

Little Nuggets of Wisdom for Work Management



Doc Palmer

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www.palmerplanning.com

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Doc Palmer

- Turned around Jacksonville Electric Authority's maintenance planning program during career of 25 years as practitioner (retired 2007).
- Requested by world's largest book publisher, McGraw-Hill, to author the *Maintenance Planning and Scheduling Handbook* 1st ed. 1999 (now in 4th ed. March 2019)
- Currently providing guidance, mentoring, and training for companies internationally for maintenance planning success.





Planning

The Essence of *Planning* (Why It Works)

Allowing planners to “fail” makes it possible to plan all the work to improve plans “over time” (and support scheduling)

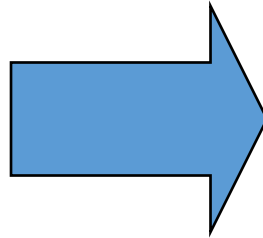




Planning

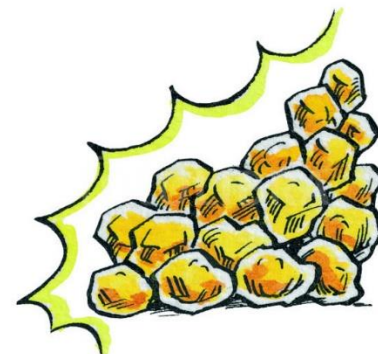
- Is Not Necessarily or Simply

Plan



Do



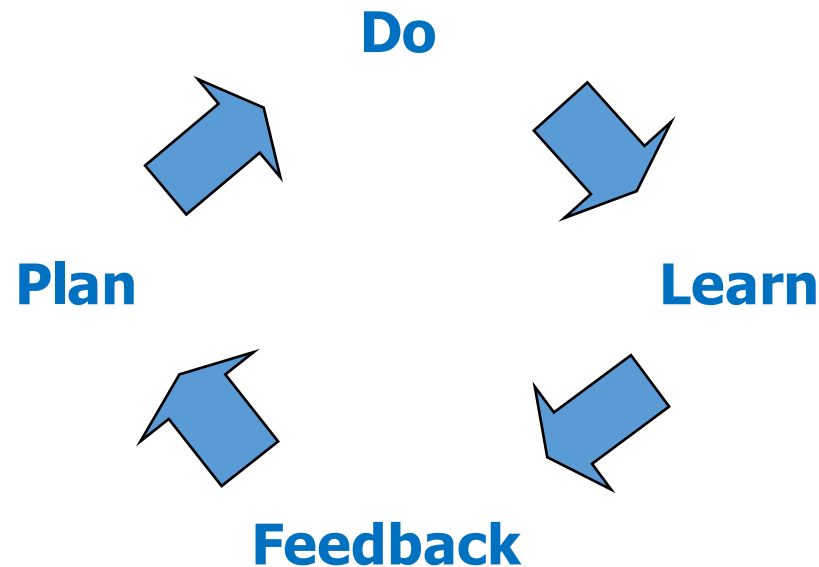


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Planning

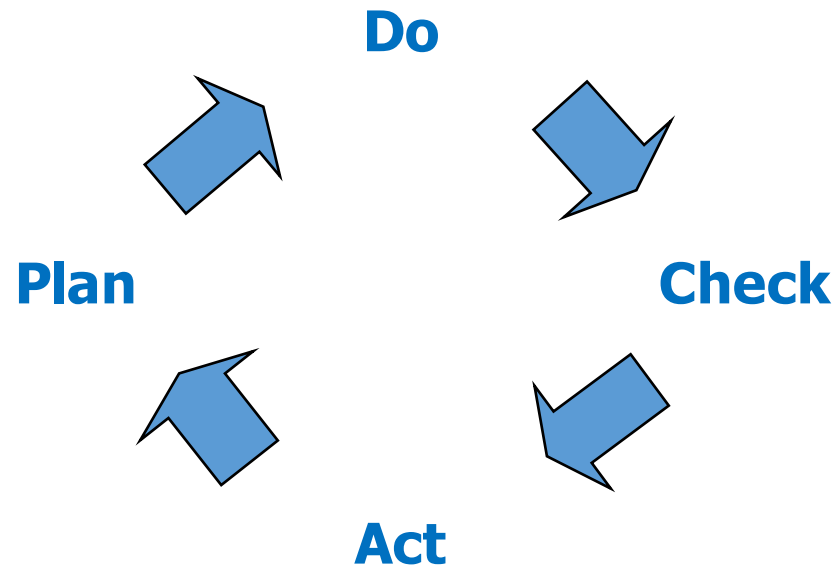
- Is a *Cycle* of Improvement





Planning

- Simply the PDCA Cycle
- W. Edwards Deming 1950's





What was requested

What we planned to do

What we did

Could be 3 different things!

