Effort Reporting System (ERS)

Implementation Planning Guide

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written by

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This document provides recommendations concerning steps and actions which will facilitate the ERS (Effort Reporting System) implementation, both in pilot and production modes. In addition to recommendations, questions are posed which will, when answered, provide guidance and direction to the implementation team. These recommendations and questions are based on first-hand knowledge gained--sometimes painfully--from participation in numerous system rollouts.

As in any system implementation the system design is critical. It must provide the needed functionality, be intuitive and user friendly, and be reliable, accurate, and easy to maintain. Anyone who has ever implemented a new system understands the importance of good system design in a successful implementation. Less obvious is the importance of advance preparation and planning for implementation. This critical part of a system implementation is often given short shrift with the result that the outcome is sometimes less than optimum and may even be disastrous. Keep in mind that what the users see and experience when they first use or are exposed to the system will indelibly affect their opinion of the system. Remember, you get only one chance to make a good first impression.

This paper is intended to identify key planning and preparation steps and to provide guidance in the development of a detailed plan to ensure a successful implementation. As you read this document it is important to understand that it is intended as food for thought rather than as a prescription for project planning and implementation. While it touches on many subjects and suggests approaches, it will not by itself provide all the answers for you. Those answers and project plans can come only from you and from an evolving collaborative effort on your campus.

The recommendations and questions in this paper are categorized into four distinct sections with sub-categories:

- Getting Started
  - Selecting the Team
  - Preparing a Project Plan
  - Consulting with Users
  - Developing a Communication Plan
  - Committing Resources
- Implementation Strategy Considerations
  - Long Term Implementation
  - Long Term Departmental Operations
  - Long Term Central Department Operations
  - Pilot Phase
  - Production Rollout Phase
- Transition Issues
  - Change Management
  - Training
- Planning for Ongoing System and Process Maintenance.

GETTING STARTED

Selecting the Team

Your project team members are your ambassadors to your users and as such should be selected carefully based not only on their availability, operational knowledge, and technical skills but on their attitudes and the impressions they create. Do they understand the importance of customer service and satisfaction? Do they keep an open mind and listen to the ideas of others.? Are they articulate and able to convey ideas and information effectively? Are they willing to try different approaches? Are they self-motivated? Can they analyze situations and formulate reasonable conclusions and plans? Are they nimble and able to react quickly when the unexpected happens? Are they poised and ready to do whatever needs to be done to make the project a success? Can they be counted on to meet deadlines? Do they hold themselves accountable? Do they work well with others in good times and bad? Are they willing to share the glory?

The project team needs to understand the importance of getting it right. They need to understand that if something isn't working it needs to be fixed, whether it be at the beginning before the system is rolled out or after it is in use and problems are uncovered. They need to understand that backup and contingency plans are sometimes needed and be prepared to develop them if the need arises. They need to understand that if the users aren't happy there will be a rocky road ahead. And while it is not always possible to modify systems or change rules or regulations, it is possible to communicate with users in such a way as to say "I hear and understand your concerns and I will do what I can."

Lastly, the team must be just that...a team. Members must be able to work together and have mutual respect for one another. They must each bring out the best in the others. Members of the team must possess among them all the necessary skills and abilities required to complete the project and must represent all constituencies and interests. The team must have a leader who can keep the project on target, support the team members and encourage and elicit the appropriate performance from each member. The good of the project must everyone’s primary concern.

Preparing a Project Plan

A successful project requires a well thought out project plan that includes not only timelines but specific tasks. Appropriate task definition is critical and should include a very detailed and specific list of required activities. It should include major categories such as those listed above and described in this document as well as detailed sub-categories, including specific measurable tasks. A good rule is that if multiple steps are required to complete a task, or if responsibility may be broken up among multiple participants, or you generally can't tell from the plan exactly what needs to be done or when, there is probably not enough detail. For example, if you need to communicate with five distinct groups over a period of two months, you could show an overall communication category with each of the five communications

listed separately with its own timeframe. This sounds simple enough and hardly worth mentioning but it's very easy to over-generalize when putting together a plan. Once the detailed and descriptive tasks have been listed it will be much easier to determine timeframes and assign responsibilities. In general, it's better to have too much rather than not enough detail. There's an expression that says "the devil is in the details", which can be translated to mean "Even the grandest project depends on the success of the smallest components". Keep that in mind when putting together a project plan. It is important to define tasks, assign responsibilities to individuals, identify key milestones and dates, and be prepared to add, remove, or change details as necessary.

