

IT 6423

IT System Acquisition & Integration



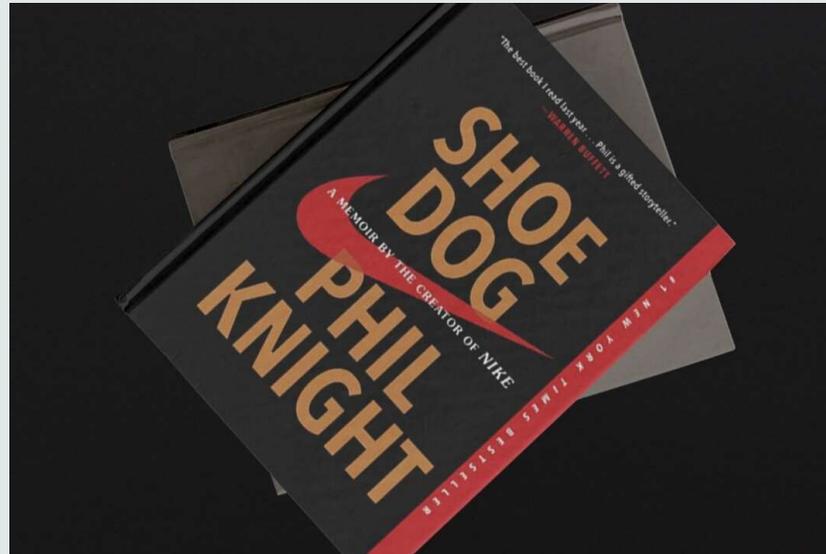
DR. NAZMUS SAKIB

Assistant Professor Of Information Technology

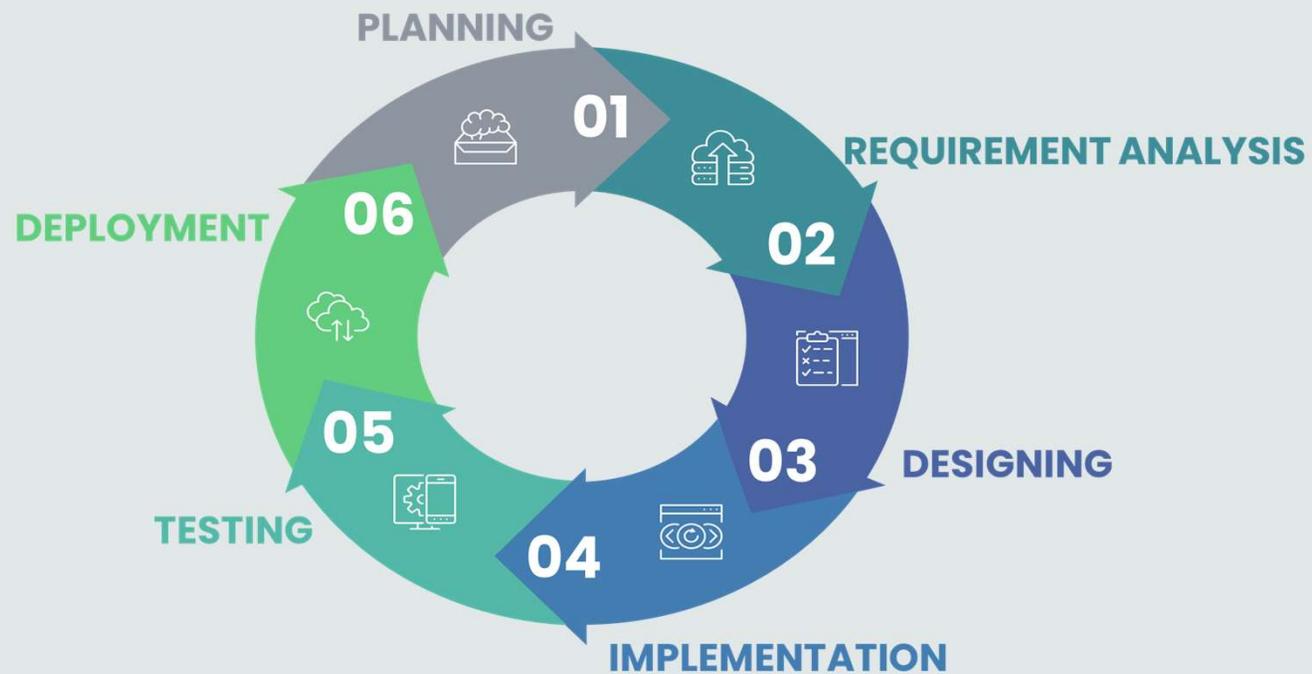
