Mastering the Essentials to Achieve Speedy Results in Your Lab

(10 Essentials of Successful, Rapid Change Management in the Lab)

Presented by Jim Ellis & Leo Serrano

Lab Quality Confab

New Orleans

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Agenda:

Mastering the Essentials to Achieve Speedy Results in Your Lab

- Introductions
- Agenda
- Market Conditions
- Purpose of Workshop

  10 Essentials of Successful, Rapid Change Management in the Lab:

  1. Learning to "Think"
  2. Learning to "See" the Opportunities
  3. Prioritize the Opportunities – Make your Shortlist in Priority Order
  4. Define Success for each Change (measure of Success, time frame, value
  5. Pick your team (Stakeholders, Team Captain, Players)
  6. Gantt your time line for the complete project (all steps of DMAIC)

  Break

  7. Learning to "Execute" your plan (detail out all steps of DMAIC)
  8. Create a "Job Jar" of Future Changes as you go along but stay focused on current change
  9. Presentation/s to Stakeholders, Customers, Team (possible PIP use)
  10. Learning to "Count" (only if time allows, if not, read on your own)

  Summary of Workshop & Closing Remarks

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The Challenge you Face:

A few "early adopters"[1] such as TriCore, Henry Ford, Geisinger, Kaiser North, New York's Northwell Health (formerly North Shore-LIJ), John T. Mather (Long Island) and some others have made the transition from "volume (data) to value" and have taken up to as long as 5 years to get there.

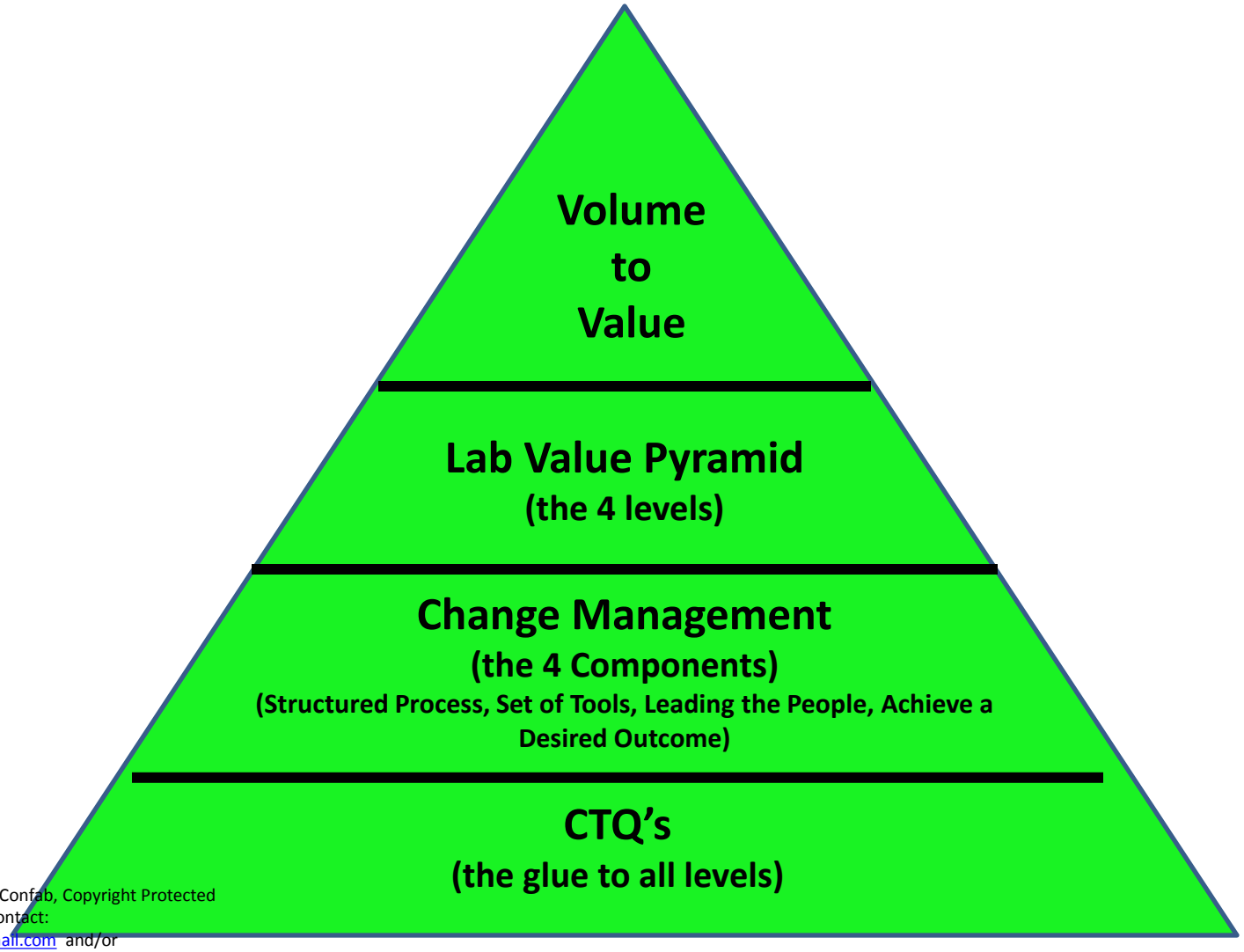
Labs today do not have the luxury to take up to 5 years to make this transition. Those labs that lag behind making this transition are vulnerable to being out-sourced, consolidated, bought-out or closed down.

2 major constraints are preventing most labs from rapidly making this transition/change: time and resident subject matter experts (SME's).

Where do you stand?

1 – CAP Today, July, 2016, "Laboratory – 2.0" & Lab Quality Confab, John T. Mather Memorial Hospital, October, 2013.

Relationships of Critical Components to Successfully transition/change from Volume (data) to Value



The Laboratory Value Pyramid

a Strategic Pathway to transition/change from Volume (data) to Value driven by the principles of change management & CTQ's

Lab Behavior at Level 4

- Your lab's practices and competencies are recognized as best-in-class by your peer groups and third party reviewers.
- You are consulting with other hospitals and systems to help them replicate what you have done within your institution.
- Your lab is recognized as among "the best in the business" because of how your lab team uses all the attributes from the first three levels.
- Examples of world-class labs can be found within prestigious institutions like TriCore, Henry Ford, Geisinger, Kaiser North, New York's Northwell Health (formerly North Shore-LIJ) & John T. Mather (Long Island).

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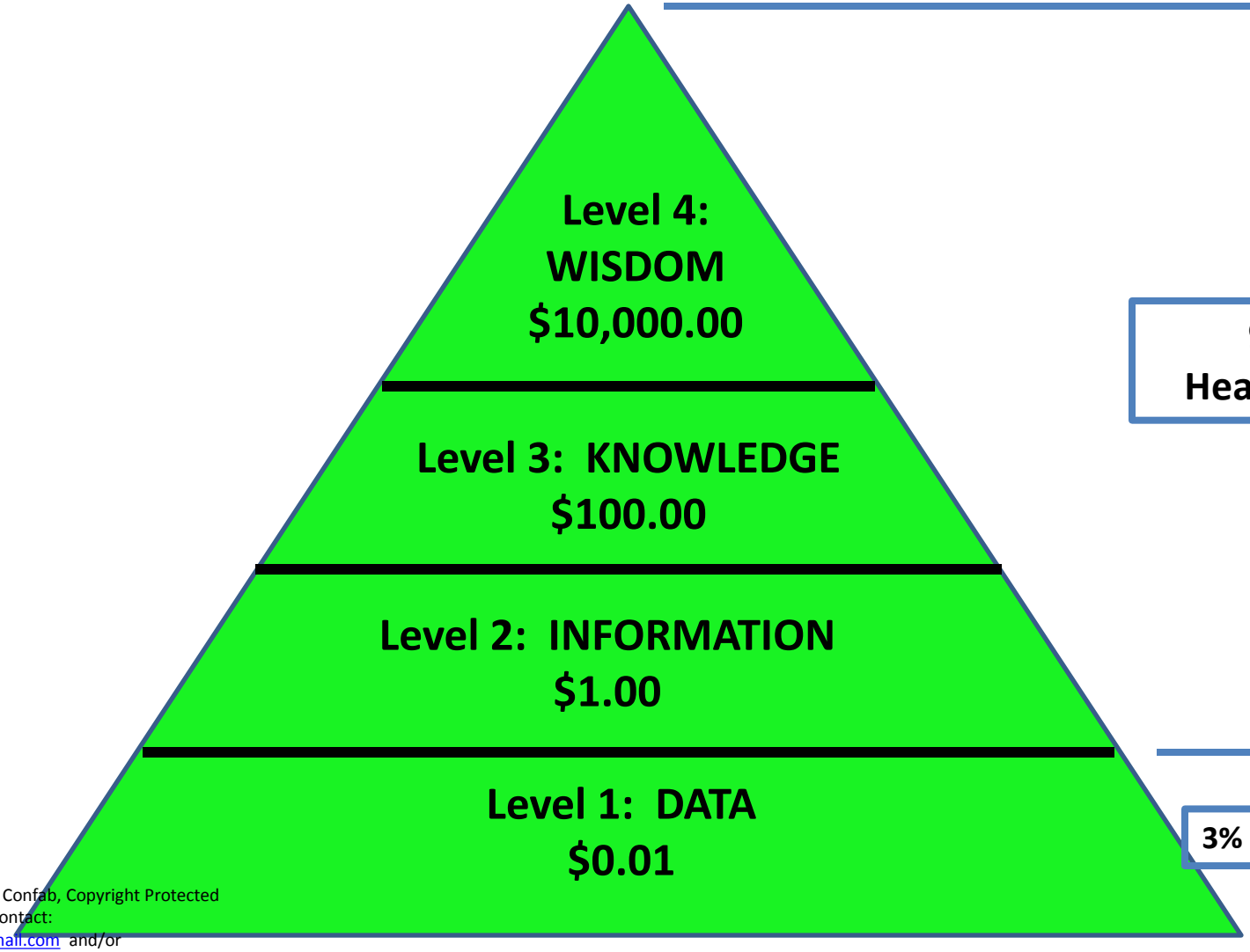
Relative $ Value of Lab's "Products" as a Lab Moves Up the Value Pyramid



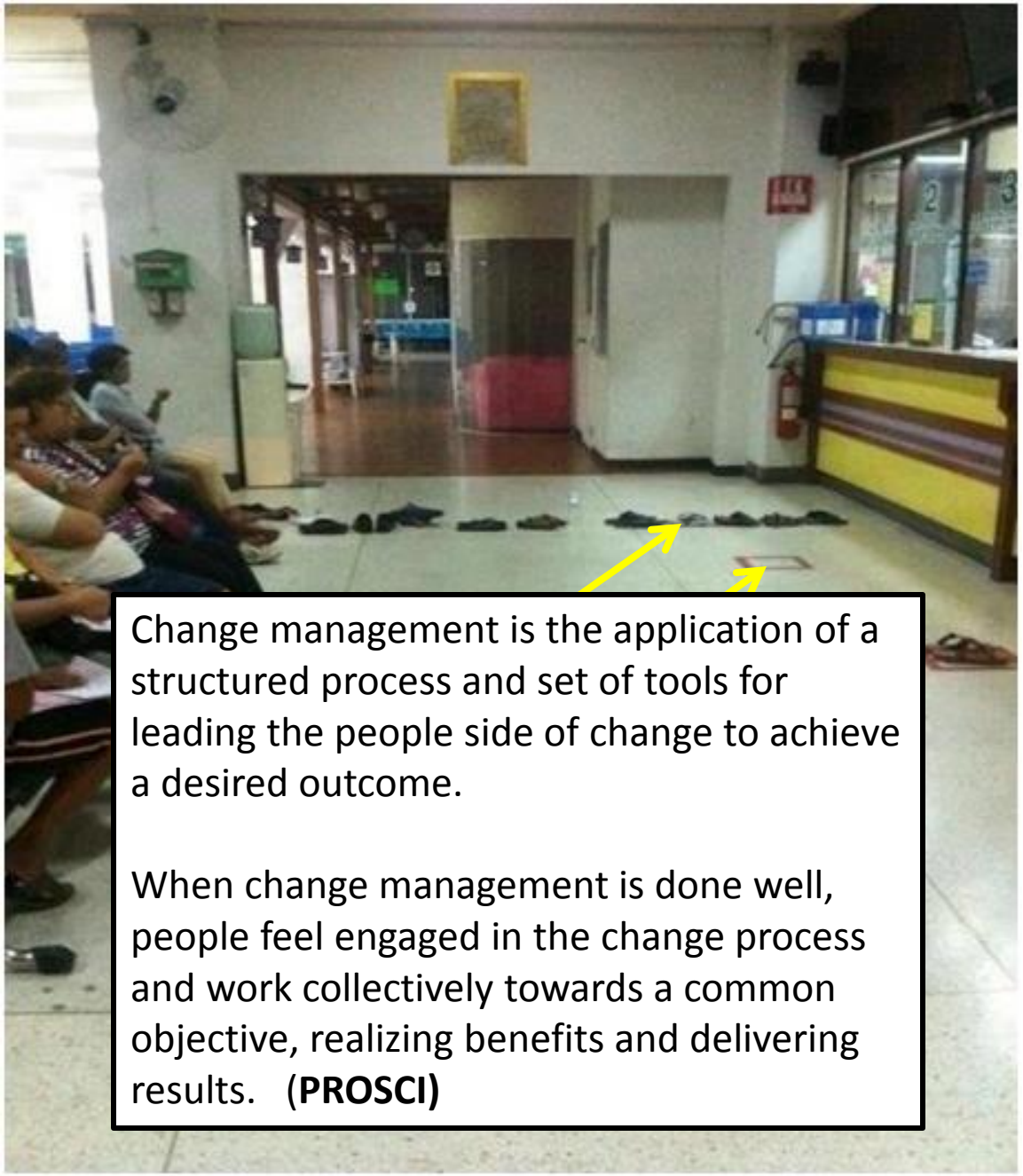
97% of Healthcare $'s

3% of Healthcare $'s

Example:
Change Management Project

Successful?
Rapid?
Change?
Management?

Was the "Customer" really more satisfied after the change?



Change management is the application of a structured process and set of tools for leading the people side of change to achieve a desired outcome.

When change management is done well, people feel engaged in the change process and work collectively towards a common objective, realizing benefits and delivering results. (**PROSCI)**

Title of Workshop – the words - We have chosen the words to the title of this workshop with purpose:

- **Successful** – in the eyes of your customer, adds value, operational definition, what would success look like, how would you measure it & know when it is achieved?
- **Rapid** – 1st project 30 days or less, majority 90 days or less, max. 12 months
- **Change** – operational definition, measurement before & after, and time bound
- **Management** = Leadership, YOU!

Apply the 10 essentials in the order presented and you have a very high probability of success. Start small. Steep learning curve. Practice makes perfect. Let's get started!

