final report

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Value Adding Capability Tool Manual

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1 Version control

Standard version numbering will be used to clearly identify all versions of this document.

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Copyright

2 Approvals

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3 Overview of Capability Tool

The Value Adding Capability Tool is a means for a company to determine "where we want to be" in relation to "where we currently are". The purpose of the Capability Tool is to map these two key elements to one another in order to determine the gaps and over capacities. A gap highlights where a company's capabilities are not up to where their business strategies are while an over capability highlights that a company has capability in areas where they have little business strategy.

The end result of this analysis may be to either set a path of honing up certain capabilities in order to meet their business strategies. It may also be to rethink their business strategies to better utilise the capabilities they already have in place.

3.1 Logical Data Structure

The 2 basic elements of the Value Adding Capability Tool are 'Business Strategies' and 'Capabilities'. A Business Strategy simply defines "where we want to be" while a Capability defines "where we currently are".

3.1.1 Overall Structure and Groupings

As can be seen in **Figure 1**, these 2 elements sit at Level 2 of the logical data structure. Business Strategies are then grouped together into various 'Business Strategy Groups' and Capabilities are grouped together into various 'Capability Groups' at level 1 of the logical data diagram. Capability Groups are then grouped up at a level higher again into 'Parent Capability Groups'.

In one sense, these groups are simply what the name suggest, a way of grouping a vast array of items into a logical set. Capabilities are grouped at a higher level than Business Strategies simply because there are many more Capabilities than there are Business Strategies. However the Groups form a more vital role than that as it is the group that is used in the mapping (outlined below). Most of the reporting is done at a 'Business Strategy Group' to 'Capability Group' level. Therefore how each group is setup and which Business Strategies or Capabilities make up that group is quite important.

Each Business Strategy and Capability is also assigned a weighting in relation to how adequately it defines the group it is a part of. Effectively a single Business Strategy and Capability could be part of more than one group so while the questions (defined below) are only answered once, their results can form the part of several reporting elements. This is a more complex model however and may be better set up at a later stage.

3.1.2 Questions

To determine a company's Business Strategies and Capabilities, a set of questions are asked. Each question links directly to a single Capability or Business Strategy and is set with a relevance score from 0 to 100 to explain how adequately the question defines the Capability or Business Strategy.

Each Business Strategy and Capability will have several associated questions, each with varying relevance scores depending on how relevant the question is the Business Strategy or Capability. The setup of these questions and relevance scores is one of the key components of the entire system as these determine the resultant score for each Business Strategy and Capability. These scores then roll up the Business Strategy Groups and Capability Groups where most of the reporting is done.

3.1.3 Capability Mapping

Another vital element of the system is the mapping between Business Strategy Groups to Capability Groups. A single Business Strategy Group maps to multiple Capability Groups. The example below shows that if the Business Strategies of a company dictate that they need a high ‘Market / Value Chain’ Business Strategy score, they will need to have high Capability Group scores for ‘Competitor Analysis’, ‘Market Intelligence / Characteristics’ etc.

The Capability Groups mapped to the Business Strategy are done so without any weighting meaning that a company may perform extremely well at several of the Capability Groups and only mediocre at the rest and still show up as being Capable in relation to that area of Business Strategy. These scores are obviously not an exact science and are only meant to highlight areas which need further investigation. If a company reported as under capable in relation to a particular business strategy element, they would obviously drill down further on this element first. A more thorough analysis would mean they drill down on every element regardless of how they scored at an upper level.

