2018
Current Practices Report

A cross industry analysis of Infor EAM user trends

advoco

Contents
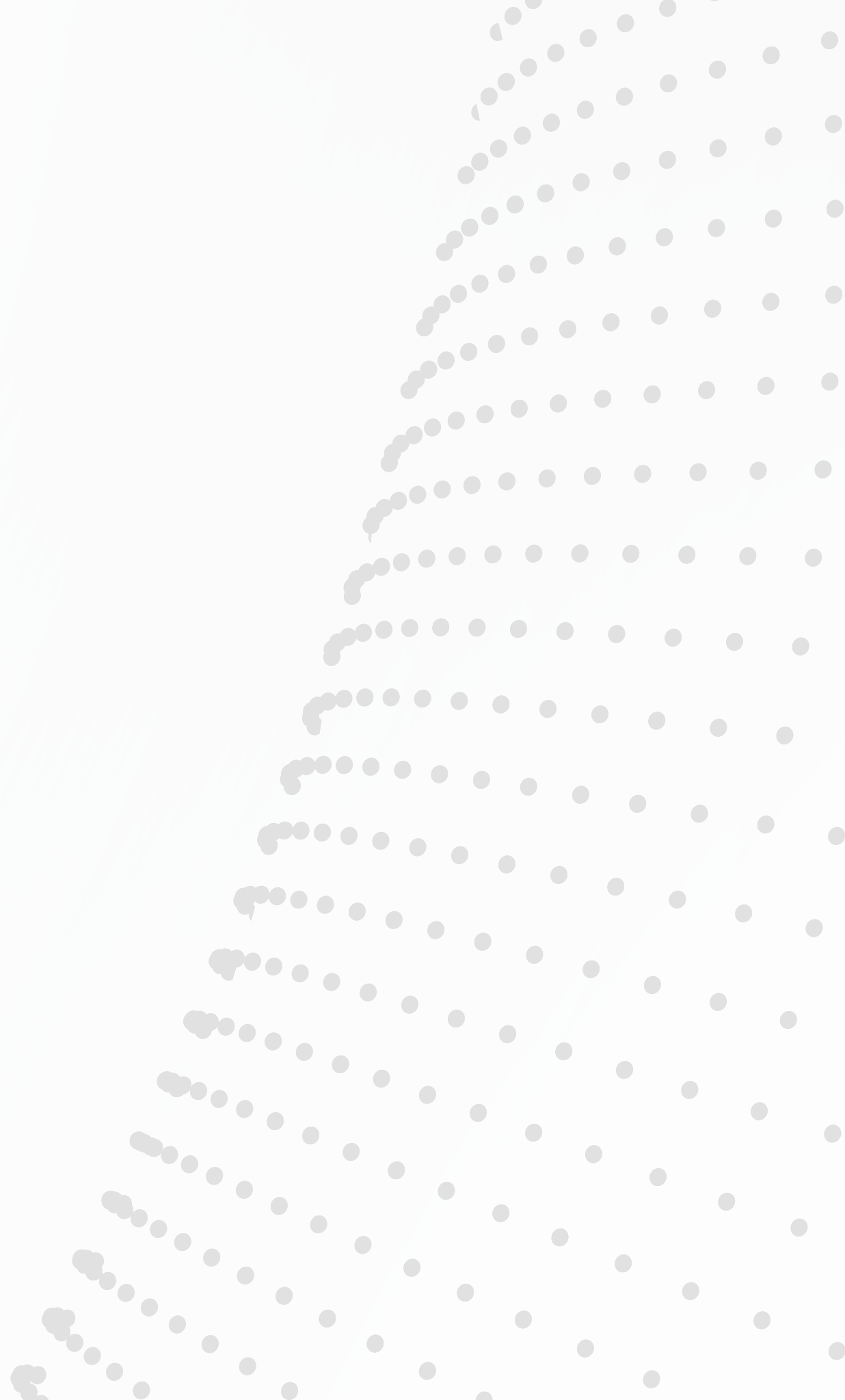
Executive Summary

Our 2018 Current Practices Report gives you a cross industry analysis of the ways that members of the Infor EAM community are using their software.

