

Team Effort and Suggested Approach to Purchasing

Part 2: Process Controls through better Purchasing and Management.

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John Ster, MS, BSME, JMS Engineering and Consulting

Mark Geiger, MS, MSE, CIH, CSP

Why the Integrated Process Team approach was adapted by DOD Acquisition



How the customer explained it.



Project leader's vision



Analysist's Design



Programmer's design



Business consultant's description



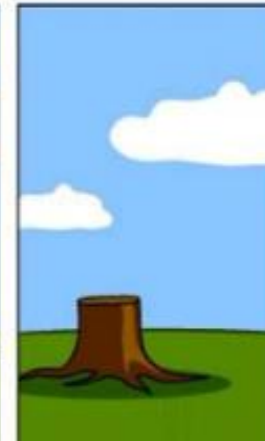
Documentation



Installation



Billing (purchase cost)



After maintenance



What the customer wanted

Working Groups as an Alternative to the Stovepipe System

https://en.wikipedia.org/wiki/Stovepipe_system



Stovepipes have no cross communication

- Good for preventing inhalation of exhaust gases
 - Bad for cross communication of ideas

Also see

- Not invented here
 - <https://hatrabbits.com/en/not-invented-here/>
- Re-inventing the Wheel
- Feedback Loops



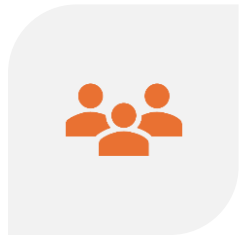
Team Effort and Suggested Approach to Purchasing

- Consultation between users, engineers, and computer experts to best outline the job needs, relative costs and requirements for selection and use of power hand tools (and many other products and projects).
- Each group may shape their expectations based on feedback from their peers.
- For example, logistics experts may be surprised to learn that the ordinary users may lack what they consider to be basic knowledge.
- Engineers may not fully understand the background and capabilities of supporting safety professionals. May also overestimate the effectiveness of protective equipment and not understand the physical and the administrative burdens that it can impose.
- Safety and health review of facility plans and purchases of chemical materials is generally accepted. Concept should be extended to purchases of potentially hazardous equipment and process design.

Suggested Approach for Evaluation and Update of Power Tools (can be applied to other equipment)

1. Outline product and process needs in a way that is fiscally defensible.
2. Identify approaches to comparing different products. This will typically involve identifying “needs” minimum acceptable criteria (thresholds) for purchase and “wants” desired levels of performance (objectives).
3. Compare alternative products from the preliminary procurement selection criteria.
4. Obtain a representative number of best-available products and arrange for user trial. Appendix B of AS6228A. Noise and, if possible, vibration, measurements should be made during these evaluations.

How to Use This Process in Your Professional Future



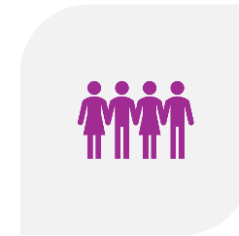
USER (WORKER)
ENGAGEMENT
INCLUDING FOCUS
GROUPS



WRITING FOR THE
AUDIENCE –
ACADEMICS,
WORKERS AND
MANAGERS ARE
DIFFERENT



COST-BENEFIT
ANALYSIS



MULTIDISCIPLINARY
TEAM APPROACH



ENGAGING
SAFETY AND
HEALTH IN
PURCHASE
EVALUATION AND
DECISION MAKING

Back-up Slides



Working Group Rationale and Approaches

Team approach to product evaluation and development

- Involves product users and developers from a range of backgrounds in order to ensure that products meet the needs of their users.
 - Applied to products from computer programs to weapons systems
 - Used by DOD, industry, academics
- Approach used to ensure that training and outreach programs are both understandable and appealing to their intended audiences.
- Many consumer products are also evaluated and improved through the input of users providing their feedback through small working groups.



Working Group Rationale and Approaches Cont.

Team approach to
product evaluation
and development

- DOD Acquisition describes this process as the Integrated Product Team.
 - Often used to develop and refine requirements (specifications and performance requirements)
 - System safety working groups
 - Logistics working groups
 - Integrated product teams with diverse memberships
 - All need user's representatives to work effectively
- Consumer reviews and marketing experts use the term "Focus Group" to describe small groups of users-who are not technical experts- to provide feedback and insights which are essential to refinement and wider product use.

