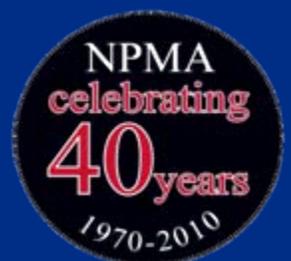**NPMA**

JOURNAL OF PROPERTY AND ASSET MANAGEMENT

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NPMA celebrating **40** years 1970-2010

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EDITOR'S COLUMN

Ladies and Gentlemen:

You hold in your hands yet another effort to take the next step in our association's professional maturation – the publication of a refereed journal. This E-Journal is a fine collection of articles, technically mature and of great depth and breadth. Yes, we have, in the past, published technically exception articles in the Property Professional. And for those authors I am truly grateful! But with this publication, we now have a PROPER forum for these research articles!

Some may ask, "Why do we need a journal?" It is yet another step on our journey towards a more mature profession. "The knowledge base of a field is represented through written materials. Usually referred to as its literature, this body of knowledge is important not only because it contains the information that makes the field unique -- thus separating it from other disciplines -- but also because it demonstrates what is known about the field of practice" (Imel, 1989)[1].

Cyril Houle discusses in his text, "Continuing Learning in the Professions" the sociological process of defining a Profession[2]. One of the characteristics displayed by the professional is that of a mastery of theoretical knowledge. With this document we have increased our theoretical knowledge – allowing all of our members to share equally in that rich fount provided by our members.

So what else does this mean to the National Property Management Association? On the anniversary of our fortieth year, we now have another publication to compliment and expand our already existing literature. To past authors I thank you for your contribution. But, if I may use some more rudimentary language – it is now the time for all of us to, "Bring it on!"

If you are interesting in writing lengthier research based articles – bring it on!
If you are in the NPMA/Stevens Henager Degree program and have a paper written for one of your classes – bring it on!
If you are going for a degree in another college or university program and are writing a research paper – bring it on!
If you have a philosophical conundrum and have researched the topic and want to write a paper – BRING IT ON!

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[1] Imel, S. (1989). The field's literature and information sources. In S.B. Merriam & P.M. Cunningham (Ed.), Handbook of adult and continuing education (pp. 134-146). San Francisco: Jossey Bass.
[2] Houle, C.O. (1980). Continuing learning in the professions. San Francisco: Jossey-Bass.

Ladies and Gentlemen – now is the time where we have another venue for you to contribute you written materials. I encourage you to do so.

Ah, but there is one other request. For this to TRULY be a REFEREED JOURNAL we need a panel of referees -- Folks that would be interested in reading through the submitted articles, providing feedback to the authors, and determining the acceptability for publication. If you are interested in working as one of these individuals, please feel free to contact me at GPDOCTOR@ATT.NET or call me at 937-878-6680.

Ladies and Gentlemen, I present to you the first edition of the National Property Management Association's Journal of Property and Asset Management.

Douglas N. Goetz, Ph.D., CPPM, CF
NPMA National Editor

**THE NATIONAL PROPERTY MANAGEMENT ASSOCIATION'S
JOURNAL OF PROPERTY AND ASSET MANAGEMENT
Volume 1, Number 1, May 2010**

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Achieving Asset Management Excellence
Brian E. Thompson

Introduction

An executive level article focused on the mission-critical elements of an asset management system. The article will begin by examining the financial savings which result from avoiding the acquisition of unnecessary assets and increasing the utilization of existing assets. It'll also review key regulatory initiatives which impact asset management for U.S.-based publicly traded companies as well as government contractors and agencies. Building upon this background information, it'll discuss how organizations achieve asset management excellence through a combination of tools, policies and procedures, and the people responsible for the asset management system.

Financial Impact

One of the biggest line items on an organization's balance sheet (or budget) is "Property, Plant and Equipment" (PPE). Today, savvy executives are realizing that proactively managing these assets will unlock potentially millions of dollars in capital savings. These initiatives will also increase their Return On Investment (ROI) (and other financial measures) used in part by analysts to determine a publicly traded organization's stock price, or for non publically traded organizations, how well they use their budgeted funds to accomplish management goals.

Since many organizations have hundreds of millions if not billions of dollars in PPE, it is imperative that executives adopt a strategic approach to managing their assets, which encompasses:

- Supporting production goals
- Avoiding the acquisition of unnecessary assets
- Increasing the utilization of existing assets
- Ensuring compliance to avoid costly penalties
- Leveraging best practices

Supporting production goals is a mission-critical function of the asset management team. Production stoppages or delays because of a lack of material or not having the right tools available when they are needed can have devastating and costly consequences. Management will still have to pay labor costs even during a production line shut-down. Missed delivery dates negatively impact customer satisfaction, and the reputation of the organization is of paramount concern for senior executives.

For those early adopters who already place a high value on avoiding the acquisition of unnecessary assets, as well as increasing the utilization of existing assets, the financial impact has been measured in millions of dollars. Robert McFarland from ITT in Fort Wayne, Indiana has documented cost savings (in the areas outlined in Figure I. below), of more than $36 million during a six year period through improved asset management systems and business processes.

"Property management professionals must manage all aspects of the asset life cycle to ensure their company achieves the maximum return on invested capital, implements efficient and effective processes that provide reasonable control that supports the workforce while eliminating non value added processes, resources and cost", says Robert McFarland, Manager, Property Management, ITT, Inc.

Asset Management Cost Savings Opportunities

- Reduced capital and expense purchases
- Reduced depreciation expense
- Reduced property insurance costs
- Increase to cash from the sale of excess idle equipment
- Reduction to repair and calibration expenses
- Reduced outsourcing costs for equipment calibration and maintenance
- Reduction in materials and parts to support test equipment
- Reduced sales and property/personal property tax
- Reduced Purchase Order processing costs
- Reduced interest expenses
- Reduced inventory expenses
- Reduced warehouse facilities square footage and costs
- Reduced acquisition and sales costs
- Reduced calibration and maintenance facilities square footage and costs
- Eliminated emergency lease requests and expensive lease payments
- Reduced production stoppage risk by ensuring the right assets will be in place where/when needed

Source: Robert J. McFarland, CPPM, CF - ITT Corporation

(Figure I)

To achieve these types of results, organizations need to have asset management systems in place which provides visibility across the entire organization. In many cases, they must transform from a silo-based philosophy where there are dozens of separate, non-integrated systems into a single solution that integrates all business functions – from engineering and operations to finance and property management. For many organizations which have high value test equipment, they have been able

to increase asset utilization by as much as four times while delivering other significant value:

- 70% reduction in capital budgets for test equipment 4X improvements in utilization
- 90% reduction in time for critical test processes
- 20 man-years of annual engineering productivity
- Trustworthy processes for delivering capability just-in-time eliminating inventory carrying costs

"Producing breakthrough results in asset management requires knowledge that is counter-intuitive to the problem. In addition to skills and processes typically associated with "asset management", success requires in-depth knowledge of finance, operations, engineering and quality processes, their metrics – and how each is impacted by assets", says Paul McNamara, Chief Executive Officer, The Sente Group.

Compliance Drivers
Organizations also must be aware of (and in many cases comply with) key regulatory initiatives (Figure II). All persons with ultimate responsibility for asset management should be intimately familiar with each of the regulations which apply to their organization.

Key Compliance Initiatives

Organization Type	Regulation
All U.S. Publically Traded Companies	Sarbanes-Oxley Act (Public Company Accounting Reform and Investors Protection Act)
U.S. Government Contractors and U.S. Government Agencies	Federal Acquisition Regulations (FAR)
All U.S. Exporters	International Traffic in Arms Regulations (ITAR) and Arms Exports Control Act (AECA)
All U.S. Government Agencies	Chief Financial Officers Act of 1990 and OMB Circular A-123

(Figure II.)

Non-compliance penalties for Sarbanes-Oxley are stiff – up to and including imprisonment of up to 20 years and fines up to $5 million dollars. Multi-million dollar fines have also been levied on government contractors who were found in violation of the FAR and for U.S. exporters in violation of ITAR, fines have reached $100 million dollars. Other consequences of non-compliance may include:

- Increased insurance costs
- Increased borrowing costs
- Damaged credibility in industry and with customers
- Costs to implement corrective action plans

Asset managers should actively seek out educational opportunities and organizations which will help them stay current as these regulations continue to evolve. Not only must they be aware of these regulations, but put in place the policies and procedures to help ensure compliance and communicate these goals throughout the organization.

The Asset Management System

An asset management system is not just a database to track what you have and where it is, rather, the asset management system is a combination of tools, processes and people which work in concert to achieve the goals of the organization (Figure III).

Figure III.

Tools
The foundation of the asset management tool set is the asset database. In order for organizations to have complete visibility over all of their assets (regardless of division or geographic location), having a web-based solution is essential. A single web-based application can support thousands of worldwide users and at the same time, not require IT to install (or maintain) software on multiple servers or individual PC's. Application security enables authorized users to view only data and execute transactions they have rights and privileges to, even giving casual users the ability to view and update the assets which they have been assigned.

There are many Commercial off the Shelf (COTS) asset management applications on the market today which offer greater long-term value compared to custom

applications which in general have been proven to be risky and expensive to develop as well as difficult to support.

The ideal asset management system will include many automated features to help eliminate costly redundant data processing which is often prone to "fat finger" errors. For example, an interface from the organizations procurement system to the asset management system could automatically alert receiving personnel to in-bound assets, automatically populate many data elements in the asset system (e.g. asset description, acquisition cost, purchase order number, vendor, etc…). Interfaces to/from other applications such as financial and human resource are commonplace.

Another streamlining opportunity is to have the system automatically produce commonly used forms such as shipping documents, maintenance work orders or disposition reports. Since much of the data needed for completing these forms already resides in the asset database, these forms can easily be automatically populated saving time and reducing errors.

What was previously referred to as simply "scanners" a decade ago, have morphed into robust mobile computers offering data entry keys, handwriting recognition and imaging tools which further empower asset managers in the field to execute more complex transactions than just an inventory scan. They can receive and simultaneously mark a new asset, transfer custody, change location, or even take a picture for inventory and insurance purposes which can be tied to the asset record in the system. With a wide variety of hardware on the market today, it's critical you first examine what tasks need to be accomplished by each functional group in order to deploy the best technology for the job.