Communities are built around shared experiences, challenges, and desires. The strongest communities are created when people are truly invested in working together toward common goals. Just by reading this report, you are joining an EAM community, so welcome, we're glad to have you here with us!

When we talk with EAM users and our customers, we often hear common challenges like:

- My assets are on the line.

- My financial resources are tight.

- There is a lack of buy in from management on the tasks I want to accomplish.

- People are resistant to change.

- Technology is constantly evolving and hard to keep up with.

What do you do?

You turn to your EAM community. You use your resources. You talk to industry experts. You ask Infor what's coming next. You search. You discover. You craft a solution that suits your specific needs. Then you win.

Executive Summary

The last time we published this report, we renamed it the Current Practices Report – because we don't believe in "best practices." We only believe in the practices that make sense for your specific vision. What works for one organization may not work for another, so we don't make sweeping generalizations about what is best.

Instead, we conducted this research study to provide you with a resource so that you can achieve successful projects with EAM and foster purpose driven maintenance. We want to share what other users are currently doing so you can see how your system compares.

In this study, we identified 5 trends that will allow you to drive the use of your EAM system. These are trends surrounding the importance of:

1. Having a maintenance mission

2. Tracking equipment metrics

3. Tracking work metrics

4. Optimizing planning and scheduling

5. Streamlining inventory/MRO

It is our hope that you will find information that will cause a spark and create a path forward toward your next opportunity. We all face similar challenges, so let's work towards winning, together.

Why *Current* Practices?

We want to retire term "best practices." What does it even mean? How is it measured and how do you know when you've achieved it? A "best practice" for one organization does not mean a "best practice" for another organization. "Best Practices" doesn't account for differences in context, and it implies that there is no room for improvement. That's why we are in favor of *current practices not best practices*. What are you currently doing that can be improved?

About the Survey

This survey was conducted because of how important it is for us to learn from each other on how we are using EAM. We last conducted this survey and published a report in 2016. That report focused on the software product and functionality.

This year we wanted to dive into maintenance practices, and how you can institute reliable operations within your organization. We asked questions around vision, strategy, equipment, maintenance practices, stores operations, purchasing, and IT.

We asked EAM users to share what practices they are definitely using, somewhat using, and not using at all. This is how data was collected for the report, and we're thrilled to share the findings with you.

