Performance Excellence Model

AME Champion’s Meeting
“Principles of Excellence”

Raytheon Missile Systems
Tucson, AZ

April 13-15, 2011

Mark Jepperson and Steve Harvey
Introduction

- At Raytheon Missile Systems, organizational **Functions innovatively create and improve standardized processes and tools**, while **Programs use those standardized processes and tools to innovatively fulfill contractual obligations**.

- Missile Systems is a **company of programs** and we are learning what that means, particularly in the program management discipline.

- Using a **whole-systems** view of Program and Functional work, the Performance Excellence Model (PEM) helps measure the key **value propositions** that make a difference for program and enterprise success.

- This presentation introduces the Performance Excellence Model (PEM), but will mostly focus on the change in thinking and behaviors needed to **create alignment** and **bring out the best** in people and organizations.

- We have been engaged in this improvement journey for much of our careers. We are available after this presentation for further discussion.
Agenda

- Introduction
- Agenda
- Which excellence?
- Whose excellence?
- Whole-system excellence
- Levels of Teaming
  - A, B and C
- I’m here to help you …
- Performance Excellence Model (PEM)
  - A focus on Value
  - 6 minute PEM introduction
- PEM and Teaming Levels
- Implementing your own model

Our agenda is to change your thoughts …
Which excellence?

- Why pursue *excellence*?

We assume that the people in this room are Change Agents. The typical Battle Cry is:

“*I am going to eliminate muda.*

*I am going to make things better!*”
Which excellence?

What we often do ... to make things better is:

“Round up the usual suspects.”
Captain Renault, Casablanca

In matters of conscience, the law of the majority has no place. Ghandi
No one takes issue with eliminating these guys.
Which excellence?

What we often do …

Affirmed in our thinking, we go home to our …

• Home room
• Comfort zone
• Familiar place
• Area of control / influence

… and we get to work.

We are armed with tools for improvement.
Which excellence?

What we often do …

Conduct improvement projects

– We write business cases
– We identify burning platforms
– We create focus groups
– We create communities of practice
– We create improvement / action teams
– We import models and tools into our culture
– We survey and measure
– We implement process improvements

These are all good things to do, but … wait a minute …

Who created those waste-villains in the first place?

All change is not growth, as all movement is not forward. Ellen Glasgow
Which excellence?

What we often do …

When pursuing excellence, we tend to only think about ourselves or our own perspective.

Please consider…

What do we think about other organizations?

Given these thoughts …

Does that affect the pursuit of performance excellence?

Are we the culprit?
**Whose excellence?**

**What do you think about the following organizations?**

We assume most of you are from Manufacturing.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td></td>
</tr>
<tr>
<td>Program</td>
<td></td>
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<tr>
<td>Supply Chain</td>
<td></td>
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<tr>
<td>Management</td>
<td></td>
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<tr>
<td>Quality Org.</td>
<td></td>
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<tr>
<td>Contracts</td>
<td></td>
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<tr>
<td>HR</td>
<td></td>
</tr>
<tr>
<td>Legal</td>
<td></td>
</tr>
<tr>
<td>IT</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td></td>
</tr>
</tbody>
</table>

Your answers reveal both at-hand and at-large issues.
# Whose excellence?

**What do you think about the following organizations?**

We assume most of you are from Manufacturing.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Thoughts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering</td>
<td><em>There is nothing wrong with my design.</em></td>
</tr>
<tr>
<td>Program</td>
<td><em>My way or the Highway!</em></td>
</tr>
<tr>
<td>Supply Chain</td>
<td><em>Low bidder and lousy performance</em></td>
</tr>
<tr>
<td>Management</td>
<td><em>Out of touch -- make me look good.</em></td>
</tr>
<tr>
<td>Quality Org.</td>
<td><em>“I need to shut you down.”</em></td>
</tr>
<tr>
<td>Contracts</td>
<td><em>Can you believe what they signed us up to do!</em></td>
</tr>
<tr>
<td>HR</td>
<td><em>Huh, Really!</em></td>
</tr>
<tr>
<td>Legal</td>
<td><em>Lawyers (need I say more?)</em></td>
</tr>
<tr>
<td>IT</td>
<td><em>Big brother</em></td>
</tr>
<tr>
<td>Finance</td>
<td><em>How many heads did you cut?</em></td>
</tr>
</tbody>
</table>

• Is this positive?
• Is this a stereotype?
• Is this kind of thinking helping?