REQUESTER SECTION		WORK ORDER		#	Priority ____
Equipment _____	Tag # _____				
Problem or Work Requested:	(ORIGINATOR)	Def Tag # _____			
By: _____	Outage Req? Y/N _____	Clearance Req? Y/N _____	Confined Space? Y/N _____		
Date & Time: _____					
			APPROVAL: _____	(OPER'S SUPV)	
PLANNING SECTION Assigned Crew: _____ Attachment? Y/N					
Description of work to be performed:					
	(PLANNER)				
Labor requirements:					
Parts requirements:					
Special tools requirements:					
By: _____	Date & Time: _____	Job Estimate: _____	Actual: _____		
CRAFTFEEDBACK (Modify plan sections above: actual labor, parts, & tools)					
Work performed including equipment changes & any problems or delays:					
	(TECHNICIAN)				
Date & Time Started: _____	Date & Time Completed: _____				
By: _____	Date: _____				
			APPROVAL: _____	(OPER'S SUPV)	
CODING (PLANNER)					





Feedback Three

(Types of Feedback)

- What you did if different from the plan. (***We do not want anyone ever to blindly follow a job plan!***)
- What you think caused the problem if not clear in the work order
- What you think could be done better* next time we work on this job (What would you like to see on the plan if you did this job again? Did you have to make more than one trip to the job site?)

*(***not*** “what was wrong or incorrect”)





Feedback Six

(Aids to Collect)

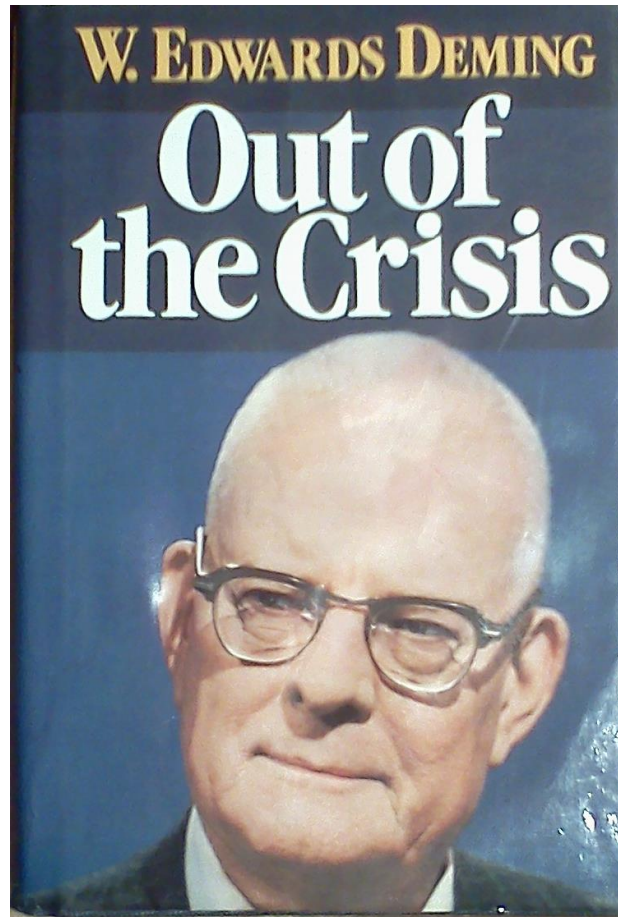
- Craft uses paper orders in field or other “real time” non-restrictive data input
- Planner goes to some crew meetings
- Planner includes Procedure History on plans (Shows that we used the feedback and helps us keep track of changes)
- Supervisor supports; reviews collected work orders
- Management supports; discusses # helpful feedbacks received or # job plans revised
- Management holds short training classes and ongoing discussions





Dr. W. Edwards Deming

1900 - 1993



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“American management thinks that they can just copy from Japan. But they don't know what to copy.”

