

## USING THE KNOWLEDGESMART POWER BI SKILLS AUDIT REPORT

This Power BI Skills Audit report template is provided in order to illustrate the range of data analysis which is possible once you have collected the Skills Audit data from your organisation.

The report we provide to you is pre-populated with Skills Audit demonstration data. Allowing you to explore what is possible ahead of capturing your own organisation's skills and knowledge.

To use the report, you will need the free version of Microsoft Power BI desktop version. A licence is often included with an Office 365 subscription. Microsoft Power BI desktop may be downloaded free from here <https://powerbi.microsoft.com/en-us/desktop/>

This report comprises a mix of different types of Skills Audit data visualisations in three sections.

**Heat Maps.** Heat Maps of User and User & Manager ratings are on pages 6, 7, 9, 10. Filters on pages 4 and 5 control the data shown in the Heat Maps. On page 8 the visuals show individual skills ratings and test results together. Page 11 is a Tree Map of the skills data.

**Statistics.** Pages 12, 13 & 14 show statistics such as highest and lowest ranking skills and individual User skill rating distribution.

**Training Tags.** Pages 15, 16 & 17 all relate to Training Tags and are used to identify learning and development opportunities within the Skills Audit data.

### Let's Get Started!

Open the Skills Audit Power BI report using Microsoft Power BI Desktop.

This report is pre-populated with demonstration data so that you can work with the filters and data visualisations before loading your own data.

The best way to learn about the Power BI visuals is to get stuck in and use the report. On Page 3, Navigation Home, you will find navigation links to all the report pages. Use this page for navigation, or alternatively use the page name tabs at the bottom of the screen to move around the report.

On each page there is a 'Home' button which will bring you back to the Navigation Home page. On the filter pages there is a 'Reset' button which will clear all the filters set for that group of visuals. You will also find a 'Reset' button on a number of the visuals pages; it has the same effect of clearing all filters. Any text entered in a 'Search' box of a filter must be deleted manually when a reset is required.

Please note: When using Power BI desktop, the buttons only work when the CTRL key is combined with a left mouse click. To make selections of multiple filter options in one filter panel, hold down the CTRL key whilst making the selection.

On the following pages of this Help Note we look at each page in the Power BI report in more detail.

**The Start Page** is the opening image and title. When you create Skills Audit reports for your organisation you may replace the logo, image and text with your own.

**Read Me First. Page 1.** As the title says, start reading here.

**User Guides. Page 2.** Explains the support and help information available for this Power BI report.

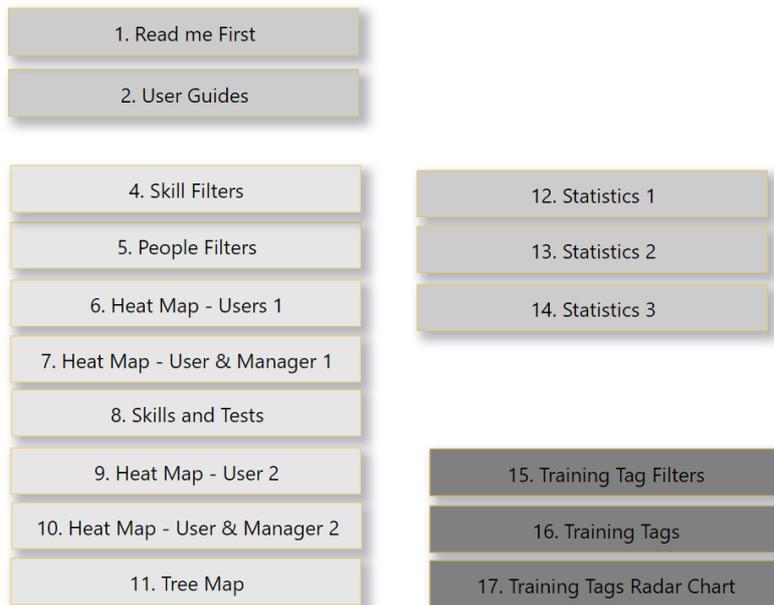
**Navigation Home. Page 3.** From this page you may navigate around the Skills Audit report. To make an action happen it is necessary to hold down the CTRL key whilst clicking on the report button with the left mouse button. To move to a specific page, click on the name of the page whilst holding down the CTRL key. When you are on any page you may return to the Navigation Home page by clicking on the 'Home' button ( whilst holding down the CTRL key ).