Creating a project plan may, at first blush, seem like an overwhelming undertaking. It needn't be. Start by looking at the major categories of activities like the ones listed in this document. Next make lists of all of the detail items--in no particular order at the beginning--and then reorganize the detailed items into the larger categories. This is an iterative process and it usually takes several passes to come up with the first skeleton project plan. This can also be done by a group brainstorming session with all thoughts jotted down and sorted through later. Once you have a skeleton plan show it to others and ask for their input. Keep adding and revising as you think of things and you will soon have your plan. Remember, a good project plan is made up of many small pieces. Think big but don't forget to think small.

One important note: Project workload, resources, and timelines are inextricably linked, and generally you can't adjust one without adjusting at least one of the others. For example, before you set milestone dates and project completion dates, you need to determine what needs to be done in terms of person hours and elapsed time for each task. Once you understand what resources (people) are available you can then determine a completion date for the task. Once you determine completion dates for each task as well as all dependencies, you can determine the completion dates for the project. If it is later determined that the project needs to be completed sooner, either resources will need to be added, or tasks or workload eliminated or reduced. This concept seems simple enough but it's surprising how often project plans are put together with the completion date set first and the resources already defined. This is a prescription for failure. It is important to be realistic in estimating workload, both in total and for individual team members. For example, team member #1 is assigned responsibility for 5 tasks all with completion dates within the next month. If the hours to complete those tasks totals 220 hours, that means the only way that person can meet the schedule is to work full time on the project + 40 hours of overtime. Remember, not everyone will be working full time on the project so be sure you consider only their time available to the project. Be sure to distinguish between task time and elapsed time on the schedule. Both are valuable pieces of information but take care not to confuse them. A person working half time on the project might have a task time of 40 hours but an elapsed time of two weeks for completion. Make sure that workload is distributed reasonably, dependencies are defined and articulated, elapsed time is factored in, and resources are accurately calculated.

The project plan, including tasks, assignment of responsibilities, and timelines should be reviewed for completeness and reasonableness by all participants (including department representatives) and their approval of the plan should be documented or recorded so that the finalized plan doesn't meet with resistance later. Now that you have created a well thought out plan it is important to regularly review the project plan details, assess progress, and adhere to the dates. The best project plan won't be of much value unless it is monitored, reviewed, revised as needed, and followed.

Consulting with Users

Involvement of users in the implementation planning is crucial. This involvement may take the form of simple communications, meetings with administrators, or detailed descriptions of system functionality and features. In the pilot or rollout phase it should also include soliciting input from department administrators about their concerns and issues especially as relates to peak workload periods, preferred methods of accomplishing training, and implementation timing. Since there are often significant operational differences from one department to another this task is best accomplished by dealing with departments on an individual basis. You may want to ask questions such as:

- Does the department anticipate any redistribution of workload or responsibility as a result of ERS? If so, what is the plan for dealing with it?
- Do all future ERS users have a logon which will allow them to access the system?
- Does everyone who needs to receive notifications have an email account?
- Is paper or any part of the current process being used for any purpose other than certification? For example, are paper reports routed for notification, to request corrections, or for other purposes? If so what will replace those functions?
- Are there ways of simplifying processes within the department?

