The Problem With Problem Management

Within ITIL®’s best practice IT Service Management framework, the Problem Management process has the twin goals of minimizing the adverse impact of errors within the IT infrastructure, and to prevent the recurrence of incidents related to those errors. In order to achieve these goals, Problem Management seeks to get to the root cause of Incidents and then initiate actions to improve or correct the situation.

Problem Management is worth the time and investment because if implemented and managed effectively, it can provide very high returns. And, because it can have a direct impact on service quality it can provide much needed quick wins during the first phase of an ITIL implementation. However, the issue is that many organizations think that they have implemented Problem Management when actually they have not – all they may have done is get better at managing incidents! Most organizations do not fully execute or manage all aspects of this key support process, and consequently do not reap full benefits.

Don’t fall into the same trap! Aim to understand what it really takes to go all the way with Problem Management in your organization. The following is a look at six of the biggest difficulties associated with implementing and managing an effective Problem management process, together with tips for how to avoid them.

Issue #1: Not all key stakeholders fully understand that Problem Management is one coin with two sides!

There are two very important and different sides to Problem Management - Reactive and Proactive. The reactive aspect is concerned with solving Problems identified as a direct result of one or more Incidents. Proactive Problem Management is concerned with identifying and solving Problems you might not otherwise know you have!

- **Reactive Problem Management**: Identifies the root cause of past incidents and proposes improvements and resolutions. Reactive Problem Management is broken down into two areas: Problem Control and Error Control.

- **Proactive Problem Management**: Prevents incidents from occurring, or re-occurring, by identifying weaknesses or errors in the infrastructure and proposing applicable resolutions. Although many organizations aspire to implement this portion of Problem Management, the necessary level of commitment (time and resources) is often missing.

This problem can be avoided in part by putting in place the appropriate levels of education and awareness. Awareness and education play an important part in the implementation and management of ITIL theory. When designing your Problem Management process you need to involve everyone who will be using it. For them to truly buy into your process and support the often more structured and disciplined change you are imposing on them, they need to feel part of the process, and understand the value. This includes senior IT managers.

Another issue is that many organizations do not provide enough ITIL education beyond the Foundation Level and as a result, key stakeholders are not well versed on Problem Management best practices to the extent that is needed at tactical and operational levels of the organization.

Issue #2: The Problem Control and Error Control aspects of Reactive Problem Management are not fully deployed.

Many organizations are managing these inter-related set of processes to some degree. But few have fully deployed both to the extent that they are at, or beyond, a “Control” level of process maturity. *(Refer to PinkLink article in August 2005 issue)*
Reactive Problem Management identifies the root cause of past incidents and proposes improvements and resolutions. The illustration below shows how Reactive Problem Management is broken down into two areas: Problem Control and Error Control. Both components must be managed as distinct and interconnected set of activities in order to realize maximum benefit.

1. **Problem Control**. Identifies underlying root causes of incidents to prevent future recurrences. Problem Control consists of the following activities:

   - **Analysis** - Information is gathered and analyzed from other business and ITIL processes including: Incident Management, Capacity Management, Configuration Management, Service Level Management and Availability Management
• **Problem Identification & Recording** - Parameters defining the problem are defined, such as recurring incident symptoms or service degradations threatening SLAs. Problem characteristics are recorded within the known problem database. Future incidents that occur related to the individual problem may reference the problem record.

• **Classification & Allocation** - Problems are classified by category, impact, urgency, priority and status.

• **Investigation & Diagnosis** - Data obtained from other processes are analyzed to diagnose the root cause of the problem. Once the root cause has been determined, a workaround is developed - if required. Once the diagnosis is complete, the problem has been turned into a known error and is passed to the Error Control portion of Problem Management.

2. **Error Control.** The process of monitoring and providing solutions for known errors until they are resolved. Error control contains the following activities:

• **Known Error Identification & Recording** - Once the root cause has been determined, the problem status changes to known error. A workaround is developed to feed back to Incident Management to handle future incidents that occur before a final solution is implemented. The known error definition can also be sent to the known error database to be used in the matching process.

• **Solution Investigated** - An assessment is performed on what will be required to resolve the known error. This activity could consist of cross-functional teams to weigh different solutions on various criteria including costs and benefits.

• **Defining Solution** - A final solution is developed and a Request for Change (RFC) is made via the Change Management Process.

• **Problem Evaluation & Review** - After the change has been implemented, a Post Implementation Review (PIR) is performed to evaluate the success of the solution and associated changes.

• **Closure** - Assuming the problem review declares the solution as successful, the problem is finally closed.

**Issue #3: Problem Manager(s) not established.**

Many of the issues identified in this article can be overcome or avoided by establishing the role(s) of Problem Manager, or at least by ensuring that key problem management activities are incorporated into the job descriptions within IT. These include responsibilities for developing, planning, implementing and maintaining all Problem Management activities. This requires a formal commitment including recruitment of qualified individuals, if necessary. However, the numerous benefits should outweigh the costs.

