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# Change Management Project award submission

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December 6, 2012

IT Service Management Conference  
Las Vegas, NV, United States  
February 17, 2013 through February 20, 2013

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**PINK ELEPHANT - 2012 - IT EXCELLENCE AWARDS**

**Project of the Year -- Submission Form**

**Instructions**

Thank you for submitting your project for consideration for the prestigious 2012 Pink Elephant Project of the Year Award.

Candidates will provide the following information regarding their project and submit the form to George Spalding ([g.spalding@pinkelephant.com](mailto:g.spalding@pinkelephant.com)) no later than 5pm EST, December 7, 2012. The candidates may include supporting documentation relevant to the criteria questions below. However, excessive support documentation will not be evaluated given the number of entries. Support documentation should be precise and to the point.

Project of the Year Award evaluations will be conducted during December. Up to three finalists will be identified in early January. The finalists will be asked to participate in a short (30 minute) teleconference interview to review the project and answer questions regarding the project from the judging panel. Finalists will be asked to prepare a short (no longer than 1 minute) video summarizing the project and highlighting key points from their Project of the Year submission. A generic corporate promotional video will not work. This video will be played in the general session during the award ceremony.

**Nominator's Information**

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**Nominee's Information**

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**Project Description**

**Definition**

Overview of what the project is all about. Please use descriptive terms. What was the business/IT problem to be solved and why was solving this problem important? (Reasons why the project was needed). 250 words or less.

Project Overview:

LLNL is a multi-programmatic science organization with a mission to anticipate, innovate and deliver solutions for our nation's most challenging security problems.

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Major research elements include bio-security, counterterrorism, defense, energy, intelligence, nonproliferation and nuclear stockpile stewardship. Many experiments and operational facilities operate 24x7 and require highly available IT infrastructure to safely operate.

Unlike many traditional organizations, IT services and infrastructure are delivered and supported by six functional organizations under the purview of the Chief Information Officer. To date, each of these organizations managed change independently. This has resulted in unplanned/unauthorized changes, change conflicts resulting in outages, a high volume of emergency changes, and a perception by customers that “IT is changing things all the time!”.

LLNL is a government owned, contractor operated facility. The Lawrence Livermore National Security, LLC operates LLNL with under contract from the Department of Energy’s National Nuclear Security Administration. Increasing compliance requirements and expectations that IT is run according to industry best practices are creating additional pressure to implement processes and procedures to manage the IT environment. In the past year, development of an IT strategy and implementation of a formal Change Management process became a contract requirement for LLNL. This project was initiated to address the contract requirements as well as improve the overall management of IT change and increase customer and stakeholder satisfaction with the enterprise IT services delivered from the CIO organization. The IT Change Management implementation project is aimed at improving the IT service environment by minimizing the impact of IT changes on the business and maximizing the ability of the IT organization to process changes.

Describe the steps the project team used to define the problem solution and what options were considered. Why was this solution approach selected? 250 words or less.

Project Solution:

**Vision**

The continuous service improvement process was utilized to define and scope the project. The vision for the future was a common systematic process for review, approval, and management of IT changes prior to implementation to mitigate the risk of change to the business. In addition, common maintenance windows and common communication processes were needed to improve the customer perception of how IT managed change.

**Where are we now?**

A multi-organizational team was established from each of the six functional areas responsible for delivering IT services. The processes used in each area were reviewed and solutions were chosen from those areas deemed to have the best practice in place. This effectively provided a baseline for the current state prior to the project implementation. Since there were no common processes and tools in place it was



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impossible to gather baseline metrics on change. A decision was made to begin measuring after implementation and monitor improvements.

**Where do we want to be?**

Key Performance Indicators were identified to help quantify how the implementation could be measured. These included: increased change success rate, reduced emergency changes, reduced unauthorized changes, improved customer satisfaction, increase in changes within required communication window and reduced incidents related to change. In addition, the documentation and implementation of common maintenance windows and communications processes.

