



**RELIABILITY<sup>®</sup>**

**THINGS TO  
THINK ABOUT  
AND DO**

**THE 2013 EDITION**



# HOW TO USE THE THINGS TO THINK ABOUT AND DO

## ORIENTATION

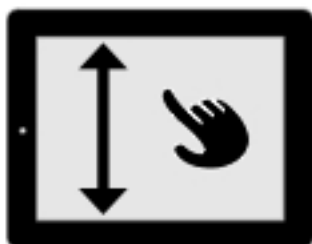
Read Things to Think About and Do (2013) in landscape orientation only.



Landscape

## NAVIGATING THE MAGAZINE

Individual articles swipe vertically for all content related to that single article. To move to the next article, swipe horizontally.



Move within the article



Move to the next or previous article



Swipe to next article



Tap for More



Website



YouTube



Blog



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## SOCIAL LINK ICONS

## HOME NAVIGATION BARS

Just tap on any non-interactive area on the screen and the bars will appear at the top and bottom of the screen. These tools are designed to navigate quickly around this app.



Big thoughts and small actions make a difference.

Here's what we're **working on** and thinking about.

**What about you?**

Feel free to share this... pass it along.  
**Things To Think About (and do) this year.**





# Featuring

Tap on name to view.

**Terrence O'Hanlon** **Tedd Weitzman**  
David Williams **Martin Tauber**  
**Mike Fitch** **Abayomi Carmichael**  
**Jeff Shiver** Robert Kalwarowsky  
**Cliff Williams** **MARC YARLOTT** Joe Swan  
**Bill Booth** **Terry Wireman** Fred Schenkelberg  
Tacoma Zach **DEREK BURLEY** **Henry Ellmann**  
**George Mahoney** **Boyd Helm** Dieter Seidenthal  
Gale Peterson Paul Lachance





# INTEGRITY AFFECTS PERFORMANCE

*Terrence O'Hanlon*

**A** person, an object or a system has integrity when it is whole and complete. Think of the example of a bicycle wheel with missing spokes – it is not whole or complete. It will become out-of-round and will work less well and eventually stop working entirely. Performance is degraded. Integrity in a person means keeping your word and honoring your word by cleaning up the mess you made when you did not or could not keep your word. When a person lacks integrity they are not whole and complete. A person who lacks integrity will by extension not achieve the same performance of a person who is whole and complete.

Keep your word.





# FIND & FILL A GAP!

*Tedd Weitzman*

Success is dependent upon three things: **Process, Technology and People.** Find a process gap and fill it with a procedure by clearly defining the process and thoroughly documenting it with the procedure. Support it with technology, standards and guidelines. If you do, it is likely that people problems will vanish.



# Share Your Vision

*David Williams*

Take the time to express and share your 'vision for the future.' Doing so will have a big impact on the people you are asking to join you in change, helping them see the big picture and removing a lot of anxiety. But remember to also include the first few steps towards the vision so it doesn't come across as an insurmountable task.







Continuous Education:  
**NEW AND  
BETTER  
METHODS**

Keep your mind open to learning new,  
more efficient ways of doing work.  
With an open mind, knowledge flows in.  
With a closed mind, you stagnate.  
If you have knowledge, share it.

**Martin Tauber**





# LUDECA

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# DOCUMENT SUCCESS

to do list

*Mike Fitch*

Condition monitoring efforts provide direct and positive contributions to key indicators like:

- ✓ **Reduced downtime**
- ✓ **Reduced repair costs**
- ✓ **Reduced parts inventory**
- ✓ **Increased production capacity ....and more.**

It is very important that we keep our management team apprised of the value they are getting from us, our tools and our training. Document your efforts and make your management team aware of the value your efforts and technologies provide.