Developing a Communication Plan

The importance of communication cannot be overstated. People like to feel that they have been included--that their needs have been considered and they have not been forgotten. Every group feels like they are unique--and they probably are--so make distinctions and communicate to groups directly rather than lumping many types of users together into some amorphous group. The users will appreciate being addressed distinctly and your message will be much more effective. While a large part of the message is the same for everyone, a little customization of the message for each particular group is essential. Communications should be as brief as possible while providing all relevant information. Communication is not a one-time event and is not one-way, so make sure your communication process includes feedback, update, and follow-up mechanisms. As you define your communication plan, ask yourself these questions:

- Have you accurately defined all of your audiences?
- Did you include the employee end user as one of your audiences?

- Do you have a process in place for updating communications and giving status reports?
- Do you have a process in place for getting feedback from users and recording it in a meaningful and useful form, and for following up?
- At what stage in the process do I need to provide additional communications and information?

Committing Resources

In any system implementation, it is important to identify dedicated resources to perform the significant activities and tasks of the project. These resources may be allocated for only a portion of a current employee's time but the time commitment should be quantified and some type of support or backfill or release from current duties should be given for that employee. (Employees who contribute a small percent of their time may not need this backup.) A system implementation project that relies solely on employees' finding time to fit in the extra tasks along with their normal workload is almost certain to fail. Remember that resource commitment has two components. The first is identification of individuals who have the knowledge and skills to perform the required functions. While employees could be hired temporarily to perform some of the functions, it is likely that most projects will rely heavily on employees with current knowledge of the business process. Two advantages of using current employees--they can be brought up to speed more quickly and they can serve as "ambassadors" for the system long after rollout. The second component of resource commitment is appropriation of funds to be used to cover the cost of backfilling the current "expert" individuals who will be temporarily assigned to the project; and to pay for support services or training preparation, or for additional equipment or software to make the job easier.

IMPLEMENTATION STRATEGY CONSIDERATIONS

Long Term Implementation

The long term implementation planning is especially important because decisions made will affect the operation of the system not only during pilot, rollout, and implementation, but on an ongoing basis as well. It is important to think through what issues need to be addressed, who needs to be involved in the planning, the implications of various decisions, the long-term manageability and effectiveness of the system, and the responsibilities as defined in the implementation planning process. Some questions to be answered are:

- What will the campus planning process be?
  - Who are the campus stakeholders?
  - Who needs to be included in initial planning process? Central Research Administration units, Payroll, Information Technology, Training Coordination, Department representatives, etc.
  - Have we defined responsibilities and output of planning process?
  - Who is the campus decision maker? Who is in charge?
  - Have we developed a detailed project plan including specific tasks?

- Who is the system owner?
  - Which central office has primary responsibility for ERS?
  - What does that mean in terms of functions and assignment of responsibilities?
- Who will be responsible for setting system schedules and managing system maintenance from a functional perspective?
- Who will be responsible for managing system maintenance from a technical perspective?
- How will interfaces to other systems be defined and managed?
  - In which systems and tables will sponsored project funds be identified?
  - How will cost sharing commitment information be obtained?
  - Who is responsible for ensuring that cost sharing commitment information is correct?
- How will policy be communicated to the academic community in advance of system implementation?
- How will compliance monitoring responsibilities be divided between academic departments and central offices?
- What process will be used to address repeat out of compliance situations with departments?
- What reporting tools are available for developing ad hoc reports?
- Are there any campus-specific reports which need to be developed?
- What planning needs to take place to integrate ERS data with other "data warehouse" applications to enable ad hoc reporting?
- What are the plans for building a team of experts?
- How will local branding be determined/defined?

Long Term Departmental Operations

In addition to the development of an overall campus strategy, it is important to address the long-term issues for departmental operations. This planning is likely to involve more operational issues and will be specific by department. While departments are responsible for, and will want to make their own decisions concerning their operations, central offices can provide invaluable assistance in raising awareness, providing pre-implementation advice and guidance, and identifying particular questions and issues. Some questions departments might want to ask themselves are:

- How do I get my department ready for ERS?
- How will departments transition from paper to electronic process?
  - What processes currently exist?
  - Can they be eliminated? If not, how do they need to be modified for the new environment?
  - Are there existing list serves or mailing lists or do departments need to create lists to manage the notification process?
  - How do departments prefer to handle the transfer of knowledge concerning the use of ERS to PI's and faculty members?
- What assistance do departments need from central offices to make the transition?