Dr. W. Edwards Deming

http://www.brainyquote.com/quotes/authors/w/w_wards_deming.html accessed 14 June, 201

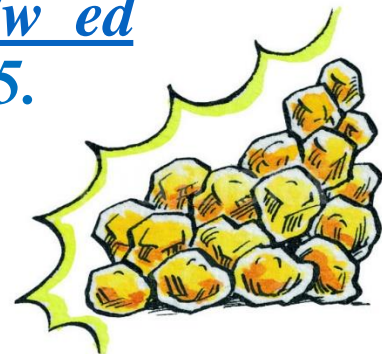




“If you can't describe what you are doing as a process, you don't know what you're doing.”

Dr. W. Edwards Deming

http://www.brainyquote.com/quotes/authors/w/w_wards_deming.html accessed 14 June, 2015.





“A bad system will beat a good person every time.”

Dr. W. Edwards Deming

http://www.brainyquote.com/quotes/authors/w/w_edwards_deming.html accessed 14 June, 2015.





“It is not necessary to change. Survival is not mandatory.”

Dr. W. Edwards Deming

http://www.brainyquote.com/quotes/authors/w/w_edwards_deming.html accessed 14 June, 2015.





*“I am forever learning
and changing.”*

Dr. W. Edwards Deming

http://www.brainyquote.com/quotes/authors/w/w_edwards_deming.html accessed 14 June, 2015.





We do not want anyone ever to blindly follow a job plan!

“All anyone asks for is a chance to work with pride.”

Dr. W. Edwards Deming

http://www.brainyquote.com/quotes/authors/w/w_wards_deming.html accessed 14 June, 2015.





*“Quality is pride of
workmanship.”*

Dr. W. Edwards Deming

http://www.brainyquote.com/quotes/authors/w/w_wards_deming.html accessed 14 June, 2015.



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*“Quality is everyone's
responsibility.”*

Dr. W. Edwards Deming

http://www.brainyquote.com/quotes/authors/w/w_wards_deming.html accessed 14 June, 2015.





*“Hold everybody
accountable? Ridiculous!”*
*“When a system is stable,
telling the worker about
mistakes is only tampering.”*

Dr. W. Edwards Deming

[http://www.brainyquote.com/quotes/authors/w/w_edwards
deming.html](http://www.brainyquote.com/quotes/authors/w/w_edwards_deming.html) accessed 14 June, 2015.





*“Lack of knowledge...
that is the problem.”*

Dr. W. Edwards Deming

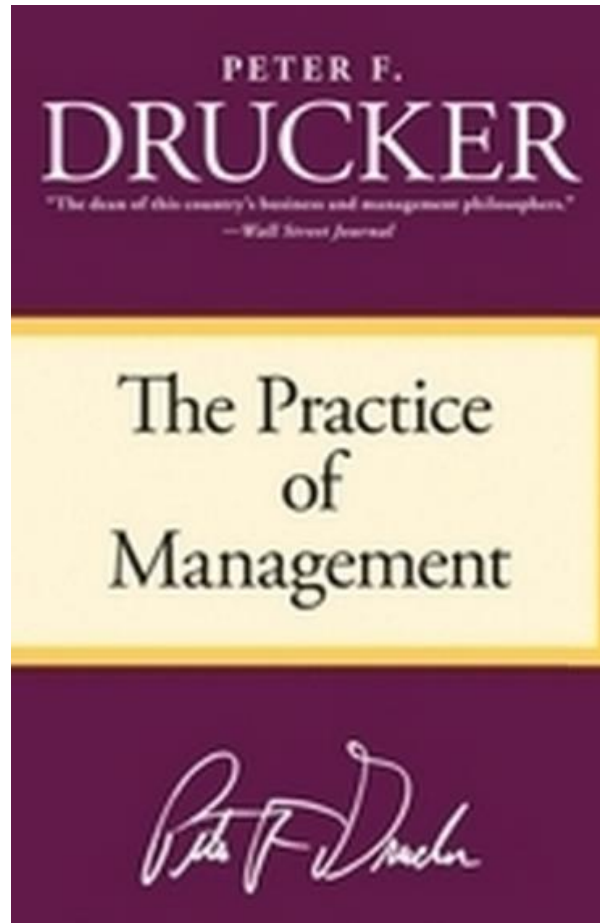
http://www.brainyquote.com/quotes/authors/w/w_edwards_deming.html accessed 14 June, 2015.