# GOT A STRATEGY?

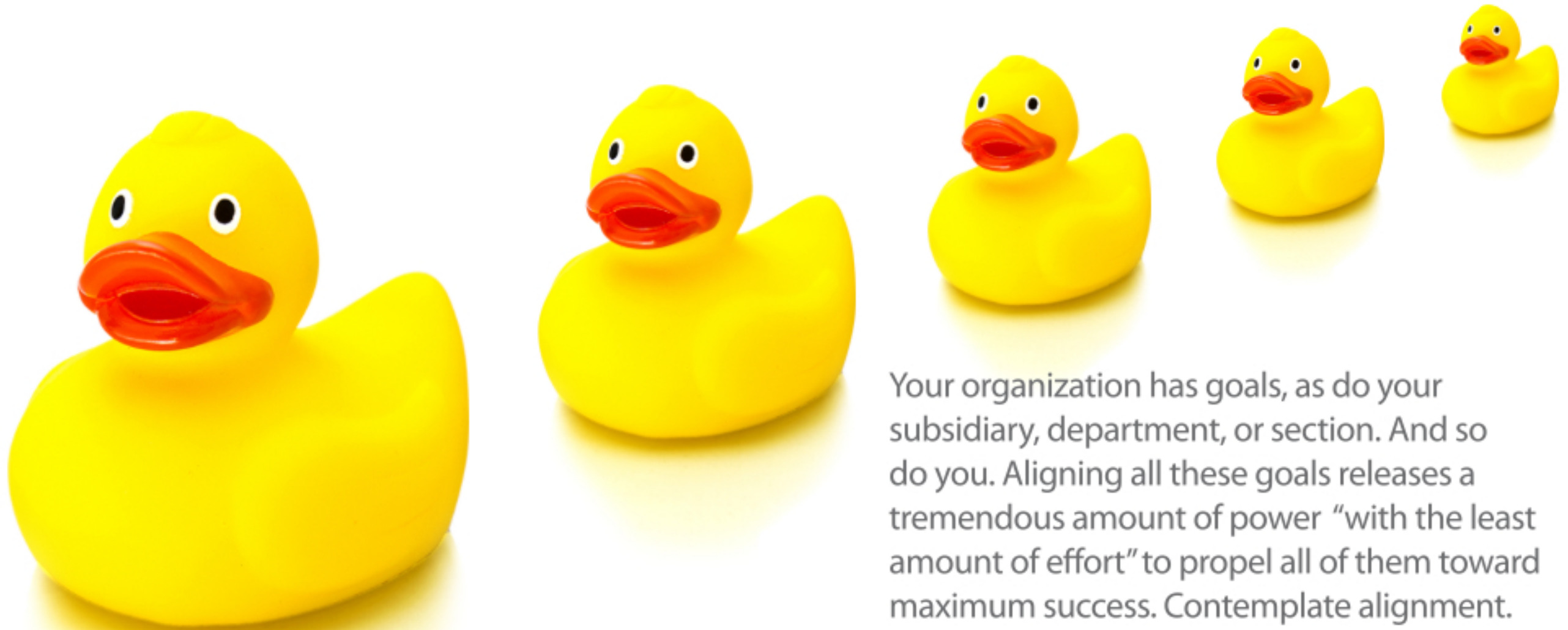
*Jeff Shiver*

**C**reating a proactive, reliability-centered culture is culture change. You can't do it by yourself. When others are involved, buy-in occurs more quickly. Want to make a difference? Create a project plan that lays out the strategy for change. Post it in public places throughout the work site and keep it updated. Work the plan one bite at a time, line by line. Encourage people to ask questions about it and to help with the tasks. You might be surprised how far you get!



# Align

*Abayomi Carmichael*



Your organization has goals, as do your subsidiary, department, or section. And so do you. Aligning all these goals releases a tremendous amount of power “with the least amount of effort” to propel all of them toward maximum success. Contemplate alignment.

**Then do it.**







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Plan for

# Bottom Line Reliability

**E**

veryone can get caught up in day-to-day operations, but it's important to have a long-term, strategic reliability plan. This sharpens and keeps the focus on bottom line profitability and gives direction to reliability energy. The strategic plan should evolve over time and always be aimed at highly visible, highly beneficial reliability projects.