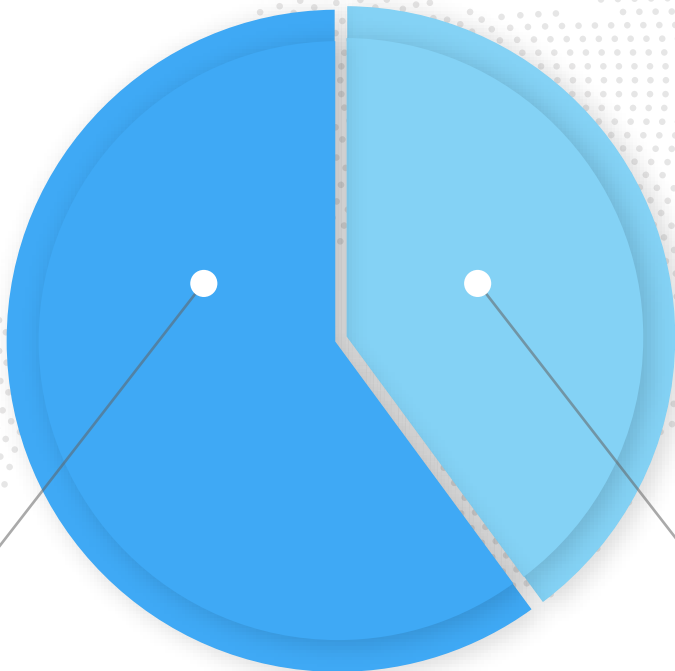## 200
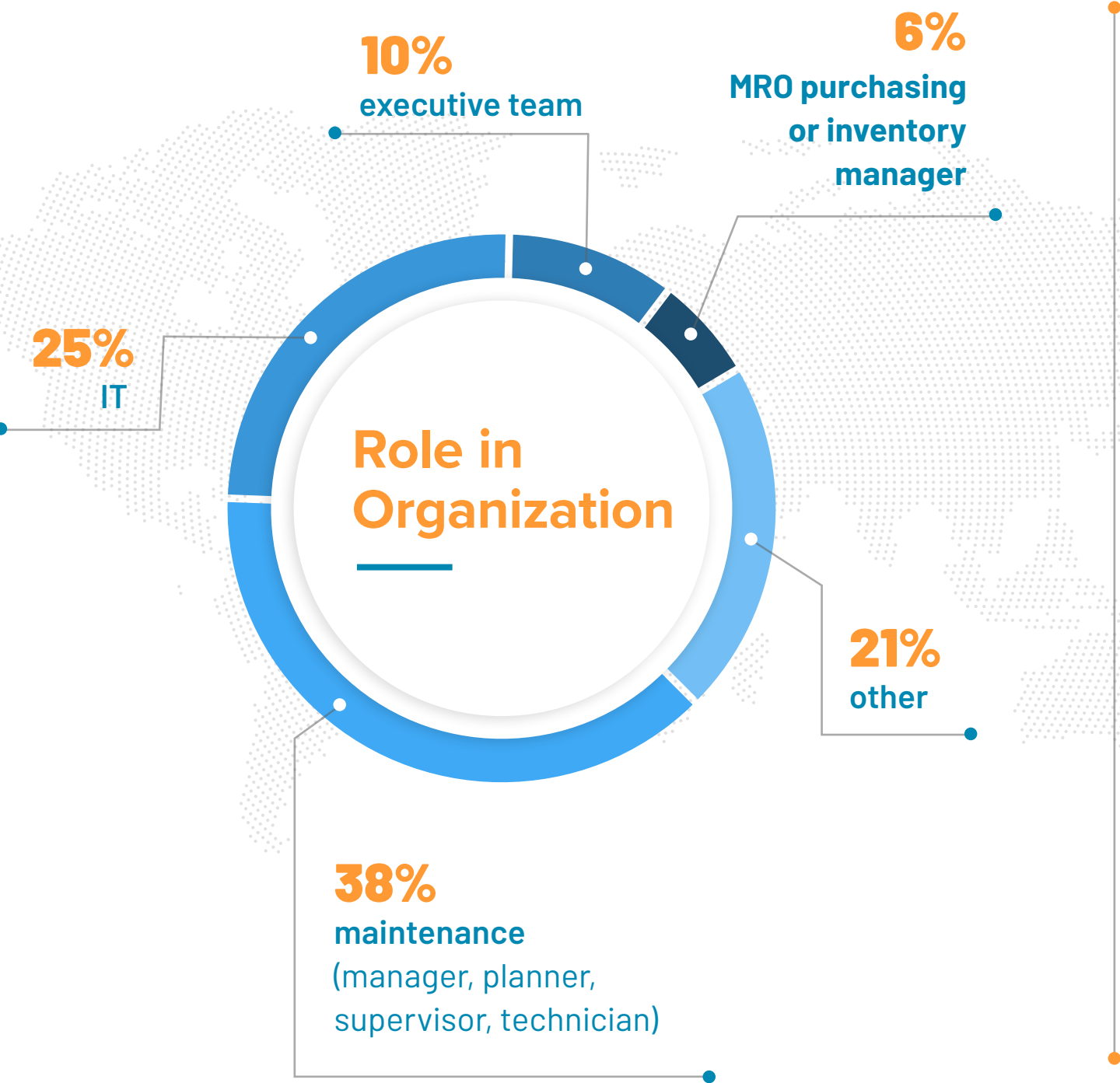user responses

90
organizations represented

60%
commercial sector

40%
public sector

About the Survey

Role in Organization

10%
executive team

6%
MRO purchasing or inventory manager

25%
IT

21%
other

38%
maintenance
(manager, planner, supervisor, technician)

// Industries & Departments Represented

Aerospace

Automotive

Facilities / Building Maintenance

Fleet / Transportation

Food and Beverage

Manufacturing

Oil and Gas

Parks and Recreation

Pharmaceutical

Research and Development

Roads and Bridges

Water / Wastewater

Results & Spidergram

All organizations have two inherent limitations: people and budget. How much easier would things be if you had unlimited hands and unlimited dollars? But that's not realistic. The Spidergram helps show where to apply your limited resources. The key to success is applying your resources to the tasks that will have the greatest impact on your operation.