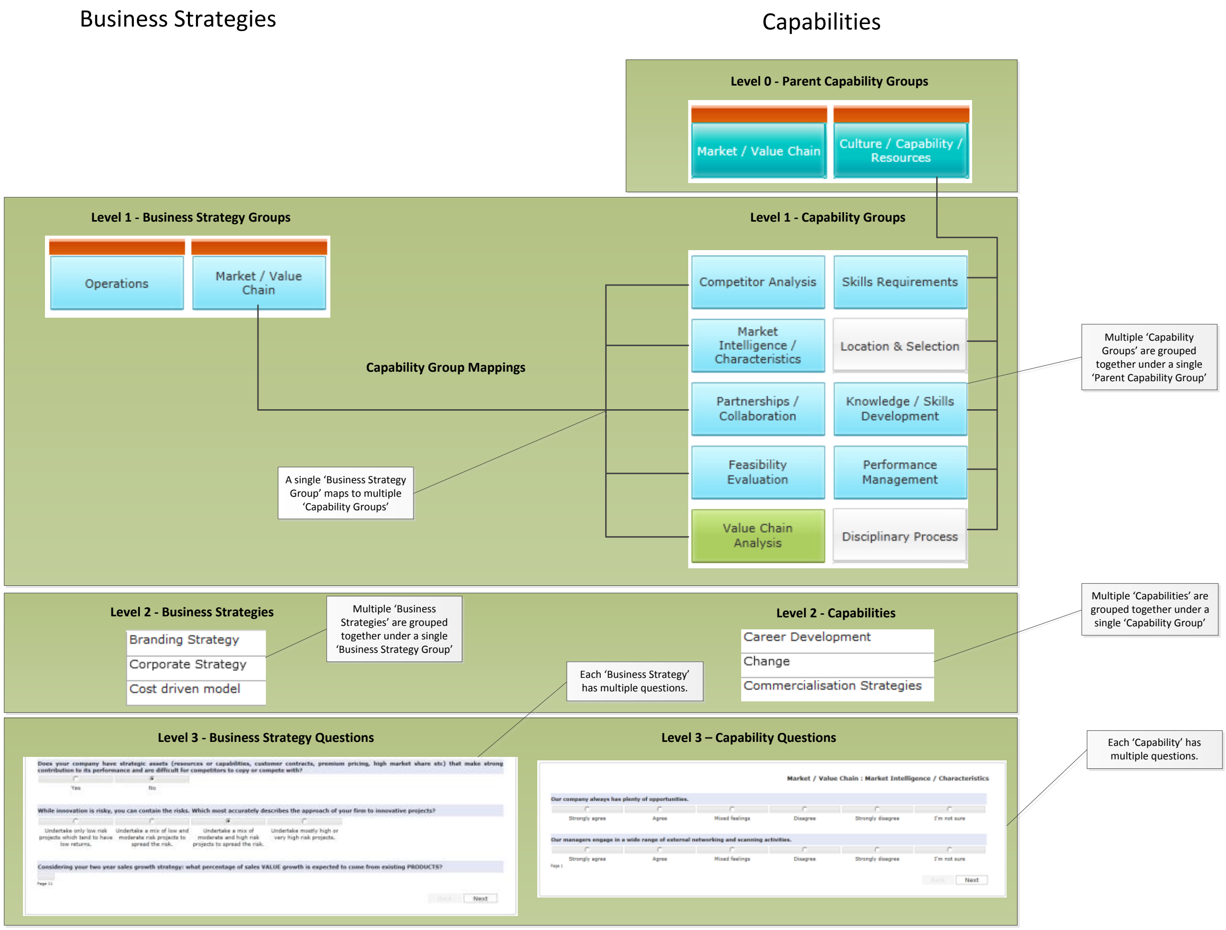


Figure 1 – Logical Data Structure Diagram

3.1.4 Other Logical Elements

3.1.4.1 Source Material

Source material is primarily a library of documents and links which form the “Knowledge Base” portion of the web site. However, source material is also used as a descriptor for questions and news elements on the home page.

Each piece of source material is related to one or more capabilities. As well as being a tool to help narrow down the search criteria in the Knowledge Base, it forms a key source of the “skilling up” a company will embark on following the results of the Capability analysis.

3.1.4.2 Companies

Each company who either performs a capability assessment or provides source material will be set up in the system. Companies performing capability assessments will also have their key staff associated with them in the system – key staff being those who will perform the Self Assessment. For capability assessment purposes, this provides the ability to report at an individual or overall company level. Self Assessment results are also stored period to period (known as Response Instances) allowing comparisons between periods both at a company and individual staff level.

For companies that provide source material as well as complete self assessments, a capacity exists for self rating of source material – i.e. A company who provide source material relating to a particular capability who also score highly in that capability will attract a higher relevance score for that material. While this capacity is not currently within the system, the data will be able to be stored in such a way as to enable it in the future. This design is in line with the thought of a self building, self sustaining system.

3.2 User Interface

The Value Adding Capability tool user interface has 3 key elements:

- Knowledge Base
- Self Assessment
- My Company Summary

Each of these elements is uniquely contained in itself while at the same time being intrinsically linked and therefore influencing the other elements.

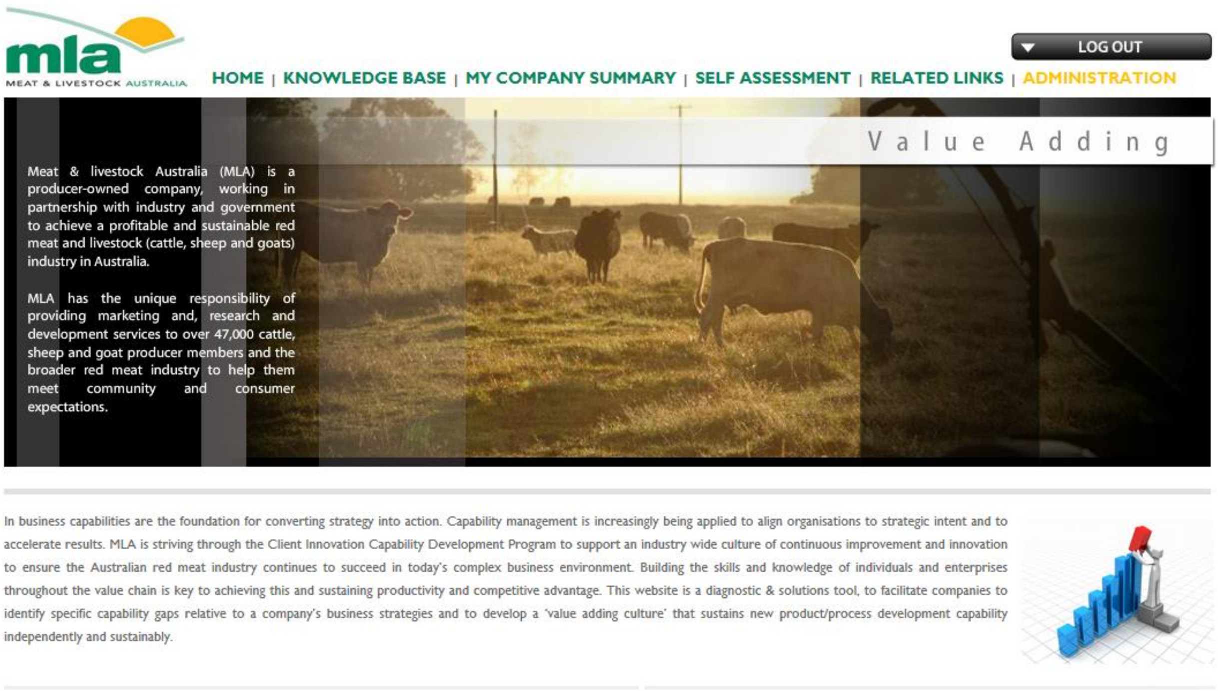


Figure 2 – User Interface Elements

3.2.1 Knowledge Base

The Knowledge Base is a library of documents, manuals and hyperlinks relevant to the Value Adding sector. This is not meant to be a "Google" type search engine spanning millions of documents attempting to find the most relevant. Rather, the Knowledge Base has been carefully stocked with documents, indexed and rated so as to provide the searcher with a handful of documents uniquely relevant their Value Adding search criteria. In fact many of the documents found here will not be available to the general public accessible by public search engines.

