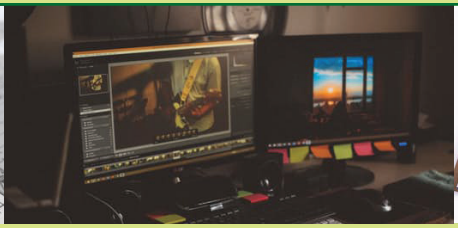
Big Data

QUICK EXPLORATORY SELF-ASSESSMENT GUIDE


PRACTICAL TOOLS FOR SELF-ASSESSMENT

Diagnose projects, initiatives, organizations, businesses and processes using accepted diagnostic standards and practices

Implement evidence-based best practice strategies aligned with overall goals

Integrate recent advances and process design strategies into practice according to best practice guidelines

Use the Self-Assessment tool Scorecard and develop a clear picture of which areas need attention

The Art of Service

Big Data
Quick Exploratory Self-Assessment Guide

This Big Data Quick Exploratory Self-Assessment Guide is an excerpt of the Complete Big Data Self-Assessment guide, read more at:

https://store.theartofservice.com/Big-Data-complete-self-assessment/

The guidance in this Self-Assessment is based on Big Data best practices and standards in business process architecture, design and quality management. The guidance is also based on the professional judgment of the individual collaborators listed in the Acknowledgments.

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About The Art of Service

The Art of Service, Business Process Architects since 2000, is dedicated to helping business achieve excellence.

Defining, designing, creating, and implementing a process to solve a business challenge or meet a business objective is the most valuable role… In EVERY company, organization and department.

Unless you're talking a one-time, single-use project within a business, there should be a process. Whether that process is managed and implemented by humans, AI, or a combination of the two, it needs to be designed by someone with a complex enough perspective to ask the right questions.

Someone capable of asking the right questions and step back and say, 'What are we really trying to accomplish here? And is there a different way to look at it?'

With The Art of Service's Business Process Architect Self-Assessments, Research, Toolkits, Education and Certifications we empower people who can do just that — whether their title is marketer, entrepreneur, manager, salesperson, consultant, Business Process Manager, executive assistant, IT Manager, CIO etc... —they are the people who rule the future. They are people who watch the process as it happens, and ask the right questions to make the process work better.

Contact us when you need any support with this Self-Assessment and any help with templates, blue-prints and examples of standard documents you might need:

http://theartofservice.com
service@theartofservice.com

Acknowledgments

This checklist was developed under the auspices of The Art of Service, chaired by Gerardus Blokdyk.

Representatives from several client companies participated in the preparation of this Self-Assessment.

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Mr Champagne can be contacted at http://matthewchampagne.com/

In addition, we are thankful for the design and printing services provided.

Complete Resources - how to access

The Complete Big Data Self-Assessment Guide includes ALL questions and Self-Assessment areas.

Included are all the Big Data Self-Assessment questions in a ready to use Excel spreadsheet, containing the self-assessment, graphs, and project RACI planning - all with examples to get you started right away. Go to:

https://store.theartofservice.com/Big-Data-complete-self-assessment/

Purpose of this Self-Assessment

This Self-Assessment has been developed to improve

understanding of the requirements and elements of Big Data, based on best practices and standards in business process architecture, design and quality management.

It is designed to allow for a rapid Self-Assessment of an organization or facility to determine how closely existing management practices and procedures correspond to the elements of the Self-Assessment.

The criteria of requirements and elements of Big Data have been rephrased in the format of a Self-Assessment questionnaire, with a seven-criterion scoring system, as explained in this document.

In this format, even with limited background knowledge of Big Data, a facility or other business manager can quickly review existing operations to determine how they measure up to the standards. This in turn can serve as the starting point of a 'gap analysis' to identify management tools or system elements that might usefully be implemented in the organization to help improve overall performance.

How to use the Self-Assessment

On the following pages are a series of questions to identify to what extent your Big Data initiative is complete in comparison to the requirements set in standards.