Along those same lines, asset management tags have advanced to the point that some are capable of emitting a radio signal to a reader to automatically capture where that asset is at any given time. Radio Frequency Identification Devices (RFID) certainly isn't recommended for every asset type but should be considered for evaluation of high dollar assets, extremely sensitive items, and/or palletized/container shipments. Ideally there should be a mix of different types of asset tags being used based on asset type as well as any special environmental considerations which could cause the tag to separate from the asset.

Processes

The second element of achieving asset management excellence is ensuring your policies and procedures are based on asset management industry leading practices (ILPs) and voluntary consensus standards (VCSs) and are well defined and clearly communicated throughout the organization.

ILPs are strategies and processes that are both quantifiably and qualitatively demonstrated to be top performing. They are the marriage of applied behavior and

knowledge that have been demonstrated and validated to yield a competitive advantage for organizations that employ them.

Standards are the common and repeated use of rules, conditions, guidelines or characteristics for products or related processes and production methods, and related management systems. Voluntary consensus standards are standards developed or adopted by voluntary consensus standards bodies, both domestic and international. One such body doing outstanding work in the field of asset management VCSs is the ASTM Committee E53 on Property Management Systems. Committee E53 develops management systems criteria, including performance standards, practices, metrics, and methods of effectiveness for the conduct of management and administration activities for durable and movable assets (personal property management). The Committee now has a membership of close to 200 persons and currently has jurisdiction of over 21 approved standards that are published in the Annual Book of ASTM Standards. A list of the current E53 subcommittees can be found in Figure IV.

ASTM Standards under the Jurisdiction of E53

Each main committee in ASTM International is composed of subcommittees that address specific segments within the general subject area covered by the technical committee.

E53.01 Process Management
E53.02 Data Management
E53.03 Financial Management
E53.04 Reutilization and Disposal
E53.05 Property Management Maturity
E53.06 Terminology
E53.90 Executive
E53.91 Awards
E53.92 Planning

Figure IV.

"At Bonneville we have incorporated Voluntary Consensus Standards into our property policies and procedures to:

- Be more efficient and effective when communicating our property operational practices
- Take advantage of established best practices that have been captured through the Standard development process
- Support our internal property policy
- Facilitate advertising our value to Management

Incorporating VCS has been beneficial to BPA by enabling us to establish a foundation that supports our entire property system from policy development, process documentation and operational practices. Further, being involved in the Standards development process has encouraged and supported our efforts at BPA to sustain our continuous improvement momentum" says Patrice R. Baker, CPPM CF, Supply Systems Analyst from Bonneville Power Administration.

 As Ms. Baker points out above, organizations that wish to achieve asset management excellence don't just need to read and follow these standards, asset management professionals should be encouraged to participate in the development of new standards as well as assist in improving and refining existing approved standards.

People

You can have a great asset application with ideal processes but it's truly up to the people to make any asset management system a success and one which results in a positive impact on an organization's bottom line. First and foremost, those people must have not only the skills and education to perform their job, but also the knowledge to recognize where to go for guidance when needed.

Since 1970, the National Property Management Association (NPMA) has been the leading membership association for personal property and fixed-asset professionals, and has been widely recognized as the primary source for asset management education and professional development. With more than 4,000 members from a wide cross-section of employers, members benefit from the finest educational classes and training programs while sharing best practices with their peers. NPMA offers basic, intermediate and advanced certification programs, as well as a Bachelor of Science in Business Administration and an Associates in Business Management (both with an emphasis in Property Management) through Stevens-Henager College. Asset management professionals should embrace this association not only for a solid background in asset management curriculum, but also to stay abreast of the latest regulations, trends and best practices in the field.

Training and communication on the asset system is also very important. The policies and procedures defined under "Processes" should all be well documented and communicated throughout the organization. For those using a vendor supplied asset application, it's equally important you partner with a qualified vendor whose mission is focused on delivering the best asset management solutions on the market with the people to stand behind the application to assist with user training, system administrator training, business process change management, documentation, consulting, system configuration, help desk and other professional services.
Summary

There are huge financial incentives for organizations to achieve asset management excellence as this article has illustrated multi-million dollar savings opportunities for

those who chose to adopt systems and policies which reduce the acquisition of unnecessary assets and increase asset utilization. These policies and procedures should also help ensure compliance with critical asset management regulations where fines and possible incarceration await those who choose otherwise.

For those who previously believed an asset management system is just a database, I hope I have illustrated the criticality of having asset management tools, processes and people working in concert to deliver the value and strategic competitive advantage organizations are seeking in today's highly competitive environment.

Author Bio

Brian Thompson is Vice President of Solutions, Strategic Markets at Sunflower Systems where his responsibilities include the sales and marketing of Sunflower Systems solutions to key strategic accounts, exploring new markets and enhancing general sales operations.

Thompson is a respected executive with a distinguished 18-year career leading software sales and professional services operations for turnaround and S&P 500 organizations. Thompson currently serves as NPMA Western Region Vice President, is a frequent contributing author to The *Property Professional* publication where in 2007 he earned an Award of Merit for Literary Excellence and he is also a frequent speaker at NPMA educational/regional events.

Thompson has served as Vice President of Sales for AssetSmart where he strengthened the organization's sales, marketing and general management operations. As Director of Sales for SunGard, he managed a team responsible for generating more than $12 million annually and was entrusted to build and market the world's first Internet-based multi-bank online treasury service which achieved profitability within the first 18 months while maintaining 100% client retention since inception.

Thompson also currently serves as Director of Program Development for Train 4 Autism, an all volunteer non-profit organization dedicated to raising funds and awareness for autism. Thompson earned a Master's in Business Administration and a Bachelor of Science in Management from Pepperdine University and is a former faculty member of the UC Berkeley Haas School of Business.

Industry Leading Practices - A Comparative Analysis
Ronald E. Regalado

Special thanks to Helen Creel, Configuration Analyst at CDI Corporation for her excellent editing in support of this article.

ABSTRACT

On October 15, 2009, I participated in a web meeting with Dr. Douglas N. Goetz as he presented to the North Texas Chapter of the National Property Management Association the topic of **Industry Leading Practices: An Exploratory Analysis.** I subsequently decided to write an article comparing the global automotive industry's approach to developing industry leading practices to the current property management industry, i.e., National Property Management Association (FAR) approach.

INTRODUCTION

This article begins by answering a few relevant questions and describing a few relevant terms:

How does the concept of an industry leading practice relate to the new Federal Acquisition Regulation (FAR) clause 52.245-1? The concept of an "industry leading practice" refers to a term mandated for use, in addition to two other terms, "standards" and "voluntary consensus standards".

NEW FAR CLAUSE:

"Consistent with voluntary consensus standards and/or industry-leading practices and standards for property management; the contractor shall initiate and maintain the processes, systems, records, and methodologies necessary for effective control of government property."

As Dr. Goetz indicated in his presentation, although voluntary consensus standards do exist for some areas of property management, there is no generally accepted definition for Industry Leading Practice (ILP) at this time. He did, however, say that FAR Part 2 and/or ASTM E 2135-07, Standard Terminology for Property and Asset Management may in the future have a definition for ILP.

If you observed what you considered to be a best practice, would you know if it would qualify as an acceptable ILP?
Dr. Goetz eloquently provided the following information from a previously written but unpublished version of a proposed Department of Defense Guide for Contract Property Administration: "An ILP should have the following characteristics:

- It should be generally accepted and widely used;
- Its use should have been proven throughout related businesses;
- The ILP process should be repeatable, measurable, and verifiable;
- The ILP process should be documented in written form and supported by historical data from an approved and accepted source (e.g. trade publications, literature, etc.).”
-

Additional ILP clarification was provided by Tom Ruckdaschel in a presentation entitled “**FAR - A new proposed rule on Property Management, Public Meeting 4/13/2004.”** He specifically said “ILP processes should consist of strategies and processes that are both quantifiably and qualitatively demonstrated to be top performing”. Continuing with this thought would imply that ILP processes should be supported by quantifiable evidence that makes an ILP “top performing”, such as consistently achieving cost savings and/or cost avoidance, using metrics to show measurement, and managing by the use of data.

What is NPMA and what efforts have been taken to create voluntary consensus standards? According to the NPMA web site (www.npma.org), “NPMA is a professional non-profit membership association for those employees who have responsibility and ultimate accountability for the physical assets of their organization. Association members oversee the effective and efficient management of fixed-assets and ensure proper records are kept of the equipment, materials, or other movable and durable property on the inventory. In June, 2000, the first tangible step was taken toward achieving a consensus standardization policy for the property industry when Committee E53 on Property Management Systems was officially organized. Established via a partnership between NPMA and ASTM International, Committee E53 is the official home for the development of management systems criteria, including performance standards, practices, metrics, and methods of effectiveness for the conduct of management and administration activities for durable and movable assets.”

What is the Automotive Industry Action Group (AIAG) and what efforts have they taken to create voluntary consensus standards? As indicated in the AIAG web site (www.aiag.org), “AIAG was founded in 1982; the Automotive Industry Action Group (AIAG) is a unique not-for-profit organization where retailers, automakers, supporters, service providers, academia, and government have worked collaboratively to streamline industry processes and business practices. The AIAG vision statement is: “AIAG is the catalyst for the global automotive industry’s efforts to establish a seamless, efficient, and responsible supply chain.” AIAG achieves its objectives primarily by publishing standards and offering educational conferences and training. Examples include the Advanced Product Quality Planning (APQP) and the Production Part Approval Process (PPAP) standards in which specific techniques and tools designed to identify problems and ensure quality are prescribed. These documents have become the defacto standard that must be complied with by all Tier I suppliers. Increasingly, these suppliers are now requiring complete compliance from their suppliers, so that many Tier II and III automotive

suppliers now also comply."

What is "supply chaining" and how does that concept relate to industry leading practices? In his book <u>**The World is Flat: A Brief History of the Twenty-First Century**</u>, author Thomas L. Friedman defines supply chaining: "Supply-chaining is a method of collaborating horizontally---among suppliers, retailers, and consumers---to create value…the more these supply chains grow and proliferate, the more they force the adoption of common standards between companies, the more they eliminate points of friction at borders, the more the efficiencies of one company get adopted by the others, and the more they encourage global collaboration". In today's economy, all industries are faced with the challenge of reducing costs while maintaining productivity, high levels of customer service, and compliance. This can be accomplished through effective "supply chaining" by collaborating horizontally among key suppliers, stakeholders, and customers to create value. The effective use of ILP will enable individuals and business entities to work together to develop common business practices and reduce non-value added costs.

