



Function Analysis

What is it?

A method used to generate alternative ways to accomplish a function or purpose.

This method helps you step back from the current approach for a process, product, or structure, and consider the purpose or function served by key elements within it. Doing so can create new possibilities for accomplishing these same purposes in dramatically different ways.

Some possible uses:

Design of a...	To clarify the function, purpose, or value of...	Then generate...
Process	Individual steps in a process flow.	Alternative ways to accomplish that function or purpose.
Product	Components or parts of a product.	
Organization	Departments, units, or groups.	



QUOTE: "An organization that runs like clockwork is great--if your goal is to run around in the same circle forever." -- Anonymous

How do I use it?

- ❶ Identify the issue or problem for which ideas are needed and explore it as a group.
- ❷ Clarify roles and ground rules. Identify the team's Sponsor, i.e., the person with the issue to be addressed by the team.



HINT: Ensure representation from all groups involved in the process, product or structure being redesigned. For product development, this might include Sales & Marketing, Engineering, R&D, Manufacturing, Customer Service, etc.

- ❸ Identify the **key elements** whose function will be analyzed. This could include the:
 - ◆ five major steps of a process
 - ◆ key activities in a process flow (those that are most time-consuming, costly, error-prone or constrained)
 - ◆ critical components or parts of a product
 - ◆ departments of an organization

④ Describe the **function** served by each of the key elements. This might be its purpose or value, or the technical capability it provides.

- ◆ A key element may serve multiple functions.
- ◆ Functions are generally one level above the activity itself.
- ◆ To discover functions, ask questions like:

"Why do we do this activity?" or
"What purpose(s) does this activity serve?"



⑤ Generate ideas, i.e., alternative ways to accomplish each identified function.



POINTER: To generate ideas, use [Brainstorming](#), [SCAMMPERR](#) or similar methods from [Chapter 4](#).



It is during this step that the team needs to follow the [ground rules](#) of [Brainstorming](#), e.g., Don't Criticize or Analyze ideas.

⑥ Evaluate the ideas generated and select the most promising.

- ◆ One option is to let the Sponsor pick his/her favorites. If so, let team members make a 30-second "pitch" for options that aren't selected. The Sponsor still decides.

Other methods for prioritizing ideas are summarized below.

POINTER: Refer to [Chapter 5](#) for more on [Multi-voting](#), which is used to determine the team's favorites, or [Impact-Ease Grid](#), which is used to distinguish short-from long-term ideas or actions. Refer to [Upgrading IDEAs](#) in [Chapter 4](#) for a method to stratify and refine ideas with potential.



⑦ Take action. Ideas are useless unless *somebody does something* about them.



QUOTE: "One of the marks of a truly vigorous society is the ability to... pass directly from thought to action." -- Eric Hoffer

On the next page is an example. On the page after that is a blank Function Analysis worksheet.

Below is an example for elements (key steps) of an internal hiring process. On the next page is a blank worksheet.

③ Key Elements, Parts, or Process Steps	Send memo to managers about job openings	Managers talk to employees about job openings	Interested candidates apply through HR	Hiring mgr. interviews qualified candidates	HR negotiates terms with selected candidate
④ Functions Functions, purpose or value	<ul style="list-style-type: none"> • Spread the word about job openings • Managers encourage candidates 	<ul style="list-style-type: none"> • Identify potential candidates • Initial screening of candidates 	<ul style="list-style-type: none"> • Next level screening of candidates • HR able to facilitate the process 	<ul style="list-style-type: none"> • Final screening for "best match" • Allow candidates to probe job 	<ul style="list-style-type: none"> • Ensure equity across groups • HR, not hiring mgr., the "bad guy" about \$
⑤ Ideas Alternative ways to accomplish each function or purpose	<ul style="list-style-type: none"> • Post in cafeteria • Post on company Web site • Managers have "promotion" quota • Newsletter • Mail to employees homes • Job "hotline" 	<ul style="list-style-type: none"> • Job/skills match on Web site • Any employee can contact qualified candidates • Post a detailed job description • Competency "test" to screen candidates 	<ul style="list-style-type: none"> • Apply to hiring manager directly • Interview calendar on Web • 1-800-Job talk • Secretaries set up interviews • Team members do screening • Job "brown bag" 	<ul style="list-style-type: none"> • Team interviews candidate • Team interviews candidate's customers • Candidate interviews team • Candidate interviews team's customers • Interview all candidates at once • Candidate talks to person departing 	<ul style="list-style-type: none"> • Fixed salaries • Skills-based pay • Market-based pay • Hiring manager negotiates to test ability to work with employee on difficult issues



Function Analysis

② Roles

① Explore issue (Who?What?When?Where?Why?How?)HOW CAN WE

Sponsor: _____ Scribe: _____

Date: _____ Participants: _____ Facilitator: _____ Timekeeper: _____

③ Key Elements, Parts, or Process Steps

④ Functions

(What is the function, purpose, or value of each element or step? Why do this?)

}

}

}

}

}

⑤ Ideas

(What are alternative ways to accomplish each function or purpose?)