



Practical Advice to Attract and Retain Industrial Maintenance Talent in Food and Beverage Processing

Sigga eBook

Practical Advice to Attract and Retain Industrial Maintenance Talent

Today's maintenance organizations face dynamic challenges such as shrinking budgets and a growing labor shortage. Both of these challenges have been further exacerbated by the COVID-19 pandemic. Baby Boomers are opting to retire early rather than cope with the health risks and restrictions of returning to work. With younger generations gravitating away from industrial maintenance professions, there are not enough qualified workers to fill job openings. And as organizations accelerate their deployment of digital technologies and smart machines, today's maintenance professionals require more diversified skill sets – the ability to handle both physical and software-based maintenance and repair tasks.

In this business environment, it has become an imperative to motivate and retain your industrial maintenance workforce. We've gathered industry advice and our own experiences with global, enterprise organizations to provide a list of practical tips including what you can do immediately and in the near term to make a material impact within your organization.

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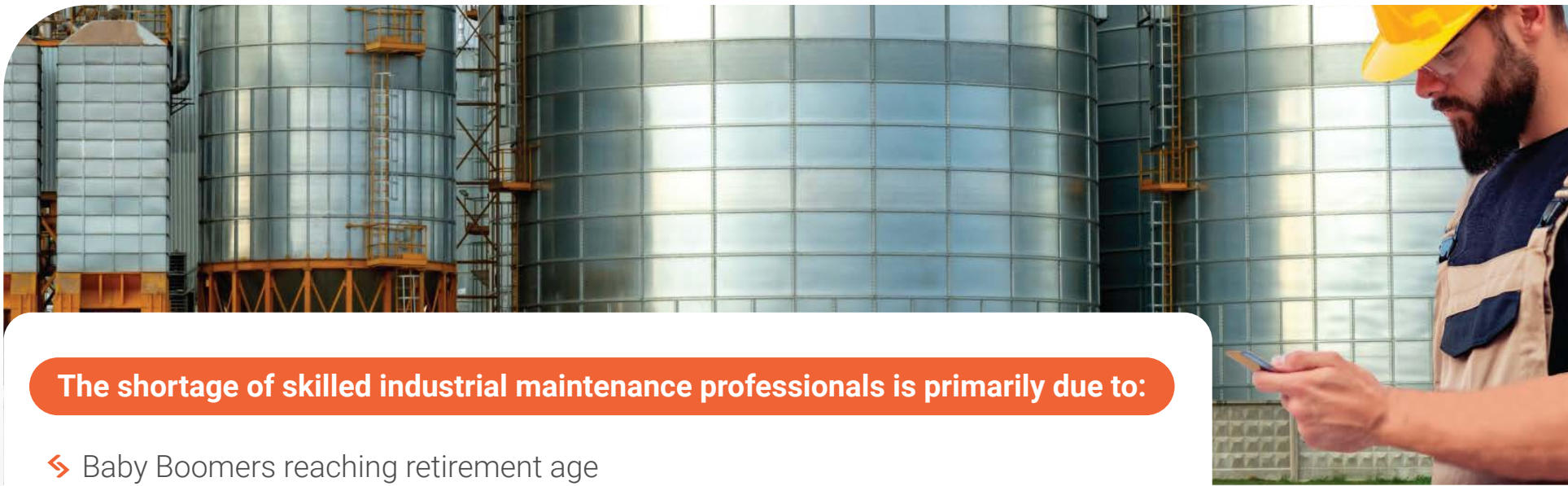
If you believe, as I do, that your employees truly are your most valuable asset, you will do whatever you can to help them do their jobs as well as possible.

-Harvey Mackay

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A Closer Look at the Growing Labor Shortage

A confluence of factors has made it more difficult to attract and retain skilled workers. For many organizations, the shortage of skilled industrial maintenance workers poses a significant threat to production. These workers play a vital role in minimizing unplanned downtime and maximizing the efficiency of production processes.



The shortage of skilled industrial maintenance professionals is primarily due to:

- ↪ Baby Boomers reaching retirement age
- ↪ Younger generations gravitating away from maintenance jobs
- ↪ New digital technologies and smart machines require more diversified skills sets

The COVID-19 pandemic accelerated retirement for many that were approaching retirement age.