This article will compare the AIAG operating model, infrastructure, and accomplishments with the NPMA and the efforts of the property management industry, as it relates to ILP. The ultimate outcome is to get our arms around exactly how ILP are identified or created, approved, and shared for the benefit of all, as accomplished by AIAG.

AIAG INFRASTRUCTURE AND OPERATING MODEL
In terms of implementing ILP solutions, validating financials and measuring progress, AIAG would be at the most mature level as an industry organization. This has been accomplished through the effective use of project teams and task groups, the development of written guidance and industry standards, certification programs and training, and by providing common, single point access data and communication links for suppliers, key stakeholders, and customers.
AIAG project teams and task groups are the heart of the AIAG operating model. A list of such teams follows. Project teams and task groups can be found on the AIAG web site(www.aiag.org).
- **Communications Project Team**: Develop guidelines for data communications and telecommunications techniques at all levels of the supply chain.
- **Bar Coding Project Team:** Develop voluntary automotive industry bar code standards, including specifications and formats, and promote bar coding at all levels.
- **Just-In-Time Project Team:** Provide an industry definition of JIT and improve industry productivity through the application of JIT.
- **Transportation Project Team**: Establish telecommunication standards of freight bills from motor carriers to paying locations.
- **Container Project Team**: Develop operational guidelines for design of returnable containers for JIT shipments within the automotive industry.

- **Continuous Quality Improvement Project Team**: Pursue standardization of a common approach to supplier quality certification.
- **CAD/CAM Project Team**: Promote the generation, use and exchange of CAD/CAM data between suppliers and customers to reduce overall product development time and cost.
- **Truck Advisory Group (TAG):** Focus on issues unique to the manufacture of heavy trucks and large off-road vehicles.
- **Quality Task Force (later renamed the Supplier Quality Requirements Task Force):** To begin communizing automaker supplier assessment programs.
- **Content Reporting Task Force**: Create a single consistent format for all suppliers to use when reporting content information.
- **The Strategic Automotive product Data Standards Integration Group:** Improve product data exchange across the international automotive community.
- **Telecommunications Project Team**: Develop the Automotive Network Exchange (ANX), a communication link between all automotive trading partners using the Internet and enabling communication through a single, secure access point.
- **The International Automotive Oversight Bureau**: Established to implement and manage the ISO/TS 16949 registration scheme oversight activities.
- **Occupational Health and Safety Steering Committee**: Address global health and safety issues.
- **Early Warning Standards Initiative:** Launched to lower automotive warranty expenses and improve product quality by reducing the lag time on identification to correction for product defects.
-

The second most prominent aspect of the AIAG approach to ILP is providing standards and written guidance. You will find some of the key AIAG knowledge objects available to the automotive supply chain listed below. Additional information related to standards and written guidance for the automotive industry can be found at AIAG's website (www.aiag.org).

- Developed the first global set of **Engineering Change Management Recommendations** to streamline the processes for managing engineering changes saving the automotive industry hundreds of millions annually.
- **Guideline for the Bill of Lading** was developed to establish a uniform format for shipment documentation through the supply chain, helping to reduce processing time and improve data accuracy.
- **Warranty Management Guideline** provided to present best practices to reduce warranty incident rates and financial exposure through faster detection.
- **Quality Management Data Specification** was developed creating an interoperable, non-proprietary, open standard for seamless data communication.

- **Common Process Approach to Control Special Processes**---heat treat, plating and coating systems---and a methodology to evaluate and remediate. The guidelines aimed to improve quality, reliability, and durability of automotive components, thus lowering warranty claims and recalls from components undergoing special processes.
- **Reliability Practices Guideline** was developed to help truck and equipment process owners and suppliers develop robust and highly reliable processes and products by managing reliability throughout the product life cycle.
- **Global Materials Management Operations Guideline Logistics Evaluation**, a common standard that measures materials and logistic process compliance was created.
- **The Crisis Management for the Automotive Supply Chain Guideline** was developed to help companies respond to and recover from critical incidents and ensure business continuity.
- **Automotive industry-driven application standard using RFID technology**---Tire & Wheel Identification Label Standard (B-11).
- The International Automotive Task Force announced agreement to recognize the **new ISO/TS 16949 registration scheme oversight activities.**

AIAG has provided a robust and comprehensive set of guidelines and standards for many of the automotive industry business processes. AIAG has also provided written guidance for special and unique processes.

The third and final pillar which supports the foundation of the AIAG operating model is learning and development offerings. Some notable learning and development initiatives are identified below. Refer to AIAG web site for more information (www.aiag.org).

- **Certification program Quality Measurement Data**
- **E-Learning platform** as a Continuous Improvement Tool.
- **Special Process System Assessment training program** related to the Consumer Centric Warranty Management Guideline.
- **Supply Chain Institute and Core Tool Certification training**
- **The ISO/TS 16949 Auditor Certification Program. Note:** AIAG was one of the first associations to become ISO 9001 registered.
- **The Tooling & Equipment (TE) Certification program**

HOW AIAG ADDS VALUE AND DEVELOPS ILP

According to the AIAG publication titled **The AIAG Dividend: Creating Supply Chain Value, 2007,** success at AIAG is due to the value it adds to the international automotive supply chain.

"AIAG adds value to the global supply chain by facilitating industry consensus to resolve global supply chain issues via adoption of common business processes. AIAG provides leadership, direction, and alignment for streamlining activities. AIAG is the industry advocate at international standards organizations (e.g. ISO, ANSI, UN/CEFACT, etc.). AIAG also provides effective communication and delivery of consistent quality requirements, guidelines, education, and training to the supply

base---worldwide. Membership in AIAG is an investment by companies seeking higher yields in profitability and productivity. Member companies realize significant bottom-line improvements by controlling costs associated with waste and process/system redundancy in the global enterprise. Initiatives developed by member companies and international partners have already saved the industry millions of dollars by driving rework, error and scrap out of the global automotive supply chain."

AIAG clearly has in place a process improvement and cost reduction methodology which is sustainable year after year and includes extensive collaboration with industry consensus by member companies. This structured methodology brings cross organizational functional leaders together to collaborate and develop focused cost reduction and process improvement strategies and tactical plans. This approach, combined with an integrated project management structure, ensures that common strategies are fully deployed across the industry. Tactical plans are then developed and completed in a timely fashion and cost savings are documented and validated. AIAG provides a support structure to the project teams so they mature and achieve process improvement and cost savings, thus adding value to the global supply chain. The overall result is faster knowledge transfer, improved processes, and reduced costs.

SOME KNOWN BEST PRACTICES THAT COULD BECOME ILP
Many NPMA member business entities have identified and implemented cost avoidance, cost savings, and cycle time reduction initiatives through the efforts of process councils or other communities of practice. These teams have placed a focus on value-added processes, standards, common IT systems, and the development of business practices that maximize value to internal and external customers. These teams have collaborated to effectively use people, business processes, and technology tools.

Some of the "low hanging fruit" in terms of typical areas that have proven to be "ripe" for improvement initiatives are:
-   Reduce system costs to track property. Explore and identify opportunities for a common IT tracking system, where it makes business sense. This is particularly true when the business entity has multiple, costly, silo, legacy IT systems used to track property.
-   Reduce property disposition warehouse "footprint" and processing costs. Explore and identify areas of opportunity for disposition by geographic area and explore opportunities.
-   Use intranet and internet auctions and screening for redeployment in lieu of sale or transfer.
-   Improve accuracy and reliability and reduce costs to perform physical inventories through the use of inventory-by-exception, cycle counting in addition to wall-to-wall inventories, establishing accountability, and written policies and procedures.
-   Reduce capital expenditures by redeploying equipment or transferring work in lieu of purchasing new equipment.

- Develop and implement a common surplus property screening and redeployment web site.
- Reduce subcontractor property management surveillance travel and labor costs by performing a risk analysis and reducing the frequency of reviews for low risk subcontractors.
-

Each improvement initiative would have a project description with scope and a tactical plan with team membership, senior leadership sponsor, and project leader identified. It would include a project milestone status with estimated completion dates, as well as a business case to include the total opportunity for estimated hard and soft savings. It is typically a good idea to project the savings out three to five years to get the total aggregate benefit over time. Any known project issues related to schedule or risk should be documented in the tactical plan for presentation to business entity management. Refer to attached project plan template which could be used to track ILP initiatives.

An excellent article on best practices was written by Brian Thompson for the 2008 NES Conference Proceedings. Brian's article was titled **Applying Industry Leading Best Practices for Asset Management Systems**. In the article, he states:
"Since industry leading practices or a single set of consensus standards are not clearly defined, the FAR revisions place the onus on asset managers to take proactive steps in seeking out, creating, validating, and possibly implementing improved asset management practices. But to create a strategic and competitive advantage, organizations are going beyond the FAR mandate to create today' asset management best practices"

 Mr. Thompson further states that "ITT has achieved savings of more than $15M in about five years time by implementing industry leading best practices to increase asset utilization, improve systems, and streamline business processes."

Following is Table I found in the article and compiled by Robert J. McFarland from ITT Corporation. Mr. McFarland provides a comprehensive list of positive outcomes that can be realized when best practices are effectively implemented:

Table I. - Asset Management Best Practices will achieve:

• Reduced capital and expense purchases
• Reduced depreciation expense
• Reduced property insurance costs
• Increase to cash from the sale of excess idle equipment
• Reduction to repair and calibration expenses
• Reduced outsourcing costs for equipment calibration and maintenance
• Reduction to materials and parts to support test equipment
• Reduced sales tax
• Reduced property/personal property tax
• Reduced Purchase Order processing costs

- Reduced interest expenses
- Reduced inventory expenses
- Reduced warehouse square footage and cost requirements
- Improved engineering productivity improvements Distractions remove
    - More efficient and timely tests from improved technology
    - Reduced calibration and maintenance cycle times
- Reduced acquisition and sales costs
- Reduced calibration and maintenance square footage and cost requirements
- Reduced audit non-compliance risk
- Reduced production stoppage risk by ensuring the right assets will be in place where/when needed
- Reduced IT support costs for legacy, non-integrated asset management systems
- Reduced software licensing costs for legacy asset management systems
- Reduced training expense and operating costs through the implementation of standardized asset management business process best practices

CONCLUSION

Dr. Doug Goetz indicated in his presentation on October 15, 2009, that "We are only beginning the process of defining ILPs and then quantitatively measuring outcomes of ILPs."