**Robert Kalwarowsky**

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# BUILDING ON SUCCESS

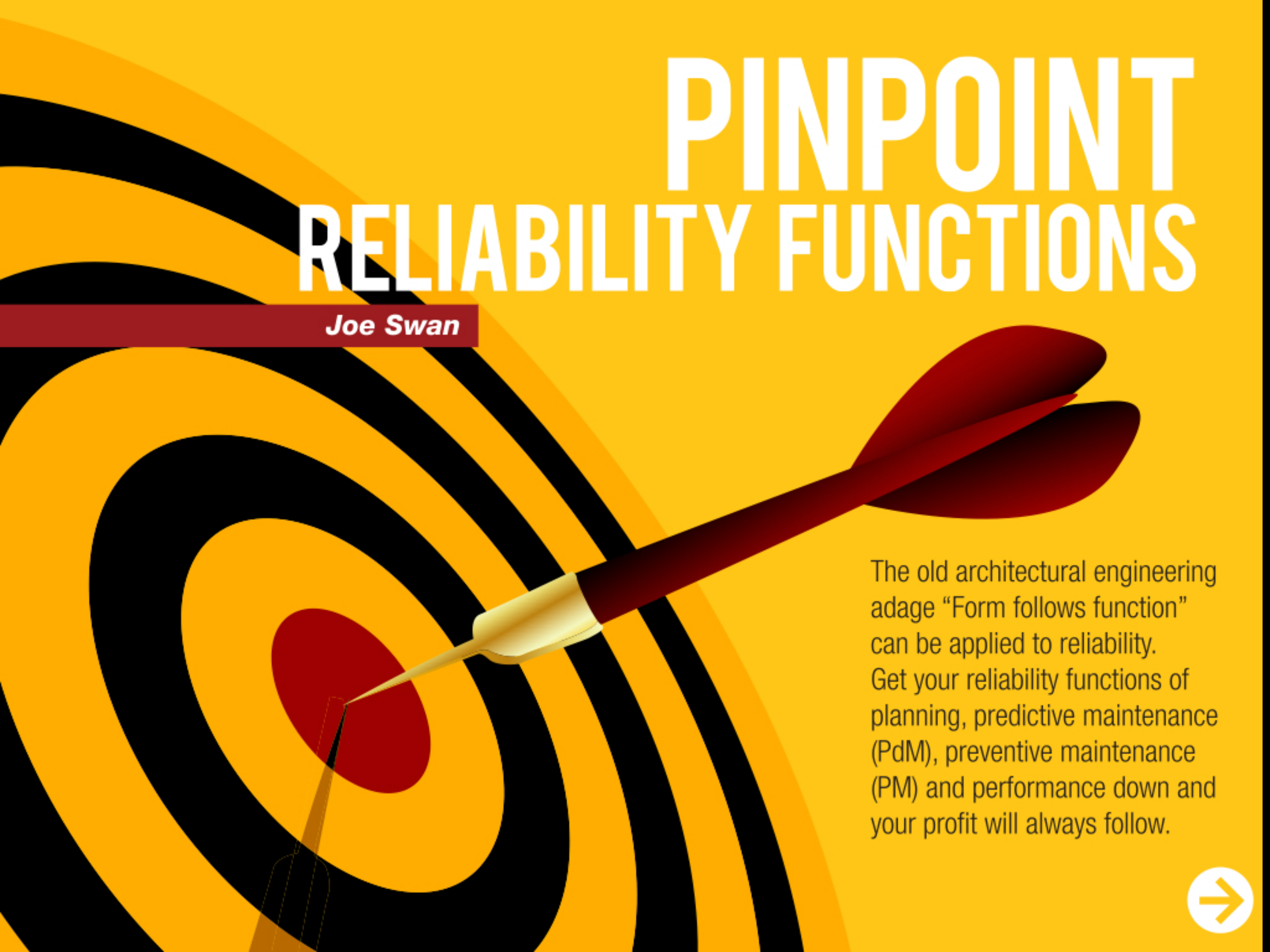
Wherever you work, there will be successes for you to build on. Take the time to recognize them, acknowledge them and publicize them. Then you can guarantee this success will be repeated in the future.

