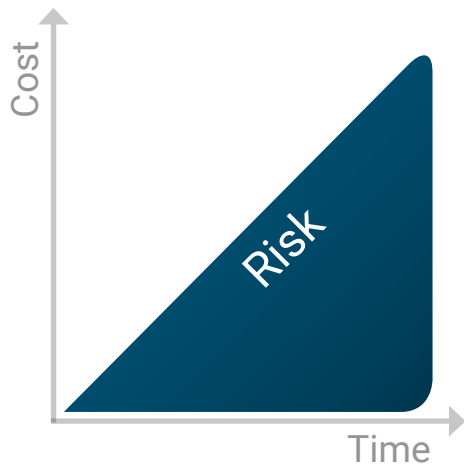# Development Methodologies

Waterfall
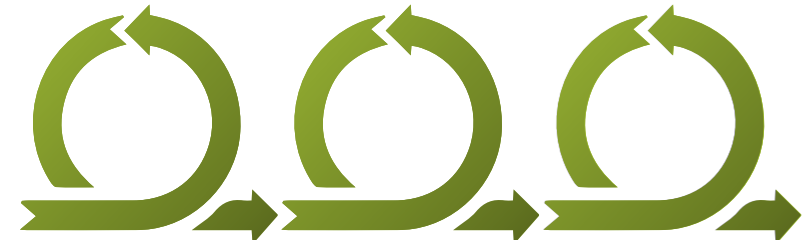

Experts doing all their work separately, then handing over to the next expert. "**Faith Driven Development**" that favors detailed planning and documentation at the beginning and is resistant to changes.
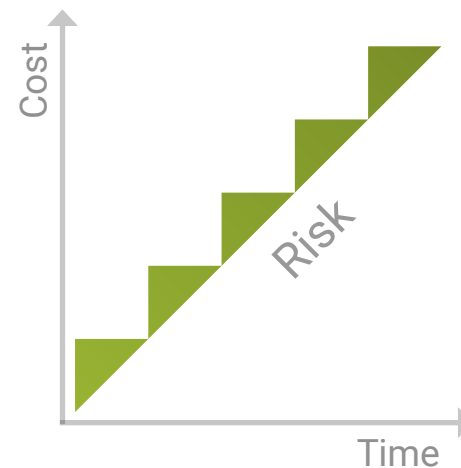

Cost / Time / Risk

Risk compounds over time as the solution is not tested until completed.
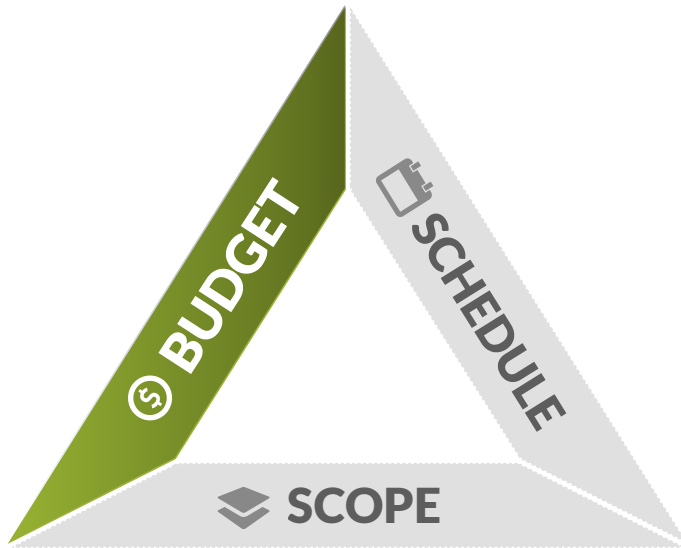
Iterative

Cross Functional team of experts working collaboratively on minimum viable products in sprints. "**Incremental Development**" that favors collaboration and iteration over detailed planning and is built to pivot and change.

Cost / Time / Risk

Risk is isolated over time as the solution is tested as features are completed.

Iterative Development on a Fixed Budget?

Set Your Priorities

Development projects have three main constraints that need to be considered:

Budget: The total amount of invested capital
Scope: The features and capabilities of the project
Schedule: The deadline or time alloted for "going live"

The iterative development process can be used if **one of these constraints is flexible** instead of rigid. In the case of a fixed budget or fixed price project, either the scope or schedule need to be flexible.

One Piece at a Time

The iterative process greatest benefit is limiting risk. This is accomplished by making a **MVP or Minimal Viable Product** quickly and then iterating to perfection.

Achieve greater success on Fixed Budget projects by breaking the required features into smaller "chunks" and not as one large deliverable.