From this page you may navigate around this Power BI report. Hold down the CTRL key and left mouse click on any of the grey buttons to take you to one of the pages of filters or visualisations.

On most pages you will find a HOME button like the one below. Whilst holding down the CTRL key just left mouse click on this button to be brought back to this page.

On the filter pages you will find a RESET button. Holding down the CTRL key whilst left mouse clicking on the RESET button will clear all the filters. If you have used a search box on a filter you will have to clear that manually.



The individual buttons can be dragged around the page. Left mouse click on the button, keep the button depressed, and drag it around. You could create a group of favourite buttons for those pages you find most useful.

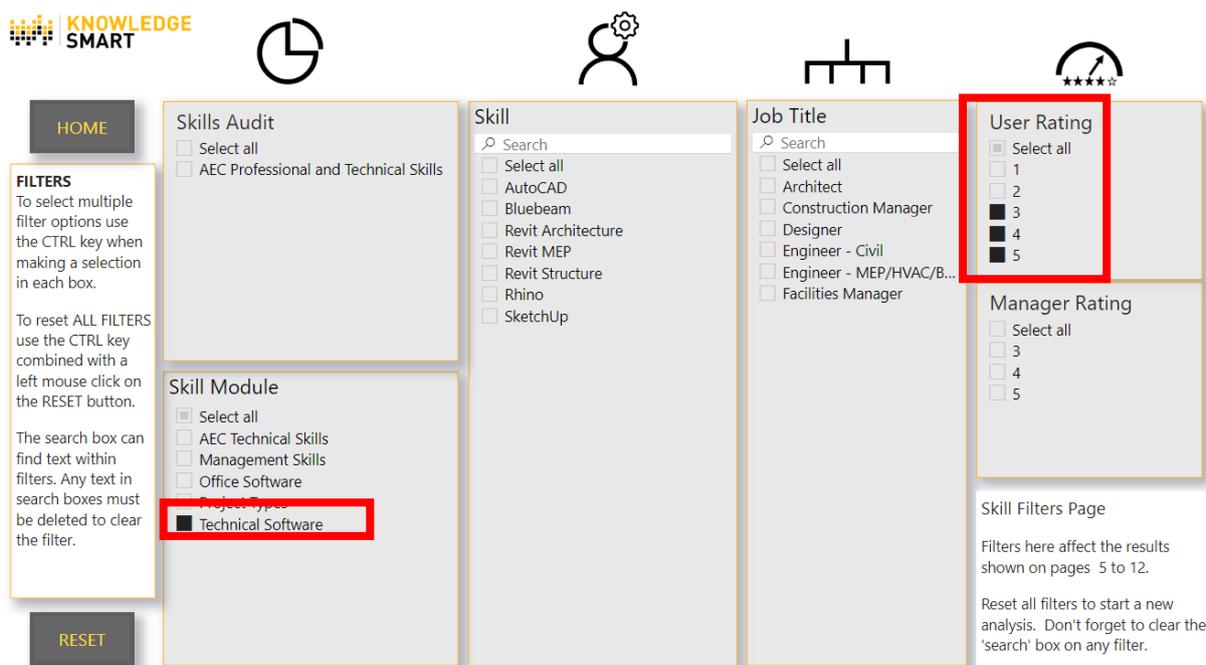
## HEAT MAPS

### Pages 4 - 11

#### Skill Filters. Page 4.

On this page are a series of filters which affect the Heat Maps and visuals on pages 6-11. These filters cover Skills Audits, Skills Modules, Job Titles, etc. To activate a filter simply click in a box or on the filter name. In the example screenshot below the filter is set to show a Heat Map for Technical Software where the User rating is 3, 4 or 5. Active filters show as black squares. To make more than one filter active in a selection panel hold down the CTRL key whilst selecting the filter.

