



SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore – 641 107

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DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY

COURSE NAME : 19CS302 AGILE SOFTWARE ENGINEERING

II YEAR /III SEMESTER

Unit 1- Introduction to Software Engineering

Topic 5: Unified Process



Brain Storming



1. What is Incremental approach?
2. What is Iterative approach?



What is Unified Process ?



- Unified process (UP) is an **architecture-centric, use-case driven, iterative and incremental development process** that leverages unified modeling language and is compliant with the system process engineering metamodel.
- A popular iterative modern process model (framework) derived from the work on the UML and associated process.



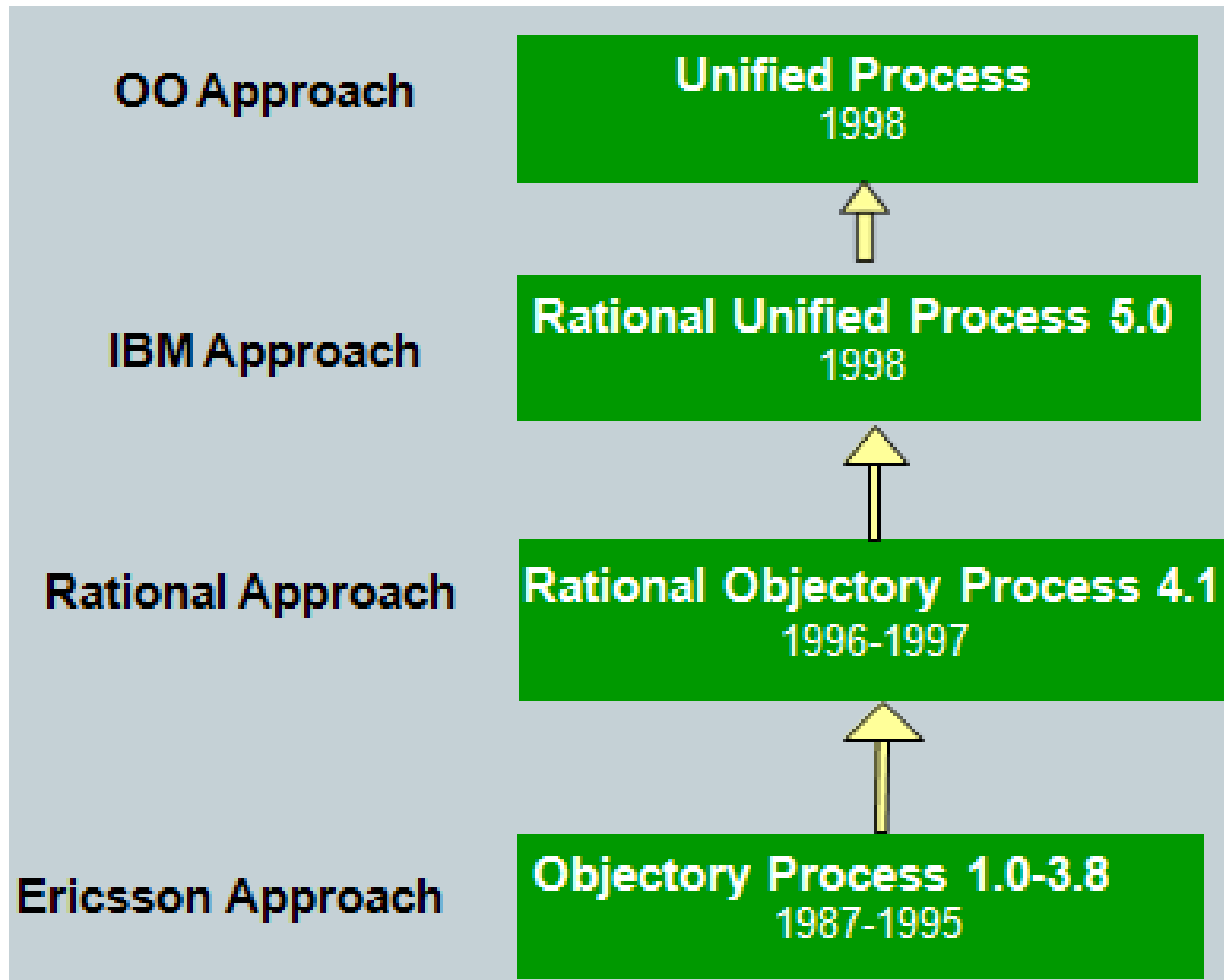
What is Unified Process ?



