



USAID GLOBAL HEALTH SUPPLY CHAIN PROGRAM

TECHNICAL ASSISTANCE, NATIONAL SUPPLY CHAIN ASSESSMENT TASK ORDER

Instructions for Using the CMM Survey Analysis Template for Scoring Capability Maturity Model Results

NSCA 2.0



DISCLAIMER: Development of the NSCA 2.0 toolkit was funded by the United States Agency for International Development (USAID). The authors' views expressed in this publication do not necessarily reflect the views of USAID or the United States Government.

INTRODUCTION

This document provides step-by-step directions for transferring data from SurveyCTO outputs into a Microsoft Excel-based template. The template is designed to produce maturity scores by level and module of the CMM and a limited number of summary outputs and graphics and these outputs are also described in this document. The summary outputs and graphics were determined to be 'standard' NSCA 2.0 outputs based on consultations with stakeholders and based on the experiences piloting the NSCA 2.0. However, individual assessments may require different analyses, deeper dives or outputs; the template may serve as a basis for developing further analyses and outputs.

This document:

- Describes the overall structure and contents of the Capability Maturity Model (CMM) Survey Analysis Template (hereafter 'the template').
- Provides guidance for moving data from Survey CTO into the template.
- Provides some guidance for modifying the template to suit the particulars of each individual assessment.
- Describes the output tables and graphs available.

The template is designed to be used for up to 15 different types of facilities / entities (e.g., health centers, hospitals, warehouses). Assessments with fewer than 15 types of facilities / entities should be able to adapt the presentation of the results with relatively little difficulty to match the number of types of facilities / entities used in their assessment. Assessments with more than 15 different types of facilities / entities will need to use more than one template and combine the outputs manually.

Use of the template requires knowledge and comfort with using Microsoft Excel. Basic functions of Excel are not described in this document.

STRUCTURE OF THE TEMPLATE

The template is divided into five parts, each marked by different color tabs for the individual worksheets within the overall template workbook (Table 1).

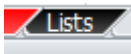


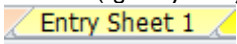

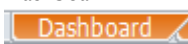
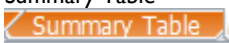

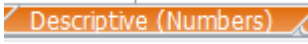
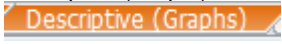
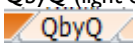
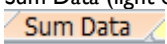
TABLE 1: OVERVIEW OF THE TEMPLATE			
TAB COLOR	FUNCTION	INDIVIDUAL WORKSHEETS	NOTES
Black	- Background information to enable other functions within the workbook	Lists 	Should not be modified; typical users need never use these sheets.
Red	-Provides the list of questions and answers used in the standard NSCA 2.0 CMM questionnaire. -Lists the scoring category for each response by level of the health system.	Reference 	Provides the background information essential to understanding the CMM scoring. Users should review and understand the information on this worksheet before starting the analysis. However, users typically would not change any information on this worksheet.
Gray	Calculation sheets used to calculate maturity scores for each of up to 15 different types of facilities / entities.	C1 through C15 	Users typically will not need to modify these sheets. Each sheet is divided vertically into the different modules; at the end of each module are the results for each entity. Users may be interested in looking at or using the results from individual entities, and thus may need to access these sheets.
Yellow	Data entry and intermediate results worksheets. There is one set for 15 different types of facilities / entities. Users must make changes to these worksheets to use the template.	Entry Sheet 1 through Entry Sheet 15 (lighter yellow) 	The worksheets where data exported from Survey CTO should be entered as well as the survey sample weights.
		R1 through R15 (Darker yellow) 	-Users need to enter the name of the facility / entity corresponding to the data entered on the 'Entry Sheet' of the same number. -Users also need to pick which of the four scoring levels was used for facility / entity. -Provides output tables for the particular facility / entity.
Orange	Outputs and results across the types of facilities / entities, presented in different ways and at different levels of detail in the different tabs. Users will need to modify these sheets in terms of formatting and presentation.	Dashboard 	High level results across modules and types of facilities / entities; highest level of aggregation provided in the template.
		Summary Table 	Provides final results and ranges for each module / type of facilities / entities.
		Bar Charts	Provides results by module (across types of facilities /

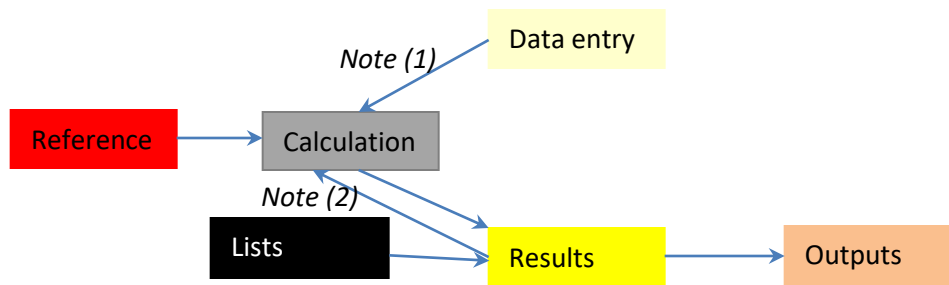
TABLE 1: OVERVIEW OF THE TEMPLATE			
TAB COLOR	FUNCTION	INDIVIDUAL WORKSHEETS	NOTES
			entities) and by type of facility / entity (by module) in the form of bar charts.
		Descriptive (Numbers) 	Provides average results for 'descriptive' (not scored) questions by type of facility / entity (these results are not presented in the dash board, summary table, or bar charts tabs).
		Descriptive (Graphs) 	Same results as for the worksheet Descriptive (Numbers) but in the form of bar charts.
		QbyQ (light orange) 	Average results for each question in the CMM survey, by type of facility / entity.
		Sum Data (light orange) 	Database used to generate other outputs. Most users will not need to use this worksheet. (Note that the worksheet is not protected to enable the functioning of the "Bar Charts" and "Dashboard" worksheets.

Note that the color yellow (both dark and light) – on both the worksheet tabs and for specific cells in the worksheets themselves – indicate areas where the assessment team will need to enter or alter data.

INFORMATION FLOWS THROUGH THE TEMPLATE

The data listed in the reference sheet provide the basis for the scoring and overall calculation (Figure 1). The data entered into the Data Entry Sheets **MUST** reflect the data in the Reference worksheet – that is, the question numbers / questions generated by SurveyCTO (and, thus, the underlying questionnaire) must match questions numbers / questions listed in the Reference worksheet (for example, question HR-203 should be the same question with the same response categories in both the survey and on the reference sheet). Extra questions can be added to the survey and the template will still function; however, the template will not produce any results for the added questions. Note that the numbers of existing questions cannot be changed. The assessment team cannot add a question in the middle of a section and then re-sequence the numbering of the remaining questions in a section and retain functionality of the template. For example, if the assessment team wants to insert a question after question HR-201, they should **NOT** number the new question HR-202 and renumber the remaining HR-200 series of questions. Rather, a new number (e.g., HR-201 I or HR-201b) should be used for the inserted question. Analysis of additional questions is the responsibility of the analysis team.