Note: Some Skills Audits may have an optional 0 rating selected for user and manager responses.



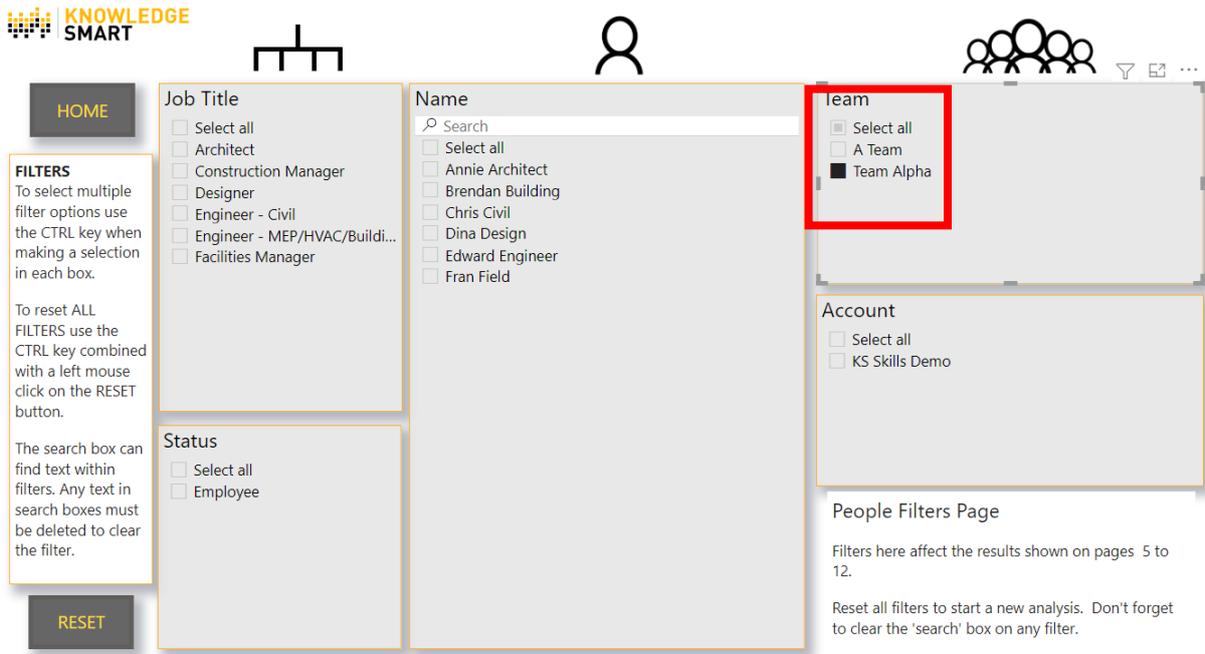
The resulting Heat Map for User ratings on Page 6 is show below.

Name	AutoCAD	Bluebeam	Revit Architecture	Revit MEP	Revit Structure	Rhino	SketchUp	Total
Annie Architect	3		4			3	3	13
Brendan Building	3	3					3	9
Chris Civil	5	4					4	13
Dina Design	3	3	4			5	5	20
Edward Engineer	3		3	4	3		3	16
Fran Field	3		3	3	4			13
<b>Total</b>	<b>20</b>	<b>10</b>	<b>14</b>	<b>7</b>	<b>7</b>	<b>8</b>	<b>18</b>	<b>84</b>

To reset the filters on Page 4, click on the 'RESET' button whilst holding down the CTRL key. Very occasionally Power BI does not reset the filters completely cleanly. You may have to click in a few selection boxes to complete the reset. If you have used any of the 'Search' functions in the filter panels the data will have to be manually deleted.

## People Filters. Page 5.

This page of filter panels is based around characteristics such as Name, Team, Account, etc. The filter system works the same way as for Page 4 - Skill Filters. In the example below we have filtered on Team Alpha.



