Rapid Application Development (RAD)

Rapid Application Development (RAD) model is an incremental software process model that focuses on short development cycle time. This model is a "high-speed" model which adapts many steps from waterfall model in which rapid development is achieved by using component based construction approach.

Rapid Application development focuses on gathering customer requirements through workshops or focus groups, early testing of the prototypes by the customer using iterative concept, reuse of the existing prototypes (components), continuous integration and rapid delivery.

Phases of RAD Model

Modeling includes 3 major phases –

1. **Business modeling**
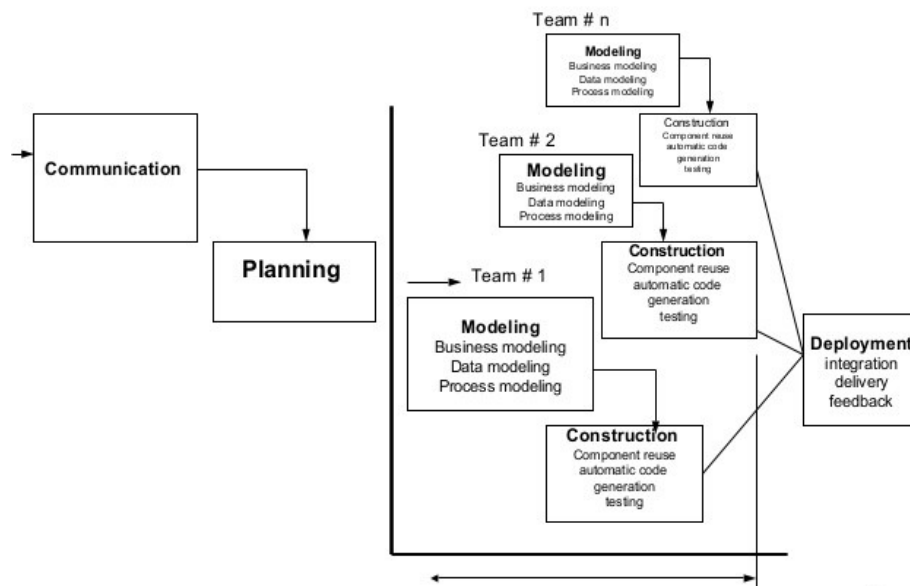2. **Data modeling**
3. **Process modeling**

Construction focuses mainly on the use of existing software components and the application of automatic code generation. **Construction** includes 3major phases –

1. **Application Generation**
2. **Testing and Turnover**

In the last stage **Deployment** establishes a basis for subsequent iterations if necessary.
A business application which can be modularize in a way that allows each major function to be completed in less than three months is useful for RAD. Each major function can be addressed individually by a separate RAD and then integrated to form a whole application.

The RAD Model

Advantages of the RAD model:

- Reduced development time.
- Increases reusability of components
- Quick initial reviews occur
- Encourages customer feedback
- Integration from very beginning solves a lot of integration issues.