After performing the comparative analysis of AIAG and NPMA, I would have to agree.

Referring to the attached ILP Maturity Model, NPMA would be at the earliest stage--Generating ILP Ideas, while AIAG would be at the most mature stage--Implementing ILP Solutions, Validating Financials, and Measuring Progress. Although NPMA has made great strides with its educational and certification offerings and its development of voluntary consensus standards in partnership with ASTM, there is substantial room for improvement when it comes to the use of ILP project teams and task groups.

ILP Maturity Model

A Continuous Process

Generating ILP Ideas	Developing ILP Initiatives & Strategies	Developing ILP Tactical Plan and Targets	Implementing ILP Solutions, Validating Financials, and Measuring Progress

Generating ILP Ideas

✓ All NPMA membership may be included

✓ **Identified Best Practices and "Best of Breed" processes**

✓ **Mapped Processes**

✓ Completed Financial Baseline

✓ **Cost Reduction Initiatives, Opportunities** Discussed

✓ **Exhaustive list of Opportunities** developed

Developing ILP Initiatives & Strategies

✓ Multi-year ILP strategies address key processes

✓ Specific tactical project initiatives exist in relation with volume, skill and process

✓ **Strong business cases for all Initiatives**

✓ Financial targets and Improvement Goals: Templates Defined

✓ Critical Metrics: Templates Defined

Developing ILP Tactical Plan and Targets

✓ **Tactical ILP project plan exists for all initiatives**

✓ Overall ILP initiative has **accountability structure and assigned leader**

✓ The teams working on the initiative have cross-industry membership

✓ **Specific milestones exist for overall ILP tactical plan**

✓ Metrics/Financial targets are monitored

Implementing ILP Solutions, Validating Financials, and Measuring Progress

✓ **Tactical ILP project plans tracked to completion**

✓ **Implementation of solutions and accountability are monitored rigorously** at business entity level

✓ **Savings/Improvements are validated at business entity level**

✓ Successes are Communicated/ Reported

Project Name: ILP Initiative - Physical Inventories

Project Description

Project Objectives / Deliverables:
- Shortened Cycle Time for Physical Inventories
- Common Physical Inventory Requirements
- Improved Customer Satisfaction
- Lower Cost to Perform Physical Inventories

Scope:
In: Capital Assets: Machinery & Equipment, land improvements and building/installed assets
Out: Expensed company property, inventory (parts) and Government/Customer property

Team

Champion:
Project Lead:
Team Members:

Business Case

Total Opportunity (5 Yrs): $XXXK Soft Savings (Cost Avoid.)
Non-financial benefit: Improved Cycle Time for Inventories

	2010		2011		2012		2013	
	Proj.	Actual	Proj.	Actual	Proj.	Actual	Proj.	Actual
Hard $								
Soft $			$XXK				$XXK	

Status

Schedule (G)	Issues/Risk (G) None

Project Milestone Status	Date
Evaluate Current State	
Coordinate New Requirements	
Revise Standard XXX	
Implement At Participating Business Entities	
Communicate New Process	

Schedule /Issues / Risk Items:
No Issues & No Risks at this time

2

A possible ILP strategy for NPMA to energize the development of ILP Project Teams and Task Groups could be to narrow the focus of existing project teams such as the Special Interest Groups (SIG) and continue to facilitate critical organizational linkages and key member participation, help the teams mature and be successful, particularly on ILP-related initiatives.

NPMA could monitor the strategy and tactical priority settings of the SIGs and other project teams. NPMA could perhaps support a few critical ILP-related projects as each team's strategy matures and as member commitment develops. NPMA could provide leadership by:
- Empowering and motivating ILP project team participants.
- Being the catalyst for ILP quality and continuous improvement efforts.
- Providing a web-based repository where valuable ILP knowledge objects could be documented and made available for use by internal and external customers.
- Building ILP teams and relationships
- Attracting and developing ILP project team leadership and talent.

NPMA could also provide leadership by encouraging ILP Project Teams to exhibit the following behaviors:
- Collaborate effectively.
- Relentlessly focus on high payoff/quick win initiatives.
- Champion change and innovation.
- Systematically solve problems, make decisions, and reconcile competing priorities.

It is certainly time to "roll up our collective sleeves" and get busy with some ILP initiatives!

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Ronald E. Regalado is a Chapter Officer of the NPMA North Texas Chapter and is a Finance Specialist Lean Six Sigma Black Belt at Northrop Grumman Corporation. He has more than 26 years experience in virtually every aspect of Property Management and Property Accounting. Mr. Regalado is a frequent contributing author to *The Property Professional* publication and he is a frequent speaker at NPMA educational events, both at the national and regional levels. Mr. Regalado earned a Bachelor of Science degree in Business Administration from California State University Northridge and has held a California State Adult Basic Education teaching credential (valid from 1999 to 2004) earned at the University of California at Los Angeles (UCLA). He served as Chair of the Northrop Grumman Integrated Systems sector Property Process Council from 1999 to 2005 and served as the founder and Charter Chairperson for the Northrop Grumman Corporate Property Council from 2003 to 2005.

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Meeting the Need:
Implications Cultural Differences for the Property Management Workforce
Michael Showers

Abstract

This paper attempts to identify, discuss, and provide recommendations for addressing several significant issues associated with the impending retirement of the "Baby Boom" generation from the workforce during the next decade. It discusses these subjects in relation to personnel engaged in United States Government personal property management occupations. The research is based on both a literature review and on statistics from the United States Office of Personnel Management (OPM). It seeks to determine whether or not the retirement of the baby boom generation increases risk that insufficient personnel resources and knowledge will be available to effectively manage significant values and quantities of Government property. In a review of the literature associated with the retirement of the baby boom generation, it finds a disparity between the general press and the academic press regarding the likelihood of labor shortages. While the general press suggests the dire predicament posed by the demographics of the baby boom retirement, the academic press considers that the baby boomers may be forced into longer employment by economic circumstances or simply may choose to remain employed. In addition there is a possibility that immigration may supplement any labor shortages.

To the degree that there are cultural differences between the baby boom generation and its successor, this paper asks whether they will pose a risk to performance. This paper also reviews OPM data to determine the availability of human resources for appropriate succession of property management personnel. The author concludes that generational cultural differences would appear to be transitory and based on the individual's progress within the organization and his or her current home environment. However, the difference in generational culture may form an obstacle to the transfer of knowledge. In Government property management occupations, this transfer of knowledge may be exacerbated by a lack of available entry level employees.

Introduction

This paper attempts to identify and discuss and provide recommendations for addressing several significant issues associated with the impending retirement of the "Baby Boom" generation from the workforce during the next decade, particularly as it relates to personal property management and the United States Government's ability to manage its physical assets. According to the September 2008 financial statements, the United States Government held nearly $1.3 trillion (in original acquisition cost) worth of personal property (Government Accountability Office,

2008). Personal property includes those billions of "moveable" items of property, ranging from pencils and pens through F-18 aircraft, to NASA's Space Shuttles. In effect, these assets are the "treasure" of our country.

Property management spans a number of different occupations from traditional blue collar jobs through agency management. Occupations span the entire property life cycle, from inventory and commodity managers, who plan for and order property needed by Government agencies; through warehouse workers, who store and preserve property until it is needed; to managers who use and maintain the property. They include accountability officers, who maintain records and management controls for the assets, and property administrators, who oversee contractor management of Government assets in their custody. Last, but not least, they include property utilization officers, property disposal officers, and plant clearance officers. When the Government no longer needs the property, these individuals are responsible for making it available for other public use; for selling it when it has no further public use; and for properly disposing of it if it has no sales or use potential. In some cases these occupations are performed by employees of the Federal Government. In other situations, the jobs are performed by contractor employees. Virtually all of them are needed to guarantee the cost effective use of these taxpayer funded resources. Many of these occupations are necessary for agencies to remain in compliance with law and regulation.

As we prepare to enter the second decade of the 21st century, the United States faces the retirement of 78 million persons who were born between the end of World War II and 1964. Over 10% of these individuals will live to age 90. These individuals are the source of a significant wealth of knowledge and experience. They can continue to serve the country in a variety of ways ("United States at threshold", 2008). As is the case with most occupations, the baby boom generation currently occupies a large number of property management positions. If we are to continue to effectively manage these assets for the public, we must consider the different aspects of succession planning and, in particular, the differences in culture, including generational differences, which may ameliorate or exacerbate the coming, inevitable change.

Method

Literature Review

The data for this paper was gathered through a literature review and a review of data from Government sources. There is a significant amount of literature devoted to the impending retirement of the baby boom generation and to the different skill sets managers will need in order to achieve success with the "younger" generations. The topics were wide ranging. However, most articles were directed at the economic impact of retirement, the need for baby boomers to plan their retirement carefully, and the impact of the recent economic downturn on the ability of boomers to retire as planned or as expected rather than the ultimate impact on the workplace. Much of the available literature exists in magazine articles that have not been subjected to academic peer review. While data on the impact of the recent economic downturn

may have relevance by causing a decline in the number of retirements expected over the coming decade, it is likely to be too early in the economic cycle to predict the overall outcome. It is also possible that the likelihood of retirement could move in a positive direction in the event of a recovery. Ultimately, regardless of the economic situation, the baby boom generation will either retire or decline in numbers due to mortality.

Early and non-academic articles suggest that the retirement of the baby boom generation may have near apocalyptic consequences. Later academically reviewed articles take a somewhat more balanced position. Academically reviewed research on the subject of cultural differences based specifically on generation is limited. The majority of articles subject to academic review discussed possible positive and negative economic consequences of the retirement and the likelihood of retirement of the baby boom generation. An article by Cennamo and Gardner (2008) reported some differences in work values between different generations. Beutell and Wittig-Berman (2008) studied the differences in work-family relationships across generation X, the baby boomers, and their elders. Phillips (2004) suggests that immigration, economic circumstances of baby boomers, and a propensity for business to hire older workers will help to offset the effect of retirements in the small business community.

