adjust to a world of digitalization.

This leads us to another, rather counterintuitive risk of digitalization in the workplace, i.e., the **deepening of social inequalities**. While it is true that the standard of living has increased progressively during the past decades due to education and digitalization, some countries and population categories continue to face poverty and discrimination. Indeed, the disappearance of many jobs and the increasing demand for high-skilled jobs widens the social gap for underprivileged and vulnerable categories in two ways: (1) because of their limited access to higher or secondary education, which further decreases their employability and (2) because of the lack of necessary skills and knowledge (potentially resulting in job loss) among employees' that were already working in jobs strongly impacted by digitalization. To mitigate this risk, both micro- and macro-level measures are needed – from local measures taken by schools and organizations to support vulnerable populations through their learning process to public policies addressing the impact of digitalization on social inequality at the societal level.

Another risk is **increased social isolation**, in stark contrast with the deeply interconnected world of work that digitalization enabled. This risk has been amplified by the COVID-19 Pandemic, which fast forwarded digitalization process in numerous organizations. Although communication is now easier and faster, virtual meeting platforms have significantly reduced face-to-face communication. The digital workplace is reducing the opportunities for physical interactions and may prevent social integration, which could further result in employees feeling isolated and an increase in social withdrawal tendencies. Although many employees are actually looking for remote jobs that allow them to work from any part of the world, organizations should consider hybrid activities that include face-to-face interactions to counteract the social isolation oftentimes inherent to highly digitalized jobs.

High dependency on technology, while providing many benefits, can turn into a disadvantage when the system is affected by glitches; for example, a glitch in a single component of a digitalized system can affect or completely prevent the whole system from functioning. Due to the fact that

digital world is a highly interconnected world, in a matter of minutes, this can lead to major financial losses or other negative consequences. Although difficult to address, the negative impact of such a risk could be mitigated by assigning employees and developing procedures to intervene promptly.

Security is another weak link in the process of digitalization, making organizations highly vulnerable to cyberattacks and data leakage more efficient than ever before. For example, if a company centralizes documents containing customer, employee data, financial data, policies, and procedures in one place, a data breach will be all the more severe for the organization and its employees. However, many organizations and experts in the domain are now working closely to create safer systems, that are harder to penetrate and considerable progress is being made.

Last but not least, **the costs** for digitalization pose severe risks both for employers and employees, particularly in less profitable industries and smaller organizations. Given the high cost, digitalization is oftentimes poorly performed, which may lead to the unsuccessful integration of digital processes, job insecurity, and diminished competitive advantage. This creates further costs for the company and reduces return on investment. Public policies and governmental programs could be developed to provide financial and operational support particularly to smaller organizations willing to optimally navigate the digitalization process.
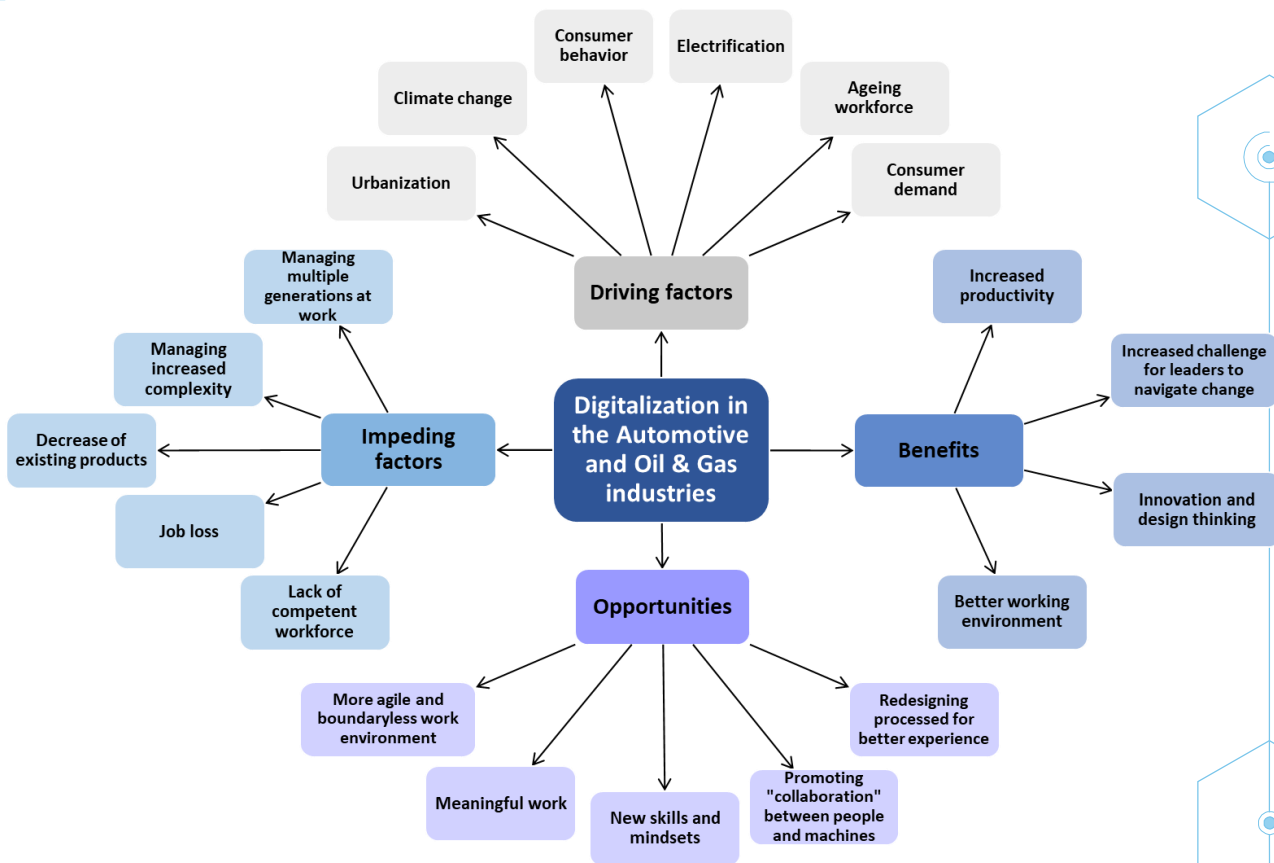
Despite the many risks and negative consequences of digitalization (some of them inherent to any change or developmental process), the world of work has met the fastest development in history, with such great benefits, that they can hardly be quantified. Moreover, given the active efforts that are being constantly made to perfect digital processes, we can safely state that these risks will be significantly diminished in the future.

1.7. A snapshot of digitalization in the automotive and oil & gas industries

Digitalization in the oil & gas industries will accelerate in both sectors, but there are differing views regarding the pace of adoption.

The Automotive sector leaders expect an acceleration of the automation and digitalization trend started years ago, amid the acceleration of the technology adoption in the sector globally, which may result in a decrease of Romania's competitiveness. In Romania, the automotive industry started automation and technology adoption for decades, but with the transition to the hybrid and electric motor, the industry needs to pick up the pace in order to maintain competitive advantage, increase efficiency, and respond to customer demands.