We took the data from the survey responses and compiled it into this Spidergram graphic. What you are seeing represents the survey population's average in the areas of vision, strategy, equipment, maintenance practices, stores operations, purchasing, and IT. The Spidergram is indicative of how the population is using EAM.

Based on the survey data collected, this Spidergram identifies key areas for improvement based on the divots. In other words, it is a graphical representation of where you should apply your resources for the greatest gain in your operations. A high percentage, or peak, indicates that the organization is on the path toward achieving success in that area and there is a lower margin for improvement whereas a low percentage, or divot, indicates a high opportunity for improvement.

// Current Practices Report Spidergram
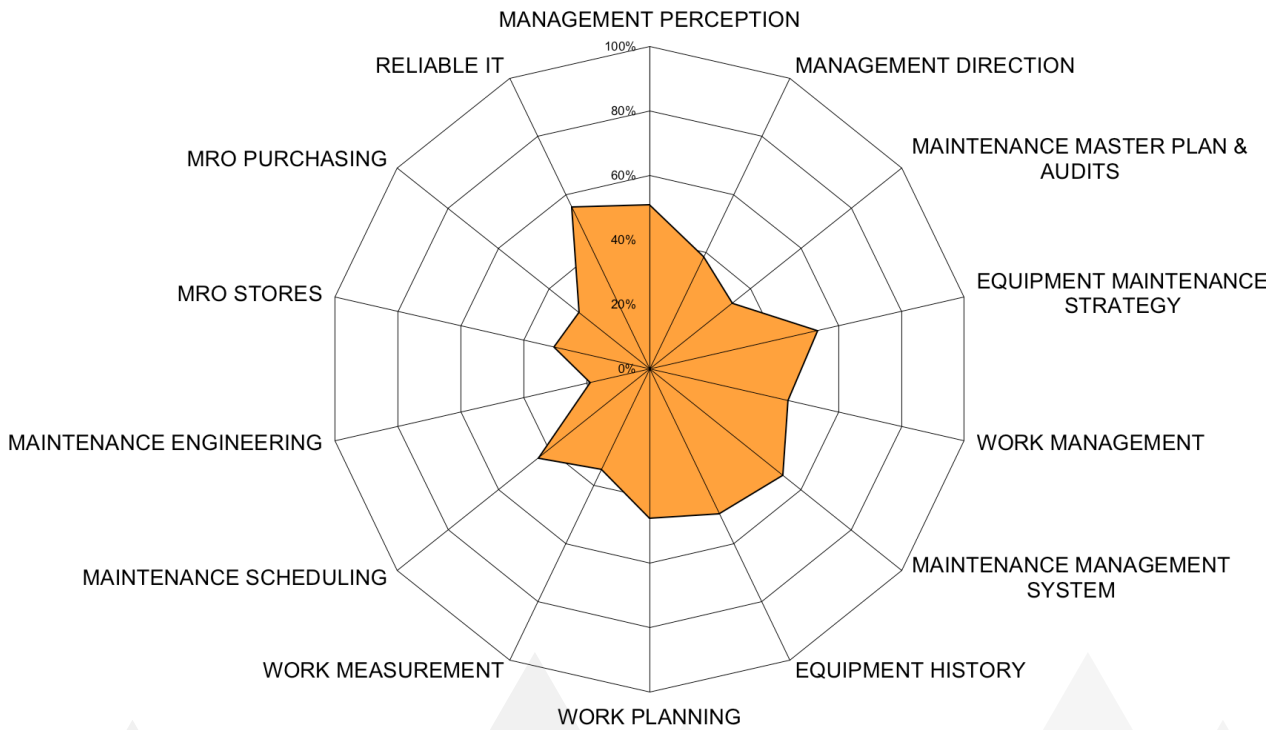
Takeaways

If you have surfed the internet, you know how much people love lists: *Top Five Ways To Grow Your Business*, *The World's 10 Best Organizations to Work For*, or *Fastest Growing Companies in America*. These lists fill our news feeds. Why do we love lists?