Government data

Government data was derived from the United States Office of Personnel Management (OPM) website. The website provides a number of reports on the demographic characteristics of the Federal Government's workforce. These reports include data ranging from the last decade of the 20th century through today. The report providing the most significant data was the "Demographic profile of the federal workforce" in particular "Table 3 - Race/national origin by white-collar occupation series and blue-collar occupation group". Information evaluating the risk associated with the retirement of the baby boom generation was derived from the report "An analysis of Federal employee retirement data: Predicting future requirements and examining factors relevant to retiring from the Federal service". Other reports provided additional supporting data. As these reports are produced by the agency responsible for personnel management throughout the Federal Government, they are likely to contain the most accurate information available on the subject. Due to the lack of available statistics on contractor personnel, this paper will concentrate on Federal civil service employees engaged in these occupations.

Results

Baby boom to Gen-x: Cultural transition
In the near future, 76 million "baby boomers" will be replaced by just 59 million "Generation-Xers". Old methods of management are no longer applicable to today's workforce. The workforce has rapidly changing demographics, it is now multigenerational. The country is likely to experience employment shortages, especially for positions that require skilled and talented employees. Available, skilled

employees are likely to demand more from the workplace itself. Diversity, particularly generational diversity, must be considered in order to recruit and maintain the productivity of employees (Ahlrichs, 2007). In a study of employees from eight New Zealand organizations, Cennamo and Gardner found there were differences between generations. However, they were limited. All generations shared values in job satisfaction, commitment to the organization, and in their intentions to leave. As opposed to baby boomers, succeeding generations prefer more autonomy, quicker access to status, and greater social involvement.

In two separate studies, Beutell and Wittig-Berman found differences in work/family relationships between the "mature" generation, baby boomers, and generation x. When questioned whether or not work interfered with family, matures scored lower than both following generations. The boomer generation scored higher in 1997 and slightly lower than Gen-X in 2002. When questioned whether or not family interfered with work, matures again scored lower than boomers or Gen-X participants in both studies. However, while boomers scored higher than Gen-X participants in 1997, they scored slightly lower in 2002. When considering a question on work-family synergy, matures scored higher than both younger generations in both studies. The position of the boomers and Gen-X participants changed over the two studies where boomers found less synergy in the early study and greater synergy in the later study. This study suggests that many of the values of the generations, particularly in relation to their families, may change as the conditions of employment and family evolve.

Culture has a significant impact on the transfer of knowledge from the current generation to its successors. Knowledge is critically important to an organization's success. While *explicit* forms of knowledge are more easily transferred through procedure and standard, other *tacit* forms of knowledge are retained within the experience of employees and are often not easily transferred. Cultural resistance to or lack of organizational reward is often the reason for failure to transfer this knowledge. This may be overcome by retaining older generation employees and by restructuring and redefining their work. In any event, it is essential that organizations recognize the coming changes and create a strategy to address them. (Calo, 2008).

Risk to the workforce
While the demographics alone would appear to lead to a significant labor shortage with the exodus of baby boomers into retirement over the next decade, a recent study by Beinhocker, Farrell and Greenberg (2009) supports the prediction that many boomers will work past retirement age. They found that only 15% of boomers expressed a desire to retire upon reaching retirement age. Rather, boomers wished to remain within the workforce to maintain their lifestyle, to meet financial obligations, to maintain necessary benefits, or to remain socially active. Boomers are expected to live longer than previous generations, well into their 70's. However, boomers may want and need to work longer due to economic conditions and reduced savings over their lifetimes (Caudron, 1997). Peter Cappelli (2005) suggests that a tight future labor market is more likely to depend on economic

growth and productivity increases. He believes it possible that the expected decline in available labor may be offset by the "baby echo" generation, which follows *Gen-X*. He also suggests that shortages might be addressed through retention of experienced employees, offering them different work schedules and compensation packages.

A Bell Investment Advisors' (2008) survey within Business and Finance Week reports that about 25% of wealthy 60 year olds are altering their plans for retirement. Four out of ten are making lifestyle changes to accommodate the declining economy. Many baby boomers are postponing their retirement plans and even hesitating to accept retirement buyouts from their employers. During the 2001 through 2002 economic recession, almost one fourth of the individuals eligible to retire decided to remain at work. An additional 10% of those who had already retired returned to work. In some cases, the decline in housing prices and the resulting loss of equity forces some workers to keep their homes and remain at work. In many cases the impact of the economic downturn is less pronounced, as those "baby boomers" already planned to remain at work later in life (McGinn & Ehrenfeld, 2008).

Government employment statistics

While some forms of the discipline may be scattered throughout some generalist position descriptions, property management occupations are generally categorized within several different "families" in the Federal personnel classification system. Supply has its own family and includes a variety of supply management activities. Property accountability and management personnel often are classified as miscellaneous administration and program management. These occupations, along with logistics management, fall under the General Administration family. Property administration and property disposition are considered to be contract management and contracting activities and fall within the Business and Industry family (United States Office of Personnel Management, 2006). Warehousing and related labor categories fall within the Federal Wage Grade program.

OPM statistics state that 956,613 or 60.80% of the full time, 2006 workforce would become eligible for retirement in the year 2016. However, based on historic retirement probability data, the agency predicts that only 37.3% of the workforce will actually choose to retire at that time. OPM calculates that the risk for retirement of female professional or administrative employees is 12 percent more likely. Males in professional or administrative positions are 22% less likely to choose retirement (United States Office of Personnel Management, 2008).

In 2006, the average age of a Federal employee was 46.9 years. This average had increased from 45.2 years since 1997. Fifty percent of employees were eligible for retirement in 2006, up from 19% in 1997. Fifty six percent of civilian employees were men. This statistic was fairly constant from 2000 through 2006. Minorities made up 34% of the total federal workforce, occupying greater portions of lower pay grades 1 through 8, and under 30% of the higher pay grades from 9 through 15. This compares with 28.2% minority representation within the overall U.S.

civilian labor force. Women constituted over 60% of the grades from 1 through 8, over 40% of the grades from 9 through 12 and increased slightly between 1998 and 2006, to just over 30% of the grades 13 through 15. Blue collar occupations totaled 11% of the workforce. 93% of the Federal workforce is full time (United States Office of Personnel Management, 2007).

Table 1 illustrates the proportion of minority employees to the whole in Federal Government property management related occupations from 1998-2006. It does not include those property management employees who may hold a position titled in a generalist field, such as management analyst or program management, as those positions cannot be discerned from disciplines related to other occupations. The table is divided into three general levels of performance, the clerical or entry level, the technician or journeyman level and the administrative or management level. Between the years of 1998 and 2006, at the administrative level, the number of General Supply positions increased by three percent and the number of Logistics Management positions increased by 10%. However, Table 1 data demonstrates a decline in the number of positions for all remaining property disciplines. Overall, property management related positions declined a total of 16% over the period. The difference is most significant within property disposition positions, where the decline in numbers ranges from 28% at the management level to 88% at the entry level.

Table 1.

	1998*			2000			2002			2006			Total Change	% Change
Proportion of Minority Employment in Federal Property Related Occupations 1998-2006														
Occupation	Total	Minority	%	Total	Minority	%	Total	Minority	%	Total	Minority	%		
Total	1563644	451494	29%	1532484	453724	30%	1601450	484296	30%	1646054	510510	31%	82410	5%
Administrative														
General Supply	1809	508	28%	1746	511	29%	1768	534	30%	1866	551	30%	57	3%
Supply Program Management	4704	1052	22%	4412	1014	23%	4228	1013	24%	3920	1001	26%	-784	-17%
Property Disposal	911	245	31%	767	225	29%	685	221	32%	653	235	36%	-258	-28%
Inventory Management	5459	1765	32%	5301	1721	32%	5071	1630	32%	5070	1668	33%	-389	-7%
Distribution Facility Management	664	177	27%	590	150	25%	539	133	25%	457	125	27%	-207	-31%
Supply Cataloging	159	42	26%	85	23	27%	61	19	31%	53	17	32%	-106	-67%
Logistics Management	11326	2047	18%	11466	2137	19%	12128	2394	20%	12562	2636	21%	1236	10%
Property Administrator	655	179	27%	608	164	27%	563	151	27%	530	136	26%	-125	-19%
Technical														
General Supply	1962	659	34%	1808	576	32%	1761	552	31%	1734	549	32%	-228	-12%
Supply Clerk/ Technician	13294	5203	39%	11699	4555	39%	10776	4253	39%	10329	4133	40%	-2965	-22%
Property Disposal	175	56	32%	133	44	33%	81	31	38%	67	29	43%	-108	-62%
Clerical														
General Supply	82	15	18%	62	13	21%	30	12	40%	20	6	30%	-62	-76%
Supply Clerk/ Technician	2134	910	43%	1484	686	46%	1205	561	47%	1031	470	46%	-1103	-52%
Sales Store Clerk	6494	3107	48%	6164	3418	55%	5710	3442	60%	5591	3441	62%	-903	-14%
Property Disposal	199	62	31%	91	36	40%	35	15	43%	23	8	35%	-176	-88%
Wage Grade														
Warehouse and Stock	25309	10941	43%	22443	9982	44%	20294	9120	45%	19148	8564	45%	-6161	-24%

* Data source - US OPM 1998, 200, 2002 and 2006 Demographic Profiles of the Federal Workforce, Table 3 - Race/National Origin Distribution of Federal Civilian Employment by White-Collar Occupation Series and Blue Collar Occupational Group Executive Branch Agencies, Worldwide, September 30, 1998 - September 30, 2006

The decline in entry level positions is pronounced with higher percentages of decline in all categories leading to technician and administrative levels (United States Office of Personnel Management, 1998-2008).

Conclusion/Discussion

Will there be a labor shortage?

Based on the mathematics alone, it would appear that significant labor shortage problems are inevitable. However, when applied to the general population, the studies do not appear to bear this out. Studies by Beinhocker, Farrell and Greenberg; Caudron; Cappelli; and Bell Investment Advisors argue that continuation of employment by the baby boomers, combined with immigration will offset the impact of the generational demographics. However, as Calo suggests, the greatest risk may involve a cultural divide that inhibits the transfer of knowledge between the two generations. This transfer of knowledge will have to take place, to assure the continuity of organizations.