When appointing dedicated Problem Managers it’s important to consider these key competencies and skills:

- In-depth knowledge of ITIL, beyond Foundation Level
- Strong organizational skills; Ability to organize and structure high levels of information
- A very methodical, disciplined approach toward work
- Strong analytical abilities
• Numerical skills  
• In-depth knowledge of the organization’s IT infrastructure  
• Strong problem solving skills; Strong thinking process with ability to apply creative solutions  
• Relationship management; Team player and customer service orientation  
• Above average written communication skills; Management report writing capabilities  

**Issue #4: Very few organizations actually perform both Reactive and Proactive Problem Management.**

Many organizations are performing Reactive Problem Management to a degree but few are performing Proactive Problem Management by undertaking activities such as reviewing and analyzing the Incident Data Base, or reviewing all changes to new systems to prevent incidents.

The two main activities within Proactive Problem Management are trend analysis and the targeting of preventative action. Do you think you’re performing these key activities? Ask yourself these questions:

- To what extent do you perform analysis on your Incident Database to identify trends that will reduce or eliminate the potential for incidents to recur?  
- To what extent are you reviewing changes that failed, or that triggered new incidents?  
- To what extent are you analyzing and tracking how much time and money is being saved by Proactive Problem Management?

Remember, Proactive Problem Management activities are concerned with identifying and resolving Problems and Known Errors *before* incidents occur (or recur), minimizing the adverse impact on the service and business related costs.

**Issue #5: Existing tools and technology do not support integrated processes.**

To manage an effective Problem Management process, you need to invest equal effort, time and resources in all three areas of People, Processes and Technology – all three are important. In the area of technology, it’s important to use a tool that can adequately support the goals and objectives of the process.

In the case of Problem Management, tools should support both its Reactive and Proactive components. When there is a strong alignment between the support tool and Problem Management processes, there are huge opportunities to identify and analyze trends, and reduce costs due to lower incident volumes.

Make sure that you have carefully mapped out your organization’s specific requirements, and goals and objectives for Problem Management, together with the requirements for other interconnected support processes such as Incident, Change and Configuration Management *before* selecting a tool.

**Issue #6: There is a poor link between the Incident and Problem Management processes.**

The success of Problem Management largely depends on creating a strong link with Incident Management. This goes beyond just the use of an effective tool. It is imperative that management and communication processes are also strong between these two “sister” processes.

If there is a weak link between incident details and problems and known error details, then those working within Incident Management will not be aware of the work-arounds for the problems, and anyone working within the Problem Management process will find it difficult to assess, analyze and monitor problems. Meaningful incident records and historical information about the IT infrastructure are also a key critical success factors.
In Conclusion

Successful Problem Management requires careful planning, a very methodical, deliberate and disciplined approach, and ongoing attention. While there are challenges to overcome, the time and cost invested in this process is well worth it and will definitely pay off!

Want To Learn More?

1. Read the ITIL book *Best Practice For Service Support*. This book may be purchased in hard copy or on CD through the following providers:
   - Amazon.com – [www.amazon.com](http://www.amazon.com)
   - iSMF Canada – [www.itsmf.ca](http://www.itsmf.ca)
   - iSMF USA - [www.itsmfusa.org](http://www.itsmfusa.org)
   - TSO (England) – [www.tsoshop.co.uk/bookstore.asp](http://www.tsoshop.co.uk/bookstore.asp)

2. Attend Pink Elephant’s *ITIL Implementation Road Map*, which is being presented next in **San Diego, December 7-9, 2005**.

   This three day workshop, which is presented by Pink’s leading senior consultants, is designed for IT directors/managers, process owners, program/project managers, and anyone who is looking for a “roadmap” for how to implement best practices according to ITIL.

   Click [here](http://www.tsoshop.co.uk/bookstore.asp) to view the detailed agenda.

3. Attend Pink Elephant’s *ITIL Service Manager Certification Program* – the highest level of ITIL certification.

   The program, which is designed for those who’ve already achieved Foundation Level Certification, includes the most comprehensive, intensive and in-depth look at ITIL’s IT Service Management processes.

   To view course dates and locations, click [here](http://www.tsoshop.co.uk/bookstore.asp).


   It’s our biggest event of the year, and the biggest ITIL event in the world!

   The agenda features 10 tracks with over 100 sessions! No matter where you are in your ITIL implementation journey – there’s something for everyone.

   If you’re just beginning, learn how to gain acceptance for change, create plans and assess your current situation. If you’re well on your way, there are more sessions than ever designed for advanced ITIL knowledge, and IT business alignment.

   Click [here](http://www.tsoshop.co.uk/bookstore.asp) to view the dynamic program.