

The Newsletter of the STC Policies & Procedures Special Interest Group

SOCIETY FOR TECHNICAL COMMUNICATION

3rd Quarter 2005

Manager's Report: Outstanding-Rated SIG Begins a New Fiscal Year

By Raymond E. Urgo

As STC's new fiscal year begins for the SIG, we are off to a strong start. Out of 20 SIGs, ours is the only one currently rated "outstanding" for achieving all its goals. Speaking of goals, our SIG's leaders have already set goals for their respective functions for the year.

Dawnell Claessen is once again coordinating our SIG's sponsored sessions for the 2006 Annual Conference. Her goals are to have a progression session on various P&P topics and a panel of experts on compliance. Additionally, she plans to moderate these sessions and author articles on them.

Barb Zeller, our Information & Research coordinator, will compile a list of P&P books and articles for members and non-members who visit our website. She also plans to have a timeline depicting key milestones in our SIG published on the website by early November.

Speaking of the website, Wendy Asman, our new Webmaster, plans to design a new look for our site with improved navigation that should appear by early November.

Wayne Glover, Listserv Discussion Coordinator, plans to finalize his assessment of members' satisfaction with the listserv's discussions that he initiated several months ago on a trial basis. Based on his findings, he will be recommending improvements or an alternate program with similar goals of expanding knowledge and interaction among our members.

Eddy Frost, Membership Coordinator and Listserv Administrator, plans to send welcome messages to new members, respond to all administrative requests for the listserv within 24 hours, and even develop a person to serve as his backup when he is not available.

Lois Marsh, newsletter editor, will publish Direction quarterly and, working with the assistant editors, improve the quality and quantity of articles.

Finally, as the SIG Manager, my goals are to keep all leadership positions filled, keep work as light as possible for our volunteers, and support our leaders' progress on achieving their stated goals. I also plan to keep abreast of changes emanating from the STC that could affect our SIG.

This coming year should prove to be exciting, especially for those who serve as volunteers in this, the world's only group dedicated to policies and procedures. Be sure to let our volunteers know what is working, and what you would like more of, better, or different. And, if you want to develop your talents further, consider volunteering with our "outstanding-rated" P&P SIG.



Advanced Procedure Writing Process – A New Methodology

By Wayne Glover

"Ultimately, technical procedures, when done correctly, provide more than a step-by-step guide for individual tasks. In effective organizations, technical procedures are welded together in an overall company-wide procedural framework."

Policy and procedure writers can contribute more effectively to their organizations than we currently do. We are in a position to see many of the inefficiencies, inconsistencies, and error sources in our organizations. In writing P&Ps, we need to incorporate improved techniques to ensure P&Ps do not simply document "how we do it here". Rather, we should produce an integrated set of procedures that form the framework of an effective and error-tolerant organization.

I have developed a new methodology for P&P writing called *Advanced Procedure Writing Process* (*APWP*). I think it vastly exceeds current procedure-writing methods because it integrates all of the following into an effective package:

- Requirements definition
- Metrics
- Human factors
- Failure Modes and Effects Analysis (FMEA)
- Procedure understanding testing
- Informational design, and
- Technology (Content Management System)

Five Major Improvements

APWP introduces five major improvements to the basic procedure writing process:

- Explicit identification of Internal and External Requirements needed to comply with government, corporate, customer, and industry standards
- An improved procedure-writing process connecting procedural steps between company groups via incoming and outgoing metrics
- Incorporation of procedural fault tolerance by modifying an engineering design process called Failure Modes and Effects Analysis (FMEA)
- Testing for procedural understanding of any employee responsible for performing critical procedures
- Interconnecting all the components of the system using a software technology called Content Management System.



Each of these improvements is discussed below.

Defining Requirements

Procedures are currently written without structural guidelines and are not tied to specific, seminal Requirements. The APWP provides structure by declaring that procedures are written only to satisfy specific Internal or External Requirements and are explicitly linked to those Requirements. This declaration provides the lineage of the procedure and proof of satisfying the Requirements.