- Are there any users of the paper process who will require increased knowledge or training?
- Do all employees who will be required to access system and certify reports have computer access?
- How will users and their roles be identified?
- How will notifications be handled when reports are ready for certification or are past due?
- What is the basis for identifying employees who will not be allowed to certify their own reports?
- Are there employees who have no salary directly charged to federal funds but for whom an effort report is needed?
- What is the department escalation procedure to deal with non-compliance?
- What is the best way to communicate detailed system usage information to faculty?

It is also important to carefully consider system security and access controls. Although the responsibility for assigning roles and responsibilities will rest with departments once the system is rolled out, central offices will likely be called upon to provide guidance concerning system access and assignment of roles. Some questions to be answered:

- Who must have access to the system?
- Who should have access to the system?
- What are the procedures for requesting access to the system and for granting access to the system?
- What are the criteria for assigning employees to security roles?
- What are the procedures for requesting specific permissions in the system and granting those permissions?

Long Term Central Department Operations

Like departments, central offices also have their own unique focus and issues. They too need to establish processes, assign responsibilities, and in general decide how they will manage their responsibilities using the new system. They will need to answer questions such as:

- What processes need to be set up to monitor overall compliance?
- How will responsibility be divided among central office employees, e.g. by department, school, etc.?
- What kinds of reports need to be developed to assist with campus compliance monitoring?
- Who will be responsible for setting system schedules and acting as the interface with the technical team?
- What other system interfaces do I need to be concerned with?

Pilot Phase

Although a pilot implementation may appear to be "somewhat less refined" than a full implementation, a successful pilot requires extensive planning and should not be a "seat of the pants" process. It has been my experience that implementation teams often shortchange the planning process thinking that it's ok to be informal since they are working with selected, cooperative departments. This approach really shortchanges the process, reduces the useful feedback, fails to identify problems and issues, and frequently does not accomplish the desired testing in the allotted time frame. In fact, pilot planning should be as rigorous as a full rollout plan and then some. It should include everything such as identification of specific participants, their roles and responsibilities, planned and frequent communications, specific test cases, schedules of system runs and user turnaround times, etc. contained in a full rollout plan PLUS additional steps for feedback and testing. It is also helpful to have one official coordinator or point person for each pilot department. That person would be responsible for coordinating communications with the project team, ensuring that test cases are completed, users trained, etc. In planning for a pilot, consideration should be given to the following questions:

- How many departments will participate in pilot?
- What criteria will be used to select departments?
- What are the expected commitments, e.g., resources, management support, of pilot departments?
- What are the expected time commitments for pilot department users?
- What are expectations of participants?
- Does the test plan include all types and combinations of situations?
- Who is responsible for ensuring that all test cases are completed and reviewed?
- How will pilot activities be managed to ensure sufficient participation?

Production Rollout Phase

The development of a comprehensive rollout strategy is crucial to the success of any implementation. It is assumed that production rollout will occur only after all the issues have been worked out and the system is functioning effectively and has been accepted by pilot departments. Questions to ask when developing the production rollout strategy include:

- Will the entire campus go live at the same time?
- If not, how will the implementation be staged?
- In what order will departments go live?
- What is the best time to roll out?
- Can training be accomplished through the use of online modules?
- How many users need hands-on or assisted training?
- How long will it take to accomplish this training?
- What level of support will be needed on help desk/hotline during rollout?
- Will departments need support in setting up user access?

TRANSITION ISSUES

Change Management

- *Change Management* has many components--some obvious and some less so. Everyone knows that communication, user involvement, and training are important, but effective change management also includes more subtle components as well. These subtle components might be described as "making users comfortable" with the transition. This includes a willingness to listen to user concerns as well as a willingness to find reasonable solutions to their problems. It also means having someone available to listen to concerns, ask questions of, and in general be a sounding board, not only about system specifics but about why the change is necessary and what the advantages/benefits are. In this regard hotline/helplines as well as a mechanism for submitting questions are extremely helpful. One word of caution...if you say you have a helpline or a comment/question forum, you had better have someone assigned to handle the communications and have a clear protocol for providing responses to questions in a timely manner. There is nothing worse than being told that you can ask a question and then not getting a timely response or getting no response at all.