According to Pew Research, the number of Baby Boomers reporting that they were out of the labor force due to retirement was 3.2 million more in the third quarter of 2020 than the same quarter in 2019. For many of these workers, the dangers posed by the pandemic were simply not worth the risk.

The spike in the number of people leaving the workforce would pose no significant challenges if younger skilled workers were waiting to take their place. But Millennials, who will make up 75% of the global workforce by 2025, have largely steered clear of careers in industrial maintenance and other skilled trades.

As the authors of a **recent McKinsey report** put it, industries such as oil and gas have been “placed on the wrong side of transition,” and suffer from a “misalignment between the career-progression time-frames and work-life choices the industry offers and the expectations of newer generations of talent.”

And then there is the rapid adoption of Industry 4.0 technologies. Many maintenance organizations had already begun their digital transformation journeys before the pandemic. But according to another **McKinsey report**, COVID-19 has accelerated organizations’ digitization by three to four years. “Maintenance professionals are under more pressure than ever to expand their skills sets to operate these new technologies.” Technicians that are less software-tech-savvy will require on-the-job training.

Employee Motivation and Retention Challenges

With the growing labor shortage, maintenance technicians are under more pressure than ever. A shortage of technicians makes it difficult to carry out proactive maintenance strategies, such as preventative maintenance. This results in more unplanned downtime and urgent requirements. Technicians face the constant pressure to respond quickly to diagnose and get machines up and running; and they are often required to work long shifts and overtime.

And for maintenance departments that continue to rely on paper-based processes, technicians must spend a good portion of their days completing time-consuming paperwork and data entry tasks. All these factors can have a negative impact on job satisfaction. Technicians that are unsatisfied are more likely to seek employment elsewhere. The loss of skilled industrial maintenance workers is something that very few organizations can afford.

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“One of the most common stress issues that can impact workplace safety is the design of tasks: including heavy workload, infrequent breaks, hectic routines, or long hours.”

The National Institute for Occupational Safety and Health

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The Role of Technology in Motivating Employees and Boosting Retention

Research shows a positive correlation between the adoption of digital technologies and employee job satisfaction. **In a global Aruba study,** “it was revealed that employees who work in digital workplaces are not only more productive, but also more motivated, have higher job satisfaction, and report a better overall sense of well-being.”

↔ 97%

Felt that their workplace would be greatly improved by an increase in the use of technology.

↔ 64%

Of respondents reported feeling that their company would fall behind the competition if new technology were not implemented.

Let’s take a closer look at the important roles that maintenance technologies can play in improving employee motivation and retention and how to get started on the path towards digitization.

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“Technological innovation is the solution to motivate employees and retain talent in today’s scenario. From process improvement to employee experience, from communication to collaboration, from hiring to retention, technology not only helps employees to automate routine work & enhance productivity but also in being happy through better engagement.”