***Cliff Williams***



# PINPOINT RELIABILITY FUNCTIONS

*Joe Swan*

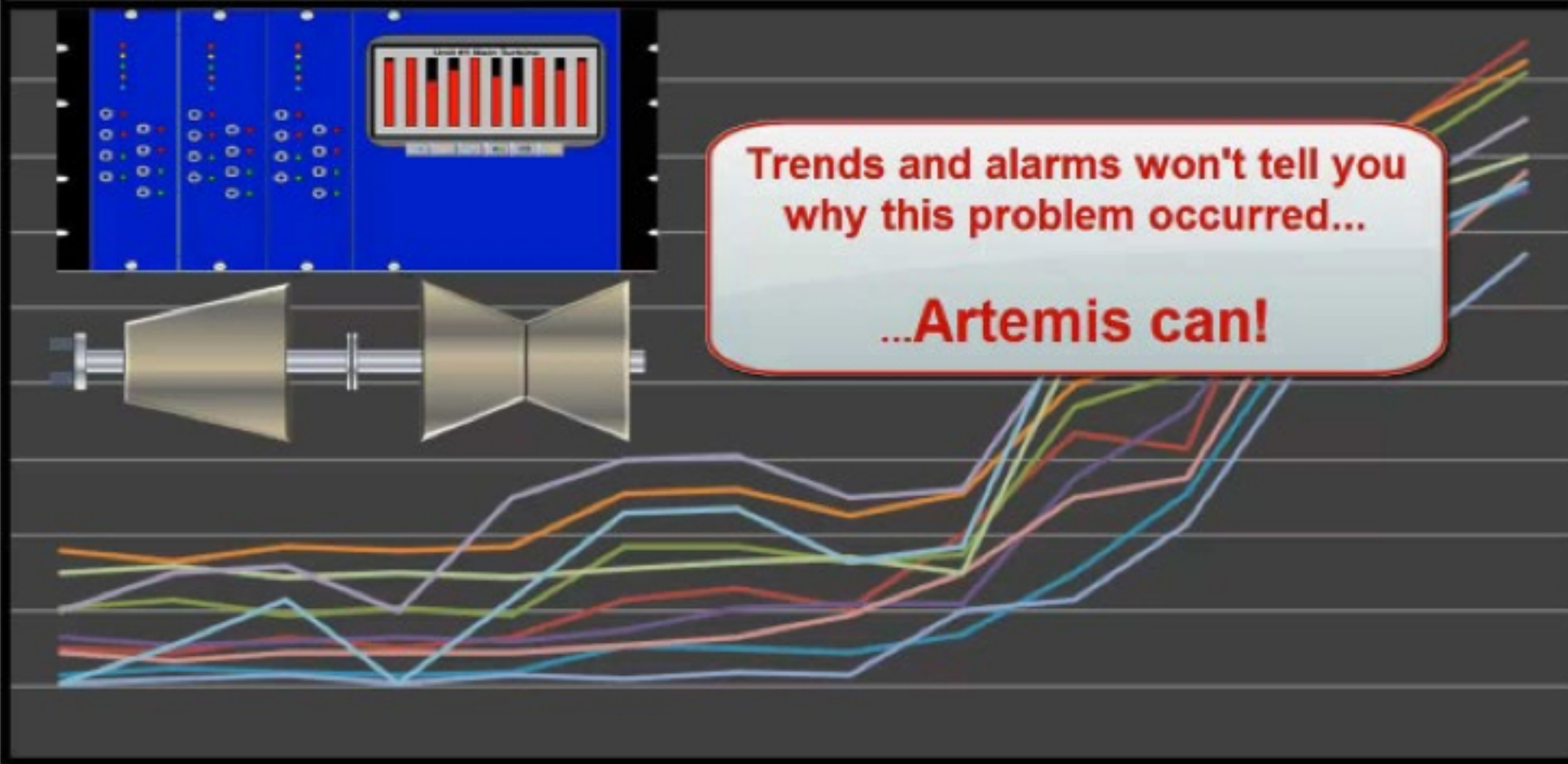


The old architectural engineering adage “Form follows function” can be applied to reliability. Get your reliability functions of planning, predictive maintenance (PdM), preventive maintenance (PM) and performance down and your profit will always follow.





## Unit #1 Main Turbine



Trends and alarms won't tell you why this problem occurred...

