

CRITICALITY ANALYSIS

What it is:

Criticality analysis is a tool that examines potential product/service features against a list of critical factors, evaluates feature priorities, and helps determine what organization or internal function is responsible for the critical factors. The spreadsheet format allows easy review of the analysis.

When to use it:

Criticality analysis is primarily a quality planning tool. It is useful in developing features and goals for products, services, and processes; in identifying and prioritizing critical product/process factors; in clearly establishing organizational responsibility for essential factors; and in establishing process controls or implementation steps to transfer a process to full operation.

How to use it:

Create a multicolumn spreadsheet.

Label the columns. The first column should identify “Features/Components.” All other columns should identify “Critical Factors.”

Use brainstorming or a predetermined list to identify all initial product/service or process features. List each feature on a separate line in column 1.

Identify all critical factors for this product/service or process. Use brainstorming or a predetermined list to identify these factors and list one factor in each of the remaining columns starting with column 2.

Evaluate each product/service or process feature against each critical factor. Use consensus to identify those critical factors that represent a high risk for each feature, and place a check in the appropriate boxes.

Alternatively, indicate degrees of risk for each factor. Use consensus or multivoting to assign risk values of **high**, **medium**, or **low**.

Create a heading “Organization Responsible for Factor” on the lower half of the spreadsheet in column 1.

Identify Responsibility. Use consensus to mark the intersection of each critical factor and the organization or internal function that controls the factor. Control can include supervision and oversight, monitoring, reporting, and taking action.

Criticality Analysis Examples

Product: Annual <i>Status of Quality</i> Document					
Critical Factors					
Features/Components	Consultant Availability	Analysist Availability	Timely Feedback	Senior Leadership Validation	Writer/Compositor Availability
Consultant feedback					
Award application feedback					
Annual analysis					
Multiyear analysis					
Recommendations					
Organization Responsible for Factor					
Quality Section	*	*	*	*	
Documentation Section			*		*
Analysis Section		*	*		

Product: Annual <i>Status of Quality</i> Document					
Critical Factors					
Features/Components	Consultant Availability	Analysist Availability	Timely Feedback	Senior Leadership Validation	Writer/Compositor Availability
Consultant feedback	H		H	M	L
Award application feedback			H	H	L
Annual analysis		H		H	M
Multiyear analysis		H		H	M
Recommendations	L			H	M
Organization Responsible for Factor					
Quality Section	*	*	*	*	
Documentation Section			*		*
Analysis Section		*	*		

