Assessment and prioritization of accessibility issues

Accessibility assessment is part of the process for assuring universal usability of IT systems and services. Whether you are looking at one large, complicated application or a large number of smaller applications, you need to make judgments on how to handle accessibility issues you may discover. You need to know who the users are, what the problems are, the severity of those problems, and what your options are for remediation or mitigation. This information can then be used to determine an appropriate course of action.

Who are your users?

As you go down the list below, you have more options to provide accommodations for accessibility barriers. For instance, you may be able to acquire specialized equipment or software for a few employees in your agency, but cost and logistics would make it unrealistic as a solution for the general public.

The farther up the list, the more important it is to address accessibility issues directly, rather than relying on accommodations.

1. General public
2. Municipal employees
3. State employees - general
4. State employees - specialized role (limited or rare use)
5. Agency employees - general
6. Agency employees - specialized role (limited or rare use) or job requirements preclude pertinent disabilities (for instance, if a job requires driving, those employees could not be blind)

Finding accessibility information

You may need to make decisions before you have results of third party testing or other hard data. The following are resources that may be available where you can get information on accessibility of products or services.

VPATs

The Voluntary Product Accessibility Template®, or VPAT®, is a tool used to document a product’s conformance with the accessibility standards under Section 508 of the Rehabilitation Act. The purpose of the VPAT is to assist Federal contracting officials and other buyers in making preliminary assessments regarding the availability of commercial "Electronic and Information Technology" products and services with features that support accessibility. - ITIC

Because VPATs are produced by the vendors, the quality can vary considerably. It is generally not a good idea to compare VPATs from different vendors, as there can be a lot of variation in the level of detail provided, the interpretation of the various requirements, how recently the testing was conducted, etc. The information in a VPAT should be considered a starting point: you should be looking for significant issues that it points out and areas where further inquiry may be warranted.

Note: Just having a VPAT does not mean the product meets accessibility requirements.

Online and other vendor support

Many vendor provide forums, wikis, and other online resources for customers. These are great places to see if customers are having accessibility-related problems and what solutions or workarounds are available.

Vendors may also have technical guidance published, including integration and customization directions to ensure developers do not introduce new accessibility issues or inadvertently disable existing accessibility features.

If not published, be sure to ask vendors if they have any accessibility fixes or enhancements scheduled for future releases.

Accessible development maturity

Ask vendors questions that can help you gauge how much expertise a vendor has and the level of commitment they make to building accessibility into their products. This may help you evaluate documentation they have provided and remediation options. Examples include:

- Do you include accessibility requirements in your design and development processes?
- Do you have accessibility experts in your design and development teams?
- What kind of accessibility training do you provide for your designers and developers?
- Do you have an in-house accessibility testing facility?
- Do you use an external company with accessibility expertise?
- Who does the testing for your test results documentation, such as your VPAT?
- Do you participate in any accessibility-related standards-setting groups?
What is the handling and escalation process for accessibility-related problems found by customers?

Other customers

Ask vendors if they can provide references to other customers who have indicated a strong interest in accessibility. You may be able to get valuable, practical information.

Accessibility testing

Conducting actual testing is the best way to find defects. Testing by a third party is required in some cases (see the Enterprise IT Accessibility Standards and IT Acquisition Accessibility Compliance Program.) You may also wish to use a third-party tester if you need their expertise.

You can also conduct your own testing by using automated or semi-automated testing tools and with specific assistive technologies (AT.) MassIT provides concurrent user licenses for AT software so you can conduct testing with them anywhere on the state network.

Whenever possible, people who rely on AT should be included in your testing. Their expectations of how your system should work and their use of AT may vary considerably from yours.

Severity ranking

Not every defect prevents users of assistive technologies from using a product or feature. The lack of alternative text for an image, for instance, might be mildly annoying in one circumstance, while in another it could prevent the user from completing a task. However, an "annoying" defect can affect a user's success if it appears often enough. And a defect that occurs only once can be very important if it prevents a user from accomplishing what they need to. A good way of determining the overall severity of various defects is to look at both occurrence and impact.

Defect occurrence or frequency

Determine the occurrence or frequency of a defect by looking at how many times a user is apt to come across it. For instance:

- Low: Defect only found in a few places
- Moderate: Defect appears in multiple places
- High: Defect appears in many places
- Significant: Defect appears throughout

Defect impact

Determine the impact a defect has on a user's ability to use a particular feature or function. For instance:

- Low: The defect has little or no impact on end-users
- Moderate: Annoying, but has a minor end-user workaround
- High: An annoying defect that has an onerous or confusing end-user workaround
- Significant: The defect prevent an end-user from performing the function

Severity score

Combining the scores for occurrence and impact should allow you to prioritize the defects. Since there is some subjectivity involved, actual users of AT should be asked to review the results as a reality check. The attached spreadsheet has formulas for computing a severity score.

Remediation options

The next step is to identify potential remedies for the prioritized accessibility problems. These could include:

- fixing the code
- reconfiguration
- identifying and documenting workarounds
- shutting off unneeded features
- providing an alternative means of online access

You should gather data for the identified options that will aid in decision-making, such as how long it will take to implement, the level of effort and types of resources it will take, and implied short- and long-term commitments. You also need to identify mitigation efforts that will be required until remediation is completed, along with associated costs.
Cost and effort

The last phase is to consider cost, timing, operational impacts, and feasibility. At this point, you will analyze the data gathered while ranking severity and investigating remediation and mitigation options to determine the most beneficial approach to addressing identified accessibility problems.

At this point you will have concrete data that can be used in making decisions, such as assigning resources to IT systems and services or as part of a procurement process.