**How do we get there?**

Expertise from trained staff, existing process best practices, and experiences from the functional areas that had experience with change enabled the definition of a solid change management process. Change Advisory Board structures, roles and responsibilities, procedures and tools were included in the scope of the process implementation.

**Did we get there?**

To date, the process has been deployed in four of the six functional areas. The metrics from several months of operating the process indicate some promising trends. The number of unauthorized changes and emergency changes is trending downward, customer satisfaction is stable but anecdotal information is supportive of the improved communication process and maintenance windows. The number of incidents related to change has been identified as an additional process improvement in the incident management process to enable data collection.

**Keep up the momentum!**

The project team continues to meet on a monthly basis and the CAB meetings also review the process and discuss opportunities for improvement. Customer satisfaction surveys and stakeholder meetings are also solicited for feedback on the process.

What were the (customer) key or critical business and IT drivers that created a sense of urgency or were critical to establishing the priority for the project? 250 words or less

Project Drivers:

The DOE and NNSA have historically held LLNL to a set of stringent detailed NNSA policies regarding the management of IT infrastructure. These policies were difficult to implement, costly to manage and were often over-constraining to meet the needs of the business. Recently NNSA began evolving their oversight of the IT infrastructure to a risk based approach. Changes to IT infrastructure or delivery of new capability are approved based upon a locally developed risk assessment with varying levels of review dependent upon the residual risk of the proposed change. Managing IT in this risk based approach requires visibility into the changes to ensure the appropriate risk assessment is performed and the appropriate documentation and approvals are in

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place prior to the change. The Change Management process provides the visibility and ensures the Cyber Security Compliance organization is involved in the change approvals.

LLNL contracting oversight office recognizes the importance of change management to ensure Cyber Security compliance and the value of implementing best practice IT Operations. This resulted in the requirement to implement a formal change management process as part of LLNS operating contract for LLNL. Having this requirement in the contract resulted in quarterly reporting on project status to ensure the process was implemented as stated by the end of 10/31/12.

In addition to compliance and security drivers, the CIO organization continues to strive toward improving IT service delivery processes and improving customer satisfaction. Providing well managed IT services to meet the availability requirements of the business depends upon common processes, published and agreed upon maintenance windows and good communication with stakeholders.

**Time**

When did the project start, and when was it scheduled to end? (Project must have started after 1/1/2011 and concluded in 2012 – no later than 12/31/2012).

**Timeline:**

Project Start: Oct 1, 2011  
Project End: Oct 31, 2012

**Organizational Scope**

Describe the organizational scope or what part of the organization was impacted by the deployment of the project/solution. 150 words or less.

**Organizational Scope:**

As a research lab located on single site with approximately 6500 employees, LLNL is a relatively small organization. However, as a research organization with University roots the IT environment is very diverse and IT support is relatively complex. IT services are delivered to LLNL through four organizations with at least three different funding sources. Many of the services are funded through a common overhead budget that is managed by the CIO but several areas such as tier-2 desktop support and cyber security are funded and managed separately.

The IT infrastructure must support a diverse client environment including Mac OSX, Windows, Linux and mobile devices. In addition, the nature of the research performed often involves customized IT solutions in direct support of the business. This project affected all four of the organizations providing enterprise services which includes several hundred IT staff and all shared services delivered to the organization and our collaborators. The awareness and skill level of the IT staff in each of these

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organizations varied from ITIL expert to no understanding of ITIL processes at all. The services impacted also serve vastly different customer communities ranging from internal security monitoring services to email. This variation presented an additional challenge to the project which was addressed through communication, project team training and senior management support.

**Desired outcomes**

What were the planned outcomes/deliverables of the project and how did the outcomes/deliverables align to the Problem Statement? How did you plan to measure the outcomes/deliverables to determine at what level they were achieved? Be specific as to both quantitative and qualitative measures. (Outcomes are derived from the project product or output and outcomes provide specific benefits.) 500 words or less.

