



TRANSIT
ASSET
MANAGEMENT



Federal Transit
Administration

FTA Roundtable: TAM & Procurement

July 15, 2018

Presented by:

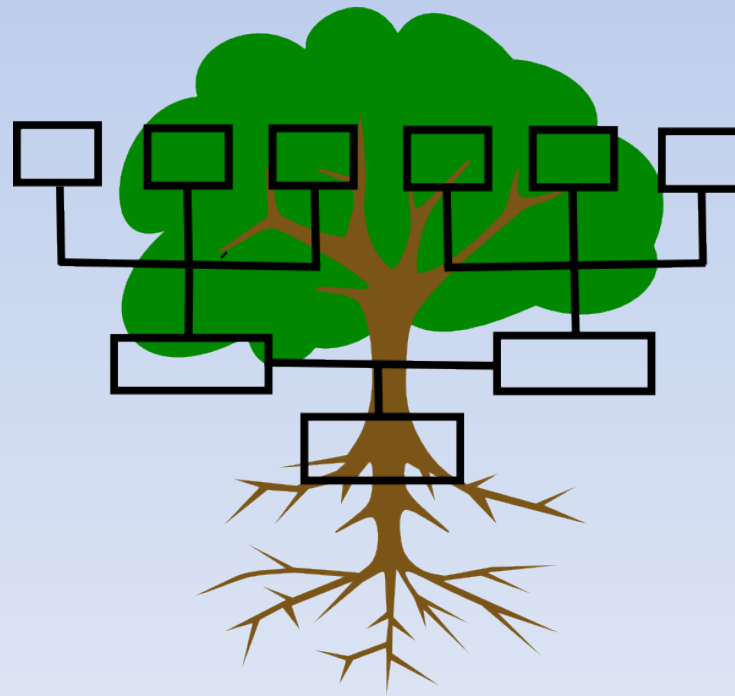
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Let's Get Started!

On an index card, write down a response to...

How are TAM & Procurement* related?



Today's Agenda

Procuring Resources

- I. Asset Management “Software” Systems
- II. Prioritization Tools
- III. Support Services

Procuring Assets

- IV. Contracts & Procurements

Asset Management System Acquisition

Who's driving this train? or bus? or boat?



Historically, the standard was if a business couldn't find a Commercial Off the Shelf (COTS) solution that could satisfy 80% of their requirements, they had to either accept less requirements met or build custom software.

Agency + MAP-21/FAST Act + Cloud and Configurable systems = Options

(TAM Needs) + (Law/Regs) + (Technology) = Market

C4 = COTS, Cloud, Configurable or Custom?

Buy It!



Build It!