We are often guilty of what we accuse others of.  Mom
Whose excellence?

What are those organizations saying about manufacturing?

“They build it right the first time …
… no matter how many times it takes!”
Whose excellence?

If our collaborators are driving us bonkers, then who is the real culprit?

Have you looked at the system or your work culture?
Whose excellence?

As presenters, we need to tread lightly here.

• Steve and Mark have almost 25 years of experience in Operations.
• We created the M.E.M. that lead to the winning the Shingo Prize.
• We moved to Program Management to work at the Enterprise level.

Yet, we, the PEM Designers with this experience, were repeatedly challenged …

Who are you to have an “excellence model”? What gives you the credibility to say so?

We know we are not you … but we will listen to what you say.

“You tell me what excellence is and I’ll take it to the next guy … and see what he says. Let’s find agreement among us.”

Tell me what you think, I’ll listen.
Whose excellence?

Here is what we heard:

<table>
<thead>
<tr>
<th>Engineering</th>
<th>Program</th>
<th>Supply Chain</th>
<th>Management</th>
<th>Quality Org.</th>
<th>Contracts</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Translator of requirements into buildable designs</em></td>
<td><em>Efficient conduit of information and funding</em></td>
<td><em>Transforming designs to on-time parts delivery</em></td>
<td><em>Providing vision, guidance, solution infrastructure</em></td>
<td><em>Accurate predictor and quality solutions provider</em></td>
<td><em>Translating law and req’mts into executable documents</em></td>
</tr>
<tr>
<td><em>HR</em></td>
<td><em>Legal</em></td>
<td><em>IT</em></td>
<td><em>Finance</em></td>
<td><em>Sales</em></td>
<td><em>Mfgr.</em></td>
</tr>
<tr>
<td><em>Providing infrastructure &amp; people to perform work</em></td>
<td><em>Protecting intellectual property and the business</em></td>
<td><em>Providing information infrastructure to perform work</em></td>
<td><em>Ensuring business viability for the present and future</em></td>
<td><em>Growing the business for the present and future</em></td>
<td><em>Integrating designs and parts to customer solutions</em></td>
</tr>
</tbody>
</table>

Enterprise -- *Efficiently working as a whole system*

What might be possible if everyone aligns?
Ignorance IS Bliss

Fixing problems seems to require personal change

Do whatever you like.

Short-term, self-interest.

I don’t want to know.

Careful! We don’t want to learn anything from this.

“Phooey to that!”
Whole-system excellence

- Why pursue *excellence*? – *a systems approach*

Excellence in

- Enterprise
  - Profit, market share, stock value, reputation

- Departments
  - Value delivery, standards, tools & processes

- Individuals
  - Skills, knowledge, performance

These constructs exist as a means to conduct business, and business is based upon value delivery in exchange for consideration -- the **Value Transaction**.

What do you want to achieve?
Whole-system excellence

- Why pursue *excellence*? – *a systems approach*

Excellence in

- **Enterprise**: Profit, market share, stock value, reputation
- **Departments**: Value delivery, standards, tools & processes
- **Individuals**: Skills, knowledge, performance

Create alignment and agreement at the *value transaction* level and you will have a foundation for the whole-system.

If you take only one thing away from this presentation – focus on the *value transaction*.

**What do you want to achieve?**
Whole-system excellence

- Why pursue *excellence*? – a systems approach

*Win all you can* game.

<table>
<thead>
<tr>
<th>Level</th>
<th>Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise</td>
<td>Profit, market share, stock value, reputation</td>
</tr>
<tr>
<td>Departments</td>
<td>Value delivery, standards, tools &amp; processes</td>
</tr>
<tr>
<td>Individuals</td>
<td>Skills, knowledge, performance</td>
</tr>
</tbody>
</table>

Who is the **YOU** at work?

Here are a few stories to show the results of a different “you” at each level.

What do you want to achieve?
Levels of Teaming – “A”

- **Level A – Me**
  - Individual effort
  - Individual rewards
  - Independent effort
  - Connected to a “higher” good
  - Working hard on best I can be
  - Optimization of my performance

  These are positive benefits.