Dr. Peter F. Drucker

1909 - 2005



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The “feedback thing”

“Follow effective action with quiet reflection. From the quiet reflection will come even more effective action.”

Dr. Peter F. Drucker

http://www.brainyquote.com/quotes/authors/p/peter_drucker.html accessed 14 June, 2015.





“A manager is responsible for the application and performance of knowledge.”

Dr. Peter F. Drucker

http://www.brainyquote.com/quotes/authors/p/peter_drucker.html accessed 14 June, 2015.





“Today knowledge has power. It controls access to opportunity and advancement.”

Dr. Peter F. Drucker

http://www.brainyquote.com/quotes/authors/p/peter_drucker.html accessed 14 June, 2015.





“Knowledge has to be improved, challenged, and increased constantly, or it vanishes.”

Dr. Peter F. Drucker

http://www.brainyquote.com/quotes/authors/p/peter_drucker.html accessed 14 June, 2015.





“We now accept the fact that learning is a lifelong process of keeping abreast of change. And the most pressing task is to teach people how to learn.”

Dr. Peter F. Drucker

http://www.brainyquote.com/quotes/authors/p/peter_drucker.html accessed 14 June, 2015.





“The only thing we know about the future is that it will be different.”

Dr. Peter F. Drucker

http://www.brainyquote.com/quotes/authors/p/peter_drucker.html accessed 14 June, 2015.





“Trying to predict the future is like trying to drive down a country road at night with no lights while looking out the back window.”

Dr. Peter F. Drucker

http://www.brainyquote.com/quotes/authors/p/peter_drucker.html accessed 14 June, 2015.





“The entrepreneur always searches for change, responds to it, and exploits it as an opportunity.”

Dr. Peter F. Drucker

http://www.brainyquote.com/quotes/authors/p/peter_drucker.html accessed 14 June, 2015.





*“Making good decisions is
a crucial skill at every
level.”*

Dr. Peter F. Drucker

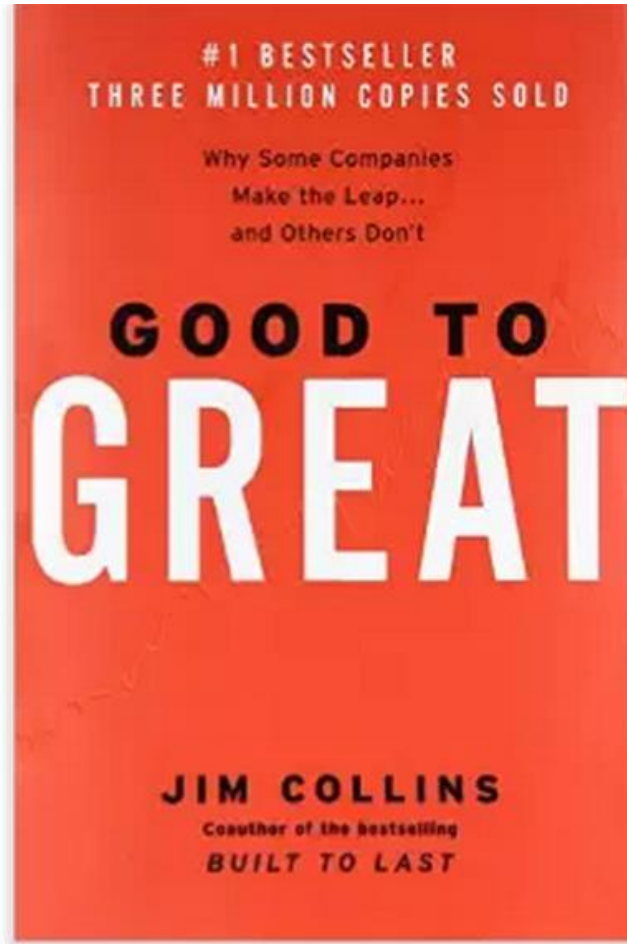
[http://www.brainyquote.com/quotes/authors/p/peter
drucker.html](http://www.brainyquote.com/quotes/authors/p/peter_drucker.html) accessed 14 June, 2015.