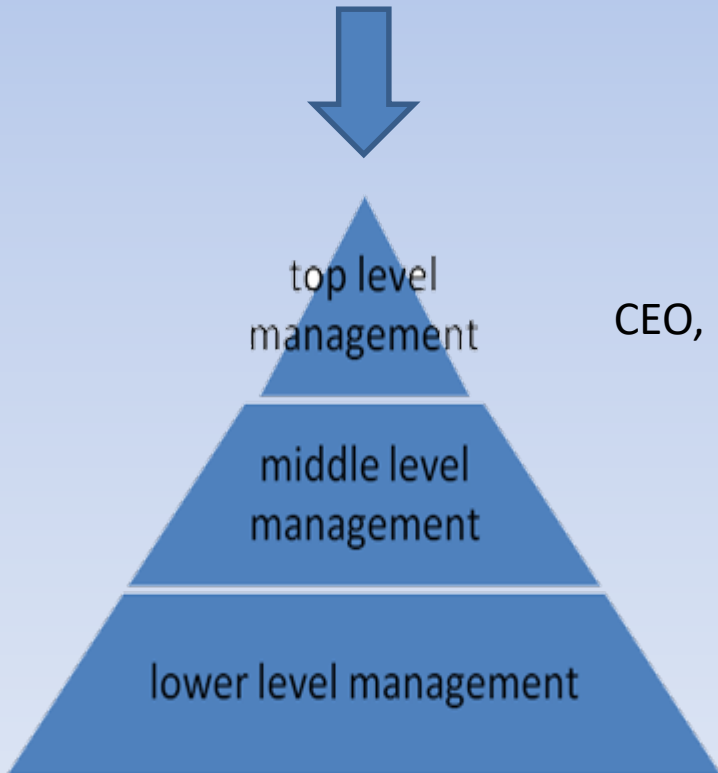
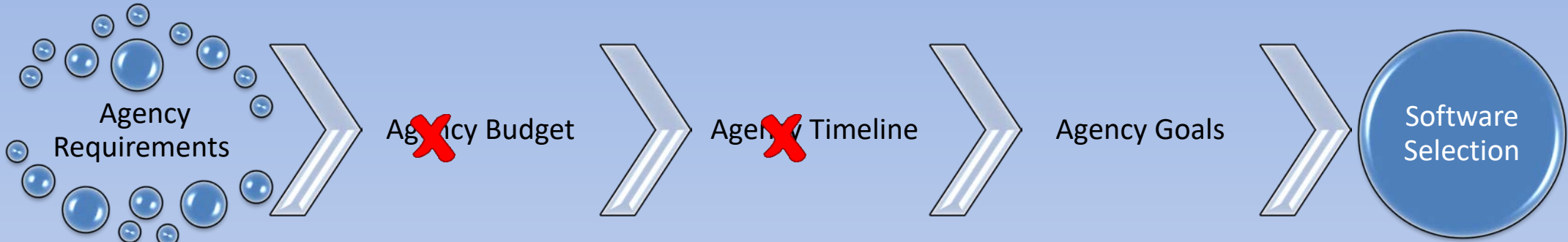


- **COTS:** Commercial Off-The-Shelf software. Often a one-time purchase of software owned by the agency. Pay to upgrade. Unusual to have Subscriptions
- **Cloud:** May have traits of both COTS and Configurable products. Hosted off-site with vendor, often subscription based.
- **Configurable:** Highly configurable. Often subscription based. Could be agency owned, consultant managed or provided or hosted by others (vendors).
- **Customized:** Built entirely in-house; locally managed by agency or consultant.

Make a software selection that best suits your Agency.

Agency Goals, Strategic Plan and Business Needs aligned and supported by your selection...while meeting regulatory requirements.

If you select a system specifically to meet the Regs, it will be sub-optimal!

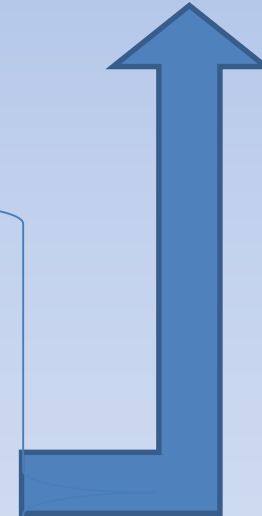


Needs:

CEO, Board, Regulatory Agencies

AGMs, Directors & Senior Managers

Managers, General Superintendents,
Foreman, Mechs and Techs



Mature Asset Management Transcends the Entire Agency.

All levels; All business units!

Anything less is sub-optimal!

Exercise #2 - on the sheet provided write responses to the following:



- **Where does your Agency stand regarding C4? and Why?**
- **Is this the right choice for your Agency? and Why?**

After 5 -7 minutes let's hear from our roundtable attendees!

Asset Management System *Requirements*

You need to answer some questions to establish requirements:

- What level of maturity is my agency at presently? Where do I want the level of maturity to be in 1, 5, 10 or more years?
- What volume of assets do we own presently?
- What volume of assets will we own in 5, 10 and 15 years?
- Where are my assets at in their life cycle? new, mid-life, near or beyond useful life?
- What's my backlog?
- What is our Asset Breakdown Structure (ABS)? There is a multiplying effect by your choice - Parent, Child, Grandchild relationships.
- What data do we want or granularity?
- What your business processes are...so it meets “your most efficient way of doing business”.

What are you prepared to invest in operating and maintaining resources (\$, time and staff)

- the system
- the data
- the personnel

What reports do we want? What reports do we need?