Requirements are generated from a detailed review of the internal and external documents that control the organization. Examples of external documents are government laws, customer requirements, and industry standards. Examples of internal documents are management memos, company meta-processes, and company goals. Following APWP guidelines, appropriate documents are collected for analysis. These documents are analyzed by a company team and specific Requirements are then written that encapsulate the conditions in the documents. Finally, procedures are written to satisfy these Requirements. Through this linkage – Controlling Documents-to-Requirements-to-Procedure – it is possible to show compliance with all internal and external documents and their attendant Requirements.

Ultimately, technical procedures, when done correctly, provide more than a step-by-step guide for individual tasks. In effective organizations, technical procedures are welded together in an overall company-wide procedural framework. This framework captures all Internal and External Requirements and blends them seamlessly into effective sets of procedures. Additionally, it provides a conduit for senior management to flow down the top-level tasks throughout the organization.

To ignore or minimize the importance of such a procedural framework is to deny your organization an excellent productivity and cost-savings tool as an effective safeguard against negative results that cannot be tolerated in your business.

Identifying Metrics

The root of many organizations' problems lies in the coordination between groups. APWP requires that specific incoming and outgoing metrics be assigned for each step in a procedure, improving group coordination. These metrics are defined by the end product that satisfies the procedure's Requirements. Working backwards, each group defines the incoming metric required by them to provide their group with the necessary ingredients (e.g. time, personnel, and material) to satisfy the subsequent incoming requirements of their customer. Each group's performance can be measured by how well they satisfy these agreed-to metrics.

Failure Modes and Effects Analysis Process

The most unique recommendation of APWP is to incorporate "fault tolerance" in procedures to accommodate foreseeable human error. Procedures that are not fault-tolerant achieve their desired outcomes only with complete procedural compliance; skipping or deviating from a procedural step will prevent a successful outcome.

Direction

Human factors experience teaches us that we cannot reasonably expect a complicated procedure to be performed exactly correct every time. History is full of events in which highly trained and motivated people deviated from procedures with catastrophic results (I refer you to the Exxon Valdez grounding and the Ohio electrical blackout). Once we accept that deviations do occur, we must move beyond the requirement for complete procedural compliance towards a fault-tolerant system that takes procedural deviations into account.

To improve the chance of successful procedural outcomes, APWP borrows a time-honored concept from the engineering design community – Failure Modes and Effects Analysis (FMEA) – to produce fault-tolerant procedures. FMEA was developed to probe new designs for potential failures. In essence, engineers use FMEA to systematically test a system to ensure it can deal with equipment failures and continue functioning properly.

I propose that we learn from existing fault-tolerant systems in our quest to improve procedures. We can do this by including human error potential in the FMEA analysis (creating a "human failure modes and effects analysis").

There is one system category with significant human interaction that simulates P&Ps and displays excellent human-error fault tolerance: commercial websites.

The main procedure performed through a commercial website is designed to enable product purchase. Notice the task is not to simply follow the procedure: it is to obtain the procedure's end goal (purchasing). This significant difference (procedural compliance vs. desired outcome) is often lost in other procedure systems. To increase the degree of successful completion, a good website must be fault-tolerant.

All website entries made by the customer (e.g. address, phone number) are checked for potential – and foreseeable – errors. The web page tests for the error ("failure mode"); understands the impact on placing the order ("effects"); and provides help to the user in the form of messages (controls) to prompt error correction. For example, if a credit card number is entered incorrectly (e.g., insufficient digits), a message provides the user with feedback (e.g., credit card number not correct) and a way to fix the error.

Certainly, if any of these actions (looking for failure modes, understanding the system effects, and offering solutions) were eliminated, the end result would be an unsuccessful outcome (the credit card couldn't be validated and the purchase wouldn't be completed). Without this message, website users would be faced with a screen telling them their order could not be processed and, not knowing how to proceed, they would leave the site in frustration, failing to complete the procedure. In circumstances where incompletion it is not an option, tasks required to release an airplane or ship a product, the likely action would be procedural non-compliance to allow the person to complete the task.