Purpose of Workshop:

We have sub-titled this workshop, "10 Essentials of Successful, Rapid Change Management in the Lab". The purpose will be to **impart to the workshop attendees a process for successful, rapid change management in the lab that has been evolved and used successfully by the two speakers throughout their careers.**

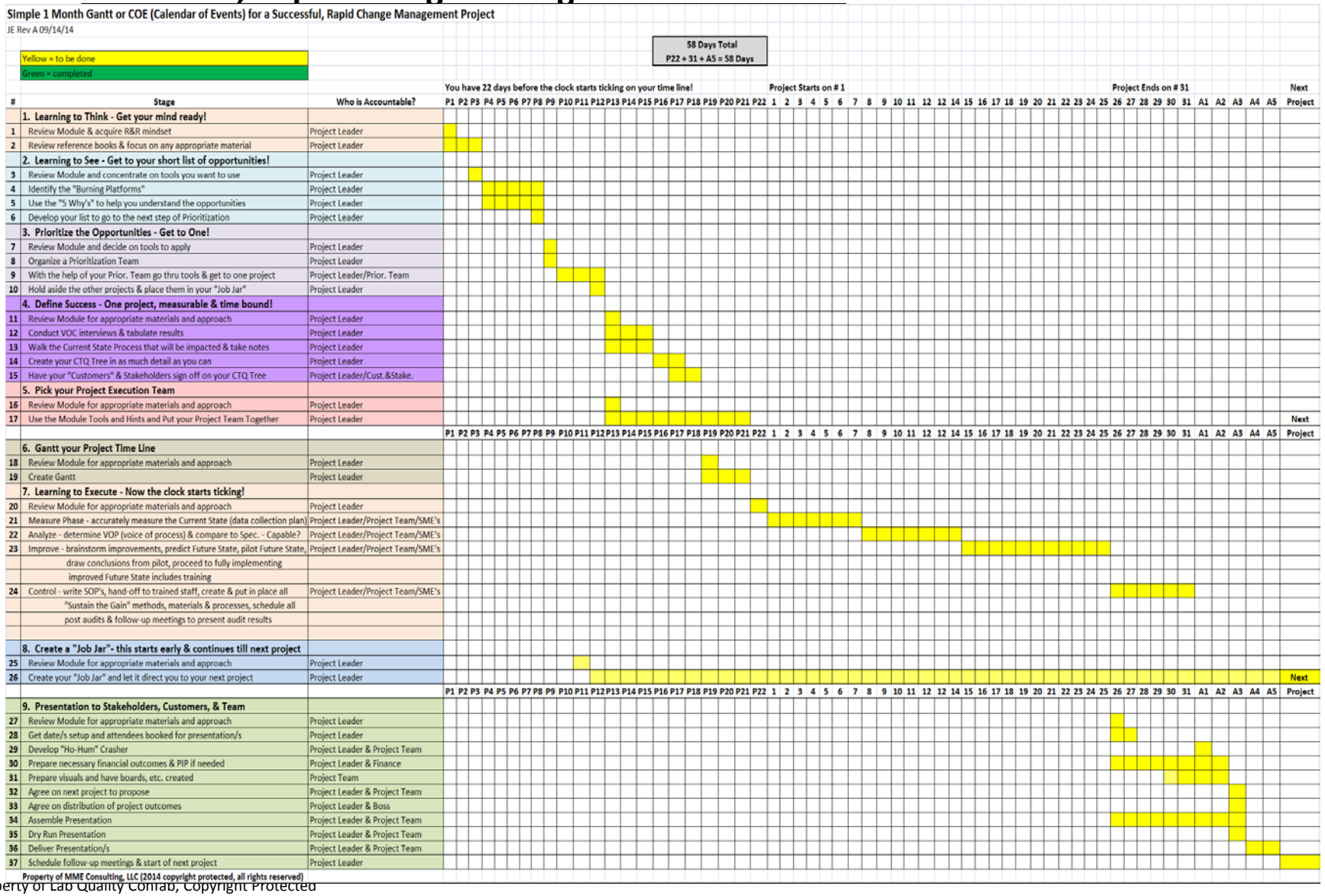
Key Learnings:

At the end of the workshop we would expect the attendees to have learned that there is a methodical, sequential process broken into **10 essential steps** that when mastered will produce successful, rapid change management results. The attendees have the opportunity to learn about specific tools that can be used in each of the 10 steps which when applied will **accelerate the time to do a change management project and will increase the probability of success**. Below is a listing of some of the tools that will be presented and described:

4 Stages of Competence
5 Styles of Thinking
VOC
CTQ Tree
Gantt Chart
DMAIC Roadmap
Data Collection Plan
PIP
Job Jar
Ho-Hum Crasher
Impact vs. Effort Diagram
5 Why's
5 S
SIPOC
Value Stream Map
Kano
FMEA
Prioritization Matrix

The hidden secrets to putting all these tools to work in a specific sequence to tell a "story" of success will be the greatest learning shared with the attendees.

At the end of today's Workshop you will know how to do this & what each line, color, section and number means as you progress through the "10 Essentials of Successful, Rapid Change Management in the Lab"



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Agenda – 10 Essentials of Successful, Rapid Change Management in the Lab:

1. Learning to "Think" – J. Ellis
2. Learning to "See" the Opportunities
3. Prioritize the Opportunities – Make your Shortlist in Priority Order
4. Define Success for each Change (measure of Success, time frame, value
5. Pick your team (Stakeholders, Team Captain, Players)
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Summary of Workshop & Closing Remarks

1. Learning to "Think" - Jim Ellis

- R&R
- Ready & Receptive
- Ready to embark on change
- Receptive to accepting "I don't know what I don't know.
- Receptive to take on a leadership role in initiating successful, rapid change within your laboratory and institution.

1. Learning to "Think"

The First Tool in this section helps get at "Thinking"

Uncover the "Styles" of thinking that are predominant in a Western business culture. You can read all about this in detail by going to the book "The Art of Thinking" by A. Harrison & R. Bramson

Exercise on Styles of Thinking

Learning to Think - Exercise

Your Question*:

For me, charts and graphs in a book or article are usually:

1. **More useful than the narrative, if they are accurate.**
2. **Useful, if they clearly display the important facts.**
3. **Useful, if supported and explained by the narrative.**
4. **Useful, if they raise questions about the narrative.**
5. **No more and no less useful than other material.**

Circle one answer that is most like what you think.

***(Pg 209, "The Art of Thinking", A.F. Harrison & R.M. Bramson)**

1. Learning to "Think"

5 Thinking Styles*:

1. Synthesist
2. Idealist
3. Pragmatist
4. Analyst
5. Realist

* ("The Art of Thinking", A.F. Harrison & R.M. Bramson)

TO STYLES OF THINKING

BEHAVIORAL CLUES

Orientation:	I SYNTHESIST	II IDEALIST
Characterized by:	Integrative view Sees likeness in apparent unlikes Seeks conflict & synthesis Interested in change Speculative Data meaningless w/o interpretation	Assimilative or holistic view Broad range of views welcomed Seeks ideal solutions Interested in values Receptive Data & theory of equal value
Strengths:	Focus on underlying assumptions Points out abstract conceptual aspects Good at preventing over-agreement Best in controversial conflict-laden situations Provides debate & creativity	Focus on process, relationships Points out values & aspirations Good at articulating goals Best in unstructured, value-laden situations Provides broad view, goals and standards
Liabilities:	May screen out agreement May seek conflict unnecessarily May try too hard for change & newness May theorize excessively Can appear uncommitted	May screen out "hard" data May delay from too many choices May try too hard for "perfect solutions" May overlook details Can appear overly sentimental

(Pgs 114-115, "The Art of Thinking", A.F. Harrison & R.M. Bramson)

5 Styles of Thinking

III PRAGMATIST	IV ANALYST	V REALIST
Eclectic view "What works" Seeks shortest route to payoff Interested in innovation Adaptive Any data or theory that gets us there	Formal logic & deduction Seeks "one best way" Seeks optimal solutions formulas Interested in "scientific" solutions Prescriptive Theory and method over data	Empirical view & induction Relies on "facts" & expert opinion Seeks solutions that meet current needs Interested in concrete results Corrective Data over theory
Focus on payoff Points out tactics & strategies Good at identifying impacts Best in complex, incremental situations Provides experiment & innovation	Focus on method & plan Points out data & details Good at model-building & planning Best in structured, calculatable situations Provides stability & structure	Focus on facts & results Points out realities & resources Good at simplifying, "cutting through" Best in well-defined, objective situations Provides drive & momentum
May screen out long-range aspects May rush too quickly to payoff May try too hard for expediency May rely too much on what "sells" Can appear over-compromising	May screen out values & subjectives May over-plan, over-analyze May try too hard for predictability May be inflexible, overly cautious Can appear tunnel-visioned	May screen out disagreement May rush to over-simplified solutions May try too hard for consensus & immediate response May over-emphasize perceived "facts" Can appear too results-oriented

5 Styles of Thinking

BEHAVIORAL CLUES TO STYLES OF THINKING

WHAT TO LOOK AND LISTEN FOR	SYNTHESIST	IDEALIST	PRAGMATIST	ANALYST	REALIST
Apt to appear:	Challenging, skeptical, amused; or may appear tuned out, but alert when disagrees.	Attentive, receptive; often supportive smile, head nodding, much verbal feedback.	Open, sociable; often a good deal of humor, interplay, quick to agree.	Cool, studious, often hard to read; may be a lack of feedback, as if hearing you out.	Direct, forceful; agreement and disagreement often quickly expressed nonverbally.
Apt to say:	"On the other hand . . ." "No, that's not necessarily so . . ."	"It seems to me . . ." "Don't you think that . . . ?"	"I'll buy that . . ." "That's sure one way to go . . ."	"It stands to reason . . ." "If you look at it logically . . ."	"It's obvious to me . . ." "Everybody knows that . . ."
Apt to express:	Concepts, opposite points of view; speculates, may identify absurdities.	Feelings, ideas about values, what's good for people, concerns about goals.	Non-complex ideas; may tell brief personal anecdotes to explain ideas.	General rules; describes things systematically, offers substantiating data.	Opinions; describes factually, may offer short, pointed anecdotes.
Tone:	Sardonic, probing, skeptical; may sound argumentative.	Inquiring, hopeful; may sound tentative or disappointed and resentful.	Enthusiastic, agreeable; may sound insincere.	Dry, disciplined, careful; may sound set, stubborn.	Forthright, positive; may sound dogmatic or domineering.
Enjoys:	Speculative, philosophical, intellectual argument.	Feeling-level discussions about people and their problems.	Brainstorming around tactical issues; lively give-and-take.	Structured, rational examination of substantive issues.	Short, direct, factual discussions of immediate matters.
Apt to use:	Parenthetical expressions, qualifying adjectives and phrases.	Indirect questions, aids to gain agreement.	Case examples, illustrations, popular opinions.	Long, discursive, well-formulated sentences.	Direct, pithy, descriptive statements.
Dislikes:	Talk that seems simplistic, superficially polite, fact-centered, repetitive, "mundane."	Talk that seems too data-bound, factual, "dehumanizing"; and openly conflictual argument unless about issues of caring or	Talk that seems dry, dull, humorless; or too conceptual, philosophical, analytical, "nit-picking."	Talk that seems irrational, aimless, or too speculative, "far-out"; and irrelevant humor.	Talk that seems too theoretical, sentimental, subjective, impractical, "long-winded."
Under stress:	Pokes fun.	Looks hurt.	Looks bored.	Withdraws.	Gets agitated.
Stereotype:	"Troublemaker"	"Bleeding Heart"	"Politician"	"Great Stone Face"	"Blockhead"

(Pgs 110-111, "The Art of Thinking", A.F. Harrison & R.M. Bramson)

1. Learning to "Think"

Results of Exercise*:

		Pred. Range
1.	Analyst	30-35%
2.	Realist	19-24%
3.	Idealist	32-37%
4.	Synthesist	6-11%
5.	Pragmatist	13-18%

For me, charts and graphs in a book or article are usually:

1. More useful than the narrative, if they are accurate.
2. Useful, if they clearly display the important facts.
3. Useful, if supported and explained by the narrative.
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5. No more and no less useful than other material.

*** ("The Art of Thinking", A.F. Harrison & R.M. Bramson)**

1. Learning to "Think"

Results for J. Ellis – complete test*:

(complete test is 18 questions, 5 answers, rank 5-1, total pts. = 270)

		Score
1.	Realist	63
2.	Analyst	60
3.	Pragmatist	52
4.	Idealist	48
5.	Synthesist	47
	Total	270

Conclusion:

- **Balanced after 40 years**
- **Favor Realist & Analyst (no surprise!)**
- **Would not have been like this 35 yrs ago**
- **4 points or less is not statistically different**

*** ("The Art of Thinking", A.F. Harrison & R.M. Bramson)**

1. Learning to "Think"

The Second Tool for helping you "Think" will help you know if a person is "getting it" and at what level they are proficient in "getting it".

(The Four Stages of Competence (Abraham Maslow, 1940)

- Unconscious Incompetence
- Conscious Incompetence
- Conscious Competence
- Unconscious Competence

1. Learning to "Think"

Tool/s: 5 Styles of Thinking
The Four Stages of Competence

Reference/s: The Art of Thinking – A. Harrison & R. Bramson, 1982
The Four Stages of Competence - A. Maslow, 1940
The Art of War – Sun-tzu, 1994
Guerilla Marketing – J. Levinson, 1984
Consultative Selling – M. Hanan, 1995
Successful Large Account Management (LAMP) – R. Miller & S. Heiman, 1991
The Little Engine that Could – W. Piper, 1930

Other Books to Consider:
Sacred Cows Make the Best Burgers – R. Kriegel & D. Brandt, 1996
Who Moved my Cheese – Dr. S. Johnson, 1998

Statement/s to Remember:
"You don't know what you don't know."
"The only constant is change."

1. Learning to "Think"

In Summary

Leading a successful, rapid change management project **requires you to "Learn how to Think" probably a little differently** than you have in the past. Recognize that **everyone thinks differently** and that in your quest to be successful you will most likely run into all 5 Thinking Styles and combinations of them**. Use various behavioral approaches** for each individual that you must influence in order to be successful with your change project. **Recognize the competency level** of yourself and your team members as you progress through your project. **Appropriately coach, assist, train**, etc. for each team member based upon their competency level of the desired skill. **Use the "Thinking" hints** from those that have been successful leading change management projects. **At the end of this step you will be ready to "Learn how to See" your change opportunities.**

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LUNCH

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Summary of Workshop & Closing Remarks

Learning to See #2

- Leadership – Leaders must:
  - Be customer focused
    - Voice of the customer
  - Challenge the status quo (A-I-O)
  - Promote tough standards
  - Be visible and available
  - Champion excellence
  - Act with integrity – (3 M's)
  - Facilitate teamwork

It's That "Vision Thing"

- **"The very essence of leadership is that you have to have a vision. It's got to be a vision you articulate clearly and forcefully on every occasion."**

—Theodore Hesburgh
President of the University of Notre Dame

Learning to See (examples)

- Need to do more with less!
  - Why do we do it this way?
    - 5 Why's
    - Look at what can be changed? Be creative!
  - Decreasing volume/revenues – WHAT TO DO?
    - How do we do our work?
      - Value Stream, Process Map, SIPOC
    - What does the lab look like?
      - Take pictures of the lab- critique them
      - 5 S your lab
        - » Sort, Segregate, Shine, Strengthen, Standardize

Learning to See #2

- What is wrong with the status quo?
  - Ask your “customers”
- Methods for Customer Input
  - Know who your customers are.
    - Customer satisfaction surveys
    - Improvement surveys – **ask** what they think
    - Measure areas surveyed
    - Encourage customer feedback-suggestion boxes
    - Visit with your customers – ask what they need
    - Customize the input process to fit the customer base.

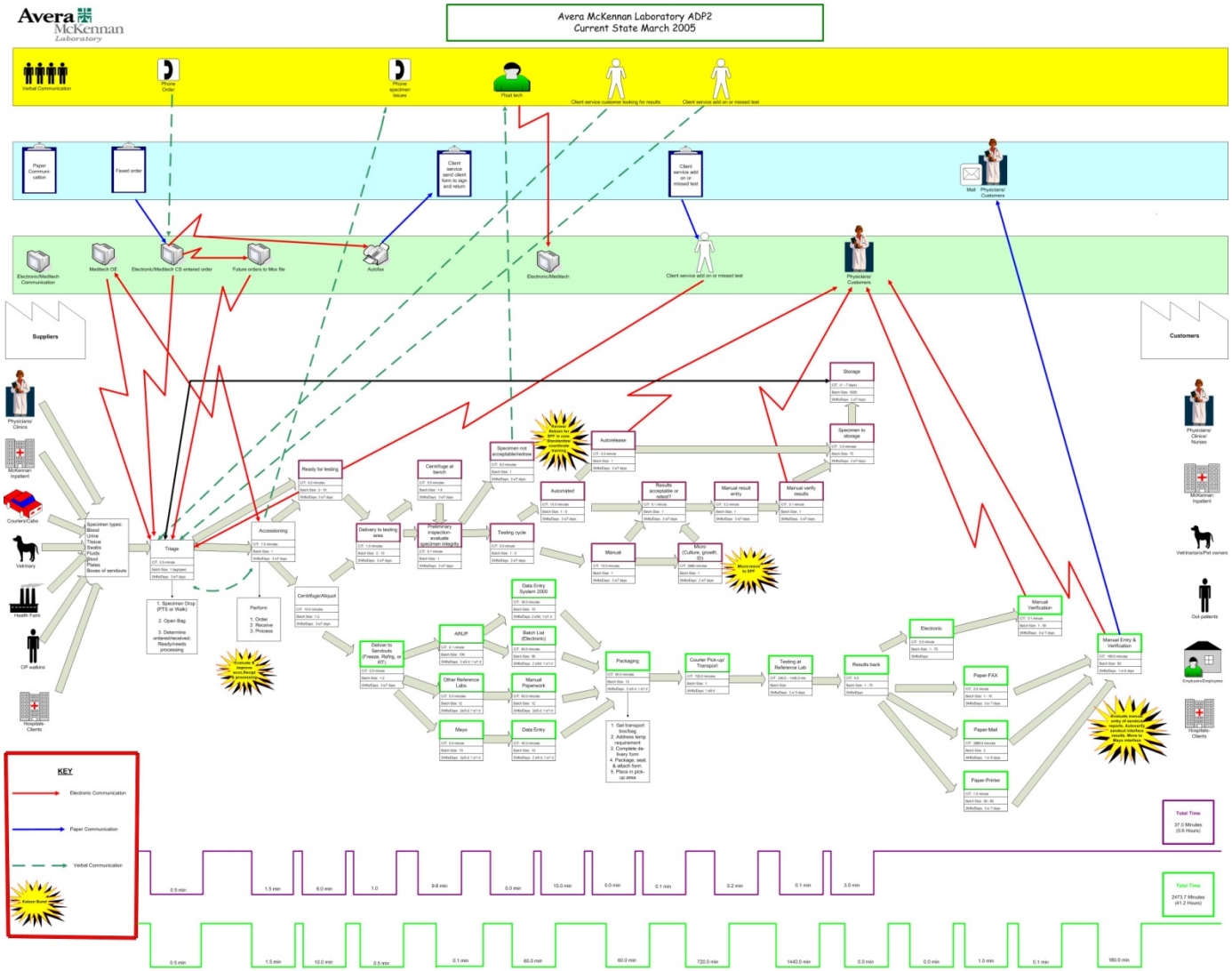
Setting the Vision – Value Stream Mapping