- Front-line staff
- Management
- Business units
- Execs & Regulatory

How many users do we want? Think long term

User Groups

- Permissions by branch, office & department
- Skill Levels: User and Super User/SME

Security of the data and system itself?

Build a Solid *Requirements Matrix*

Interact with every business unit in the agency

Ask lots of questions!

Exercise #3 - Discuss Asset Management System (AMS) **Requirements** at your table

- **Craft one specific requirement you recommend to put in your AMS solicitation, share and discuss at your table.**
- **What value does fulfillment of that requirement provide to your AMS?**

After 5 -7 minutes we will have one representative from each table to share their requirement and why it adds value. Remember sharing is fun!

Prioritization Tools

Baseline:

- What do I have presently?
- Do I keep what I have or invest in another product?
- What are you using it for?
 - Which assets to replace? or maybe which Projects to “green-light” or “go first”?
 - Decision and prioritization tools require solid input
 - Critical to the tool is the establishment of criteria
 - Many of the tools are comparative analysis tools!
 - They take attributes and weigh their importance based on Stakeholder input

Assess Adequacy...Is it good enough?

Hey...spreadsheets can work!

- **Simple and functional *beats* Complex and dysfunctional any day!**

Survey the Market

- Talk to peers; visit peers – beg, borrow and steal from your peers!
- Conduct vendor demos
- Test drive the product...**ask for a sandbox to play in!**
 - Use your data



Project Prioritization Tools (cont'd)

Involve Multiple Business Units in Selection Process and Criteria Development

- ✓ You need diversity!
- ✓ Should map to agency goals and strategic plan
- ✓ Avoid departmental dominance & mono-vision,
 - ✓ Utilize RASCI diagram or equivalent
 - ✓ Roles & Responsibilities
- ✓ Must be defensible and sound – Define your “Method to the Madness”
- ✓ Narrative – sentences and paragraphs telling what you do and why you do it.

Agility

- ✓ Canned vs Ad Hoc Reporting
- ✓ Must be change friendly
- ✓ Criteria must consider all relevant attributes and playing fields
 - ✓ Asset vs. Non-Asset based criteria

Agency Diversity:

- Responsible
- Accountable
- Support
- Consult
- Inform

Helps avoid gaps!!!

Prioritization Tool Criteria

**It may involve
tangible and intangible
elements!!!**

**If *something* provides
value then it is an
asset to be managed!!!**

(Decision Criteria) Objective/Sub objective	(Constraints) Rating Scale	Weighting Factor
1. Continuous improvement to customer service – 20%		
Provide safe and reliable customer service	Safety critical: 100% Regulatory: 100% Operation critical: 70% Operation support: 50% Service enhancements: 30% Service expansion per approved regional or other long range plan: 30% Other service expansion: 0%	10%
Apply continuous improvement to service delivery	Project delivers customer facing service improvements: 100% Project improves overall efficiency and effectiveness of internal business operations: 50% Project does not provide customer facing service improvements or substantially improve the efficiency of internal operations: 0%	5%
Mitigate risk to the Authority	Project eliminates the potential for a significant operational disruption or safety issue: 100% Project provides an opportunity to significantly reduce cost: 100% Project provides an opportunity for significant improvement to MARTA internal operations: 100%	5%
2. Sustaining our assets - 20%		
Maintain infrastructure and operational capabilities	Asset or operational process is in a Failed condition: 100% Asset or operational process is in a Substandard condition: 70% Asset or operational process is in an Adequate condition: 30% Asset or operational process is in a Good or Excellent condition: 0%	10%

Criteria Elements:

- Customer Impact
- Ridership
- State of Good Repair
- Environmental Impact
- Safety
- Security
- Regulatory
- Legal
- Operational Impact
- Cost/Benefit
- Funding/Grants
- Resilience
- Deliverability
- Public Good
- Brand
- Others_____