The addition of controls to a procedure does not promote mediocrity or release users from the responsibility to understand their job and get it right the first time. Controls benefit managers by producing results that are more likely to satisfy the requirements, by catching and measuring errors, and by monitoring individual contributors' performance. This information provides more conformance and control, not less.



Procedural Testing

All critical procedures identified by management should include a procedure to test employee understanding. This test is developed outside of APWP, but is an integral part of it. The testing format (e.g., self-paced, monitored) is determined by management ahead of time. The results are maintained in the employee's training file and demonstrate that the employee has sufficient knowledge to perform the task properly. This adds to the confidence of the employee and management that they have taken adequate precautions to ensure proper knowledge transfer, not simply created a procedure that may or may not be understood. In our litigious society, this could be significant in a safety situation.

Content Management System

APWP requires numerous interconnections between the data components with procedures, forms, Requirements and more. This interconnection is accomplished with a user-friendly Content Management System (CMS). CMS is used to:

- 1. Collect external documents for analysis (e.g. government regulations)
- 2. Manage all the data components and their interconnections
- 3. Publish documents (e.g. policies and procedures) in the format best suited for the user

CMS is the software tool that allows these interconnections to be created and managed. It also allows sole sourcing of information to increase efficiency and accuracy.

Summary

Taken together, these APWP guidelines will dramatically change and improve procedures. While the development of procedures under this system is more difficult and the skills required may not currently exist in your organization, workers can be trained to cultivate the required skills and attitudes. The long-term benefits of such an investment extend beyond the procedures, permeating all workplace activities.

The importance of the effective procedural framework described here is simply ignored by most organizations. The cradle-to-grave (documents-requirements-procedures) approach offered here will provide you with the comfort of knowing, not assuming, that all conditions your organization must meet have been met. The benefits are there for any organization willing to make the investment.

Wayne Glover lives in Redmond, Washington. He has worked as a technical writer, engineer, software trainer, and management consultant specializing in P&Ps. You can contact Wayne by email at: wglover@technicalmedia.net



Member Profile – Vesa Purho, Nokia Corp

Vesa Purho recently joined the P&P SIG. She lives and works in Helsinki, Finland with her spouse and their pets: a Labrador puppy, a ferret, and a boa constrictor!

D: Can you briefly describe your business background?

VP: My first other than summer job was that of a software designer in a small company back in the mid-80s. I worked there through my university studies (Translation and interpretation of English) and in 1995 I joined Nokia as a technical writer. In Nokia, I have held several positions: documentation project manager, documentation group manager, documentation researcher, process development manager for documentation processes, and currently I'm a process development manager for our customer support related processes.

D: Tell us about your work – responsibilities, challenges.

VP: My main responsibility is to take care of our customer support process architecture. So I'm responsible for thinking about what kind of sub-processes we should have and how they relate to other processes in product creation, delivery, sales, marketing etc. My work consists of discussions and workshops with process owners trying to decide where the process boundaries are and what kind of 'workproducts', as we call them, go across the boundaries to ensure efficient and effective end-to-end processes.

The main challenge in process work is that people tend to think about organizations rather than processes and don't understand that an organization and people in it can run several processes. Therefore each organization tends to develop its own process for handling the same things that are handled in another organization thus creating almost identical processes for no other reason than them being in a different organizational unit. So the challenge is to get people to think about processes that go across organizations and that don't need to change when we change our organization, which is bound to happen every now and then.

D: Tell us about your audience.

VP: As I'm doing process architecture work, my audience is mainly process managers and process developers who then in turn develop the actual processes used in everyday work.

D: What do you like most about your job?

VP: As I need to discuss the interfaces with other processes, I get to know the other process areas to some extent, as well giving me a good overview of all of them. I get to understand how Nokia works as a whole. I'm also a very conceptual person in general and thus this kind of theoretical process architecture work suits me well.

D: What advice can you give to someone who wants to get into P&P documentation?