Figure 1: Flow of information through the template

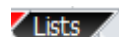


The calculation sheets also require (1) data to be entered in the data entry sheets from Survey CTO, and (2) the scoring level from the intermediate results worksheet in order to complete calculations. Once calculations are completed, they are passed back to the intermediate results worksheets. For the Data Entry, Calculation, and Results worksheets, the numbers at the end of each worksheet indicate a single type of facility / entity. For example, 'Data Entry 1', 'CI', and 'RI' all work together for one type of facility / entity – data entered on 'Data Entry 1' are processed on worksheet 'CI', and the results passed to the worksheet 'RI'. Note that the names of the tabs can be changed; for example the names of 'Data Entry 1', 'CI', and 'RI' could be changed to 'HC Entry', 'CHC', and 'RHC' if this set of sheets are used for health centers. When changing names of the tabs, we recommend retaining a common root across the 3 worksheets in each set (in the example above, the common root was 'HC') in order to be able to easily cross check data entry, calculations, and results.

Data from the Results worksheets are then passed to the output worksheets for overall presentation.

DESCRIPTION OF INDIVIDUAL WORKSHEETS IN THE TEMPLATE

LISTS



The 'Lists' worksheet contains only the four scoring levels (SDP, Referral Hospital, Warehouse, and MoH) used to assess maturity (Figure 2). This refers to the set of modules and questions used in SurveyCTO. Row 1 corresponds to Column N on the 'Reference' worksheet, Row 2 corresponds to Column M, Row 3 to Column L, and Row 4 to Column K. This list is linked to cell B1 on each of the 'R' worksheets. The names are arbitrary, and can be changed, but are not reflected in any of the results. They correspond to how the sets of questions are called within SurveyCTO.

Figure 2: Contents of the List worksheet

SDP	
Referral Hospital	
Warehouse	
MoH	

REFERENCE



The 'Reference' worksheet provides a list of all the standard NSCA 2.0 CMM questions, potential responses, and scoring category, by health system level (Table 2).

TABLE 2: DESCRIPTION OF THE CONTENTS OF THE REFERENCE WORKSHEET		
COLUMN(S)	TITLE	CONTENTS
A	Q#	The question number as listed on the paper version of the questionnaire. Provided for reference only.
B	Q#CTO	The question / field number as produced by the SurveyCTO output of for the questionnaire; these are the question numbers used in the calculation sheets unless there is a question number in Column E.
C	Question Type	Indicates whether the question/responses is included in the maturity scoring, the question is descriptive, or the question represents physical verification.
D	QUESTIONS	Provides the question as presented in Survey CTO
E	Verification number	If the question has a separate, follow-up question to provide physical verification of the answer to the question, this column lists the SurveyCTO question number for the physical verification.
F	RESPONSES	Lists the potential answers to the question listed in column D. If Column D is blank, the response corresponds to the last question listed in column D, above the row where the response is listed. Commonly repeated answer categories (e.g., "yes", "no", and "I don't know") are listed in one cell instead of multiple cells to shorten the presentation of the survey.
G	RESPONSE TYPE	The type of response to the question; for informational purposes only.
H	SKIPS	Lists whether or not the response to the question will indicate skipping subsequent questions or not; for informational purposes only.
I	SKIP Destination	If the conditions for a 'skip' are met, the next question to be asked.
J	Response #	The numeric response code from SurveyCTO that indicates that the answer to the question is 'positive' (i.e., it 'counts' towards their score For example, for

TABLE 2: DESCRIPTION OF THE CONTENTS OF THE REFERENCE WORKSHEET		
COLUMN(S)	TITLE	CONTENTS
		<p>question SPM-102_1, a response of 1 indicates that the supply chain strategic plan includes human resources, while any other response (in this case, 0) indicates that human resources are not included.</p> <ul style="list-style-type: none"> -Responses colored orange indicate a 'nested question' where a low answer may indicate 'basic' is in place, while a middle answer may indicate both 'basic' and 'intermediate' is in place (or vice-versa). -Responses colored green indicate a descriptive question. -Responses colored blue indicate that each answer is a 'partial' contribution to an overall score. -Responses colored in purple indicate a skip pattern where, if the question in purple is skipped, the question does not contribute to the overall score - typically because the question is not relevant, due to previous answers. Where questions are skipped that are not highlighted in purple, the site would "lose" credit for that question (typically because the site does not have the criteria being asked about, which is known based on the response to a previous question). <p>Please refer to the data analysis plan for more information about how questions are scored.</p>
K-N	Various (Health system levels)	The maturity category (basic, intermediate, advanced, or state of the art) for the response, across 4 potential health system levels. These are used by the calculation sheets to sort questions/responses by maturity category to calculate the overall score. If there is no text in the cells for a certain question and level, this indicates that the question is not asked at that level.
O	Notes and Scoring Adjustments	Provides notes for each question if appropriate.

CALCULATION (C1 THROUGH C15)



Users typically should not make modifications to the calculation sheets. The following description is intended to enable users to understand the processes used in the calculations sheets.

Columns A through G on the calculations sheet reflect columns in the 'Reference' worksheet (based on the name listed in Row 1). The remaining columns (Columns H through AEE) are used for calculations.

Vertically, the calculations worksheet is divided into the separate modules of the CMM survey, with a thick gray line separating each module. At the bottom of each module section are the results of the calculations (Figure 3).

Figure 3: Contents of the results of the analysis in the calculation sheets

	A	B	C	D	E	F	G	H	I
1	Q#CTO	QUESTIONS	Verificaiton number	RESPONSES	Response #	Maturity	Notes and	Results	1
163	STRATEGIC PLANNING & MANAGEMENT								
164	Number of questions								
165	Basic								0
166	Intermediate								0
167	Advanced								0
168	SOA								0
169	Number in place								
170	Basic								0
171	Intermediate								0
172	Advanced								0
173	SOA								0
174	Percentage		Count = 100%	Count	Percent at 1(Min		Max		
175	Basic		0	0	#DIV/0!	#DIV/0!	#DIV/0!		###
176	Intermediate		0	0	#DIV/0!	#DIV/0!	#DIV/0!		###
177	Advanced		0	0	#DIV/0!	#DIV/0!	#DIV/0!		###
178	SOA		0	0	#DIV/0!	#DIV/0!	#DIV/0!		###
179	Overall score					#DIV/0!	#DIV/0!		###

In the example provided in Figure 3, Rows 165 through 168 indicate the number of responses by maturity category. This is done for *each entity* (starting in Column I) because, depending on skip questions, the number may be different for each entity. Rows 170 through 173 indicate the number ‘in place’ for each maturity category out of the potential number listed in Rows 165 through 168.

Rows 175 through 178 present the results for each entity, and overall (in Column H), while Row 179 shows the results for the total maturity score. Note that the NSCA 2.0 is intended to be a system assessment, and evaluation of individual entities is generally not appropriate. However, if advanced statistical analyses are desired that require entity-specific data, these data must be extracted from here.

ENTRY SHEETS

Entry Sheet 1

Entry Sheet 1 through Entry Sheet 15 are largely blank. They are the intended destination for the data exported from Survey CTO. More details on these sheets are provided in the “Transferring data from SurveyCTO to the template” section.

INTERMEDIATE RESULTS SHEETS

R1

Worksheets R1 through R15 both require inputs from users and presents results.

In Cell B1 (“MOH CENTRAL LVL” in Figure 4), the user must choose the level of the health system appropriate for the data. There are four overall sets of questions, which are reflected in the SurveyCTO code. The level selected in cell B1 has to match the level used in the SurveyCTO for the type of entity, or the scoring will not be done correctly.