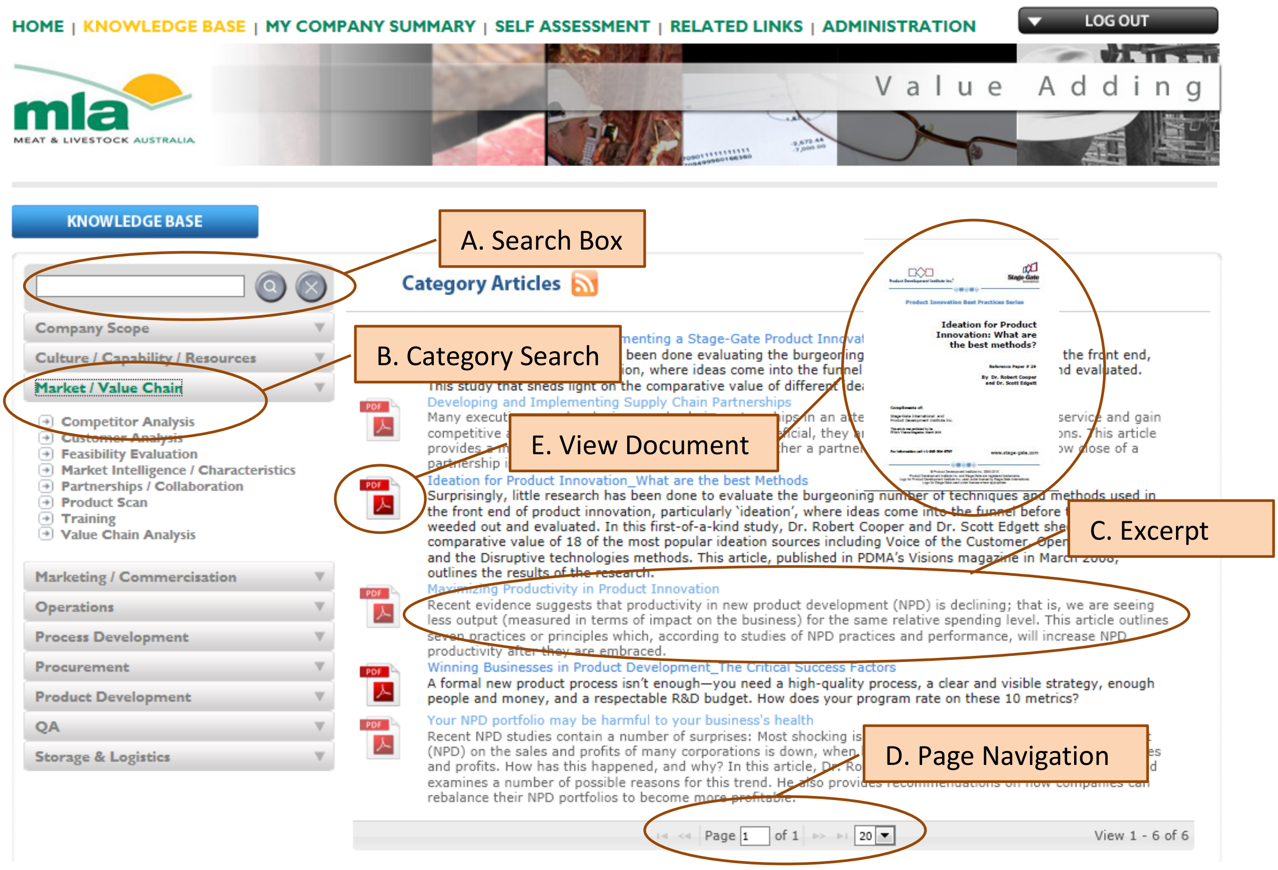


Figure 3 – Knowledge Base

The functionality of the Knowledge Base page, as seen in **Figure 3** is:

A. Search Box
   a. This is a free text search. Simply type in a key word and either hit the enter key or click the magnifying glass. This will search across all the key words associated with the document, not across the entire document content.
   b. To clear the search, click the X button.
   c. If no categories are selected (see step B), the search is across all categories. If a category is selected, the search will be limited to within the selected category.

B. Category Search
    a. To limit the search results to a particular category, simply click on the grey label representing the category of interest.
    b. To further limit the search results, click on the sub category expanded out underneath the main category
    c. To further limit the search results, use the search box as outlined in step A
C. Excerpt
    a. The list of documents returned by the search results has an excerpt associated with it. This is a brief paragraph outlining the document content.
D. Page Navigation
    a. If more than one page of results is returned, simply click the next and back arrows to navigate between pages
E. View Document
    a. To view a document, simply click on the icon to the left of the text. This will open up the document in a separate window. Note that you will need the appropriate program to open the document. The document type will be highlighted by the icon e.g. PDF, PowerPoint etc.

3.2.2 Self Assessment

The self assessment is a set of questionnaires designed to gauge both the business strategies your company has adopted as well as the capabilities already existing in your company. Unlike an examination which is aimed at ranking your results against others to see where you rate, the self assessment is a “self-help” tool. Its purpose is to help map “where you want to be” to “where you currently are” in order to identify both gaps as well as over capacities. The questionnaires should be approached in this manner in order to get the most out of the tool.

The Value Adding Capability Tool consists of two parts, the self assessment summary page, as seen in **Figure 4** and the questionnaire, as seen in **Figure 5**.

