

# INFO 8145 - Issues, Requirements and Schedule for Case Study 1

As your Senior DS for this Project, I am writing this document to convey important issues and requirements of your work for this Project. Also, a Work Schedule and the Rubric / Evaluation Maximum Marks are on the last few pages of this report.

*This list of needs replaces any previous lists of issues and requirements that you have received.*

*This is the complete list of issues and requirements for your project work, as of the date of printing. Written communications between your team and your professor / Senior DS after this date regarding any one of the items below are to be considered as applying to your project work as well.*

**These are the issues that the business has been able to identify as of now.**

<u>Issue</u>	<u>Details</u>
1 Possible contracting to provide Call Centre services	You are Data Analysts working for a Call Centre Outsourcing firm. There is a potential client, who has been running their own call center for several years. The potential client has two different business divisions. Your management needs further analysis of data supplied by potential client, so that they can decide if it's worthwhile to quote on providing services.
2 A second, very similar, Call Centre dataset to be analyzed.	The potential client also has another callcentre, in another country, using the same techology and staffing/operation principles. This also has two different business divisions. Your management needs further analysis of a second data set supplied by potential client, so that they can decide if it's worthwhile to quote on providing services to both call centres.
3 Re-using your analytical templates	Your Senior DS believes that, because the two DataSets appear to be so similar, that you can make use of the same templates created for DataSet 1 to analyze the new DataSet 2. However, there are some additional requests for this DataSet 2.
4 DataSet 2: How busy is each agent type? What are the shifts worked?	The supplied data appears to not have embedded metric calculations. How many hours is each agent type (work role) on the phone in each shift of each day, according to the supplied data?
5 DataSet 2: How much time is available between phone calls for each agent type?	How much time is available between phone calls for each agent type for each shift and day? Your Sales manager needs a graphic (not a pivot table) that has drilldown capabilities for this. The drilldowns must, at minimum, cover the different agent types and work shifts for years, quarters (every 3 months), months and weeks.
6 DataSet 2: Average length of caller contact per agent type? Analysis not needed.	What is the average length of caller contact per agent type? Your Sales Manager needs no statistics on this for the second dataset.

## INFO 8145 - Issues and Requirements for Case Study 1

<u>Issue</u>	<u>Details</u>
7 DataSet 2: Probability that the caller contact is successful, or is passed on to another agent type?	What is the probability that the caller contact is successful, or is passed on to another agent type within the call centre? Your Sales Manager needs statistics and Pivot tables on this for agent types, shifts, and years, months, weeks, and days of the week.
8 DataSet 2: Is Shift 1 busier than Shift 2? This is officially known as a Cluster Analysis	Are the different agent types on Shift 1 busier than Shift 2? Your Sales Manager needs statistics and Pivot tables on this for agent types, shifts, and years, and months. Also, prepare a brief written opinion (possibly in a table layout) on this issue.
9 DataSet 2: Are the days of the week different in busyness?	How busy are the different days of the week? Your Sales Manager needs statistics and Pivot tables on this for agent types, shifts, and years, and quarters. Is this just random data, or can you detect a pattern or trend?
10 DataSet 2: Durations with Counts of <= Zero. This is officially known as Anomaly Detection	The data appears to have instances of counts that are 0, or a negative number, and yet have a calculated average duration. For each of the agent types, prepare Pivot tables take show the count of these records for shifts, and years, quarters, and months. Is this just random data errors, or can you detect a pattern or trend?
11 Package your diagnostic analytical work for the above 7 Issues (numbers 4 thru 10) in a Case Study Report. Deliver this to the Sales Manager in 10 calendar days.	Your employer is awaiting the results of your work, so that they can decide on submitting a quote to take over the management of the two Call Centres. Package it as a Case Study digital (PDF) report, with a cover letter, title page, Table of Contents, Document History, Executive Summary, your findings of Diagnostic Analysis, Statement of Confidence and Concerns about the DataSet, Statement of Academic Integrity, and a Summary/Conclusion. Include your Excel files as well, and refer to them as needed in the PDF report.