- The leading object-oriented methodology for the development of large-scale software
- Maps out when and how to use the various UML techniques
- Develop high-risk elements in early iterations
- Deliver value to customer



Unified Process-Evolution





Unified Process Model



- Software development process for OO models.
- Iterative and incremental development process
- Follows use-case driven approach: Development process proceeds through series of workflow that derive from use-cases.



Unified Process Phase



- **Inception**

- It involves customer communication and planning activities. Establish the business case for the system, define risks, obtain 10% of the requirements, estimate next phase effort.

- **Elaboration**

- It encompasses the communication and modeling activities of the generic process model. Aims to develop an understanding of the problem domain and the system architecture, risk significant portions may be coded/tested, 80% major requirements identified.

- **Construction**

- System design, programming and testing. Building the remaining system in short iterations.

- **Transition**

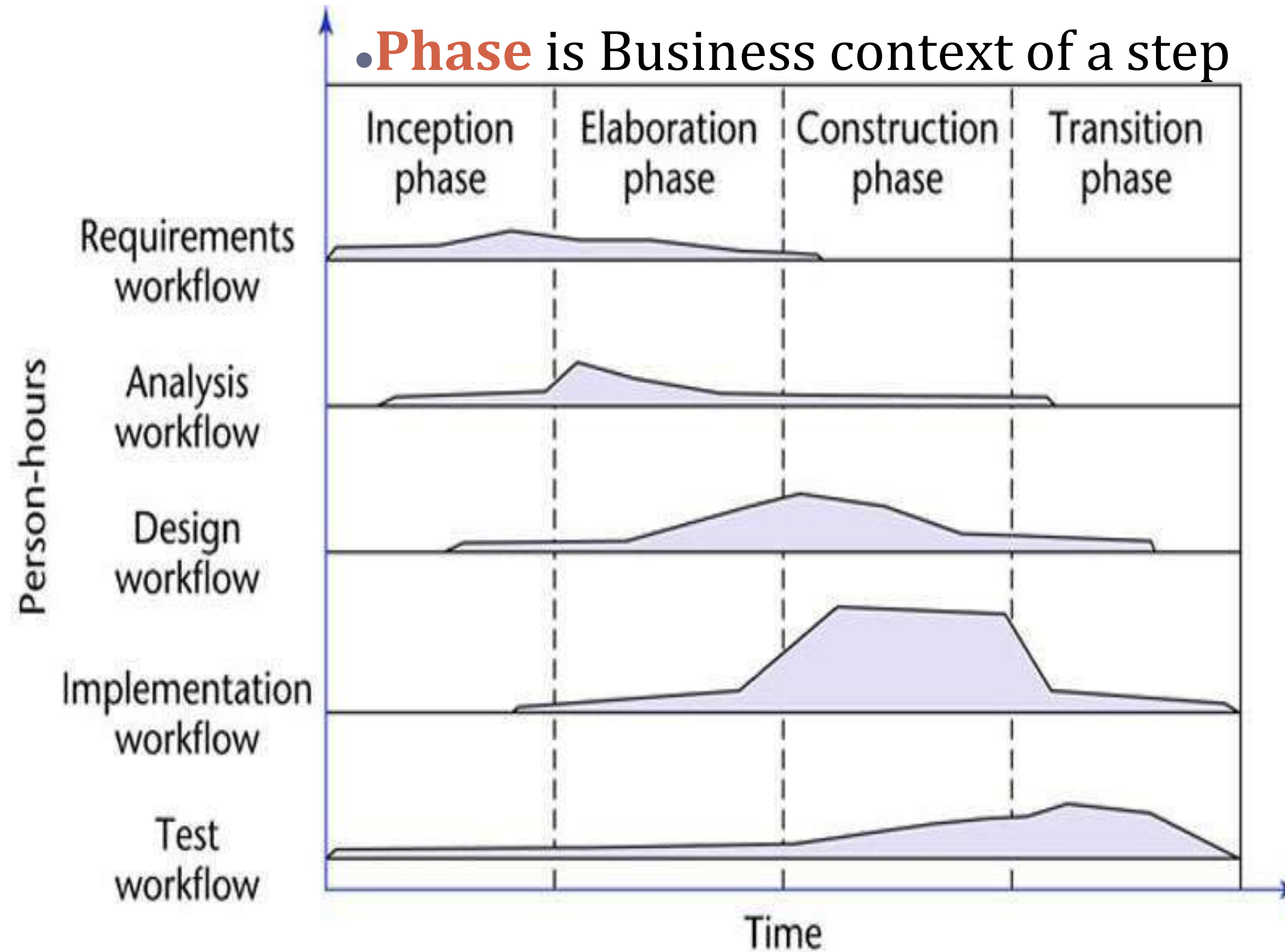
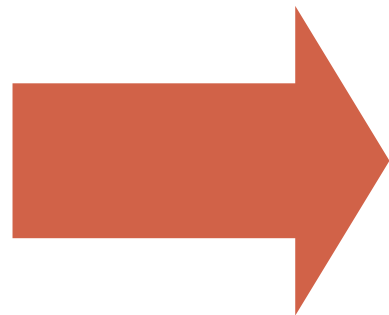
- Starts when beta testing is completed, Deploy the system in its operating environment. Deliver releases for feedback and deployment