Lists bring order to chaos and make things easier for us to understand. That's why we have broken this report into a list of five key takeaways that stood out. Our hope is that you read this report and identify improvements you can make in your organization today.

With a massive set of data and information, it's easy to get lost in the details of specific questions and responses. Instead, we want to highlight the big topics for you to take note of to help drive your company to achieve purpose driven maintenance.

// Key Takeaways

1. importance of having a **maintenance mission**

2. tracking **equipment metrics**

3. tracking **work metrics**

4. optimizing **planning and scheduling**

5. streamlining **MRO / inventory**

Takeaways

// Maintenance Mission

You wouldn't start a race without knowing the course, just like you wouldn't start a road trip without a map. Why should your organization be any different? Without a clearly defined maintenance mission, how will your team know what they are working towards or what success is?

From the survey results, we were surprised to find that the majority of respondents do not have a solid maintenance mission or plan for their team. When asked if there was a formal, published maintenance mission, only **35%** of respondents answered yes and only about **75%** of respondents perceived maintenance to be proactive. This is a call for creating a maintenance mission and directly tying maintenance success to overall operations success.

Nearly two-thirds of respondents do not have established maintenance metrics. This provides a great opportunity to define your maintenance goal. What are the leading and lagging indicators* that will help tell if your goal is accomplished? Figuring out what the leading and lagging indicators are for your operation is a great place to start.

80% of respondents said they do not have a maintenance master plan. A maintenance master plan is a long-term planning document that provides a layout to guide growth and charts a course for maintenance improvement. The maintenance master plan is critical because it defines success so that EAM can be used to drive toward that success.

These results show us that there are huge opportunities for improvement, starting with creating a maintenance mission and tying it to your maintenance master plan. As business and leadership expert Patrick Lencioni says, **you have to weigh-in to buy-in**, so create a formal maintenance mission, have your team sign it, and proudly display it on the wall for everyone to see!

*Leading & Lagging Indicators

Leading and lagging indicators are great tools to measure your organizations success or failure. Leading indicators are input oriented metrics that are harder to measure, but easier to influence. Lagging indicators, on the other hand, are output oriented, easier to measure, but more difficult to improve or influence. Leading indicators impact lagging indicators. If your ultimate goal is reliable equipment, a leading indicator would be PM compliance (am I getting my PM jobs done), where a lagging indicator would be uptime of that piece of equipment. A personal example of leading and lagging indicators can be seen with the example of weight loss. A leading indicator would be calories consumed or amount of exercise completed and a lagging indicator would be your weight. The leading indicators (calories consumed and exercise) influence the lagging indicator (total weight lost).

Takeaways

// **Maintenance Mission How To**

Creating a Maintenance Mission:
✓ Use simple words so everyone can understand
✓ Formalize it by writing it down
✓ Keep your team accountable by posting it somewhere everyone can see

What Your Maintenance Mission Must Answer:
✓ Who you are
✓ What you do
✓ Why it is important

Sample Maintenance Mission
✓ We are devoted to delivering safe, reliable equipment that makes our company a leader in our industry.

Takeaways

// Equipment Metrics

Equipment metrics are an important part of creating an efficient and well-functioning system. Equipment metrics allow you to track the cost of your equipment, how much maintenance is done, and how often the maintenance is performed. You need to have visibility into what maintenance is done and the associated cost in order to have reliable equipment. Reliable equipment is at the base of everything we do.

Over **53%** said their master equipment hierarchy list is current and in EAM, and nearly **90%** said that critical equipment is identified in EAM. There is correlation between cost roll up and equipment hierarchy: if you are doing your equipment hierarchy, chances are you are probably doing cost roll up as well. This was supported in our findings because over **50%** of respondents said that their work order costs roll up to specific equipment systems. These numbers are encouraging because the master equipment hierarchy serves as the base of your system.

Less than **27%** of respondents have failure reporting available for critical systems. This number is due to the fact that these respondents are not utilizing the closing code functionality on their work orders. This functionality allows you to easily perform failure analysis tracking and produce mean time between failure reports. This helps you to have a better idea about what went wrong with the equipment without having to read the comments.