Application to Government property management disciplines

The OPM statistics provide an illustration of the difficulty in transfer of knowledge between the generations. While they could be interpreted as a progression towards incorporation into and promotion of minorities through the property management workforce, the increased numbers of minorities in higher level positions may simply reflect the departure, through retirement or other means, of non-minority personnel, thereby increasing the ratio of minorities in the workforce. There is insufficient data available to determine which of these two scenarios is taking place or whether both are. As a result, one cannot determine whether the positive aspects associated with inclusion of alternate cultures is taking effect. Eoyang (2008) argues that insufficient progress has been made in incorporating managers into the senior ranks of the Federal Government and that doing so will become more critical as baby boomers retire.

The most glaring demographic is the steady decline in entry level positions. It might be argued that these positions are not necessarily unfilled, but have been contracted-out. However, whether the positions are or are not filled with non-Government employees, they are no longer available within the organization, for training and succession to higher ranks. The ultimate result of this is an inability to transfer knowledge. There is no one left to transfer the knowledge to.

Are there cultural differences between generations and will they have an effect?

According to Wendover (2005), Gen-X employees display cultural differences from the baby boom generation in the work environment. Gen-X employees expect to become leaders far sooner than their predecessors. Many will change organizations more frequently and after a shorter duration, even after becoming leaders. The next generation of leaders may be more inclined to use technology and the World Wide Web to communicate in place of face to face meetings. Employees from the next generation invest less emotion in their jobs than did the previous generation. They are also more likely to seek assignments, training, mentoring and other activities in an effort to expand their resume, feeling that this will expand their ability to seek other employment if they are unhappy with their current circumstances. Some of these differences were supported by academic studies.

However, it would appear as though some values and circumstances of employment may be fluid and subject to change as careers advance and family circumstances, such as the maturing of children take place.

What to do?

  Work to keep baby boomers working

To counter the problems with loss of knowledge and a shortage of talent, Canadian workers are working their way into retirement. By reducing their work schedule and receiving a reduced pension, they gradually move into retirement while retaining some benefits and tax advantages (Powers, 2009). A number of studies suggested that baby boomers desire to remain active and employed. This desire should be encouraged and developed. McEvoy and Blahna (2001) suggest that it isn't enough to attempt to retain employees. Employees must keep their desire to be effective and attentive to the work. They must also be willing to adapt. To accomplish this, boomers must be recognized for their contributions, experience, and knowledge. The work must be stimulating and the environment must be enjoyable. Older workers must be given the opportunities to train and be trained, to mentor, and to learn about new technology. They should have a fair amount of independence in the completion of work. Discourage retirement by adapting the work environment. Provide other benefits of particular interest to older workers such as part-time work, phased retirement and flexible work environments. Let the older worker know that their skills are valuable to the organizations and request that they continue working.

  Prepare the next generation to take over

The American Institute of Certified Public Accountants' 2008 Private Companies Practice Session (PCPS) Succession Survey, found that a number of firms adopted a variety of strategies to address the anticipated retirement of baby boom aged leaders. Over two-thirds of the firms recommend personnel development and trainings a first priority, so that employees are able to accept responsibility and work. Nearly one half of the organizations require leaders to push work down to lower levels. One third of the organizations move to focus upper management activities on satisfaction of customer needs rather than processing of work. Over 40% of the organizations have removed expectations to work excessive hours. Other actions require leaders to work within written policies and procedures; to define power structures clearly; to provide rewards based on accountability toward achieving succession goals. Finally, organizations are appointing senior leaders who have demonstrated leadership skills, rather than promotion simply as a result of seniority (Cingoranelli, Dennis, Schamberger, 2009).

  Transfer knowledge

It would appear as though cultural differences will, in most cases, provide opportunity, rather than obstacles, as the baby boomer generation retires. Cultural differences between generations appear to be transitory, evolving as family requirements change and organizational advancement occur. Cultural differences based on race, gender or sex provide opportunities, rather than problems.

Immigration may provide not only new sources of staffing, but new ideas and methods. Ultimately, the need to transfer knowledge between the generations appears to be the greatest risk to both the private and public sectors. Companies must take steps to retain the knowledge of the current generation and pass it on to those who succeed them. The next generation must be encouraged to work with the boomer generation to absorb the knowledge. Combinations of existing knowledge (where the pitfalls are) and new ideas about how to get around them should lead to improved performance in virtually every endeavor.

Unfortunately, without an audience, the transfer of knowledge is not likely to occur within the Federal property management community. Unless Government agencies establish initiatives to increase and retain entry level property management employees, the knowledge available from the boomer generation may evaporate, leaving their successors to suffer the same pitfalls and difficulties already experiences by the current generation. This failure may place the significant public assets, being managed by these individuals at risk.

There were two unexpected results from the research. Most significantly was the significance of the rate of decline in property management positions. While the researcher was familiar with the gradual decline in numbers of employees, the magnitude of the losses was unexpected. In addition, the movement in cultural positions of Generation-X as they mature in the organizations was unexpected. Further research, which includes demographics on contracted property management occupations, would be helpful in determining the impact on the property management community as a whole.

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'Sup With All This "Standards Stuff"?
Lyle Hestermann, CPPM CF

"It has been said that there are two reasons to be involved in a *standards activity*: one, to make sure that a standard is developed, and two, to make sure that it is not."[1]

Many, *many* people have expended a lot of individual *and* collective effort on Property Management standards. And these people are volunteering their time! Why?

And, as our Association President, Ms Cheri Cross explained in a previous issue of The Property Professional[2], the Property standards effort was officially ten years old last year. So, what's been going on?

Let's take a few minutes to explore this whole issue, from the ground up, and then maybe it will make a little more sense. We'll attack this in four easy parts, OK?
1. What is a 'standard'?
2. How does a standard grow up to become a 'voluntary consensus standards'?
3. What is the status of the NPMA/ASTM International Property Standards Effort?
4. How the heck do you put these standards to use?

Part 1 - What is a standard?

In my simple mind, I think of a standard as either a *measurement* or a *method of taking a measurement.*

Probably the best definition comes from OBM Circular A-119[3] (which is based on Pub. L. 104-113, the "National Technology Transfer and Advancement Act of 1995"). That definition is:

"(1) Common and repeated use of rules, conditions, guidelines or characteristics for products, or related processes and production methods and related management systems.

(2) The *definition* of terms; *classification* of components; delineation of procedures; *specification* of dimensions, materials, performance, designs, or operations; *measurement* of quality and quantity in describing materials, processes, products, systems, services, or practices; *test methods and sampling procedures*; or *descriptions* of fit and measurements of size or strength." (emphasis added).

So, a standard is more than a mere measurement or a method, a standard:
- Defines;
- Classifies;
- Specifies;
- Measures;

- Is a test method or sampling procedure; and
- Describes.

Who can produce a standard?

Anyone can set a standard! For example, if I said every male over the age of 21 in the state of Indiana had to be at least six feet tall, have blue eyes and arctic blond (some people call it 'gray') hair, that would be a standard. Or, how about a standard that says every resident of the state of Ohio over the age of 16 had to carry a buckeye in their pocket?

However, these are not 'real' 'standards' because they are neither 'common' nor 'repeated' - not to mention downright silly and therefore not worth the time you just took to read it!

So, what are 'common and repeated' standards?

In general, there are four recognized standards[4]. In order, they are:
<div align="center">

International Standards
National Standards
Industry Standards
Company Standards

</div>

Let's start at the bottom and work our way up.

Your employer has standards; they are the "**Company Standards**". Such standards are generally created to define *design*, *performance* or *specification.* In other words, what does it look like (design)? How well does it work and how long will it last (performance)? With what kind of wood is it made (specification)?

The company may have a subject matter expert that writes standards, or it could have a group of people writing them. The points to be made here are:
- *Members of the company* create the standard(s);
- The company defines the format as well as the *process* for creating the standard(s). And finally,
- The standards are the intellectual property of the *Company*.

Next, let's look at **"Industry Standards"**, which are shared amongst companies. A group made up of individuals representing the various 'entities' probably joined up to write the standards.

Where would we be without Industry Standards?
- Your shirt size might be "Medium" for one manufacturer and "24X2" for another.
- You might have to have different sizes and shapes of electrical outlets for different kitchen appliances, not to mention different power requirements!
- A 'gallon' of milk might be 36 ounces at one store and 64 ounces at another.

Let's face it, almost every facet of our daily lives are affected by 'Industry Standards' in one way or another.

What about the *process* for Industry Standards? While Company Standards are controlled by the company, a group of people from *different* companies have to agree on Industry Standards. The odds are great that there will be a *difference of opinion* in this diverse group. Therefore there has to be a *process* for dealing with differences.

There are three general rules for such a process:
1. The process must be **open**. The industry process may admit only industry members. (Remember, for Company Standards, a company can and may admit only company personnel.)
2. Every participant is *equal* and no one interest can *dominate* the process.
3. Consensus or 'general agreement'. We'll talk more about 'consensus' later.

Next in line are **"National Standards"**. As the name implies, individual countries create these standards. That's why most of the household appliances in the United States run on 110 volt and 60 hertz (cycles per second), and why most appliances in European countries run on 220 volt and 50 hertz. (I remember the first time I plugged an alarm clock, purchased in America, into an electrical outlet in Germany. I used a transformer, of course, and it ran fine, but only accounted for 50 minutes out of every hour!) National standards also define many aspects of our lives!

Now let's spend a few minutes on **"International Standards"**.

The basic premise of the World Trade Organization's (WTO) Technical Barriers to Trade Agreement is that standards be developed that would "… contribute to the goal of the Agreement to prevent unnecessary obstacles to trade."[5]

The WTO has a "Committee on Technical Barriers to Trade", and that committee made and published a "DECISION OF THE COMMITTEE ON PRINCIPLES FOR THE DEVELOPMENT OF INTERNATIONAL STANDARDS, GUIDES AND RECOMMENDTIONS WITH RELATION TO ARTICLES 2, 5 AND ANNEX 3 OF THE AGREEMENT."[6]

Whew. Catch all that? Anyway, and in short, the Decision defines principles and procedures that should be observed when creating international standards. There must be:
A. Transparency
B. Openness
C. Impartiality and Consensus
D. Effectiveness and Relevance
E. Coherence
F. Development Dimension (provisions ensuring that developing countries are allowed to effectively participate)

Now let's take a gander at **"Full Consensus Standards"**.