Oil and Gas leaders also envisage further adoption of technology, mainly driven by the need for increased efficiency and optimization, in the overall context of declining production due to exploitation of mature fields. Process optimization and technology investments are important opportunities for the sector. Among the technologies with the highest expected impact, they mentioned remote monitoring, big data/data analytics/data science, IoT, Augmented and Virtual reality and chat-bots.

Digitalization in the Automotive and Oil & Gas industries

Driving factors
- Consumer behavior
- Electrification
- Climate change
- Ageing workforce
- Urbanization
- Consumer demand

Impeding factors
- Managing multiple generations at work
- Managing increased complexity
- Decrease of existing products
- Job loss
- Lack of competent workforce

Benefits
- Increased productivity
- Increased challenge for leaders to navigate change
- Innovation and design thinking
- Better working environment

Opportunities
- More agile and boundaryless work environment
- Meaningful work
- New skills and mindsets
- Promoting "collaboration" between people and machines
- Redesigning processed for better experience

Surveys among employers and employees' representatives in the Automotive and Oil & Gas Industries in Romania, Hungary, and Slovakia reveal the following statistics on the factors that drive automation and digitalization:

82%	80%	75%	67%	31%	64%
Customer requirements	Competitors practice	Cost reduction	Lack of qualified workforce	National strategy	Global pressure
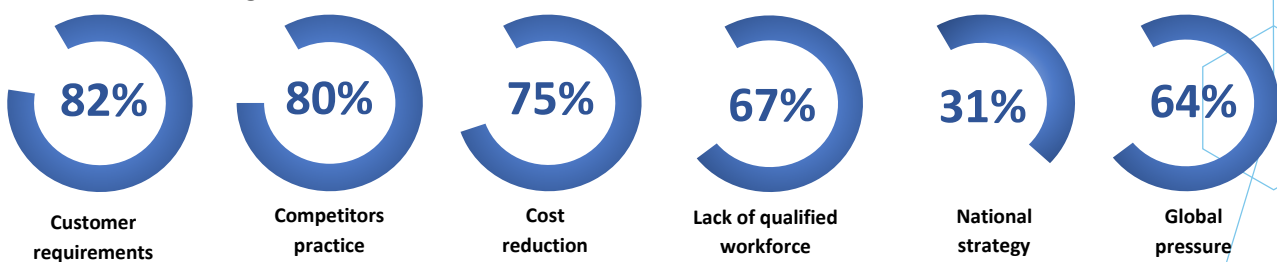
Surveys among employers, employees and their representatives in the Automotive and Oil & Gas Industries in Romania, Hungary, and Slovakia reveal the following statistics on the impeding factors of automation and digitalization:

67%	54%	44%	75%	62%	77%
Lack of digital knowledge	Lack of quality and execution standards	Cybersecurity risks	Lack of employee readiness	Need for continuous education	Lack of financial resources
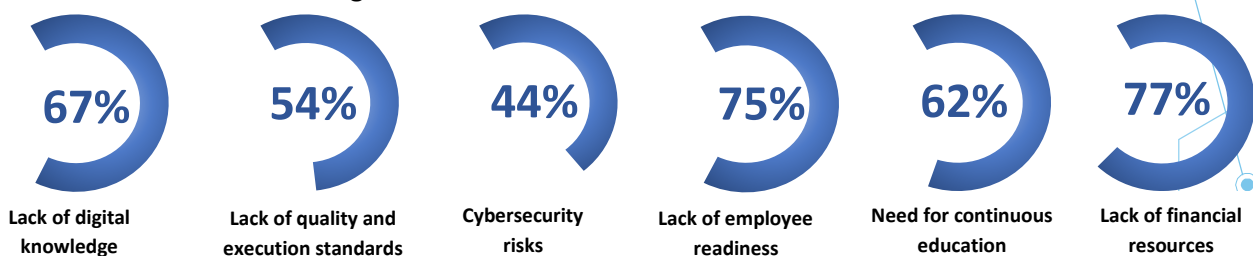
Both driving and impeding factors are essential to inform interventions meant to facilitate digitalization. Specifically, they act as reference points indicating the advantages to be capitalized on and the obstacles to be addressed on the road towards digitalization.

2. HOW CAN EMPLOYERS AND EMPLOYEES ADAPT TO THE NEW WORLD OF WORK?

Strategical approaches for the transition to a digital world of work

Understanding what digitalization entails and how it impacts the world of work is essential to start the adjustment process. However, the question that still lingers is what exactly can organizations, through their employers and employees, do to facilitate this transition.

In response to this need, the following chapter will discuss the strategic, long-term, as well as tactical, short-term approaches that both employers and employees should take to adjust to the new world of work.

In any given organizational change, strategy sets the framework and guides further steps. Strategy comprises the courses of action towards major goals and is concerned with long-term outcomes/changes. The digitalization of organizational processes requires a thorough analysis of the organizational context, followed by detailed planning based on this analysis. Although different actions are targeted towards different individuals according to their role in the organization (i.e., employers versus employees), a strategy of digital transformation concerns all of them to a certain extent. Therefore, the strategic recommendations in the current guide are targeted at both employers and employees as core change agents in the digitalization process.

The transition to the digital world of work can employ various strategical approaches. The most relevant of them will be detailed below as recommendations.

A. PLAN-DO-CHECK-ACT

The plan-do-check-act (PDCA) circle is a general model for continuous change, which assumes that every transition towards improved processes requires a four-step circular approach. When considering digitalization, employers should make sure that the following steps are considered:

a. <u>Plan</u>

Planning is the first phase in the digitalization loop, which requires identifying a certain problem as an opportunity to improve organizational processes (production, marketing etc.), analyzing the core needs of the organization (through surveys targeted at all the involved parties, including employees), and planning the change by setting clearly defined objectives and the needed steps towards achieving them.

Organizations will face different difficulties, so there is no one-size-fits-all approach. This phase allows for the identification of the particular difficulties your organization may be facing in its transition towards digitalization by requesting a thorough analysis of the position of your company in the transition process, the specific challenges it faces, as well as the areas that are already properly digitalized and do not need further investment from a utility perspective. In this phase, you should identify the changes that must be prioritized (e.g., through needs analysis), set measurable objectives (one or two great aim split into smaller ones), plan financial investments, identify the parties potentially impacted by

these changes (workers, customers etc.), anticipate challenges and benefits, and proposing tactics to overcome negative consequences, while also maximizing benefits.

After the planification phase, you should therefore know the courses of action that you will take, as well as the definite steps (i.e., tactics) and tools that are needed.

The PDCA is circular, meaning that the process of digitalization is organized in a feedback loop, where every phase informs the next one. You should, therefore, be flexible and open to adjustments or revisions of the planification phase based on the previous stages of the process.

b. Do

Once the planification of the digitalization process is finished, start implementing it. You should perceive this stage as a test of the previous one. Begin by applying the plan on a sample (e.g., a single unit or department of your organization) to avoid significant losses, disruptions or any other type of negative effects. Not everything will go according to plan, so be ready to monitor the progress of the plan, identify any needed adjustments, unexpected challenges or benefits, and new solutions that emerge in the process.