This is the resulting Heat Map for User ratings on Page 6.

Name	AIR's	Analytical Thinking	AutoCAD	BEP's	Bluebeam	CDE's	Collaboration	Commercial	Conservation	Decision Making	Delegation
Annie Architect	2	2	3	3	2	3	3	3	2	3	2
Brendan Building	1	1	3	1	3	1	3	2	1	2	1
Chris Civil	1	4	5	2	4	2	4	2	3	3	3
Dina Design	2	3	3	3	3	2	4	3	2	3	4
Edward Engineer	2	4	3	3	2	2	3	4	1	3	2
Fran Field	3	3	3	3	2	2	3	3	3	3	2
<b>Total</b>	<b>11</b>	<b>17</b>	<b>20</b>	<b>15</b>	<b>16</b>	<b>12</b>	<b>20</b>	<b>17</b>	<b>12</b>	<b>17</b>	<b>14</b>

To reset all the filters on page 5, use the same process as on Page 4. Click on the 'RESET' button whilst holding down the CTRL key.

The filters on pages 4 and 5 can work together or independently. Experiment with a few settings to see what effect they have on the Heat Map output.

## Heat Maps. Pages 6, 7, 9, 10.

The Heat Maps in this report display rated skills as a coloured matrix. Ratings are set 0 to 5 where 0 is at the lower end of experience and knowledge and 5 is at the higher end. The default ratings are shown below. The 0 rating is optional and can be turned on or off for individual Skills Audits. These ratings may be customised for each individual Skills Audit. Heat Maps are readily understood and are very popular ways to present skills rating data.

Rating = 0 None/not applicable	Rating = 1 No/very basic	Rating = 2 Basic	Rating = 3 Good	Rating = 4 Advanced	Rating = 5 Expert
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We offer four Heat Maps. On Page 6 the Heat Map is for User rating only with names down the left-hand side and skills across the top. The Heat Map on Page 7 includes both User and Manager ratings. The Heat Maps on pages 9 and 10 display the same ratings, but with reversed axes, so names along the top and skills down the side. Use whichever you prefer.

Let's look at the Heat Map on page 7. Heat Map - User and Manager -1



Skill	Annie Architect		Brendan Building		Chris Civil		Dina Design	
	User	Manager	User	Manager	User	Manager	User	Man
AIR's	2	2	1	1	1	1	2	
Analytical Thinking	2	2	1	1	4	3	3	
AutoCAD	3	4	3	3	5	5	3	
BEP's	3	2	1	1	2	2	3	
Bluebeam	2	2	3	3	4	4	3	
CDE's	3	3	1	1	2	2	2	
Collaboration	3	3	3	3	4	4	4	
Commercial	3	3	2	2	2	2	3	
Conservation	2	2	1	1	3	3	2	
<b>Total</b>	<b>121</b>	<b>125</b>	<b>99</b>	<b>104</b>	<b>149</b>	<b>144</b>	<b>142</b>	<b>11</b>

1. This is the navigation panel. The 'RESET' button clears all filters on the page. The other three buttons will take you to the specific named page in the report.
2. These are Group filter panels which allow rapid filtering of specific skills ratings. Simply click on one of the rectangles. It will go from grey to black to show it is selected. The Heat Map will respond according to the selection. There are Group filter panels for Users, or both Users and Managers, according to the type of Heat Map.

In the 'User Rating Grader' Group panel shown below 'Star Performers - Rating 4&5' has been selected. The effect on the appearance of the Heat Map visual on page 6 is shown below it.



