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The essentials of good work instructions

Frontline workers struggle to find the information they need to perform their job correctly. Regain the wasted time with concise & clear work instructions.

2022 edition

Table of contents

Introduction

1.8

hours a day, or

9.3

hours of the workweek.

That's the time workers spend looking for internal information or tracking down colleagues who can help with a specific task, according to a McKinsey research.

The numbers showcase the disconnection and inaccessibility of information to frontline workers. They spend hours of their productive time just searching for information to do their job effectively. Which is ineffective in itself.

Considering that they can't find the right data every time, information's inaccessibility poses a striking problem. And it can be even worse for knowledge-based industries.

In manufacturing, maintenance, or field service industries, the availability of correct information on-site is the difference between a completed job and costly, repeated issues.

So, there is the question operation managers should ask.

"Do your technicians have the right instructions to complete the job the first time around and on their own?"

If yes, you probably have the competitive advantage of an efficient and delay-free workforce.

If not, you have an opportunity to streamline your knowledge management, save many hours of productive working time, and mitigate downtimes. All thanks to efficient management of work instructions.

If you are not familiar with the essentials of work instructions, don't worry.

In this e-book, we've outlined what work instructions are, their benefits, and how to efficiently create, store and share them. In the end, you should have all the essential information to decide whether you need to start with knowledge management in your organization from the bottom up.

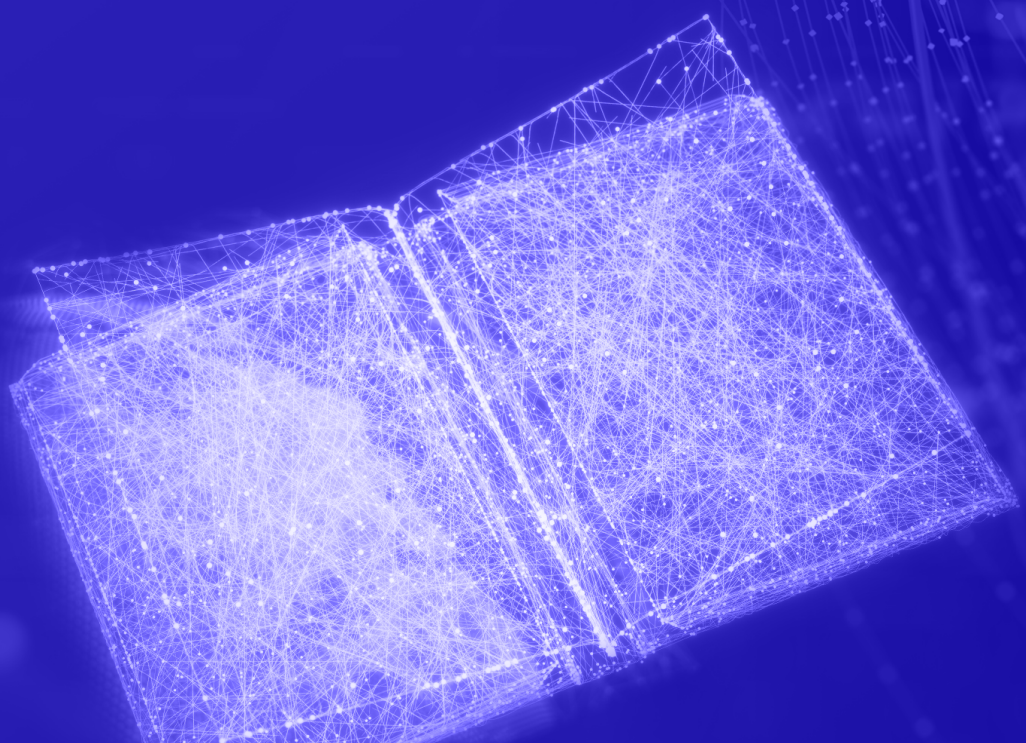
What are work instructions?