In Cell B2, the user should type the name of the type of facility / entity (e.g., health center, district hospital, etc.). Any response is allowed, but what is typed there will be used throughout the

presentation of the results and it is best practice to be consistent with the nomenclature used throughout the assessment.

Figure 4: Inputs required on the intermediate results sheets

	A	B	C	D	E	F	G
1	Level:	MOH CENTRAL LVL				Maximum entities:	10
2	Name:	MOH 4	n	=	1		

Cell G1 lists the maximum number of entities that can be processed in the calculation sheet corresponding to the Intermediate Results sheet. The number allowed decreases as the number of the Intermediate Results sheet increases – for example R1 allows up to 200 entities, while R15 allows up to 10 entities. Thus, the lower the number, the lower the level of the health system, and R1 should be used for the type of facility / entity with the largest sample (typically health centers or similar), while Intermediate Results sheet with higher numbers should be used for national or similar level entities where only one or two entities are included in the assessment.

Cell E2 lists the number of entities that have been entered on the corresponding Entry Sheet.

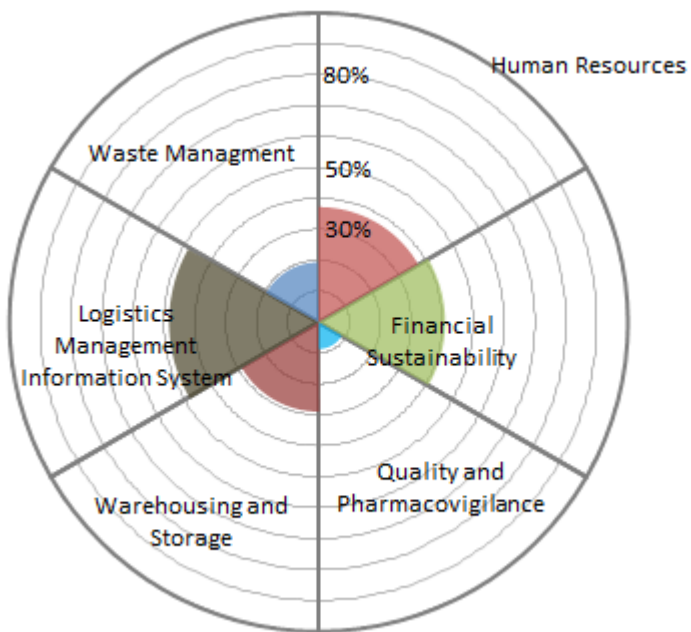
Figure 5: Outputs listed on the intermediate results sheets

Module	Average Score (Range)	Percentage of SDPs combined with all 'basic' items	Average percentage of basic items at SDPs combined	Average percentage of intermediate items at SDPs combined	Average percentage of advanced items at SDPs combined	Average percentage of state of the art items at SDPs combined
Human Resources	0% 0% to 0%	0% 0% to 0%	0% 0% to 0%	0% 0% to 0%	0% 0% to 0%	0% 0% to 0%
Financial Sustainability	0% 0% to 0%	0% 0% to 0%	0% 0% to 0%	0% 0% to 0%	0% 0% to 0%	0% 0% to 0%

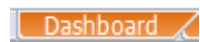
Two types of output are presented on the Intermediate Results worksheets, each specific to the type of entity entered in the corresponding Data Entry worksheet. Starting in Row 3, there is a table of results by CMM module (Figure 5). The first column of the table lists the overall maturity score, together with the range (the individual entity with the lowest score to the individual entity with the highest score). If a module is not relevant (or, in some cases, if no data have been entered for a module), the module name will not appear in the table. These rows will still appear in the table but be blank. The second column lists the percentage of entities that have 'achieved' basic maturity (i.e., have all questions in the basic category affirmatively answered). The fourth through seventh column indicate the percentage score by maturity category. Note that these are not scaled (e.g., while basic maturity items contribute 50% to the overall score, the range presented in the fourth column is NOT scaled 0% to 50% but rather is scaled 0% through 100%).

Figure 6 shows a radial pie chart presenting the overall scores by module. These charts may need further formatting before final presentation to ensure readability.

Figure 6: Radial Pie Chart

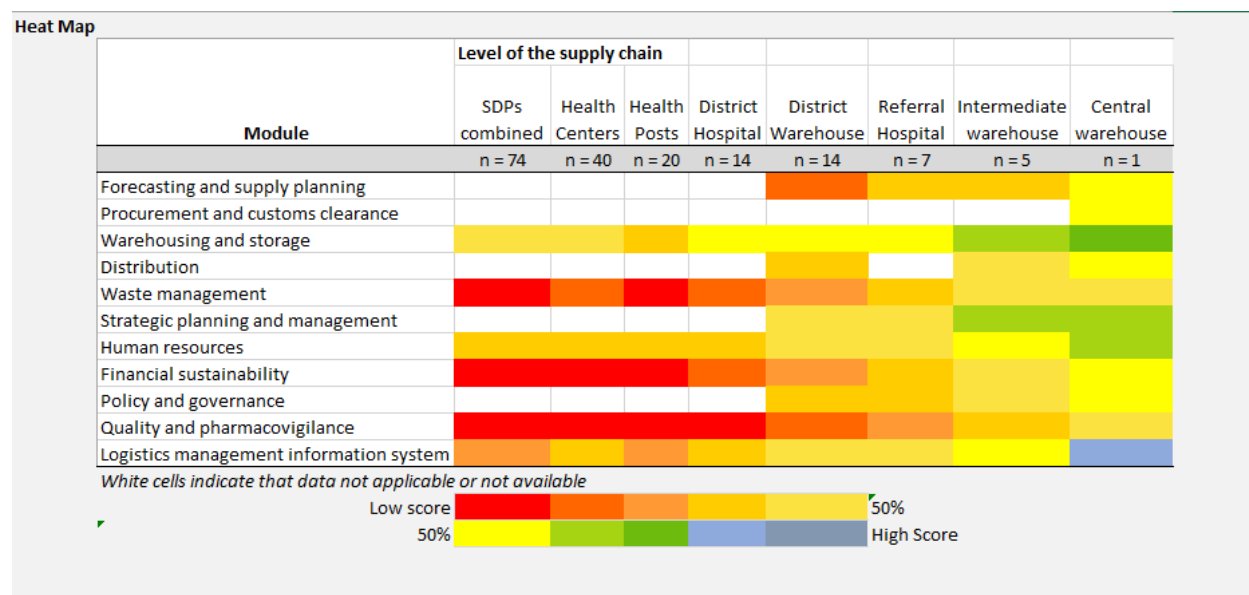


DASHBOARD



The dashboard contains four summary outputs: a traditional heatmap, a bubble chart heat map, spider graphs, and a bar chart.

