

# Using Skills Analysis

## Overview

Skill analysis is simply the process of evaluating the supply and demand for skills within an organizational unit.

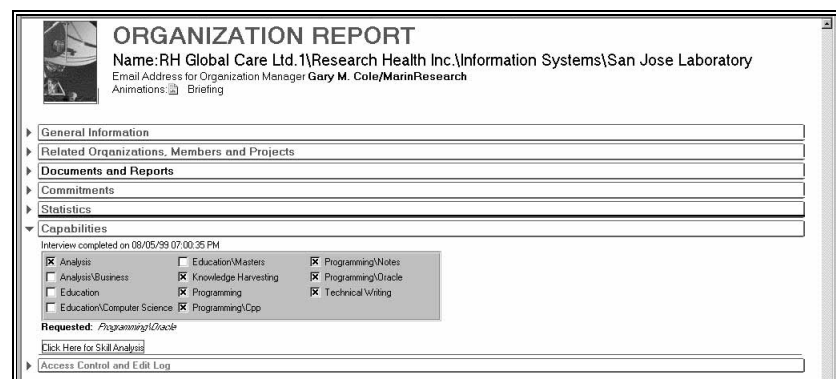
The demand for skills is easily assessed because it consists of commitments and reservations that are tagged for specific skills. The demand for skills can be also be evaluated using Work Analysis.

The supply of a skill is complicated by the fact that people almost always have multiple skills. As a result, your 12 person team may have the capability to do 11 persons work of analysis and 9 persons work of Notes programming and 3 persons work of Oracle programming and 5 persons work of technical writing. BUT NOT ALL AT THE SAME TIME!

The Skills Analysis Report contains a specially formatted bar chart and a tabular tradeoff matrix to help you understand and manage skills within your organization.

## Initiating Skills Analysis

Skill analysis is normally initiated from the Capabilities section of an organization report document. Note: It is also part of a standard organization briefing.

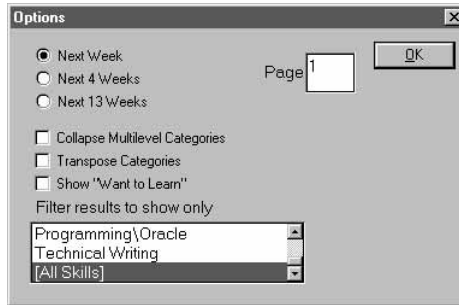


The screenshot shows a web-based interface for an "ORGANIZATION REPORT". The title bar indicates the organization is "RH Global Care Ltd.\Research Health Inc.\Information Systems\San Jose Laboratory". The user is identified as "Gary M. Cole/MarinResearch". The interface has a tree view on the left with the following items: General Information, Related Organizations, Members and Projects, Documents and Reports, Commitments, Statistics, and Capabilities. The "Capabilities" section is expanded, showing a list of skills with checkboxes. The "Requested" skill is "Programming/Oracle". A link "Click Here for Skill Analysis" is visible below the list.

Requested	Available
<input checked="" type="checkbox"/> Analysis	<input type="checkbox"/> Education/Masters
<input type="checkbox"/> Analysis/Business	<input checked="" type="checkbox"/> Knowledge Harvesting
<input type="checkbox"/> Education	<input checked="" type="checkbox"/> Programming
<input type="checkbox"/> Education/Computer Science	<input checked="" type="checkbox"/> Programming/Cpp
	<input checked="" type="checkbox"/> Programming/Notes
	<input checked="" type="checkbox"/> Programming/Oracle
	<input checked="" type="checkbox"/> Technical Writing

*"Click Here for Skill Analysis" appears in the Capabilities section*

This will produce the Skills Analysis Options dialog or web page.



*Skills Analysis Options dialog*

**Select the time period** - Next Week, Next 4 Weeks, or Next 13 Weeks.

Select the report page (only when more than 10 skills are in use)

Select any of the special options

***Collapse Multilevel Categories***

This will combine categories that which have multiple levels into a single top level. I.e. Programming/Notes, Programming/Oracle, etc. would be shown as a single category Programming.

***Transpose Categories***

This will swap the category titles so that Programming/Notes becomes Notes/Programming.

***Show "Want To Learn"***

If this is selected, then the information in the "requested" field of the organization document will be used to show people that are interested in learning this skill. They will be represented by a "raised hand" icon on the top of each skill bar.

***Press OK to perform the analysis.***

The resulting form shows up to 10 skills at a time. Actions allow you to page left and right if needed to show others. Below the bars is a table that displays the numeric data used for each skill column.

A legend on the left identifies the colors used on the chart and their meaning.

***Skill Bar Chart***

The height of each bar is determined by the number of people who have that capability. Each person is represented by a "head" icon. When there are more than 20 people, multiple icons will appear side by side. Each skill bar is independently scaled so as to better display the skills for which fewer people are qualified.

***Available Capacity (Green)***

All persons who have a recorded capability for the skill will be counted. This controls the height of the skill bar. Each member appears as an individual "head and shoulders" icon.

The unused portion of this capacity is colored green.