**Project's Deliverable(s):**

The outcomes expected and planned from this effort can be summarized into three categories, 1) Implementation of a common process for all functional organizations; 2) Improvement in the quality of changes implemented and 3) Improved customer satisfaction. The implementation of a common process was desired to meet compliance requirements requested by the LLNL contractor and to provide a repeatable way to review changes to ensure the risk based assessment was carried out for Cyber Security compliance. In addition, the common process provides visibility into unauthorized changes and also allow for better scheduling and conflict resolution of approved changes.

The implementation of the process is evidenced by the documentation produced, training completed with the affected staff and the on-going existence of Change Advisory Board (CAB) meetings. The ITIL certified project team members provided training for the Change Managers, the CAB members, stakeholders, and IT staff. Another indication that process implementation is complete is the use of the common ITSM tool to submit Requests For Change (RFC's) and process change requests.

The LLNL contracting office reviewed all the documentation and formally accepted the completion of the requirements with an "exceptional" rating indicating the project exceeded their expectations to deliver a best practice change management process. In addition, the Cyber Security program leader has reviewed and approved the process showing it provides appropriate support for the Cyber Security risk based assessment process. Once implemented, the change management process enables the Change Advisory Board or Change Manager(s) to review proposed changes and ensure the proper implementation plans were in place. Each change is required to have an implementation plan, a communication plan, a staff plan and a rollback plan. While this doesn't prevent unintended outages resulting from change the success rate of changes will increase as this change process ensures due diligence is performed in the planning phase.

The lack of common processes and tools prevented the project from collecting substantial baseline metrics prior to implementation. The decision was made to begin collecting metrics as the process was implemented and then monitor them to confirm success and drive improvements. Since beginning measurements in mid-summer, we have seen a trending increase in change success rates and a trending decrease in unauthorized and emergency changes. As each area is brought under change management we are seeing a spike followed by a decline in change request re-categorizations which is indicative of the learning curve for change requestors. It is anticipated that the volume of standard changes will also increase over time as the change process matures and change implementations are documented and repeated. Early indications are showing a slight increase in the volume of



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standard changes.

Customers to date have viewed IT as “always changing things”. There wasn’t a consistent way to inform customers of what was changing and when they could expect changes. Each organization operated to different outage windows with varied communication processes. The implementation of common maintenance windows and standard communication processes, customers are more aware and informed about changes. They also have a more active role in approving change by their participation in some cases as CAB members.

#### **Benefits achieved to date**

Describe the tangible and intangible benefits realized as a result of achieving the desired outcomes. Align the measured benefits to the desired outcomes and the original problem statement. Describe how the benefits were measured and give specific evidence of the benefits achieved. 300 words or less.

Benefits:

There were three primary categories of outcomes anticipated from this project:

- Common process for change across all the organizations that were in scope – common approval process, tools, communication process, and compliance
  - All six functional organization under same process with same CAB
  - All RFC’s in a single ITSM tool providing metrics and visibility into changes
  - All organizations use the same communication notification process to ensure customers are informed and engaged in a timely manner
  - Acceptance of the change process with an exceptional (highest) rating from our oversight organization
  - Support for risk based approach by ensuring the Cyber Security organization is involved in reviewing RFC’s and participates in the CAB
- Improved quality of changes – reduced outages, less emergencies, fewer change related outages
  - No baseline metrics were collected because of the variation in tools and process prior to implementation
  - Since implementation the number of unauthorized changes is trending down
  - Increased number of standard changes which requires documentation and review prior to becoming a standard
  - Reduced number of emergency changes as the process is rolled out
  - Overall increase in change volume due to more accounting and more compliance with process
  - Reduction in the volume of reclassification of requests after implementation
- Improved customer satisfaction
  - All organizations use the same communication notification process to ensure customers are informed and engaged in a timely manner.
  - Consolidated maintenance windows with coordinated communications has improved the customer/stakeholder perception that IT is “always changing”. This is a quality metric measured through stakeholder reviews of the change process



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### **Management of Organizational Change**

Describe how your organization managed the organizational/transformational change or impact to individuals or groups as the project deliverables were implemented. Provide a summary of your plans to address organizational resistance, improved communications and education/training. 300 words or less.