Work instructions are documents with a clear and easy-to-follow description of how to correctly perform a task, so there are no errors, safety risks, or delays. Such instructions describe individual steps that employees must follow to perform an activity successfully.

Work instructions cover various areas of a task:

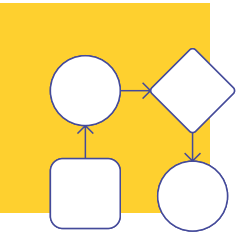
- Equipment and spare parts necessary for installation or repair
- Estimated time duration and difficulty
- Tips on how to avoid frequent mistakes
- Expert contact in case operator or engineer needs help
- Factors determining the action successful or unsuccessful
- Safety measures to take into consideration

Imagine work instructions as recipes (but for workers) with step-by-step instructions in a particular order, time schedule, list of necessary ingredients, visuals, and tips on technique. All the essential information one may need to complete a task.
You can come across various names for work instructions in different industries:
SOPs – Standard Operating Procedures | Work manuals | Guides | Job aids | Operation instruction | Work orders



The benefits of work instruction

With the dawn of industry digitalization, companies substitute paper-based instructions with their digital counterparts. Digital work instructions take the lead thanks to advancements like live edits, quick search, or easy distribution. In general, work instructions provide several benefits to organizations:



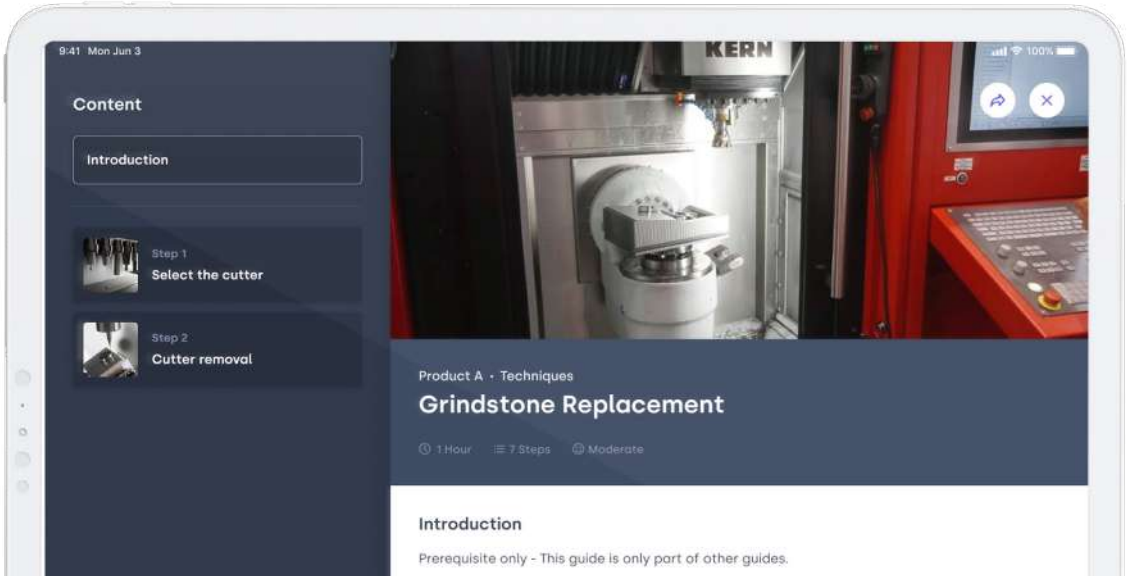
1. Get the job done the first time

First-time fix rate is an important performance indicator for install and repair services in manufacturing. It determines the proportion of service calls that technicians resolve on the first visit, which greatly impacts the cost of work and customer satisfaction. Work instructions can play a big role in optimizing first-time fix rates.

As Aberdeen's research shows, 25% of all service calls require at least one additional visit to solve customer needs. On average, 1.6 additional dispatches are needed to ensure complete resolution. And the reason? 51% of additional visits are caused by part unavailability and 25% because technicians don't have the necessary experience to perform the repair.