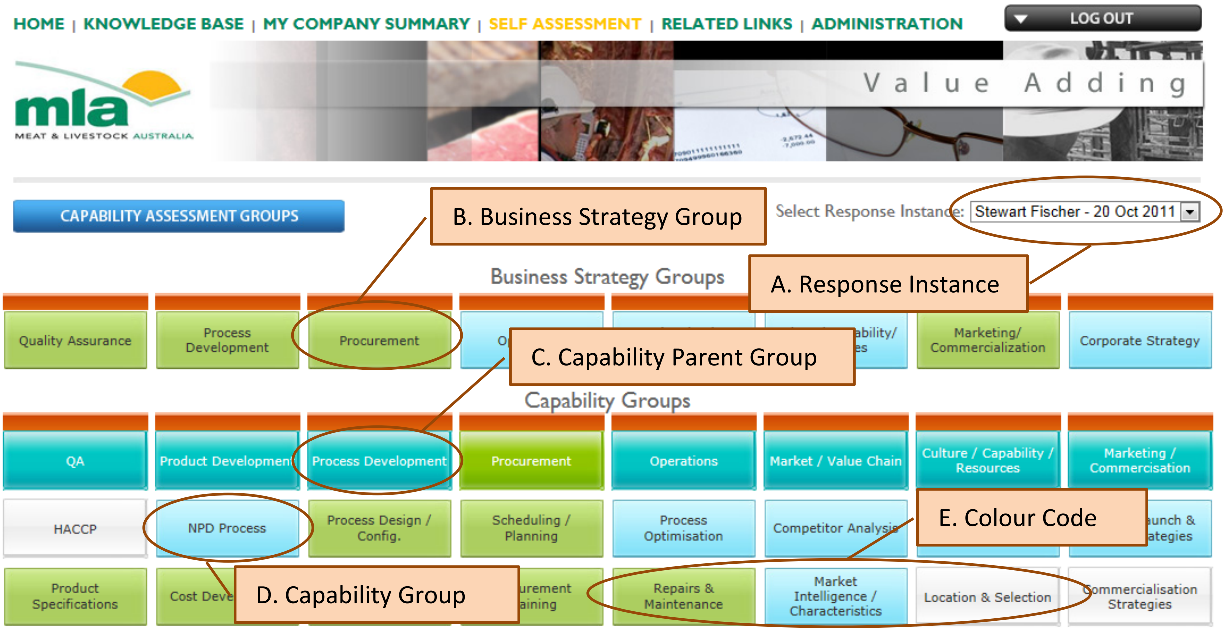


Figure 4 – Self Assessment Summary

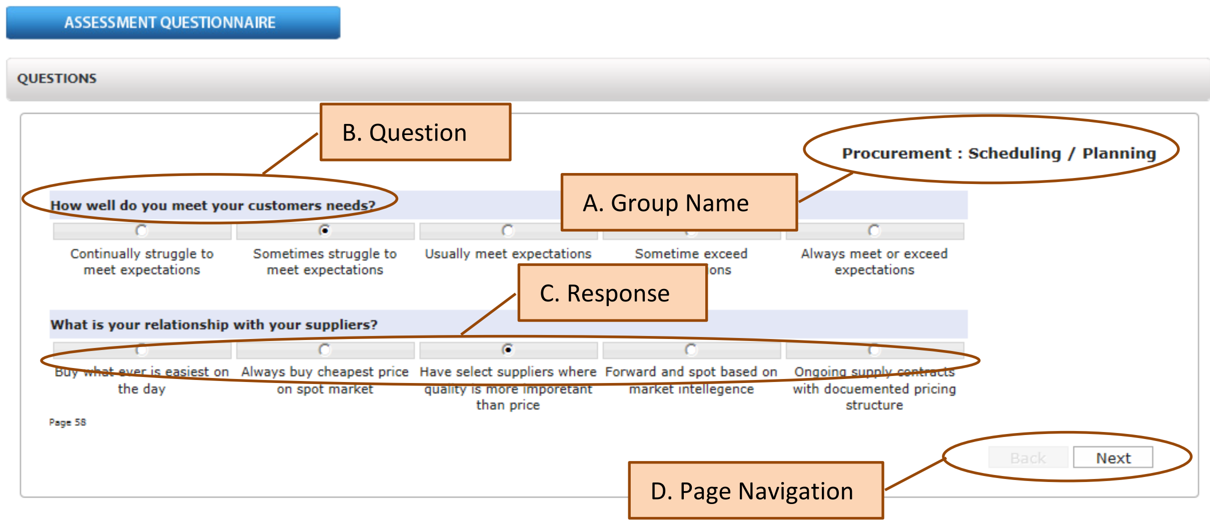


Figure 5 – Self Assessment Questionnaire

The Self Assessment summary page, as seen in **Figure 4**, has the following features:

A. Response Instance
    a. A 'Response Instance' is a questionnaire which has been completed by a user at a point in time. Companies will choose a set period of time – 3, 6 or 12 months to redo the questionnaire. This is called a new Response Instance. Users can return to see their answers to previous Response Instances by selecting the appropriate one from the drop down menu and then navigating to each section.
    b. The Response Instance selected by default will be the latest one and will be the one most appropriate to use.
B. Business Strategy Group
    a. The relationships of Business Strategies, Capabilities and their groups are defined in detail in Section 3.1. You can navigate to the questionnaire associated with each Business Strategy Group by clicking on the appropriate Box.
C. Capability Parent Group
    a. The relationships of Business Strategies, Capabilities and their groups are defined in detail in Section 3.1. These are group headings only and do not navigate to a questionnaire.
D. Capability Group
    a. The relationships of Business Strategies, Capabilities and their groups are defined in detail in Section 3.1. You can navigate to the questionnaire associated with each Capability Group by clicking on the appropriate Box.
E. Colour Code
    a. The colour of each box indicates the status of its associated questionnaire:
        i. Grey – No questions associated with group
        ii. Green – All questions in the associated questionnaire have been completed successfully
        iii. Blue – Some or all of the questions in the associated questionnaire have not been answered yet

The Self Assessment questionnaire page, as seen in **Figure 5**, has the following features:

A. Group Name
    a. The name of the Capability Group or Business Strategy Group which this questionnaire relates to.
B. Question
    a. The question which needs to be answered.
    b. Some questions, or group of questions will be preceded with some additional explanatory text as seen in **Figure 6** – A.
C. Response
    a. This example is a radio button response. This means that you select the appropriate answer by clicking one of the radio buttons.
    b. Other response types are available such as drop down menus, free text or numeric values as seen in **Figure 6** – B.

D. Page Navigation

a. After finishing each page, click the next button to answer the next page of the questionnaire. After page 1, the back button will also be available enabling you to return and re-answer questions.

b. When you come to the last page of the questionnaire, the 'Next' button will be replaced with a 'Submit' button as seen in **Figure 7** – A. Once clicking save, you will be presented with a popup dialogue box as seen in **Figure 7** – B. to confirm the questionnaire has been saved correctly. You can then click the 'Return to Self Assessment' link, as seen in **Figure 7** – C, to return to the Self Assessment Groups page.

