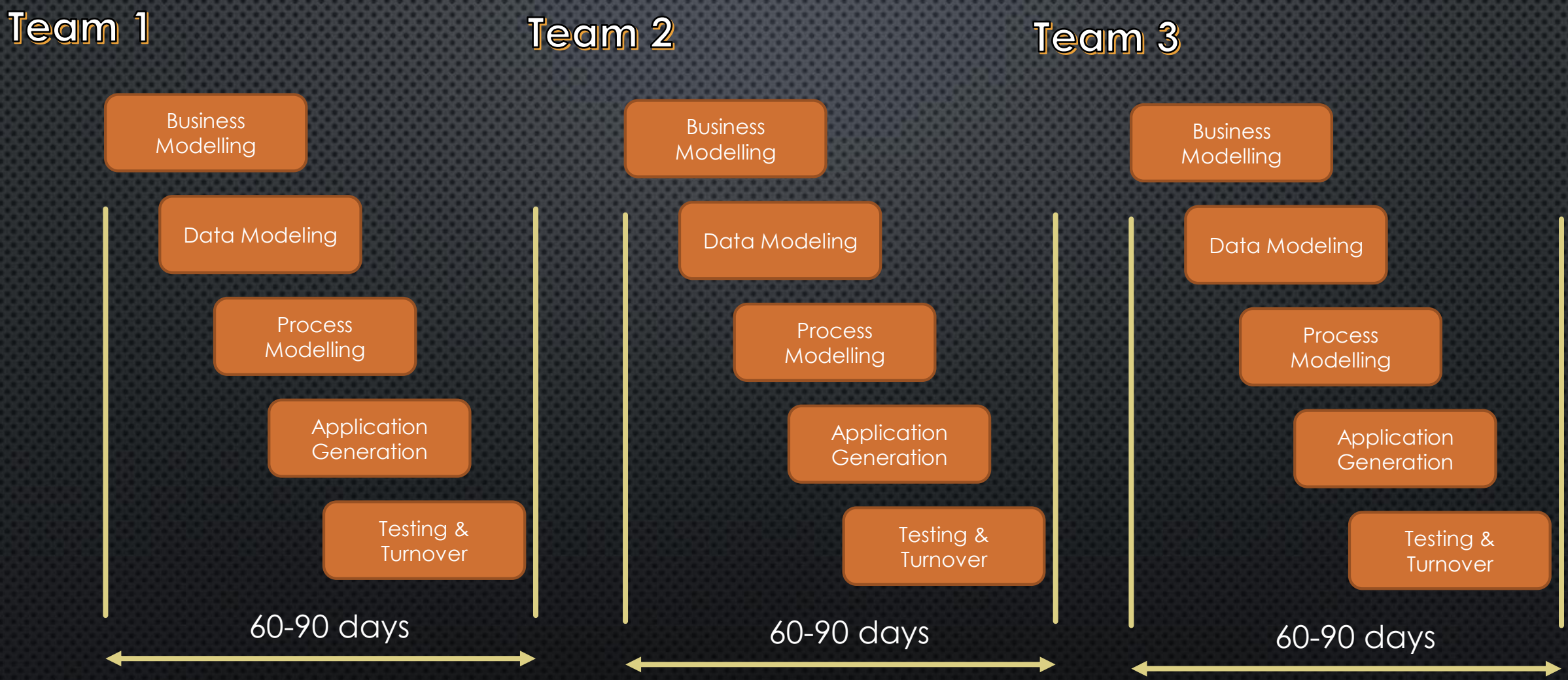
THE SOFTWARE DEVELOPMENT PROCESS

Software Development Models – RAD Model

RAD MODEL

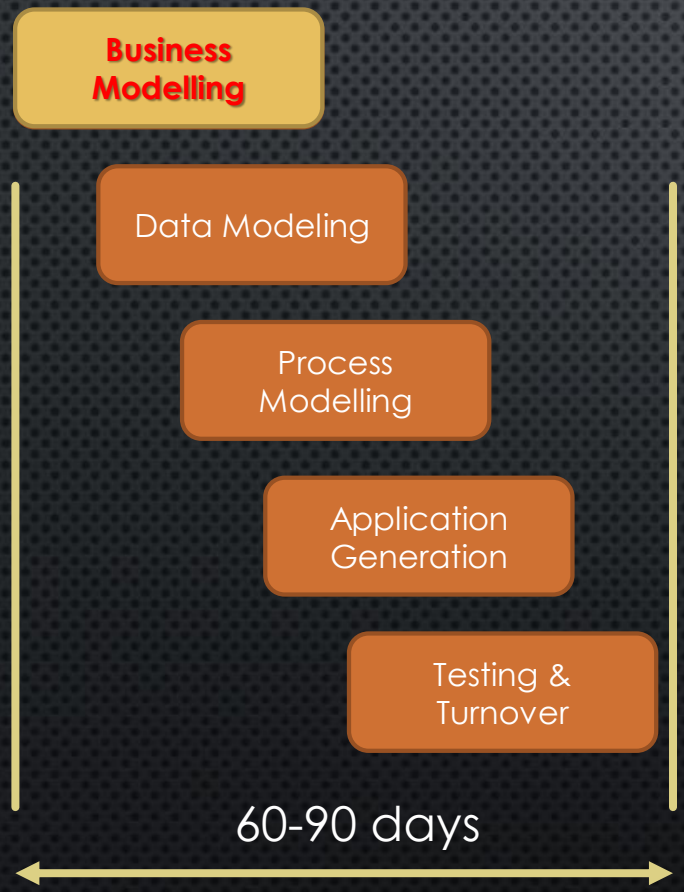
- RAD model is Rapid Application Development model
- It is a type of **incremental model**
- In RAD model the components or functions are developed in parallel as if they were mini projects
- The developments are time boxed, delivered and then assembled into a working prototype
- This can quickly give the customer something to see and use and to provide feedback regarding the delivery and their requirements