- **High-level view of all of the activities required to take a specific product from raw material (tube of blood) to the finished product (reported test result)**
  - **Current state map**
    - **Identifies current processes**
    - **Captures critical metrics**
  - **Future state map**
    - **Identifies projects to eliminate variation, errors and waste**
    - **Will become the new Current State**

Challenge the Status Quo

- What is wrong with the status quo?
  - Ask your “customers”
- Value Stream Mapping
  - Allows for visualization of the processes in an orderly fashion
  - Allows for a timeline that shows time for each process or sub-process
  - Process Mapping just shows the processes in an orderly fashion-no timeline
- Spaghetti Diagrams
  - Useful for visualizing walk patterns pre and post lean design

Sample VSM



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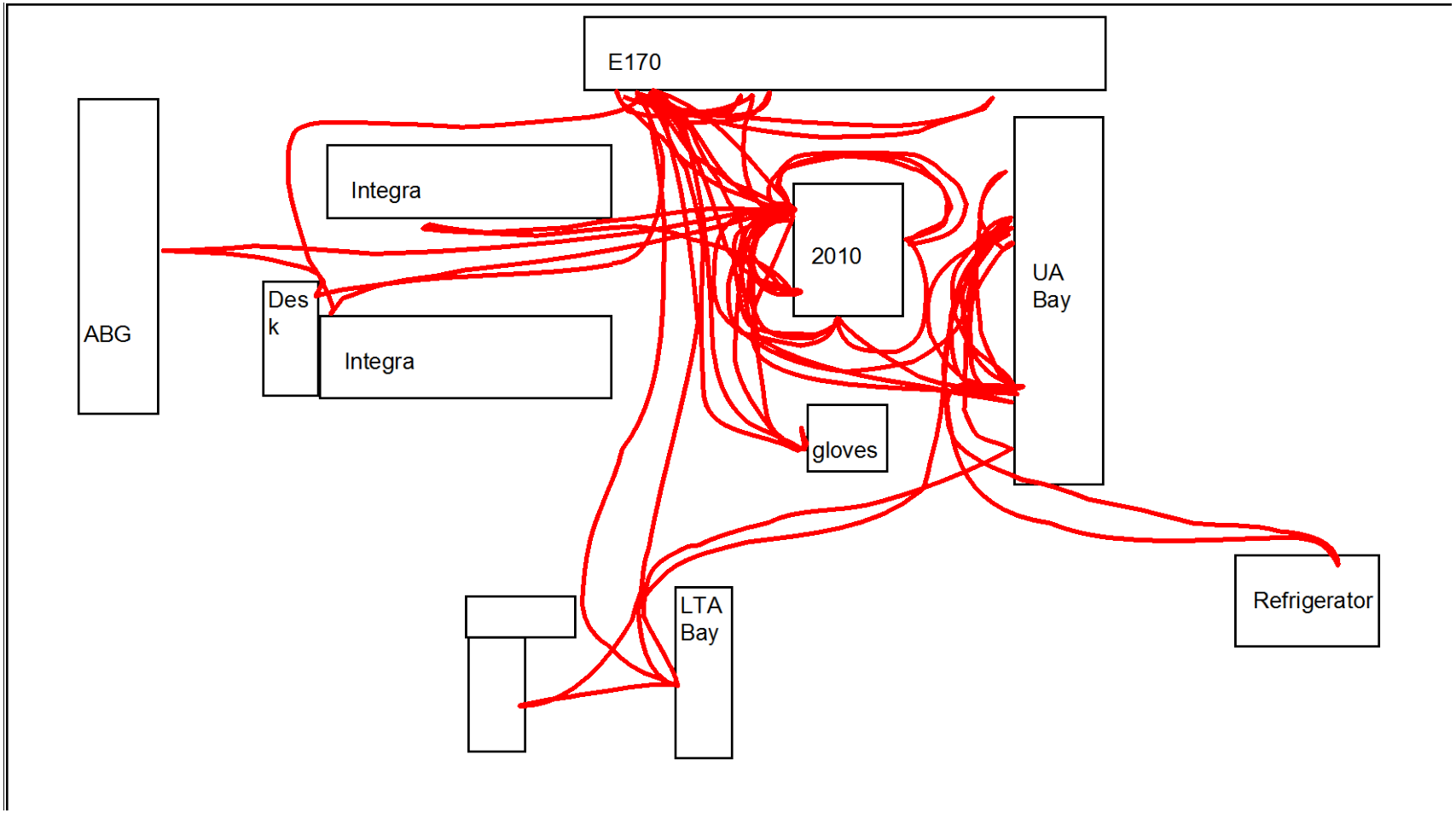
Sample Spaghetti Diagram



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Summary of Workshop & Closing Remarks

Prioritization #3

- **You should consider creating a prioritization matrix if**:
- You cannot do everything at once,
- You are uncertain about the best use of your resources or energy or
- You are looking toward specific improvement goals.

Prioritization #3

- For example, if the team is considering which improvement step to attack first, some of their criteria might be:
  - Low investment cost
  - Maximum use of existing technology
  - High potential dollar savings
  - High improvement potential for process speed
  - High improvement potential for defect reduction
  - High customer satisfaction potential
  - Minimum impact on other processes
  - Ease of implementation
  - High probability of quick results

Prioritization Matrix #3

Picking One CTQ

	Criteria being compared to									Row	
	Low cost	Use of technology	Potential Savings	Increased speed	Decreased defects	Customer Satisfaction	Minimal impact	Easy to implement	Quick Results	Total	%
Criteria	a.	b.	c.	d.	e.	f.	g.	h.	i.		
a. Low Cost		5	0.1	0.2	0.1	0.2	1	5	1	12.6	7.5%
b. Use of Technology	0.2		0.2	0.2	0.2	0.2	5	1	1	8	4.8%
c. Potential Saving	10	5		5	5	5	10	10	1	51	30.3%
d. Increased Speed	5	5	0.2		1	1	1	5	1	19.2	11.4%
e. Decreased Defects	10	5	0.2	1		1	5	5	1	28.2	16.7%
f. Cutomer Satisfaction	5	5	0.2	1	1		5	5	5	27.2	16.2%
g. Minimum Impact	1	0.2	0.1	1	0.2	0.2		1	0.2	3.9	2.3%
h. Easy to Implement	0.2	1	0.1	0.2	0.2	0.2	1		0.2	3.1	1.8%
i. Quick Results	1	1	1	1	1	0.2	5	5		15.2	9.0%
Column Total	**32.4**	**27.2**	**2.1**	**9.6**	**8.7**	**8**	**33**	**37**	**10.4**	168.4	**100.0%**

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4. Define Success for Each Change – (measure of success, time frame, value)

Description: Now that you have funneled all your potential **change opportunities down to the one** you are going to work on, where do you go from here? In order to be successful, complete in a "rapid" time frame and provide the leadership to accomplish these things **you will need to know how to do this**, what tools to use and have some examples and/or assistance from subject matter experts (SME's). This section about **defining success** and making it time bound **is the most important single thing to do right in your whole project plan**. **Do not underestimate the importance or the amount of time it takes to do this right. Do it right and you will look like a star at the end. Exceed expectations! Do it wrong and you will fail. At the end of this section you will have an operational definition of success, a preliminary CTQ Tree and time boundaries around accomplishment of goals.**

4. Define Success for Each Change – (measure of success, time frame, value)

How To:

- **First - Define Success** with an **operational definition**, must be **measurable**
- **Second - Make Success time bound Hint:** Give yourself some room to "play" in your written documentation of what Success would look like. Better to under promise and over deliver.
- **Conduct VOC** (voice of the customer) interviews and tabulate the data
- Take time to **directly observe** and take notes of the current process
- **Create a CTQ Tree**
- **Sort into primary and secondary CTQ's** (Critical to quality needs/drivers/where the pain is)
- **Complete your CTQ Tree**, as much as you can, which now has some measurements, goals and time boundaries around each Secondary CTQ that is impacting your one Primary CTQ
- Your **Primary CTQ should be a description of the one change** that you have funneled down to, e.g. Reduce Defects
- Your **Secondary CTQ's should be the drivers** that are producing Defects, e.g. one might be – too many QNS chemistry tubes. The metric for this Secondary CTQ could be Range of % QNS Chem Tubes in one work week. The goal could be - reduce my % QNS chemistry tubes from a weekly range of 28 -31% down to at least 15-18%. The time boundary for the goal could be within the next 30 days.
- Do this for all CTQ's and **get buy off from your customer.**

"CTQ's are to Value as Westgard Rules are to QC", J. Ellis 2014

4. Define Success for Each Change – (measure of success, time frame, value)

How To:

First - Define Success with an **operational definition**, must be **measurable**

Second - Make Success time bound - Hint: Give yourself some room to "play" in your written documentation of what Success would look like. Better to under promise and over deliver.

Reduce defects in the core lab - Change Management Project selected from Thinking, Seeing and Prioritizing

Operational Definition: Reduce defects in my top 3 defect categories

Time frame: 1 month

Measure of Success: Greater than 30% reduction in each category

"CTQ's are to Value as Westgard Rules are to QC", J. Ellis 2014

4. Define Success for Each Change – (measure of success, time frame, value)

How To:

Conduct VOC (voice of the customer) interviews and tabulate the data

Take time to **directly observe** and take notes of the current process

Conduct "Customer" Interviews: Setup 20 minute interviews with representative lab staff from all shifts and external lab customers to flush out types of defects and relative importance of these defects from each of their perspectives. Get this done in 5 days or less.

Sort, analyze interview data: List types of defects in order of severity from the collective input from the interviews.

Direct Observation of Current Process: Go directly observe the process at representative times throughout a complete production cycle (usually 24 hrs.) as you are conducting interviews and take notes of what types of defects you see and rank them in severity. This is not a deep dive into collecting data that will be done during the Measure phase of your project.

"CTQ's are to Value as Westgard Rules are to QC", J. Ellis 2014

4. Define Success for Each Change – (measure of success, time frame, value)

How To:

Create a CTQ Tree

Sort into primary and secondary CTQ's (Critical to quality needs/drivers/where the pain is)

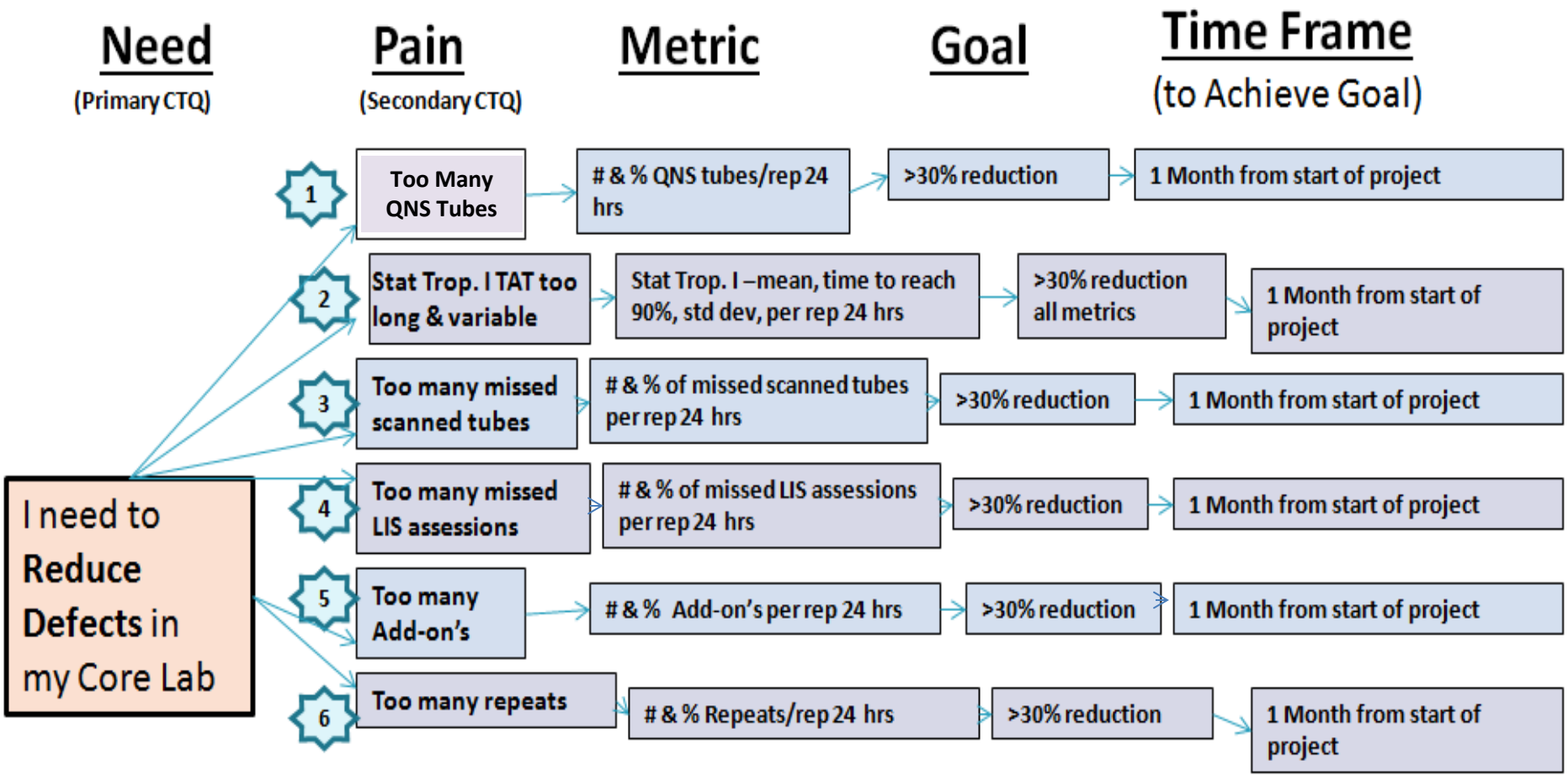
Complete your CTQ Tree, as much as you can, which now has some measurements, goals and time boundaries around each Secondary CTQ that is impacting your one Primary CTQ.

Your **Primary CTQ should be a description of the one change** that you have funneled down to, e.g. Reduce Defects

Your **Secondary CTQ's should be the drivers** that are producing Defects, e.g. one might be – too many QNS chemistry tubes. The metric for this Secondary CTQ could be Range of % QNS Chem Tubes in one work week. The goal could be - reduce my % QNS chemistry tubes from a weekly range of 28 -31% down to at least 15-18%. The time boundary for the goal could be within the next 30 days.

"CTQ's are to Value as Westgard Rules are to QC", J. Ellis 2014

Reduce Core Lab Defects Example:



At this stage you don't yet know which Secondary CTQ's are the Top 3.

"CTQ's are to Value as Westgard Rules are to QC", J. Ellis 2014

More Examples of Primary CTQ Needs & Categories of Needs:

• Quality	Defects
• Quality	Customer Satisfaction Scores
• Quality	Rework
• Quality	Accuracy of Result/Diagnosis
• Quality	Employee Satisfaction
• Productivity	Footprint square footage
• Productivity	Reported Results/Paid Labor Hr.
• Financial/Cost	Output/Cost
• Financial/Cost	Labor Consumed
• Service	MTBF
• Service	Back Orders
• Service	Shipment Errors
• Service	Down time for maintenance
• Safety	Noise
• Safety	Lost time due to accidents

4. Define Success for Each Change – (measure of success, time frame, value)

How To

Do this for all CTQ's and get buy off from your customers

Customer Sign Off: This CTQ document is the most important document of your project! It is a living document that you will rev as you move through the steps of your project. You now know what Success is, how to measure it, how much time you have to achieve it and what value it will bring to your customers when completed successfully. Keep it visible and updated! Use it in your progress communications.