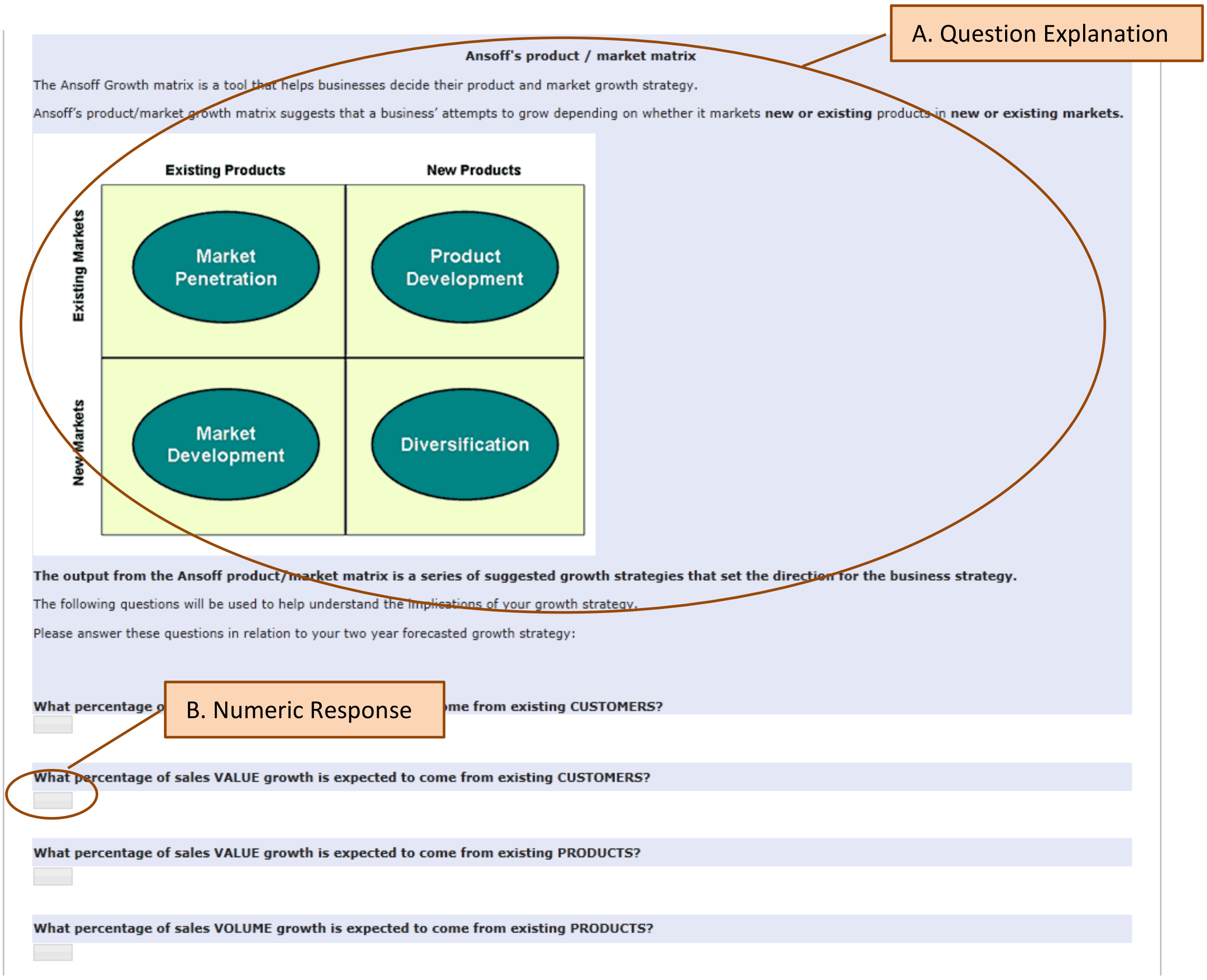


Figure 6 – Questionnaire Features

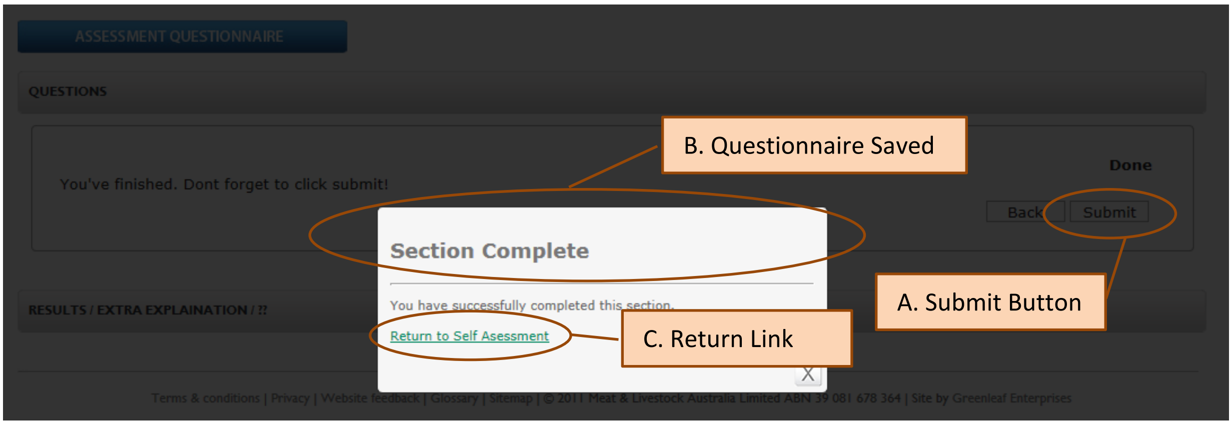


Figure 7 – Questionnaire Final Page

3.2.3 My Company Summary

"My Company Summary" is the summary report of the Value Adding Capability Tool. It calculates the Business Strategy score or "Benchmark" and compares it to the score of its mapped capabilities. Each of the 3 elements on this page shows the same thing but from a different perspective.

