# **Alternatives Grid**

#### Overview

The **Alternatives Grid** page shows the alternative priorities with respect to the decision goal for All Participants. These priorities are based on the normalized right eigenvector of the geometric average of the judgments for all participants who have roles for measures derived with pairwise comparisons, and for the arithmetic averages of priorities derived from ratings, utility curves, step functions, or direct input. This aggregation is known as **Aggregating Individual Judgments**, or **AlJ**, and is the default aggregation method.

	jectives										
ž				Sample IT Portfolio Alternatives	o Op s Gri	otimization					
bjectives	All Parti	cipants							<b>\$</b>		
	L	G		Į.	3	Q Search					
Goal: Optimize IT Portfolio T			ID	Alternative Name			All Particip				
Leverage Knowledge	27.7%	27.7%					7 with judg	ments			
Vendor/Partner Access	30.17%	8.36%	[08]	AS/400 Replacements			6.07%				
Customer Access/Service	32.54%	9.01%	[03]	Cisco Routers		7.2%					
Internal Access	37.29%	10.33%	[17]	Customer Service Call Ce		6.89%					
Improve Organizational Ef	21.06%	21.06%	[13]	Desktop Replacements		5.7%					
Improve Service Efficie	22.53%	4.75%	[04]	EMC Symmetrix		6.22%					
Leverage Purchasing P	18.15%	3.82%	[12]	Firewall and Antivirus Lice	6	6.43%					
Improve Time to Market	27.33%	5.76%	[05]	Iron Mountain Backup Se	rvice		6.99%				
Manage Resources	31.99%	6.74%	[11]	Laptop Replacements			3.85%				
Maintain Serviceability	10.07%	10.07%	[15]	Mobile Workforce Pocket	PCs		3.67%				
Scaleability	42.84%	4.31%	[09]	Oracle 9i Upgrade	1 03		6.69%				
Responsiveness	32.5%	3.27%		PeopleSoft Upgrade			5.38%				
Resources	24.66%	2.48%	[07]	1 10		9%					
Minimize Risks	19.85%	19.85%	[02]	Plumtree Corporate Porta		-					
Leverage Proven Techn	40.95%	8.13%	[16]	ProServe System Upgrad	le		6.4%				
Ensure Readiness	59.05%	11.72%	[14]	Sales Force Laptops			6.06%				

By selecting an element in the hierarchy other than the goal, you can see the results with respect to (WRT) this element rather than the overall results with respect to the goal.

			wit	Sample IT Portfolio O Alternatives Gr h respect to Improve Organi	id	:y
Objectives	All Parti	cipants				
	L	G			Q Search	
Goal: Optimize IT Portfolio T	07.70	07.70/	ID	Alternative Name		All Participants 7 with judgments
Leverage Knowledge	27.7%	27.7%				
Vendor/Partner Access	30.17%	8.36%	[08]	AS/400 Replacements		6.7%
Customer Access/Service	32.54%	9.01%	[03] Cisco Routers		7.17%	
Internal Access	37.29%	10.33%	[17]	Customer Service Call Center	r	4.67%
<ul> <li>Improve Organizational Ef</li> </ul>	21.06%	21.06%	[13]	Desktop Replacements		5.5%
Improve Service Efficie	22.53%	4.75%	[04]	[04] EMC Symmetrix		8.1%
Leverage Purchasing P	18.15%	3.82%	[12] Firewall and Antivirus Licenses		S	4.67%
Improve Time to Market	27.33%	5.76%	[05]	Iron Mountain Backup Service	9	7.42%
Manage Resources	31.99%	6.74%	[11]	1] Laptop Replacements		3.76%
Maintain Serviceability	10.07%	10.07%	[15]	Mobile Workforce Pocket PCs	5	2.13%
Scaleability	42.84%	4.31%	[09]	Oracle 9i Upgrade		7.79%
Responsiveness	32.5%	3.27%	[07]	PeopleSoft Upgrade		7.88%
Resources	24.66%	2.48%		1 15		9.44%
Minimize Risks	19.85%	19.85%	[02]	Plumtree Corporate Portal		
Leverage Proven Techn	40.95%	8.13%	[16]	ProServe System Upgrade		6.2%
			F4.41	Salas Earon Lantans		1 26%

The grid above shows all the alternatives priorities with respect to the selected node Improve Organization Efficiency.

Click 📧 to show the toolbar options (showing and hiding the toolbar is being remembered).



Toggle Hierarchy C to show/hide the objectives hierarchy/tree at the left.

Toggle L & G Priorities O to show/hide the Local and Global objectives priorities on the objectives hierarchy/tree.

#### Select Participants and Groups

You can choose to display results for individual participants or another group by clicking 💾 1/12  $\cdot$ 

The fraction in the image above designates the selected/total number of participants and groups.

Clicking the button opens a window listing the participants and groups in the model. You can select more than one user or group. Simply check the participants and groups you want to see results.

#### Expert Choice Comparion® Help Document

earch	Participant Name		Email Address	÷	Has data?	÷		•	Group name	Has data?  🍦	Select all users with data
	Administrator		admin				•	<b>~</b>	All	Yes	
	User 21232f29		user_21232f29@ec.com						Participants		
	User 36498ffa		user_36498ffa@ec.com		Yes						
	User 560ee1e9		user_560ee1e9@ec.com								
	User 780ecdf6		user_780ecdf6@ec.com		Yes						
	User c1ad25db		user_c1ad25db@ec.com		Yes						
	User def8f43a		user_def8f43a@ec.com		Yes						
	User ebedeca4		user_ebedeca4@ec.com		Yes						
	User f01c7c6c		user_f01c7c6c@ec.com		Yes						
	User fd8fdac3		user_fd8fdac3@ec.com		Yes		$\checkmark$				
	7uza Pauta	S	elect all   Select All Parti	cipan	its And Groups	s Wit	h Da	ata	Deselect all		

## **Filter Alternatives**

By default, all alternatives are displayed.