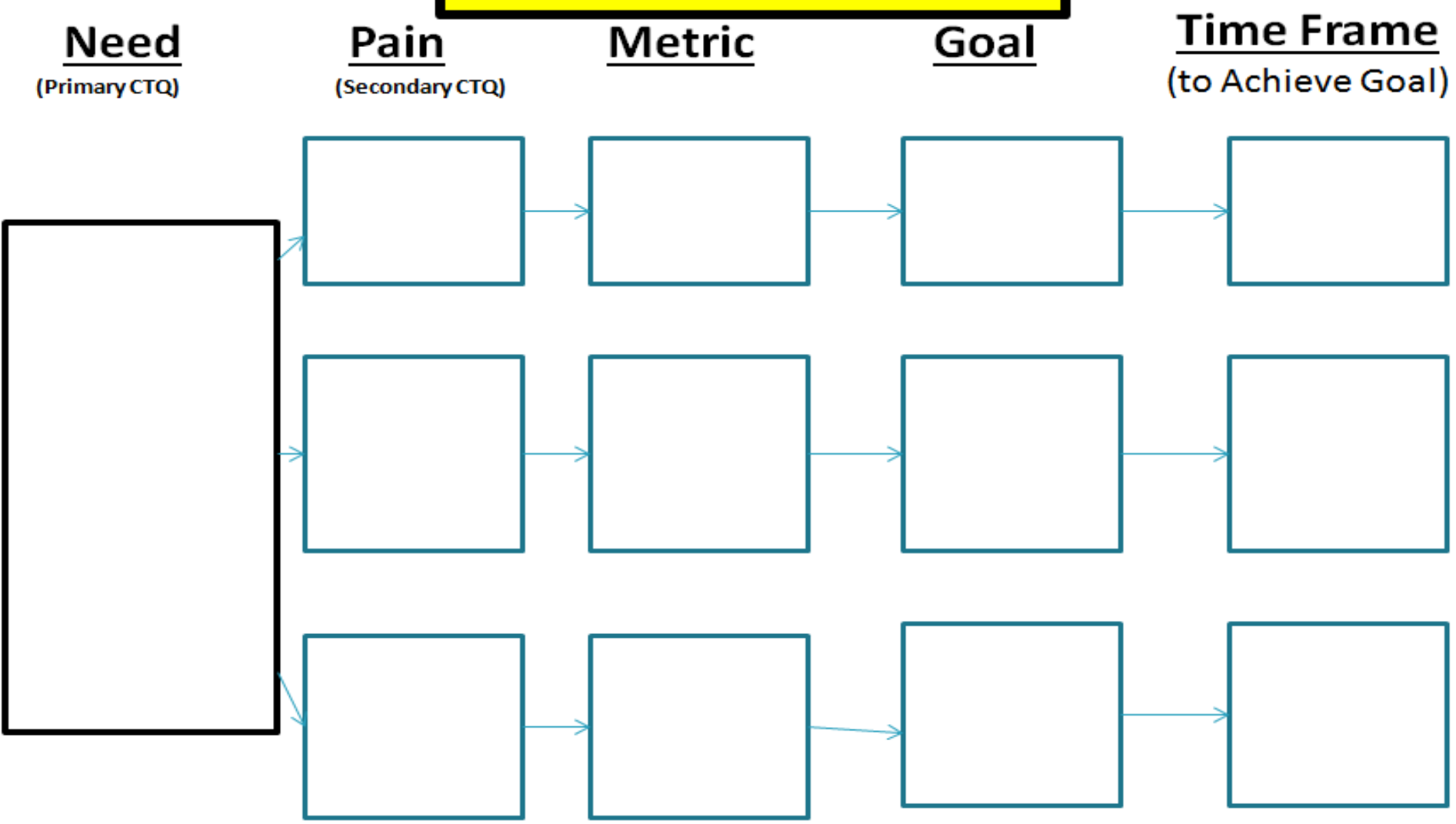
"CTQ's are to Value as Westgard Rules are to QC", J. Ellis 2014

4. Define Success for Each Change – (measure of success, time frame, value)

CTQ Exercise

"CTQ's are to Value as Westgard Rules are to QC", J. Ellis 2014

CTQ Exercise



Let's walk through the development of a Primary CTQ:

(Note: the only difference in the 4 levels of the Pyramid are the CTQ's chosen at each level.)

CONTROL

Summary of your project (you worked through Define, Measure, Analyze, Improve & Control & now you are 8 weeks later):

CTQ Tree Green Hospital Lab Example

Stage: CONTROL # 4

Define	Define	Define	Define	Measure	Analyze	Improve	Improve	Improve	Control
Primary CTQ	Secondary CTQ (Pain I'm feeling)	Goal Future State	Metric	Current State Process Sigma	Predicted Future State (20% or >)	Time Frame Future State	Achieved Future State	% Improvement	$ Value (annual)
Quality /Value	The quality & value of my Chemistry & Immunoassay process is not what it could be. There are too many errors and defects in the process. It needs improvement.	Measurably improve by at least 20% the quality (fewer defects) & value of my Chem/IA process within 60 days start to finish.	Process sigma level. Measured from LIS receipt into lab through to tube in storage & result released. As reference 6 Sigma is 3.4 defects per million opportunities.	3.31	3.97 or >	60 days duration from time project is approved through improvements implemented.	4.17	26%	$28,350

4. Define Success for Each Change – (measure of success, time frame, value)

Tool/s: Voice of the Customer (VOC) Interviews
Critical to Quality (CTQ) Tree

Reference/s: The Six Sigma Memory Jogger - M. Brassard, et. al., 2002

Statement/s to remember: "Garbage in, Garbage out" – author Unknown
"CTQ's are to Value as Westgard Rules are to QC" – J. Ellis 2014

Agenda – 10 Essentials of Successful, Rapid Change Management in the Lab:

1. Learning to "Think"
2. Learning to "See" the Opportunities
3. Prioritize the Opportunities – Make your Shortlist in Priority Order
4. Define Success for each Change (measure of Success, time frame, value
5. Pick your team (Stakeholders, Team Captain, Players) – L. Serrano
6. Gantt your time line for the complete project (all steps of DMAIC)

LUNCH

7. Learning to "Execute" your plan (detail out all steps of DMAIC)
8. Create a "Job Jar" of Future Changes as you go along but stay focused on current change
9. Presentation/s to Stakeholders, Customers, Team (possible PIP use)
10. Learning to "Count"

Summary of Workshop & Closing Remarks

KEY CRITERIA

- Form a powerful coalition –
  - They will support your change effort
- Get a good mix in your team
  - Check titles at the door
- Create the Vision within the team
  - Help them articulate the vision
  - Identify the top priorities to accomplish the mission.
- Communicate the vision to all around you.
  - Develop a 90 second elevator speech.

LEAD BY EXAMPLE

What to look for

- To achieve High Performance a team needs diversity in the orientation of its individual team members:
  - Some team members will be needed who are primarily oriented towards task and target date accomplishment (Consult your Thinking Styles work).
  - Other team members will be needed who hold process, planning, organization and methods in the highest regard.
  - Teams also need members who nurture, encourage and provide communication nodes. Otherwise, anarchy and intense frustration can result, as individuals demand that "their way" is "the only way."
  - Teams will certainly need some members who are creative and innovative. This quality is helpful when product design, inspiration, optimism or humor is needed.
  - The final type of team member needed by a High Performance Team is a floater-someone who is capable of identifying with all of the above orientations and can fill in when one of the viewpoints is missing.

The Process Excellence team at Avera McKennan is a good example of a diverse team.

1. There was a member from the chemistry area who while very bright and technically capable and organized was seen as quiet and bland. Too laid back to be a leader (became the de-facto leader).
2. Another member was young, aggressive, open to new ideas and working on an off shift. (creative, the designer)
3. A third member was calm, detail oriented, analytical, well spoken but not overly aggressive. Working on an off shift, this person consistently looked for ways to reduce waste. (the float)
4. A fourth member worked in Client Services – very bright, nurturing, organized, detail and customer oriented. (the communicator)
5. The fifth member had been out of the working lab for many years- very IT oriented and nurturing. (a mother figure)

Most importantly they worked as a team.

Picking Your Team #5

New Core Layout

Agenda – 10 Essentials of Successful, Rapid Change Management in the Lab:

1. Learning to "Think"
2. Learning to "See" the Opportunities
3. Prioritize the Opportunities – Make your Shortlist in Priority Order
4. Define Success for each Change (measure of Success, time frame, value
5. Pick your team (Stakeholders, Team Captain, Players)
6. Gantt your time line for the complete project (all steps of DMAIC) – J. Ellis

Break

7. Learning to "Execute" your plan (detail out all steps of DMAIC)
8. Create a "Job Jar" of Future Changes as you go along but stay focused on current change
9. Presentation/s to Stakeholders, Customers, Team (possible PIP use)
10. Learning to "Count"

Summary of Workshop & Closing Remarks

6. Gantt your time line for the complete project (all steps of DMAIC)

Description: Since **you have now time bound your change project** when you defined Success, you better be sure that you have a **documented, detailed plan** to complete your project in the time period you bound it to. This plan should be easy to follow and detail each step, each Milestone, who is accountable and what is accomplished. The plan should have some flexibility built in but be rigid enough to **meet or exceed your goals for completing the plan on or before the deadline**. The plan needs to have **approval from your Stakeholders** and those affected by the change. Your core change team should have input into creating the plan and approving the final version. Your plan should be very **visible and displayed** in the area affected by the change. You should conduct **weekly meetings** to provide updates and any changes to the plan. At the end of this section then you will be ready to execute.

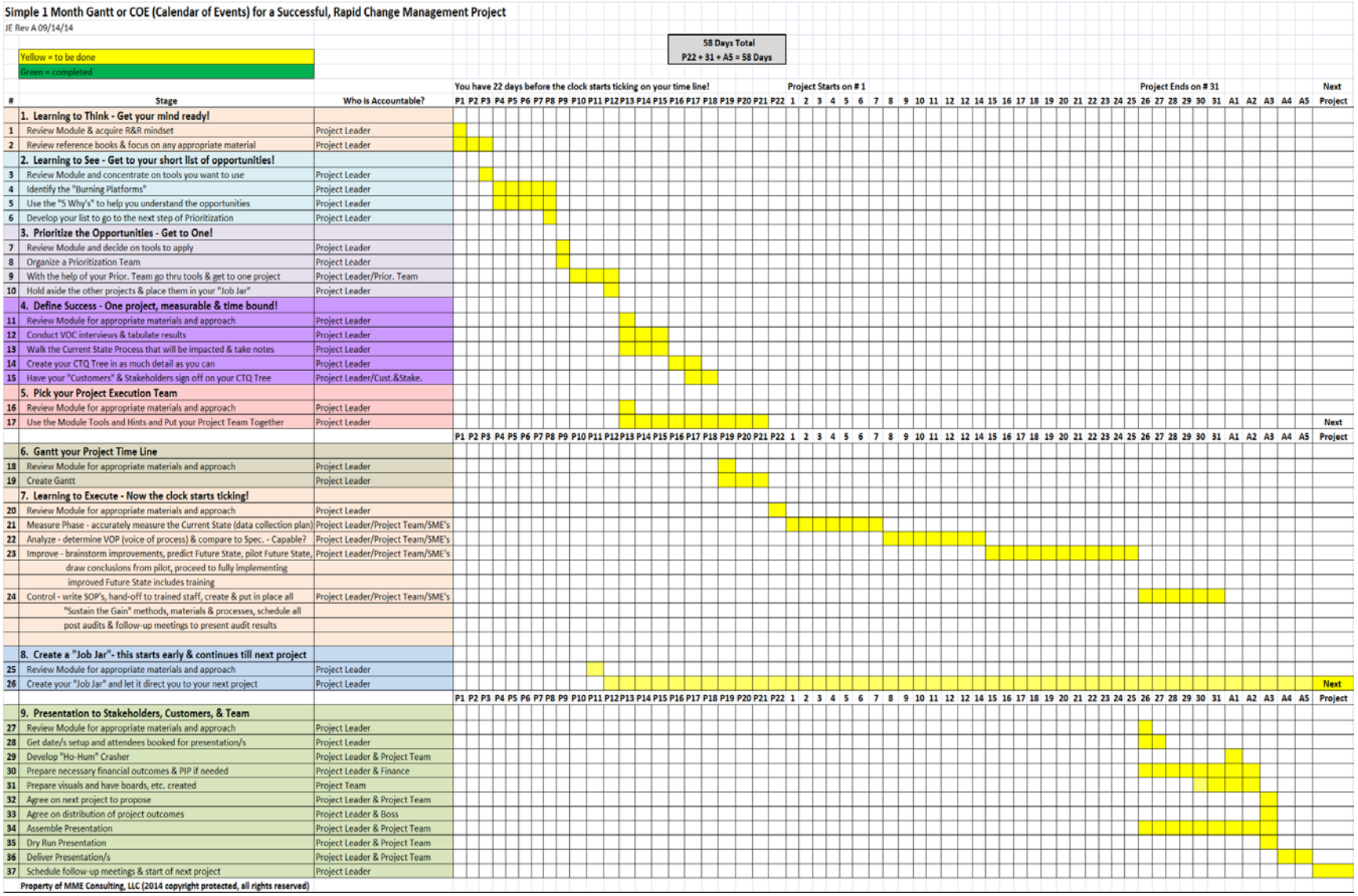
6. Gantt your time line for the complete project (all steps of DMAIC)

How To:

- Start out simple with a one change plan that can be completed in 30 days or less
- Use a simple one page Excel spread sheet
- Follow the **5 step model of DMAIC**
- Color code the 5 steps
- Break it down into days of the month
- Color code activities that are not completed and then change the color when completed
- Show who is accountable for each activity/action
- Have the plan mounted on a poster board from Kinko's that you can display in your office, meetings, the area impacted, etc.
- Conduct weekly updates and progress meetings
- Seek professional project management expertise as you take on more complex projects
- Take a course in project management
- Learn how to make and use Gantt charts
- Have someone on your team become project management certified

"Make your Plan, Work your Plan" – P. Quattrini, 1975

6. Gantt your time line for the complete project (all steps of DMAIC)



Simple 1 Month Gantt or COE (Calendar of Events) for a Successful, Rapid Change Management Project

JE Rev A 09/14/14

Yellow = to be done
Green = completed

58 Days Total
P22 + 31 + A5 = 58 Days

You have 22 days before the clock starts ticking on your time line! | Project Starts on # 1 | Project Ends on # 31 | Next Project

#	Stage	Who is Accountable?
	1. Learning to Think - Get your mind ready!	
1	Review Module & acquire R&R mindset	Project Leader
2	Review reference books & focus on any appropriate material	Project Leader
	2. Learning to See - Get to your short list of opportunities!	
3	Review Module and concentrate on tools you want to use	Project Leader
4	Identify the "Burning Platforms"	Project Leader
5	Use the "5 Why's" to help you understand the opportunities	Project Leader
6	Develop your list to go to the next step of Prioritization	Project Leader
	3. Prioritize the Opportunities - Get to One!	
7	Review Module and decide on tools to apply	Project Leader
8	Organize a Prioritization Team	Project Leader
9	With the help of your Prior. Team go thru tools & get to one project	Project Leader/Prior. Team
10	Hold aside the other projects & place them in your "Job Jar"	Project Leader
	4. Define Success - One project, measurable & time bound!	
11	Review Module for appropriate materials and approach	Project Leader
12	Conduct VOC interviews & tabulate results	Project Leader
13	Walk the Current State Process that will be impacted & take notes	Project Leader
14	Create your CTQ Tree in as much detail as you can	Project Leader
15	Have your "Customers" & Stakeholders sign off on your CTQ Tree	Project Leader/Cust.&Stake.
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24	Control - write SOP's, hand-off to trained staff, create & put in place all "Sustain the Gain" methods, materials & processes, schedule all post audits & follow-up meetings to present audit results	Project Leader/Project Team/SME's
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35	Dry Run Presentation	Project Leader & Project Team
36	Deliver Presentation/s	Project Leader & Project Team
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L. Serrano at Lserrano1944@gmail.com

