

LO1. Review change requests

1.1 Procedures and Protocols in Receiving Request for Hardware and Software Changes

Requests must be received and documented for hardware and software changes, utilizing a change management system and according to organizational help desk procedures.

A procedure is a section of a program that performs a specific task.

A procedure is a series of steps, taken together, to achieve a desired result.

- System data must be gathered and organized relevant to the change requests, using available diagnostic tools.
- The proposed changes are reviewed against current and future business requirements.
- System data are examined, with work team, in order to select appropriate changes to be carried out.
- Selected changes are discussed and clarified with client.

Protocol

In information technology, a protocol is the special set of rules that end points in a telecommunication connection use when they communicate. Protocols specify interactions between the communicating entities.

Protocols exist at several levels in a telecommunication connection. For example, there are protocols for the data interchange at the hardware device level and protocols for data interchange at the application program level. In the standard model known as Open Systems Interconnection ([OSI](#)), there are one or more protocols at each layer in the telecommunication exchange that both ends of the exchange must recognize and observe. Protocols are often described in an industry or international standard.

The [TCP/IP](#) Internet protocols, a common example, consist of:

- Transmission Control Protocol (TCP), which uses a set of rules to exchange messages with other Internet points at the information packet level
- [Internet Protocol](#) (IP), which uses a set of rules to send and receive messages at the Internet address level
- Additional protocols that include the Hypertext Transfer Protocol (HTTP) and [File Transfer Protocol](#) (FTP), each with defined sets of rules to use with corresponding programs elsewhere on the Internet

There are many other Internet protocols, such as the Border Gateway Protocol ([BGP](#)) and the Dynamic Host Configuration Protocol ([DHCP](#)).

The word *protocol* comes from the Greek *protocollon*, meaning a leaf of paper glued to a manuscript volume that describes the contents.

Review Change Request:

1. AMT receives ORSPA Action Form (OAF), creates a new task in the Activations site, and saves the request in a new Activation folder. The AMT Grant & Contract Officer (AMT GCO) assigned to the award is notified via email message from SharePoint.

The AMT GCO may create a new task in the Activations Site for change requests received directly. AMT GCO needs to verify the task doesn't already exist before creating a new task. Do not setup the new task when notifications@asu.edu is included in the email request. The individual monitoring the notification inbox will setup the task.

When starting a new Activations task,

1.1. Refer to [step 7](#) within WI-AS-15 to setup the Activation Folder.

1.2. Refer to [step 8](#) within WI-AS-15 to complete the required task fields.

- The Notes field should be used to record review comments and task progress. Notes should always start with the date and GCO initials (e.g., 04/18/11 IL:). It's important the notes include enough detail to allow the reviewer to understand the current status of the action requested. The most current note should be the first that appears in the list.
- The Secondary Status field should be used to define the appropriate status the task is currently in. Note that the Status field defines the queue the task is in and for Change Request the Status field should show "Award Modification". Below is a list of the different Secondary Statuses and their definitions which would be used during the change request process.

Awaiting PNT Action - AMT GCO requested PNT support.

Pending – New task has been created and assigned to AMT GCO or current task which have been moved into a new queue and no action has been taken.

In Progress - Task is in the AMT GCO's queue to work on.

Awaiting Department Action – AMT GCO requested additional information from the Unit.

Obtaining PI Approval – AMT GCO requested PI to approve award modification and/or changes.

Obtaining ASU Signature – Modification and/or change requires the AMT Assistant Director's (AMT AD) signature. The AMT Student Workers monitor tasks with this status and manage the process for obtaining the AMT AD's signature.

Obtaining Sponsor Signature/Approval – Request/partially-executed modification has been sent to sponsor and AMT GCO is awaiting sponsor approval or fully –executed modification.

Completed - No Activation Needed - Award change was submitted; however, it was not approved by the sponsor.

2. Review documents in Activation folder and determine the type of change requested.

- For changes to NSF Awards refer to "[Processing NSF Award Changes Job Aid](#)" for two different options in routing and documenting the change.
- For Rebudgets on NIH Awards refer to "[NIH Salary Cap Activations modifications job aid](#)" prior to processing change requests.