- **A Joe Montana story**
  As a guest speaker he was asked a question at a company leadership forum:

  "When you were injured what did you do to help your teammates be successful?"

  "Phooey to that!"

  Short-term, self-interest.

  Is this good or not so good?
Levels of Teaming – “B”

- Level B – Group
  - Efficient work team
  - Share the work
  - Cover for each other
  - Shared goals & rewards
  - Inclusive and adds diversity
  - Optimization across the group

A M.E.M. story
A successful functional initiative to create manufacturing excellence and implement lean across all factories (recognized with Shingo Prize).

What did we do to help the enterprise be successful?

Is this good or not so good?
Levels of Teaming – “C”

- **Level C – Organization**
  - Effective organization
  - Links with other organizations
  - Shared resources
  - Organization cooperation rewarded
  - Optimization across the organization

A P.E.M. story
An initiative to create performance excellence across all organizations supporting programs, and in turn, enterprise success.

*How did we help everyone be more successful? Was there a cost?*

These are positive benefits.

Fixing problems seems to require personal change.

Is this good or not so good?
Levels of Teaming -- Summary

- The system is perfectly designed for the results it is getting.

- If you want a different result, you need a different design … at each of these levels.

Are you happy with your current result?

What result level are you seeking?
I’m here to help you …

- So … armed and ready, we approached our process owners

- OB 5 (affectionately, the Obi Wan story)
  
  - Okay, but only if you …
    - Speed up my schedule
    - Improve my quality
    - Reduce my cost
    - Reduce my risk
    - Grow my business

  - otherwise, don’t bother me, I have work to do …

- OB – Okay, you have my attention …

Achieving this would require individuals, groups, departments and the enterprise to work together in a new way, aligned and focused on value-delivering behaviors.

Fixing problems seems to require personal change.

Nothing will work unless you do. Maya Angelou
What if … we worked together to find out what makes a difference in creating program and enterprise success?

What if we focused on VALUE to the business?

Careful! We don’t want to learn anything from this.

PEM 6 minute animated ppt show
Mapping PEM performance levels and teaming levels

This is basically another assessment, but it also teaches, guides, and provides a roadmap toward those behaviors that constitute agreed upon excellence.

*It is an integrated system that serves as a framework by which you “fill in the blank” for what you aspire to achieve.*
Behaviors

As a whole-systems view of Program work, a PEM Assessment answers:

1. What tools, processes and behaviors should individuals utilize to improve their individual performance and mature toward excellence?

2. How well do Programs achieve their own goals for local performance?

- 1. Plan to Perform
  - Documented evidence of intent to achieve
  - Physical evidence of a plan or direction to be taken.

- 2. Performing
  - Objective evidence that the intent has been put into action
  - Observable improvement efforts as evidenced by reports, memos, tool use, process use, etc.

- 3. Contributing to Program Success
  - Evidence exists of a Program-defined standard in use throughout
  - Verification that all plans, processes, tools, etc. in use are used across the Program and are standardized.

Improving is good, but it is still about my success.
Behaviors

As a whole-systems view of Program work, a PEM Assessment answers:

1. What standards (tools, processes and methods) are used that help mature the users toward excellence?

2. How well do *Functions fulfill their charters to provide standards* that help Programs contribute to Enterprise success?

Success, using standards, but they may not be optimized.
Behaviors

As a whole-systems view of Program work, a PEM Assessment answers:

1. How well do Programs and Functions partner to identify, develop and utilize standardized processes that create performance excellence?

2. How well does the MS Enterprise support standardization of processes, tools and metrics?

From “We” to the best there is …
PEM – Real life example

Using the conference as common ground:

- Benchmarking ................................................ Level 5 behaviors, Yokoten, learning built in
- Capturing & Sustaining Lean Improvements .......... Build that criteria into what you measure
- Raytheon Six Sigma ........................................ Use performance results data to focus improvements
- Performance Excellence Model (PEM)
- Respect ............................................................. Content developed by owners (not us) and vetted
- Total Employee Engagement Requires a .......... Vision, common tools & metrics to lead / engage
  Sustainable Management Platform
- Lean Sustainment via Culture Transformation ........ Define the behaviors to build norms which build culture
- Manufacturing Enterprises: from Academia to .......... Build-in the best ideas & measure it
  Real World
- Aha Moments ..................................................... Nothing like facts and data to change minds

Let us demonstrated how these principles of excellence can be integrated into a framework.