As an employer, you should pay special attention to employees' reactions, direct and indirect feedback (i.e., feedback that comes to you through changes in their work activity or attitudes towards work). This will help you anticipate the effects on employers if the project is further implemented widely.

Note that, in this phase, you should only monitor progress and note down any information you find relevant, without drawing conclusions or advancing solutions. Make sure to include more people in the monitorization process, particularly in the areas that are subject to personal biases.

c. Check

In this stage, you will confront the data resulted from the pilot implementation of the project (stage 2) with the initial plan (stage 1). Assess the extent to which the objectives were achieved, whether they respected the initial timeline (or required less/more time than anticipated), areas of improvement, and provide solutions for the unexpected challenges. For example, if employers were less open to change than anticipated, focus on identifying the reasons of their reluctance and advance solutions to diminish it.

Based on the results of this analysis, you will decide how to proceed:

i. If the analysis revealed important differences or discrepancies between the initial plan and its actual efficacy, go back to Step 1 and adjust the plan accordingly.

ii. If only minor changes to the plan are needed, you may only want to repeat the *Do* and *Check* phases.

iii. If the pilot test of the digitalization process produced satisfactory results, in accordance with initial expectations, go to Step 4, i.e., the Act stage.

d. Act

In this stage, you will implement the project widely. Generalize the actions from one department or unit to all the departments, by taking into consideration any needed adjustments. More specifically, although a prototype plan worked on a work sample, it does not mean that it should be identically implemented in the rest of the organization.

Instead, make sure you personalize the plan to properly address the particularities of every department or unit. Minor changes, based on core work activities of certain departments, levels of specialization etc, will increase the probability of success, thus ensuring a more efficient transition to the final outcome, which is digitalization.

Since the PDCA is a loop approach, the process of digitalization will not end with the *Act* phase. Instead, use the products of your first project to inform continuous progress towards digitalization and constantly refine your current solutions. Indeed, the transition to a digital world of work is a gradual, step-by-step pursuit, that requires consistent upgrading and flexibility. Along the process, try to minimize losses, while emphasizing benefits and advantages. However, although you should do your best to accommodate the needs of all the parties involved, keep in mind that compromise is an inherent part of any change process. The main way to ensure that you are taking a balanced view on these compromises is to work in teams and constantly debate plans, objectives, and solutions with others. This will mitigate the risk of personal biases and omissions of important aspects (such as employees' opinions on the particular change you propose), and will improve cooperation and openness to change even from the most severely impacted by this change.

General approaches of the transition to a digital world of work, like the PDCA are very useful because they provide change agents (both employers and employees) with the freedom to choose the most appropriate methods to implement change in their organizations. However, sometimes, a more specific strategy facilitates planning and implementation through the shortcut of clearer directions. Below, we will detail a strategic approach based on the more general PDCA model, that is customized for the process of digitalization.

The following model directly targets the steps that organizations need to take to tackle digitalization and digital transformation. It is comprised of four theoretically succesive stages, that act in a feedback loop, suggesting a continuous process to fine-tune digitalization goals and plans.

1. Step 1: Positioning a company in digitalization

   The first step requires analyzing the effects of digitalization on organizational processes (actual work processes, communication processes etc.) and clarifying where the organization stands in relation to the current digitalization processes. Specifically, positioning a company in digitalization requires you as change agents to go through four stages: digitalization impacts, digitalization drivers, digitalization scenarios, and digitalization goals.

   To identify *digitalization impacts*:
   - identify and analyze current and upcoming trends of digitalization and their relevance for the company's domain; pay particular attention to the processes that were digitalized in the organizations from the same domain. However, not all digital trends are applicable to or leading to improvements in a certain activity, so choose the ones that best suit your organization's profile, needs, and work processes;
   - assess the position of your organization in the process of following these trends. Your organization may not have to start the digitalization process from zero, so seek to identify exactly the steps that have already been taken and start the digital transformation from there;

- perform a SWOT (strengths-weaknesses-opportunities-threats) analysis to assess the current trends in the digital world of work in relation to your business domain. Choose those trends that have more strengths and create more opportunities than they pose threats or cause weakness in your organization. This will help you position your company in the middle of those trends that are not only the most relevant, but that also ensure higher organizational performance with minimal costs and losses.

Based on the trends analysis at the previous step, the *digitalization drivers* should be identified. Specifically, one should use the trends that were deemed relevant for the organization and assess their impact on or relevance for the business. You should then hierarchize these trends based on their impact and begin by addressing the one that you expect to affect the organization the most. For example, if all the other organizations in the domain digitalized a certain process that is essential to the business, you should consider making the change to avoid losing competitive advantages.

Once you identified the digitalization impacts and drivers, start *designing scenarios* for the company's future if you decide to follow digitalization trends. Begin by considering multiple scenarios based on the digitalization drivers that are at the top of the hierarchy previously established. Remember that changes should be gradual to prevent them from severely disrupting work processes, so in the beginning, only design scenarios for those changes that seem essential to the organization.

For each scenario, perform an analysis that evaluates:

- the costs of implementing the scenario
- benefits of implementing the scenario
- risks associated with implementation
- risks associated with not implementing the scenario

Based on this analysis, choose the scenario/scenarios that seem to work best for your organization.

Last but not least, positioning the organization in digitalization requires *setting and defining clear goals* regarding the digitalization process. These goals should be defined only for the scenario/scenarios that were chosen in the previous step. Their magnitude depends on the specific change that will be made, from simply utilizing a narrow technology for faster operations to completely rebuilding the business using digital tools.

Productive goals, that actually guide digital transformation, should be based on the SMART principles of goal-setting processes. Specifically, irrespective of how broad or narrow the goals for digitalization are, they should be:

- specific – specifying what needs to be accomplished, who is responsible for the accomplishment of the goal, and what *specific* steps should be taken to achieve it;
- measurable – setting clear milestones and indicators that allow you to quantify to extent to which your goals have been met;
- achievable – assess whether your goals, as well as the time frame for achieving them are realistic; unrealistic goals will eventually lead to demotivation for the parties involved and potentially compromise their engagement and commitment to future digitalization processes. In your analysis, consider the

financial and human resources costs of your goals and confront them with available resources;

- relevant – not every process you can digitalize is necessarily relevant for your organization. Make sure your digitalization goal is in agreement with the needs and profile of your organizations and that, if successfully implemented, will lead to significant improvements in work processes. This is an essential step in justifying the costs associated with working towards the goal.
- time-bound – digitalization goals should be achieved according to a realistic deadline. Establish a time frame for every milestone or stage of the goal, not only for the overall goal. This will help the organization better monitor and control goal progress and employ adjustments to the initial planning if necessary.