#### **Management of Organizational Change:**

Management of change in any organization is difficult. The implementation of Change Management at LLNL was further complicated due to the disparate functional organizations (lack of a single administrative management chain), a highly diverse technical environment, and a relatively low level of knowledge about best practice operational frameworks such as ITIL.

This project benefited from the knowledge of several ITIL experts on the project team and senior management support. Many of the actions taken and tools used can be categorized using the Kotter model for managing organizational change.

#### **Creating a Sense of Urgency**

Senior management support from the Chief Information Officer was paramount in helping to establish a sense of urgency and to give the team authority and accountability for delivering. The two other items that created the sense of urgency were the contractual requirement/measurement to implement change management and the need to formalize where risk assessments were performed prior to changes.

#### **Form a Guiding Coalition**

The project team was staffed by members from each of the affected organizations including those who would support and oppose the process. The project team was fortunate to have several ITIL experts and several certified practitioners participate. These members helped to educate those not familiar with formal change management and also helped resist scope creep into other process areas. For example, when forming the communication processes, there was a strong pull to begin defining event management since a large part of communicating is a result of an unplanned outage.

#### **Creating a Vision**

The project team established early on the benefits to all because it would improve IT's reputation with customers and increase the communication between IT service providers. Team members familiar with formalized change management encouraged others stating that Change Management gave them confidence to make changes to critical IT services because they had management approval to make the change.

#### **Communicating the Vision**

The team created a project charter that outlined the scope of the project. This charter was shared with stakeholders, sponsors and team members. In addition, the ITIL certified members provided team training so everyone had a basic understanding of Change Management and could speak a common language.

#### **Empowering Others**

Frequently the project team created spin-off working groups to develop solutions. This empowered those most impacted by the process change to take ownership of the solution. For example, Change Managers with the most mature change processes were asked to review their process and develop a common process that met both their needs.



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#### **Planning for and Creating Quick Wins**

The process was implemented in phases starting with the functional areas that already had more formalized change management processes in place. These organizations then served as examples and supporters of the new organizations. The common communication process was implemented early in the implementation providing a very visible example to customers and IT staff that something was changing. It created the perception internally and externally of a single team.

#### **Consolidating Improvements and Producing More Change**

Throughout the implementation, as issues were raised the project team worked to adjust and improve the process. Common maintenance windows were adjusted to meet the needs of all areas, communications formats became more consolidated and streamlined, and the ITSM tools and reports were refined. All members of the team were asked to “watch over each other” and raise awareness if unauthorized changes were detected with the intention of learning, not to punish. This approach is building a culture of change management.

#### **Institutionalizing Change**

Change Management is becoming a part of the culture. Each CAB and maintenance window planning session have produced “ah ha” moments. On several occasions, there have been major items caught in CAB such as changes planned that were not properly communicated or a major service about to go production without the knowledge of the CIO. These “ah ha” moments are serving to prove the value of the process to all involved.

#### **Summary**

Provide a short (less than 100 words) summary of why your project should be awarded the Project of the Year award.

Summary:

This project demonstrates a real implementation of an ITIL process in a complicated organization with little process maturity or governance. It succeeded because it leveraged the principles defined in the ITIL framework and advanced knowledge of the ITIL certified staff. The project had clearly defined objectives and demonstrated measurable results. It can serve as a good example to others challenged to implement processes in similar environments.

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Prepared by LLNL under Contract DE-AC52-07NA27344