Jim Collins

1958 -



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“To go from good to great requires transcending the curse of competence.”

Jim Collins

[https://books.google.com.br/books/about/Good to Great.html?id=Q7ja95uwUT4C&source=kp_cover&hl=en](https://books.google.com.br/books/about/Good_to_Great.html?id=Q7ja95uwUT4C&source=kp_cover&hl=en)
accessed 14 June, 2015.





“When you combine a culture of discipline with an ethic of entrepreneurship, you get the magical alchemy of great results.”

Jim Collins

[https://books.google.com.br/books/about/Good to Great.html?id=Q7ja95uwUT4C&source=kp_cover&hl=en](https://books.google.com.br/books/about/Good%20to%20Great.html?id=Q7ja95uwUT4C&source=kp_cover&hl=en)
accessed 14 June, 2015.





“Those who launch radical change programs and wrenching restructurings will almost certainly fail to make the leap.”

Jim Collins

[https://books.google.com.br/books/about/Good to Great.html?id=Q7ja95uwUT4C&source=kp_cover&hl=en](https://books.google.com.br/books/about/Good_to_Great.html?id=Q7ja95uwUT4C&source=kp_cover&hl=en) accessed 14 June, 2015.





Doc and others...



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“Planning is about defeating Murphy’s Law”

Doc Palmer

Maintenance Planning and Scheduling Handbook



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*Murphy's Law:
Anything that can go
wrong will go wrong*



SOTIP





!!!At a school!!!



*Planners save information for
craftspersons*

*“A planner is a
‘craft historian’”*

David Clemons

Planner at JEA



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*Tie Job Plans and information
to asset numbers!*





Like a dentist office



Must have asset numbers!





*USA: Understand, Simplify,
then Automate (Karl Kapp)*

*“If we have to use a
CMMS,
make it quick and
painless”*

Rick Baldrige, Cargill





“The computer is a moron.”

Dr. Peter F. Drucker

http://www.brainyquote.com/quotes/authors/p/peter_drucker.html accessed 14 June, 2015.





*We “grow” better plans
over the years*

*“As a planner, I plant
seeds that grow. I do not
plant full grown oak
trees.”*

Warren Trojanoski

Planner at JEA

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*Start here when planning jobs
(Management by Objective)*

*“The emphasis should
be on why we do a job.”*

Dr. W. Edwards Deming

http://www.brainyquote.com/quotes/authors/w/w_edwards_deming.html accessed 14 June, 2015.





“A problem well stated is a problem half solved”

Charles Kettering





*Get those jobs through the
Deming Cycle*

*“Put what you know,
and go!”*

2015 Lisa Horton, Columbia Pipeline Group



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*Collect and incorporate that
feedback*

*“A short pen is better than
a long memory”*

*2014 Mechanical Supervisor Bunge Company in
Barcelona Spain quoting his grandmother*



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*“A good note is better than
a good memory”*

~2010 John Kasper pastor



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*That feedback is
“out there”*

*“We are data rich, but
information poor”*

Heard at SMRP conference circa 1990’s



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*“If GE knew what GE
knew, we’d be invincible!”*

Attributed to Jack Welch CEO GE



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(Why should we have to find the mouse a second time?)



onehundredcatsandamouse





Craftspersons fear giving feedback to make plans better

“The planning program is not trying to give away the plant’s work to contractors”

Doc Palmer

Maintenance Planning and Scheduling Handbook





Lesson: Because plans are not perfect, run the Deming Cycle

*“The best-laid schemes o' mice
an' men gang aft a-gley”*

*The best laid schemes of mice
and men oft go astray*

Robert Burns

Poet



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Scheduling

The Essence of *Scheduling* (Why It Works)

Creating fully-loaded schedules and
allowing breaking them makes it
possible to complete more work overall.