**Below is a list of Professor's requirements, at minimum, that your team of 3 must perform and/or deliver.**

<u>Requirement</u>	<u>Details</u>
1 Review Issues and Requirements Doc	Review Issues and Requirements Document. Understand that the Issues are NOT what each person and team uses to manage their work. The Requirements ARE what must be done, and have marks!

## INFO 8145 - Issues and Requirements for Case Study 1

<u>Requirement</u>	<u>Details</u>
2 Build sheet and List of Deliverables. Add Deliverables Records	Start of a list of Team's deliverables for Case Study 1 in an Excel sheet called "Deliverables" in an Excel workbook, following INFO8145 Best Practices. Add records to the List of Deliverables about the deliverables that must be done for each of Week 5 and 6's Requirements. Some requirements might have two deliverables; some might have none.
3 Update Team's Deliverables List - Actual - Week 5	Add notes to the List of Deliverables about the work actually done for each of Week 5's deliverables. Be sure that each person's work is clearly identified in the Excel Workbook(s) and sheets.
4 Update Team's Deliverables List - Plan - Week 6	Review the List of Deliverables. Add notes to the List of Deliverables about the possible deliverables to be done for each of Week 6's deliverables. Adjust the deliverable's descriptions if needed.
5 Update Team's Deliverables List - Actual - Week 6	Add notes to the List of Deliverables about the work actually done for each of Week 6's deliverables. Be sure that each person's work is clearly identified in the Excel Workbook(s) and sheets.

**Your Senior DS has done some work scoping for you. Below is a list of requirements, at minimum, that your team of 3 must perform and/or deliver.**

<u>Requirement</u>	<u>Details</u>
6 Create / Update the ReadMeFirst Documentation sheet.	Create the ReadMeFirst sheet. Enter appropriate documentation (see Samples and/or Feedback) from your Prof). Add a table of all the sheets in your Excel Workbook into the ReadMeFirst sheet. For each sheet, provide a brief description of it.
7 Pick the first DA issue (#4). Plan to produce deliverables.	Focus on the first Issue (#4). Develop and document a strategy (in the top rows of the Issue #4 Data Model sheet) to produce deliverables for each of the 5 agent types (Team of 2? Do 3 of the 5 agent types). Plan to duplicate Excel work from Practical 1 and re-use with different data. Consult with Senior if needed.
8 Produce deliverables for DA Issue #4. Document.	Follow your strategy, as a team, to produce the 5 (or 3) deliverables for Issue #4. Document the work done by everyone. Work can be done in a shared workbook, or separate workbooks. Each of the 5 (or 3) deliverables must show the initials of its creator. Share the work equally.
9 Document deliverables for DA Issue #4.	Document the work done by everyone for DA Issue #4. Sheet names, titles, sources of data, dates, updated strategy steps - follow INFO 8145 Best Practices and Feedback to completely do this documentation.
10 Pick the second DA issue (#5). Plan to produce deliverables.	Focus on the second Issue (#5). Develop and document a strategy (in the top rows of the Issue #5 Data Model sheet) to produce deliverables for each of the 5 agent types (Team of 2? Do 3 of the 5 agent types). Plan to duplicate Excel work from Practical 1 and re-use with different data. Consult with Senior if needed.

