



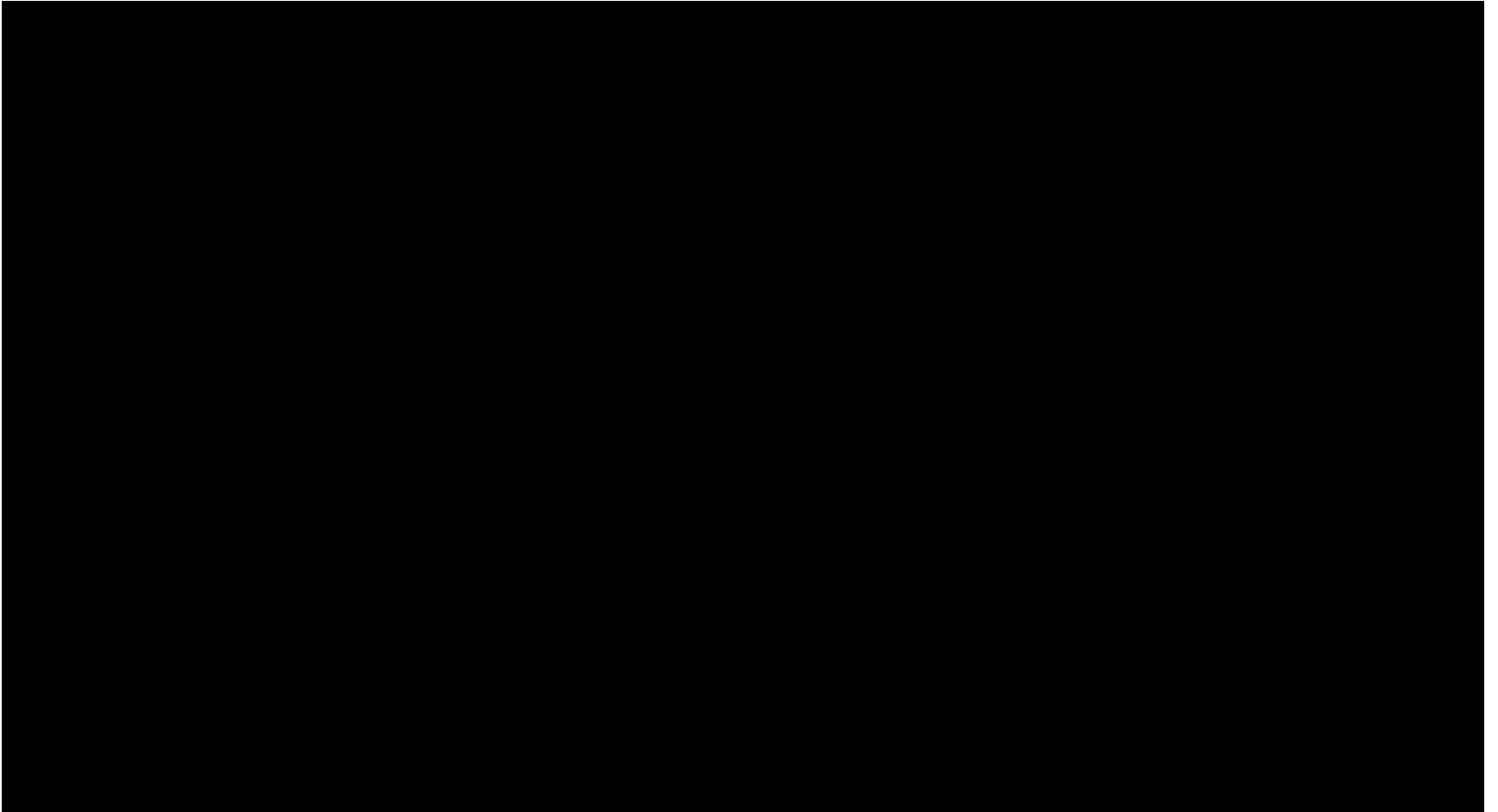
Agile Model

What is Agile?

The word 'agile' means –

- Able to move your body quickly and easily.
- Able to think quickly and clearly.
- In business, 'agile' is used for describing ways of planning and doing work wherein it is understood that making changes as needed is an important part of the job.
- Business 'agility' means that a company is always in a position to take account of the market changes.