The important question with these metrics is, even if you are reporting on these numbers, are you getting them in a way that you want to see them? Are your numbers creating information with the level of detail you need? Use criticality on equipment and closing codes on your work orders in conjunction with equipment hierarchy will yield better utilization of your Infor EAM system.

Takeaways

// Work Metrics

How are you looking at your work? How are you breaking down your work? How are you analyzing the data you have collected on work completed? Based on the survey results, there is room for improvement in this arena.

The vast majority of respondents said that "all" maintenance work is performed against an EAM work order. We were impressed by this. It is critical to track "all" work when it comes to maintenance. Missing just **10%** of your work orders can skew your data. Even though the majority of respondents answered in the positive, there were still some nos. For anyone answering no, how are you using your EAM system? We understand that every moment of the day cannot be documented but you should strive to have all your work performed against a work order in the system.

When asked if booked labor percentage is **90%** or greater, we had an even split between yes, somewhat, and no responses. Booked labor allows you to capture the cost of your maintenance. If you don't book labor against your equipment, you lose the valuable metric of how much your equipment maintenance truly costs. When using booked labor, be sure you are including trade rates. Infor has several options for booking labor that can be utilized for different scenarios. The standard is the Labor Tab, but mechanics workbench, and the start/stop buttons are also commonly used.

"

Missing just 10% of your work orders can skew your data.

10%
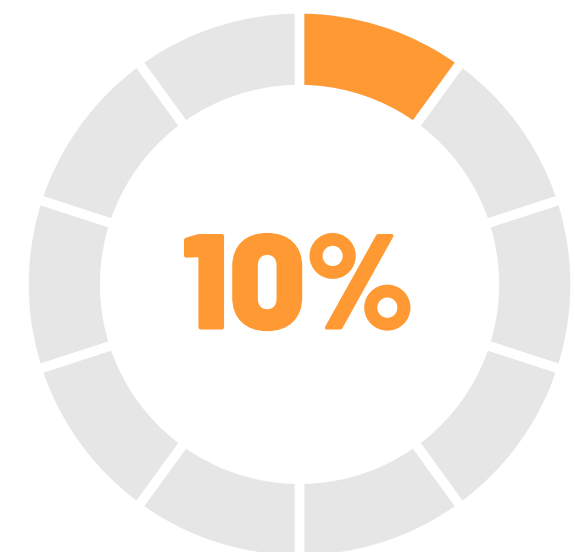
Takeaways

// Work Metrics

Almost **73%** of respondents said their EAM system does not capture Problem, Failure, Cause, and Action (PFCA) Codes. Over **60%** said a Root Cause Failure Analysis (RCFA) has not been established. Based on our survey, RCFA and results associated with Maintenance Engineering are the top areas that need the most improvement in EAM. Over **60%** of users reported that they do not have anything established for analyzing and adjusting their business processes as a result of RCFA data.

The important thing to ask yourself with these codes is, are you using them well? Are you making decisions based off of them? That's when they become the most powerful. Without corrective actions or changes in maintenance or purchasing procedures based on RCFA and PFCA, why collect these codes?

When you engineer solutions based on these codes, you are on the right track to utilizing work metrics. These codes are becoming increasingly important, and Infor is leveraging them to do more within the system. Thus, it is important to take the time to set them up effectively.

Another EAM tool that can be used to improve maintenance work is attached documents. For example, **60%** of respondents are not using document control. Document control allows you to set up documents in EAM. This allows for versioning of your documents without requiring reuploading and reassociating, all while keeping the history of the document changes. Infor is utilizing new tools to help with document control, like IDM, which serves as a replacement to a typical sharepoint where you can do revision control. Using IDM, you can link your EAM system to make that your document management system.

But you can't just use document control or assume because a document is in the system it's properly utilized. Ask yourself: Do you have it distributed properly? Can the right people get to the right information? Do you know if the right people have the proper revision of the desired document? The proper utilization of document control will allow you to track a document's history and cut down on the work of reuploading and reassociating documents.