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APPENDIX G - SUMMARY OF TRAINING RECOMMENDATIONS

Staff Category	Key Education Components	Possible Vehicle/Approaches
Senior management	<p>Fiscal and sustainability factors supporting productivity and safety.</p> <ul style="list-style-type: none">▪ Safety and health risks associated with operations, including risk acceptance at the appropriate management level.▪ Associated accountability and potential liability for occupational illness and injuries.▪ Results of periodic program evaluations.	<p>Senior level policy documents.</p> <ul style="list-style-type: none">▪ Periodic program reviews.▪ Production and quality reports.▪ Safety summary and mishap reports.
Engineering and production management	<p>Safety and health risk factors inherent in processes.</p> <ul style="list-style-type: none">▪ Basic ergonomic risk factors.▪ Cost/benefit considerations associated with ergonomic programs.▪ Lean six-sigma and other process/productivity evaluation approaches.	<p>Management policy and related training.</p> <ul style="list-style-type: none">▪ Ergonomic working groups involving engineering, production, and support personnel.
Procurement/logistics department	<p>Risk factors inherent in processes and role of purchasing in modulating risks of productivity impairment and injury risk.</p> <ul style="list-style-type: none">▪ Life-cycle cost/benefit accounting considerations supporting best value procurement.	<p>Management policy</p> <ul style="list-style-type: none">▪ User feedback related to product procurement.▪ Rating systems based on customer/user feedback,

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Maintenance and tool room	<ul style="list-style-type: none"> ▪ Productivity evaluation. ▪ Purchasing process and approaches to justify procurement. ▪ Safety and health considerations associated with work and maintenance operations. 	<p>Collaboration and routine meetings between procurement and production <u>and safety/health.</u></p>
Production and maintenance staff using power hand tools	<p>Safety and health requirements and rationale for their adaption including risks relevant to their work and control measures.</p> <ul style="list-style-type: none"> ▪ Link between safety and productivity. ▪ Protective equipment requirements, limitations, and evaluation of effectiveness. ▪ Overview of the organizations safety and health program including feedback/risk reporting. 	<p>Safety and health training required/ recommended by organizational policy and by regulations such as the European Union and related national regulations or U.S. OSHA regulations.</p> <ul style="list-style-type: none"> ▪ New employee orientation. ▪ Routine training and training related to updated processes
Safety and health personnel	<ul style="list-style-type: none"> ▪ Productivity evaluation. ▪ Purchasing process and approaches to justify procurement. ▪ Lean six-sigma and other process/productivity evaluation approaches. ▪ Leadership and communications education 	<ul style="list-style-type: none"> ▪ Collaboration and routine meetings between procurement and production. ▪ Continued education ▪ Management meetings ▪ Procurement review

Approaches to Tool and Process Management

Engaging all stakeholders in the process

- Improves feedback and clarifies requirements
- Likely to provide a venue for mutual education

Getting the best (versus best marketing) vendors

What aspects of European and other approaches might be considered?

It's not just the tools –it's the process management!

Cultural issues and organizational impediments to progress

How integrate safety and health as an indicator of process quality and effectiveness

Working Groups in Defense Acquisition and Requirements Development

- Multiple prior efforts which didn't fully engage the knowledge of users- often created expensive surprises and maintenance challenges.
 - Uneven and often low rate of customer satisfaction (applies to commercial and military products).
 - ***Can you identify a new product that was difficult to use?***
- Requirements/capabilities development including multiple users, developers, and experts in the acquisition process.
 - Understand what users want and need. (May require some translation into capabilities/ requirements docs).
 - Review the strengths and limitations of current products.
 - Help avoid requirements creep.
- Acquisition Programs and facility design/ upgrades involve multiple groups with diverse experts.
 - System safety working groups.
 - Logistics working groups.
 - Integrated product teams.
 - ***All need user's representatives to work effectively.***



Feedback Survey



Your feedback is important to me