To facilitate answering the questions, there is a space in front of each question to enter a score on a scale of '1' to '5'.

1 Strongly Disagree

2 Disagree

3 Neutral

4 Agree

5 Strongly Agree

Read the question and rate it with the following in front of mind:

'In my belief,
the answer to this question is clearly defined'.

There are two ways in which you can choose to interpret this statement;

1. how aware are you that the answer to the question is clearly defined
2. for more in-depth analysis you can choose to gather evidence and confirm the answer to the question. This obviously will take more time, most Self-Assessment users opt for the first way to interpret the question and dig deeper later on based on the outcome of the overall Self-Assessment.

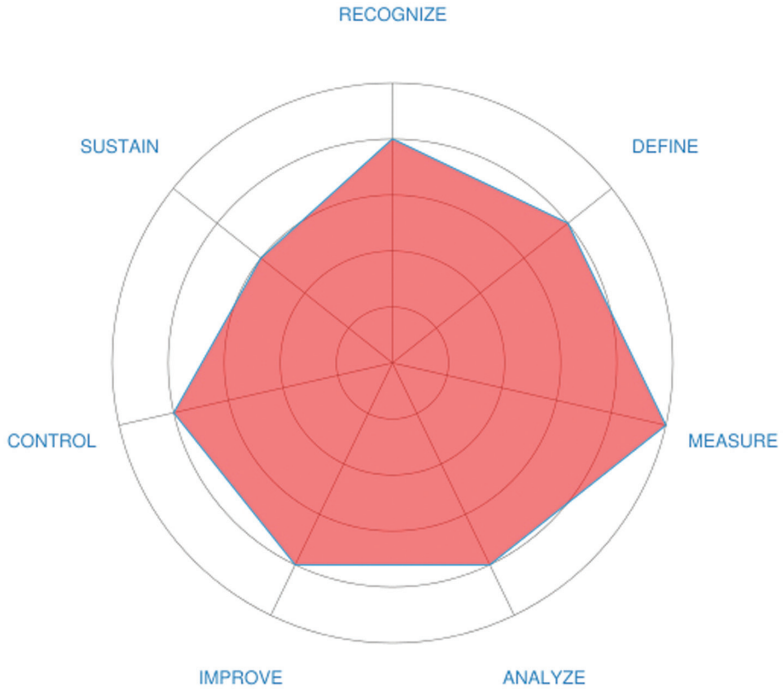
A score of '1' would mean that the answer is not clear at all, where a '5' would mean the answer is crystal clear and defined. Leave emtpy when the question is not applicable or you don't want to answer it, you can skip it without affecting your score. Write your score in the space provided.

After you have responded to all the appropriate statements in each section, compute your average score for that section, using the formula provided, and round to the nearest tenth. Then transfer to the corresponding spoke in the Big Data Scorecard on the second next page of the Self-Assessment.

Your completed Big Data Scorecard will give you a clear presentation of which Big Data areas need attention.