Filter Alternatives: Show all Alternatives V
Show all Alternatives
Show top 5 Alternatives based on All Participants priorities
Show top 10 Alternatives based on All Participants priorities
Show top 25 Alternatives based on All Participants priorities
Advanced
Show funded Alternatives - Default Scenario
Select/Deselect Alternatives
Filter by alternative attributes

- Show top N Alternatives. Select to display the top 5, 10, or 25 alternatives based on the "All Participants" group priorities.
- Advanced. Allows you to specify the top N based on the selected participant or group.

Advanced				
Select top	16 •	Alternatives based on	All Participants •	priorities
			ОК	Cancel

- Show funded alternatives from the active Resource Aligner scenario.
- Select/Deselect Alternatives.

Select/Deselect Alternatives	
<ul> <li>AS/400 Replacements</li> <li>Cisco Routers</li> <li>Customer Service Call Center</li> <li>Desktop Replacements</li> <li>EMC Symmetrix</li> <li>Firewall and Antivirus Licenses</li> <li>Iron Mountain Backup Service</li> <li>Laptop Replacements</li> <li>Mobile Workforce Pocket PCs</li> <li>Oracle 9i Upgrade</li> <li>PeopleSoft Upgrade</li> <li>Plumtree Corporate Portal</li> <li>ProServe System Upgrade</li> <li>Sales Force Laptops</li> <li>SRDF Site/Service</li> <li>Thin Client Implementation</li> </ul>	
All   None	OK Cancel

• Filter by Alternative Attributes specified on the Alternatives page.

Filter by alt	ernative attributes						
	Use: AND	•	Add Rule		Reset		
•	FTE_Hours	•	Equal	•	10		X
<b>A</b>	Region	۲	Equal	•	North		X
						OI	Cancel

#### **Change Alternatives Color**

You can change the Alternatives color from the Alternatives Grid and Dynamic Analysis page; and the Objectives color from the Objectives Grid page.

From Grid, simply click or right-click the alternative or objective priority bar/cell, and then choose a color from the color picker:

ID	Alternative Name	All Participants 7 with judgments
[08]	AS/400 Replacements	52.74%
[03]	Cisco Routers	61.76%
[17]	Customer Service Call Center	60.38%
[13]	Desktop Replacements	49.19%
[04]	EMC Symmetrix	52.77%
[12]	Firewall and Antivirus Licenses	56.75%
[05]	Iron Mountain Backup Service	59.98 <mark>%</mark>
[11]	Laptop Replacements	32.78%
[15]	Mobile Workforce Pocket PCs	32.71%
[09]	Oracle 9i Upgrade	57.69%
[07]	PeopleSoft Upgrade	45.32%
[02]	Plumtree Corporate Portal	77.52%
[16]	ProServe System Upgrade	55.37%
[14]	Sales Force Laptops	53.12%

**DIDN'T SEE THE OPTION YOU ARE LOOKING FOR?** Try enabling the **Advanced Mode** switch at the bottom of the page; this will show the **advanced options on this page**.

When the Advanced mode is ON, you will see the advanced options on this page:



#### Ideal and Distributive Synthesis

Results can be computed as an **Ideal** mode (default) or Distributive mode synthesis.

Ideal
 Distributive

Originally, AHP had only one synthesis mode – later called the "distributive" synthesis mode. A distributive synthesis distributes priorities from the goal down through the alternatives and is analogous to dividing priorities in a pie chart, which is intuitive for decision-makers to comprehend. The sum of the global priorities for each alternative with respect to each covering objective represents the overall priority of that alternative. The priorities have ratio scale properties (as well as, of course, interval and ordinal properties), which means that they can be used in making a choice or in allocating resources. This synthesis operation can be thought of as distributing the goals priority of 1.0 to the alternatives under consideration, and is today called the distributive synthesis mode. Originally, this was the only synthesis mode of AHP. Critics of AHP pointed out situations where a different synthesis mode is more appropriate.

### Aggregating Individual Priorities (AIP)

Clicking the **AIP** check-box will show results based on aggregating individual priorities, known as AIP, instead of aggregating individual judgments (<u>AIJ</u>). When AIP is checked, overall alternative priorities are computed for each participant and then an average of these priorities is computed.

○ AIP

NOTE: Due to the nature of AIP, objectives charts, objectives grid, and all sensitivity analysis pages are disabled when AIP is selected.

## **Normalization Options**

By default, the results are Normalized. When the advanced mode is ON, you can select to display results as follows:



- Unnormalized: The priority is the sum of the products of each covering objective's global priority times the priority of the alternative with respect to each covering objective. If an alternative has a priority of 1 for every covering objective, it will have an unnormalized priority of 1 and is referred to as an ideal alternative. Note: "Unnormalized" is not available and not applicable when using Distributive mode.
- Normalized for All: Sum to 1 for all the alternatives
- Percentage of Maximum: The alternative with the highest priority is 1 and all others are a percentage of this
- Normalized for Selected: Sum to 1 for the selected alternatives

## Combined Input Option (CIS)

If the Combined Input Option (CIS) is ON, then results for individuals are computed by combining the priorities derived from judgments/ratings for which they had roles, with the combined results for any parts of the model where they did not have a role.

#### CIS

# **Apply User Priorities**

If priorities (weights) have been specified for participants, you can use the "User Priorities" check box which enables you to apply or ignore these priorities in calculating the results.

**V**ser Priorities