  Another important aspect of Change Management begins very early in the process. A common tendency is to simply replicate existing processes in the new environment. Unfortunately, doing so misses opportunities, and once a new process is implemented it is not easy to go back and rethink it. Before any change is implemented, users should be asked to look at current processes, policies, and ways of doing business with an eye toward streamlining and eliminating unnecessary steps. It is helpful to ask questions such as:
  - What is the process intended to accomplish?
  - Is there an easier way to accomplish the same thing?
  - Are all the current steps and approvals necessary?
  - Why does this rule exist?
  - Do I really need to keep these records or are they available in the new system?

  It is very common to think of Change Management as applying only to the end users. We think in terms of how to manage and effect the change in the functional/operational side of the process but often lose sight of the fact that Change Management applies to central office users and technical staff as well. Overlooking the central office users can have significant consequences since many of these users are part of the decision making process during the design and implementation phases. If the central office users don't think in terms of new possibilities and streamlining, then the system, as it is rolled out, might have built-in inefficiencies and lost opportunities.
- *Communication* as mentioned earlier is an essential component of implementing any change. In general a communication strategy focuses on planned and formal communications, usually to large groups. In managing change it is important to recognize that informal and individual communications are equally important, so

be sure to plan for adequate staffing so that users don't feel like they are left to their own devices once the system has been implemented.

- *System Testing* should be at the very core of any system implementation. That means that all other components of the implementation plan should assume that the system has been thoroughly tested so that when it is rolled out to the users they won't be responsible for identifying and communicating problems. (Pilot departments, of course, are the exception to this rule since they have agreed to take on this responsibility.) Testing should include a thorough review of all possible situations and combinations of situations, e.g. 9/12 and 11/12 combination appointments; performance testing including volume testing and load balancing; and system use by users of varying levels of knowledge and skills.
- *Feedback Mechanisms* should be in place before the system is implemented and not created on-the-fly when problems arise. In spite of the best planning and testing, rarely are systems rolled out with no problems or questions. To be safe, assume that unique situations will arise and you will get questions, and plan accordingly.
- *Ongoing Assessment* is another process that is often overlooked. For ERS this ongoing assessment could take the form of additional compliance monitoring in the first few cycles, gathering feedback from user focus groups, or interviews with a few well-selected department users. Maybe it's a questionnaire--does it work?, is it easy?, are there problems?, etc. Or maybe it's a standing workgroup meeting where users can discuss issues and ask questions. Remember that departmental administrators and faculty are in the best position to provide feedback (after using the system for a short time). Solicit feedback. There's an expression that says "No news is good news", but experience says that this is not always true. Solicitation of feedback will let users know you care and will increase user acceptance of the system and may prevent future problems by identifying system idiosyncrasies not detected earlier.
- *Outstanding Issues List* is one of the best ways to manage outstanding system and functional issues. There should be a defined method of posting to the issues list, managing its content, and addressing issues.

Training Considerations

Training means different things to different people, with each of us seeing it in terms of our own perspective or position. This of course, gives us only a partial view of the total. Trying to describe training could be likened to the proverbial blind men describing an elephant based on which part of the elephant they were feeling. In this document the word Training is used to describe all manner of conveying information to users, including but not limited to memos, workshops, presentations, demos, lecture, web-based training modules, helpdesk and hotlines, and hands on system usage. This definition of training is intentionally broad because it is important to understand that a good training program requires multiple vehicles for disseminating information. Individual users learn differently and respond to different approaches. And, using different formats allows you to break down information into manageable pieces so that users can digest, understand, and accept the higher level concepts

before getting into the details. It also allows you to reinforce information without seeming repetitive.

