IT-21014

Rapid Application Development (RAD) Model

* Introduction:

The RAD Model, developed in the 1980s by IBM, is a software development approach focused on fast, iterative releases, quick prototyping, Modularity and stake holder involvement. It with linear methodologies like the waterfall model by emphasizing adaptability.

key phases:

1. Requirement planning: Define scope and gather user requirements through

brain storming and task analysis

2. User Design:

Develop prototypes iteratively based on feed back to align with user needs.

3. Construction: Refine modular prototypes into the final product using efficient tools.

4. Cutover: Integrate and test the system followed by deployment.

Objectives:

→ Speedy development through modular design and reusable components

→ High adaptability and stakeholder participation.

→ Improved quality via early testing.

Advantages:

→ Faster delivery, cost efficiency and better user satisfaction

→ Easier adaptation to changing requirements

Dis-advantages:

→ Requires skilled teams and is unsuitable for complex or large projects.

→ Relies on active customer involvement.

Application:

Ideal for innovation-driven projects, short time lines and modular systems with high user involvement.

Conclusion:

While RAD excels in rapid. user-centered development. it is unsuitable for large-scale or complex projects. proper context ensures efficiency and user satisfaction.