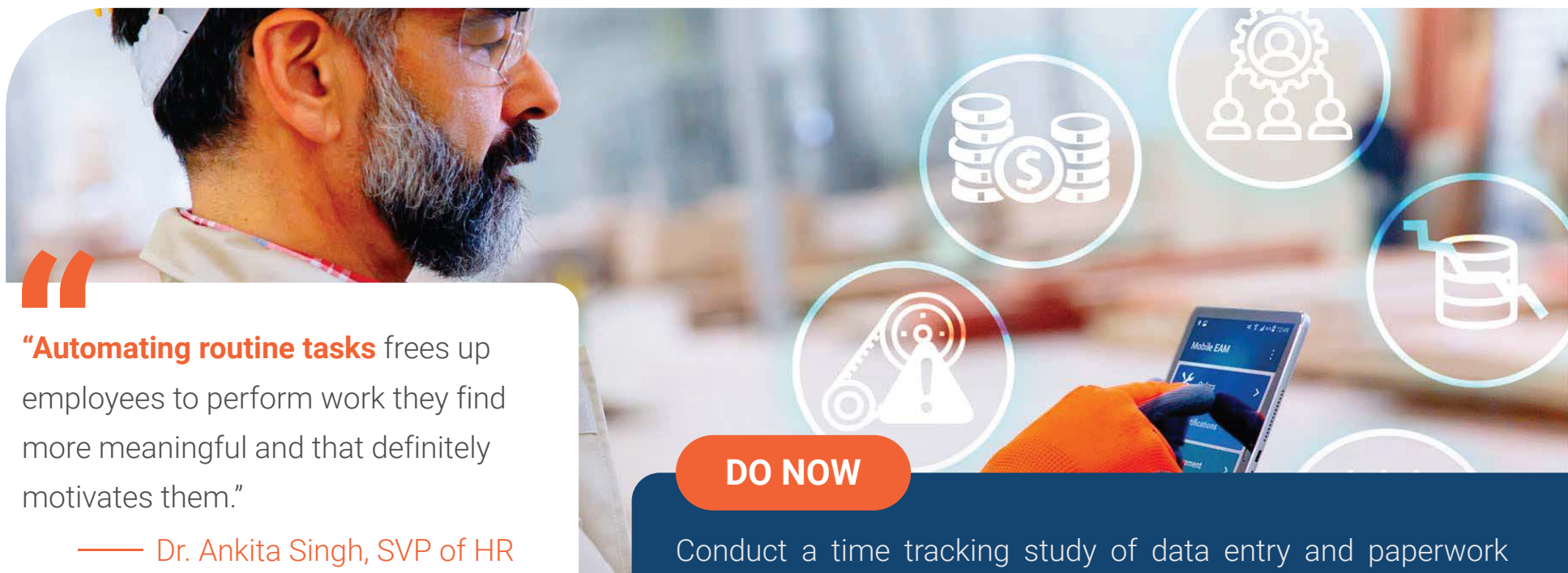
—— Dr. Ankita Singh, SVP of HR at Cignex Datamatics

01

Automate Time Consuming Tasks

According to the IDC, some 60% of the U.S. workforce are mobile frontline workers – those that do not require a desk or office to do their work. This is especially true for maintenance professionals that spend most of their time on the factory floor or out in the field. Yet many maintenance organizations continue to rely on paper-based processes. Technicians are forced to spend a good portion of their workdays completing paperwork such as manually filling out work orders and travelling to get them to the back-office staff to update the work order system like SAP PM.

Automating tedious work with user-friendly technologies can significantly improve job satisfaction. In production for example, robots take on the repetitive tasks that don't require judgement freeing up the worker for tasks that require some human ingenuity to perform. For maintenance workers, keep them on the shop floor or in the field with mobile devices with an application linking them to the work order system. For maintenance schedulers, replace the slow, tedious weekly (or daily) process to download data from the work order system to organize schedules in spreadsheets. Planning and scheduling software can provide a modern interface to automate the process of pulling data, arranging schedules, and updating work orders.



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“Automating routine tasks frees up employees to perform work they find more meaningful and that definitely motivates them.”

— Dr. Ankita Singh, SVP of HR
at Cignex Datamatics

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DO NOW

Conduct a time tracking study of data entry and paperwork tasks to support the business case for change.



Improve Communication

Several converging trends have accelerated the need for organizations to equip their employees with mobile devices. **As McKinsey notes,** “The need to augment workers with technology stems in part from four major trends...retiring baby boomers, regionalization, the proliferation of shop-floor data, and now COVID-19. These forces are creating a workforce that is more spread out, less experienced, and more overwhelmed by data with untapped potential.” The authors conclude that digital collaboration tools have the “potential to unlock more than \$100 billion in value – thanks in part to productivity boosts of 20 to 30 percent in collaboration-intensive work processes such as root cause investigation, supplier management, and maintenance.”

With digital technologies, stakeholders can easily dispatch work orders, track execution, and efficiently coordinate schedule changes. They can maintain communication with the staff to resolve problems, provide guidance, and feedback on performance. Maintenance technicians can easily send a notification and report on the work they have completed before moving on to the next work order.

Seamless communication also enables agility to respond to urgent needs. When issues arise and production has come to a halt, maintenance management can quickly coordinate and redirect the right technicians to the emergency. With mobile devices, technicians have full access to the information that they need while in the field for both planned and unplanned activities. They can check inventory on needed parts, and keep management informed all while staying at the job site.



“The way Millennials communicate (texting, tweeting, liking, facetimeing, etc.) is now real-time and continuous. This dramatically affects the workplace because Millennials are accustomed to constant communication and feedback.”

