



# Team Problem Solving

---

Team problem solving includes several distinct steps. Each one is important for helping a team reach its goals. Experienced team leaders have a large toolkit of strategies for dealing with each of these steps.

- Step 1: Problem definition
  - Goal: All stakeholders need to agree on what the problem is and how to describe it
  - Strategies: Talking to stakeholders and gathering data to describe the current situation
- Step 2: Generating alternatives
  - Goal: Listing as many options as possible; seeking quantity without evaluating quality
  - Strategies: Creative idea-generation
- Step 3: Evaluating alternatives
  - Goal: Assessing the alternatives for feasibility and potential impact in order to focus the group's energy and achieve its goals
  - Strategies: Reviewing options from a variety of viewpoints in order to select the ones most likely to lead to team success

There are many online resources for helping project team leaders facilitate each of these steps. One useful source for problem solving is the Mind Tools website at <http://www.mindtools.com>.

The chart on the following page provides examples drawn from a variety of online resources.

## Team Problem Solving

Examples of Strategies & Tools	Resources
<b>Problem Definition</b>	
5 Whys	<ul style="list-style-type: none"> <li>• Six Sigma tool introduction: <a href="http://www.isixsigma.com/tools-templates/cause-effect/determine-root-cause-5-whys/">http://www.isixsigma.com/tools-templates/cause-effect/determine-root-cause-5-whys/</a></li> <li>• Harvard Business Review blog: <a href="http://blogs.hbr.org/video/2012/02/the-5-whys.html">http://blogs.hbr.org/video/2012/02/the-5-whys.html</a></li> </ul>
Surveys	<ul style="list-style-type: none"> <li>• Survey Monkey: <a href="http://www.surveymonkey.com/">http://www.surveymonkey.com/</a></li> <li>• Purdue University: Creating good survey questions <a href="http://owl.english.purdue.edu/owl/resource/559/06/">http://owl.english.purdue.edu/owl/resource/559/06/</a></li> </ul>
Process Map Flowcharts	<ul style="list-style-type: none"> <li>• Iowa State University: <a href="http://www.fpm.iastate.edu/worldclass/process_mapping.asp">http://www.fpm.iastate.edu/worldclass/process_mapping.asp</a></li> </ul>
<b>Generating alternatives</b>	
Brainstorming	<ul style="list-style-type: none"> <li>• <a href="http://www.mindtools.com/brainstm.html">http://www.mindtools.com/brainstm.html</a></li> </ul>
‘Yes, and...’	<ul style="list-style-type: none"> <li>• <a href="http://jenniferbdavis.blogspot.com/2006/07/yes-and.html">http://jenniferbdavis.blogspot.com/2006/07/yes-and.html</a></li> </ul>
Word Clouds	<ul style="list-style-type: none"> <li>• <a href="http://www.wordle.net/">http://www.wordle.net/</a></li> <li>• <a href="http://www.tagxedo.com/">http://www.tagxedo.com/</a></li> </ul>
Mind maps	<ul style="list-style-type: none"> <li>• <a href="http://www.thinkbuzan.com/us/articles/view/how-to-create-a-mind-map">http://www.thinkbuzan.com/us/articles/view/how-to-create-a-mind-map</a></li> <li>• <a href="http://www.mindtools.com/pages/article/newISS_01.htm">http://www.mindtools.com/pages/article/newISS_01.htm</a></li> </ul>
Creative idea generation	<ul style="list-style-type: none"> <li>• <a href="http://creatingminds.org/tools/tools_ideation.htm">http://creatingminds.org/tools/tools_ideation.htm</a></li> <li>• <a href="http://creativityisfree.com/2008/05/30/brainstorming-techniques/">http://creativityisfree.com/2008/05/30/brainstorming-techniques/</a></li> </ul>
Visioning activities	<ul style="list-style-type: none"> <li>• <a href="http://hostedweb.cfaes.ohio-state.edu/bdg/visioning.html">http://hostedweb.cfaes.ohio-state.edu/bdg/visioning.html</a></li> <li>• <a href="http://www.gdrc.org/ngo/vision-dev.html">http://www.gdrc.org/ngo/vision-dev.html</a></li> </ul>
<b>Evaluating alternatives</b>	
Decision matrix	<ul style="list-style-type: none"> <li>• <a href="http://asq.org/learn-about-quality/decision-making-tools/overview/decision-matrix.html">http://asq.org/learn-about-quality/decision-making-tools/overview/decision-matrix.html</a></li> </ul>
Six Thinking Hats	<ul style="list-style-type: none"> <li>• <a href="http://www.debonogroup.com/six_thinking_hats.php">http://www.debonogroup.com/six_thinking_hats.php</a></li> <li>• <a href="http://www.mindtools.com/pages/article/newTED_07.htm">http://www.mindtools.com/pages/article/newTED_07.htm</a></li> </ul>
Multi-voting	<ul style="list-style-type: none"> <li>• <a href="http://www.doh.state.fl.us/hpi/pdf/MultiVoting2.pdf">http://www.doh.state.fl.us/hpi/pdf/MultiVoting2.pdf</a></li> </ul>
Nominal Group Technique	<ul style="list-style-type: none"> <li>• <a href="http://hostedweb.cfaes.ohio-state.edu/bdg/pdf_docs/d/F06.pdf">http://hostedweb.cfaes.ohio-state.edu/bdg/pdf_docs/d/F06.pdf</a></li> </ul>