# INFO 8145 - Issues and Requirements for Case Study 1

<u>Requirement</u>	<u>Details</u>
11 Produce deliverables for DA Issue #5.	Follow your strategy, as a team, to produce the 5 (or 3) deliverables for Issue #5. Work can be done in a shared workbook, or separate workbooks. Each of the 5 (or 3) deliverables must show the initials of its creator. Share the work equally.
12 Document deliverables for DA Issue #5.	Document the work done by everyone for DA Issue #5. Sheet names, titles, sources of data, dates, updated strategy steps - follow INFO 8145 Best Practices and Feedback to completely do this documentation.
13 Pick the third DA issue (#7). Plan to produce deliverables.	Focus on the third Issue (#7). Develop and document a strategy (in the top rows of the Issue #7 Data Model sheet) to produce deliverables for each of the 3 agent types (not greeter or manager). Plan to duplicate Excel work from Practical 1 and re-use with different data. Consult with Senior if needed.
14 Produce the deliverables for the third DA Issue.	Follow your strategy, as a team, to produce the 3 deliverables for Issue #7. Work can be done in a shared workbook, or separate workbooks. Each of the 3 deliverables must show the initials of its creator. Share the work equally.
15 Document deliverables for DA Issue #7.	Document the work done by everyone for DA Issue #7. Sheet names, titles, sources of data, dates, updated strategy steps - follow INFO 8145 Best Practices and Feedback to completely do this documentation.
16 Pick the fourth DA issue (#8). Plan to produce deliverables.	Focus on the fourth Issue (#8). Develop and document a strategy (in the top rows of the Issue #8 Data Model sheet) to produce deliverables for each of the 5 agent types (Team of 2? Do 3 of the 5 agent types). Consult with Senior if needed. Plan to do the actual work next week.
17 Pick the fifth DA issue (#9). Plan to produce deliverables.	Focus on the fifth Issue (#9). Develop and document a strategy (in the top rows of the Issue #7 Data Model sheet) to produce deliverables for each of the 9 agent types (Team of 2? Do 3 of the 5 agent types). Consult with Senior if needed. Plan to do the actual work next week.
18 Async work Before Week 6 Session	Prepare the workflows as guided by your Professor
19 Produce the 5 (or 3) deliverables for the fourth DA Issue.	Follow your strategy, as a team, to produce the 5 (or 3) deliverables for Issue #8. Work can be done in a shared workbook, or separate workbooks. Each of the 5 (or 3) deliverables must show the initials of its creator. Share the work equally.
20 Document deliverables for DA Issue #8.	Document the work done by everyone for DA Issue #8. Sheet names, titles, sources of data, dates, updated strategy steps - follow INFO 8145 Best Practices and Feedback to completely do this documentation.

## INFO 8145 - Issues and Requirements for Case Study 1

<u>Requirement</u>	<u>Details</u>
21 Produce the 5 (or 3) deliverables for the fifth DA Issue.	Follow your strategy, as a team, to produce the 5 (or 3) deliverables for Issue #9. Work can be done in a shared workbook, or separate workbooks. Each of the 5 (or 3) deliverables must show the initials of its creator. Share the work equally.
22 Document deliverables for DA Issue #9.	Document the work done by everyone for DA Issue #9. Sheet names, titles, sources of data, dates, updated strategy steps - follow INFO 8145 Best Practices and Feedback to completely do this documentation.
23 Look for, and report on, patterns or trends for the fifth DA Issue.	Review the deliverables for fifth DA Issue. Look for patterns or trends. Provide your findings, and describe them. Suggest possible reason(s) for the patterns or trends. Package all this in writing in either Excel or Word/PDF.
24 Pick the sixth DA issue (#10). Plan to produce deliverables.	Focus on the sixth Issue (#10). Develop and document a strategy (in the top rows of the Issue #10 Data Model sheet) to produce deliverables for each of the 5 agent types (Team of 2? Do 3 of the 5 agent types). Consult with Senior if needed.
25 Produce the first of the 9 (or 5) deliverables for the sixth DA Issue.	Follow your strategy, as a team, to produce the 5 (or 3) deliverables for Issue #10. Work can be done in a shared workbook, or separate workbooks. Each of the 5 (or 3) deliverables must show the initials of its creator. Share the work equally.
26 Document deliverables for DA Issue #10.	Document the work done by everyone for DA Issue #10. Sheet names, titles, sources of data, dates, updated strategy steps - follow INFO 8145 Best Practices and Feedback to completely do this documentation.
27 Look for, and report on, patterns or trends for the sixth DA Issue.	Review the deliverables for sixth DA Issue. Look for patterns or trends. Provide your findings, and describe them. Suggest possible reason(s) for the patterns or trends. Package all this in writing in either Excel or Word/PDF.
28 Prepare a Statement of Confidence and Concerns about the DataSet.	Prepare a Statement of Confidence and Concerns about the DataSet. Follow the guidance provided by your faculty.
29 Prepare a written "Guided Tour" of your Team's Diagnostic Analytics work.	Prepare a written "Guided Tour" of your Team's Diagnostic Analytics work. Follow the guidance provided by your faculty. Include all of your Excel Workbooks.
30 Prepare a written "Guided Tour" of your Team's Project / Work management.	Prepare a written "Guided Tour" of your Team's Project / Work management. Follow the guidance provided by your faculty. Include all of your Lists (Deliverables, and WorkTasks) in a separate Excel Workbook.