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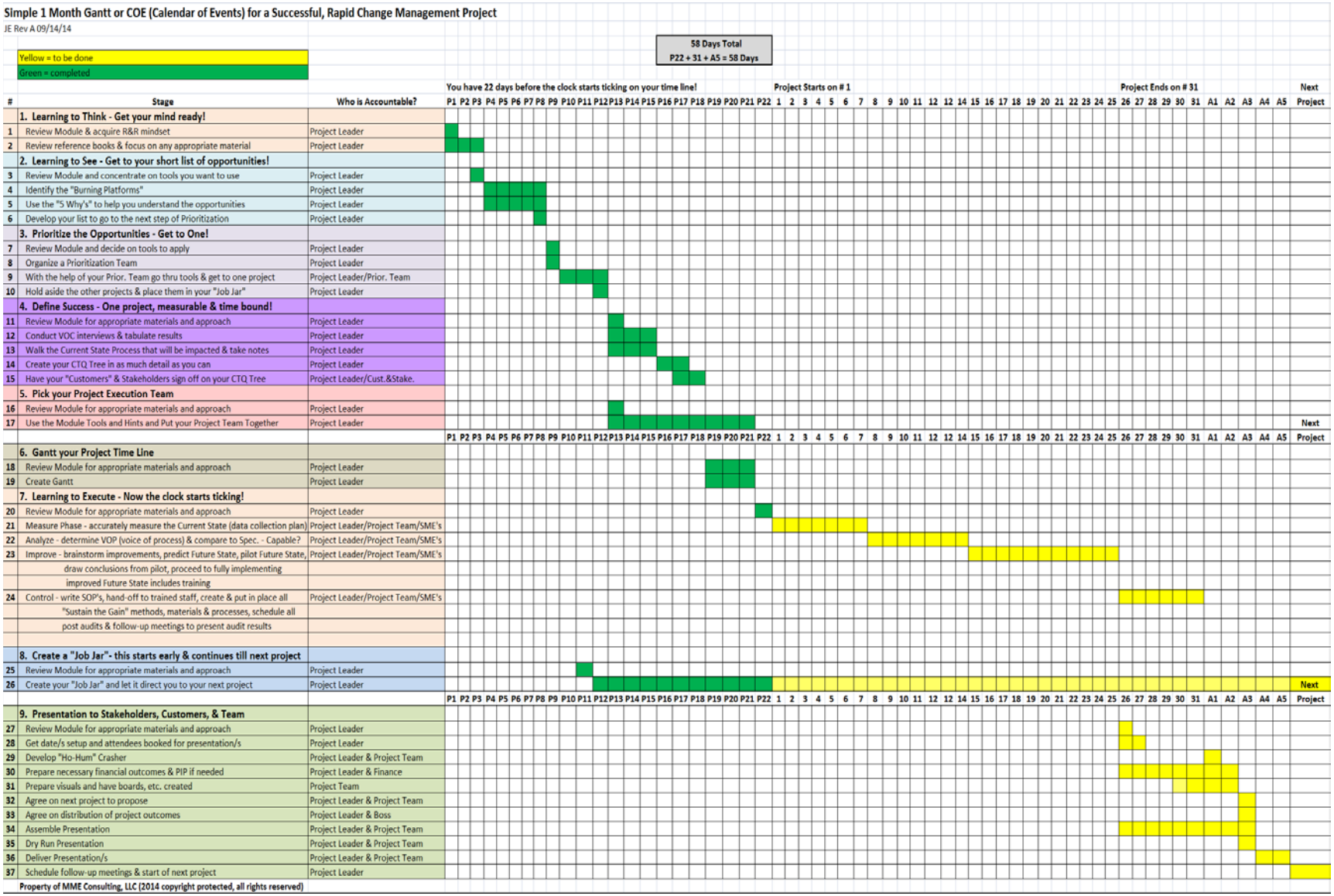

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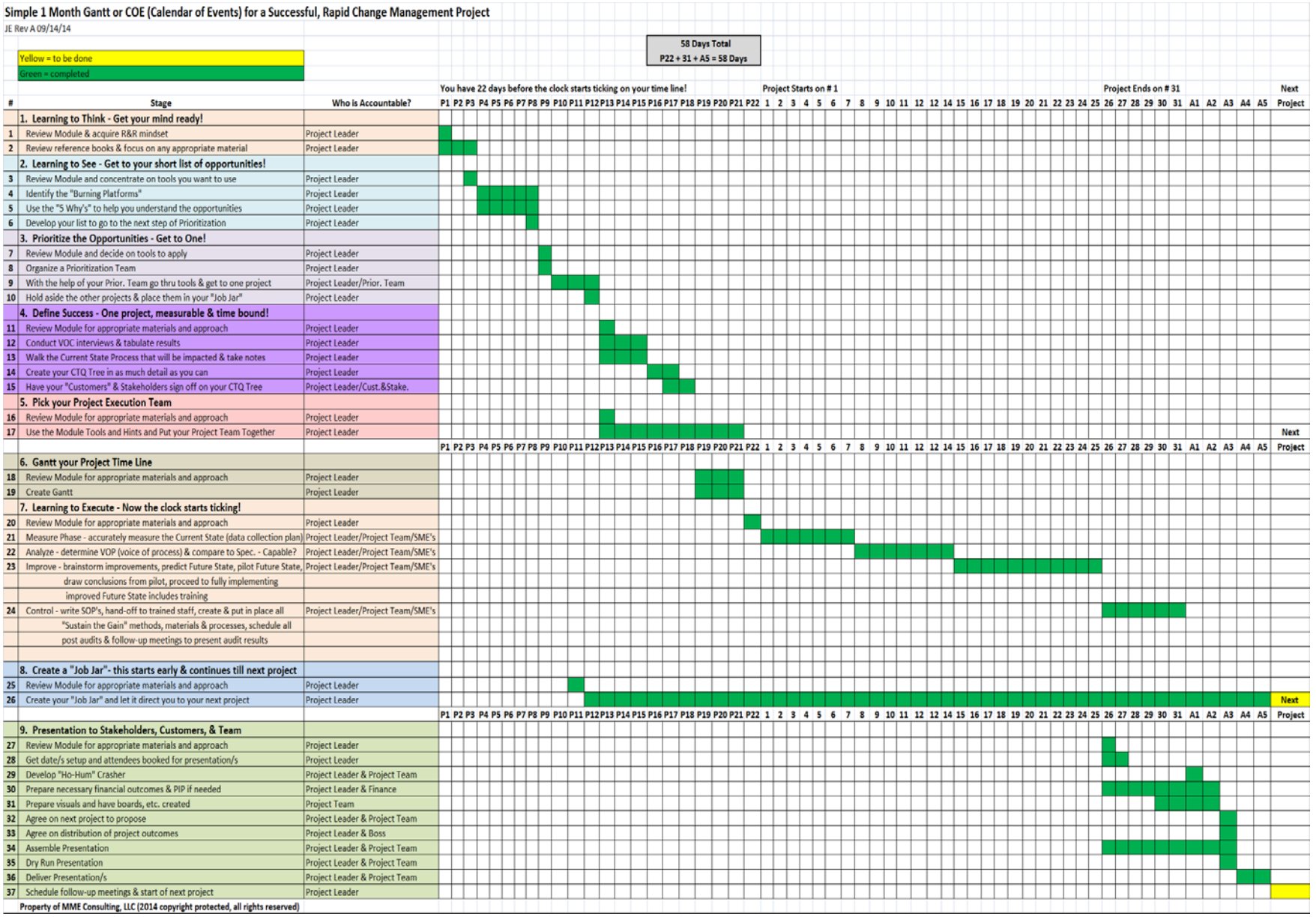

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For your 1st few projects you will need to spend some time getting ready. Steps 1 -6 are things you do in the Pre-Execute days (P-days), 22 P days in this 1 month example.

6. Gantt your time line for the complete project (all steps of DMAIC)

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	6. Gantt your Project Time Line																							
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Remember to change color code for tasks from yellow to green when completed. Plan your days appropriately when you have more than one task happening on a particular day.

6. Gantt your time line for the complete project (all steps of DMAIC)

Simple 1 Month Gantt or COE (Calendar of Events) for a Successful, Rapid Change Management Project

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Project Starts on # 1 — Project Ends on # 31 — Next Project

P22 1 2 3 4 5 6 7 8 9 10 11 12 12 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 A1 A2 A3 A4 A5

If you have not used DMAIC tools before in project execution, best to bring in an SME who has had experience, not just book trained! Consider your suppliers as a potential resource pool.

Things can get a little hectic at presentation time. Plan, Plan, Plan! Start preparing at least a week before your project is due to finish. SME's can really help you out here too.

"A" Days are after your project officially ends. In this example, 5 days.

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- Follow the **5 step model of DMAIC**
- Color code the 5 steps
- Break it down into days of the month
- Color code activities that are not completed and then change the color when completed
- Show who is accountable for each activity/action
- Have the plan mounted on a poster board from Kinko's that you can display in your office, meetings, the area impacted, etc.
- Conduct weekly updates and progress meetings
- Seek professional project management expertise as you take on more complex projects
- Take a course in project management
- Learn how to make and use Gantt charts
- Have someone on your team become project management certified

"Make your Plan, Work your Plan" – P. Quattrini, 1975

6. Gantt your time line for the complete project (all steps of DMAIC)

Tool/s:
Gantt Chart
Excel Spreadsheet
DMAIC roadmap
Kinko's

Reference/s:
Project Management for Dummies – S. Portny, 2013
Google Search for images of Gantt Charts
The Six Sigma Memory Jogger - M. Brassard, et. al., 2002

Statement/s to remember: "Make your Plan, Work your Plan" – P. Quattrini, 1975

Send me an email and I will send you the Excel file of the Gantt Chart.
jellisaiken@gmail.com

Agenda – 10 Essentials of Successful, Rapid Change Management in the Lab:

1. Learning to "Think"
2. Learning to "See" the Opportunities
3. Prioritize the Opportunities – Make your Shortlist in Priority Order
4. Define Success for each Change (measure of Success, time frame, value
5. Pick your team (Stakeholders, Team Captain, Players)
6. Gantt your time line for the complete project (all steps of DMAIC)

Break

7. Learning to "Execute" your plan (detail out all steps of DMAIC)
8. Create a "Job Jar" of Future Changes as you go along but stay focused on current change
9. Presentation/s to Stakeholders, Customers, Team (possible PIP use)
10. Learning to "Count"

Summary of Workshop & Closing Remarks

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Summary of Workshop & Closing Remarks

7. Learning to "Execute" your plan

Description: At this point in time you have "Learned to Think", "Learned to See", Prioritized your Opportunities to one project, Defined Success & Created a preliminary CTQ Tree, Picked your Team & Stakeholders and drawn up a first pass at a Gantt time line of your project. Now you are ready to begin working your plan (executing). The **execution of your plan continues to follow the DMAIC roadmap** that you have illustrated in your Gantt Chart. This section begins at the Measure Phase and concludes at the end of the Control Phase. The slides provided in this section illustrate some of the type of output you can expect from execution of a change project. Other examples will be found in the slides from the final presentation section. For this section we will use the 1 month project example shown in the Gantt your project time line section. Until you become proficient at the skill of project execution the **best way to learn and accelerate your project is to get some expert help** in this stage of your project. Again, if you start with short, less complex projects you can learn more quickly and then move to longer, more complex projects. **Learn from an expert** if you can so that you do it the "right" way from the beginning. At the end of this section you should have all the data you need to create a final presentation of your project.

7. Learning to "Execute" your plan

How To:

- You need to be the **"air traffic controller"** and always **stay at least one week ahead** of the current week.
- **Recap** each week on Friday and set the stage for the following week. **Communicate** your recap and next week's plan in formal documentation.
- **Foresee** anything that could alter or change a date by staying in constant communication with all those doing the work.
- **IT** is always a wild card – plan accordingly.
- **Anticipate** needed supplies and order with plenty of lead time.
- If you have **renovations** to do be sure you work closely with operations/facilities to avoid delays.
- For longer and more complex projects, set aside a **"war room"** (lockable) so that you have a secure, quiet place to work on your project, meet with your team and display you project plan, progress and results.
- Hold those assigned **accountable** for hitting deadlines – customers included, nobody gets a free pass.
- **Meet with your team** on Monday AM to kick off the week and on Friday AM-PM to recap.

7. Learning to "Execute" your plan

- Keep your **Stakeholders informed** weekly of the progress.
- **No excuses, no slackers!**
- **Plan to beat** your plan's deadline by a few days
- Don't underestimate how difficult and **time consuming a pilot and implementation** can be.
- Implementation should be a **gradual hand-off and transition** to be sure the folks you need to "Teach how to fish" are proficient before you and your team move on.
- Consider **outside help** while you are learning these skills, e.g. outside consultants, outside your department, your suppliers, etc.
- Create **lots of visual displays**, scorecards, an audit process, SOP's, andons, mistake proofing, 5'S cleanup days, have fun, contests, prizes, visibility, communication!
- There is **no substitute for direct observation**, computer printouts and reports are next best, word of mouth is last resort.
- If production runs over 24 hrs., be sure you **observe a few representative 24 hr production turns.**

If you have not used DMAIC tools & not followed a DMAIC pathway before in project execution, best to bring in an SME who has had experience, not just book trained! Consider your suppliers as a potential resource pool or outside consultants.

7. Learning to "Execute" your plan

MEASURE

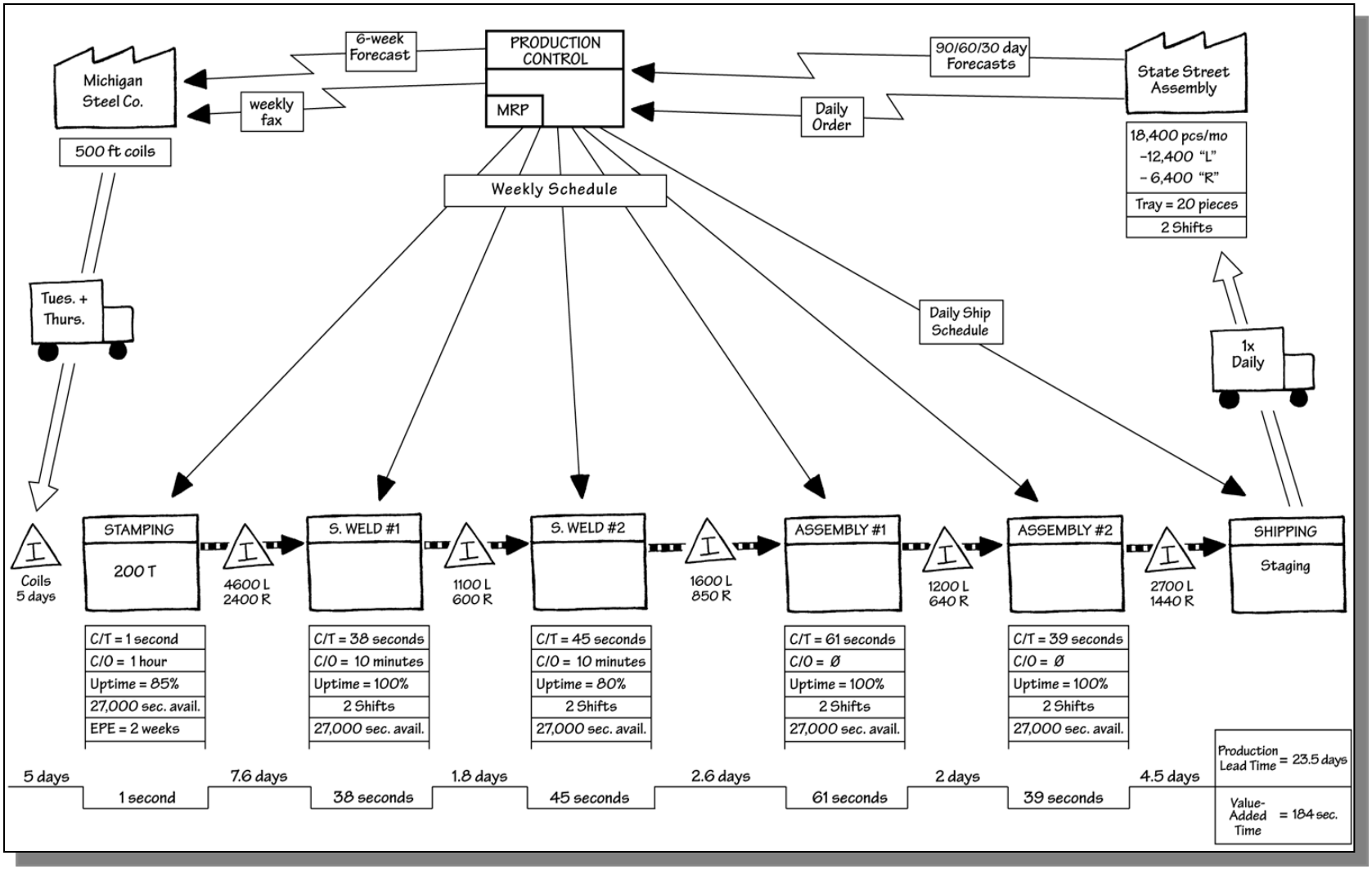
DMAIC – Measure (its all about the Current State – is it Capable?)

