Q-1 Discuss the prototyping model. What is the effect of

designing a prototype on the overall cost of the

project?

Answer- Prototype is the act of making the software applications prototypes which is basically an incomplete version of the software program that is being developed. It takes place in software development and is comparable to prototyping as known in other fields like that of manufacturing and mechanical engineering. However, it is completely different from that of the final product and stimulates only a few aspects.

Q-2. Compare iterative enhancement model and

evolutionary process model.

Answer- Iterative Enhancement Model: This model has the similar phases as the waterfall model, but with fewer restrictions. In general the phases occur in the same order as in the waterfall model but these may be conducted in several cycles. A utilizable product is released at the end of the each cycle with each release providing additional functionality.

Evolutionary Development Model: Evolutionary development model bear a resemblance to iterative enhancement model. The similar phases as defined for the waterfall model occur here in a cyclical fashion. This model is different from iterative enhancement model in the sense that this doesn't require a useable product at the end of each cycle. In evolutionary development requirements are implemented by category rather than by priority.

Q- 3. As we move outward along with process flow path of

the spiral model, what can we say about software

that is being developed or maintained

Q-4 Explain the Scrum Agile methodology.

* Agile and scrum are two similar project management systems with a few key differences.
* Agile is more flexible and promotes leadership teams, while scrum is more rigid and promotes cross-functional teams.
* Agile lets teams develop projects in small increments called “sprints” and allows for more effective collaborations among teams working on complex projects.
* **This article is for business owners and project managers who want to learn more about agile scrum methodology and how to implement it as a management process.**

Agile scrum methodology is used by companies of all sizes for its ability to provide high-end collaboration and efficiency for project-based work. Agile and scrum are two different methods and can be used separately; however, their combined benefits make the agile scrum methodology the most popular use of agile. Here’s the complete guide to agile scrum methodology

Agile scrum methodology is the combination of the agile philosophy and the scrum framework. Agile means “incremental, allowing teams to develop projects in small increments. Scrum is one of the many types of agile methodology, known for breaking projects down into sizable chunks called “sprints.” Agile scrum methodology is good for businesses that need to finish specific projects quickly.

Agile scrum methodology is a [project management system](https://www.businessnewsdaily.com/9977-best-online-project-management-software.html) that relies on incremental development. Each iteration consists of two- to four-week sprints, where the goal of each sprint is to build the most important features first and come out with a potentially deliverable product. More features are built into the product in subsequent sprints and are adjusted based on stakeholder and customer feedback between sprints.

Whereas other project management methods emphasize building an entire product in one operation from start to finish, agile scrum methodology focuses on delivering several iterations of a product to provide stakeholders with the highest business value in the least amount of time.

Agile scrum methodology has several benefits. First, it encourages products to be built faster, since each [set of goals](https://www.businessnewsdaily.com/11225-set-achievable-business-goals.html) must be completed within each sprint’s time frame. It also requires frequent planning and goal setting, which helps the scrum team focus on the current sprint’s objectives and increase productivity.

What is agile?

Agile is a process that allows a team to more efficiently manage a project by breaking it down into several stages, each of which allows for consistent collaboration with stakeholders to promote steady improvements at every stage.

What are the values of agile?

Agile was first described in the Agile Manifesto in 2000 by a group of developers who sought out a new method of writing software. The manifesto cites four values:

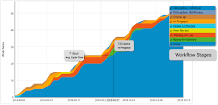
1. Individuals and interactions over processes and tools
2. Working software over comprehensive documentation
3. Customer collaboration over contract negotiation
4. Responding to change over following a plan

What are the 12 principles of agile?

The Agile Manifesto also enacted 12 principles in reference to software development and was later reconfigured to fit a wider perspective of users:

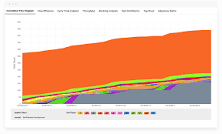
1. Customer satisfaction
2. Early and continuous delivery
3. Embrace change
4. Frequent delivery
5. Collaboration of businesses and developers
6. Motivated individuals
7. Face-to-face conversation
8. Functional products
9. Technical excellence
10. Simplicity
11. Self-organized teams
12. Regulation, reflection and adjustment

Q-5. Explain the utility of Kanban CFD reports



The cumulative flow diagram (also known as CFD) is one of the most advanced Kanban and Agile analytics charts. It **provides a concise visualization of the three most important metrics of your flow:** **Cycle time**. **Throughput**.

What is a CFD in kanban?



Cumulative Flow Diagram (or the CFD)  
  
The CFD is **a time-based plot of the cards as they move from the left to the right on a Kanban board**. As cards start from the Ready queue or column, the CFD plots the number of cards at each stage of the Kanban workflow or value stream.