There are two ways how work instructions can mitigate these issues. Firstly, they provide information about the necessary equipment and parts in advance so that the technicians can get ready for the repair. Secondly, they substitute any missing experience with explicit details on how to perform the task.

Work instructions software can even enable remote support – meaning that technicians can receive remote assistance via video calls with experts to resolve issues immediately.

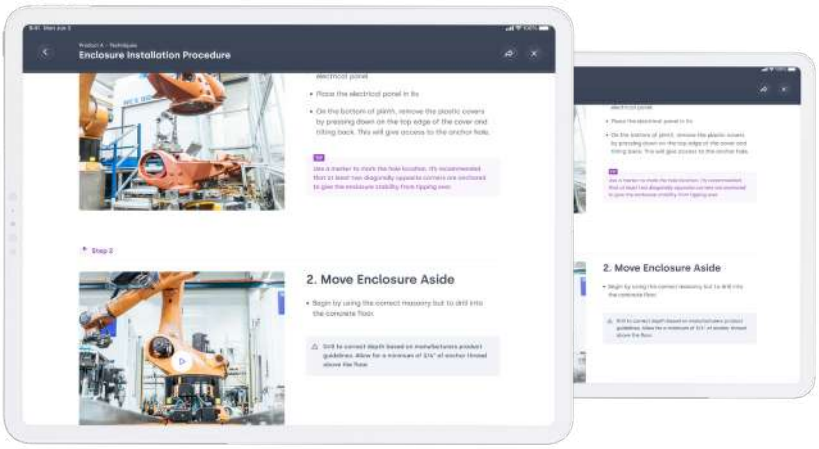


2. Ensure safety, eliminate hazards

Missing instructions are an important risk factor in industries like manufacturing, maintenance and field service. According to research conducted by J.C. Blaise, out of 93 accidents studied in the maintenance sector, 27% were linked to a risk unforeseen by the victim.

76% of accidents resulted from intervening either on a machine still in operation or from machine restarts. 41% were related to a lack of required protection. Managers can mitigate these injuries by providing safety information in advance and reminding it before initiating any hazardous action.

Therefore, before writing a safe work procedure, companies should complete risk assessments and include the findings in their work instructions. This single change in technicians' workflow can significantly improve the risk management on the shop floor or field.



3. Mitigate downtimes

Unplanned downtimes are costly errors that negatively affect the quality and quantity of production. But despite steep costs, many organizations still can't prevent mistakes resulting in production outages. According to Plant Engineering Maintenance Survey, 44% of unscheduled downtimes are caused by aging equipment, and 16% by operators' errors.

While manufacturers can eliminate the first issue with preventive maintenance, the latter is a great task for work instructions. Lockout/tagout procedures, safety instructions, step-by-step guidance are all a part of SOPs. And all of them contribute to error prevention.

And if operators have these resources at their disposal every time, they can reduce errors to a minimum. Cost savings from this practice can be enormous.

4. Ease the work-related stress

Uncertainty and insufficient support are proven stress factors in the workplace, affecting productivity and employee wellbeing. Working with incomplete information puts a lot of pressure on the frontline workers. They have to make critical decisions directly on-site, often isolated and without back-office support.

And missing information makes the struggle even more painful. By empowering their staff with work instructions, organizations can mitigate these stress factors.

In addition, knowledge management software solves uncertainties and lack of on-site support by providing step-by-step guidance combined with remote assistance. Such resources bring more autonomy and smoother workflows to employees. And that makes the frontline workers happier in their jobs, leading to better performance and improved wellbeing.

5. Train effectively

On-the-job training is the gold standard of knowledge-based industries. It's practical, easier on employees, has quick results, and high relevancy. Technicians are learning directly on the job from relevant people, and that brings results.