Positioning a company in digitalization is not a one-time leap; in reality, it requires constant revision based on the digital progresses organizations make. After all, every goal that is achieved changes the position of the organization in the realm of digitalization and requires the adjustment of future goals.

2. Step 2: Review of the current state

Based on the goals defined in the previous steps, the current situation of the company will be analyzed. This stage includes two sub-steps, i.e., analyzing impacted areas and analyzing the situation with respect to the goals.

a. **Analyzing impacted areas.** To analyze impacted areas, you should first decide whether the goal is related to internal efficiency or to external opportunities. If your organization's goal is related to internal efficiency, you should identify the processes, tools, and resources that will be involved in digitalization and directly affected by it. If the goal is related to external opportunities, you should identify customers, competitors, external resources and processes that will be impacted by the digitalization of your processes.

b. **Analyzing the situation with respect to the goals.** To conduct a proper analysis of the situation, four specialists in the domain of digital transformation, Parviainenin, Kääriäinen, Kääriäinen, and Teppola (2017), recommend answering a series of questions depending on whether the goal is related to internal efficiency or external opportunities.

If your digitalization goal is related to internal efficiency, you should consider the following aspects related to internal practices in your organization:

- *How is the issue handled now and how satisfied are the stakeholders with the current situation?*
- *What is the state of technology used to handle the issues?*
- *What are the main obstacles or shortcomings of the current practice?*
- *What current competencies related to the goal are available?*
- *What are the obstacles that prevent change regarding the issues?*

If your digitalization goal is related to external opportunities, you should consider the following aspects related to the business case:

- *What are the current company offerings?*
- *Who are the current customers and what are the current customer segments?*
- *What is the competitive advantage of the current offering compared to the ones of other competitors on the market?*
- *Are there new customers that could be targeted through digitalization?*
- *How are competitors dealing with this potentially new segment of customers?*
- *What would be the competitive advantage of the company in the new service or segment?*
- *What are the costs of implementing the new offering?*
- *What are the risks involved in implementing the new offering based on digitalization or technology processes?*

Irrespective of the changes that the organization goes through, they will most likely be disruptive. Reviewing the current state also implies reviewing the processes and offerings that will be disrupted, the magnitude of this impact, the processes that will be involved in the change, the competencies and resources that are already available and the ones that are lacking (and need to be developed), how can existing competencies be used in the process of digitalization, and what is the time frame of this change.

3. Step 3: Roadmap for digitalization

In this step, the plan for achieving the digitalization goal/s will be detailed and split into specific sub-steps, to provide all the change agents (employers and employees) with guidance in the transition towards digitalization.

Firstly, employers and employees should work together to identify the gap between the current state of the organizational processes and the digitalization goal. The next step is to identify and analyze the core elements composing the gap, such as competencies gap, lack of tools or technology, competencies and tools that could be reused to favor digitalization, changes in the current offerings to appeal to the new target customers, lack of qualified workforce, negative attitudes towards change etc.

Secondly, based on the conceptualization of the gap, change agents should identify specific actions that need to be taken to close this gap. Actions include: taking on new technologies, such as IT tools, identifying processes with the highest potential to benefit from digitalization and the highest impact on organizational performance, optimizing or re-defining existing processes to include technological developments (e.g., using technology to automatize manual work processes), re-evaluating KPI (Key Performance Indicators) in accordance with business digitalization, acquiring new competences, analyzing or even extending to new markets, rearranging internal resources (human and financial resources, internal infrastructure, management and entrepreneurship, information and technology).

Thirdly, a feasibility analysis and prioritization of actions should be performed. In this step, a cost-benefit analysis, an impact analysis on existing infrastructure, offerings, and resources, and a risk analysis will be performed. When considering costs of digitalization, include: the technology needed for digitalization, training and support for staff involved in
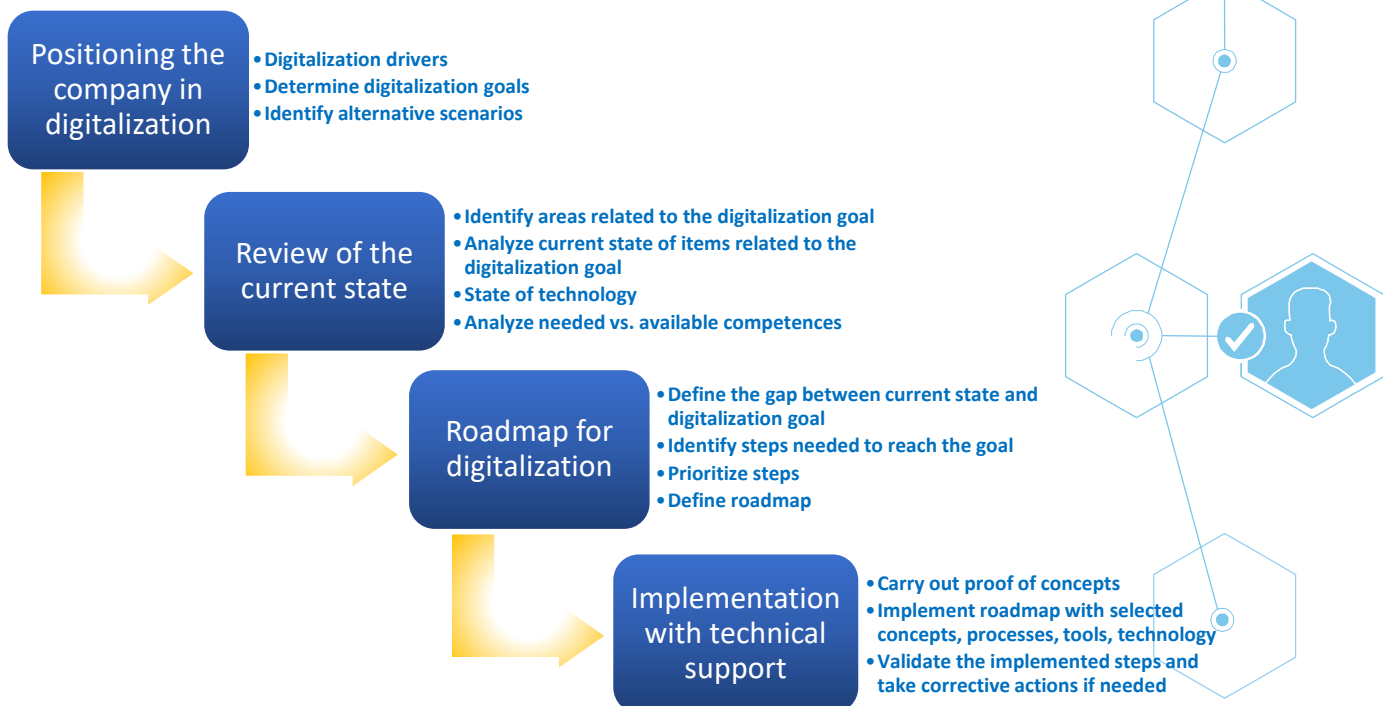
digitization work, maintenance of digital data, any other costs usually associated with change in general.