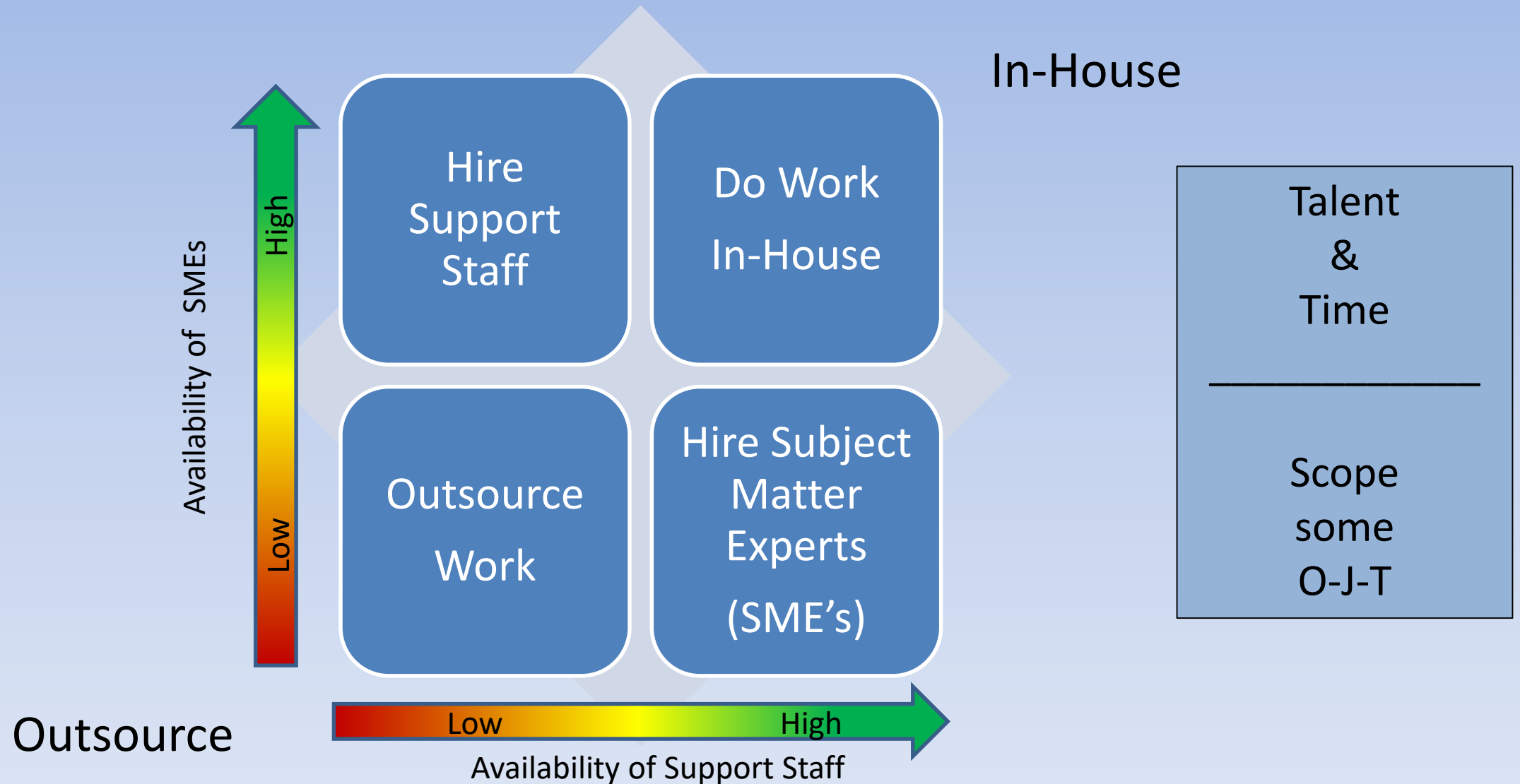
Exercise #4

On your hand-out, take the following prioritization elements, pick the top 7 elements to build your Agency's prioritization model. Apply weights to each of the 7 elements so they total 100. Sorry the model only allows 7 elements!