Director of mHealth Lab

College of Computing and Software Engineering

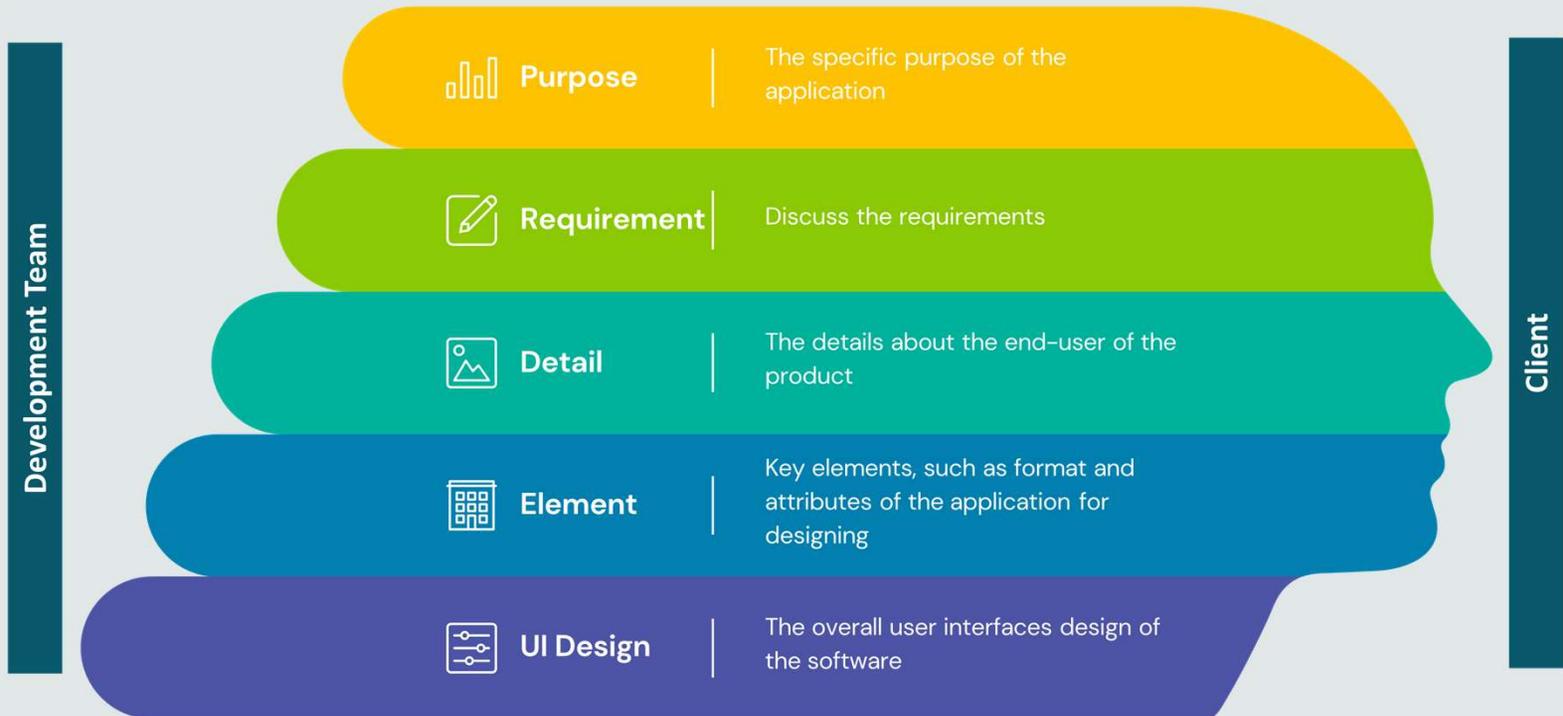
“In the beginner’s mind there are many possibilities, but in the expert’s mind there are few.”