- Value Stream
- Process Map
- Data Collection Plan – how much is enough?
- Is Current State in Control? – Control Charts
- Is Current State Capable? – Specs (VOC) vs. Control Limits
- Funneling – the trivial many X's – FMEA

7. Learning to "Execute" your plan

MEASURE

Creating the Current-State Value Stream Map



Ref "Learning to See" Rother & Shook

7. Learning to "Execute" your plan

MEASURE

Measure: Data Collection Plan Features

Data Collection Plan **Project** _____

What questions do you want to answer?

Being clear about your question will help you make sure you collect the right data.

Data		Operational Definition and Procedures			
What	Measure type/ Data type	How measured [1]	Related conditions to record [2]	Sampling notes	How/where recorded (attach form)

Recording what data you are going to collect reminds you what you want to accomplish. Noting the type of data helps you decide how you should analyze the data.

An operational definition defines exactly how you will go about collecting and recording the data.

For more information contact:
J. Ellis at jellisaiken@gmail.com and/or
L. Serrano at Lserrano1944@gmail.com

7. Learning to "Execute" your plan

MEASURE

One of 6 Secondary CTQ's you identified from the Define Phase (VOC) – do this for all 6.

Example: One Secondary CTQ tracking along DMAIC pathway of execution:

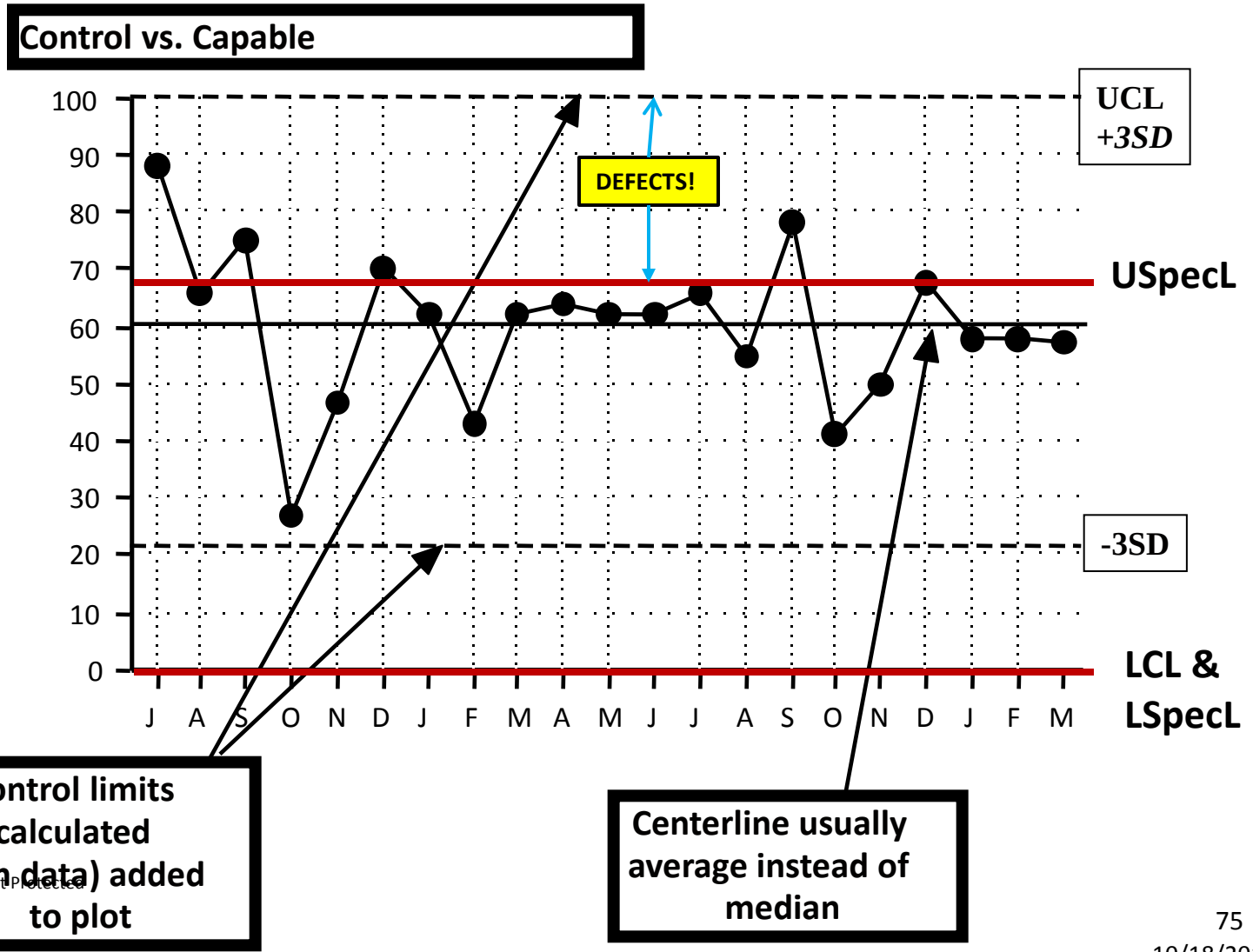
Define	Define	Define	Define	Measure	Improve	Improve	Improve	Control	Control
Primary CTQ (need)	Secondary CTQ (pain)	Metric	Goal	Current State	Predicted Future State	Pilot Results	Results at Go-Live	6 Months Go-Live	12 Months Go-Live
Reduce Defects in my core Lab	Too many QNS samples (one of 6 Secondary CTQ's)	# & % QNS general chemistry samples per representative 24 hrs.	>30% Reduction	28-31%					

"CTQ's are to Value as Westgard Rules are to QC", J. Ellis 2014

7. Learning to "Execute" your plan

ANALYZE

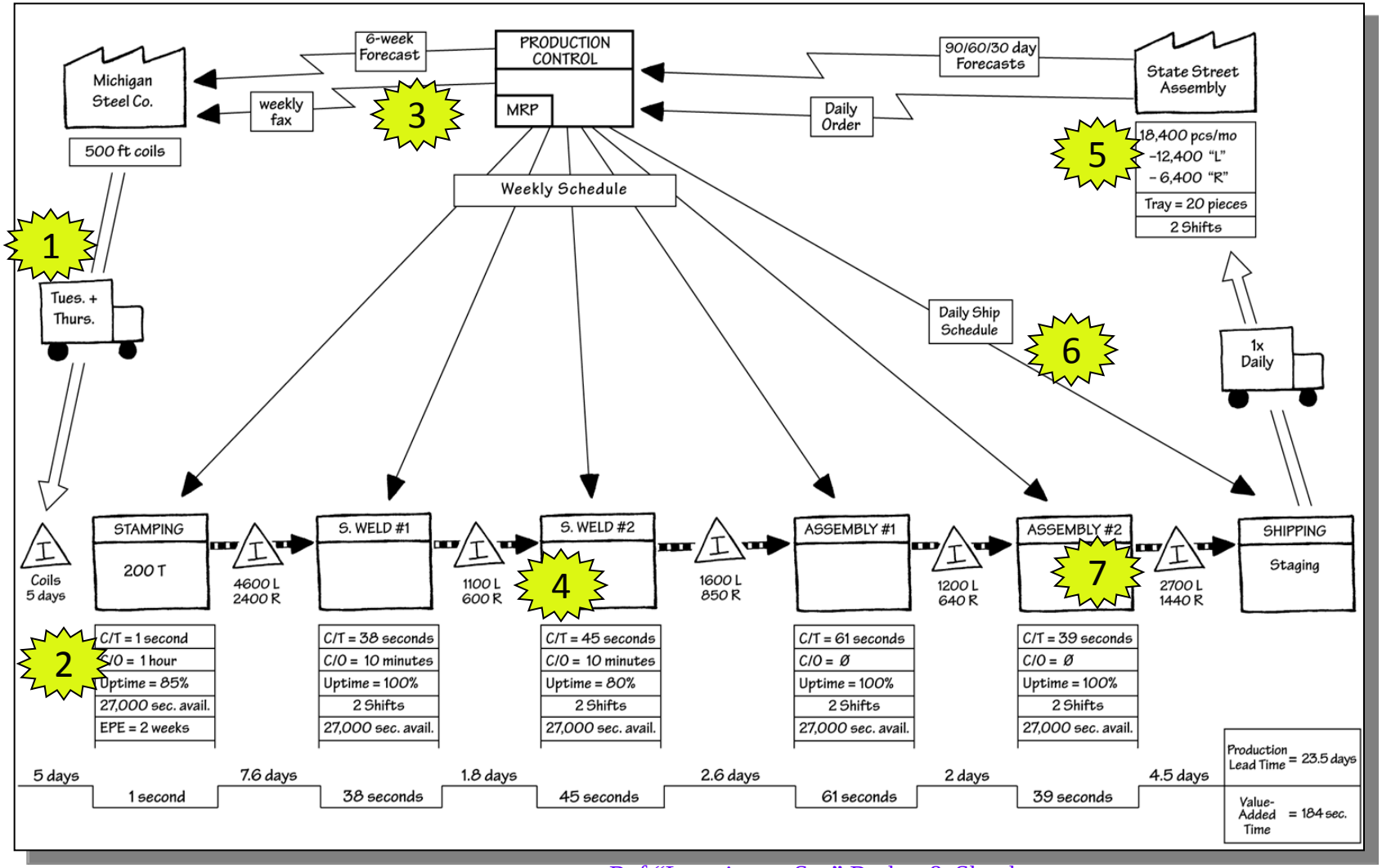
Measure: Control Chart – Current State VOP



7. Learning to "Execute" your plan

IMPROVE

Innovative Improvement: Current Value Stream Map with Kaizen Bursts indicating opportunity areas for improvement from Brainstorming activities



Ref "Learning to See" Rother & Shook

7. Learning to "Execute" your plan

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7. Learning to "Execute" your plan

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7. Learning to "Execute" your plan

IMPROVE

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Control: Visual Work Place Examples

CONTROL

Cleaning station

(Is anything missing?)

Production Control Board

Inventory pick-up/drop-off locations

Control: Visual Work Place Examples

Line of Sight – Performance Boards – Andon

Control: Visual Work Place Examples

Performance Boards

Control: The Periodic Audit (great tool for sustaining improvements)

CONTROL

Rating Scale Guide

Score	Description of Score
1	No apparent attempt to institute/enforce &/or adhere to the principle
2	Principle has been instituted, but no apparent attempt to enforce or sustain
3	Principle has been instituted and displays signs of sustainability and enforcement
4	Principle is being sustained and enforced, and there are positive signs of a plan to track performance
5	Principle is sustained and enforced. Kaizen events occur frequently.

Main Menu | 5S | Operations | Metrics | Supply Chain

7. Learning to "Execute" your plan

CONTROL

One of 6 Secondary CTQ's you identified from the Define Phase (VOC) – do this for all 6.

Example: One Secondary CTQ tracking along DMAIC pathway of execution:

Define	Define	Define	Define	Measure	Improve	Improve	Improve	Control	Control
Primary CTQ (need)	Secondary CTQ (pain)	Metric	Goal	Current State	Predicted Future State	Pilot Results	Results at Go-Live	6 Months Go-Live	12 Months Go-Live
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"CTQ's are to Value as Westgard Rules are to QC", J. Ellis 2014

7. Learning to "Execute" your plan

Tool/s: Data Collection Plan
DMADV
DMAIC
Process Mapping
Spaghetti Diagram
Workplace Design

Reference/s: The Six Sigma Memory Jogger – M. Brassard, et. al., 2002
Google Search – Impact vs. Effort matrix
The LEAN toolbox
LEAN SIGMA

Other Books to Consider:
Execution: The Discipline of Getting Things Done – L. Bossidy, et. al., 2002

Statement/s to Remember:
"Innovation distinguishes between a leader and a follower" - **Steve Jobs**
"Creativity before Capital" - unknown author
"Make your Plan, Work your Plan" – P. Quattrini, 1975
"In God We Trust, All Others Must Bring Data" – author unknown
"The only easy day was yesterday" – US Navy Seal motto

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Summary of Workshop & Closing Remarks

CREATING THE JOB JAR #8

- Use for items that came forth but were not part of the priority matrix or original project scope.
  - These items can be addressed after the main project is completed
    - Can use members of main team to “lead” using existing staff from the area so that they have ownership.
    - Does not detract from main project and allows for further hardwiring of the methodology of the team members as well as rank and file staff.

Examples

During Lean project of “core lab”, the following areas were identified and “job jarred”:

- Courier routing and arrival-
  - Affects specimen processing and routing
- Microbiology Set up and workflow
  - Setup and processing affects both central processing as well as the actual microbiology workflow
- Processing Referred Tests
  - What happens after they are separated from routine work? Time and temperature sensitive

TIPS

- Can each be tackled by a smaller team?
  - Take a member from the previous team to lead and teach
- Which has the most impact on the overall lab operation?
  - Use a prioritization matrix to determine
- Often smaller projects can proceed simultaneously when done by separate teams
  - The original team can split to lead the next projects

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Summary of Workshop & Closing Remarks

9. Presentations to Stakeholders, Customers, & Team

Description: At this stage of your project you have executed your plan and **fully implemented your change**. You have established **control procedures** to be sure you can **sustain the improvement**. You have **key performance metrics (KPM's from your CTQ's**) in place and you are **monitoring them on a real-time basis with appropriate visual aids and scorecards**. You have created **a job jar for future** change projects. You are ready to give **final presentations** to stakeholders, customers, those impacted by the change plus your team members. Depending on the scope and complexity of your change project, the **presentations you give will range from simple to complex**. In our experience if you see an example of complex and learn the components of complex then it is very easy to scale down to any level below complex. Therefore, for **this workshop we will concentrate on the components of a complex, final presentation. Final refers to a time when you are realizing all the benefits** from the change plan you put in place. In a complex project you will most likely **need to give presentations multiple times**, e.g. at the beginning to gain approvals and funding, at specific Milestones such as pilot results, go-live, IT connected, automation in place, one-month post full go-live, etc. Again, if we concentrate on a complex, final presentation then **scaling back in time and complexity will be fairly easy.**

This module is best assimilated by taking quiet time and reading through it a few times. The slides in this module are your Cliff's Notes for how to assemble your final project presentation/s.

9. Presentations to Stakeholders, Customers, & Team

With the complex, final presentation you will probably **have to deliver it multiple times** to different audiences. Therefore, you will need to **prepare multiple versions** of it depending on your audience. Once again, if you build the most complete one with all details then you can scale it down for various audiences. **Never give a full detail 1-2 hr presentation to anyone at the "O" level, e.g. COO, CEO, CFO, CMO,** etc. **Those that are impacted by your change will need to see the most detail and you will probably need 1-2 hrs to go over the full presentation. Stakeholders will need a presentation somewhere closer to the "O" level with slightly more detail. Directors, managers and supervisors will need somewhere between 30 and 60 minutes**. Best to keep all your slides in an Appendix and/or hidden so that if you get asked a detail question you can quickly go to the appropriate slide/s. The key is to **gauge the length and detail of your presentation to your audience.**

9. Presentations to Stakeholders, Customers, & Team

Components of a complex, final presentation where you need all detail:

- Audience is a group of "Customers" impacted by the change
- Usually 1-2+ hrs. with Q&A
- Usually 50 – 100+ slides
- Title Slide (include a picture here if you can, e.g. institution, lab, team, change, etc.), list presentation date and presenters
- **Agenda** with bullets and names of presenters for each section if multiple presenters
- **"Ho-Hum Crasher" (ending of your story)** - "We/You have the opportunity over the next X time to double our output with 40% less input by doing _____ or investing in _____." In the next _____ minutes I will show you how we are or how we did do this.

  Versions of this phrase above should be used at the beginning of your presentation for all presentations at all levels and at all times in your project life cycle from beginning to end. This is the "beef" and this is "What's in it for THEM". For an "O" presentation you can eliminate the agenda slide and just have your title slide say "Executive Summary of _____ Change Project". Complete **Executive Summary should only be 5-6 slides** max. You pick what slides from your full detail presentation to use to support your "Ho-Hum Crasher".

Ho-Hum Crasher – Exercise
Close your books.

Create a Ho-Hum Crasher around Defect example: Reference slide #83. You just went Live and have results and now have your presentation to your Stakeholders.

What was the one I used on you today? (way back at intro)

At the end of today's Workshop you will know how to do this & what each line, color, section and number means as you progress through the "10 Essentials of Successful, Rapid Change Management in the Lab"

Ho-Hum Crasher - Exercise

Ho-Hum Crasher:

Our 1st Successful, Rapid Change Management Project in the Core Lab Reduced our Top 3 Lab Defect Categories by Over 30%!

We completed the execution of the project in slightly less than one month. Let us show you how we did it!