Name	Analytical Thinking	AutoCAD	Bluebeam	Collaboration	Commercial	Delegation	Design Visualization	Education	Environmental Awareness	Global Working
Annie Architect								4		
Brendan Building										4
Chris Civil	4	5	4	4					4	4
Dina Design				4		4	4		4	
Edward Engineer	4				4					4
Fran Field							4			
<b>Total</b>	<b>8</b>	<b>5</b>	<b>4</b>	<b>8</b>	<b>4</b>	<b>4</b>	<b>8</b>	<b>4</b>	<b>8</b>	<b>12</b>

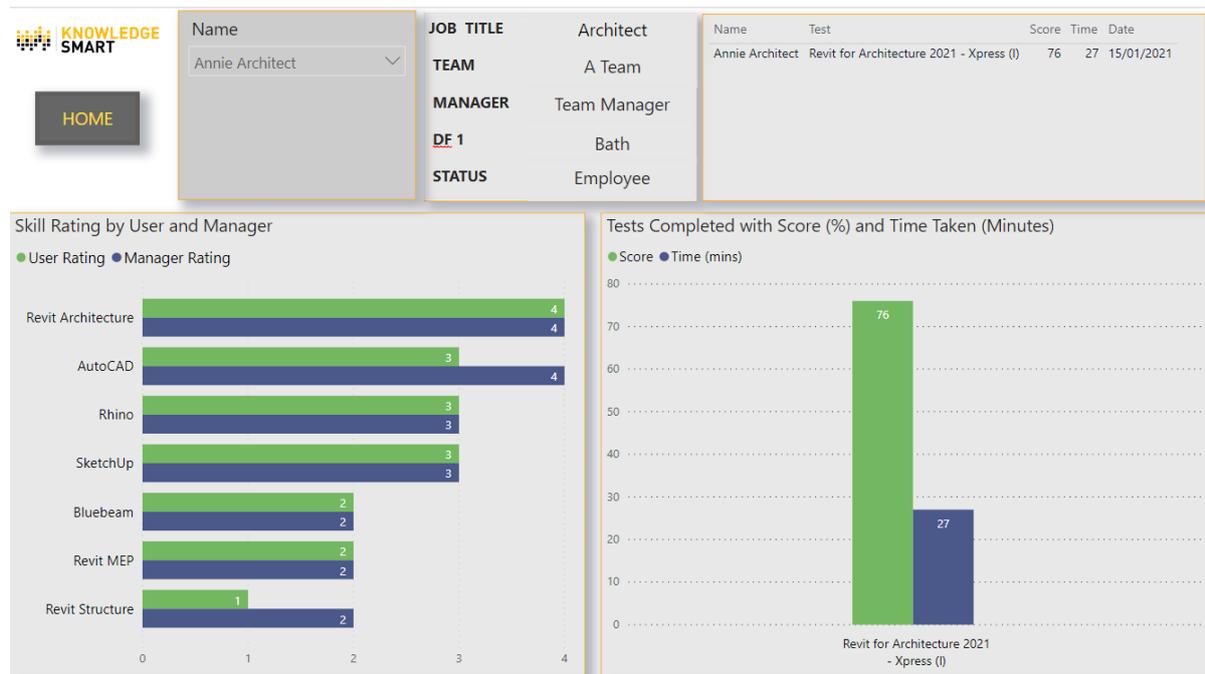
By removing the 'noise' of the other skills ratings it is obvious who has 4 and 5 ratings and in what skills.

- The Heat Map may be altered for colour, column width and general appearance. At the bottom of each column and at the end of each row is a Total. This is the sum of all the skills ratings in that column or row.
- This is a dropdown filter which presents the Heat Map for an individual user.

## Skills and Tests. Page 8.

This page shows the results of skills ratings together with any test results, for an individual.

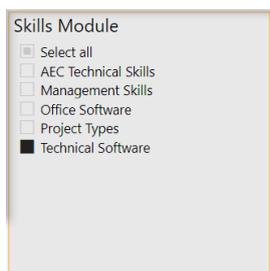
In the example below, Annie Architect has been selected using the dropdown filter at the top left of the page. There is an information panel showing her Job Title, Team, Manager, Status and User Datafield 1 (DF 1). A Skill Rating panel shows User and Manager ratings. The Tests panel shows Annie has completed a Revit for Architecture 2021 - Xpress (I) test on January 15<sup>th</sup>, 2021.