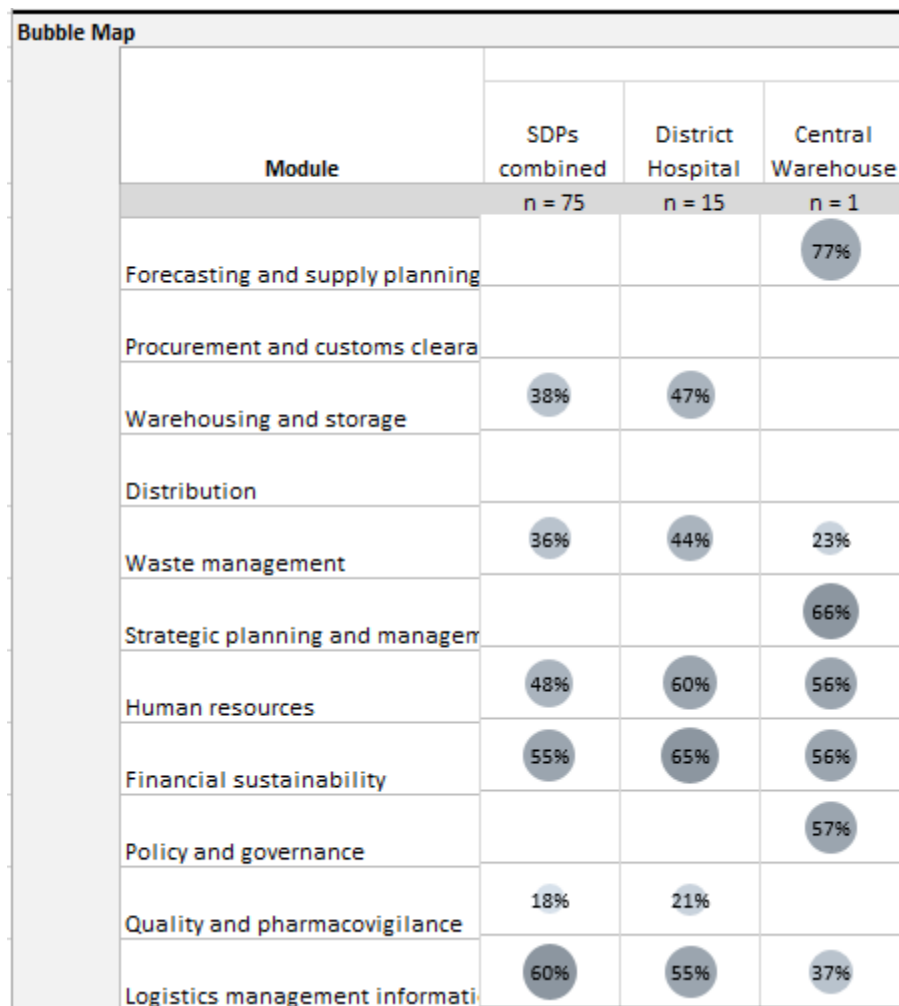
Figure 7: Basic Heat Map



The basic heat map (Figure 7) is presented for each module and type of facility / entity. The heat map converts numbers to colors in 10% increments. The darkest red indicates, for example, a score of less than 10%, moving to yellow and then to green at 70% to 80%. After 80% the heat map moves to blue colors. Most low- and middle-income countries realistically would have goals in line with having ‘intermediate’ maturity and scores above 80%, while desirable, may represent ‘overly mature’ segments of the supply chain if other portions of the supply chain have noticeably lower maturity. Focusing on presenting results as colors rather than numbers emphasizes looking for large differences between types of facilities / entities or modules, which is appropriate for the sample sizes employed in typical assessments. On the other hand, some people find the heat map too busy and people who are color blind may have difficulty distinguishing certain shades of color.

Note that in the CMM dashboard heatmap, individual results may receive a blue color when the score is higher than the 80% target. For KPIs, the established performance standard can be the maximum value for a particular KPI, and thus in some cases the performance standard cannot be exceeded. Thus, blue colors are not included in the KPI heatmap.

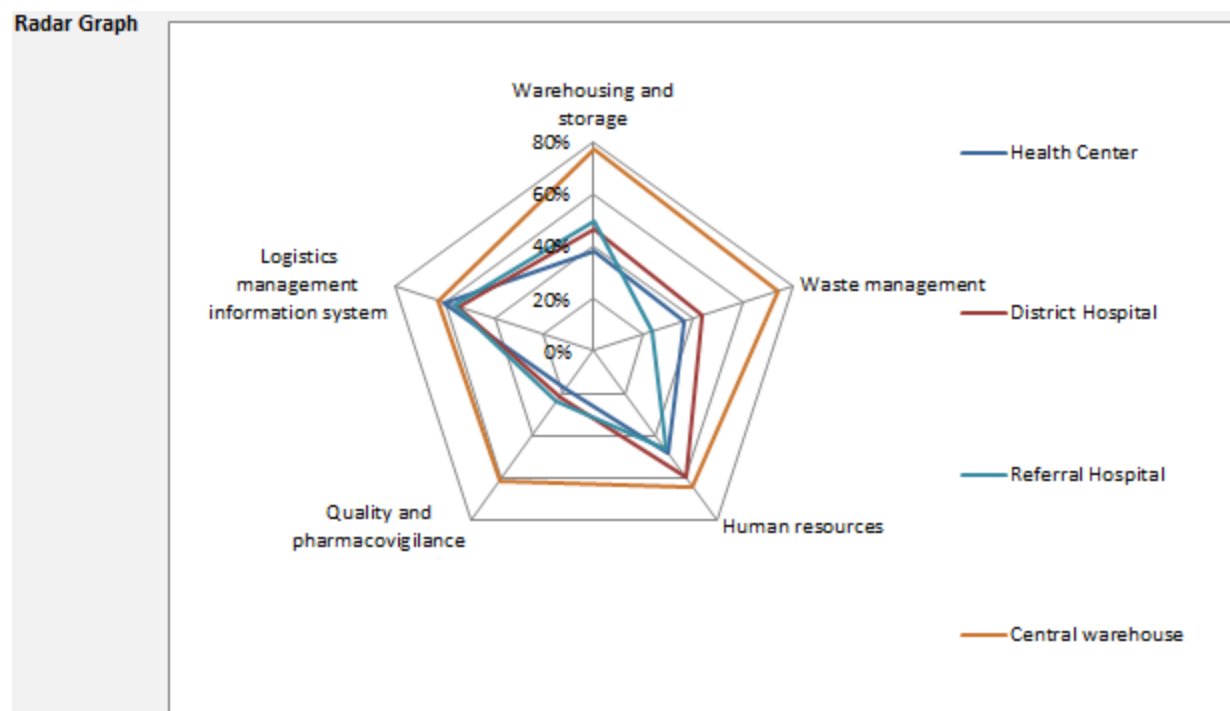
Figure 8: Bubble Chart Heat Map



The bubble chart heat map (Figure 8) presents the same data as the basic heat map, again with color coding (lighter to darker) indicating the level of maturity in 10% increments. In addition, the bubble chart heat map varies the size of the bubbles based on the score and presents the score as text within the bubble. The bubble chart heat map is color-blind and black and white printer friendly, but is larger than the basic heat map.