Resilience	Security
Customer Experience	On Time Performance
Ridership	Safety
State of Good Repair	Environmental Impact
Branding	Community Outreach
Expansion Opportunity	Backlog Management
Cost/Benefit Analysis	Service Expansion
Deliverability	Grant Funding Availability
Cleanliness	Regionalization
Regulatory Compliance	Age

After 5 -7 minutes we will ask attendees (randomly) to share their 7 model elements and weights. Only a few so we can discuss on the floor. Once again...Sharing is fun!

Support Services



Support Services

- What is your Agency's vision and a mission!
- What does your TAM policy say? Do you have one?
- Do you have the right leadership spearheading the effort?
- Do you have the personnel in-house?
- Do they have the time to do it?
- Do they have the skill to do it?
- How do you select the right kind of support?
- Don't pay someone to tell you something you already know...unless it's the last resort!
- Are you taking a phased approach?
 - the first step might be peer support or consultant support
 - defining the scope of the effort...again *Who's driving the train?*
 - identifying business units and their role in procuring the right support?
 - Look for possible quick win or success opportunities to build on?
 - what body of work or data do you to build on and sharpen or expand
 - interim milestones so you can measure success

Exercise #5

On your hand-out, draw an org chart that shows where your TAM expertise resides at your Agency. Include internal departments and offices and external resources if the expertise resides outside the Agency.

Now draw your Agency's TAM Dream Team. The one that achieves optimal TAM Agency Performance!!!

