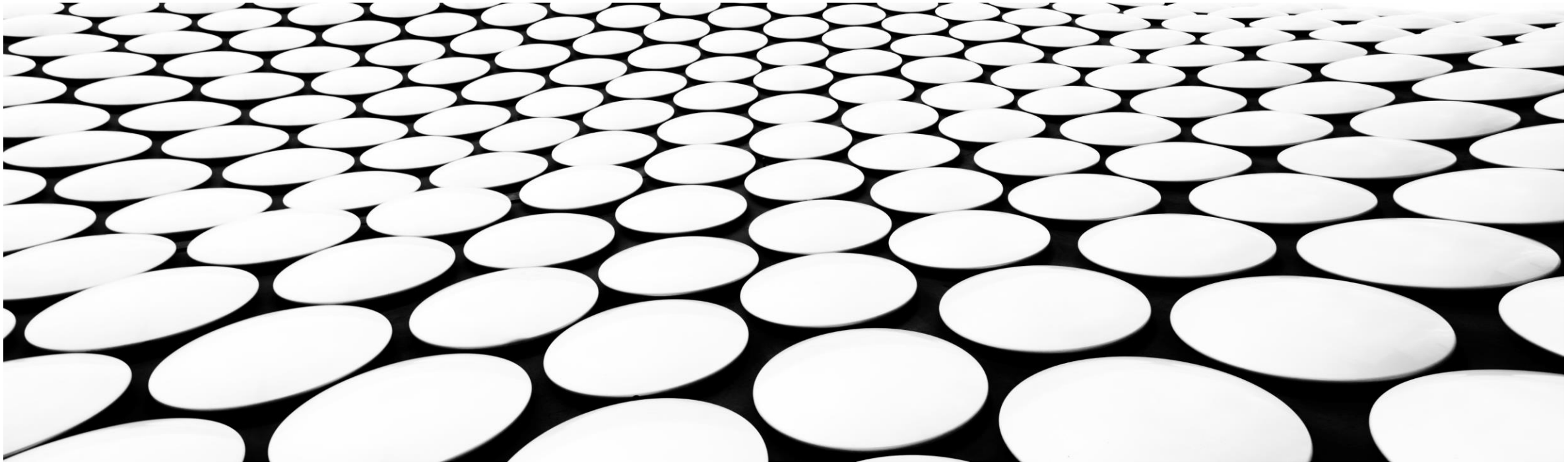
# RAPID APPLICATION DEVELOPMENT (RAD)

IT PROJECT MANAGEMENT



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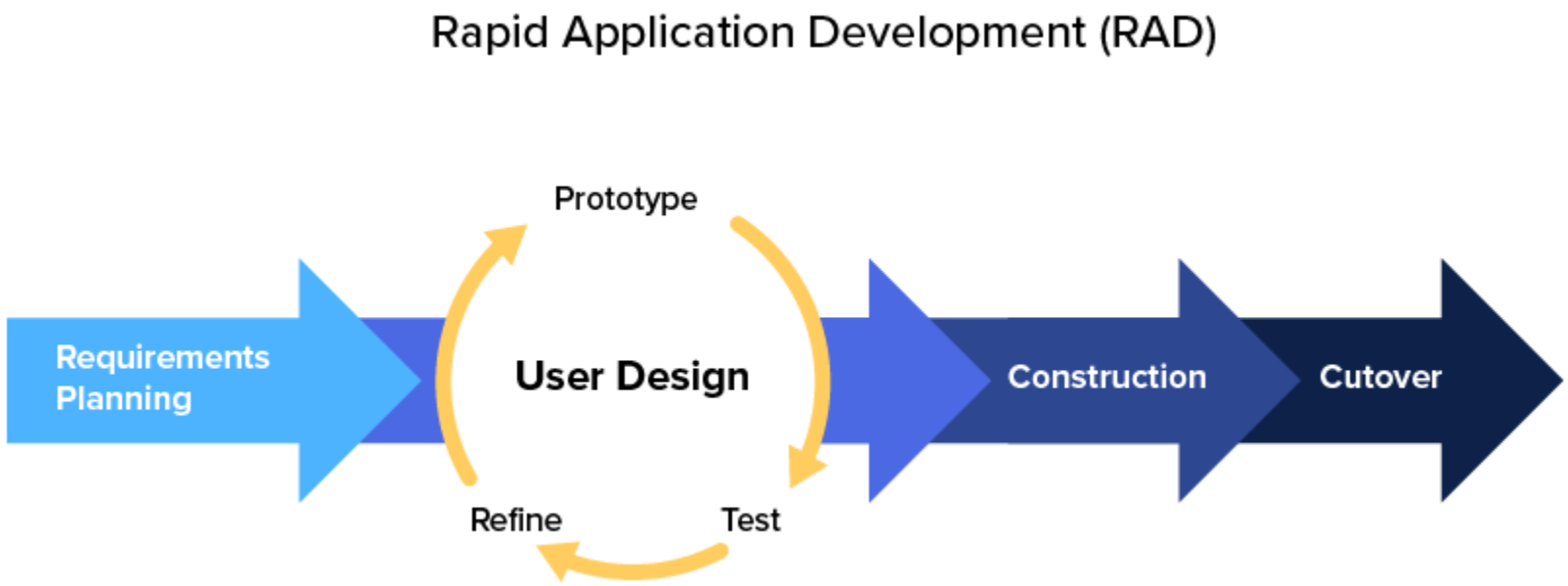
# WHAT IS RAD?