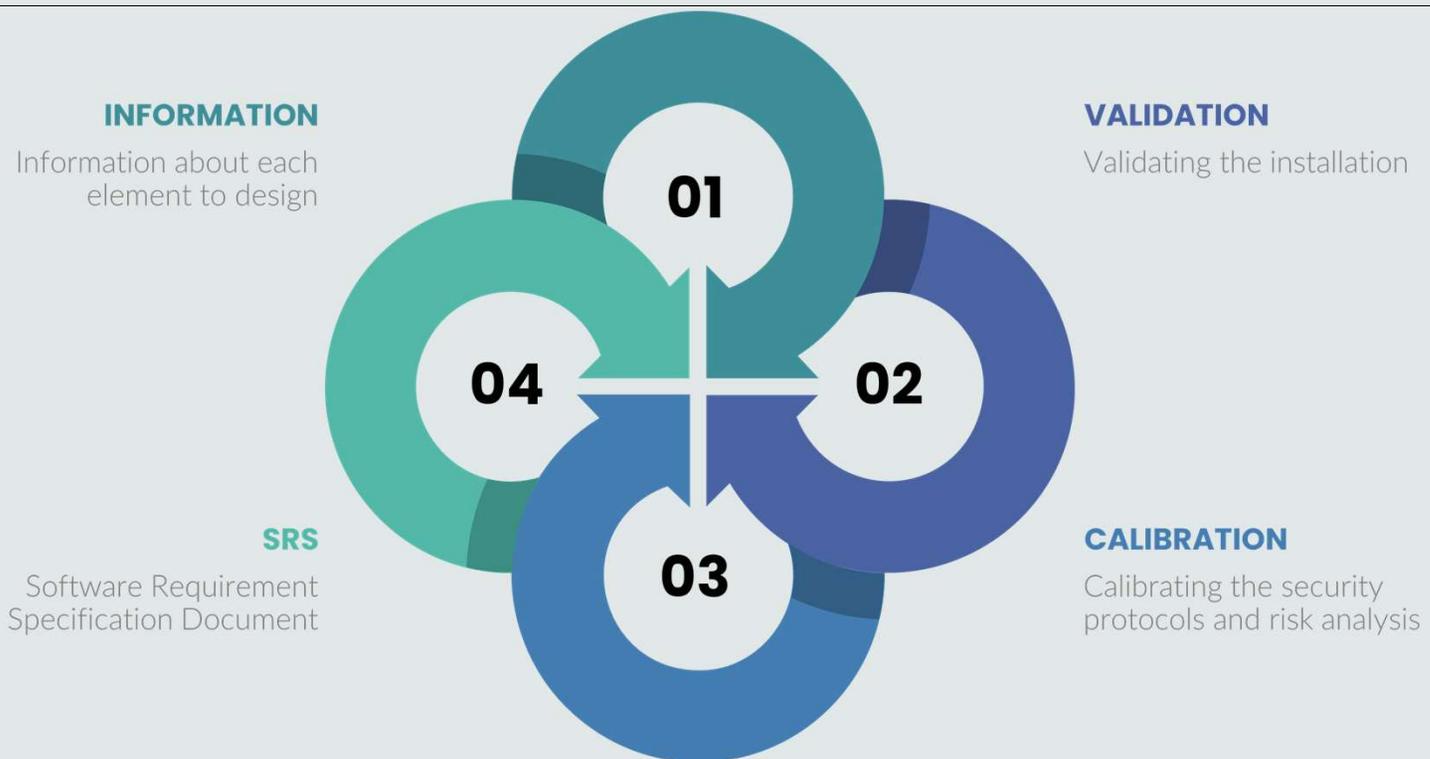
IT System Development Life Cycle (SDLC)