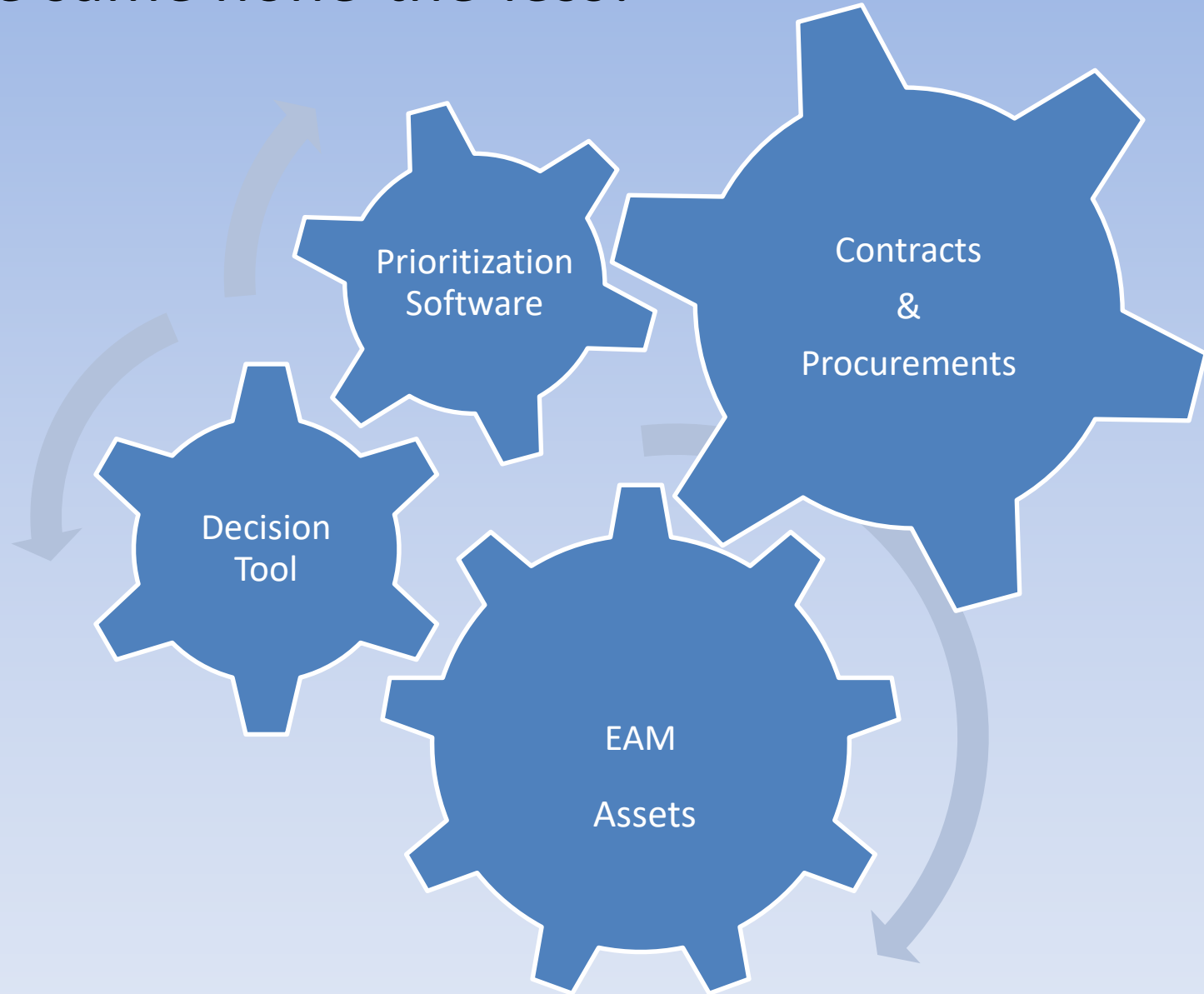
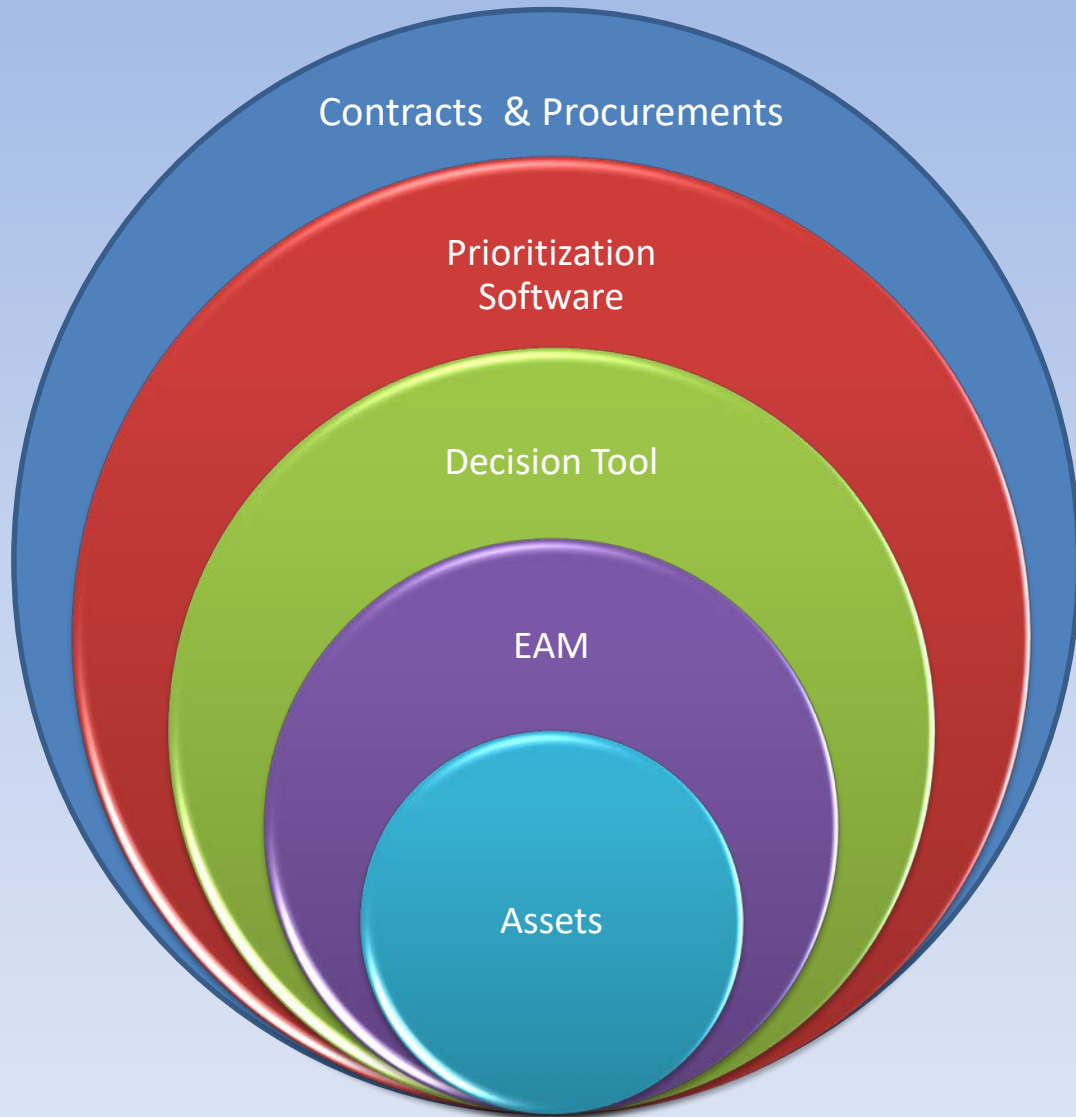
After 5 -7 minutes we will ask attendees (randomly) to share where the largest pocket(s) of TAM expertise reside in their Agency and where the largest gaps are.