Scheduling

- Is Not Necessarily or Simply

Hour by hour
with names
a week
in advance

M	T	W	Th	F
Fred #15678	Mike #14356	Mike #14682	Mike #19765	Mike #12345
Mike #15983	Jack #13456	Fred #15234	Jason #18764	Jack #11123
Jack #15893	Jason #12356	Mike #15790	Fred #16387	Fred #13456
Fred #16222	Mike #15467	Mike #13458	Mike #17865	Mike #17856
Jack #14567	Fred #18796	Fred #13478	Jason #15689	Fred #15470
Mike #13456	Jack #18976	Jason #17689	Jack #15672	Jason #13600
Jason #18395	Jason #12359	Mike #14579	Mike #14567	

(However, daily
schedules have
names set
DAILY by crew
supervisor)



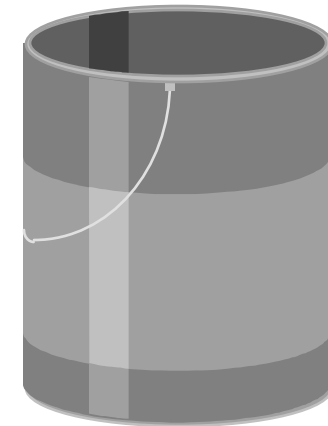


Scheduling

- Is a *full allocation* of work for a week to defeat Parkinson's Law. Could be a list or a bucket



Fill Available Crew
Skill Hours with
Work Order Hours





Scheduling

- Simply MBO Management by Objective
- Peter Drucker 1950's
- The “objective” is to help us complete more work than we would normally complete.





“Management by objective works - if you know the objectives. Ninety percent of the time you don't.”

Dr. Peter F. Drucker

http://www.brainyquote.com/quotes/authors/p/peter_drucker.html accessed 14 June, 2015.





The objective of scheduling is to help us “complete more work,” not necessarily to “complete the schedule.”

Doc Palmer

Maintenance Planning and Scheduling Handbook





"if you don't
know where you
want to go,
then it doesn't
matter which
path you
take."

alice in wonderland





“Scheduling is about defeating Parkinson’s Law”

Doc Palmer

Maintenance Planning and Scheduling Handbook



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Parkinson's Law: The amount of work assigned will expand to fill the time available

*1955 Cyril Parkinson
(November 19th, 1955), Parkinson's Law, The
Economist as reported in
http://en.wikipedia.org/wiki/Parkinson's_law
accessed 10 Oct, 2013.*





“Parkinson’s Law works everywhere”

1986 Michael Gorbachev as quoted by Margaret Thatcher

O’Sullivan, John (June 2008). "Margaret Thatcher: A Legacy of Freedom". Imprimis (Hillsdale College) 37 (6): 6. as reported in http://en.wikipedia.org/wiki/Parkinson's_law accessed 10 Oct, 2013.





“Time is the scarcest resource and unless it is managed nothing else can be managed.”

Dr. Peter F. Drucker

http://www.brainyquote.com/quotes/authors/p/peter_drucker.html accessed 14 June, 2015.





“The average American worker has fifty interruptions a day, of which seventy percent have nothing to do with work.”

Dr. W. Edwards Deming

http://www.brainyquote.com/quotes/authors/w/w_wards_deming.html accessed 14 June, 2015.





*We must fully load
schedules...*

*“The productivity of work
is not the responsibility of
the worker but of the
manager.”*

Dr. Peter F. Drucker

[http://www.brainyquote.com/quotes/authors/p/peter
drucker.html](http://www.brainyquote.com/quotes/authors/p/peter_drucker.html) accessed 14 June, 2015.





...and allow breaking the schedule

“People with targets and jobs dependent upon meeting them will probably meet the targets - even if they have to destroy the enterprise to do it.”

Dr. W. Edwards Deming

http://www.brainyquote.com/quotes/authors/w/w_edwards_deming.html accessed 14 June, 2015.





*(SC is not about underloading
the schedule to look good)*

*“Weekly schedule
compliance is the ultimate
measure of proactive
maintenance”*

John Crossan, Clorox, 1997





*“Whenever there is fear,
you will get wrong
figures.”*

Dr. W. Edwards Deming

http://www.brainyquote.com/quotes/authors/w/w_edwards_deming.html accessed 14 June, 2015.