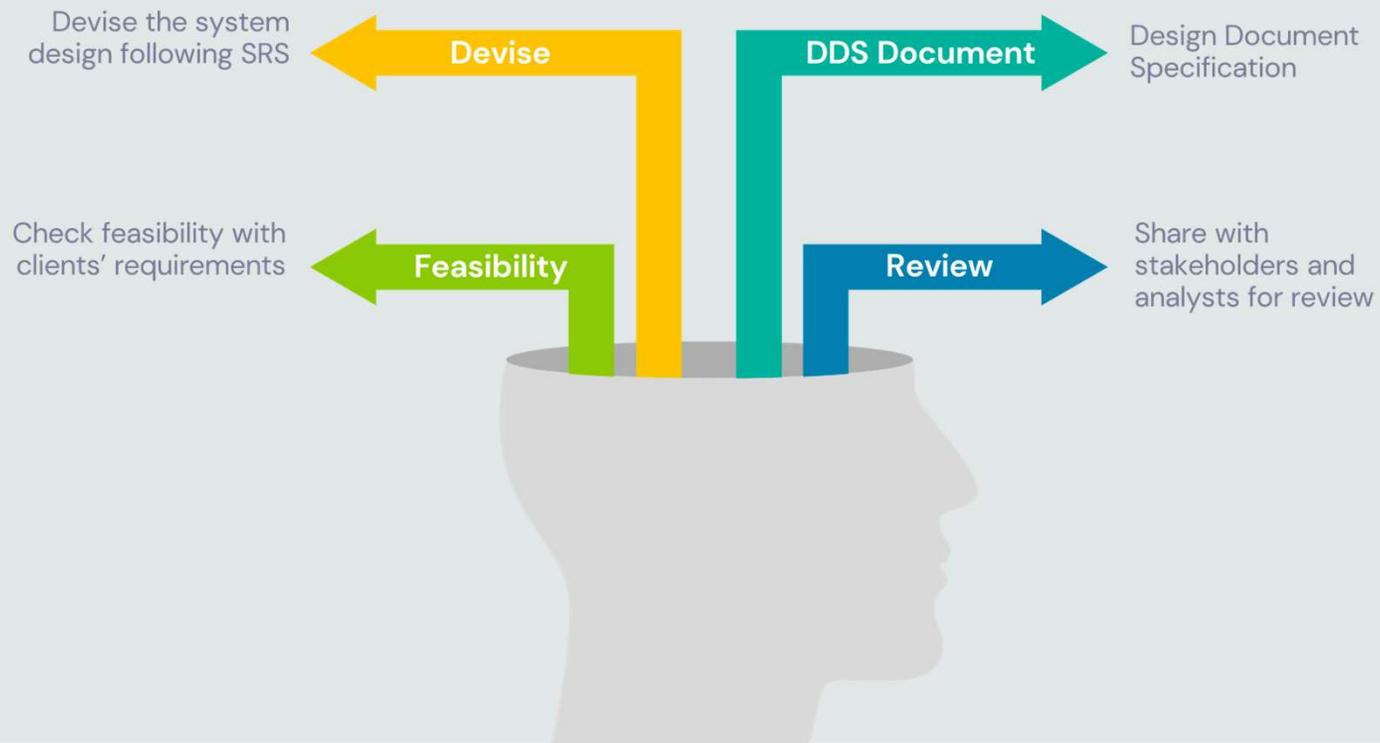
Planning



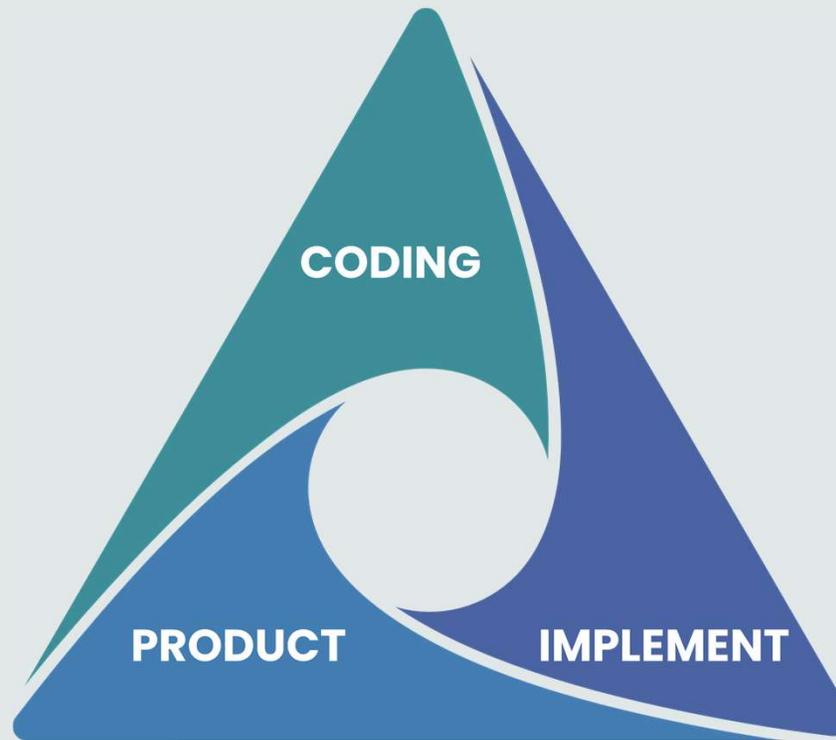
Requirement Analysis



Design



Implementation/Coding



Developers start writing the code using the language

Actual Implementation of the Software Product

Development tools like compilers or debuggers to implement the code

Testing

Deployed in multiple test environments to check the functioning