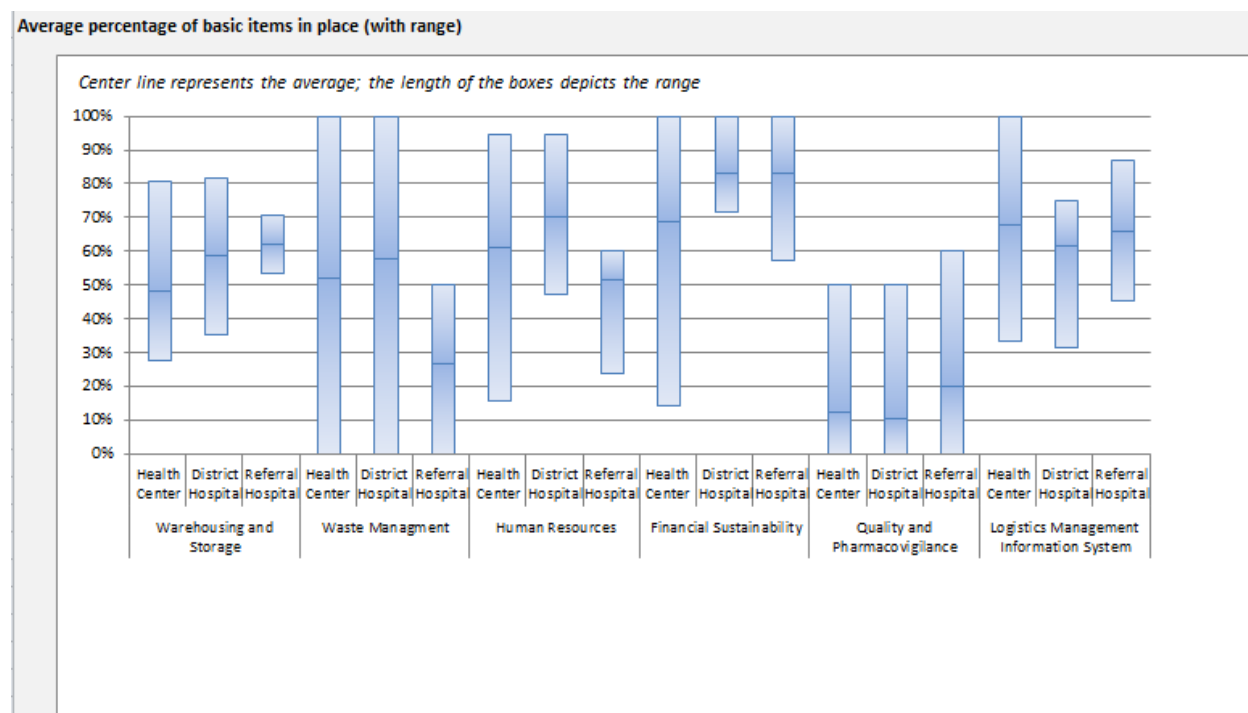
After the bubble chart heat map is a radar (or spider) graph of the results for the five modules asked at all levels of the health system (Figure 9). The radar graph *can* highlight differences between types of facilities / entities, but, depending on the results of an individual assessment, may reveal very little useful information. Users may choose to remove certain types of facilities / entities from the radar graph or otherwise format it to meet the needs of the assessment.

Figure 9: Radar Graph



The last portion of the 'Dashboard' worksheet contains a bar chart representing the percentage of basic items in place by module and type of facility / entity (Figure 10). This combines the information in the third column of the tables in the intermediate results sheets. The bars themselves represent the range (entity with the lowest score to the entity with the highest score) of results for a type of facility / entity, with a cross bar in the middle representing the average score.

Figure 10: Bar chart showing the percentage of basic items in place



SUMMARY TABLE

Summary Table

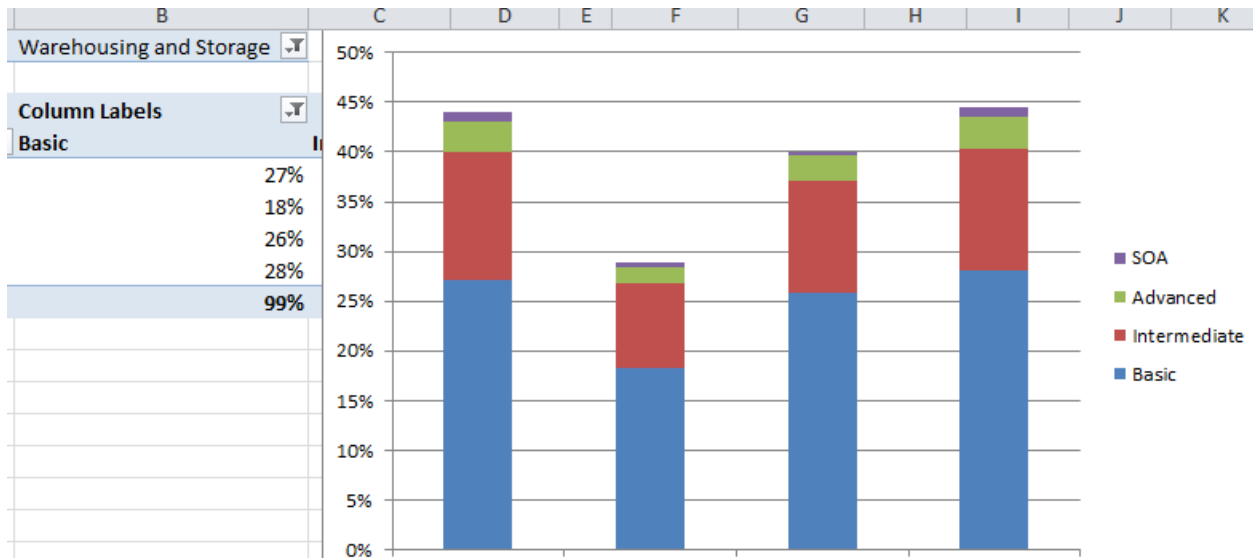
The summary table worksheet contains two tables. The first table, starting in Cell A2, combines the overall maturity scores by module across types of facilities / entities (i.e., the first columns from the intermediate results worksheets). The second table, starting in Cell A28, presents the percentage of basic items in place by module and type of facility / entity (corresponding to the third columns in the Intermediate Results worksheets).


BAR CHARTS

Bar Charts

The 'Bar Charts' worksheet allows more in-depth assessment or presentation of maturity results. First, it presents maturity scores, broken down by the contribution to the overall score by maturity categories, across types of facilities / entities for one module (Figure 11).

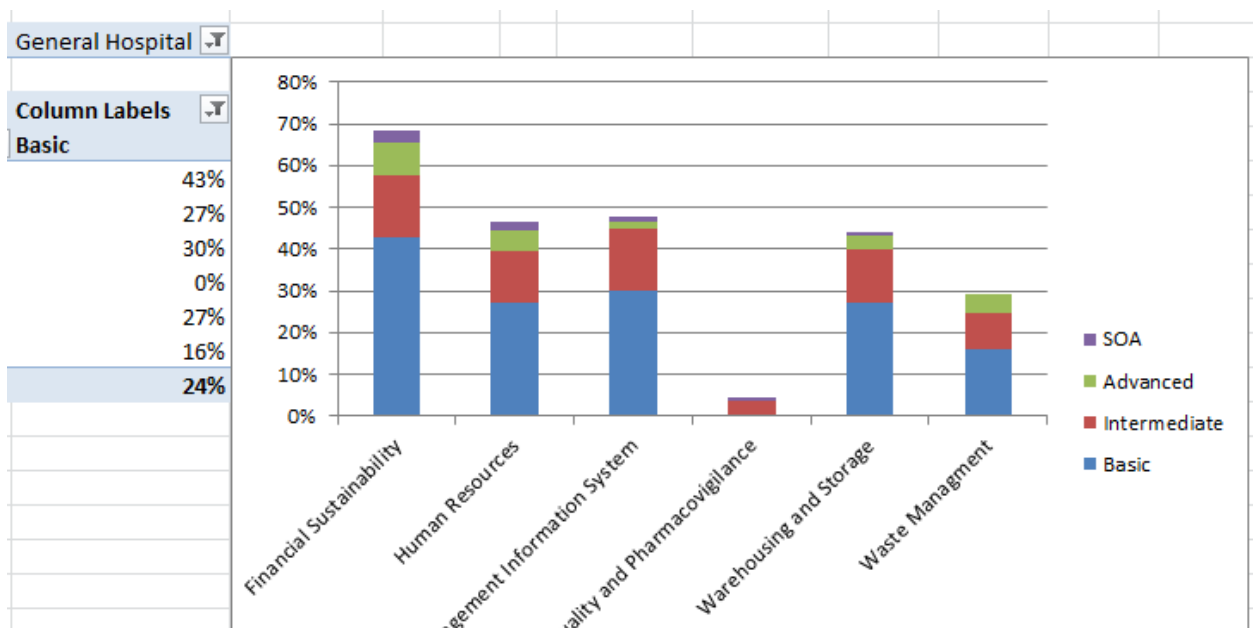
Figure 11: The first bar chart on the Bar Charts worksheet