*“Schedule compliance is
not strictly under the
control of the supervisors”*

Doc Palmer

Maintenance Planning and Scheduling Handbook



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(Truths about scheduling)

*“Planners cannot make
the perfect time estimate”*

Doc Palmer

Maintenance Planning and Scheduling Handbook



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Planners are “estimating” not “exactimating”

2019 Jason Henley Veolia





*“Management cannot
hold technicians
accountable to time
estimates for single jobs”*

Doc Palmer

Maintenance Planning and Scheduling Handbook





*“Wrench time” at good plants is 35%,
but best practice is 55%*

*“The big problems are
where people don't realize
they have one in the first
place.”*

Dr. W. Edwards Deming

http://www.brainyquote.com/quotes/authors/w/w_edwards_deming.html accessed 14 June, 2015.





*WT merely explains why there
is an opportunity*

*“Wrench time is not
strictly under the control
of the technicians”*

Doc Palmer

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*30 persons + 1 planner
= 47 persons!*

*“1 planner equals 17
persons”*

Doc Palmer

Maintenance Planning and Scheduling Handbook

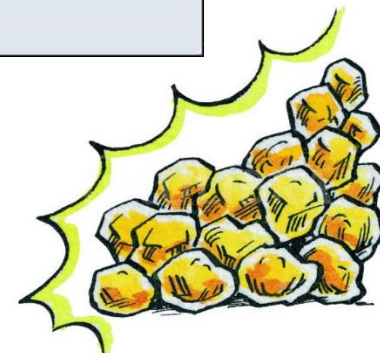


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Lesson: Because of Parkinson's Law, load up schedules



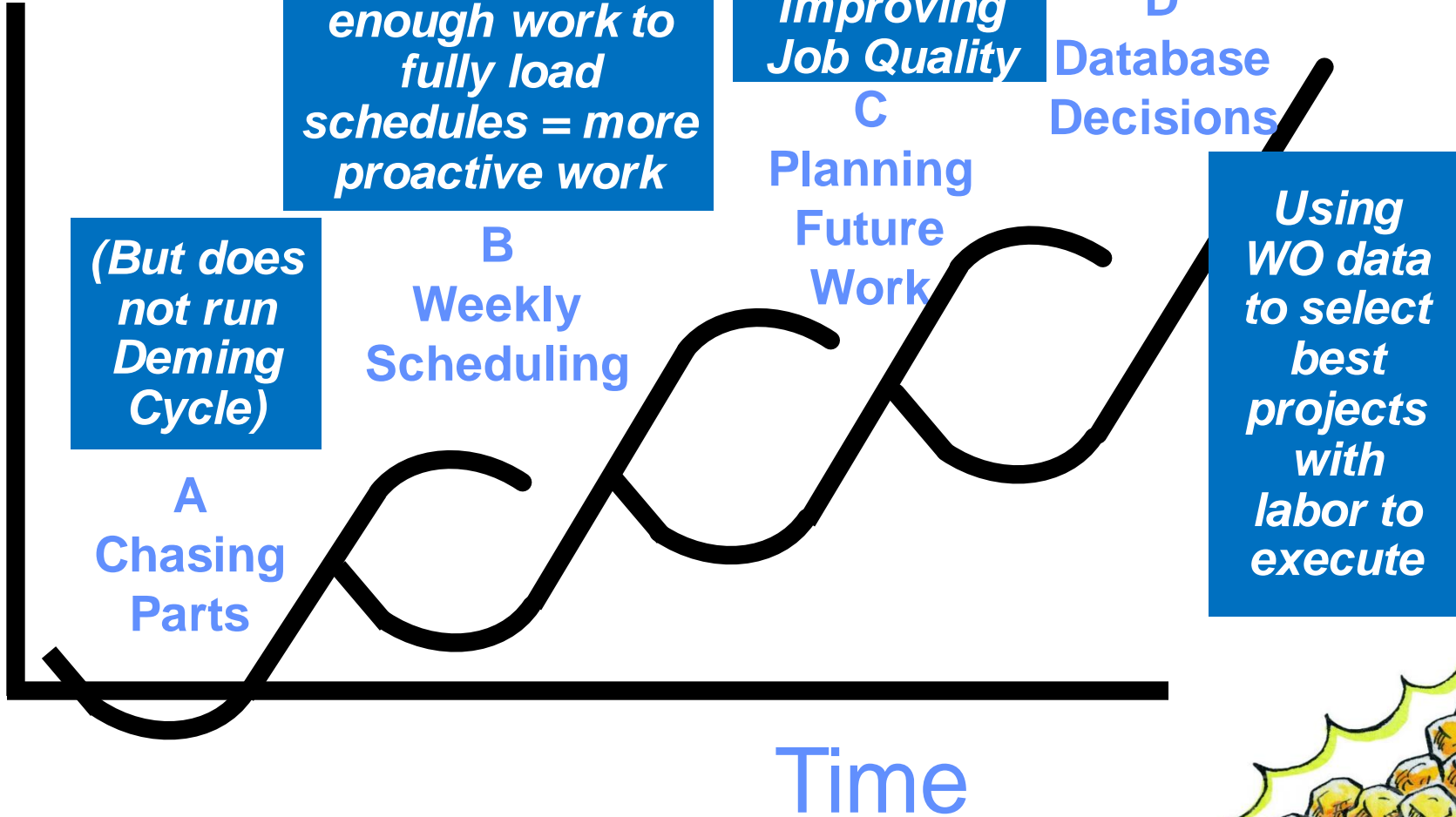
**Increase Your
Workforce without
Hiring**