VP: If you want to get into documenting processes, you have to be able to look across organizational boundaries to find the real end-to-end processes, you need to have good analytical and conceptual thinking skills, and you need to be ready to fight against the "why do we need processes" attitude that often prevails. I think that the required skills are not that different from any technical writing job. The audience is internal but they are customers anyway and so all the techniques used to write user manuals apply.

D: What's the biggest P&P challenge that you face in your industry or specialty?

VP: As I mentioned earlier, helping people understand the importance of processes to ensure that we have effective and efficient operations.

D: Tell us a bit of personal information about you – e.g., hobbies, where you live, your family, or other information to help us get to know you.

VP: I live with my spouse in Helsinki, Finland, in a row house. We don't have that many hobbies: watching TV, if you can call that a hobby, and going to gym are the main ones. This spring we bought a puppy, Labrador, and he has been taking a lot of our time. We also have a ferret and a boa constrictor, not in the same room though, so animals are our hobby as well.



Using FMEAs and Process Maps in Financial Services

By Lois Marsh

Founded in 1817, my employer is one of the oldest and largest financial services providers in North America. Like most government-regulated companies, we produce and maintain a large volume of policies and procedures – and we have used the same methodology for reviewing them for many years: ask the content owners to update the content, edit, and re-publish if necessary.

In this post-Enron era, though, there's a change in the wind that has impacted our internal review process. Our internal auditors suggested we add some new tools: process mapping and Failure Mode & Effects Analysis.

Introducing the FMEA Methodology

Initially developed by aerospace engineers, Failure Mode and Effects Analysis (FMEA) is a methodology for analyzing potential process failures so that preventive controls can be built in. You can learn a great deal about FMEA on the internet. This article focuses on some challenges we faced in implementing the methodology in a service environment.

For our first project, we hired an outside consultant to orient us to FMEA. As manager of the Market Risk Documentation Team, I was asked to roll out the methodology to the other groups in our business unit and keep the momentum going.

We were also asked to create process maps to be used together with the FMEA methodology. Flowcharting of processes was not new to me, but doing so within the FMEA framework was. For instance, it took us a few tries to agree on our definition of a control point (preventive step). For us, a control point is defined as "a point in a process denoting accountability and overall responsibility for accuracy and completeness." It is typically a management review of the results from a critical step in a procedure.

It was a real stretch for our business unit to see how a tool used widely in the auto industry applied to the business of analyzing market risk. Let's face it – manufacturing widgets seems a far cry from analyzing Delta/Gamma/Vega curves for yesterday's financial trades.

Once people became comfortable with admitting to potential failures, they were more enthusiastic about the FMEA process and identifying preventive steps. The task that initially caused some groaning became an accepted part of procedure reviews. We also faced the challenge of deciding what level of detail to include in our process maps, and how to effectively link outputs from one process to subsequent processes as inputs. Editing for consistency in labeling and hyper linking related maps proved useful.

Benefits of Process Mapping

Mapping the processes was invaluable and very much worth the effort. It's easier to gain consensus on how a procedure can be improved using a Visio[™] flowchart than a narrative document because it's



less open to interpretation. Process maps now form an important part of all our P&P projects. We involve as many team members as possible in the mapping meetings, but it's well worth the investment – the sessions often reveal misunderstandings or control gaps that can introduce unwanted risk.

High-level process maps now help define the scope for our detailed documentation. They also make the job of identifying changes in procedures easier during periodic reviews. They act as visual cues, and reviewing them is more likely to surface changes than just asking a subject matter expert to read a whole chapter of their P&P manual.

Role Change

One surprise outcome of the FMEA methodology was that my own role as a documentation specialist has significantly broadened. Not only am I expected to develop and publish P&Ps, I am also called on to facilitate minor process reengineering as a result of our FMEA work. This has been reasonably easy for me because I spent several years as a business analyst. It's more challenging for documentation staff who may see themselves primarily as compilers and editors. For me, it's an exciting challenge to apply new methodologies to P&P. Who knows? I may end up on a Six Sigma team yet!