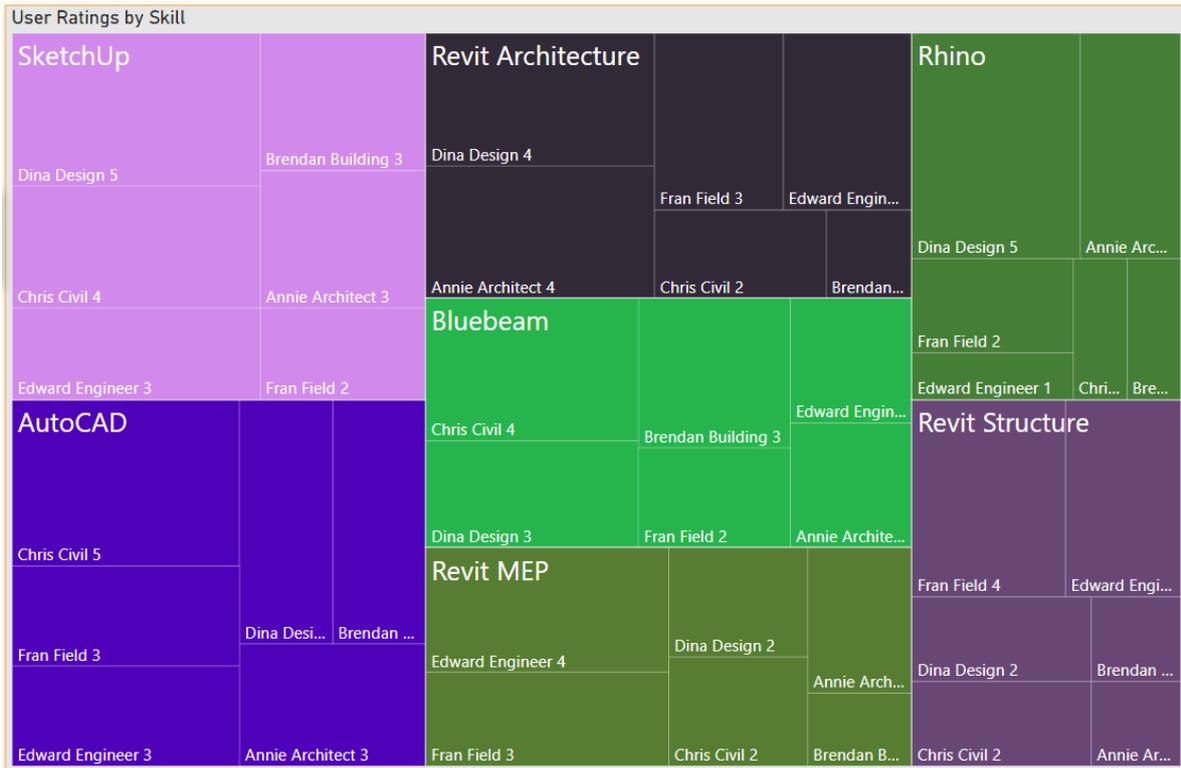


## Tree Map. Page 11.

The Tree Map represents skills ratings by area of a rectangle on the screen. In the example Tree Map on the next page the filter of Technical Software has been set on the Skill Filters, page 4.

Each technical software skill has its own rectangular area of the Tree Map, which is then sub-divided by individual, with their name and rating shown. The larger the area the higher the skill rating.