Testing team may find errors or bugs



Continued till the system proven stable



Deployment



SDLC Models

Waterfall Model

01

04

Spiral Model

Incremental Model

02

05

V-Model

Iterative Model

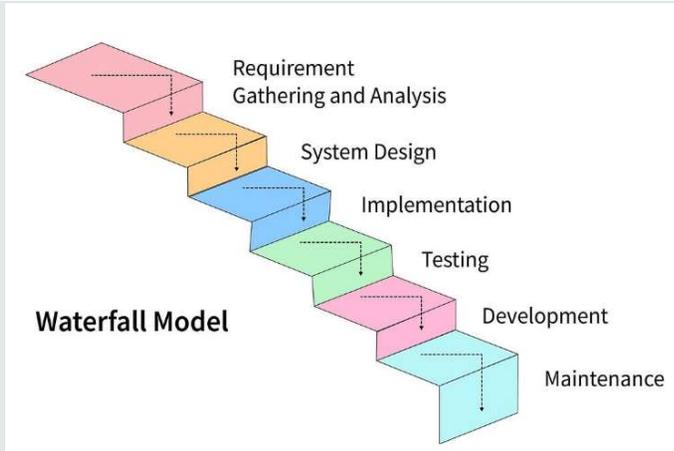
03

06

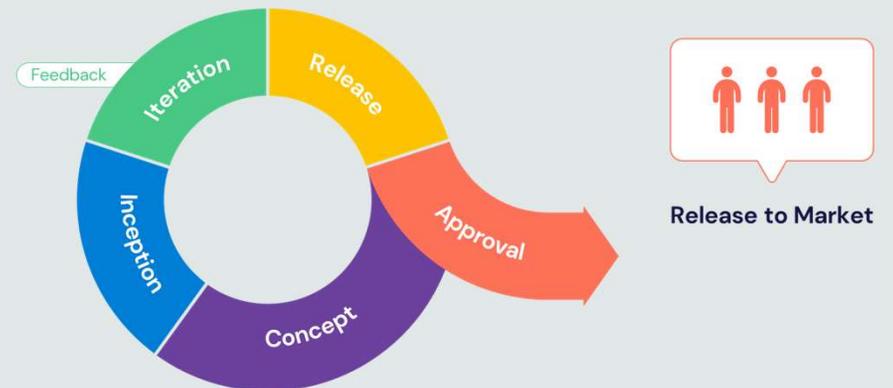
Agile Model



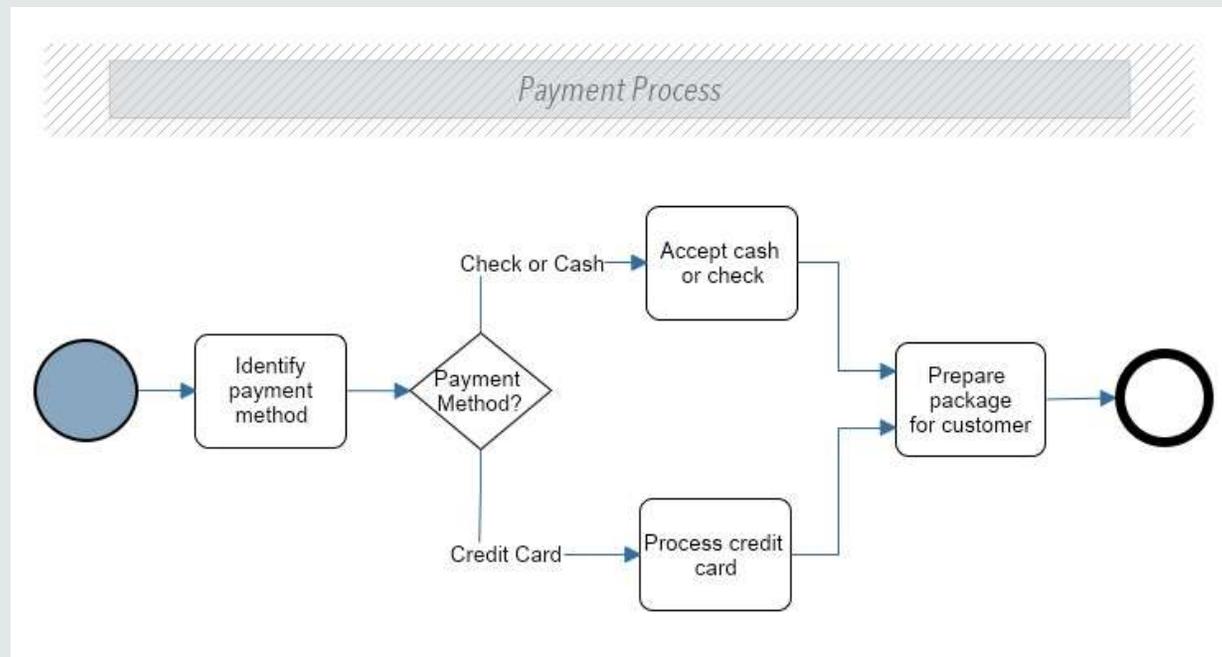
Waterfall Model Vs. Agile Model