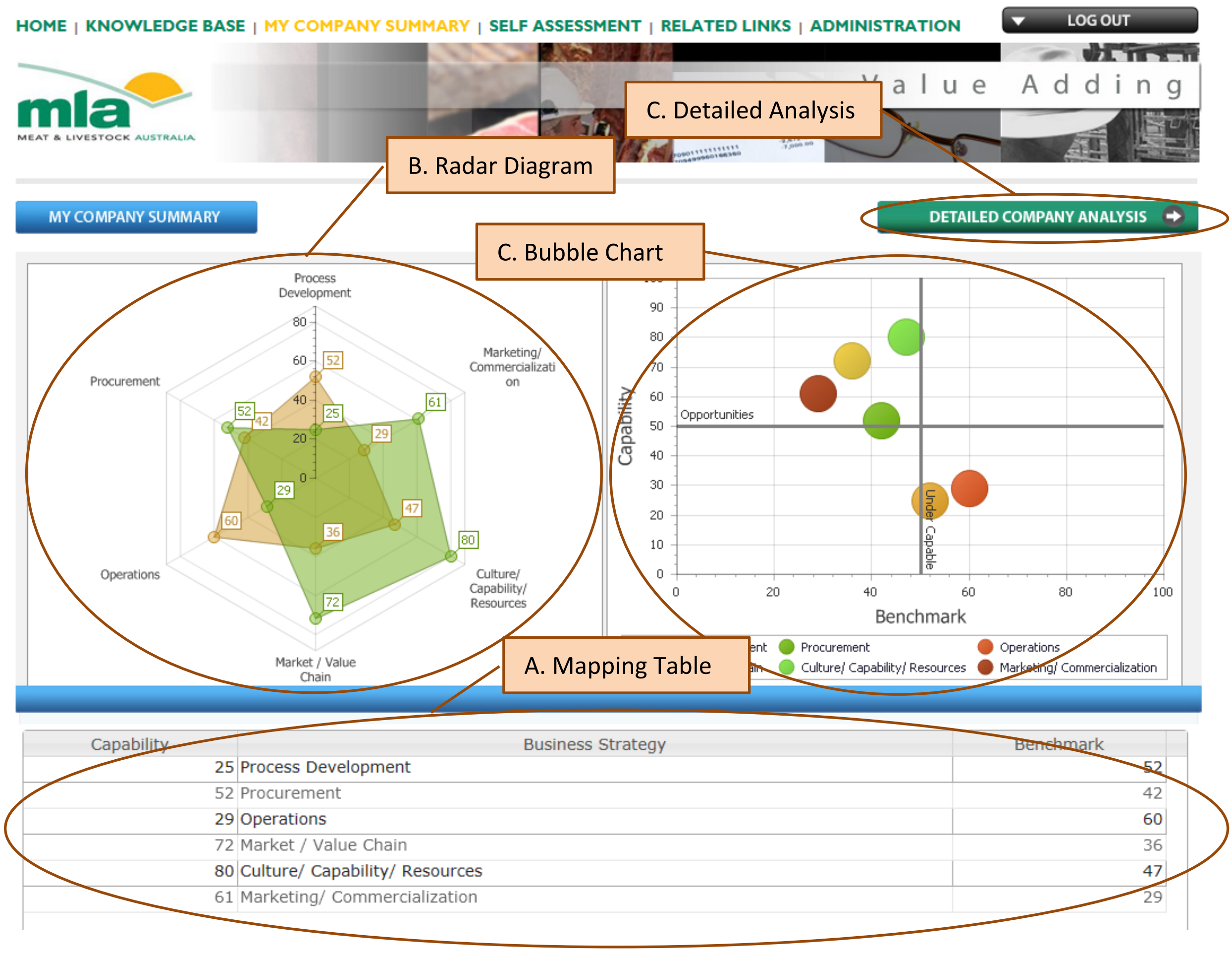


Figure 8 – Company Summary

3.2.3.1 A. Mapping Table

The mapping table sets out the Benchmark to Capability comparisons in tabular form. The details for how each of these elements is calculated are outlined in section 3.3.3. In summary, the Benchmark is a weighted average of the results of each Business Strategy Group self assessment. Capability scores are calculated from the results of each Capability Group self assessment.

A weighted average is then calculated of the capabilities which are mapped to each Business Strategy Group. This is the figure marked as “Capability” in the Mapping Table. This is a measurement of how much capability exists in the company in comparison to the business strategy or benchmark they have set themselves.

3.2.3.2 B. Radar Diagram

The radar diagram highlights pictorially the gaps of either over or under capacity. Wherever red-brown can be seen, it highlights that the capabilities within the company are not up to the benchmark they have set. Wherever green can be seen, it highlights that a company has more capability than the benchmark they have set.

Decisions made from this analysis could go one of two ways. For example, from the radar diagram represented in **Figure 8 – Company Summary**, a company may look at their operations and decide to hire an operations manager to increase their capability in that area. They could however also decide that the benchmarks they have set themselves are unrealistic for where they are currently at as a company. Similarly in regards to the area of Market / Value Chain, this company may decide that with the amount of capability that exists in the company that they should focus more heavily on this area thereby setting themselves higher benchmarks. Whereas in the area of Marketing / Commercialization, they may decide that the resources being poured into this area could better be put somewhere else thereby decreasing their capabilities more in line with their benchmarks.

3.2.3.3 C. Bubble Chart

The Bubble Chart is broken up into four distinct sections:

A. Opportunities	B. In line with Benchmarks
C. In line with Benchmarks	D. Under Capabilities

A. Represents the list of benchmarks where capability exceeds the benchmarks they have set and therefore presents a list of opportunities
B. Represent areas where a company has high expectations in terms of their benchmarks and are meeting those expectations in terms of their capabilities
C. Represents areas where a company has low expectations in terms of their benchmarks and are meeting those expectations in terms of their capabilities
D. Represents the list of benchmarks where capability decides the benchmarks they have set and therefore presents a list of areas which need attention

3.2.3.4 C. Detailed Analysis

When areas are highlighted as being over or under capable, they can be drilled down via the Detailed Analysis. The detailed analysis breaks down to each of the Capability Groups which are mapped to the Business Strategy Benchmark.

The page is made up of a table of entries to the left and a radar diagram on the right. The radar diagram consists of the benchmark score mapped equidistant around the centre of the diagram and each capability group mapped on top of that.

The examples identified in section 3.2.3.2 suggested that a company may decide to reduce marketing efforts and focus on Market / Value Chain. However from the diagram shown in **Figure 9 – Detailed Analysis**, it may be further decided to only decrease efforts in part of the Market / Value Chain group. For example, it may be decided to decrease efforts in Partnerships and Market Intelligence but keep Value Chain Analysis efforts as is since the benchmark for this area will likely increase in line with the changes to Market / Value Chain. It may also be decided that while marketing efforts need to be reduced in some areas, other areas such as Feasibility Evaluation still need some attention.