- For non-competitive additional funding requests refer to Job Aid “[Non Competitive Continual Renewal Proposals for Existing Projects](#)” for guidance.
- For Work Suspension, Stop Work Orders, or Early Termination, refer to Job Aid "[Work Suspension, Stop Work Orders, Early Termination](#)".
- For 2nd No-Cost Extension Requests on NIH Awards, refer to "[Requesting 2nd No Cost Extensions on NIH Awards job aid](#)".
- For Foreign awards, verify a Foreign Currency Reconciliation has been completed prior to moving forward with change request. A Foreign Currency Reconciliation is necessary because exchange rates could affect the funds available. The Foreign Currency Reconciliation Template can be found in ACCTG > Financial Reporting and Invoicing > Internal Forms.

3. Refer to Required Documentation Matrix below to confirm that PI/RA provided the correct documentation for the type of change requested.

1.1 Change Management System According to Organizational Help Desk Procedures

The objective of Change Management is to ensure that standardized methods and techniques are used for efficient and prompt handling of IT changes, in order to prevent change-related incidents. The objective is to make changes in such a way as to minimize negative impact on the delivery of services to users and clients

L02. Modify system according to requested changes

- Potential solution is identified to solve problems.
- Recommendations about possible solutions are developed, documented, ranked and presented to the appropriate person for decision.
- Implementation and evaluation of solutions are planned.
- Recommended solutions are technically documented and submitted to appropriate person for confirmation.

2.1 Identify potential solution to solve problems

Creating a startup, or managing any business, is all about problem solving. Some people are good at it and some are not – independent of their IQ or their academic credentials (there may even be an inverse relationship here). Yet Iâ€™m convinced that problem solving is a learnable trait, rather than just a birthright.

Entrepreneurs who are great problem solvers within any business are the best prepared to solve their customersâ€™ needs effectively as well. In fact, every business is about solutions to customer problems – no problems, no business. Problems are an everyday part of every business and personal environment.

Thus it behooves all of us work on mastering the discipline of problem solving. Here is a formula from Brian Tracy, in his book [The Power of Self-Discipline](#) that I believe belongs in the problem solving category:

1. **Take the time to define the problem clearly.** Many executives like to jump into solution mode immediately, even before they understand the issue. In some cases, a small problem can become a big one with inappropriate actions. In all cases, real clarity will expedite the path ahead.
2. **Pursue alternate paths on facts of life and opportunities.** Some things that you can do nothing about. They're not problems; they are merely facts of life. Often, what appears to be a problem is actually an opportunity in disguise.
3. **Challenge the definition from all angles.** Beware of any problem for which there is only one definition. The more ways you can define a problem, the more likely it is that you will find the best solution. For example, "sales are too low" may mean many things.
4. **Iteratively question the cause of the problem.** This is all about finding the root cause, rather than treating a symptom. If you don't get to the root, the problem will likely recur, perhaps with different symptoms. Don't waste time re-solving the same problem.
5. **Identify multiple possible solutions.** The more possible solutions you develop, the more likely you will come up with the right one. The quality of the solution seems to be in direct proportion to the quantity of solutions considered in problem solving.
6. **Prioritize potential solutions.** An acceptable solution, doable now, is usually superior to an excellent solution with higher complexity, longer timeframe, and higher cost. There is a rule that says that every large problem was once a small problem that could have been solved easily at that time.
7. **Make a decision.** Select a solution, any solution, and then decide on a course of action. The longer you put off deciding on what to do, the higher the cost, and the larger the impact. Your objective should be to deal with 80% of all problems immediately. At the very least, set a specific deadline for making a decision and stick to it.
8. **Assign responsibility.** Who exactly is going to carry out the solution or the different elements of the solution? Otherwise nothing will happen, and you have no recourse but to implement all solutions yourself.
9. **Set a measure for the solution.** Otherwise you will have no way of knowing when and whether the problem was solved. Problem solutions in a complex system often have unintended side effects which can be worse than the original problem.

People who are good at problem solving are some of the most valuable and respected people in every area. In fact, success is often defined as "the ability to solve problems." I believe this is true and it's valued even more than "book smarts."