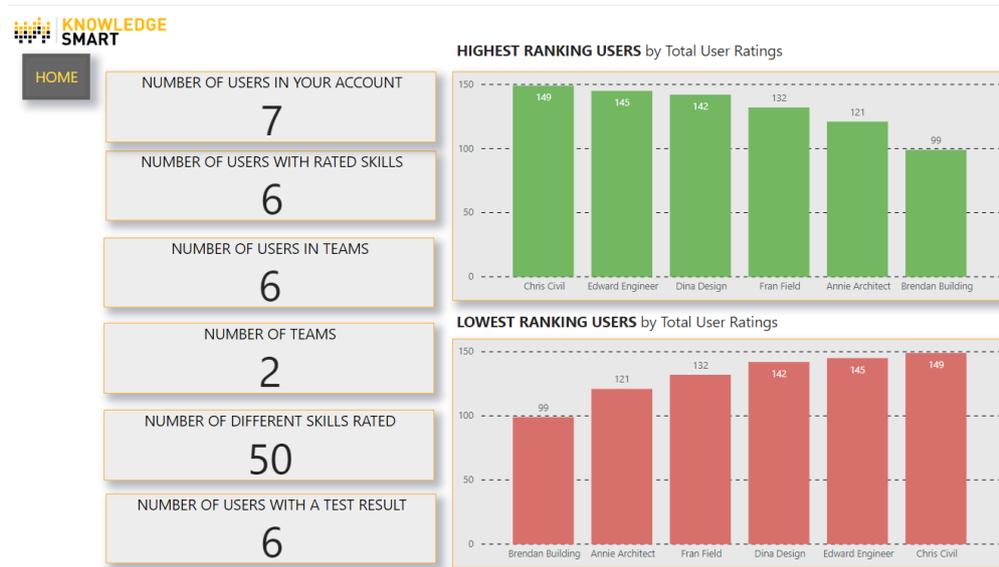


## STATISTICS

### Pages 12-14

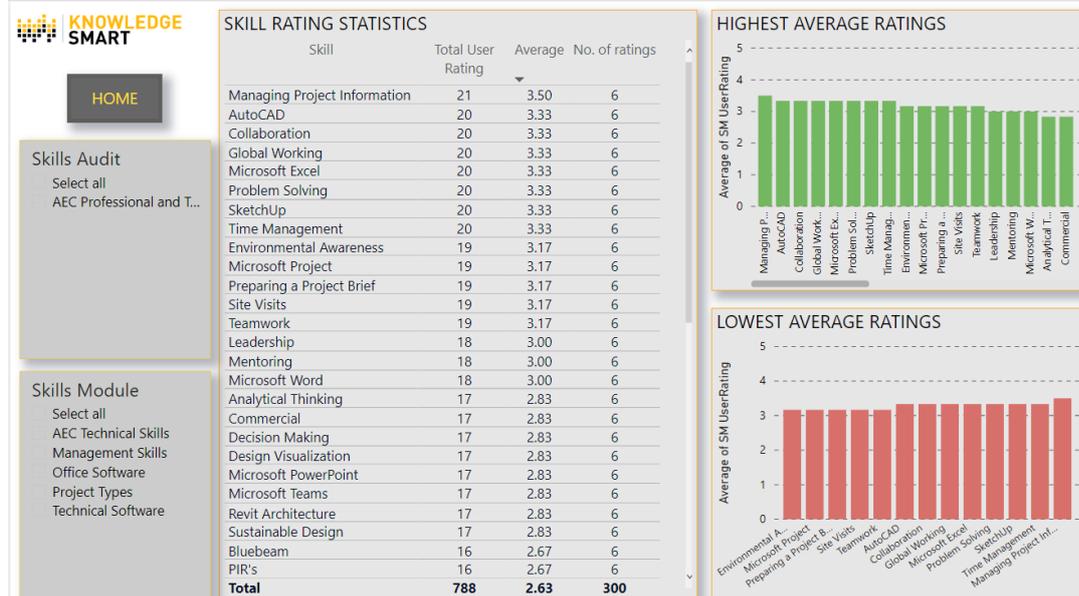
#### Statistics 1. Page 12.

This page of visuals provides an insight into the Skills Audit data in two main areas. The two bar charts rank people by highest and lowest total User skills rating. For this demonstration data there are only 6 rated Users, so they appear in both charts! The boxes on the left provide useful information on the level of account activity.



#### Statistics 2. Page 13.

This page of visuals provides insight into the highest and lowest rated skills in the KnowledgeSmart account.



The Skill Rating Statistics table is sortable on each column and shows the total rating, average rating and number of ratings for all skills in the KnowledgeSmart account. This table is based on User ratings. It is easily adapted to show Manager ratings.