Millennials in the Workplace: 11 Ways to Attract and Keep Them



DO NOW

Increase your frequency of communication.





Provide Access to Data in Real-Time

Traditional maintenance processes inhibit the use of data to gain and implement actionable insights. Even organizations that have adopted an EAM system such as SAP lack access to complete and reliable data in real-time. There are several reasons for the data issues which are largely driven by the fact that equipment master data and maintenance work orders include a lot of information. And to stay current and complete, these systems typically require the manual data entry of lots of details daily.

Organizations using SAP PM face the challenge of SAP's non-intuitive interface which complicates, and delays data entry processes. Many organizations fail to use the depth and power of SAP PM as a result. The complicated interface limits use to a few trained users and leads to the printing and distribution of work orders. Technicians perform their work and handwrite notes on the work orders. Completed work orders are then manually updated into SAP PM, work order by work order. This delay leads to data quality issues, inconsistent inputs, and incomplete data.

A mobile solution can integrate seamlessly with SAP to provide technicians and stakeholders with access to complete and reliable data in real-time. Technicians automatically receive work orders on their mobile devices. They complete their work, add their notes via the app, and then the work order is updated with a push of a button. Standardized responses with drop down menus and selections improve the consistency of data captured. Overall, data timeliness, quality, and depth are improved while technicians cut out hated paperwork tasks and gain more time for the work they enjoy.

Impact of Mobile on Employee Productivity

A global Research Report: **The Employee Experience Imperative** by Servicenow, shows that employees believe that mobile devices improved their ability to:

↪ **97%** Access the information they need

↪ **55%** Resolve issues quickly

↪ **47%** Get work done

How Instant Data Access Can Make a Difference

In this webinar, the Project Leader at Saint-Gobain, Nouredine Benbellat, described how delighted the organization was with the ability to label each piece of equipment, so that the maintenance staff could use a mobile device to scan and immediately get the latest checklist to get the equipment back up and running. They often found that the production staff would also use the checklist and could often solve a problem without having to contact maintenance. Watch the **webinar**.

How Mobile EAM Can Increase Your Plant Efficiency and Reduce Costs

DO NOW

To expand access later, update the data in SAP PM a little every day.

04

Provide On-the-Job Learning and Resources

As discussed above, today's technicians require a more diverse set of skills with the growth of technologies like smart equipment, Artificial Intelligence (AI) and IIoT. To repair a piece of equipment can require both physical and software-related actions. As a recent [article on HR DIVE](#) notes, "In an era of deep talent gaps, the need to train has never been greater. And new tech that promises to make workers more productive – if they only had the time to learn to use it – compounds the problem." Thus, management must ensure that technicians receive adequate on-the-job training.

But not all training must be hands-on. Rather, giving technicians immediate access to visual aids to do specific tasks enables them to learn while doing. Given their accessibility, mobile devices can be a powerful resource for technicians while out in the field.

A native mobile EAM solution provides technicians with full access to all the information that they need both online and offline. This includes video repair instructions, work task procedures, safety information and checklists. Organizations can compile these resources from equipment manuals and by capturing the experiences and knowledge of older technicians before they retire. These resources help produce maintenance teams that are more self-reliant and confident that they can complete any maintenance task. Moreover, they get more work done right the first time.

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“As employees become more reliant on their phones, it is more common for them to carry out tasks of all scale on mobile in those micro-moments (during a break at work, waiting for public transport) available...Many activities, particularly learning, is slotted in during spare moments, like during travel.”

— Dr. Ankita Singh, SVP of HR at Cignex Datamatics

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DO NOW

Create visual aids, video instructions, document procedures, and checklists.



Enable More **Informed Decisions**

We discussed above how automation can improve data quality by eliminating manual data entry processes. This gives stakeholders access to better quality and more complete data in real-time. But you need more than that to analyze the data and make informed decisions. Here's where reporting and analysis software come into play. Planning and Scheduling software and Mobile EAM solutions provide collective intuitive views of the real-time work order system data. Stakeholders have full visibility to be able to plan and manage work more effectively.