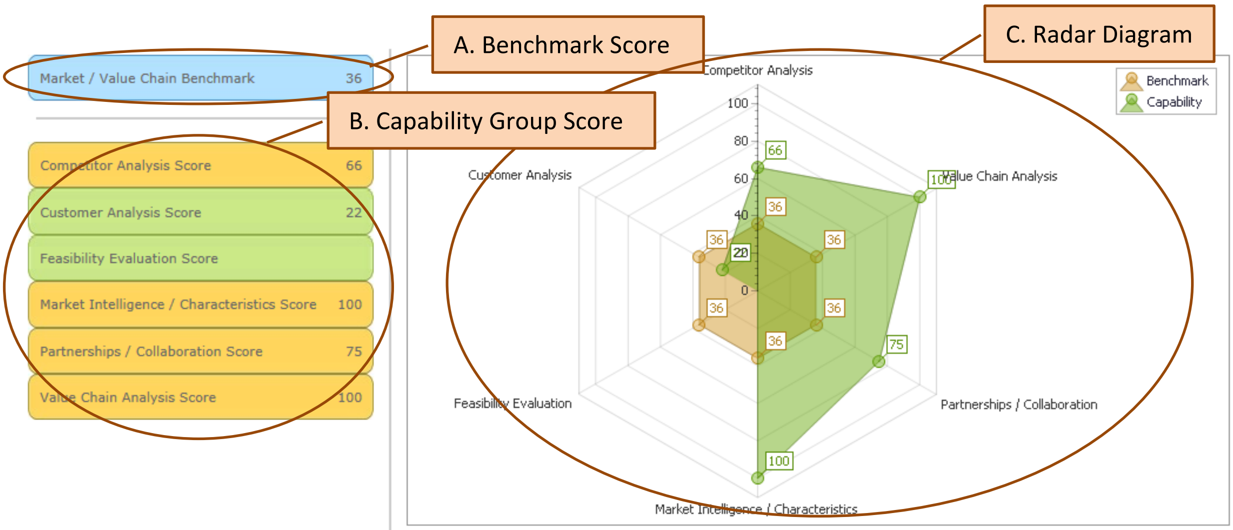


Figure 9 – Detailed Analysis

3.3 Physical Data Structure

This section outlines the Database structure and calculations used in the reporting. It further details the logical data structure. For a higher level summary, please refer to section 3.1.

3.3.1 Business Strategies, Capabilities and Groups

3.3.1.1 3 Tiered Model

Capabilities are defined in a 3-tiered model with each tier following a one to many structure:

- Capability Parent Groups – Defined in the CapabilityGroups table with no Parent CapabilityGroup
- Capability Groups - Defined in the CapabilityGroups table with a Parent CapabilityGroup defined
- Capabilities – Defined in the Capabilities table and linked to Capability Groups via the CapabilityGroupCapabilities table. This allows for a single capability to be linked to multiple capability groups. For this release, this follows a simpler one to one model. The interface is set to restrict this while the database structure has been designed to allow this functionality to be extended at a later stage.

The CapabilityGroups table is designed in such a way as to allow a many tiered approach simply making the parent Capability Group a child of another Capability Group. In this release, the interface has been restricted to allow only 2 levels while the database structure has been designed to allow this functionality to be extended at a later stage.

3.3.1.2 Company Scope Capabilities (Or Business Strategies)

One of the key reporting outcomes for a company is to be able to ascertain “where we want to be” vs “where we are”. The “where we want to be” elements have been defined as Business Strategies while the “where we are” elements have been defined as Capabilities.

A bit field, CompanyScope in the CapabilityGroups and Capabilities tables define which capability type the elements fits in - CompanyScope is set to true denotes a Business Strategy vs a Capability. From a user experience perspective, “where we want to be” is quite uniquely different to “where we are”. However from a database perspective, the calculation and presentation model is quite similar.

The company scope capability model follows a 2-tiered structure with a single Capability Group (with no parents) and an associated set of Capabilities. The interface is set to restrict this while the database structure has been designed to allow this functionality to be extended at a later stage.

3.3.1.3 Capability Group Mappings

Capability Group Mappings allow Business Strategy Groups to be mapped to Capability Groups. This is for the purpose of reporting, in particular to map “where we want to be” to “where we are”. These are defined as a one to many relationship from Business Strategy Groups to Capability Groups i.e. One Business Strategy Group can relate to many Capability Groups

3.3.2 Self Assessment Questionnaire

To determine the how capable a company wants to be (Business Strategies) and how capable it is (capabilities), a set of questions are to be answered by the user, each of which have an associated score.

3.3.2.1 Response Instances

For each company contact who has been given access to the system, a questionnaire (or response instance) can be created for them. At varying intervals, subsequent response instances can be assigned to them. The results of each questionnaire are stored enabling comparisons of results between time periods.

When a user logs onto the system, the questionnaire they will be presented with is the latest one. They can also access their results to their own previous questionnaires.

3.3.3 Reporting Calculations

The reporting is based on the responses to questions. Each question has a score, they are summed up to capabilities and then to capability groups. These scores are then able to be compared between Business Strategy groups and capability groups.

3.3.3.1 Questions

Response Types

Each question has a response type. Each of these response types has an associated score.

- Text, Memo – These are for information only and have no impact on scores
- Yes / No, Check Box – These work on a percentage basis where No=0% and Yes=100%
- Numeric – These questions should ideally be designed to rate from 0 to 100. In this way, they are able to be averaged together with other questions in the same capability. Questions which do not follow this standard must be treated with caution in terms of averaging within capabilities, between capabilities, across company and non-company scope capability groups etc.
- Drop Down, Multiple Choice – A score can be assigned to each of the possible options. Each option should be given a score between 0 and 100 for the same reasons as stated above for numeric questions.
- Question Groups – These form a convenient method if grouping a set of questions together. They present to the user as a single question which allow multiple responses. The question group is able to have a report type assigned such as bar or pie – these group the responses for each question by the group.

Question response scales

In order for any weighted average or comparisons to be made, we need to ensure that question response options follow the same scales. Zero to 100 is suggested as the norm. Questions which result in a different range should be given a relevance score of zero. This will ensure they are not included in the weighted averages. They can however be used in other graphs such as the question group graphs.

Calculations

The calculation of averages within a company for a particular question is calculated as a simple average across response instances for that company within a selected period of time (selected within the user interface) ensuring only one response instance per company contact is used. Where more than one response instance exists, a 95% confidence interval will also be calculated.

Relevance Rating

Each question also has a relevance score which is a percentage value from 0 to 100 which rates how relevant the question is to the related capability. A question with a relevance score of zero is one for information gathering purposes only. The responses will be shown for the individual question but will be excluded from capability averages.

Deleting of Questions

Questions can be deleted provided they have not already been answered as part of a response instance. A response instance for the question may have been created but must be unanswered i.e. Have a null response value.

If a question has associated answers, it cannot be deleted. However it can be made inactive. If made inactive, the question will appear everywhere it has already been associated with a response instance but will not be created for any new response instances.

System Questions

A system question is one which is marked at the database level and cannot be unmarked as system via the user interface. These questions cannot be deleted or made inactive. All other details however can be changed via the user interface. They will be marked as system, thereby alerting the user to treat with care when making changes.