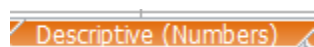
The Module presented can be changed by the user by clicking on the funnel (sort button: ) in cell B1 and then selecting the module of interest. Note that colors, etc. may be changed by the user for presentation purposes.

The second bar chart presents the same information but presenting all module results for one type of facility / entity (Figure 12). The type of facility / entity can be selected by clicking on the funnel button in cell B23.

Figure 12: The second bar chart on the Bar Charts worksheet

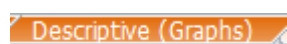


DESCRIPTIVE (NUMBERS)



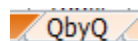
This worksheet contains information on the “Descriptive” questions in the CMM Questionnaire, i.e., those questions that do not contribute to the maturity scores. Column A in the ‘Descriptive (Numbers)’ worksheet lists the SurveyCTO descriptive question number, Column B lists the text of the question asked, and Column C lists the potential responses to each question. Columns D through R report the average percentage of respondents that had the answer in the corresponding rows. Note that not all questions are asked at all levels of the health system, in which case a particular column should be blank. This worksheet should present results for all questions that are not included in the maturity scoring process.

DESCRIPTIVE (GRAPHS)



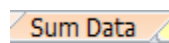
This worksheet contains the same information as the ‘Descriptive (Numbers)’ worksheet except in graphic form. Note that most of these graphs will need further formatting before presentation. Further note that not all ‘descriptive’ questions are included on this worksheet, but it includes questions that are most likely of interest to present.

QBYQ



Column A in the ‘QbyQ’ worksheet lists the SurveyCTO question number, Column B lists the text of the question asked, and Column C lists the potential responses to each question. Columns D through R report the average percentage of respondents that had the answer in the corresponding rows. This sheet contains all of the questions that are standard in the NSCA 2.0 CMM questionnaire. It also highlights responses listed as ‘Basic’ in pink color (which is different across levels of the health system). Note, however, that this sheet does not adjust for ‘nested’ questions. For example, for HR-203 the percentage listed should add up to 100%. Thus, if 23% of respondents are listed as ‘Some’ and 42% of respondents are listed as ‘Most’, those with ‘Most’ have also achieved the basic score of ‘Some’ (but the ‘Most’ is not highlighted).

SUM DATA



The Sum Data worksheet presents two tables, the first in Columns A through D and the second in Columns F through H.

Columns A through D present maturity score results broken down by type of facility / entity, maturity category, and module. The data in Columns A through D are used to populate pivot tables on the Bar Charts worksheets.

Columns F through H present the percentage of basic items in place. The data in Columns F through H are used to populate the pivot table on the Dashboard worksheet. “Minimum” displays the percentage of basic items in place for the entity with the lowest percentage of basic items in place. “Average”

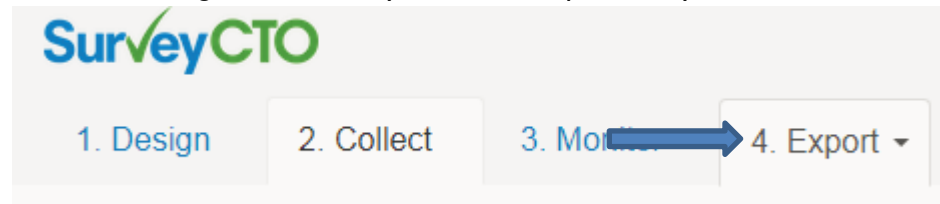
displays the *difference* between the average percentage of basic items in place and the result for “Minimum” (i.e., adding the results for “Average” and “Minimum” gives the overall average for the percentage of basic items in place). “Maximum” displays the *difference* between the entity with the highest percentage of basic items in place and the result for “Average”. Results are broken down by type of facility / entity and CMM module.

Typically, users will not need to modify this sheet, but should include / exclude data in the pivot tables on either the Bar Charts worksheets or the Dashboard worksheet, if desired, for clarity of presentation.

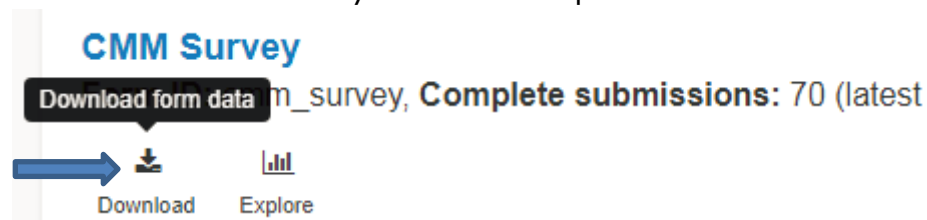
TRANSFERRING DATA FROM SURVEYCTO TO THE TEMPLATE

The first step in transferring data from SurveyCTO to the template is to download the data from the SurveyCTO website:

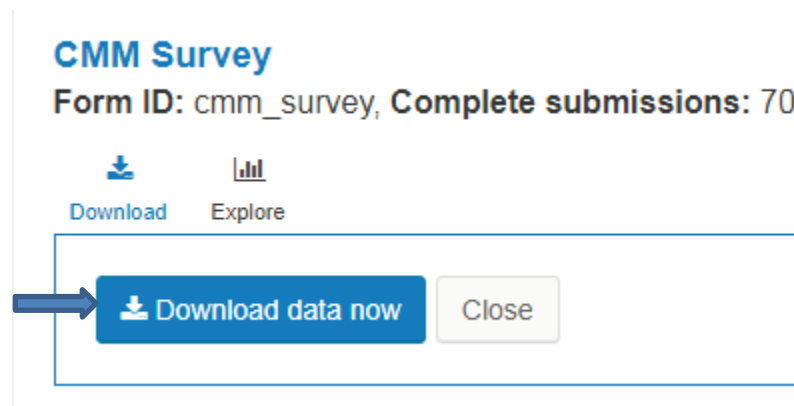
1. First, log into the SurveyCTO server specific to your assessment, and then click the export tab:



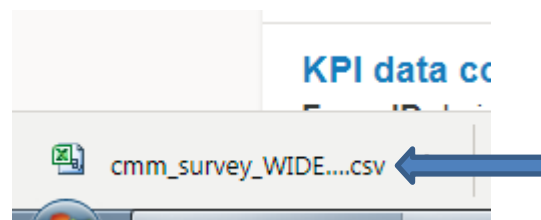
2. Find the CMM Survey section of the export tab and click the 'download' button:



