

#### ASSIGNMENT – 4

Methodology	Description	Characteristics
Waterfall	A sequential approach to software development where progress is seen as flowing steadily downwards (like a waterfall) through defined phases: requirements, design, implementation, testing, deployment, and maintenance.	Linear process, strict and rigid, suitable for projects with well-defined requirements upfront.
OV Model	Objectives and Key Results (OKR) is a goal-setting framework for defining and tracking objectives and their outcomes. It involves setting ambitious, measurable goals and tracking progress towards them.	Focused on achieving specific objectives, encourages alignment and transparency, adaptable to changing requirements and priorities.
Agile	A flexible and iterative approach to software development that emphasizes collaboration, customer feedback, and the ability to adapt to changing requirements throughout the development process.	Iterative and incremental, encourages adaptive planning, continuous delivery, and improvement, ideal for projects with evolving or unclear requirements.
Iterative	A development approach where a project is divided into small cycles or iterations, each iteration involves all stages of the software development life cycle.	Feedback-driven, allows for incremental development and refinement, suitable for complex projects where requirements may change over time.

#### E-COMMERCE APPLICATION :

##### Flexibility:

E-commerce applications often operate in a dynamic environment where market trends, customer preferences, and technological advancements can change rapidly. Agile methodology allows for flexibility and adaptability to accommodate these changes effectively. As requirements evolve or new features are identified, the agile approach enables the development team to incorporate them seamlessly into the project.

##### Continuous Improvement:

Agile emphasizes continuous improvement through iterative development cycles. For e-commerce applications, this means that new features and enhancements can be delivered to users in shorter iterations, ensuring that the application remains competitive and meets the evolving needs of customers.

**Customer-Centric:**

Agile places a strong emphasis on collaboration and customer feedback. In the context of e-commerce, understanding and responding to customer needs is paramount.

Agile methodology facilitates regular interactions with stakeholders, including end-users, allowing the development team to gather feedback early and often, resulting in a product that better aligns with customer expectations.

**Risk Management:**

Agile's iterative approach helps mitigate risks associated with large-scale software projects. By breaking the development process into smaller, manageable iterations, potential issues can be identified and addressed early in the project lifecycle, reducing the likelihood of costly delays or failures.