Agile

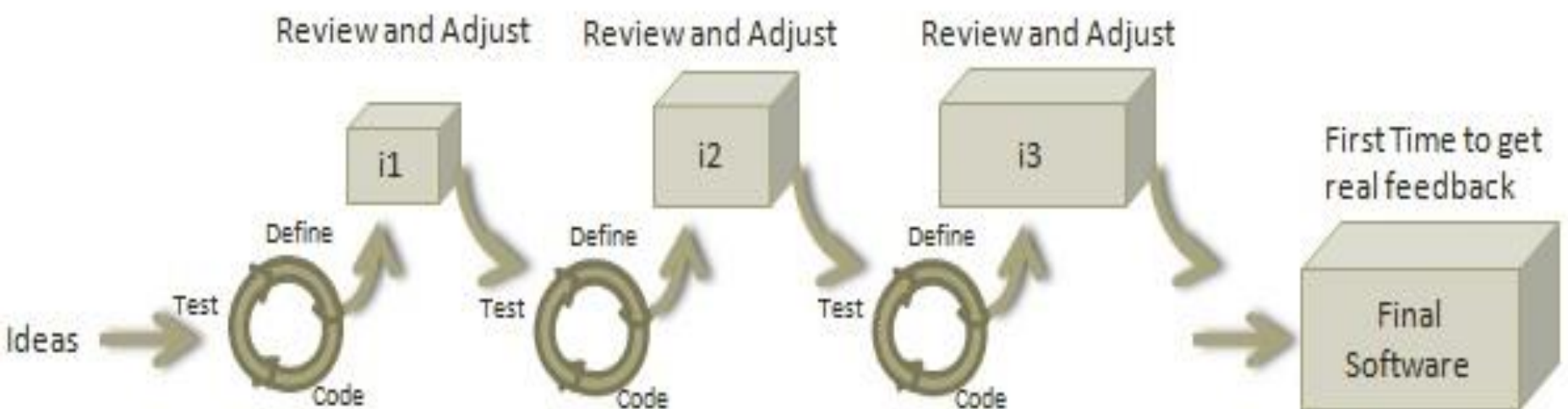


Agile software development:

- Agile is a software development methodology to build a software incrementally using short iterations of 1 to 4 weeks so that the development process is aligned with the changing business needs.
- Instead of a single-pass development of 6 to 18 months where all the requirements and risks are predicted upfront, Agile adopts a process of frequent feedback where a workable product is delivered after 1 to 4 week iteration.



Traditional Method



Agile Method

Roles in Agile

- **Scrum Master**

- A Scrum Master is a team leader and facilitator who helps the team members to follow agile practices so that they can meet their commitments. The responsibilities of a scrum master are as follows –
- To enable close co-operation between all roles and functions.
- To remove any blocks.
- To shield the team from any disturbances.
- To work with the organization to track the progress and processes of the company.

Roles in Agile

Scrum Master

To ensure that Agile Inspect & Adapt processes are leveraged properly which includes

- Daily stand-ups,
- Planned meetings,
- Demo,
- Review,
- Retrospective Meetings, and
- To facilitate team meetings and decision-making process.

Product Owner

A Product Owner is the one who drives the product from business perspective.