The importance of training cannot be overstated. Training is not a "one size fits all" proposal. Training requires customization so that each audience hears everything they need to know and nothing more. Training can't be overly dry or boring--it must hold the users' attention if they are to learn from it. Web-based training modules are particularly good in this respect as they can be developed with interesting visual details and user interaction so that the presentation is not monotonous. Modularization also allows the user to set the pace and makes it easy to revisit sections of particular interest.

Selection of "trainers" is also important. These people are your face to your world of users. If the trainers are knowledgeable and can answer questions--even those that may be a somewhat specific to the user--they will succeed in conveying confidence and the users will be comfortable. If the trainers can only repeat prepared presentation materials the results will not be the same. It is important to understand that training is not simply conveying information about the system. Training is conveying confidence. Training is saying to the users...we understand your needs and this system will meet them. Training is saying that we will work with you until you understand and are comfortable with the system. Very often the trainers are strangers to the users, especially when the trainers are from administrative departments and the users from academic departments. In this regard I have found it extremely helpful to have a department representative be part of the training team. That way the users will either know the trainer or the trainer can be introduced as "Thelma from your Dean's Office". Even if the department representative has only limited participation or simply does an introduction to the system, their participation goes a long way toward reassuring users that their organization understands and supports the system implementation.

Human nature being what it is, very few users are comfortable with a system until they have used the "live" system once or twice. It can be extremely helpful to offer a workshop where users can bring their first "live action" and complete it with trainers or experts standing by to answer their questions and assist them with problems. While the workshop idea works well for administrative employees, faculty members would probably benefit from an offer to be available in their department at a specific time to answer questions and assist with problems.

And last but not least, training is ongoing. Training does not end once the system is rolled out but continues in some form through the life of the system. For continuing users that ongoing training may be in the form of answering questions received in calls to the help desk or hotline. For new users it may be the full-blown training program. It is also important to recognize that training for a system implementation focuses on transition and is somewhat different than continuing training which will be delivered long after the system is rolled out. As new people come on board and are trained there will be no mention of "we used to do it that way and now we do it this

way". Training content should be modified to eliminate references to the old way of doing business. Training should also be reviewed for its effectiveness. Is the helpdesk receiving a lot of calls asking one particular question? Are users repeatedly having problems with one particular area? If the answer to either of these questions is yes, it's quite possible that the training in these areas needs to be enhanced. If you have a newsletter or a listserve of users (if you don't have one it might be a good idea to create one) it can be very helpful and relatively easy to send out updates on system features, answers to commonly asked questions, or helpful hints.

PLANNING FOR ONGOING SYSTEM AND PROCESS MAINTENANCE

Once a system is rolled out to the campus it requires maintenance both from a systems and functional perspective. Although the Change Management section of this document addresses change as a transition issue it is important to understand that there is an ongoing component of change management as well. This ongoing component would include technical system changes (programming), addition of tools such as campus-specific reporting tools, changes in the campus look and feel of the system access, etc. Ongoing changes could also include functional items such as policy changes which would require a change in the way a user certifies a report, or the addition of system interfaces such as cost sharing. There is also the ongoing component of training which will need to take place as new users begin using the system. Implementation planning should include acknowledgement of this ongoing need to manage change.

It is important to plan for the ongoing maintenance and operation of any system. You can't simply roll out a system and forget it assuming that the workload can be picked up by existing staff. That approach is risky at best and almost certain to cause disappointment, frustration, and user dissatisfaction. Rather, the system should be thought of as a dynamic, living entity requiring attention over its entire life cycle.

Finally, remember that your approach to a system implementation, whether pilot or production mode, should be comprehensive and proactive. You need a strategy. You need a detailed project plan. You need a team of skilled and dedicated people. You need backup and contingency plans. You need to have open lines of communication--in all directions. You need to consider feedback and results and revise when necessary--if something isn't working, fix it. You need a schedule and timeline. You need to manage the schedule and timeline. You need to have someone in charge.