**Exercise 4.1**

**Find out all the reasons why risk management in the iterative development models is different compared to the traditional waterfall model.**

Risk management in iterative development models, such as Agile, differs from the traditional waterfall model due to several key factors. These include flexibility and adaptability, continuous feedback loops, incremental delivery, prioritisation of risks, cross-functional teams, continuous risk assessment, effective communication, and empirical process control.

Flexibility and adaptability are key advantages of iterative models, as projects are divided into manageable increments or iterations, allowing for more flexibility and adaptability to changes in requirements, technology, or market conditions. Continuous feedback from stakeholders and end-users enables early identification and mitigation of risks, rather than waiting until the project's end. Incremental delivery allows for early validation of assumptions and functionality, reducing the risk of building the wrong product or features that do not meet user needs.

Prioritisation of risks is based on their impact on the current iteration or sprint, with higher priority given to risks that could potentially derail the current iteration's goals. Cross-functional teams within agile teams collaborate closely, enabling more effective identification and mitigation of risks. Continuous risk assessment is essential throughout the project lifecycle, allowing teams to adapt their strategies in response to changing circumstances. Effective communication is crucial in iterative models, with regular channels like stand-up meetings, sprint reviews, and retrospectives for discussing and addressing emerging risks.

Empirical process control is a key aspect of iterative models, emphasising decision-making based on observed outcomes and feedback rather than initial plans or predictions. This approach encourages teams to experiment, learn from failures, and adapt their strategies accordingly, leading to more effective risk mitigation over time.