"These are the five star standards. They involve more interests, and their use, or application, is more universal. … Full consensus standards are developed in standards developing organizations … *SDOs*."[7]

So what is an SDO?

Back to OMB Circular A-119 which defines "Voluntary consensus standards bodies."

(1) "Voluntary consensus standards bodies" are domestic or international organizations which plan, develop, establish, or coordinate voluntary consensus standards using agreed-upon procedures. … A voluntary consensus standards body is defined by the following attributes:
(i) Openness.
(ii) Balance of interest.
(iii) Due process.
(vi) An appeals process.
(v) Consensus"

Now let's get back to the word "consensus." The Circular defines it as:

"(v) Consensus, which is defined as **general agreement**, but **not necessarily unanimity**, and **includes a process for attempting to resolve objections** by interested parties, as long as all comments have been **fairly considered**, **each objector is advised of the disposition** of his or her objection(s) and **the reasons why**, and the **consensus body members are given an opportunity to change their votes after reviewing the comments**." (emphasis added)

I can hear you now (at least those of you who made it this far):

"So, Lyle, what the heck is the bottom line to all this? What does this have to do with me, my Property profession and the NPMA?"

And the answers … the standards that *we* - us Property professionals - are creating via the ASTM International process are:

- *International* in scope! They have been developed through an internationally recognized process of openness, balance of interest, due process, an appeals process and consensus.
- Referenced and used by governmental agencies as well as industry.
- Exportable to other markets.[8]
- "…commercial and political currency in the world trading system."[9]

Have I mentioned these are the standards that *we* are writing? Who better?!

Part 2 - How Does A Standard Grow Up To Be A "Voluntary Consensus Standard"?

Even though I've been involved with the Property standards effort for over 10 years now, I still get confused on ASTM International's process. (It's not ASTM's fault, I'm just easily confused.)

So, I asked Christine Sierk, ASTM International Staff Manager for Committee E53 on Property Management Systems, for a simple 'flow chart', something easy to follow. Christi referred to me the publication entitled "Standards: The Corporate Edge, A Handbook for the Busy Executive".[10]

The handbook has a lot of good info (much of it cited previously), and, finally, on the last page, a simple table that answered many questions. That table, Figure 1, appears below, and I'll take a few lines to explain it now.

The basic and most important level is the *Task Group* (TG). This is where the rubber meets the road. These folks have identified an opportunity (or a challenge) and feel the need to address it. So, they got together and wrote a standard. They don't have to be members of E53, they don't have to be members of anything other than a group commitment to the same opportunity.

So, the TG has a standard, and maybe it fits their needs just fine. What if they believe that this very standard would be good for some folks outside their circle? If it works for them, maybe others can use it!

If the TG all have the same employer, they could write a 'Company Standard'. If they were all part of the same industry, they could get together with like companies and write an "Industry Standard". If the TG members were all in the same country, they could write a "National Standard".

In this case, the standard qualifies as an "International Standard", so the TG looks around hoping to find a 'voluntary consensus body' (see OMB Circular A-119 and/or Part 1 of this article), that will ensure:

(i) Openness.
(ii) Balance of interest.
(iii) Due process.
(vi) An appeals process.
(v) Consensus

The Task Group has chosen ASTM International, and the process gets a little more involved.

First, the TG finds a committee with similar interests. Or, as happened with us, ASTM International formed a *new* committee.

The main committee probably refers the TG to a subcommittee with more specific similar interests. The TG runs their draft past the chair of the subcommittee, who says: "OK, let's go." Or, a motion may be passed at a subcommittee meeting; either way, that leads to the next level, the:

Subcommittee Ballot
(By the way, you might refer to Figure 1, it might help make sense of this.)

The draft is sent to the members of the subcommittee - with a cover letter introducing the draft and the reason for the ballot - for their review. Members must have at least 30 days for the review.

- **If** 60% of the ballots are returned, and
- **If** 2/3 of the votes returned are affirmative, and
- **If** all negative votes have been considered and
- **If** the negative votes are considered not persuasive or not related, then the draft can go to the next level, which is the:

Main Committee Ballot/Society Review
If all the subcommittee ballot requirements have been met, ASTM International Headquarters will issue a Main Committee Ballot. Again, members must have at least 30 days for the review.

- **If** 60% of the ballots are returned, and
- **If** 90% of the returned ballots are affirmative, and
- **If** all negative votes have been considered, and
- **If** all negative votes resolution forms have been completed and returned to the staff, and
- **If** no negative votes were persuasive, then the draft can go to the *next* level, which is:

Committee on Standards (COS) Review

The staff submits the balloted item to the COS who checks to see that procedures have been correctly followed. If so, the next (and final) level is:

Approval and Publication!

Did you follow all that? If so, yea! Pat yourself on the back. All this rigmarole makes you wonder why anyone would get much past the first step, right? Crazy, foolish process anyway!

Well, several groups of Property folks have made it through; the process *is* tough, but it also makes for *tough* standards. Standards that stand up to the test of tough times, and those standards are **useful**.

How useful are they, you ask? Well, let's take a look at that in:

PART 3.   What is the status of the NPMA/ASTM International Property Standards Effort?

After reflection and talking to many, many people who are seriously involved with this effort, it feels good to advise you that, at least from my perspective, it looks like this standards stuff might just be headed in the right direction.

"In what direction is this standards stuff headed?" you ask. First, let's talk about where it's been, and then we will get to the strategic part.

Since NPMA committed to the standards effort back in 1998, 19 standards dealing with a wide variety of issues have been published. Even more are in the process.

A full suite of educational offerings have been rolled out. Eight people received their Certificate in Advanced Studies of Voluntary Consensus Standards, and 22 have been awarded since then. And, several hundred people have attended the webinars.

The membership of ASTM International's Committee E53 on Property Management Systems has grown to over 150. As of this writing (Apr 08) 75% of E53 also are members of NPMA. (Hmmmm – looks like other professions are interested, too!)

Two standards, LDD and Inventory, were up for their 5 year review already! Inventory went through the process relatively easy, while LDD is on its fourth rewrite. (That's okay, because that means people are actually reading, analyzing and thinking about the standards! I get concerned when draft standards go through the first time around.)

Many new standards are in the 'work draft' stage. The really neat thing about these new drafts is that there is a whole new crop of people that are writing those standards!

Standards are popping up in more and more places. Type 'ASTM property standards' and/or variations on those words/phrases into your favorite Internet search engine, and you'll see what I mean.

One task that the NPMA Council on Standards (COS) felt was very important was to refine and define the relationship between NPMA and ASTM International. To that end:

- We have an understanding between the parties that ASTM's forte is publishing standards and that NPMA's strength is education. Building on the strengths of each, the standards effort will continue to grow and mature.
- NPMA formally chartered the Council on Standards, which consists of NPMA members who also serve on E53's Executive Committee.
- The Executive Vice President, Mr. Steve Michelsen, is the liaison between the Council on Standards and NPMA's Executive Board.
- NPMA's Strategic Plan includes "Goal 6", which is directly standards related.

So, where is the Council on Standards and/or ASTM Committee E53 going?

The COS/E53 has a strategic plan in place which is quite detailed, so I'll stick with the goals and objectives we've adopted:
1. Maintain leadership role.
2. Steady stream of draft standards for consideration.
3. Promulgate adoption and use
    a) Gather feedback from standards.
    b) Inform the process going forward.
4. Review, update and revise existing standards.
5. Coordinate with other standards development entities.

I feel quite confident we'll achieve these goals, just as we achieved the goals set forth in the COS 1998 Strategic Plan.

So, where is the Property profession going in relation to these standards?

Mounting evidence says that more and more Property professionals are relying on standards to ever better define their role in their particular entity, as well as using standards to measure their performance.

I've spoken with several people who are doing business with a variety of customers, up to and including *international* customers. They see the ASTM Property Standards as the foundation upon which they will build an encompassing property management system that will satisfy the needs and requirements of all their **_global_** customers.

That thought truly rocked me when my colleagues brought it up! And I thought I had a clue about this 'standards stuff'!

Please stop and think about that for a moment. How would you like to have *one* Property Management Plan for *all* your needs? A plan founded upon principles to which a wide variety of Property professionals have *formally* agreed? Not one that you were *told* to use, but one which was based upon the experience and expertise of *many* professionals such as yourself?

The ramifications of what we – us Property professionals – are engaged in with this standards stuff are truly staggering. *We* are taking control of our future!

Part 4 - HOW THE HECK DO YOU PUT THESE STANDARDS TO USE?

The variety of ways that the current standards can be put to use is limited only to the imagination of the user. At the risk of stunting creativity, here are some thoughts to 'kick start' the thought process.

◊ If you are putting together a Property system, or writing a procedure or process about such a system, do you think it would be wise to consult ASTM E2279-03, Standard Practice for the Guiding Principles of Property Management? To quote Mr. Jim Dieter: "If I had to choose *one and only one* standard to adopt, this is it."

◊ If you are going to conduct a physical inventory, or maybe write a procedure or process about physical inventory, would you maybe want to first read, and then reference ASTM E2132-01(2007), Standard Practice for Physical Inventory of Durable, Moveable Property?

◊ If you were looking into writing a competency model for a Property professional, would it not be wise to consult ASTM E2379-04, Standard Practice for Property Management for Career Development and Training?

◊ Let's say you have a good system that has been reliable for years, and your LDD ratio is *well* within widely accepted standards (please see ASTM E2131-01, Standard Practice for Assessing Loss, Damage and Destruction of Property), couldn't you make a good case for extending the time frame for Physical Inventories? Wouldn't you love to tell your boss you can cut inventory costs by *half,* just by going to a biennial inventory instead of an annual inventory?

Okay, those were some simple, easy to implement ideas. Just for fun, let's take a theoretical but *very* interesting walk around the subject of an age-old question: **"How many Property people does it take to control how much stuff?"**

Using current standards, I submit to you that we can get a much better 'grip' on that issue than we ever have before.

Using the 'traditional' approach, we see only the data in Figure 2. From this data, one can surmise that Alpha Equipment has about 7,300 items per Full Time Equivalent (FTE), Bravo only has 1,000 items per FTE, and Charlie's Thingies has

5,000 items per FTE. On the face of it, each of Alpha's FTEs is handling a lot more property than either Bravo or Charlie.