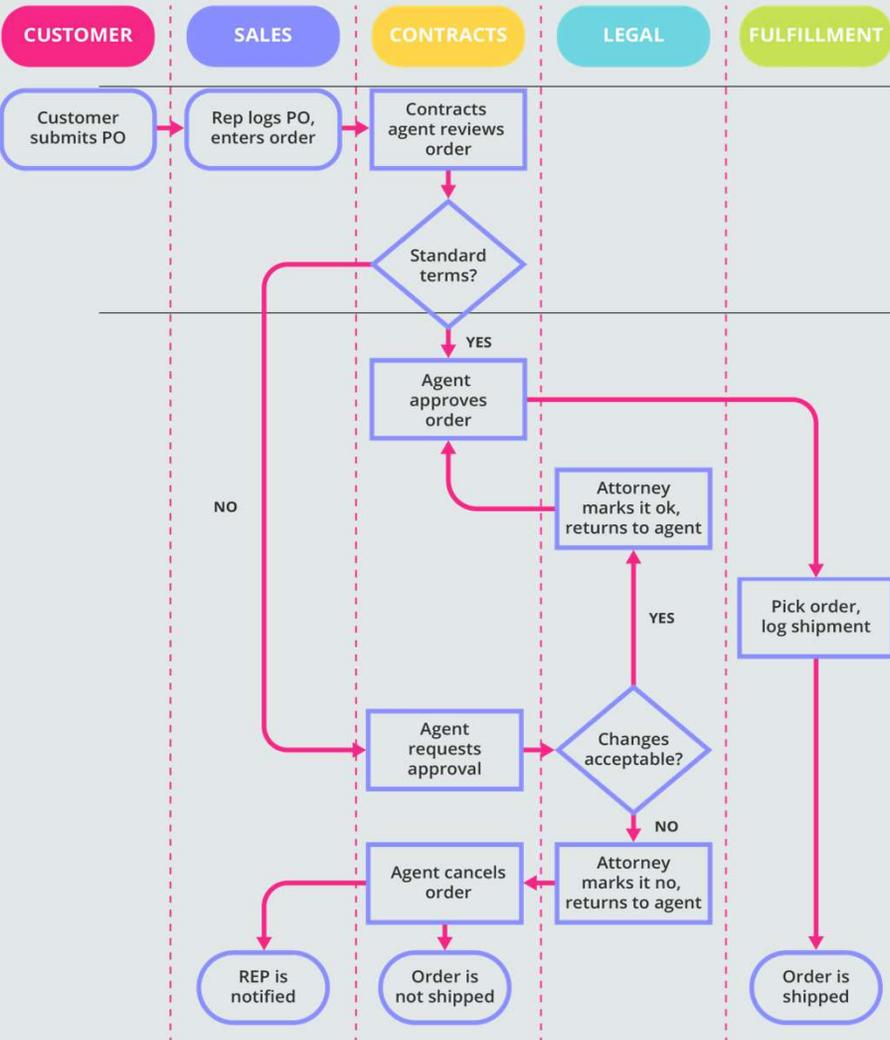
Vs.  Software Development



Business Process Modeling (BPMN)



BPMN (Contd..)



- Event Logs
- Process Mining
- Control Flow
- Data Flow
- Performance Metrics
- Resource Utilization
- Simulations → Optimization on steps within process

Source: Pearson, S. (Nd). '9 best business process modeling techniques (with examples)'. Retrieved from Tallyfy.