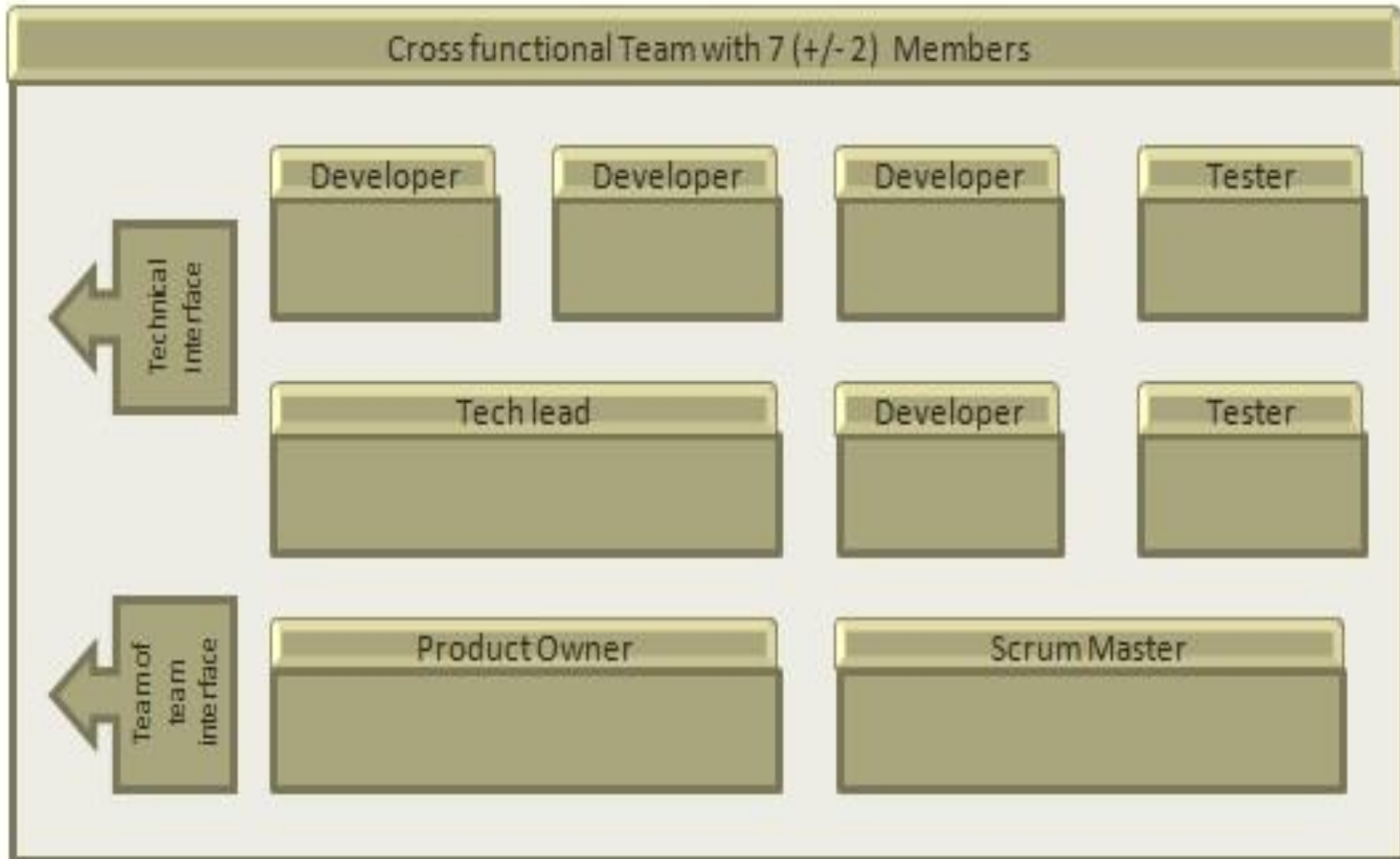
The responsibilities of a Product Owner are as follows –

- To define the requirements and prioritize their values.
- To determine the release date and contents.
- To take an active role in iteration planning and release planning meetings.
- To ensure that team is working on the most valued requirement.
- To represent the voice of the customer.
- To accept the user stories that meet the definition of done and defined acceptance criteria.

Cross- functional Team

- Every agile team should be a self-sufficient team with 5 to 9 team members and an average experience ranging from of 6 to 10 years.
- Typically, an agile team comprises of 3 to 4 developers, 1 tester, 1 technical lead, 1 product owner and 1 scrum master
- Product Owner and Scrum master are considered to be a part of Team Interface, whereas other members are part of Technical Interface.