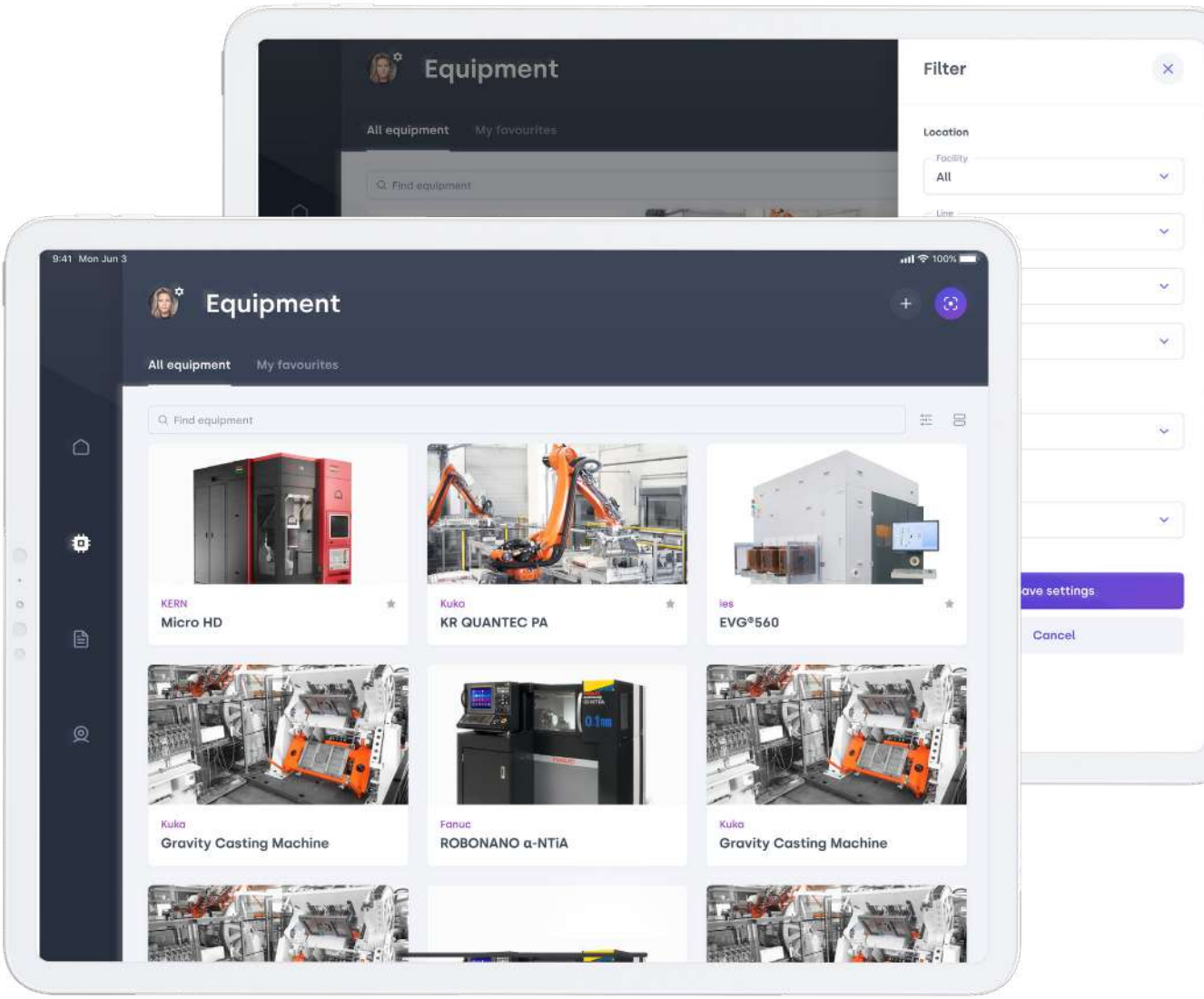
But on-the-job training is also demanding and expensive.