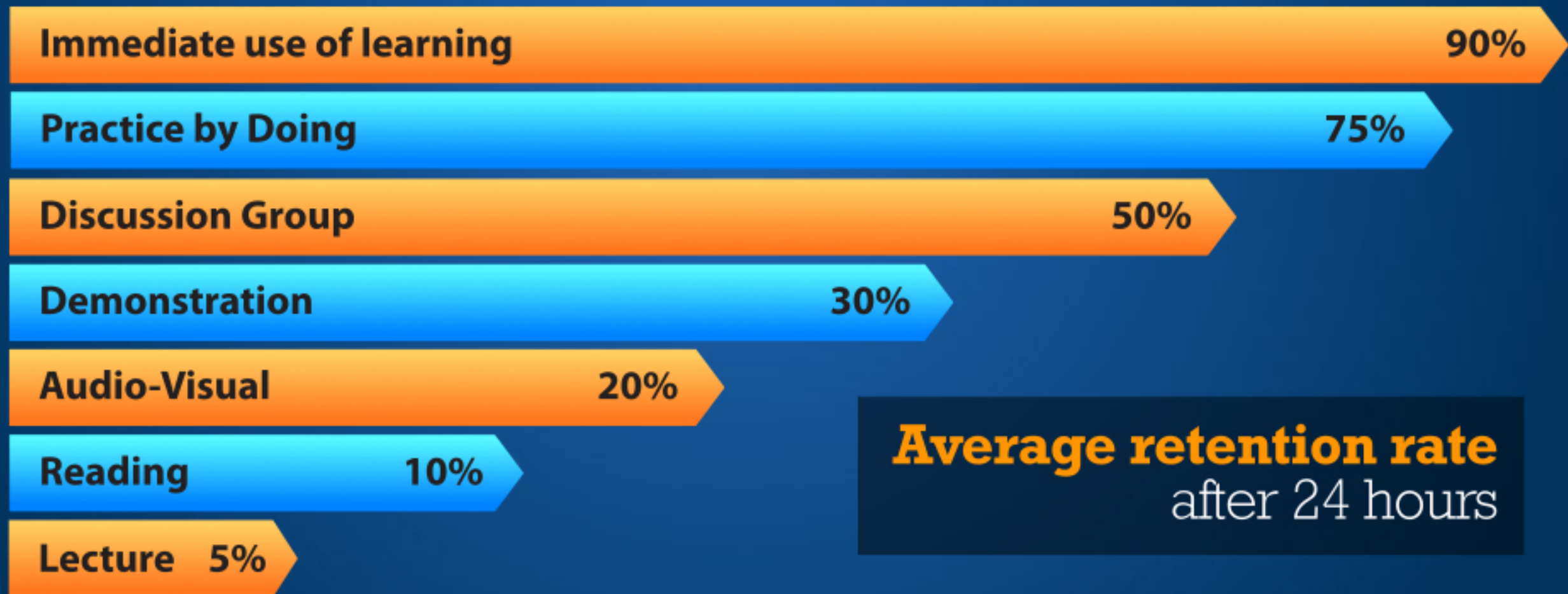
...Artemis can!



# Learn Effectively

Dr. Bill Booth

Lectures continue to be the most prevalent teaching mode in education and training in American business and industry classrooms despite overwhelming evidence that it produces the lowest degree of retention for most learners.



To make our training more effective and long lasting, managers, supervisors and others who conduct classes must learn and practice appropriate learning/training methodology. We have been marginally effective in the classroom for far too long.







Marc Yarlott

# CHOOSE LEADING KPIs

Pick only five leading key performance indicators (KPIs) that represent your process improvement goals for the next six to 12 months. Track and celebrate them with your team to see significant organizational change.

Think about this quote from Albert Einstein:

*"The main source of all technological achievements is the divine curiosity and the playful drive of the tinkering and thoughtful researcher, as much as it is the creative imagination of the inventor."*

- Einstein, 1930



# GET INFORMED ABOUT **ASSET MANAGEMENT** STANDARDS

*Terry Wireman*

With new ISO asset management standards soon to be finalized, will maintenance reliability professionals finally get the recognition that has escaped them for decades? Maintenance reliability professionals should properly educate themselves about asset management by reading articles, attending conferences and researching online. Becoming informed is the best way to ensure the maximum benefit of adopting the new standards.







## Assessment

**Got a strategy?** We integrate the current state assessment, gap analysis against the Best Practices and facilitate the development of a customized plan of improvement into a single process.

**The outcome?** A strategic roadmap combining education and coaching to ensure your success, one step at a time.

What we do ...

On-site and public educational training courses

- Maintenance Management Principles
- Maintenance & Reliability for Mgrs – 4 parts
- Maintenance Planning and Scheduling
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- Storerooms/ Material Management
- Others on demand

The video player shows a background image of a large industrial engine component being worked on in a factory setting.

*Boyd Helm*

# WHAT IF

It is 8 a.m. on Friday and the weekend plan has been communicated. BUT, production has just decided to run over the weekend. Do your technicians know how to adapt to a change in schedule? Do they know which PMs are critical or what tasks can be rescheduled to maintain your reliability program?





# Make a Game Plan

*Derek Burley*

**A**s the new standard nears completion, start compiling a flexible road map towards ISO55000 compliance.

As the economy shows encouraging signs of recovery, let's get ahead of the game and focus on the value generated by asset management!







# WHY MAKE THINGS SO DIFFICULT?

*Gale Petersen*

TAP

## STRATEGY

Your business has a **STRATEGY** and deals with a complex and diverse set of **STAKEHOLDERS**.