- **Cross-functional Team**





Plan-driven and agile development

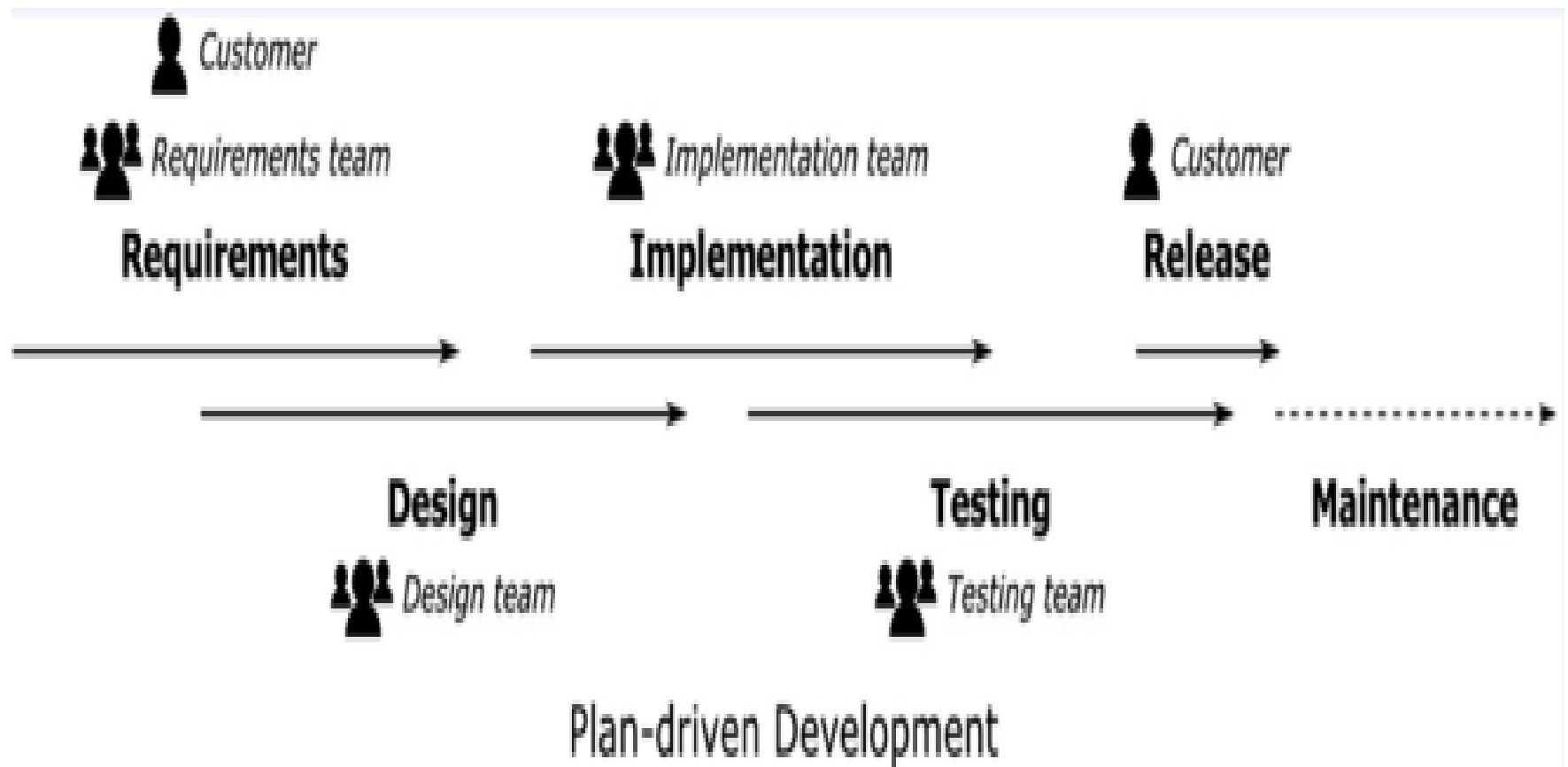
- **Plan Driven and Agile Development — Both are development processes**

- **Plan Driven:-**

The development process in which all the activities to be done in the process is planned initially or in advance, this development process is called ***Plan Driven Process***.