3. Click the "Download Data Now" button:



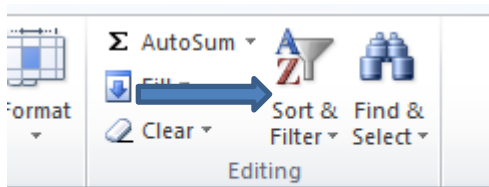
4. In the lower left-hand corner of your screen (depending on the browser), click on the downloaded form:



- The data should open in Microsoft Excel as a .csv (comma separated variable) file. First, filter the data based on the type of entity. To do this click on cell that contains the variable 'factype':

N	O
factype	
DHO	Central

- Then select the filter button on the Microsoft Excel ribbon:



- Select "Filter" on the subsequent drop down menu.
- The 'factype' cell should now look like this:

N	O
factype	faclevel
DHO	Central

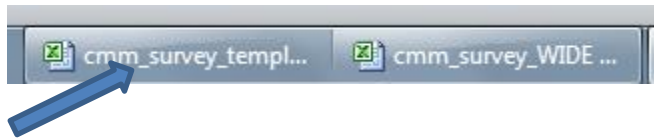
- Click on the single chevron (V-shaped arrowhead) to the right hand side of the cell

N	O
factype	faclevel
DHO	Central

- In the subsequent drop down list, select the type of facilities/entity that you want to copy into the template (note that you may first need to deselect the option to '(Select all)' before selecting the type of facility / entity desired).
- Select Cell A1.
- Select all columns and rows that have data – you should have highlighted all the cells that have data on the worksheet. Copy the selection:

BGT	BGU	BGV	BGW	BGX	BGY	BGZ	BHA	BHB	BHC	BHD	BHE	BHF	BH
WM-40	WM-40	WM-40	WM-40	WM-40	WM-40	WM-40	WM-40	WM-40	module	instanc	formde	KEY	
							1	1		uuid:4daa	1.81E+09	uuid:4daa	27d9-6
									No SOPs f	uuid:5316	1.81E+09	uuid:5316	484-4
							1		Waste seg	uuid:ccfa4	1.81E+09	uuid:ccfa4	4625-ft
							0		Have disp	uuid:0288	1.81E+09	uuid:0288	8e22-8
					1				Wastes ar	uuid:6a8f	1.81E+09	uuid:6a8f	00c-1
							1		Expired it	uuid:8e01	1.81E+09	uuid:8e01	0fb9-7
							1		There is a	uuid:9ffe	1.81E+09	uuid:9ffe	7e9c-α
					0	0	1		Facility us	uuid:269b	1.81E+09	uuid:269b	0871-2
							1		The	uuid:13e5	1.81E+09	uuid:13e5	51949-8
									This facilit	uuid:6cd4	1.81E+09	uuid:6cd4	4c3cb-9
									No SOPS c	uuid:6d03	1.81E+09	uuid:6d03	5731-8
									No	uuid:0332	1.81E+09	uuid:0332	abe6-c
										uuid:b498	1.81E+09	uuid:b498	Deed-1
						1	1	0		uuid:5b3e	1.81E+09	uuid:5b3e	18b7-4

13. Open (or select) the Capability Maturity Model Survey Analysis Template:



14. On the appropriate entry sheet (See Table I) for the type of facility / entity you have copied, select cell **B1**:

	A	B
1	Weight	
2		1

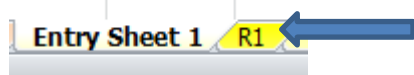
15. Paste the copied data into the template. Tip: You may want to 'wrap' or 'unwrap' text by clicking the 'Wrap Text' button in the Excel ribbon: Wrap Text

16. Next, fill in column A with the survey weights specific to each facility. Survey weights are calculated automatically in the NSCA 2.0 Sampling Template and can be pasted here if the assessment team used the Sampling Template to select the sample. If another method was used, then the assessment team will need to calculate the sample survey weights. If you are not using survey weights for your analysis, you **must** still fill in column A – Enter '1' in each cell instead of the survey weight. Every entity entered in the data entry sheet requires a number in column A, or the calculation worksheets will not work:

	A	
1	Weight	Sum
2		4 ###
3		4 ###
4		4 ###
5		4 ###
6		4 ###
7		4 ###
8		5 ###
9		5 ###
10		6 ###
11		3 ###
12		3 ###
13		2 ###
14		3 ###
15		4 ###
16		
17		
18		

Note that cells in Column A are shaded pale yellow up to the maximum number of entities that are allowed for the particular Entry Sheet. Not all cells with shading need to have a Weight entered; only those that have data in subsequent columns. In the example above, rows 2 through 15 have data entered; thus, Weights are entered for cells A2 through A15, but no data needs to be entered in cells A16 and below (even though they are colored pale yellow).

17. Select the appropriate Intermediate Results worksheet:



18. Enter the appropriate data in Cells B1 and B2 on the intermediate results worksheet:

	A	B	C
1	Level:	SDP	
2	Name:	SDPs combined	

19. Save the Excel workbook – use a different name than what it was previously saved as (if you have not already done so). Note also prior to pasting or after completing these steps, the data need to be cleaned (as described in the **Annex 15 of** the National Supply Chain Assessment 2.0 Implementation Guide) for the results to be valid.
20. Repeat steps 9 through 19 for each type of facility/entity, ensuring that each time you enter the data in a different Entry Sheet.

GUIDANCE FOR MODIFYING THE TEMPLATE TO SUIT THE PARTICULARS OF EACH INDIVIDUAL ASSESSMENT

While the template will automatically calculate and produce results based on the steps outlined in the previous sections, some additional steps are needed in order for all of the data to be relevant and to enable presentation of the results.

UPDATING PIVOT TABLES

While the workbook automatically calculates results (provided that the calculation is turned to automatic), some aspects of the template do not automatically update when new data are entered.

- a. On the “Dashboard” worksheet there is a pivot table in columns AK to AL, which provides data for the bar chart representing the percentage of basic items in place by module and type of facility / entity. Click anywhere in the data for these columns:

	AJ	AK	AL	AM	AN	AO
	Percentage of Basic Items in place: Graph					
1	Average of Result					
1	Column Labels					
1	Row Labels					
1	Forecasting and Supply Planning					
1	District Warehouse					
1	Referral Hospital 1					
1	Referral Hospital 2					
1	Intermediate warehouse					
1	Intermediate 2					
1	Central warehouse 1					
1	Central Warehouse 2					
1	MOH 1					
2	MOH 2					
2	MOH 3					
2	MOH 4					
2	Distribution					
2	District Warehouse					
2	Intermediate warehouse					
2	Intermediate 2					

Then ‘right click’ your mouse and select refresh.

- b. A similar process is needed for the two graphs on the “Bar Charts” worksheet – select the data tables for the graphs, right click, and then click ‘refresh’.