## ASSETS

You must manage **ASSETS** and **FACILITIES** in distributed geographic **LOCATIONS**.

## SYSTEMS

There are **SYSTEMS** to help you out.

## BUDGET

You must manage to a **BUDGET** and have **PROCESSES** to follow according to your business **REQUIREMENTS**.

## METRICS

You have **METRICS** to measure your success. This complex, day-to-day environment is managed by **PEOPLE**.

## DIFFICULT?

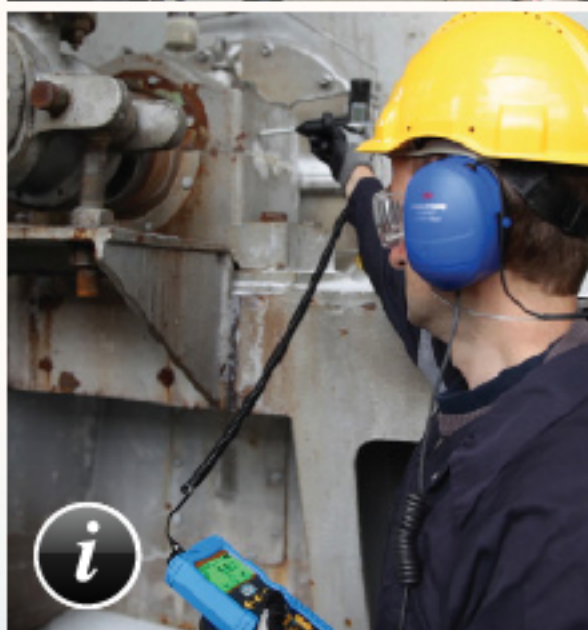
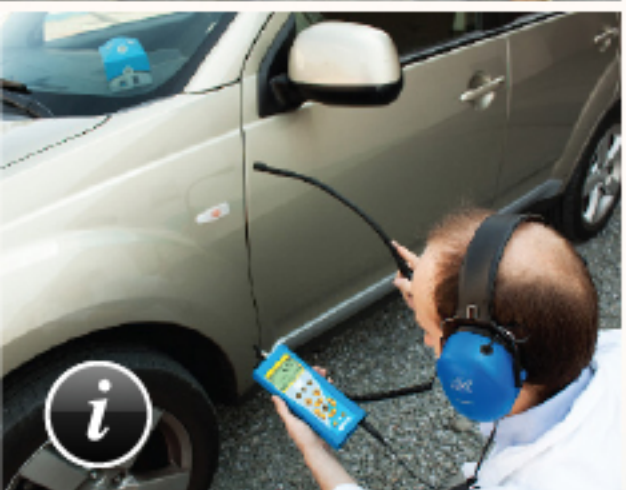
This is your world. This is our world. **Why make things so difficult?**