- RAD is a sub-model of Agile
- Prioritizes development and building a prototype, rather than planning
- Was conceived in the 1980s with continuous evolution of development philosophies according to the requirement at that particular time
- Initially, rapid application development took the shape of the Spiral model, where one or more development models were used to work on a particular project.

# STEPS IN RAPID APPLICATION DEVELOPMENT



# STEPS IN RAPID APPLICATION DEVELOPMENT

1. Define the Requirements

   → Broad requirement instead of detailed list of specifications from end users

2. Prototype

   → Developers create prototypes with different features and functions as fast as they can

   → These prototypes are then shown to the clients who decide what they like and what they don't (only key features)

3. Construction

   → Engineers and developers work tirelessly to flesh out a working system from a working model

   → Feedback and reviews are crucial at this stage and most bugs, issues, and alterations are addressed during this stage

4. Deployment

   → Involves intensive scale testing, technical documentation, issue tracking, final customizations, and system simulation

# ADVANTAGES AND DISADVANTAGES OF RAD MODEL

RAD software is great for small teams and quick projects

| Advantages of RAD Model | Disadvantages of RAD Model |
|---|---|
| Requirements can be changed at any time | Needs strong team collaboration |
| Encourages and priorities customer feedback | Cannot work with large teams |
| Reviews are quick | Needs highly skilled developers |
| Development time is drastically reduced | Needs user requirements throughout the life cycle of the product |
| More productivity with fewer people | More complex to manage when compared to other models |
| Integration isn’t a problem, since it integrates from project inception | Only systems which can be modularised can be developed using Rapid application development. |

# RAD VS OTHER SOFTWARE DEVELOPMENT MODELS

| RAD | Waterfall | Agile |
|---|---|---|
| Builds a functional, working model of the application in the fastest way possible | Emphasizes intensive planning and follows through on set objectives | Builds the app by breaking down large objectives into smaller ‘sprints’ |
| Perfect for projects that require the shortest time to complete | Projects are thoroughly planned and execution is typically time-consuming | Helps develop projects in periodical milestones or ‘sprints’ |
| Can adjust to changing requirements | Does not allow for changes once planning is done | Can quite easily adjust to changes even at later stages |
| Involves clients throughout the development cycle | Only involve clients during the planning stage | Involves clients throughout the development |
| Prioritizes functionality over aspects of UI/UX | Considers all aspects of the app before deployment | UI/UX takes as much priority as functionality |

# WHEN CAN YOU USE RAD METHODOLOGY?

1. **When You can Reliably Test Your Prototypes**

    → A pool of users who can give consistent and reliable feedback on the prototypes you make

2. **When You've Got the Budget**

    → Hiring talented staff means you'll need to give them appropriate salaries

3. **When You Need a Project Done Quickly**

    → Tight deadline

    → Under pressure to deliver something that works

    → Don't have the time to go through a long requirement planning and design phase

# SOURCES


- https://www.michaelpage.com.au/advice/career-advice/productivity-and-performance/top-7-sdlc-methodologies
- https://kissflow.com/application-development/rad/rapid-application-development/