In the feasibility analysis, you should also perform trials and develop prototypes of the identified solutions. These will give you more insight into the actions needed to implement digital transformation at a larger scale. These actions will then be prioritized and lead to the development of a roadmap of the digitalization of business processes, revealing the order, importance, and responsibilities for the actions.

4. Step 4: Implementation with technical support

This is the final stage in the adjustment to digital transformations and it entails the actual implementation of the goals and detailed plans in the previous stages. Given the fact that changes are essentially disruptive, make sure to first implement proof-of-concepts instead of directly investing in digitalization on the wider scale. Proof-of-concepts are exercises on smaller samples of an organization to test the viability of a certain plan. They create the opportunity both for employers and employees to make more precise assessments of the digitalization plan, gain a more realistic view of what the change would look like if implemented at a larger scale, and encourage internal feedback. It also ensures that the transition to digitalization is made collaboratively, in an attempt to provide the most advantageous solutions for the organization and the employees, thus decreasing their reluctance to change.

Along the four-step process described above, employers and employees must pay specific attention to how these changes may impact social dynamics in the organization (managerial conflicts, technical challenges faced by employees directly confronted with changes in their work activities etc.) and organizational culture at large.

Positioning the company in digitalization
- Digitalization drivers
- Determine digitalization goals
- Identify alternative scenarios

Review of the current state
- Identify areas related to the digitalization goal
- Analyze current state of items related to the digitalization goal
- State of technology
- Analyze needed vs. available competences

Roadmap for digitalization
- Define the gap between current state and digitalization goal
- Identify steps needed to reach the goal
- Prioritize steps
- Define roadmap

Implementation with technical support
- Carry out proof of concepts
- Implement roadmap with selected concepts, processes, tools, technology
- Validate the implemented steps and take corrective actions if needed

It is both employers' and employees' responsibility to address these challenges by providing proper training to employees, considering their complaints and opinions in the digitalization process, emphasizing personal/professional benefits for them, and approaching changes proposed by the employers with an open mind.

3. HOW CAN EMPLOYERS AND EMPLOYEES ADAPT TO THE NEW WORLD OF WORK?

Tactical approaches for the transition to a digital world of work

Strategical approaches refer to a long-term plan aimed at transitioning digitalization processes in the organization. Tactical approaches are complementary to strategical ones and give specificity to the transition process. Below, we will detail the specific skills and abilities that employers and employees should have to adjust to the new world of work, as well as potential ways to develop those skills.

3.1 SOFT and HARD SKILLS AND ABILITIES – Conceptualization

Soft skills are non-technical skills that refer to how you work in terms of interpersonal interactions, communication, time management etc. and are usually not specific to a certain job or role. However, some of those skills may be more relevant to a certain job, process, or context than others, as is the case with soft skills in the context of digitalization.

Soft skills as tools to adjust to the new world of work have received much more attention in the scientific literature compared to technical or hard skills. Indeed, in accepting change and acquiring technical skills, they are, by definition, a prerequisite. The most important characteristic of soft skills is their transferability. Transferable skills are useful in multiple jobs or roles, ensuring the versatility of employers and employees, which is all the more important in the fast-changing digital world of work, that requires constant adjustment. Given their importance, below, we will focus on the soft skills that particularly facilitate the transition to the digitalization of work processes and on the measures that should be taken to develop them both in employers and employees.

It is important to keep in mind that this is not a comprehensive list and that new soft skills could be added in the future, as the world of work makes efforts to keep the pace with the galloping development of technology.

Whether you are an employer or employee, the skills below will help you adjust to the new world of work:

- **Social/interpersonal skills** – a digitalized world of work is an interconnected world. Indeed, process digitalization in organizations meant faster, more efficient communication, more connections between departments or sectors, and facilitation of team work. Moreover, jobs requiring social interaction as an inherent part of their activity are difficult to automate, which increased the need for people with good interpersonal skills on the job market. This is in contrast with jobs requiring skills that are easier to automate, making them less popular and searched for. Therefore, the transition to a digitalized world of work requires strong interpersonal skills to help you efficiently collaborate in the organizational synergies favored by digitalization, become more

relevant or indispensable for organizations, and more versatile when it comes to transitioning from a work activity that has been potentially automated or digitalized to one that requires social interaction.

"Social skills" is an umbrella term covering a wide array of specific skills, such as coordinating with others, emotional intelligence, negotiation, persuasion, service orientation, training and teaching others, ethics and social responsibility, virtual collaboration, conflict management, and communication skills. Each of these skills is more or less relevant depending on the nature of your activity or the profile of a certain organization. For example, training and teaching others is particularly important in organizations that are undergoing high-impact transitions to digitalized work, that need to teach technical skills, such as handling certain machines or devices to employers' whose work activity has been digitalized. Negotiation and persuasion skills are essential for employers and employees alike involved in selling activities. You can also think about organizations that are now reaching a higher number of customers through the endless possibilities of interaction that technology provides (such as online meetings or messages, online shopping etc.), pushing their employers and employees to communicate properly to clients with different expectations and cultural backgrounds, act agreeably, show availability etc. If you, as an employee, have better communication skills, you are very likely to contribute to the increase of your company's competitive advantage. This will make you more valuable to and dependable for your organization and help you better transition to a world of work posing an increasing number of social or interactional challenges.

Social skills also facilitate the transition to digitalization at a more informal level. Think about the strategies you employ whenever you have to learn new activities or information in the workplace – among the most frequently used is asking for support from colleagues. If you have good communication skills, high emotional intelligence, and good conflict management abilities, you have probably developed high-quality relationships with your coworkers, which will make them more willing to help you.

Indeed, to navigate digital transformation successfully, you should invest in the development of your and your employees' interpersonal skills.

How to: initiate conversations, ask open-ended questions, let others finish their answers, listen actively (nod, approve, summarize), explore before jumping to conclusions or contradict.

- **Critical thinking skills** consist of five main abilities: *observation* (noticing and predicting opportunities, problems, and solutions), *analysis* (the gathering, understanding and interpreting data), *inference* (drawing conclusions based on relevant data, information, personal knowledge and experience), *communication* (sharing and receiving information), *problem solving* (the process of gathering, analyzing, and communicating information to generate solutions). In the organizational world, critical thinking is the analytical and rationale thought process that allows individuals to make informed judgements about the organization, evaluate business problems and challenges. Digitalization is a challenge in and of itself, requiring a thorough strategical process that can only be valuable if done

critically. By definition, critical thinking is involved in every step of the transition to the digital world of work, helping employers and employees observe, analyze, and make predictions about digitalization opportunities, as well as accept them easier by becoming aware of their benefits. It also facilitates cooperation and sharing of information between all the parties involved, which leads to decisions and courses of action that are mutually convenient. Last but not least, critical thinking skills add value to any other competencies you may have due to the fact that they are very difficult to digitalize or automate, making you an extremely valuable presence in the organization, irrespective of the automation or digitalization of other work processes you may have been involved in.