9. Presentations to Stakeholders, Customers, & Team

- **Description of the problem** (excerpts from a project Charter doc can be used here)
- **Summary of VOC Interviews** – highlight your Voice of the Customer findings, especially those that refer to the pain associated with your Primary CTQ. Also, show comments that call out the Secondary CTQ's you chose.
- **CTQ Tree – Very important Slide!** Summarizes what data you will collect for Current & Future State, what your key performance metrics will be to measure Success, what your success goals are compared to the Current State, and states your time boundary for the project. Remember – "CTQ's are to Value as Westgard Rules are to QC".
- **Review of Data Collection Plan for Current State Measurements** – focus on Secondary CTQ's, use a team agreed to formal data collection plan.
- **Summary of Current State measurements** expressed in metrics of your Secondary CTQ's
- **Summary of Analysis of the Current State measurements** – is the Current State sustainable? Does it meet Customer specs 100% of the time? Does it have too much variability? Does the Voice of the Process (VOP) match up to the VOC? This analysis will indicate areas where the Current State can be improved. Be sure this is obvious in your presentation.

9. Presentations to Stakeholders, Customers, & Team

- **Summary of the Change Improvement** – how did you arrive at what and how to improve the Current State? The analysis of the Current State in objective terms is how you arrive at what to improve. **Each Secondary CTQ should have a plan in place to improve it for this stage.** Talk about how you arrived at your improvement plan. How you piloted the improvement plan. What results you got from the pilot. What the improvement looked like compared to the Current State. How you created your full Implementation Plan and what it looks like. How did you implement? **What were the results in terms of key performance metrics once implemented?** Show actual results of implemented **key performance metrics vs. those that came from the Current State measurements.** Show that you met or exceeded the goals set from your Secondary CTQ Tree. This stage is data rich and could have 50+ slides in a full detail presentation.

9. Presentations to Stakeholders, Customers, & Team

At the **end of the tech detail you are now going to review the Financial Business Case and show analysis of costs vs. benefits** across a predetermined time frame with predetermined time intervals. This is where the **Profit Improvement Proposal or PIP** is presented. If this is a final presentation the PIP, if it was deemed appropriate to use, will be presented in final rev. **If the PIP is to be used, which you will decide early on with your team**, then at this stage in final presentation your audience will have seen it before many times and seen how it evolved from an example to a predicted form and now in its final rev. We **strongly suggest when you decide to use this tool, which can be extremely powerful, that you get some expert advice and training before presenting** even in example form. By this time you will have **learned how your institution evaluates investments, what the criteria is for investment analysis and what is pass/fail for each criteria. You will have gotten all your costs identified and quantified the impact of your change (the benefits). Next you will run the cost vs. benefit analysis against all appropriate investment analysis criteria and produced the results.** These results will be displayed in most likely an Excel spreadsheet which you will have made into a slide and a poster board. Use these for your presentation at this point in the presentation. Be sure it is all good news before you present.

9. Presentations to Stakeholders, Customers, & Team

Example of Very Simple Financial Justification:
(no complex PIP required)

Simple PayBack on Capital Purchase

- **Total Capital Expense** **$955K**
- **Labor Enhancement Benefit – 4.5 FTE's** **$270K/yr.**
  (assumes $60K/FTE)
- **Simple PayBack Time** **3.5 Yrs.**

9. Presentations to Stakeholders, Customers, & Team

Example of Very Complete & Complex PIP

Example: Level 1 Financial Justification

Project Phase	PHASE I		PHASE II				PHASE III					
Year	2012	2012	2013	2013	2014	2014	2015	2015	2016	2016	2017	
Cost Analysis (Incremental)												
Six Month Periods	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**Total Cost**
Chem analyzer rental (1)	66,180	66,180	66,180	66,180	66,180	66,180	66,180	66,180	66,180	66,180	66,180	
Lab Automation (2)	0	186,010	186,010	231,010	255,333	292,041	292,041	292,041	292,041	292,041	292,041	
One Time Charges (3)	157,500	157,500	75,000	0	0	0	0	0	0	0	0	
- Renovation Costs	0	10,000	0	0	150,000	0	0	0	0	0	0	
- LIS 5.23 upgrade	0	120,000	0	0	0	0	0	0	0		0	
Total Incremental cost	**$ 223,680**	**$ 539,690**	**$ 327,190**	**$ 297,190**	**$ 471,513**	**$ 358,221**	**$ 358,221**	**$ 358,221**	**$ 358,221**	**$ 358,221**	**$ 358,221**	**$ 4,008,593**
Benefit Analysis (Incremental)												
Six Month Periods	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**Total Benefit**
Site A Labor Savings (4)*	0	0	118,745	118,745	122,308	122,308	125,977	125,977	129,756	129,756	133,649	1,127,220
Site B Labor Savings (4)*	0	60,000	179,993	179,993	185,393	185,393	190,954	190,954	196,683	196,683	202,583	1,768,629
Other Facilities Labor Savings (4)*	0	0	39,998	39,998	41,198	41,198	42,434	42,434	43,707	43,707	39,998	374,675
Service (5)	15,422	30,843	30,843	30,843	30,843	30,843	30,843	30,843	30,843	30,843	30,843	3,270,525
Reagents/Consumables (1)	63,064	63,064	63,064	63,064	63,064	63,064	63,064	63,064	63,064	63,064	63,064	
Shipping (6)	800	800	800	800	800	800	800	800	800	800	800	
Asset Reduction (7)	0	23,700	23,700	23,700	23,700	23,700	23,700	23,700	23,700	23,700	23,700	
Non-Salary Expense Reduction [3-13%] (8)	0	112,500	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	
Productivity & Capacity Improvements	$ 1.00											
Operational Lease Cost Write-Offs	$ 1.00											
Total Benefit	**$ 79,288**	**$ 290,907**	**$ 682,144**	**$ 682,144**	**$ 692,306**	**$ 692,306**	**$ 702,773**	**$ 702,773**	**$ 713,554**	**$ 713,554**	**$ 719,638**	**$ 6,671,383**
Net Contribution	$ (144,392)	$ (248,783)	$ 354,953	$ 384,953	$ 220,792	$ 334,084	$ 344,551	$ 344,551	$ 355,332	$ 355,332	$ 361,416	**$ 2,662,790**
Cumulative Net Contribution	$ (144,392)	$ (393,176)	$ (38,223)	$ 346,730	$ 567,523	$ 901,607	$ 1,246,158	$ 1,590,709	$ 1,946,041	$ 2,301,373	$ 2,662,790	
NPV @ 12%	$1,690,261											
NPV @ 15%	$1,516,380											
IRR	175%											
PAYBACK (mos.)	14											

Key Financial Investment Criteria

*Profit Improvement Proposal or PIP are registered Trade Marks of Mack Hanan author of Consultative Selling

*This Proposal is good for 60 days from date on Proposal.

The analysis of "Before & After" metrics will provide accurate information to generate a true cost to benefit report to show the customer how financially sound their decision was.

9. Presentations to Stakeholders, Customers, & Team

When you are doing presentations before you have done a pilot of the improved Future State then this whole section would be made up of Predicted Future State outcomes around the key performance metrics. Also you would predict what the future state would look like based on the improvements you want to make. After full Implementation you would go back and compare what you predicted to the actual results. **When you get good at this you want to set it up so that you always exceed expectations of the actual deliverables compared to your predicted deliverables.**

9. Presentations to Stakeholders, Customers, & Team

- **Sustaining the Gain** – Summary of the Control phase of your project where you have now incorporated this change into a standard operating procedure and it is now the new Current State. How did you train the folks who are impacted in the new process? What kind of Mistake Proofing did you put in place? **What key performance metrics are you monitoring to insure the performance gain is being sustained?** If a metric goes out of "control" what SOP/s do you have in place to get it back in "control"? What visual displays and scorecards did you setup to monitor the key performance metrics? **What type of behavioral motivation plan did you put in place to incentivize those that are most impacted by the change?**
- **Review your agenda** – tell them what you told them, put up the "Ho-Hum Crasher Slide" as a reminder of what the end of the story was
- **Next Steps** – Review the Job Jar and indicate what you propose to do next and ask for support and input from your audience
- **Q&A and Close** – Watch your time, limit questions based on the time you have. Have a flip chart for questions that you will answer off-line. Thank them all for attending.

9. Presentations to Stakeholders, Customers, & Team

How To: **Hints: Your presentation should always tell a story! Give the ending (the "Ho-Hum" Crasher!) away in the first couple of slides and then build the rest of the story around how you got to the ending**. **Tell them what you are going to tell them, tell them, then tell them what you sa**id you were going to tell them. Don't throw out a bunch of **"rubber chickens",** be sure each feature has a benefit. Don't forget to "**show them the beef**". **What's in it for THEM!** Make multiple copies of your agenda slide and as you go through the presentation put an agenda slide before each agenda section and highlight it so your audience can see where you are in the overall story. This allows you to create smooth segues and keeps your audience flowing with the logic path you setup in the first agenda slide. Your agenda bullets should **follow a DMAIC roadmap.** Only call it that if you choose to. **Get training** in how to create and deliver effective presentations. Look at examples of good and bad presentations that have been presented to your various audiences. And, **consider bringing in outside subject matter experts** to help you get up the learning curve and accelerate your project. Remember, you will have a **diverse group of "thinkers" at each presentation**. Review the "Art of Thinking" styles and be prepared! **If there is any way to predict key attendees' thinking styles ahead of time it will be in your best interest.**

Be prepared before each presentation to decide how and who will get copies of what you present. Your presentations will become intellectual capital and proprietary. Obey the rules for disseminating. Don't take it lightly. **Control the value that you have created**. Instead of giving it out freely, use it wisely. One trick is to **setup follow up meetings** with key attendees to go over the info instead of giving it to them. The **PIP can be extremely valuable so plan accordingly**.

At the end of this section you should be ready to take on your next project.

9. Presentations to Stakeholders, Customers, & Team

Tool/s: Project Charter
CTQ Tree
Data Collection Plan
PIP
Proficiency with Microsoft PowerPoint at least at Intermediate level

Reference/s: Consultative Selling (includes how to create a PIP) – M. Hanan, 1995
The Six Sigma Memory Jogger – M. Brassard, et. al., 2002

Other Books to Consider:
Presenting to Win – J. Weissman, 2008

Statement/s to remember: "To keep the idea/s alive, communicate successes often" – author unknown

Agenda – 10 Essentials of Successful, Rapid Change Management in the Lab:

1. Learning to "Think"
2. Learning to "See" the Opportunities
3. Prioritize the Opportunities – Make your Shortlist in Priority Order
4. Define Success for each Change (measure of Success, time frame, value
5. Pick your team (Stakeholders, Team Captain, Players)
6. Gantt your time line for the complete project (all steps of DMAIC)

Break

7. Learning to "Execute" your plan (detail out all steps of DMAIC)
8. Create a "Job Jar" of Future Changes as you go along but stay focused on current change
9. Presentation/s to Stakeholders, Customers, Team (possible PIP use)
10. Learning to "Count" – J. Ellis

Summary of Workshop & Closing Remarks

10. Learning to Count

Description: By this time in your project/s you have **completed as least one project** that has helped you start up the steep learning curve to be proficient in successful, rapid change management. If you **brought in some SME's** to help you then you have probably accelerated your learning and have moved up further on the learning curve than if you would have done your project without the SME help. **This section is presented as a "Stretch Goal" or could be considered the search and attainment of the "Holy Grail"**. Gathering data (numbers) and working with **numbers can be play as a tremendous advantage in favor** of your success and rapid time frames. The numbers start back at the beginning of your project when you begin to translate Primary CTQ's into Secondary CTQ's that have metrics associated with them. These metrics then have goals established (more numbers) along with time boundaries. You gather lots of numbers when you measure and analyze the current state. And then more numbers are added when you predict your future state, pilot the future state, implement the future state and audit the future state. That is a lot of numbers! **Getting those numbers to work for you is what "Learning to Count"** is all about. The **"Holy Grail" is finding ways to easily access the numbers and being able to formulate the numbers into a powerful story that supports your change efforts and proves that your change was indeed beneficial and met or exceeded your "customers" expectations.**

This module, like #9, is best assimilated by taking quiet time and reading through it a few times. The slides in this module are your Cliff's Notes for how to perfect your change management skill & impact.

10. Learning to Count

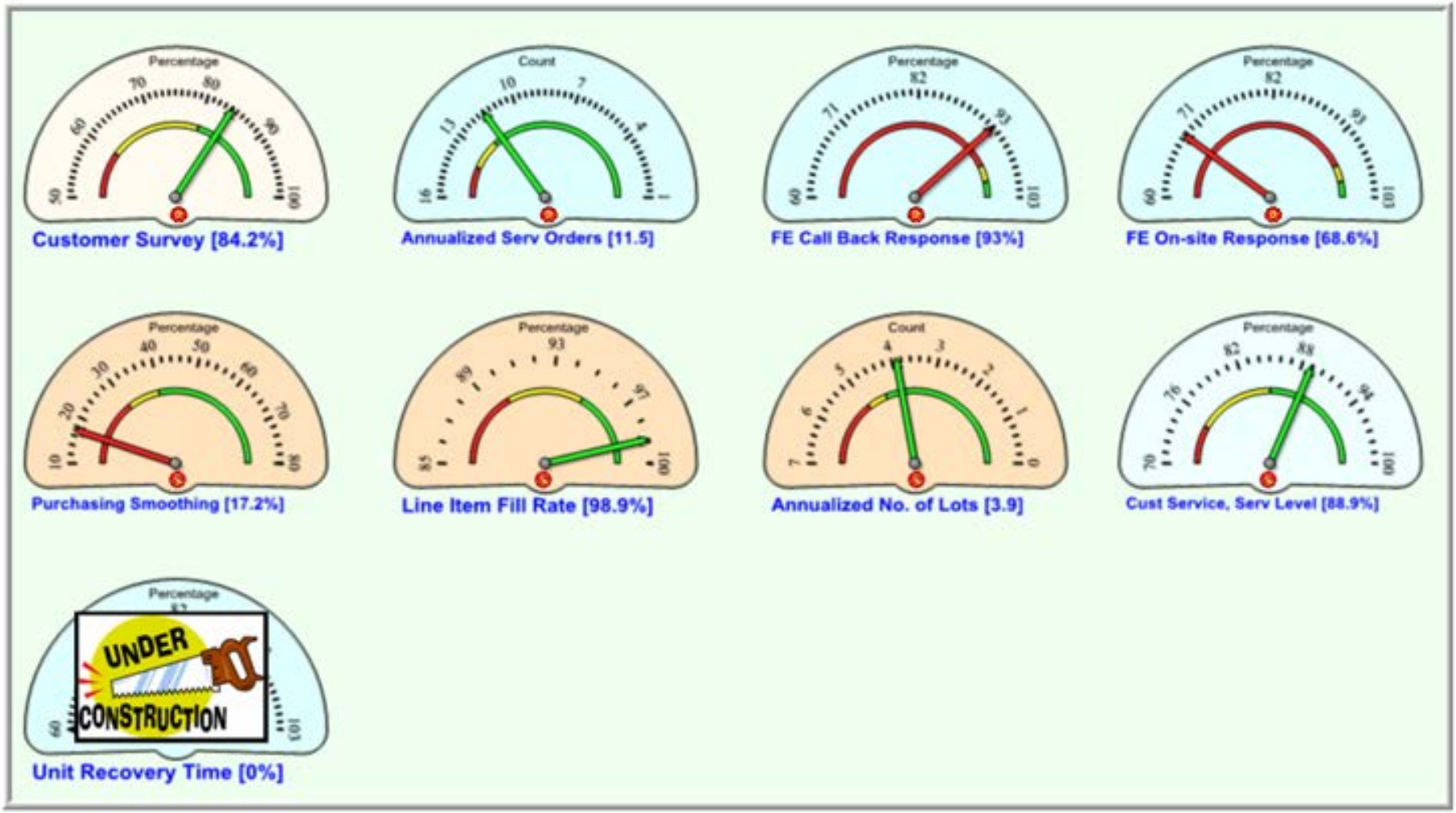
I was fortunate enough a few years back to meet an author who was a **lean practitioner in the fields of accounting and finance.** At the time lean was just getting started in healthcare and was not that prominent in mainstream US manufacturing either. Lean in accounting? That was an unheard of thought. This author is **Brian H. Maskell. He has now written 8 books on lean accounting practices**. He takes a **strong and valid position on getting your accounting and finance folks on your work teams and as stakeholders to truly understand the value that your change projects can produce**. The best way to **get their attention is with numbers**, thus the importance of "Learning to Count". Without their involvement in your project, when you go to request funds for capital and/or renovations you may face major roadblocks. **Getting them involved early in your project will help accelerate your project and pave the way to a higher probability of obtaining project funds.** At the end of this section you should be well up the learning curve and have a few projects behind you. Once you have perfected your skills within your lab it will be time to export your skills outside the walls of your lab and teach others within your institution. The **experience you gain with your lab projects can provide the means for you to lead other change projects within your institution.**