Industry 4.0 technologies such as sensors and features of modern equipment can collect and stream data on things like vibration, temperature, and moisture to signal a potential mechanical failure. Often this information is underutilized if not connected to your work order system to trigger a notification when the sensor identifies a result out of spec. These technologies can replace preventive maintenance inspections and avoid breakdowns. Technicians can better monitor, inspect, and diagnose a problem while management can utilize the insights to develop better maintenance routines.

But even if organizations are not quite ready to openly embrace predictive maintenance technologies, like smart sensors, the collection of data by mobile devices supports better planning decisions. For example, a mobile EAM can automatically capture how long a specific task takes to complete. Planners and schedulers can use this data to estimate how long it will take to complete the same task in the future. Schedulers can more accurately allocate time for technicians to do the task right, resulting in less pressure and stress plus more efficient use of the technicians' time to get more work done.



How Mobility Helped Ambev Boost Its Maintenance Operation Productivity

Ambev, is a part of Anheuser-Busch InBev, the largest brewing company conglomerate in the world. They manage their maintenance activities with the SAP PM Module and internal studies by the maintenance team identified critical issues in their maintenance planning and execution. Specifically, they found:

- ↪ Information loss and unreliable data
- ↪ Planners spent excessive time transforming notifications into maintenance orders
- ↪ The overall maintenance organization was impacted by time wastes including excessive work order preparation and data entry tasks due to paper-based processes

Ambev turned to the Sigga Mobile EAM app for a user-friendly solution that fully connects to SAP. With Sigga, Ambev experienced improved emergency maintenance, reduced MTTR (Mean Time to Repair, improved information reliability, eliminated manual paper-based processes, and enhanced control of workers hours and materials.

--Read the success story

↪ **15%** Increase in Technician productivity

↪ **7.2%** million sheets of paper saved per year

↪ **10%** increase in MTBF

↪ **80%** reduction of MTTR



Appeal to the **Younger Generation**



To attract younger generations to maintenance professions, it is important to understand that they have capabilities and preferences that can vary from those of older generations. For instance, they tend to have more experience and a higher comfort level using digital technologies. They are also harder to retain, as they are more readily to switch jobs if they don't see the opportunity to improve their skill-sets. According to **a Gallup study**, about 21% of Millennials report switching jobs within the last year, and 60% are open to a different opportunity.

One way to attract and retain younger workers to maintenance jobs is to go mobile. Millennial workers were raised using computers and the internet and expect to have access to information wherever they are. Industry 4.0 technologies also appeal to younger generations since they provide an opportunity for continual skills development on the job. The same Gallup study showed, 87% of millennials say professional growth and development opportunities are their top priorities.

DO NOW

Involve your younger employees in learning and developing work procedures for your new Industry 4.0 technologies.

Invest in the technologies proven to improve day-to-day working processes:

Mobility

Supply your staff with mobile devices and a Mobile EAM interface to SAP

Planning and Scheduling

Provide management with an intuitive software interface to SAP

IIoT sensors

Deploy and integrate data to advance use of predictive technologies

These technologies provide the means for boosting employee productivity and efficiency. Automating time-consuming and repetitive tasks such as manually filling out work orders increases wrench time and technician job satisfaction. These technologies also serve to improve data quality and enable informed decisions, as well make open maintenance positions more appealing to a larger pool of candidates.

As maintenance organizations face dynamic challenges including shrinking budgets and a shortage of skilled workers, the time is now to take full advantage of Industry 4.0 technologies from mobile apps to sensors, to analysis tools.

Sigga can work with you to successfully make these changes within your organization. Significant operational efficiencies can be captured while improving your employee satisfaction and retention. **Let's get started today.**

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“Once you've got your processes standardized, repeatable and efficient, not only does wrench time increase, but employees enjoy their jobs more and machine uptime increases as well...It will change the whole organization...People will be more satisfied in their work. There will be **less absenteeism, better morale and less turnover.**”

— Ricky Smith, Senior Reliability Advisor for GPAllied

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Check out our EAM integrated portfolio

Software to help you maximize productivity, increase efficiency, and optimize your workflows while maintaining data quality and visibility in SAP.

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SIGGA EAM EMPOWER

SIGGA PLANNING & SCHEDULING

SIGGA WAREHOUSE & INVENTORY

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Integration with SAP S/4HANA[®]

SAP
Silver Partner

Trusted by global organizations including:



SAP[®] Certified
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