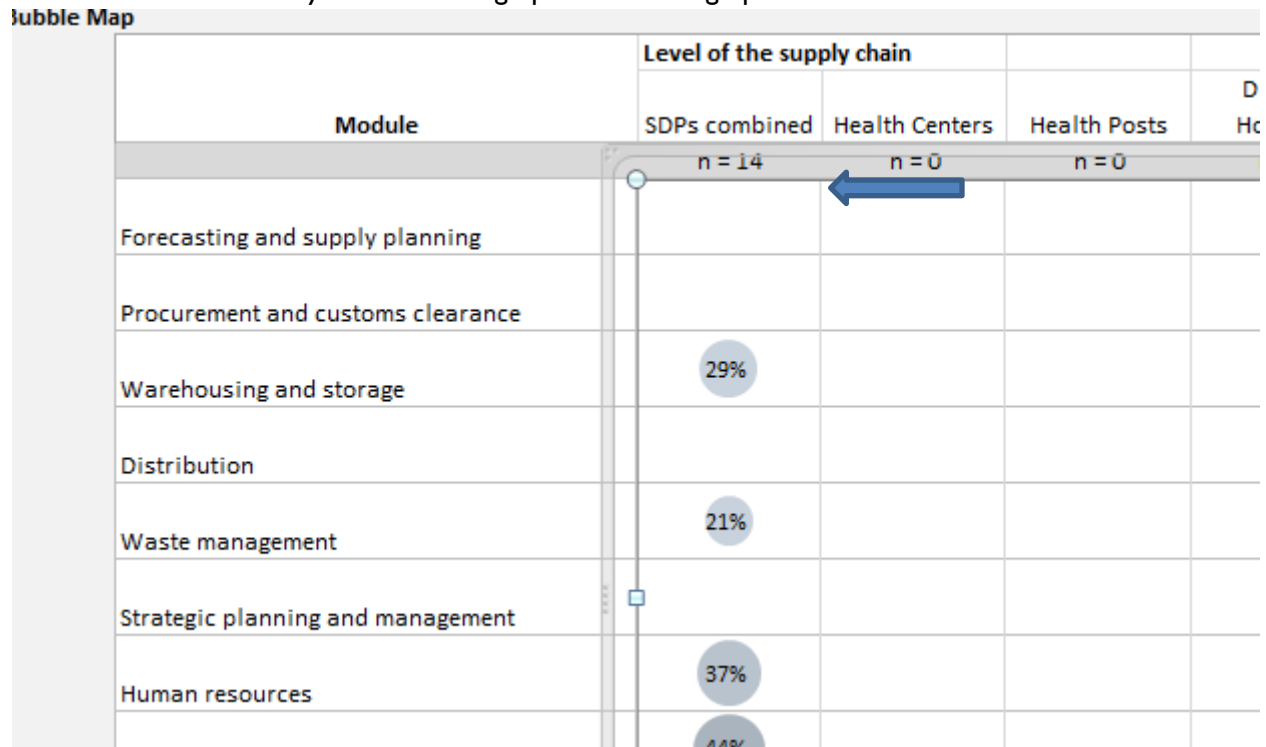
Once the pivot tables have been refreshed, the data presented should reflect the data you have entered.

ADJUST THE NUMBER OF COLUMNS

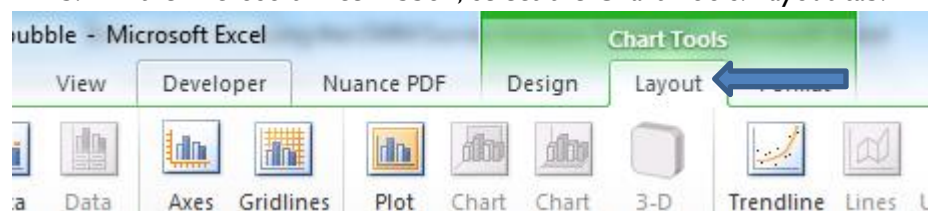
The worksheets 'Dashboard', 'Summary Table', 'Descriptive (Numbers)', 'Descriptive (Graphs)', and 'QbyQ' by default present data in 15 columns – one for each of the data entry, calculation, and intermediate results combinations. However, an assessment may have fewer than 15 separate types of facilities / entities included in the assessment, and displaying all 15 columns may be cumbersome or distracting. In those situations, the extra columns should be 'hidden'.

On the 'Dashboard' worksheet, first adjust the bubble graph heat map:

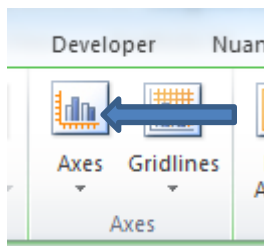
- Click on the body of the bubble graph so that the graph is selected:



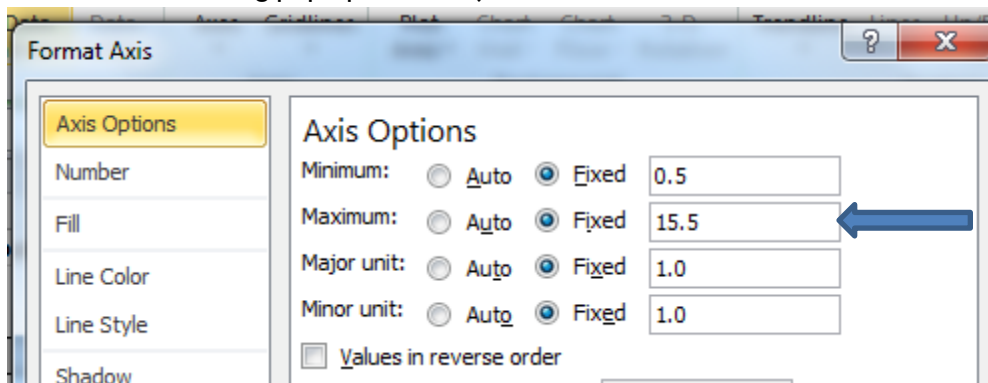
- In the Microsoft Excel ribbon, select the Chart Tools: Layout tab:



- In the Excel Ribbon, click the "Axes" Button:



- d. Under Axis Title, select “Primary Horizontal Axis” option and then select “More Primary Horizontal Axis Options”
- e. In the ensuing pop-up menu, adjust the number listed under ‘Maximum’:



The number should be 0.5 more than the number of types of facilities / entities included in the assessment. For example, if you have 10 entities, then the maximum should be 10.5.

- f. Click the ‘Close’ button at the bottom of the pop-up menu. You may still need to resize the graph by dragging at its edges, but do this only after hiding the columns (as described next). Then, you should adjust the number of columns visible in the ‘Dashboard’ (this step will be repeated across the other sheets: ‘Summary Table’, ‘Descriptive (Numbers)’, ‘Descriptive (Graphs)’, and ‘QbyQ’)
- a. Select the entire columns that you do not want to see by clicking on the gray letter part of one column and then dragging across the columns to include all of the columns you do not want to see:

	M	N	O	P	Q	R
al	Central					
se 1	Warehouse 2	MOH 1	MOH 2	MOH 3	MOH 4	
0	n = 0	n = 0	n = 0	n = 0	n = 0	

- b. Right click on the gray area with the letter, and then select “Hide”.

TRANSFERRING TO PRESENTATION FORMATS OR WORD PROCESSING SOFTWARE

Some of the tables and figures are very large, and not easily transferable to other software in a way that preserves and/or optimizes the presentation of the results. Solutions to these issues include:

1. Format the output in Excel to satisfaction/needs, and then copy and paste 'as a picture' in other software.
2. Limit the amount of data in a single graph. For example, the Spider / Radial graphs on the dashboard should likely present no more than 4 or 5 different types of facilities / entities – assessment teams may choose which facilities / entities to include in any presentation. Similarly heat maps may exclude central or national level entities to present only lower level entities for comparison.