How to Solve a Problem

Problem solving is one of the most essential skills in life. Regardless of who you are or what you do, you will face obstacles. How you deal with such challenges will often be a determining factor in how successful you are at life. While problems come in a wide variety of shapes and sizes, this article will give you some tools to help find solutions.

There are many ways to solve problems, and it will depend on your situation, your experience, your knowledge, your attitude, and your problem to determine the best approach

- Your situation may be that you have a long term problem that will take time to resolve, such as a legal dispute or a personal issue. Your situation may be pressing, but not immediate. Such may be the case for solving a problem at work, or how to help your child get a better grade on next week's test. At the extremes, your situation may be dire, such as discovering your single-engine plane has just run out of gas, and a solution is needed immediately.
- Your experience comes into play for all the above.

- If you are an attorney, or a counselor, you will know how to navigate legal and personal issues through training and experience, and the best approaches to take solving those problems.
- If you are an educator, or even a parent who has an older child, you've already experienced the difficulties of test-taking, and will have the necessary skills to help your child succeed.
- If you're in serious, you will likely rely on gut instinct to solve your problem. As a pilot, you will have been trained on how react in an emergency.

Use logic to arrive at a conclusion. To solve virtually any problem, you can use a process of elimination—dividing the issue down until all you have left is the problem. There are four basic steps to this process:

- 1. Define the problem
- 2. Develop a plan
- 3. Implement the plan
- 4. Evaluate the results
- Until there's an acceptable answer, you'll repeat steps 2 through 4 until that answer has been reached. We'll use a common problem to illustrate this scenario.

2.1 Recommendation of possible solutions

Recommendation is an opinion given by an analyst to his/her clients about whether a given stock is worth buying or not.

Example: What are possible solutions to unemployment?

Recommended possible solution: Faster economic growth is viewed as a means of generating more jobs

Develop recommendations

Recommendations can be developed about how a program can be improved, how the risk of program failure can be reduced or whether a program should continue.

2.1 Planning implementation and evaluation of solutions

While you are designing and testing the solution for a problem, you should be **planning for implementation** of the designed solution. Planning for implementation should follow the steps shown below:



Implementation:

Implementation is the stage where all the planned activities are put into action. Before the implementation of a project, the implementers should identify their strength and weaknesses, opportunities and threats.

The strength and opportunities are positive forces that should be exploited to efficiently implement a project. The weaknesses and threats are hindrances that can hamper project implementation.

Monitoring is important at this implementation phase to ensure that the project is implemented as per the schedule. This is a continuous process that should be put in place before project implementation starts.

Monitoring is also important to ensure that activities are implemented as planned. This helps the implementers to measure how well they are achieving their targets. This is based on the understanding that the process through which a project is implemented has a lot of effect on its use, operation and maintenance.

It demonstrates that:

- Planning describes ways which implementation and monitoring should be done;
- Implementation and monitoring are guided by the project work plan; and
- Monitoring provides information for project planning and implementation.

2.1 Confirm Recommendation

Decisions on confirmation must be made within as necessary.

2.1.1 Technically document

Technical documentation refers to any type of [documentation](#) that describes handling, functionality and architecture of a technical product or a product under [development](#) or use.

The term 'technical documentation' refers to different documents with product-related data and information that are used and stored for different purposes. “Different purposes” mean: Product definition and specification, design, manufacturing, quality assurance, product liability, product presentation; description of features, functions and interfaces; intended, safe and correct use; service and repair of a technical product as well as its safe disposal.

Types of technical documentation include:

- User instructions
- Operating instructions
- Servicing instructions
- Installation manuals
- Software manuals
- Online help

2.1.1 Submit technical document

LO3. Train on the use of modified system

- Training is prepared to meet the needs of client in using the changed system.
- Prepared training is delivered appropriately for client

3.1 Prepare training for the client in using the changed system

3.2 Delivering the training

The Six Best Practices for Delivering IT Training

- 1 Provide IT trainees with the flexibility to choose among different IT training delivery methods.
- 2 Ensure that on-the-job training is planned and monitored as part of the training process.
- 3 Consider combining different teaching methods (Web-based and instructor-led) within the same course.
- 4 Provide just-in-time training.
- 5 Consider outsourcing training solutions.
- 6 Build courses using reusable components.