Today’s conference topics and materials should have a place in a whole systems model – here is where today’s topics might fit into the PEM.

What might be possible if everyone aligns?

... it’s in there
Outputs From Assessments

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Sample Report

<table>
<thead>
<tr>
<th>Raw Score</th>
<th>Expected Score</th>
<th>Functional Element Name</th>
<th>Normalized Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.9</td>
<td>3</td>
<td>Overall Weighted Score</td>
<td>-0.1</td>
</tr>
<tr>
<td>2.6</td>
<td>3</td>
<td>Program Management</td>
<td>0.4</td>
</tr>
<tr>
<td>2.8</td>
<td>3</td>
<td>Quality &amp; Mission Assurance</td>
<td>-0.2</td>
</tr>
<tr>
<td>2.9</td>
<td>3</td>
<td>Engineering</td>
<td>-0.1</td>
</tr>
<tr>
<td>3.0</td>
<td>3</td>
<td>Operations</td>
<td>0.0</td>
</tr>
<tr>
<td>2.8</td>
<td>3</td>
<td>Supply Chain Management</td>
<td>-0.2</td>
</tr>
<tr>
<td>2.7</td>
<td>3</td>
<td>Finance</td>
<td>-0.3</td>
</tr>
<tr>
<td>3.2</td>
<td>2.9</td>
<td>Business Development</td>
<td>0.3</td>
</tr>
<tr>
<td>2.6</td>
<td>3</td>
<td>Contracts</td>
<td>-0.2</td>
</tr>
<tr>
<td>3.0</td>
<td>3</td>
<td>Program Management Excellence</td>
<td>0.0</td>
</tr>
<tr>
<td>2.9</td>
<td>3</td>
<td>Human Resources</td>
<td>-0.1</td>
</tr>
<tr>
<td>2.7</td>
<td>3</td>
<td>Information Technology</td>
<td>-0.3</td>
</tr>
<tr>
<td>1.3</td>
<td>3</td>
<td>Legal</td>
<td>-1.7</td>
</tr>
</tbody>
</table>

Representative data for example only.
### PEM – Whole System Benefits

When used to measure, standardize and improve performance

<table>
<thead>
<tr>
<th></th>
<th>Individuals</th>
<th>Program / Team</th>
<th>Function</th>
<th>Enterprise</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Improved Quality:</strong></td>
<td>Specific behaviors identified lead to individual performance improvement.</td>
<td>Identifies team strengths and functional improvement areas for improvement efforts.</td>
<td>Identifies improvement areas across all programs to focus improvement efforts.</td>
<td>Serves as an objective and early performance indicator.</td>
</tr>
<tr>
<td><strong>Speed:</strong></td>
<td>Maturing toward the use of standard processes increases speed.</td>
<td>Maturing organizational standard processes in a way that allows innovation to emerge increases speed.</td>
<td>Standardization allows for employee movement from program to program with a reduced learning curve.</td>
<td>Standardization allows for infrastructure to be created to improve process performance.</td>
</tr>
<tr>
<td><strong>Reduced Cost:</strong></td>
<td>Aligning individual work to program performance helps eliminate waste.</td>
<td>Aligning program resources to effect performance improvements</td>
<td>Aligning individual work to program performance helps eliminate waste.</td>
<td>Standardization supports cost reduction, waste elimination, improved margin and profit.</td>
</tr>
<tr>
<td><strong>Risk mitigation:</strong></td>
<td>Lessons “built in” from other’s success leads to fewer mistakes and improved performance.</td>
<td>Standardization leads to fewer errors which supports innovation.</td>
<td>Standardization supports process confidence and reduced waste.</td>
<td>Standardization supports process confidence and reduced waste.</td>
</tr>
<tr>
<td><strong>Growth:</strong></td>
<td>Creating time efficiencies creates capacity to perform more work.</td>
<td>Improved process efficiencies creates capacity to perform more work.</td>
<td>Improved performance creates customer appreciation which supports growth.</td>
<td>Improved performance creates capacity to perform more work and improve profit.</td>
</tr>
<tr>
<td><strong>Knowledge:</strong></td>
<td>Connects employees to “what is important.”</td>
<td>Focuses the program team on performance excellence.</td>
<td>Creates alignment on the functional team.</td>
<td>Aligns infrastructure.</td>
</tr>
</tbody>
</table>
PEM -- Progress results

