

IFoA Certificate in Data Science

Assignment 3: Outline for Data Science & AI deployment

In the final assessment for this course, you are asked to create a proposal in which you outline a data science deployment within your organisation.

Your proposal will consider the technical issues with regards to the techniques you will implement and the data you will use. In support of this proposal, you should also include consideration of the actuarial professional, ethical, regulatory and governance considerations in your deployment.

A high-level overview of the structure for the proposal is listed below. In this assignment, you will be working on an data science & AI outline which will include each of the sections listed below:

1. Summary
2. Proposal of deployment – Executive summary (proposal outline)
3. The ethical, professional, governance and regulatory considerations of the deployment
4. Plan of action and success metrics

1. Summary: the summary should provide an overview of your data science deployment and should concisely encapsulate what you hope to achieve. In your summary, *include* the following:

- A clear definition of the objective of the deployment
- Organization information, including the relevant products or services it provides
- Your overall plan for the strategic implementation of the data science deployment(s) within your organisation.
- How will the organization will benefit from this deployment.
- What the benefits to the organisations customers and key stakeholders will be.

(no more than 750 words)

2. Proposal for deployment: produce a detailed explanation of your proposed initiative within your chosen organisation. Consider the following points:

- A description of the data science techniques that will be applied.
- How any modelling would be validated.
- A description of the data that will be used, with consideration of how it will be collected, cleansed and validated.
- The technical requirements necessary for implementation.

(no more than 750 words)

3. Ethical, professional, governance and regulatory considerations of the deployment: You may want to review Modules 5 and 6 to cover this aspect comprehensively. Consider the following points:

- The ethical and professionalism considerations that you considered at each stage of your proposed deployment.
- The governance and leadership requirements necessary to implement your proposal.
- Any regulatory considerations that you considered were relevant to your deployment.
- Identification and proposed mitigation of key risks from the above considerations

(no more than 750 words)

4. Deployment and Success criteria: describe your plan of action for the implementation of AI in the organisation you have chosen. Consider the following pointers:

- The skills and knowledge required to complete the requirement– in house, contracted out or bought in.
- The considerations of the management of the deployment.
- An outline of the approach taken to monitoring and managing risks post implementation.
- Identification of the key stakeholders
- Metrics for success.
- The impact of the deployment on jobs within the organisation (e.g. upskill, reskill, relocate?)

(no more than 750 words)

Task: based upon the sections listed above you are asked to create a report which outlines your proposal for deployment of an AI solution within your chosen organisation.