Lois Marsh is Manager of Documentation for Market Risk with BMO Financial Services in Toronto, Canada.



By Dwight Irving

With the increased use of contact centers, my company, RBC Financial Group, realized the importance of ensuring that the same services clients came to rely on from the bank branches could be delivered effectively via telephone or email. As there were a large variety of potential requests that could be requested of a call center agent, the contact center's operations group had produced a comprehensive set of banking procedures in order to help the agents provide better and consistent service to customers.

Analyzing the Problem

Call center agents need to find procedural information quickly while on the phone with a client, but this was not easy with the existing paper-based format, housed in large binders. The authors had been more concerned about providing all of the necessary information than about making it navigable or easy to use. In addition, procedures were sometimes phrased in a complex manner. If agents could not find the needed information, they had to call an internal support desk which would clarify the procedure, all while the client was placed on hold.

Choosing a Solution

Having clients wait to do things with their money affected their overall satisfaction, and calling the internal support desk to have a procedure explained affected the agent's effectiveness. To counter this, the operations group sought a way to improve the situation. They had decided on a web-based solution which followed Jakob Nielsen's recommendations for reading text on the web.

Nielsen found that people, when reading on the web, tend to scan the document in their search for information. If that held true for the agents in the contact centers, then the procedures needed to be revised.

To increase usability, the operations group proposed reformatting the procedures using Nielsen's idea of "scannable text." Scannable text uses keywords, meaningful subheadings and bulleted lists, which cuts down on the number of words used, and by calling attention to important information, increases comprehension.

The changes, for the most part, were well received. While there were a few agents who did not appreciate the new format, generally the feedback was positive. The operations group had also found that there was an average time savings of 9 seconds per call across all of the businesses.

To find out more about developing scannable text on the web, see Jakob Nielsen's article at http://www.useit.com/alertbox/9710a.html.

Dwight Irving is an MIS Analyst at RBC Financial Group.



This article first appeared in the April 2005 issue of the Toronto STC's Communication Times.



Volunteer News

We have a new webmaster! Thanks to Wendy Asman for volunteering. Once she recovers from her recent move from Vancouver, Canada to Los Angeles, USA, she will develop a renewed strategy for our P&P website. Look for news about her plans in coming issues of *Direction*.

To check out the current site, click here: [WENDY TO ADD URL TO SITE].



ANNOUNCEMENTS

STC Publication Themed on Policies and Procedures

Be sure to see the November issue of *Intercom*, STC's magazine, for a first-time theme dedicated to Policies and Procedures.

P&P SIG Membership

Membership total as of

April 30 743

July 31 803

That's an increase of 60 people – 8%! Welcome to all our new members. We hope you enjoy *Direction*.

Coordinated Discussions on Listserv End

Due to a dearth of participation, the five-month trial for the coordinated discussions on our listserv ended effective September 2005. The results of the trial lead us to believe that the listserv was not an appropriate or convenient forum for members to exchange ideas on more long-term and philosophical issues about P&P. The intent was to offer an additional value to our members while capturing knowledge from these discussions for later summarizing on our Website. A special thank you to Wayne Glover for initiating and overseeing this project. According to Wayne, "we haven't had a failure; but rather, a success at finding out what doesn't work."

Course on Policies & Procedures

Introduction to Policies & Procedures Communication (Web-based course)

University of California, Los Angeles Extension

Dates: October 9 through December 2, 2005

Fee: \$550. (\$500 for STC members)

Course# 439.19

Reg# R5172

Instructor: Raymond E. Urgo (rurgo@urgoconsulting.com)

Contact: UCLA Extension 310/825-4192 or www.uclaextension.edu



Online Resource for Word Users

Using Microsoft Word[™] to create and publish your P&Ps? You're not alone. If you ever get stuck with a problem in Word that isn't covered by the online help, try using this link:

http://www.shaunakelly.com/Word/

It's maintained by a Word guru and is chock full of help.