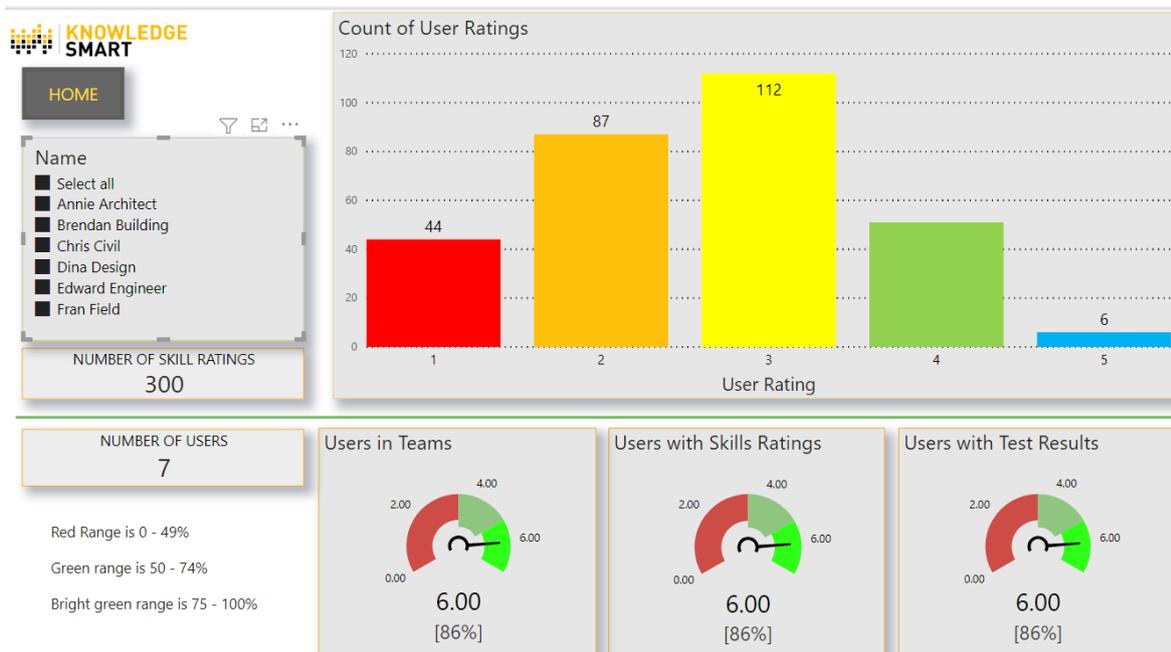
The bar charts show highest and lowest average ratings for skills. They are a quick way to identify those areas of skill strengths and weaknesses for an organisation.

The two filter panels on the left work at a Skills Audit or Skills Module level. To reset these filters simply select the 'Select all' box.

### Statistics 3. Page 143.

On this page the upper visual is a bar chart showing the total number of User rated skills in each of the skill ratings categories of 1 to 5. It may also be filtered for an individual by using the name dropdown filter on the left.

The three gauges on the lower half of the page are a measure of the penetration of KnowledgeSmart assessment and skills rating within your organisation.



## TRAINING TAGS

### Pages 15-17

#### Training Tags - Filters. Page 15.

The Training Tags pages 15, 16 & 17 focus on training tags, showing the opportunities for learning and development which have been identified by Skills Audits.

The Training Tag filters work in the same way as the Skill and People filters. In the screenshot below the filters have been set for Technical Software in the Skills Module filter panel and a User rating of 1 or 2 in the User Rating filter panel.

The results of these filter settings help identify those people who have rated themselves with no knowledge or basic knowledge of using the software products which make up the Technical Software module. You can see these software titles listed in the Skill panel in the middle of the page.

## Training Tags. Page 16.

The filters set on page 15 produce these results. The bar chart shows 4 people who are rated only 1 or 2 for Revit MEP and for Revit Structure. The names of the people are shown in the table. Clicking on any skill bar in the chart will drill down to show the related names in the table.



**Training Tags Radar Chart. Page 17.** This filtered information is the same as on the bar chart page, this time displayed as a Radar chart.