## INFO 8145 - Issues and Requirements for Case Study 1

<u>Requirement</u>	<u>Details</u>
31 Prepare a cover letter, title page, Table of Contents, Document History, Executive Summary, Statement of Academic Integrity, and a Summary/Conclusion.	Prepare a cover letter, title page, Table of Contents, Document History, Executive Summary, Statement of Academic Integrity, and a Summary/Conclusion. Follow the guidance provided by your faculty.
32 Package your deliverables from 28 to 31 in a PDF. Submit to eConestoga Case Study B assignment.	Package your deliverables from 28 to 31 in a PDF. Do not include any Excel sheets or workbooks in the PDF (except for brief summaries). Submit to eConestoga Case Study B assignment. Also submit your Excel Case Study 1 Workbook(s).

# INFO 8145 - Issues and Requirements for Case Study 1

## Work Schedule

Work Schedule			Maximum		
	<u>ID</u>	<u>Requirement</u>	<u>Details</u>	<u>Estimated Hrs</u>	<u>Mark</u>
Week	Wk05				
Work Done by:					
	1	Review Issues and Requirements Doc		0.33	0
	2	Build sheet and List of Deliverables. Add Deliverables Records		0.33	5
	3	Update Team's Deliverables List - Actual - Week 5		0.33	2
	6	Create / Update the ReadMeFirst Documentation sheet.		0.3	2
	7	Pick the first DA issue (#4). Plan to produce deliverables.		0.5	2
	8	Produce deliverables for DA Issue #4. Document.		1	5
	9	Document deliverables for DA Issue #4.		0.3	2
	10	Pick the second DA issue (#5). Plan to produce deliverables.		0.5	2
	11	Produce deliverables for DA Issue #5.		1	5
	12	Document deliverables for DA Issue #5.		0.3	2
	13	Pick the third DA issue (#7). Plan to produce deliverables.		0.5	2
	14	Produce the deliverables for the third DA Issue.		0.3	5
	15	Document deliverables for DA Issue #7.		1	2
	16	Pick the fourth DA issue (#8). Plan to produce deliverables.		0.5	2
	17	Pick the fifth DA issue (#9). Plan to produce deliverables.		0.5	2
Total for:				7.69	40

## Week **Wk06**

Work Done by:

	4	Update Team's Deliverables List - Plan - Week 6		0.33	0
	5	Update Team's Deliverables List - Actual - Week 6		0.33	0
	18	Async work Before Week 6 Session		1	9
	19	Produce the 5 (or 3) deliverables for the fourth DA Issue.		0.3	5
	20	Document deliverables for DA Issue #8.		1	2
	21	Produce the 5 (or 3) deliverables for the fifth DA Issue.		0.3	5
	22	Document deliverables for DA Issue #9.		1	2
	23	Look for, and report on, patterns or trends for the fifth DA Issue.		1	3
	24	Pick the sixth DA issue (#10). Plan to produce deliverables.		0.5	2
	25	Produce the first of the 9 (or 5) deliverables for the sixth DA Issue.		0.3	5
	26	Document deliverables for DA Issue #10.		1	2