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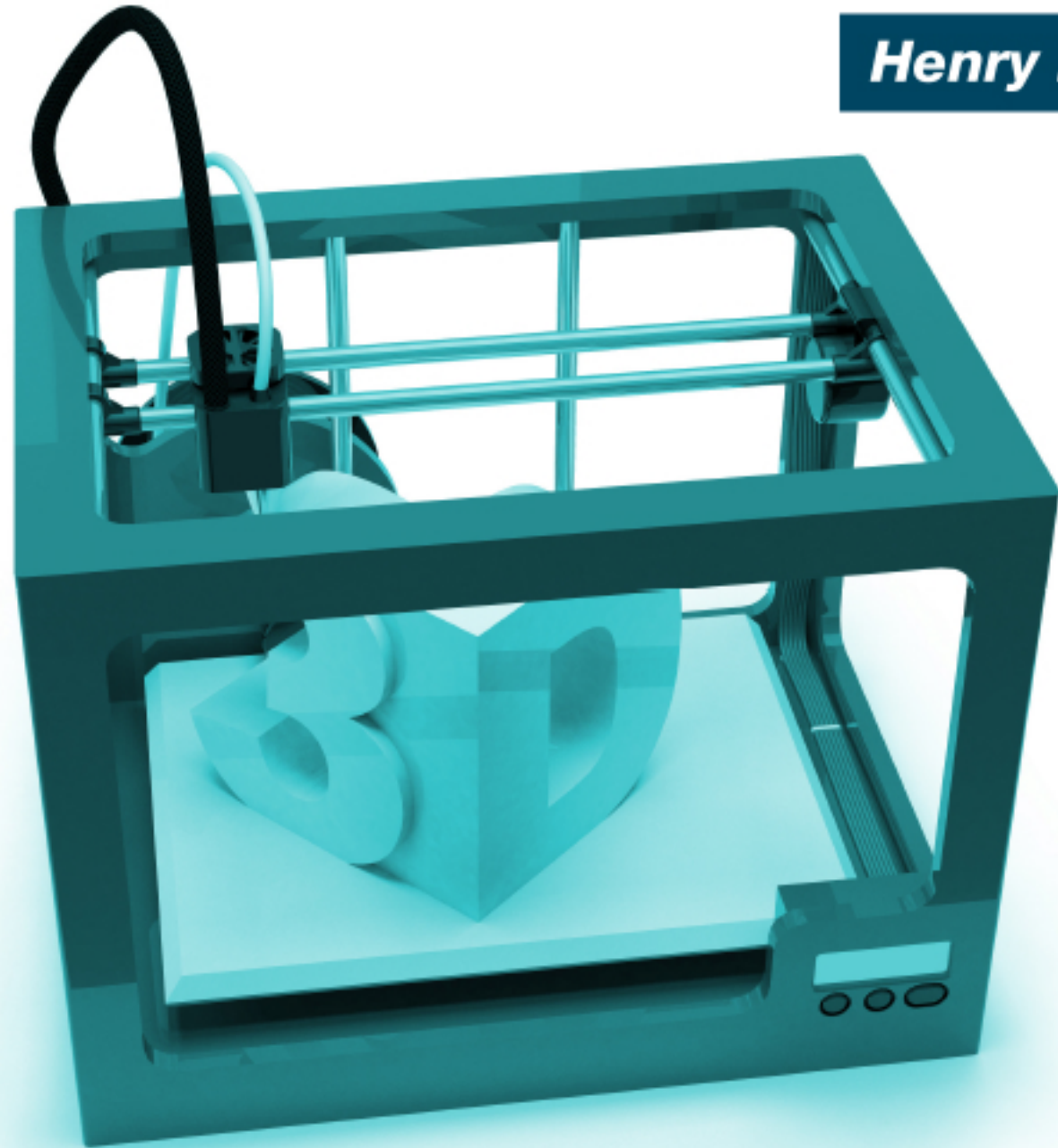
# REDUCE

# DOWNTIME WITH 3D PRINTERS

**S**pare parts now can be produced faster, cheaper and safer on 3D printers. The process consists of adding thin, successive layers of material to build up a three-dimensional object based on a digital blueprint. Costs are decreasing rapidly, allowing 3D printers to revolutionize the entire spare parts procurement procedures.

Shorter lead time to acquire spare parts will reduce inventories, downtime and costs, thus improving the bottom line!

*Henry Ellmann*





# VALUE

# TIME

*George Mahoney*



- »» Don't allow people to waste your time. Be just as respectful with theirs.
- »» Spend less time on the unimportant, so you can spend more time on what matters.
- »» Just because you spend a lot of time on something, doesn't mean it is important or that you shouldn't stop doing it.