Takeaways

// Planning & Scheduling

Infor has a number of Planning and Scheduling tools available to use right out of the box. Take advantage of things like standard work orders, PM schedules, task plans, and material lists to make sure you are getting the most out of your system.

Planning and scheduling work is a key element to an effective system. Planning and scheduling allows for better use of your technicians' time. It allows them to know the requirement of the job, how long it will take, and what tools they will need, before they even leave the shop. **Don't let the work find you, plan for the work ahead of time.**

There is overhead in everything we do. How many times do we have to recreate the same job plan? Why not document it once and have it as a starting point going forward for other jobs? By creating standard job plans, you can cut down on overhead! Just over **20%** of respondents said that standard job plans are maintained to minimize planner time demands on repetitive jobs. If you can document your task plan and material lists, they can be used across PMs and standard jobs. They can also be added to ad hoc work orders, saving planner time. This is an outstanding feature. Take the time to set it up now, so you can save time moving forward.

90% of respondents said that each critical system has an equipment-specific maintenance strategy - PMs, lubrication, checklists, etc. This is encouraging because it shows that organizations are taking the time to pre-plan and prepare themselves for equipment failure, knowing the work needed ahead of time.

Over **80%** of respondents said their work order process is clearly established with written procedures from origination to completion. Try taking this further than just a written procedure. Is your work order process diagrammed? Is every step included in your process (how it's created, how it's scheduled, how it's issued)? It is important to have written procedures because it makes it easier to train new technicians on your organization's SOPs.
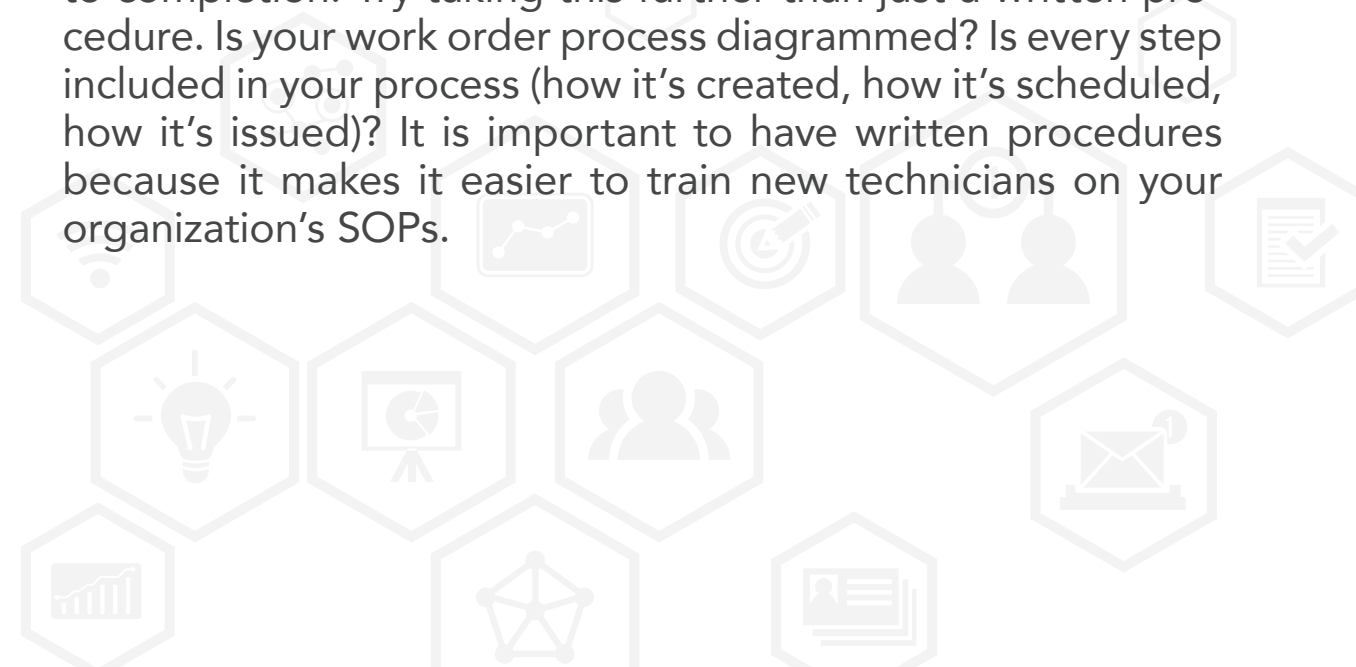
Takeaways