How P&S Helps



Effectiveness



(But does not run Deming Cycle)

Run Deming Cycle to plan enough work to fully load schedules = more proactive work

Deming Cycle Improving Job Quality

D Database Decisions

Using WO data to select best projects with labor to execute





*Extra labor to do more
proactive work*

*“Efficiency is doing things
right; effectiveness is
doing the right things.”*

Dr. Peter F. Drucker

[http://www.brainyquote.com/quotes/authors/p/peter
drucker.html](http://www.brainyquote.com/quotes/authors/p/peter_drucker.html) accessed 14 June, 2015.





*Be able to pick the best
proactive work and projects*

*“Modern maintenance
needs to do less with less”*

Larry Bradley 2005

*Technical Superintendent
St. Johns River Power Park 2005*





Some other stuff



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Vendors and contractors

“The result of long-term relationships is better and better quality, and lower and lower costs.”

Dr. W. Edwards Deming

http://www.brainyquote.com/quotes/authors/w/w_wards_deming.html accessed 14 June, 201





People, management, and measuring

*“Be careful to mind the
store and not just mind the
score”*

Attributed to Unknown





“Avoid KP-Itis”

Bob Welnick



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Only needs one KPI!





*“It is better to train
employees and lose them
than to not train them and
keep them”*

Zig Ziglar

<https://www.goodreads.com/quotes/search?utf8=%E2%9C%93&q=ziglar+train&commit=Search>
accessed 26 July, 2023.





“Everyone should go home at the end of the day knowing if they have won or lost”

*Charles Coonradt
The Game of Work*





“The prevailing system of management has crushed fun out of the workplace.”

Dr. W. Edwards Deming

http://www.brainyquote.com/quotes/authors/w/w_wards_deming.html accessed 14 June, 201⁵





“Most of what we call management consists of making it difficult for people to get their work done.”

Dr. Peter F. Drucker

<http://www.brainyquote.com/quotes/authors/p/drucker.html> accessed 14 June, 2015.





*“Everyone should enjoy
their work”*

Doc Palmer

Maintenance Planning and Scheduling Handbook



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“Everyone is an adult”

Doc Palmer

Maintenance Planning and Scheduling Handbook



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*“The most important thing
in communication is
hearing what isn't said.”*

Dr. Peter F. Drucker

[http://www.brainyquote.com/quotes/authors/p/peter
drucker.html](http://www.brainyquote.com/quotes/authors/p/peter_drucker.html) accessed 14 June, 2015.





Conclusion



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*There's a lot of stuff to think
about*

*“Rational behavior
requires theory. Reactive
behavior requires only
reflex action.”*

Dr. W. Edwards Deming

http://www.brainyquote.com/quotes/authors/w/w_wards_deming.html accessed 14 June, 201





*“You can make a lot of
crazy rules if you ignore
reality!”*

(Doc’s daughter Abby)





Thank you
for letting me be part
of your maintenance
family!

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**MAINTENANCE PLANNING
AND SCHEDULING**

WORKSHOPS

Edmonton, AB
April 16-17, 2024

Atlanta, Georgia
June 18-19, 2024

St. Catharines Niagara area, ON
November 13-14, 2024