- We built it
- We piloted it
- We are using it
- We are making discoveries
- We are learning and making changes

Let us share some implementation stories
PEM -- Implementation Discoveries

Some quick stories

■ Level A – Individual
  – I didn’t know that was my job …
  – No training exists for that …
  – New performance expectations set …
PEM -- Implementation Discoveries
Some quick stories

- **Level B – Department**
  - We thought this was simple to use …
  - Our customer loved this! They see we are working on the right things

I don’t want to know.

Careful! We don’t want to learn anything from this.
Level C – Enterprise

- We have a systemic measure of performance
- We can focus resources on their best use …
- Integrated assessment tool -- Tagging

Careful! We don’t want to learn anything from this.
Your journey

- We have shared stories about what we did, and how we thought and what we encountered along the way.

- Now, let’s talk about you and your potential implementation journey.
Implementing your own model
Suggestions

- Your model should be about *how you do business*

- Your model should *start change where you are today*
  - A change too far is a change effort lost:
    - The next step is always taken from where you are standing
    - People need to see the path ahead (from where they are standing)

- When implementing … use our *framework* not our *content* to design your model
  - Use what works for you (use the strengths of your work culture)
  - Focus on behaviors that produce value – *value transaction*

Anyone who has never made a mistake has never tried anything new. Einstein
Implementing your own model
Start up techniques – the Influence Machine

Key techniques we used … may or may not work for you

1. A compelling vision
2. A focus on value
3. Emergence
4. Conversation
5. Influence
6. Alignment
7. Empowerment

Where’s the beef?

“Change your thoughts and you change your world”  Norman Vincent Peale
Implementing your own model
Secrets

- As a change leader, it is not others who must change first
  ... you must be the change you want others to become

- Start with behaviors in your culture
  ... behaviors create norms which create culture which reinforces
  behaviors that create norms that creates culture, which ...

- Valuing value
  ... there are competing systems (initiatives, processes, tools)
  out there, find them, understand them, and work them into
  your own performance excellence model

Don’t start unless you are committed to finish.
Implementing your own model
Questions for your journey

- What is it that you value?
- What is it you want?
- What does your team want?
- What does your department want?
- What does your organization want?
- What does your company want?
- What does your customer want?

- What do you change to **align all** of these wants?
- What do you put in place to ensure you get these wants?

Failing to finish creates cynicism.
Summary – Key learning points

- Using waste reduction tools – they are a good thing
- Understand the scope of your world
- Find the real, root cause problem that needs to be solved
- Design win, win, win, etc.
- Know whose excellence are you working on
- Become aware of unconscious behaviors
- Buckle up, it is going to be a bumpy ride (prepare yourself)
- We say the system (and often the cultural system) needs to change
- Determine the level of problem solving needed (if not all)
- Focus: Behaviors and value
- Focus on the value transaction
- Build a change model that fits who are; where you are; where you are going
- Start where your people actually are (not where you are)
- Use the influence machine
Summary – One overall take-away

We, Steve and Mark, have been involved in change management, Lean, Raytheon Six Sigma, Baldrige criteria, Learning, Organizational Development, systemic culture change and more for most of our careers.

These experiences have been integrated into the performance excellence model concept. “There is room at the table” for all of these good change efforts.

What made this integration possible was the discovery and application of a common and basic building block …

If you take only one thing away from this presentation – focus on the **value transaction**.
What questions do you have?

We’ve seen Calvin’s response …

… now what do you want to know?
Reference Materials

- industrial management (July/Aug 2005)
  - Focused Journey of Change – Raytheon’s manufacturing excellence model relies on behavior, Mark Jepperson
- Large Group Interventions, Barbara Bunker & Billie T Alban
- Corporate Culture and Performance, John Kotter
- Leading Change, John Kotter
- Teaming by Design, Donna McIntosh-Fletcher
- Creating a Lean Culture, David Mann
- Learning to See, Mike Rother, John Shook, Jim Womack