It's because countless factors influence the final outcome - frequency of training,

fluctuation of employees, lack of senior staff, scheduling conflicts, remote work. All that and more complicates onboarding and training.

However, companies using knowledge management systems for training can equip reskilling employees and newcomers with digital manuals and visual information on how to proceed with individual tasks. At any point, people can check the instructions, validate outcomes, or ensure their safety with the available information.

Work instructions can't substitute the supervision and learning phase during the initial onboarding period. But they make the whole process of training a lot easier and effective.



6. Reduce aging workforce problem

For decades, baby boomers represented the largest share of active workforce. But as this generation retires, we see a fundamental shift in the labor market. It's a challenge, especially for industries like manufacturing or maintenance, where these people hold an asset that is priceless for their organizations – years of experience in the field.

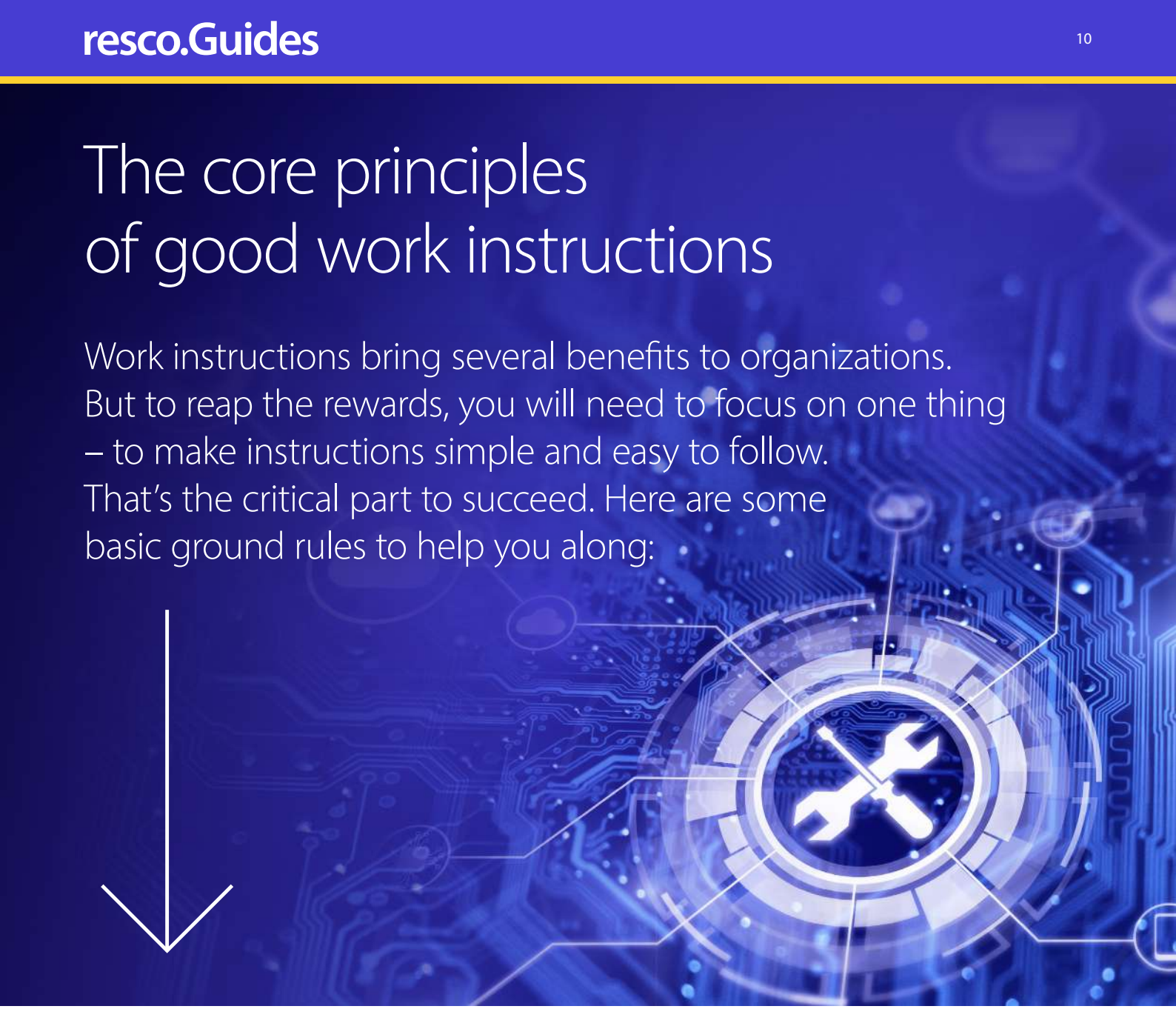
One way to overcome this growing challenge is to collect and preserve the tribal knowledge of senior experts and distribute it to the new generation of technicians. Because despite technology advancements, long-term workers possess domain knowledge and experience that help them to make accurate and timely judgments.