Contracts & Procurements



Contracts & Procurements are integral to Whole Life Cycle Management

Different look...but it's all the same none-the-less!



Examples of Poor AM Data Requirements in Contracts

MISSING



B.2.4 ASSET MANAGEMENT

The Contractor shall compile, record and submit asset data to update the Authority's Fixed Asset Management System database with the assets/components provided under this Contract per an Authority-provided procedure.

“Good” Example of AM Data Requirements in Contracts

- A. Compiling, recording and submitting the data required to update the Authority's Fixed Asset Management system database with the assets/components provided and installed under this Contract.
1. Contractor shall record required data (see Appendix A) using the Authority provided Excel spreadsheet as the assets/components are delivered and installed.
 2. The following assets/components shall be inventoried and reported:
 - a. Exhaust Fans
 - b. Fire Alarm Panels
 - c. Fire Sprinkler systems
 - d. Fire Extinguishers
 - e. Emergency Shower/Eye Wash
 - f. Automatic Transfer Switch
 - g. Panelboards
 - h. Power Distribution Panels
 - i. Uninterruptable Power Supply
 - j. Switchboards
 - k. Safety Switches
 - l. MV Switchgear
 - m. MV AC Potential Transformer
 - n. MV Transformer
 - o. DC Rectifier
 - p. DC Switchgear
 - q. DC Circuit Breaker
 - r. Local Control Panel
 - s. Battery Charger
 - t. Batteries
 - u. Energy Storage System
 - v. DC Disconnect Switch
 - w. Safety Switches
 - x. Overhead Coiling Door
- B. Facilitating monthly reviews by the Authority of the compiled and recorded data beginning one (1) month after the effective date of the Site Notice to Proceed (SNTTP).



Whole life cycle management includes acquisition of assets which means...

Procurements which means...contracts, requirements, specs, terms and conditions and maybe some supplementary conditions which means ...

The Prime (Bidder) has to read, comprehend and understand the document... then cost the effort and deliverables...typically through their own contracts, sub-contracts, suppliers and sub-suppliers which means...

Systems and sub-system integration required to form a functional product which means...

Components and sub-components are needed that likely have different expected useful life (EULs)

**Always put
yourself in the
other's shoes. If
you feel that it
hurts you, it
probably hurts
the person too.**

MyBookOfQuotes.com

Bonus: Add Buy America, Disadvantaged Business Enterprises (DBEs), Grants and Local Content Requirements and things can get challenging!

Question:

Did anyone list their Contracts, Procurement or Materials offices as having or needing TAM expertise as part of the last exercise?

Show of hands?



Having an Asset Management System...
that has solid data and asset breakdown structure...
that supports how the Agency conducts its business...
that can be translated (cross-mapped) into contract documents that are
easily understood by contractors, manufacturers in your supply chain
can be a tremendous benefit!!!

It will save both of you...time, money and a whole lot of heartache!!!



Discussion and/or Rotten Tomatoes