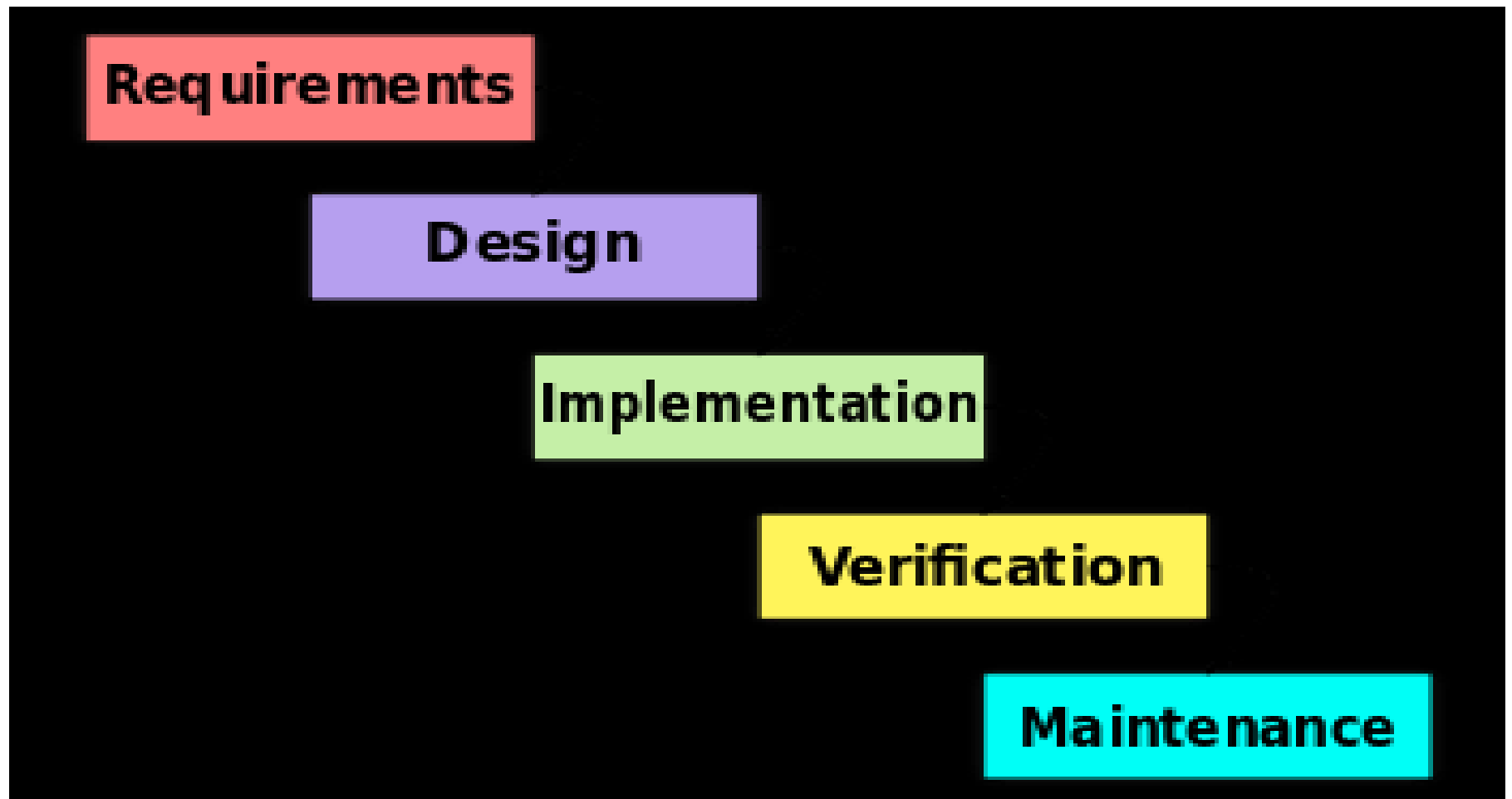
- In this way, we can measure the progress of the process against this plan.

” Plan Driven development only works in situation where product managers and business stakeholders know exactly what they want, will not change their minds, are clear on priorities and are sure that the business process does not change.”



Plan-driven

- Water-Fall Model is Plan-Driven model.



Agile Development

” The agile methodology is a much a philosophical shift as it is a process shift.”

- The development process in which planning of activities is incremental and it's easier to change the processes due to the changing of activities or adding or removing the activities, is called ***Agile development process***.
- As activities can be changed, so the progress of development process is not measured exactly.

Agile Development

- In software development processes, it is very reliable as mostly customers don't know what they want and it is very difficult to gather all the requirements in the beginning of development process.
- Hence, Agile development approach is iterative approach. If there is risk of changing requirements then we mostly use Agile development approach.
- Incremental model is mostly Agile model, But it becomes Plan-Driven model when requirements remain unchanged.
- Iterative model is the example of Agile development process.