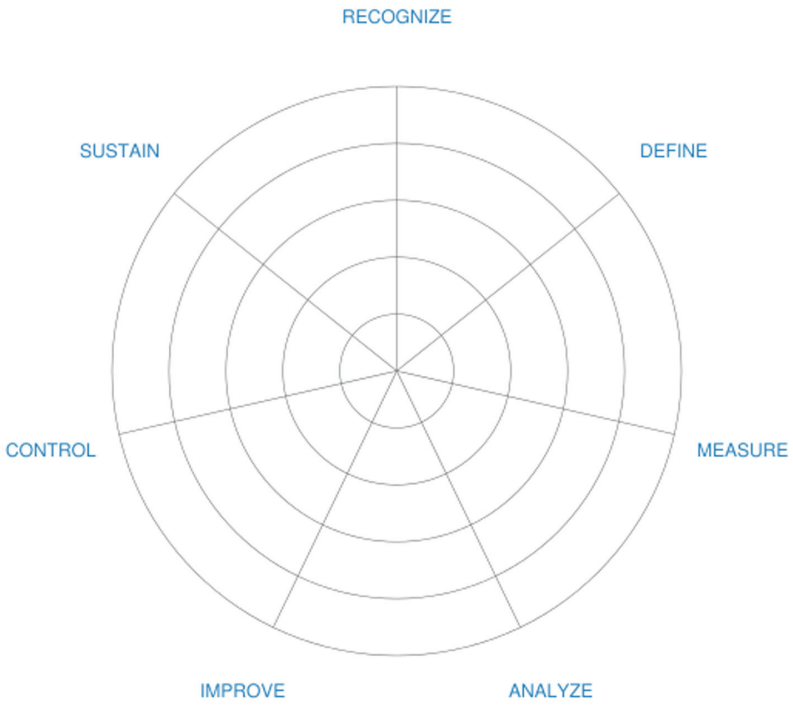
Big Data Scorecard Example

Example of how the finalized Scorecard can look like:



Big Data Scorecard

Your Scores:



BEGINNING OF THE SELF-ASSESSMENT:

SELF-ASSESSMENT SECTION START

CRITERION #1: RECOGNIZE

INTENT: Be aware of the need for change. Recognize that there is an unfavorable variation, problem or symptom.

In my belief, the answer to this question is clearly defined:

5 Strongly Agree

4 Agree

3 Neutral

2 Disagree

1 Strongly Disagree

1. Why use expensive machines when cheap ones suffice?
<--- Score

2. What s limiting the task?
<--- Score

3. What business challenges did you face?
<--- Score

4. What are we missing?
<--- Score

5. What is in Scope?
<--- Score

6. What load balancing technique should we use?
<--- Score

7. What can it be used for?
<--- Score

Add up total points for this section:
_____ = Total points for this section

Divided by: _____ (number of statements answered) = _____
Average score for this section

Transfer your score to the Big Data Index at the beginning of the Self-Assessment.

SELF-ASSESSMENT SECTION START

CRITERION #2: DEFINE:

INTENT: Formulate the business problem. Define the problem, needs and objectives.

In my belief, the answer to this question is clearly defined:

5 Strongly Agree

4 Agree

3 Neutral

2 Disagree

1 Strongly Disagree

1. What tools and roadmaps did you use for getting through the Define phase?
<--- Score

2. How was the 'as is' process map developed, reviewed, verified and validated?
<--- Score

3. Are different versions of process maps needed to account for the different types of inputs?

<--- Score

4. Is the current 'as is' process being followed? If not, what are the discrepancies?
<--- Score

5. Is the improvement team aware of the different versions of a process: what they think it is vs. what it actually is vs. what it should be vs. what it could be?
<--- Score

6. Has a high-level 'as is' process map been completed, verified and validated?
<--- Score

7. How do you keep key subject matter experts in the loop?
<--- Score

Add up total points for this section:
_____ = Total points for this section

Divided by: _____ (number of statements answered) = _____
Average score for this section

Transfer your score to the Big Data Index at the beginning of the Self-Assessment.

SELF-ASSESSMENT SECTION START

CRITERION #3: MEASURE:

INTENT: Gather the correct data.
Measure the current performance and
evolution of the situation.

In my belief, the answer to this
question is clearly defined:

5 Strongly Agree

4 Agree

3 Neutral

2 Disagree

1 Strongly Disagree

1. Is the need persistent enough to justify development costs?
<--- Score

2. Overall cost (matrix, weighting, SVD, sims)?
<--- Score

3. What is the cost of partitioning/balancing?
<--- Score

4. What is the quantifiable ROI for this solution (cost / time savings / data error minimization / etc)?
<--- Score

5. Isnt big data just another way of saying analytics?
<--- Score

6. Which core Oracle Business Intelligence or Big Data Analytics products are used in your solution?
<--- Score

7. Which departments in your organisation are involved in using data technologies and data analytics?
<--- Score

Add up total points for this section:
_____ = Total points for this section

Divided by: _____ (number of statements answered) = _____
Average score for this section

Transfer your score to the Big Data Index at the beginning of the Self-Assessment.