DIAGRAM OF RAD MODEL



PHASES OF RAD MODEL

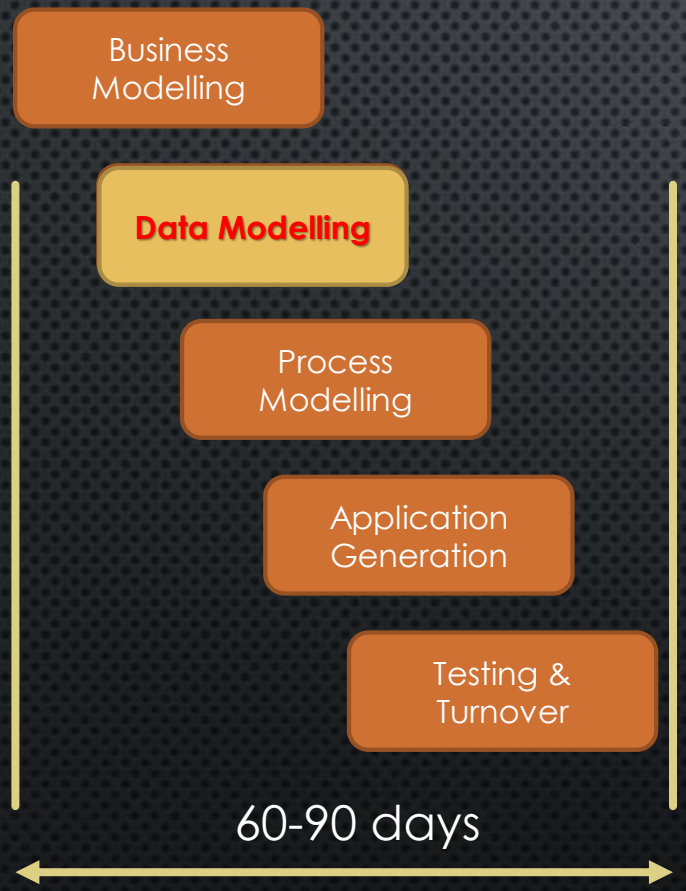
Team 1



The information flow is identified between various business functions

PHASES OF RAD MODEL

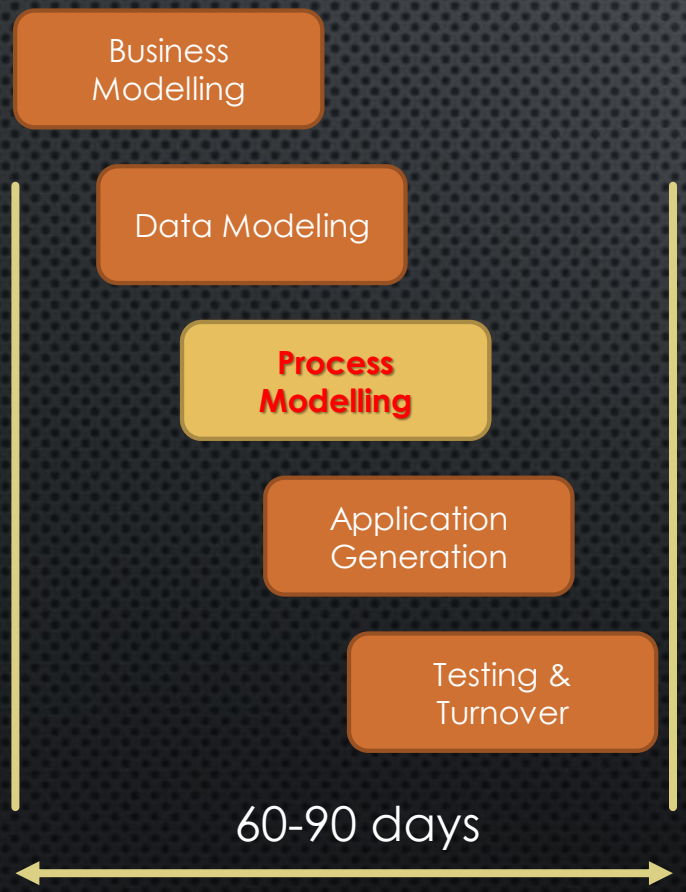
Team 1



Information gathered from business modelling is used to define data objects that are needed for the business