Agile Development

Agile Development



Continuous Releases



Regular Iterations

Maintenance

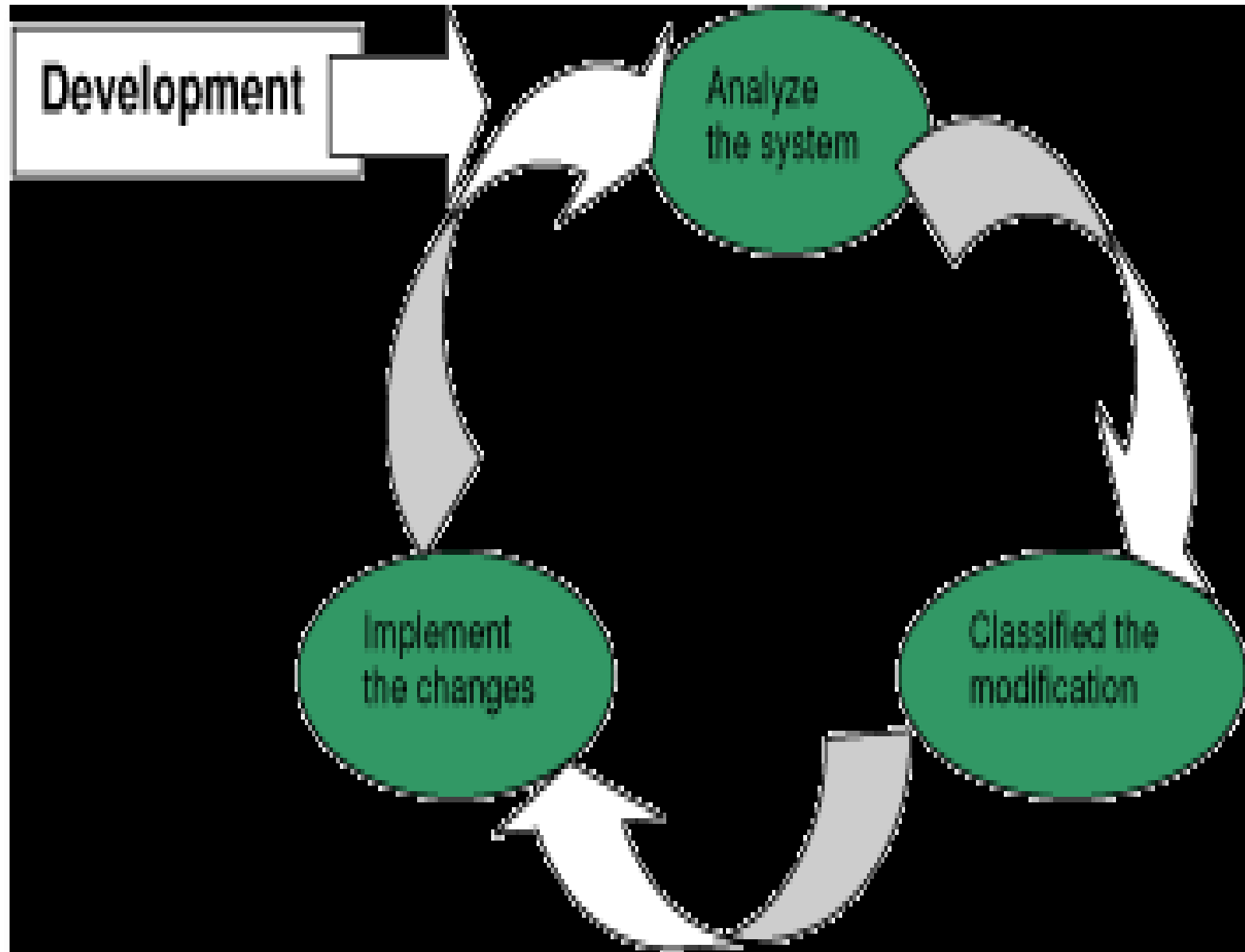


Development

Analyze
the system

Classified the
modification

Implement
the changes



- **Difference Between Plan-Driven process and Agile-Development process ?**