Critical thinking is the engine that drives smart transitions and sustainable change.

How to: question and diversify your sources of information, listen to opposing views and critiques, identify your assumptions and find both pro and against facts for them, beware of implicit, automatic mental processes (such as the tendency to look for information that confirms your beliefs).

- **Cognitive flexibility** – generally speaking, cognitive flexibility refers to the ability to adapt to new, changing or unforeseen events.

In organizational contexts that are rapidly changing and flexible themselves, particularly under the influence of digitalization and the pressure to keep the pace with competitors, cognitive flexibility allows you to accept change and adapt your working style to the new world of work; studies show that people who own this skill make better decisions in the workplace (for example, decisions regarding the digital changes that are the most relevant or beneficial to the organization), are more creative, are able to extrapolate current knowledge to the changes resulted from the digitalization of work processes. and respond more efficiently to workplace conflict due to their ability to integrate multiple points of view and empathize with others. For example, during digital transformation processes, cognitive flexibility can help you deal with your colleagues' reluctance or negative reactions to digitalization. It will also make it easier for you to learn new automatic ways of performing work tasks (e.g., using a certain software to perform the task instead of doing it manually). You can also use previous knowledge (e.g., proficiency in a foreign language) to access information or get in touch with people that could help you navigate digitalization smoothly.

How to: start with small changes in your work activity, try to think of alternative ways to perform tasks, transfer information or skills from one area to another, add a new activity to your everyday routine or replace a certain activity with another, actively seek advantages or benefits you derived from these changes.

- **Innovation and creativity** – defined as the means by which individuals produce novel and useful ideas, products, and processes, creativity is needed to conceive and generate new working methods that are enabled or initiated by digital transitions. While other work processes will become automated, organizations will be increasingly dependent on human creativity to generate ideas on how to improve work activities and business processes, by making use of the constantly evolving digital possibilities. Creativity is

central to changes in general, and the transition to a digital world of work requires you to find the most appropriate ways to adjust to digitalization. For example, if you are an employer in the digital era, creativity will help you find the best ways to transition to digitalization and help your employees do the same. If you are an employee, creativity will guide you in finding the means to extrapolate or use your existing knowledge to the new world of work. The current guide gives you some more or less general directions in how to transition to a new world of work; however, the way you customize them according to your and your organization's interests is a thorough process that requires creativity.

How to: identify the co-workers you find the most different and initiate discussions with them to explore and integrate different perspectives, take the risk to explore without actually accomplishing something, explore multiple solutions to the same issue or task.

- **Intercultural skills** – digitalization created the opportunity to bring together people from various countries, with different cultural backgrounds and skills. In fact, never has interconnection across the world been as widespread as it is nowadays, a process that has been fast forwarded by the COVID-19 pandemic. Borderless collaboration in the workplace due to digitalization challenges your abilities to collaborate efficiently, accept, and seize upon the possibility to work with employers and employees from different countries. As a European country in the process of digitalization, we are becoming increasingly tied with companies from different countries (both inside and outside Europe), having to work with people with different cultural backgrounds. Capitalizing on this opportunity means developing our intercultural skills to properly interact with others in the workplace.

How to: learn foreign languages, learning how to learn, read about foreign countries and culture, stay curious, open your mind to cultural complexities, seek similarities between you and people from different cultures.

- **Interdisciplinary skills** – "interdisciplinary skills" is an umbrella term that comprises most of the skills detailed above, such as interpersonal and communication skills, to which technical skills are added (such as digital competencies). Essentially, it is the ability to explore content or solve problems by integrating knowledge and experience from different fields or subjects. Interdisciplinarity is widely searched in employees particularly because it encourages versatility and it is, by definition, a prerequisite of the adjustment to the changes of digitalization of business processes. If you develop your interdisciplinary skills (including certain psychological traits, such as cognitive flexibility or body language), you will find it easier to navigate digitalization in the workplace, which more often than not, entails changes in your work activities and an integration of knowledge from multiple fields. Consider creating and taking any opportunity that contributes to the widening of your knowledge beyond the borders of your main area of expertise.

How to: read the strategies on how to develop each of the above skills, identify the ones that best suit your work context and your personality and integrate them in a complex approach of personal change.

- **Resource management skills –** resource management may very well be the component most strongly impacted by digital transformation and describes how the organization handles available resources, both tangible and intangible. Tangible resources include materials, tools/equipment, and money, while intangible resources consist of workers/employees or time resources. Digitalization penetrates resource management at all levels, influencing how the money are spent, what equipment is invested in and used, how workers perform their activities, what their attitudes in response to digitalization are, and how time is planned.

Thinking about the activities that resource management entails (such as scheduling, budgeting, planning etc.), it becomes easy to understand how skills in the area facilitate adjustment to digitalization. In fact, if you turn back to the strategic approaches that we discussed in the previous chapter, you will realize that resource management is essential in every stage of the process of digital transformation. Although it may seem like only employers should have such skills, they are also very relevant to employees and workers who are given micro and macro responsibilities in the transition to a digital world of work. Digitalization is a very costly process, therefore, employers and employees in different departments (financial, human resources etc.) should cooperate to find optimal solutions, prioritizing only those transformations that bring maximal benefits with minimal costs, staggering less profitable ones after the former ones generate profit.

How to: identify resource managers in your organization, collaborate with them to identify available resources and set up plans to use them efficiently, look for opportunities to get more resources (recruitment processes, tools acquisition etc.), set deadlines and objectives and closely monitor them.

- **Technical skills–** in a digitalized world, technical skills are the most tangible, palpable areas of improvement. Digitalization always entails the use of technology, from the most basic ICT (information and communication technology/digital) skills, such as turning on a computer, navigating the internet and writing virtual documents, to the most advanced ones, such as using or creating softwares in response to business pressures and market needs. Other technical skills include equipment operation and control, programming, user experience design, data analysis and research skills and so on.

How to: implement and take training programs to develop basic digital skills, practice digital skills at home (use computers and smartphones), use digital devices at work whenever possible (even if not required), communicate with others online, exchange digital knowledge with your co-workers, seek online tutorials to learn new skills.

Technical skills, particularly in highly automatized tasks, are the most immediate change that is implemented in an organization and one of the main changes that causes reluctance from workers. This happens particularly because of employers feeling unprepared or unskilled, which is oftentimes the result of poor management of the transition from one type of work method to another. Read the following chapter to find out how this transition should be handled so that you turn this transition from a threat to your current role or position to an opportunity.

- **Digital skills –** as one of the most important skills needed to navigate the digitalization process in the workplace, digital skills entail using electronic/digital devices to communicate, perform computations, manage information and machines. Most jobs nowadays require at least basic digital skills, which is a disadvantage particularly for employees who do not have access to digital devices or did not have the opportunity to develop digital skills during school.

  How to: ask your work colleagues and friends to teach you basic digital skills, such as virtually communicating with others, writing e-mails, navigating the internet; watch tutorials on how to use common softwares such as word processors, excel or powerpoint; take part in classes on digital skills.