The use for this field currently is to mark certain questions which are used in custom graphs. The field has been made more generic than this to allow for other uses in future.

3.3.3.2 Capabilities

The capability score is calculated as a weighted average across questions according to their relevance score. An example of the score is below.

Score	Weight
12	100
10	50
25	25

(12x100 + 10x50 + 25*25) / (100+50+25) = 13.28.

Once calculated per company contact, the company capability score is calculated as a simple average across response instances for that company within a selected period of time (selected within the user interface) ensuring only one response instance per company contact is used. Where more than one response instance exists, a 95% confidence interval will also be calculated.

3.3.3.3 Capability Groups

Each capability within a Capability Group is assigned a group weighting. This is a value from 0 to 100 signifying how well the capability describes the entire capability group.

4 Reporting Elements

4.1 Capability Mapping Table

The Capability Mapping Table is a simple mapping showing the differences between each Capability Group with its weighted average and its associated Company Capability Group with its weighted average.

The comparisons obviously will only work if we are comparing apples with apples. To enable this, each question which is used in the Capability Group Weighted Averages will need to follow the same scale. It would be expected that these will follow a 0 to 100 range. Questions which result in a different range should be given a relevance score of zero. This will ensure they are not included in the weighted averages. They can however be used in other graphs such as the question group graphs.

4.2 Custom Graphs

A set of custom graphs will be created based on the ANSOFF graphs. These are based on answers to individual questions. It will be important to ensure that these questions are never deleted from the database, made inactive or changed is such a way as to skew to subsequent ANSOFF graphs. These questions have been marked as 'System Question' to help avoid this.

5 Final handover

Full testing capability has been provided to be able to access this website by MLA for a period of time after the completion of this project. Testing and refinement to the site may be required as more companies use and trial the site. Adaptation to company specific needs may be considered as a future project after commercial use of the system.

Following is the web logins for the Value Adding Capability Web tool although the passwords for existing MLA users have not changed.

http://www.greenleaf.com.au/ValueAdd/Login.aspx
A training manual is attached based on the original scope. But depending on the next steps to potentially adjust the final scope of the tool the web pages and report content may change.

Logons are as follows:

Rod Coogan:
Username = rcoogan
Password = redmeat123

Christine Pitt:
Username = cpitt
Password = redmeat123

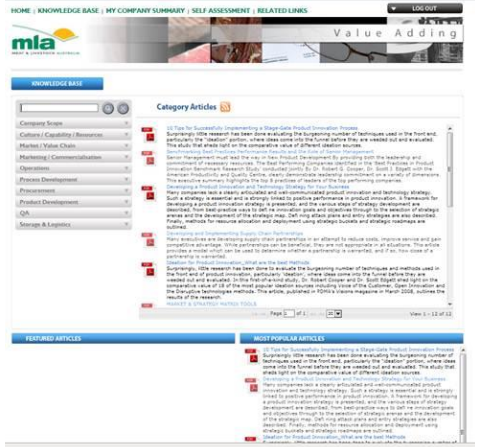
Michael Lee:
Username = mlee
Password = redmeat123

Dean Gutzke:
Username = deano
Password = redmeat123

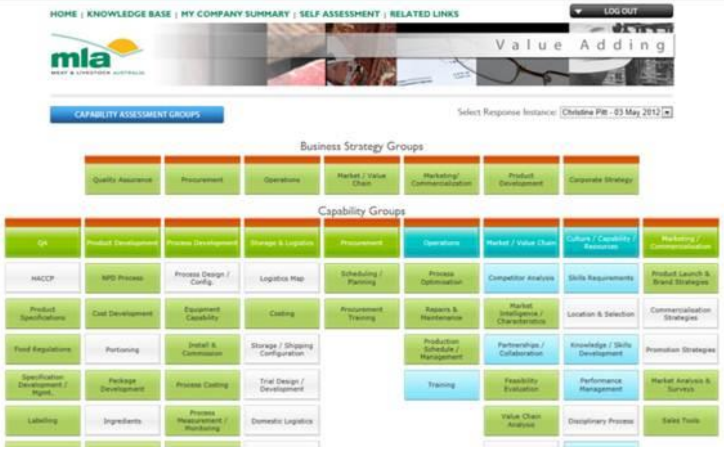
Phil Franks:
Username = pfranks
Password = redmeat123

6 Appendix – System screen shots

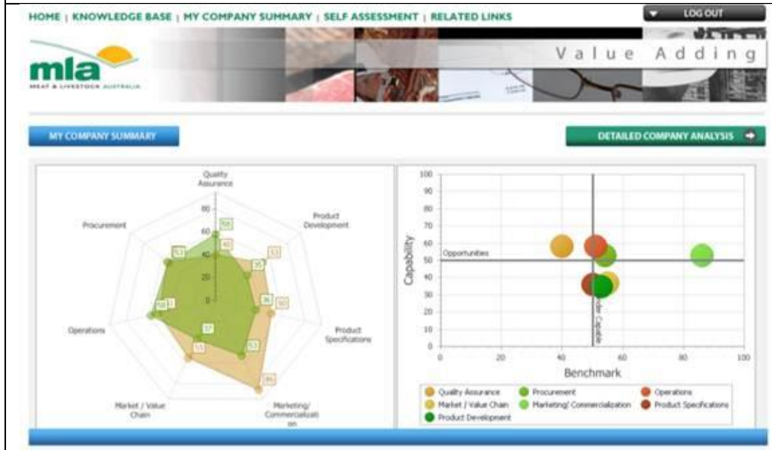
Logon Home Page



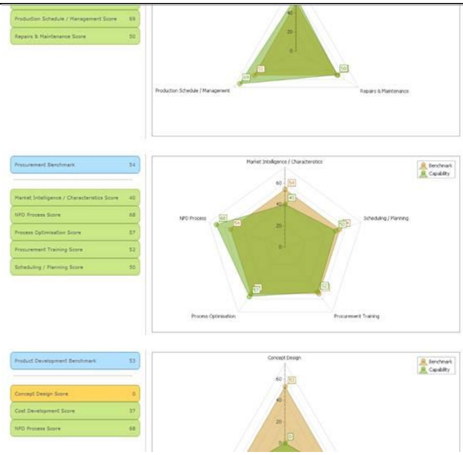
Knowledge Management



Capability Categories



Capability Assessment Summary



Capability Assessment Detailed Results