PHASES OF RAD MODEL

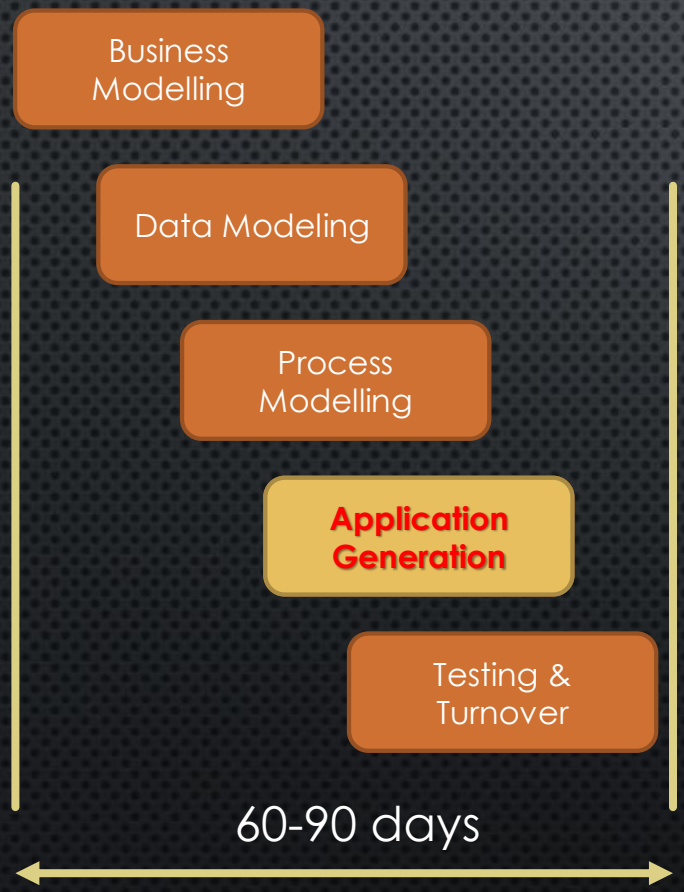
Team 1



Data objects defined in data modelling are converted to achieve the business information flow to achieve some specific business objective
Description are identified and created for CRUD of data objects

PHASES OF RAD MODEL

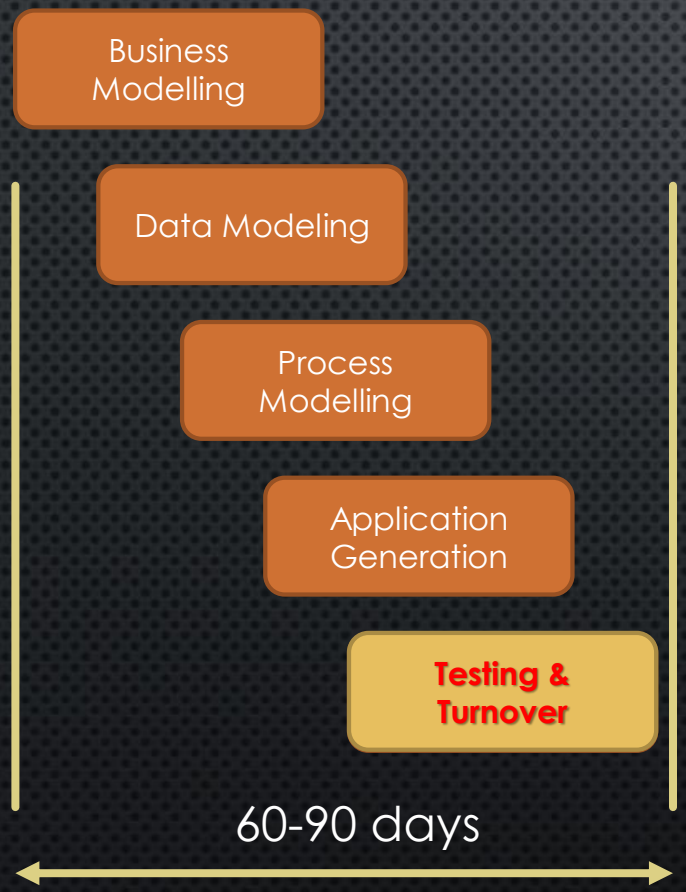
Team 1



Automated tools are used to convert process models into code and the actual system

PHASES OF RAD MODEL

Team 1



Test new components and all the interfaces

ADVANTAGES OF 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**

DISADVANTAGES OF RAD MODEL

- Depends on strong team and individual performances for identifying business requirements
- Only system that can be modularized can be built using RAD
- Requires highly skilled developers/designers
- High dependency on modelling skills
- Inapplicable to cheaper projects as cost of modelling and automated code generation is very high

WHEN TO USE THE RAD MODEL

- RAD should be used when there is a need to create a system that can be modularized in 2-3 months of time
- It should be used if there's high availability of designers for modelling and the budget is high enough to afford their cost along with the cost of automated code generating tools
- RAD should be chosen only if resources with high business knowledge are available and there is a need to produce the system in a short span of time (2-3 months)