SELF-ASSESSMENT SECTION START

CRITERION #4: ANALYZE:

INTENT: Analyze causes, assumptions and hypotheses.

In my belief, the answer to this question is clearly defined:

5 Strongly Agree

4 Agree

3 Neutral

2 Disagree

1 Strongly Disagree

1. Does our entire organization have easy access to information required to support work processes?
<--- Score

2. What is the right technique for distributing domains across processors?
<--- Score

3. What preprocessing do we need to do?
<--- Score

4. Looking at hadoop big data in the rearview mirror - what would you have done differently after implementing a Data Lake?
<--- Score

5. Wheres the evidence that using big data intelligently will improve business performance?
<--- Score

6. What is Big Data to us?
<--- Score

7. What if the needle in the haystack happens to be a complex data structure?
<--- Score

Add up total points for this section:
_____ = Total points for this section

Divided by: _____ (number of statements answered) = _____
Average score for this section

Transfer your score to the Big Data Index at the beginning of the Self-Assessment.

SELF-ASSESSMENT SECTION START

CRITERION #5: IMPROVE:

INTENT: Develop a practical solution. Innovate, establish and test the solution and to measure the results.

In my belief, the answer to this question is clearly defined:

5 Strongly Agree

4 Agree

3 Neutral

2 Disagree

1 Strongly Disagree

1. How robust are the results?
<--- Score

2. What metrics do we use to assess the results?
<--- Score

3. Hybrid partitioning (across rows/terms and columns/documents) useful?
<--- Score

4. Solution for updating (i.e., adding documents)?
<--- Score

5. Which other Oracle products are used in your solution?
<--- Score

6. Which other Oracle Business Intelligence products are used in your solution?
<--- Score

7. Do we understand public perception of transportation service delivery at any given time?
<--- Score

Add up total points for this section:
_____ = Total points for this section

Divided by: _____ (number of statements answered) = _____
Average score for this section

Transfer your score to the Big Data Index at the beginning of the Self-Assessment.

SELF-ASSESSMENT SECTION START

CRITERION #6: CONTROL:

INTENT: Implement the practical solution. Maintain the performance and correct possible complications.

In my belief, the answer to this question is clearly defined:

5 Strongly Agree

4 Agree

3 Neutral

2 Disagree

1 Strongly Disagree

1. At which levels do you see the need for standardisation actions?
<--- Score

2. Where do you see the need for standardisation actions?
<--- Score

3. Do you see the need for actions in the area of standardisation (including both formal standards

and the promotion of/agreement on de facto standards) related to your sector?
<--- Score

4. Are there any best practices or standards for the use of Big Data solutions?
<--- Score

5. When we plan and design, how well do we capture previous experience?
<--- Score

6. Future Plans - What is the future plan to expand this solution?
<--- Score

7. Will any special training be provided for results interpretation?
<--- Score

Add up total points for this section:
_____ = Total points for this section

Divided by: _____ (number of statements answered) = _____
Average score for this section

Transfer your score to the Big Data Index at the beginning of the Self-Assessment.

CRITERION #7: SUSTAIN:

INTENT: Retain the benefits.

In my belief, the answer to this question is clearly defined:

5 Strongly Agree

4 Agree

3 Neutral

2 Disagree

1 Strongly Disagree

1. What are the legal risks in using Big Data/People Analytics in hiring?
<--- Score

2. Is Big data different?
<--- Score

3. Do we address the daunting challenge of Big Data: how to make an easy use of highly diverse data and provide knowledge?
<--- Score

4. Big Data: what is different from large databases?

<--- Score

5. How does big data impact Data Quality and governance best practices?
<--- Score

6. Have new benefits been realized?
<--- Score

7. Are new benefits received and understood?
<--- Score

Add up total points for this section:
_____ = Total points for this section

Divided by: _____ (number of statements answered) = _____
Average score for this section

Transfer your score to the Big Data Index at the beginning of the Self-Assessment.

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