### Demand (Yellow)

All of the commitments and reservations that impact the specified time period and which have this skill will be summed to generate an aggregate demand (which is expressed in FTE). This portion of the bar is colored yellow to the extent that it fits within the capacity, or bright red to the extent that it exceeds it.

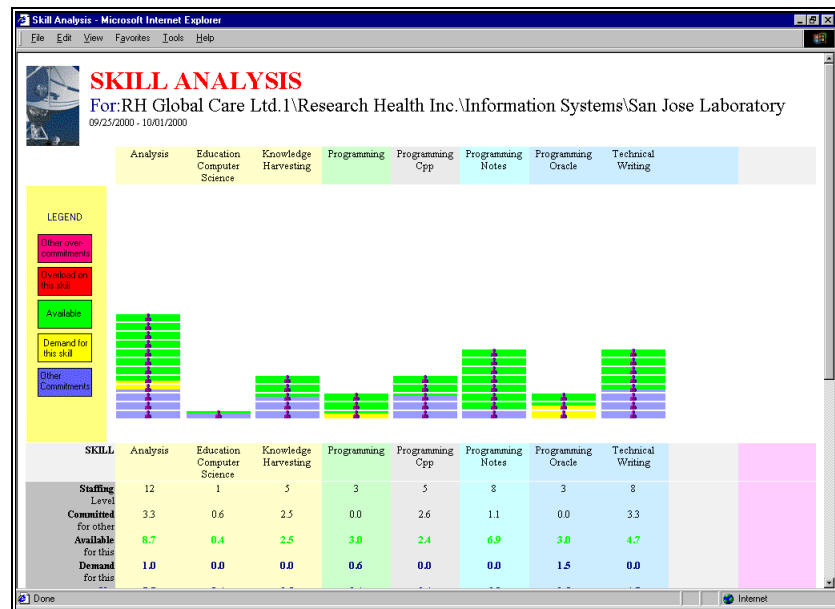
### Other Demand (Blue)

The Utilization of the resources who have the desired capability on work using other skills. If you have 11 Analysts, but 8 are currently committed to projects doing Notes Programming, then you really only have 3 analysts. This portion of the bar is blue.

### Excess demand caused by other commitments (Magenta)

### Excess demand caused by commitments to this skill (Red)

Both of these represent problems, but they have usually have different solutions.



Skills Analysis created in a browser. Up to 10 skills can be shown on one page.

### The Tradeoff Matrix

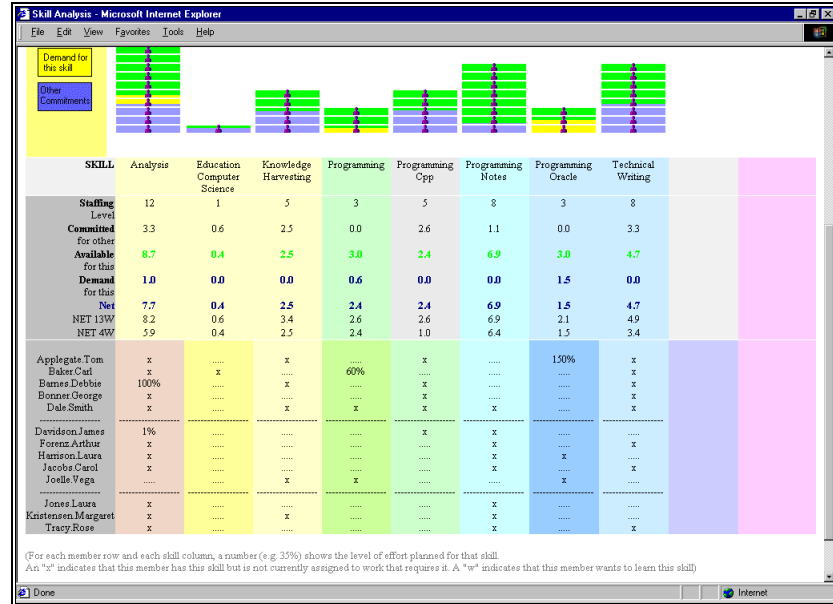
The table at the bottom of the chart shows the names of the members on the left and the degree of commitment for each skill across the row. If the intersection is empty, it means that this person does not have this capability.

If the intersect is an "x" it indicates that this person has the capability, but no work is assigned to him or her.

If the intersection shows a nn% it indicates the portion of that persons defined capacity that is assigned to work using that skill. The sum of

the percentages across the row indicates the total commitment of that person (this may exceed 100%)

If the intersection shows a "w" it indicates that this person is interested in acquiring this skill.



The Tradeoff matrix shows the names of the members and their commitments for this time period.

### Using the Tradeoff Matrix.

If you have an overcommitted skill, you want to maximize the availability of the people who have that skill.

This means that you want to reassign the other-skill work that the capable people are doing to someone else who is not capable of doing the overcommitted skill.

For this you should look at the people who are x or have some commitment in this skill column. For any that are not 100% committed in this skill, look across to find which other skills they may be using. From that column, look up and down to find an a different person who is not fully committed on that other skill and look across to make sure he or she is not qualified on the overcommitted skill. Having found the tradeoff that makes the most sense, you should go to the member report for the member to be freed up to find the project commitments that make up this work and then request reassignment by the project managers.