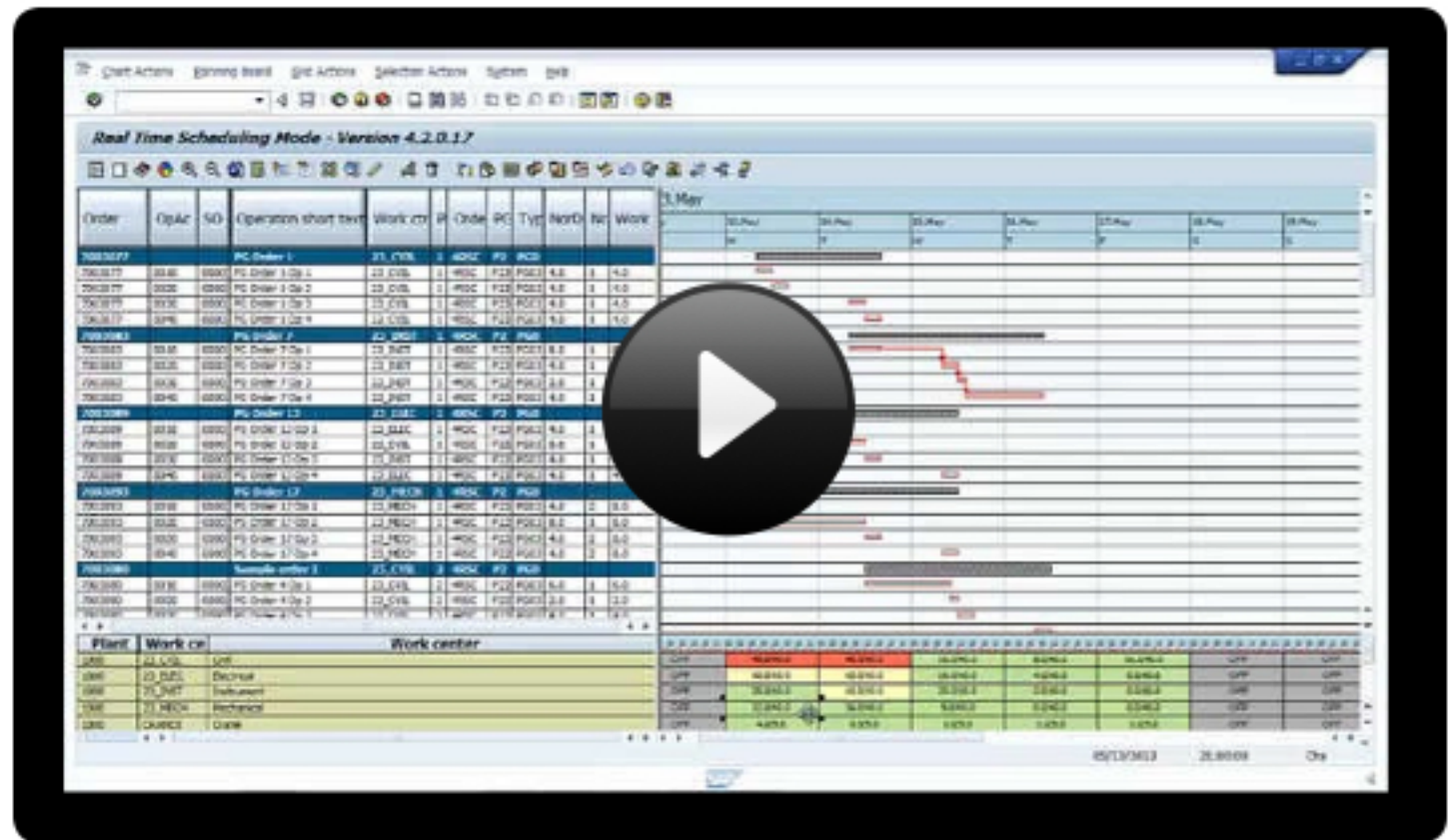
# KNOWLEDGE: PASS IT ON

*Dieter Seidenthal*

**M**any Baby Boomers occupy key positions in plant maintenance and operations in all major industries. When they retire, they will take with them an enormous wealth of information and knowledge, which many are calling “the huge knowledge gap.” Let’s make sure replacements are trained and knowledge is transferred. Baby Boomers can serve as consultants while replacements are fully entrenched. Job sharing or flextime can encourage Baby Boomers to stay in the workplace and help close the gap.







## Scheduling

- **Effective plant maintenance** is the foundation of an asset management strategy.
- Our **best-in-class** planning and scheduling solutions help increase availability, reduce costs, and manage risk.
- **Leaders in oil & gas, chemical and utilities** trust us to increase productivity, retain institutional knowledge and facilitate cross-functional collaboration.





# DETERMINE **YOUR** VALUE

**Fred Schenkelberg**

Business managers speak in terms of money. Profit, expenses, investments and return on investment (ROI) are common business concepts, but they are not commonly used by maintenance reliability professionals. By estimating and measuring the value of every task, maintenance reliability professionals will justify upfront costs and build credibility in their program.





# The Importance of

# CMMS

**Computerized maintenance management software (CMMS)** will continue to play a vital role in safety compliance, helping maintenance do its part to protect employees and pass inspections. But CMMS users will see improvements to safety PMs, divided by routine tasks, incidents and inspections, with separate safety checklists created specifically for OSHA auditors.

***Paul Lachance***







**Tacoma Zach**

# What You Don't Know PUTS YOU AT RISK

Even the best laid plans can go awry due to a lack of understanding or discovery. Every asset management program is incomplete without an accurate and comprehensive risk analysis.

Do you really know what systems are critical?

Do you know what really puts you at risk and in what ways?

How do you know you are spending your money in the most efficient way?

How do you know you are working on the truly important maintenance tasks?

**What you don't know puts you at risk.**





# Credits

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