These conclusions tell us very little, though, don't they?   And that is because there is no way to tell what types of property each entity has, how much movement there is, the maturity of their systems, etc, etc, etc. The good news is that there are now voluntary consensus standards that address a few of these steaming issues!

ASTM E2497-06, Standard Practice for Calculation of Equipment Movement Velocity (EMV), says, basically, that you measure the 'movement' of property coming into your entity, how much stuff moves around inside your entity, and how much stuff moves out of your entity. The lower that number, the less movement and less record activity (changes) you have. Entities with EMVs approaching zero have very little movement, while entities with higher numbers have more 'turnover', for lack of a better term.

Add EMV data and the chart looks like Figure 2.

Hmmm, looks like the EMVs are not that far apart; yes, Bravo has more record activity, but it doesn't appear significantly higher.

Let's add another factor. ASTM E2452-05, Standard Practice for Equipment Management Process Maturity (EMPM) Model, (a **wonderful** model for self assessment!) provides for rating the maturity level of your property management system, from 1 to 5 (5 being at the top of your game). Let's add that information to the data we already have and compare the results. Please see Figure 3.

It appears that Alpha has a reasonably mature system, Bravo's maturity could be better, and Charlie is OK.

So far, it still appears that Alpha is doing 'more with less'. Why? Let's add *another* factor.

ASTM E2132-05, Standard Practice for Assessing Loss, Damage and Destruction (LDD) of Property, states that an entity's LDD ratio for low risk property can be no more that 2%, and that the LDD ratio for high risk property (dangerous, hazardous, etc) can be no more than 0%. Figure 4 adds that data to the chart.

Hmmm. Alpha is looking pretty good, Bravo has some potentially serious issues, and Charlie needs to improve on their high-risk property management.

Now let's compare the LDD ratios to the inventory results and add data related to ASTM E2132-01 (2007), Standard Practice for Physical Inventory of Durable, Moveable Property. For our purposes, let's look at inventory frequency and record accuracy rates; please see figure 5.

So, Alpha is looking better, eh? They inventory every three years (so their inventory costs per item are, arguably, 1/3 that of Bravo or Charlie), plus they have a better record accuracy rate than the other two.

Did I mention that conducting physical inventories costs money, and the less you have to do them the less cost to your entity?! That's called **'value added'** or **'value based'** Property Management![11]

We haven't talked about types of property yet. We mentioned 'high-risk property' in the LDD standard, but it isn't very good (yet) on making a clear distinction between 'high-risk' property and the non-high-risk stuff. However, there's a new standard that does!

ASTM E2608-08, Standard Practice for Equipment Control Matrix (ECM), says that there are five classifications of property, based on the consequences of loss of control of the property. Equipment Control Class (ECC) 1 is the most serious, with a loss of control indicating a negative 'societal safety/security impact.' In other words, a lot of people could get hurt or even killed if there was a loss of control of this class of property. At the other end of the spectrum is ECC 5, where if you loose it, there is "no visible or recognizable" impact on the entity.

The standard goes on to state that, reasonably, the greater the consequence of loss of control, the greater the *level of control* and entity will exert over that property*,* ranging from 'continuous control' for ECC 1 stuff, to "tracking or protection" for ECC 5 items.

Okay, let's see what classes of property our three entities have. Take a look at figure 6.

Wow! Over *one half* of Alpha's stuff is in ECC 1 and 2! That means that Alpha is doing a lot of 'continuous control, tracking and protecting', indicating a ***significantly*** higher level of effort. But notice that Alpha is not tracking the stuff (ECC 5) they don't have to; they're expending the most effort on the most important stuff. Whereas Bravo and Charlie both are controlling/managing stuff where there is minimal, if any, consequence of loss of control.

Very interesting, wouldn't you say? Based on what we've seen so far, we can reach some reasonable, verifiable conclusions, the prime conclusion being:

Alpha Equipment has a successful and cost effective Property Management system.

And the proofs, based on cold hard facts, for that statement are that Alpha has:

a) An acceptable maturity level based on the EMPM standard.
b) LDD ratios that *exceed* industry standards.
c) *Cost effective* physical inventories, the results of which *exceed* standards.
d) Alpha Equipment is successfully managing a lot of sensitive and extremely sensitive property with a minimum of human resources.

One more factor that we must examine is the people, the Property professionals, the "FTEs", the 'human resources'. In Alpha's case, how can so few do so much and so successfully?

ASTM E2379-04, Standard Practice for Property Management for Career Development and Training, "…establishes the recommended education, training, and experience requisites necessary for property management organizations to adequately support the missions and objectives of organizations …" and is "…predicated on three levels of professional certification based on a combination of academic course work and professional experience."

Three levels of professional certification? Sounds familiar, doesn't it? If it doesn't sound familiar, here's a hint: CPPS, CPPA and CPPM.

So, let's take a look at the certification level of the "FTEs" of each entity; please see figure 7.

Wow! Alpha's people are all CPPMs! Only one of Bravo's Property people has any kind of certification at all. The distribution of certifications among Charlie's people is about what one would expect, but it sure could improve, wouldn't you say?

Is there a connection between the success and the cost effectiveness and the certification level of the Property professionals? It would certainly appear so!

We now have a much clearer picture of the performance, and the cost effectiveness, of the three entities' Property Control Systems than when we started. And, we have a much better picture of "How many Property people does it take to control how much stuff?"

The data presented above are based on 'real world' as well as 'estimated' situations, and the real world stuff was not collected in 'scientific' manner. So, we are talking conversationally and theoretically, here, OK?

However, such data, collected in a credible manner and over time, will make a huge difference and enable vast improvements to the Property profession.

I submit to you that we have a lot more pieces with which to assemble the puzzle. Until now, we didn't even have a picture of what the puzzle was supposed to look like!

You've heard from me. I would **_love_** to hear from you!
- Are you using the standards?
- If so, how are you using them?
- Are they working for you?
- What is good about them?
- What is not good about them?

Thank you for your time and attention!

Lyle Hestermann, CPPM CF

Level	To Initiate	To Complete Successfully and Proceed to Next Level
TASK GROUP	No formal requirements	No formal requirements
SUBCOMMITTEE BALLOT	• Subcommittee chairman approval or motion passed at subcommittee meeting • At least 30 days between issue & closing date • Cover letter explaining reasons for ballot	• 60% of ballots returned • 2/3 affirmative votes (of total affirmative & negative votes cast on each item) • All negative votes considered No negative votes are persuasive or related
MAIN COMMITTEE BALLOT/SOCIETY REVIEW	• All subcommittee ballot requirements completed • All main committee ballots are issued by Headquarters	• 60% of ballots returned • 90% affirmative vote (of total affirmative & negative votes cast on each item) • All negative votes considered • All negative votes resolution forms completed and returned to staff • No negative votes are persuasive
COMMITTEE ON STANDARDS REVIEW	• Staff submits items to Committee on Standards after successful Main Committee Ballot/Society Review	• Committee on Standards agrees that procedures were followed correctly
APPROVAL AND PUBLICATION		

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Figure 1

ENTITY	LINE	ACQ	FT

	ITEMS	COST	E
ALPHA EQUIPMENT	22K	$150M	3
BRAVO STUFF SUPPLIERS	3K	$25M	3
CHARLIE'S THINGIES	1M	$20B	200

Figure 2

ENTITY	LINE ITEMS	ACQ COST	FTE	EMV*
Alpha Equipment	22K	$ 150M	3	1.03
Bravo Stuff	3K	$ 25M	3	1.7
Charlie's Thingies	1M	$ 20B	200	1.24

Figure 3

ENTITY	LINE ITEMS	ACQ COST	FTE	EMV	EMPM*
Alpha Equipment	22K	$150M	3	1.03	3.5
Bravo Stuff Suppliers	3K	$25M	3	1.7	2.8
Charlie's Thingies	1M	$20B	200	1.24	3.3

Figure 4

ENTITY	LINE ITEMS	ACQ COST	FTE	EMV	EMPM	LDD* Low/High
Alpha Equipment	22K	$150M	3	1.03	3.2	0.004/.00
Bravo Stuff Suppliers	3K	$25M	3	1.7	2.8	2.4/.01
Charlie's Thingies	1M	$20B	200	1.24	3.3	0.09/.001

Figure 5

ENTITY	LINE ITEMS	ACQ COST	FTE	EMV	EMPM	LDD Low/High	PHYS INV *
Alpha Equip.	22K	$150M	3	1.03	3.2	0.004 /.00	Triennial / 99.4%
Bravo Stuff Suppliers	3K	$25M	3	1.7	2.8	2.4/.01	Annual / 97.2%
Charlie's Thingies	1M	$20B	200	1.24	3.3	0.09 /.001	Annual / 99.2%

Figure 6

ENTITY	LI	ACQ $	ECM *				
			ECC 1	ECC 2	ECC 3	ECC 4	ECC 5
			LI	LI	LI	LI	LI
Alpha	22K	$150M	23%	27%	32%	18%	0%
Bravo	3K	$25M	2%	33%	33%	27%	5%
Charlie	1M	$20B	10%	20%	50%	15%	5%

Figure 7

ENTITY	LI	ACQ $	FTE	None	CPPS	CPPA	CPPM
Alpha	22K	$150M	3				3
Bravo	3K	$25M	3	2			1
Charlie	1M	$20B	200	65	50	50	35

Figure 8

Endnotes

[1] Helen Delaney, "Standards: The Corporate Edge, A Handbook for the Busy Executive", ©ASTM International 2007

[2] See the July/August 2008 issue

[3] OMB Circular A-119 Revised, February 1998, **SUBJECT:** Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities

[4] Helen Delaney, "Standards: The Corporate Edge, A Handbook for the Busy Executive", ©ASTM International 2007

[5] Decisions and Recommendations Adopted by the Committee Since 1 January 1005, World Trade Organization G/TBT/1/Rev.8, 23 May 2002, Committee on Technical Barriers to Trade.

[6] ibid

[7] Helen Delaney, "Standards: The Corporate Edge, A Handbook for the Busy Executive", ©ASTM International 2007

[8] ibid

[9] ibid

[10] Helen Delaney, "Standards: The Corporate Edge, A Handbook for the Busy Executive", ©ASTM International 2007

[11] See Mr. Robert McFarland's several fine articles in the Property Professional on the NPMA website under 'Research'. http://www.npma.org/publications/ as well as in The Property Professional, Volume 20, Issue 3.

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