10. Learning to Count

Once again **if you want to accelerate** up the learning curve with this section, **bring in some SME's**. **Take your metrics from your Secondary CTQ's and funnel them down to 5 or less key performance metrics (KPM's) that can act as early warning indicators for something going wrong with your new change.** Agree with your team as to what level is acceptable (green), what range is marginal (yellow) and at what point it is unacceptable (red**). If these KPM's cannot be monitored in a real-time, passive manner, then create a process as to who gathers the data, who posts the data, what frequency it is posted and where it is posted. Be sure the process describes the action that should be taken if any metric goes yellow and what to do if it goes red.** Conduct periodic reviews with your team and stakeholders about the values of these KPM's. One of the best visual formats I have used in the past has been to **display these KPM's in the form of an analog dashboard gauge.**

10. Learning to Count

KPM (CTQ's) Visual Dashboard Example



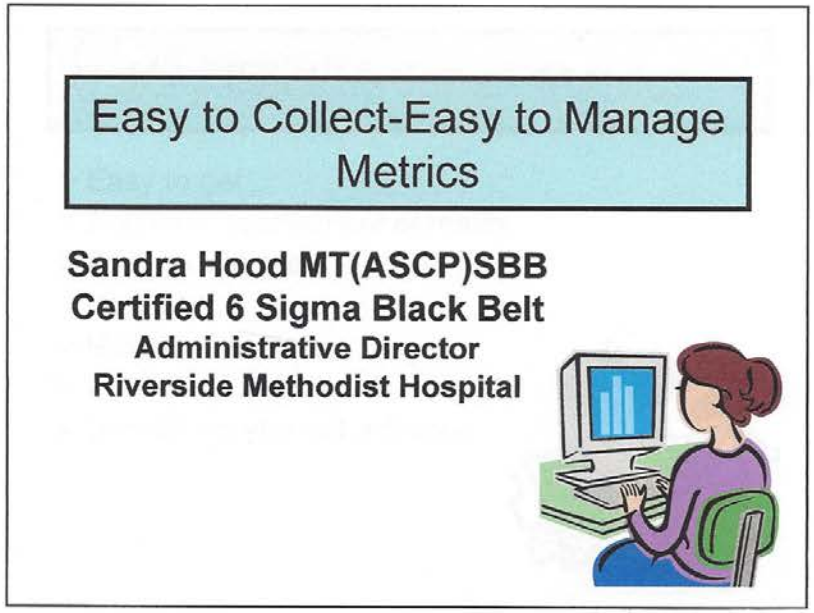
10. Learning to Count

Ideally you would like to have these **KPM's** be **generated passively and real-time and displayed in your lab** for all to see. This is being done sporadically today but is **not mainstream yet**. The biggest **roadblock** to having this occur is **software**. If you truly believe that these KPM's which are derived from CTQ's are critical to keeping your lab running on target then you will need to **make this demand known to your IT folks, your IT and middleware suppliers and your equipment suppliers. We need to create KPM monitoring software as we did with Westgard rules for QC, thus the belief we shared with you that "CTQ's are to Value as Westgard rules are to QC"**. The best **example** I have recently seen is the referenced **CLN article in the July, 2014, issue pgs. 14-15, "What Does Turnaround Time Say About Your Lab?"** In this issue there is a description of **a passive, real-time TAT electronic monitor**. This is an article worth reading. Envision all KPM's connected this way! Whether you post your KPM's manually or passive, real-time electronically, the key is to **do it**. This will give you the information to show that your change was good and is being sustained. Now parlay that success into your next change challenge!

10. Learning to Count

"Easy to Collect-Easy to Manage Metrics" – S. Hood, Sept. 29, 2009, Lab Quality Confab (pdf available online by Google Search of "sandy hood lab confab")

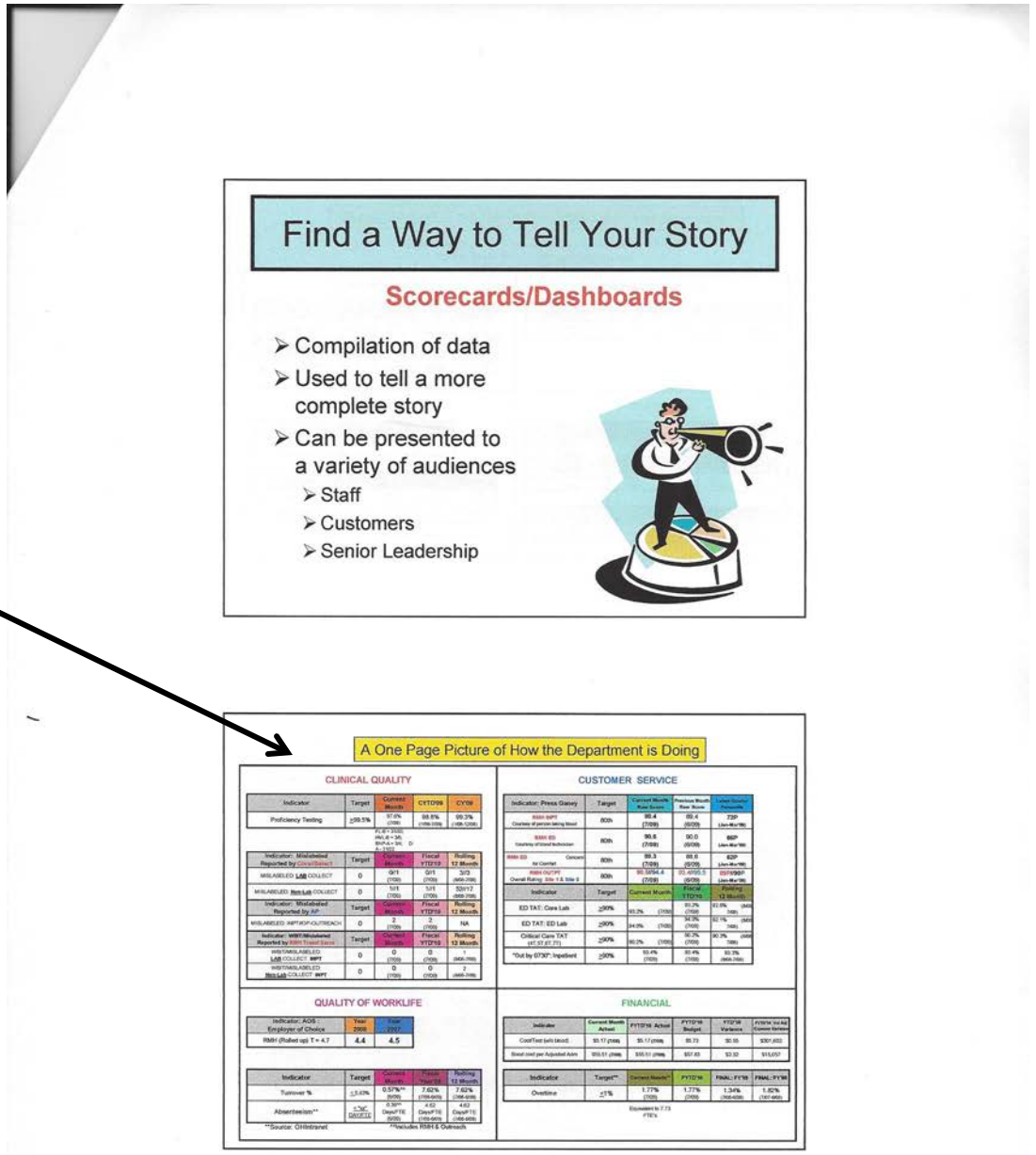
The Best example of Monitoring & Managing KPM's (CTQ's) that I have ever seen!



10. Learning to Count

"Easy to Collect-Easy to Manage Metrics" – S. Hood, Sept. 29, 2009, Lab Quality Confab (pdf available online by Google Search of "sandy hood lab confab")

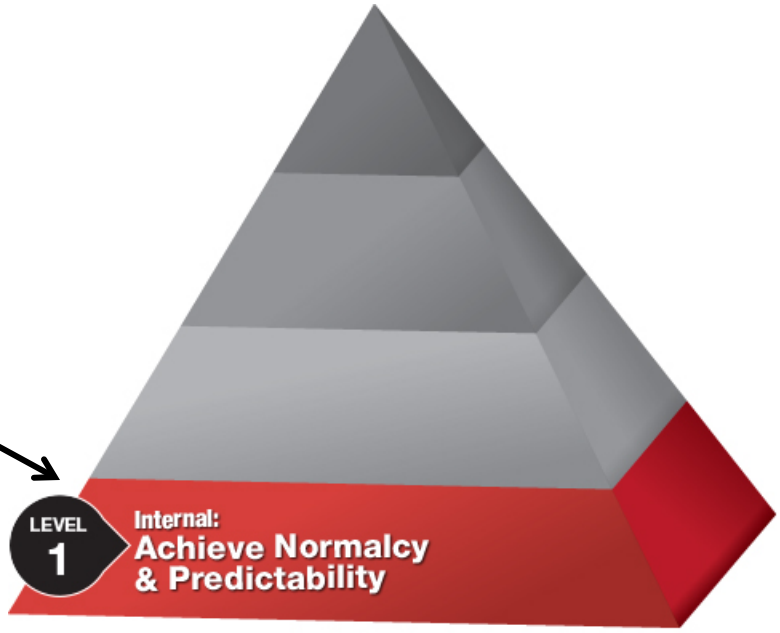
Key Performance Metrics Example:



10. Learning to Count

The Dark Report, Vol. XXI, #13, 9/22/2014 – "Defining a Path to Clinical Lab Best-in-Class via Benchmarks", Part One of a Series.

Lab Value Pyramid, Level 1 of 4



10. Learning to Count

Tool/s: Google Search of "Books written by Brian H. Maskell"
Slides showing the examples above

Reference/s:

Making the Numbers Count - B. H. Maskell, 1996
Practical Lean Accounting – B. H. Maskell, 2011
"What Does Turnaround Time Say About Your Lab?", Clinical Laboratory News (CLN), July, 2014, pgs. 14-15.
"Easy to Collect-Easy to Manage Metrics" – S. Hood, Sept. 29, 2009, Lab Quality Confab (pdf available online by Google Search of "sandy hood lab confab")
The Dark Report, Vol. XXI, #13, 9/22/2014 – "Defining a Path to Clinical Lab Best-in-Class via Benchmarks"

Statement/s to remember: "In God We Trust, All Others Must Bring Data" – author unknown
"CTQ's are to Value as Westgard rules are to QC" – J. Ellis, 2014

Agenda – 10 Essentials of Successful, Rapid Change Management in the Lab:

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Summary of Workshop & Closing Remarks – J. Ellis & L. Serrano

Summary & Closing Remarks

Remember the following highlights:

1) **Successful** – in the eyes of your customer, adding value, operational definition, measurement of success, time bound.
2) **Rapid** – 1st project 30 days or less, majority 90 days or less, max. 12 months.
3) **Change** – operational definition, must add value, measurement and time bound
4) **Management** = Leadership, YOU!
5) **Find SME's to help you accelerate**
6) **R&R (Ready & Receptive)**
7) **5 Styles of Thinking** – what are you, what is your audience/customers?
8) **4 Stages of Competence** – know where you and your team are.
9) **Core Competency or a Target for Outsource?**
10) **Tools for Prioritization**
11) **Define Success** – Primary & Secondary CTQ's, Metrics (KPM's), Goal, Time Bound
12) **Pick Your Team for Success**

Summary & Closing Remarks

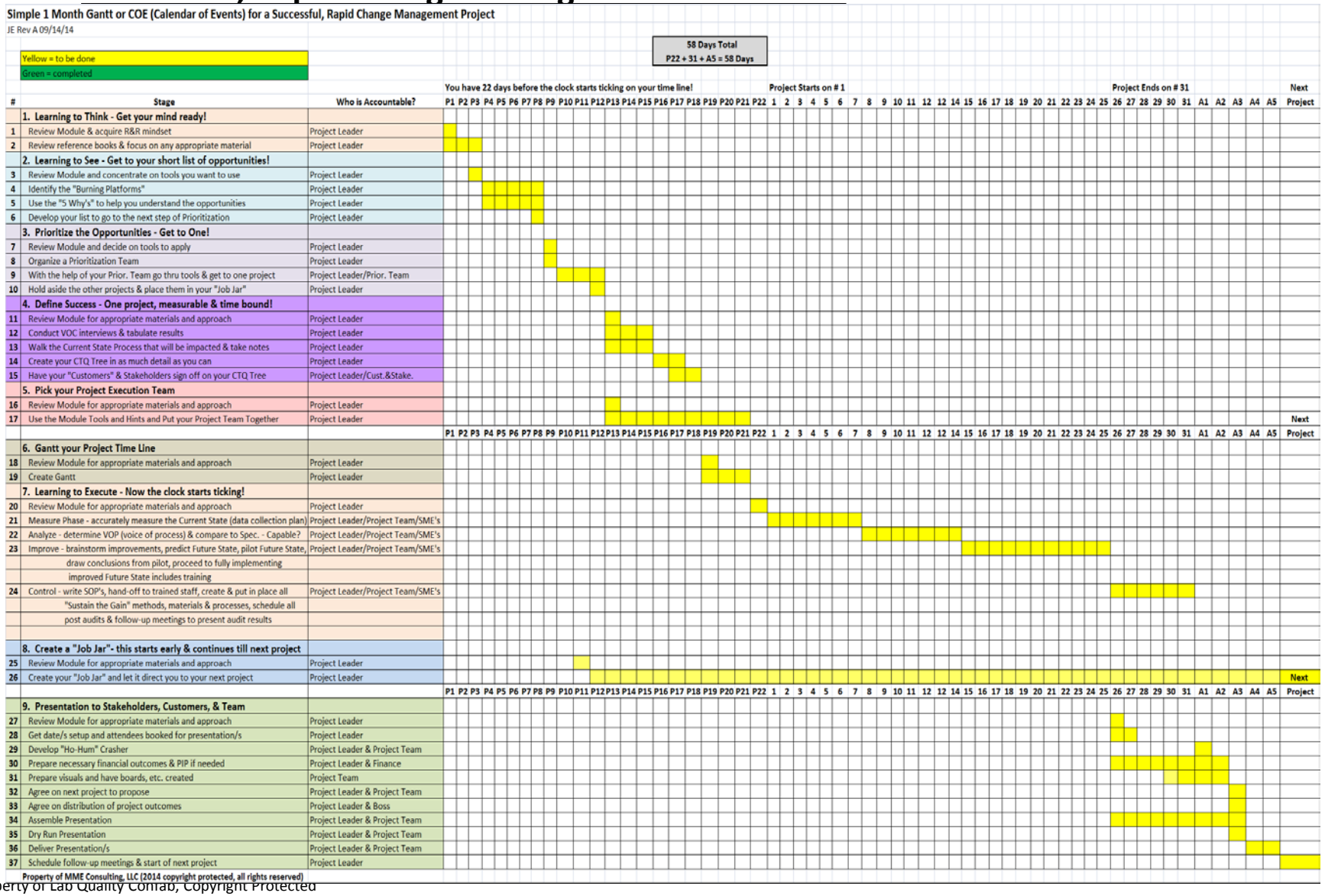
Remember the following highlights:

13) **Gantt following DMAIC**
14) **Direct Observation is most accurate way to get real data**
15) **Make your Plan, Work your Plan**
16) **Communicate, Communicate, Communicate**
17) **Job Jar will locate your next opportunity**
18) **Ho-Hum Crasher** – disclose the ending first and then explain how you got the ending
19) **Tell a story, order by DMAIC**
20) **Go after the Holy Grail** – KPM's collected passively and real-time & displayed electronically color coded
21) **Add an accountant/finance person to your team early on**
22) **CTQ's are to Value as Westgard Rules are to QC**

In Summary this written tutorial and the accompanying slides should assist you in any change management project that you encounter. We have applied the principles described in this workshop to our everyday projects over many years and have found them to be extremely useful in delivering successful, rapid change management initiatives. We hope you can benefit from our experiences and not have to go through trial and error to come up with a change management process. Contact us if you need help or advice. Good luck!

For more information contact:
J. Ellis at jellisaiken@gmail.com and/or
L. Serrano at Lserrano1944@gmail.com

At the end of today's Workshop you will know how to do this & what each line, color, section and number means as you progress through the "10 Essentials of Successful, Rapid Change Management in the Lab"



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Q & A

Change management is the application of a structured process and set of tools for leading the people side of change to achieve a desired outcome.

When change management is done well, people feel engaged in the change process and work collectively towards a common objective, realizing benefits and delivering results. (**PROSCI)**