Thus, experts' extensive bank of personal experience and knowledge is a valuable resource for their company. And that's where SOPs, work instructions, manuals, and guidelines play an essential role.

They capture the collective intelligence and information that frontline workers need to successfully perform their jobs. It's like receiving advice from senior colleagues without the need to track them down or interrupt in their own job. And as you may remember from the beginning of this e-book, this is an action that workers waste 9.3 hours a week on.

The core principles of good work instructions

Work instructions bring several benefits to organizations. But to reap the rewards, you will need to focus on one thing – to make instructions simple and easy to follow. That's the critical part to succeed. Here are some basic ground rules to help you along:



Eliminate fluff and be consistent

The golden rule of writing instructions is to make them simple, which is often the most challenging part. Eliminate multi-syllable words, long sentences, acronyms, or unnecessary fluff from your wording. Avoid slang and use active voice. Keep the rule of one action per sentence. Format longer parts into shorter paragraphs, use bullet lists and headings.

These are all rules of good writing which you should follow to achieve clarity and consistency. Ideally, for work instructions, you need to be a good technical writer. Or have one or two in your team.

Focus on relevancy

Technicians will willingly start to use the instructions if they find them helpful and relevant. And you are not going to achieve this from the office. The best knowledge is hidden in the brains of your experts. Help your senior technicians, operators, and engineers to write the information down first and polish it with technical writers later.