## INFO 8145 - Issues and Requirements for Case Study 1

27	Look for, and report on, patterns or trends for the sixth DA Issue.	1	3
28	Prepare a Statement of Confidence and Concerns about the DataSet.	0.5	3
29	Prepare a written "Guided Tour" of your Team's Diagnostic Analytics work.	1	6
30	Prepare a written "Guided Tour" of your Team's Project / Work management.	1	6
31	Prepare a cover letter, title page, Table of Contents, Document History, Executive Summary, Statement of Academic Integrity, and a Summary/Conclusion.	1.5	7
32	Package your deliverables from 28 to 31 in a PDF. Submit to eConestoga Case Study B assignment.	0.3	0
Total for:		<b>12.36</b>	<b>60</b>
			<b>100</b>

### Rubric / Evaluation Maximum Marks

<u>ID</u>	<u>Requirement</u>	<u>Details</u>	<u>Estimated Hrs</u>	<u>Maximum Mark</u>
<b>Rubric Criteria Z Workflows</b>				
• 1	Review Issues and Requirements Doc		0.33	0
• 2	Build sheet and List of Deliverables. Add Deliverables Records		0.33	5
• 3	Update Team's Deliverables List - Actual - Week 5		0.33	2
• 4	Update Team's Deliverables List - Plan - Week 6		0.33	0
• 5	Update Team's Deliverables List - Actual - Week 6		0.33	0
• 6	Create / Update the ReadMeFirst Documentation sheet.		0.3	2
• 7	Pick the first DA issue (#4). Plan to produce deliverables.		0.5	2
• 8	Produce deliverables for DA Issue #4. Document.		1	5
• 9	Document deliverables for DA Issue #4.		0.3	2
• 10	Pick the second DA issue (#5). Plan to produce deliverables.		0.5	2
• 11	Produce deliverables for DA Issue #5.		1	5
• 12	Document deliverables for DA Issue #5.		0.3	2
• 13	Pick the third DA issue (#7). Plan to produce deliverables.		0.5	2
• 14	Produce the deliverables for the third DA Issue.		0.3	5
• 15	Document deliverables for DA Issue #7.		1	2
• 16	Pick the fourth DA issue (#8). Plan to produce deliverables.		0.5	2
• 17	Pick the fifth DA issue (#9). Plan to produce deliverables.		0.5	2
• 18	Async work Before Week 6 Session		1	9
• 19	Produce the 5 (or 3) deliverables for the fourth DA Issue.		0.3	5
• 20	Document deliverables for DA Issue #8.		1	2
• 21	Produce the 5 (or 3) deliverables for the fifth DA Issue.		0.3	5
• 22	Document deliverables for DA Issue #9.		1	2
• 23	Look for, and report on, patterns or trends for the fifth DA Issue.		1	3
• 24	Pick the sixth DA issue (#10). Plan to produce deliverables.		0.5	2



## INFO 8145 - Issues and Requirements for Case Study 1

• 25	Produce the first of the 9 (or 5) deliverables for the sixth DA Issue.	0.3	5
• 26	Document deliverables for DA Issue #10.	1	2
• 27	Look for, and report on, patterns or trends for the sixth DA Issue.	1	3
• 28	Prepare a Statement of Confidence and Concerns about the DataSet.	0.5	3
• 29	Prepare a written "Guided Tour" of your Team's Diagnostic Analytics work.	1	6
• 30	Prepare a written "Guided Tour" of your Team's Project / Work management.	1	6
• 31	Prepare a cover letter, title page, Table of Contents, Document History, Executive Summary, Statement of Academic Integrity, and a Summary/Conclusion.	1.5	7
• 32	Package your deliverables from 28 to 31 in a PDF. Submit to eConestoga Case Study B assignment.	0.3	0
			100
			100

These issues and requirements are what I have as of now. I will update you if anything more comes forward.

Regards,  
Your INFO 8145 Senior DS