- **Self-efficacy –** although not a skill per se, self-efficacy is the psychological characteristic that penetrates all learning processes, by increasing motivation, openness to new information, perseverance through the learning process, ultimately impacting productivity and performance. Self-efficacy is the extent to which you believe in your ability or capacity to perform certain behaviors aimed at achieving performance-related goals. Oftentimes, when changes such as the automation of your work methods occur and you are confronted with the need to develop new skills, the first thing that influences your actions is your self-efficacy, i.e., the trust that you are actually able to learn and make this transition successfully. If you lack self-efficacy, you may be reluctant to even try to develop new sets of skills, which may lead to wasted potential and high costs both for you and the organization. Fortunately, self-efficacy can be improved through specifically designed interventions, so the first step to consider in digitalization processes is the assessment and improvement of self-efficacy.

  How to: set realistic, although slightly challenging goals and expectations both for you and your employees, provide mentoring, guidance, and training, provide positive feedback when goals are met and progress is made, praise effort and willingness to learn, acknowledge your own progress and reward yourself, encourage autonomy in employees to self-manage.

These skills become particularly relevant when they *interact* towards digitalization objectives. In fact, they are rarely beneficial or valuable when used in isolation since, particularly in the digital era, all processes are more synergistical and interdependent than ever. Whether you are an employer or an employee, remember that you should try to first identify the most relevant ones for a particular business process or activity and then invest in developing them in conjunction with each other. For example, cognitive flexibility is particularly valuable when a person is also creative and can integrate different perspectives to innovate and put forward unique solutions. However, these solutions will be better if they go through the filter of critical thinking. Resource management skills also imply good interpersonal skills for two reasons: (1) departments in charge with the management of different types of resources should constantly communicate to properly coordinate their actions and (2) negotiation, persuasion, understanding and integrating perspectives is a core activity in human resources management, particularly during high-impact changes, such as digital transformation. These are only a few examples of how these skills interact to enhance change processes in

organizations, but they make a strong argument for the necessity to implement measures (e.g., trainings) that address the development of multiple skills instead of targeting one particular skill to the detriment of others.

3.2 SOFT and HARD SKILLS AND ABILITIES – Employers' Development

Simply being aware of the skills that will help you navigate the transition to digitalization is not enough. Whether we refer to employers as a person, a company or organization that pays others in exchange for their services, it is important to understand that they are the engine of digital transformation. Their role implies decision-making processes, thorough analysis of relevant digitalization trends, and efficient implementation that also considers employees' needs and how digitalization impacts them.

In this chapter, you will find some good practices for employers that the scientific literature recommends to develop the skills needed for successfully embracing digitalization. These recommendations are also inspired by the suggestions of direct stakeholders in the Automotive and Oil & Gas Industries. From an employer perspective, these skills and courses of action should be targeted both at employees (i.e., what should employers do to facilitate employees' adjustment?), and at themselves (i.e., what should employers do to facilitate their own adjustment?).

If you are an **employer or employer representative** trying to seize the great opportunity of digital transformation, please consider the recommendations below.

To facilitate **employees'** transition to digitalization in the workplace:
- Manage biased perceptions and bust myths about the presence of technology in the organization.
- Many employees believe that digitalization and automation of work processes will replace them, which makes them highly reluctant to any kind of change. Simply firing them should never be the first option both for human and economic reasons. Therefore, make sure you come to know what their fears and preconceived ideas are, use communication and active listening skills to validate and empathize with them, and counter them with strong arguments. For example, you can explain them that technology will help reduce tedious, routine, or monotonous tasks and make work processes more time-efficient and creating the opportunity to focus on other, more relevant tasks. You can also emphasize the reduction in human error (due to exhaustion, tediousness of a certain tasks etc.) and, therefore, in negative consequences both for them and the organization. Technology also reduces discrimination and increases inclusiveness of the job market by automating tasks that could not be performed by people with certain disabilities.
- Besides these more general benefits, make sure to include specific ones, that are related to the industry in which your organization operates and your organization's activities. If digitalization targets a narrow work process, you may focus on the benefits that are specific to that particular work process.

- Discuss with managers and team leaders to announce the changes you plan to make using technological possibilities.

- Explain the rationale behind these changes, what the organization aims to achieve through digital transformation, how these changes will be implemented, and what are the expected benefits for the employers and the organization at large. Make sure the message is reassuring for most employees, so that it does not sound as a threat to their jobs or positions. Remind them that changes will only be made based on a rigorous analysis that will also take their needs and perspectives into consideration. However, your message should be honest and provide a balanced view on both the advantages and disadvantages of digitalization. Leave open the possibility of discussions with employees if they want to ask for more information. Transparency will help you build trust among employees and make them more responsive to digital transformations.

- Be specific about the benefits that employees will have and communicate collateral advantages (advantaged that do not directly or exclusively address work activities), such as the opportunity to meet new people, socialize, and make friends, consolidate relationships with co-workers when taking part in training programs, learning a foreign language etc.

- Create a list of competencies and skills that are needed in the digitalization process, from the ones you find most relevant to the less impactful.

- Perform a needs analysis among employees to assess what are the main gaps and hindrances that they perceive in the process of digitalization.
- Choose inclusive methods to collect information, such as both online and paper-and-pencil forms. This will give you access to as many perspectives as possible. Include multiple choice, as well as open-ended questions to ensure that you also obtain information that was not anticipated.

- Confront the results from the needs analysis with the list of skills you created in the second step and develop another list with the most relevant skills for the digitalization process that were also identified as major gaps or hindrances in the needs analysis.
- Use this list to design a development plan for employees based on their current job roles and their needs.

- Assess the versatility of employees' competencies and retrain those who have high potential according to the needs of each position or role.

- Plan a training program for the development of technical skills. The program can be delivered either by other employees or by specialists outside the company.

- Encourage employees to exchange skills and abilities and schedule organized training between them.

- Create training programs offered by students with technical skills that correspond to the requirements of the digital transformation and the needs of the current employees. In this way, you offer students the opportunity to practice and come into contact with specialists in an industry of interest for them and save training costs.

- Create or hire companies that provide soft skills training to improve interpersonal skills, critical thinking, creativity, managerial competencies, intercultural skills, time management skills or any other skills that are relevant to the specific digital transformations in your organizations and that result from the needs analysis.

- Consider hiring a career or psychological counselor during the transition period to help employees better cope with stressors, uncertainty, the anxiety of change, as well as to increase their self-efficacy.

- Make changes gradually to avoid overwhelming employees. Sudden transitions can decrease their self-efficacy because they may find it hard to keep up with new information and activities.

- Ask for feedback across the transition period to ensure that you are updated about emerging needs, obstacles or opportunities that may require adjustments in your initial strategy.

- Outline success and provide social and/or financial rewards to employees for their efforts to adjust to digitalization.

- Stay realistic. No matter how rigorous and well-intended your development plan is, it will not be 100% successful.