Add visuals

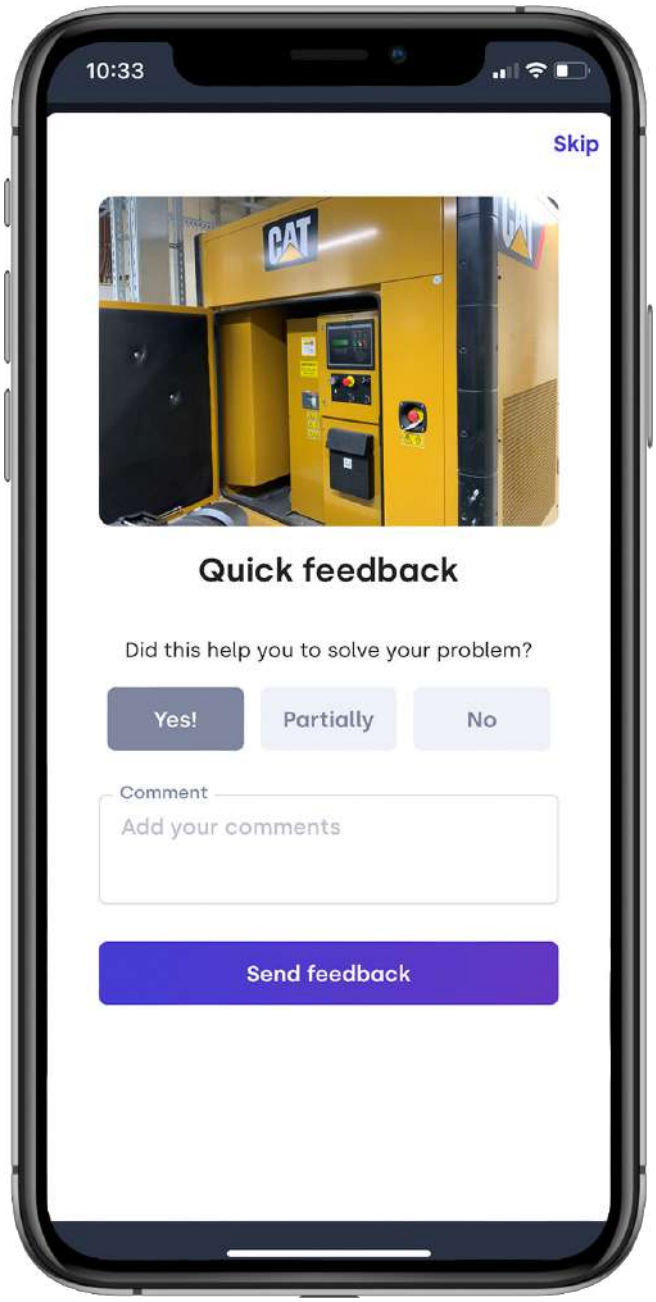
The saying “a picture is worth of thousands words” doubles down when talking about instructions. Humans process visual information much faster than text, making it perfect for guides. A single picture, photo, or video can explain complex actions in a simple and efficient way.
Furthermore, sharing the information in images instead of words breaks language barriers. Make sure to add visual information to your manuals so workers can understand any information easier.

Test first

You won’t get it perfect instantly. Remember, it’s key to make it work in real-life conditions and the preparation phase is here to eliminate errors. Try to follow the instructions yourself, then ask your colleagues and technicians to do the same and collect their feedback. Edit and repeat until your instructions are ready for live deployment.

Make it easily accessible

We can distinguish between three types of work instruction formats: paper-based, PDFs, and dedicated apps. While you can use any of these, the last one allows for easier distribution.
With dedicated knowledge management apps, technicians can simply access the instructions on their phones or tablets. Anytime they need, and with functionalities like QR code scanning or search. All that makes looking up information much faster and can eliminate the 1.8 hours per day spent on searching.



Edit regularly

Iteration is key to perfection. Processes can change, technicians can find a more efficient way of getting things done, or you can always make the instructions simpler. Collect feedback, update your materials, create new visuals to keep knowledge as relevant as it can get.

It is also a way to give a voice to operators, technicians, and engineers from the shop floor. They can have useful experience to share or tips on what to improve. Work instructions are a way of passing on this wisdom to their colleagues. Once again, digital instructions can make this a lot easier through live editing, quick updates, and easy distribution features.

Returning wasted time to technicians

“Do more with less” is a drumbeat in many organizations. Deadlines become more demanding, productivity a higher priority, and job responsibilities increase. We put greater focus on data, IoT, industry 4.0.

We optimize everything, but at the same time, workers need to spend almost 2 hours a day on an unproductive hunt for information to be able to fulfill an actual task.
Luckily, companies are starting to build healthier work environments for their employees. And the new generation of workers will need people-centric solutions too. So, how about making work easier for employees?

Work instructions and knowledge management software are a helpful addition on this endeavor. They provide the insights that workers need, eliminate information hunting, and return wasted time to people. So, they can focus more on the quality of their service, increasing customer satisfaction, and creating a healthier work environment.

Eventually, all that will lead to a brighter future for your company itself.

Capture, standardize, and apply tribal knowledge thanks to resco.Guides. Technicians can access and feedback work instructions anytime to execute tasks faster & error-free. Engage your field team via effective on-the-job training.

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