// Inventory / MRO

Is your store room filled with everything you don't need and nothing that you do need? Do you have lots of parts collecting dust and empty spaces where the things you need the most should be? It's a pretty common complaint that we hear, when you go to the storeroom and need something to do a repair, it doesn't have what you need. It's out of stock, it doesn't exist, or there isn't enough.

Unfortunately, for a lot of our respondents, this is the reality because inventory accuracy is low. Only **19%** of respondents said inventory accuracy is **90%** or greater. There are plenty of reasons why this number could be low. It's difficult to do inventory, it's hard to keep it accurate, and getting your parts list into EAM can be a headache. It is critical to have inventory accuracy as this is one of the first places to create cost savings.

There is a direct correlation between locked down store rooms and inventory accuracy. The same percentage of respondents who reported inventory accuracy said that spare parts inventory is controlled 24-hours a day. It is becoming increasingly important to have locked down and secured inventory. This puts controls, requirements, and regulations on your inventory and makes it easier to track and manage.

Another area to improve your parts inventory accuracy is your turn rates. Only **6%** of respondents said that inventory turn rates average greater than four times. Why are turn rates important? They give you insight into obsolete items and allow you to reduce your overall investment. If your turn rate is low and the item isn't critical, get rid of that item. If it's high, you need to make sure you are stocking enough to reduce the overhead cost of purchasing.

Your preferred supplier lists are also key to increasing inventory and MRO accuracy. Only **30%** of respondents said that a preferred supplier list exists and compliance is **90%** or greater. You need to know what to buy, how much to buy, and who to buy from, so utilize the preferred supplier list!

Getting parts into this list in EAM just got even easier with OpenCAD. You can now automatically scan and bring your bill of material lists into EAM utilizing OpenCAD. The preferred supplier list also gives you visibility into whether your team is using the preferred supplier. Remember: if it's not recorded, you can't report on it.

Optimization of your storeroom supports increased operating efficiencies and generates significant cost savings, which means new-found discretionary cash. Inventory and MRO are the first places to recoup money, so it is critical to do it right. EAM is designed to help with that.

Where Do We Go Now?

You've seen the data and the trends, but what happens now? You need to take this knowledge and apply it to your organization.

Over **80%** of respondents said that EAM provides them with timely, actionable decision-making tools (such as KPIs, grids, or reports). The only way to keep this number increasing is with on-going investment in the product. Through small project enhancements, continued education, or by taking the time to regularly analyze your metrics and adjust your goals accordingly, continued investment in your system is essential.

To grow your system, you need to support your system. There is no worse feeling than being unsupported. If users feel they cannot get the system to work and don't know where to turn, they will stop using the system. We have a saying, "left to their own devices, people will create their own devices." By providing your users with the right support and tools, you help them use the system to get the right data and information.

// **Foster Support of EAM Through Continued Education & Engagement**

✓ Take advantage of webinars

✓ Invest in ongoing training

✓ Attend user conferences such as Advoco Connect

✓ Engage in community forums like:

   ✓ Advoco LinkedIn

   ✓ Infor EAM LinkedIn

   ✓ Advoco Facebook

✓ Agree to complete an assessment or self-assessment

✓ Identify opportunities for improvement from this report

Final Thoughts

How can you maximize your software investment and make sure your system is successful? You start by educating yourself on the newest trends and comparing how others are using the system to how you are using the system. Ask yourself, how do we stack up?

Lean on the EAM community so you can win.

Begin to routinely ask yourself "Am I getting the most out of my system?" Then, you can identify the gaps and areas where you can improve. Right now, you may be getting the data you need, but are you using that data effectively to make good decisions and implement positive change? That is where the real power of the system lies.

We hope that this report shed some light on areas where you can begin to make changes in your organization today.

We aren't after best practices for everyone. We want to find the practices and next opportunities that are right for you.