To facilitate your transition as an **employer** to digitalization in the workplace:

- Take part in trainings that aim to develop critical thinking, planning, time management, and resource management skills. These skills will help you adopt proper strategical approaches towards digitalization and make better informed decisions when it comes to hiring new employees and retraining existing ones.

- Stay informed about digital innovations, as well as the skills needed to better deliver digital change in your organization.

- Identify areas of development for yourself, including technical or soft skills. This will ensure double benefits: (1) it smooths your transition to the new world of work and (2) encourages participation in trainings and positive attitudes towards change among your employees.

- Take assessment trainings to learn how to assess and monitor skills development in your employees.

- Take part in interpersonal skills training to learn how to interact with employers in an empathetic manner, how to communicate information, and how to build an organizational climate of trust and transparency.

- Address your own biases regarding digitalization – if you find yourself having misconceptions or negative attitudes towards digitalization, take a critical stance towards it by searching and analyzing evidence both for and against your position.

- Dedicate a few hours per week or per month to having open discussions with employees to stay updated and connected to the evolution of the digital transformation, potential difficulties they may be facing, or suggestions for improvement.

- Take classes to improve your conflict management skills. High-impact changes, particularly if they are perceived as threatening, have the potential to create tense work climates, increase competitiveness, and generate conflicts among workers, as well as between workers and employers. Acknowledge them as a normal part in the digitalization process and learn how to properly address them.

- Stay connected with other employers who are crossing similar processes. This will help you find solutions to the difficulties you are facing in the process of change, give you valuable insights such as alternative courses of action to enhance the digitalization process, and last but not least, provide a safe environment, where you can share difficult experiences in your own adjustment process.

- Do not ignore your own transition – digital transformation is happening for you as much as it is happening for your employees. Acknowledge your difficulties and needs in the process and try to find appropriate solutions. Your own adjustment directly impacts how digitalization unfolds in your organization.

3.3 SOFT and HARD SKILLS AND ABILITIES – Employees' Development

Although most of the above skills are useful both for employers, and employees, the ways to develop them may differ to a certain extent. The main difference between employers and employees in the digitalization of work and businesses is how proactive they are expected to be in the process of adjustment to a new world of work. Compared to employers, employees play a more

passive role and are less involved in the decision-making process regarding digital transformations. However, their effort to adjust is no less considerable and requires just as much action.

These recommendations are also inspired by the suggestions of direct stakeholders in the Automotive and Oil & Gas Industries.

If you are an **employee or an employee representative** willing to smooth your transition towards a digitalized work environment, please consider the following recommendations based on the scientific literature and on the opinions of direct stakeholders in the Automotive and Oil & Gas Industries:

- Think critically about digitalization processes in your organization – seek information to check whether your fears and negative expectations are backed up by solid arguments. Do not hesitate to ask your employer for more details on the digitalization process, what it entails, what are the associated benefits and costs, and what are the actual actions you should take to increase the probability to thrive in the digitalization process.

- Keep an open mind. Although change is threatening and fears are sometimes legitimate, do not let them stop you from exploring the personal and professional benefits you could have if you accept change.

- Stay proactive. Although employers should provide you with the necessary resources to navigate digital transformations, you can also take an active stance in your own development. You could take part in trainings or classes that aim to develop relevant skills such as the ones mentioned above.

- Accept opportunities. If your employers provide trainings for skills developments, try to make the best out of them, particularly since those skills are probably considered highly relevant in the adjustment to the digital transformations adopted by your organization.

- Ask employers for training programs to deal with new tasks. Whether you are an employee or a representative of employees, campaign for employees' right to benefit from training in accordance with their adjustment needs.

- Ask employers to provide you with protection from the risks of technology (e.g., cybersecurity risks). Perform assessments of the specific risks associated with digitalization in your work processes and order them according to their negative effects. Then ask employers to address the ones at the top of your list.

- Join forces. Collective efforts (e.g., unions and groups of employees) have a higher chance of success than a single employee militating for a certain right or benefit.

- Encourage your co-workers to embrace digitalization. If you are aware of co-workers being reluctant to change, explore their reasons and provide both emotional and instrumental support to facilitate their transition.

- Self-manage. Make changes in your work activity to make it more meaningful and increase your own motivation to persevere through the transition (e.g., by rewarding yourself for progress in developing new digital skills).

- Seek social support. Change is hard and most of your co-workers are probably going through similar experiences. Sharing your experiences and fears related to digitalization may feel soothing and reassuring. In cooperation, you may also brainstorm new ways to transition digital transformation efficiently.

- Organize groups of employees with complementary skills and exchange information. This strategy is cost and time-efficient and helps you consolidate your professional relationships, besides its instrumental benefits.

- Be patient. Since digitalization is a complex, intensive, and long-term process, its benefits are not always immediately noticeable, which may become demotivating in the long run. Find small rewards to keep you motivated along the way and keep in mind that satisfaction and growth will come later.

- Advocate with governments and other decision-makers to act for employees' interests, by providing the financial means to navigate digitalization processes, information campaigns, protecting them against the risk of losing their jobs or other risks associated with digitalization etc.

- As a union, you should perform information campaigns to advocate for digitalization, by emphasizing its benefits, busting myths about digitalization, and addressing employees' concerns.

- As a union, make sure to engage in one-on-one constructive debates with employees, through round tables and open discussions, to provide them with the opportunity to freely express their opinions.

- Extend your targets from work to educational environments and develop information campaigns among scholars to promote the skills required by the new labor market.

- Forming unions and facilitating employees' access to unions' representatives. Surveys among employees' representatives[1] in the Automotive and Oil & Gas Industries reveal

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[1]https://forms.gle/J6GuEhzR3aNbGixW6

that they are not informed about the existence of unions or believe unions in their industries are not available.

- Make sure employees know how they can reach unions to ask for help or support to navigate digitalization.

4. WRAPPING UP – Key points

- **Digitalization and automation are rapidly changing the world of work as we know it**, forcing us to adapt, compromise, and make efforts in the name of long-term benefits for organizations, their employees, and society at large.

- Despite the many specific strategies we can employ and the isolated actions of change agents to facilitate the transition to the new world of work, **digital transformation in the workplace is possible only by means of joint efforts** from all the parties involved.

- **Cooperation, synergistic approaches combining complementary skills and possibilities, responsiveness, attention to others' needs, and a critical stance** are key to the successful integration of technology into our professional activities and day-to-day lives.

- **Digitalization in the workplace is eventually mutually beneficial,** creating a virtuous circle in which more skilled and versatile employees stimulate organizational performance and business profitability, which further lead to higher wages and social, informal rewards. These rewards increase motivation, openness to change and constant growth, making employees more and more valuable.

- **The transition to digitalization, although laborious, becomes a feedback loop** in which every entity is both a change agent and the beneficiary of change.

WorkTransition CEE

NAVIGATING THE TRANSITION TO A DIGITAL WORLD OF WORK

Digital transformation is not primarily about technology, it is about people.

National Trade Union Bloc