The Phases/Workflows Of Unified Process



Workflow is
Technical
context of a
step

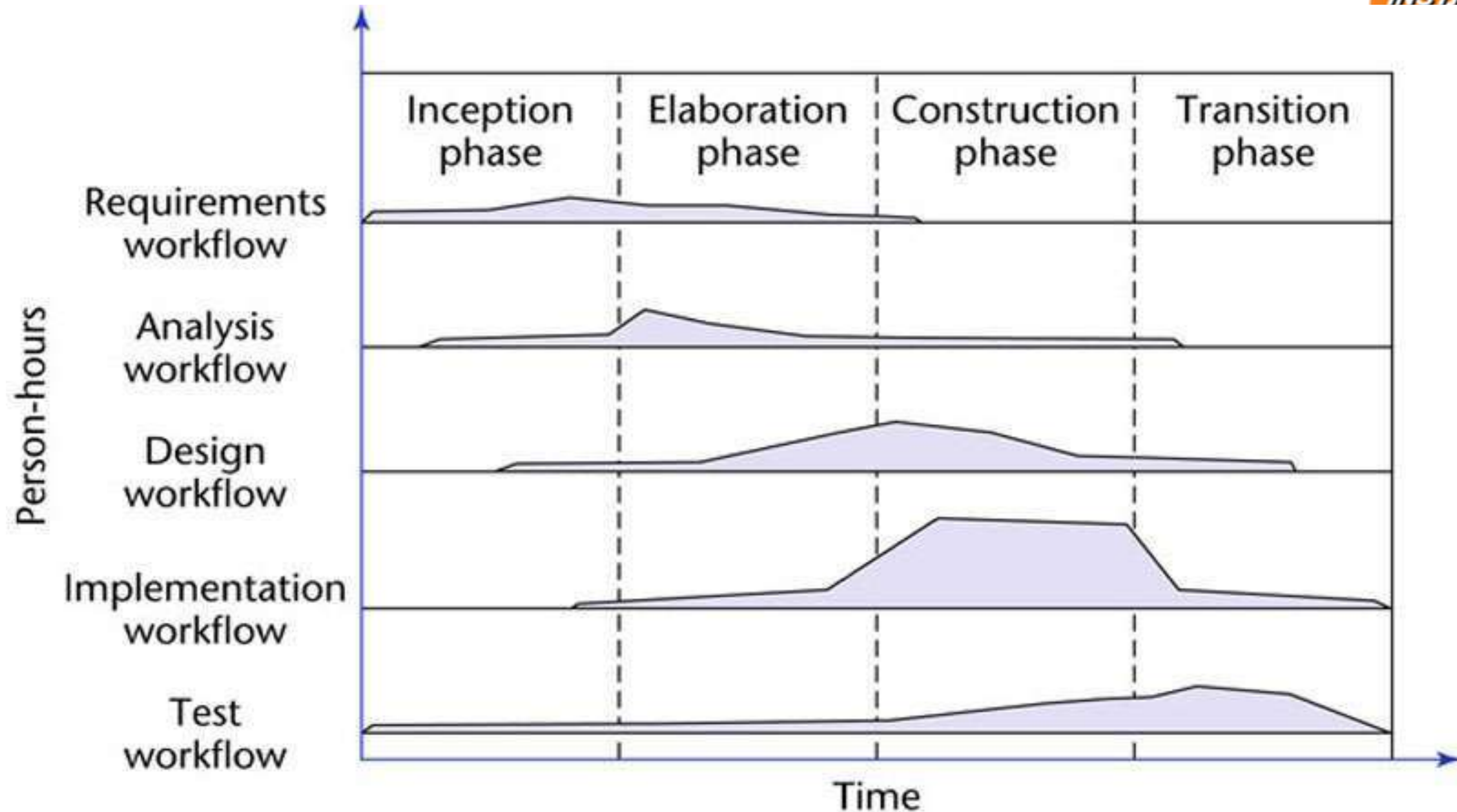




The Phases/Workflows Of Unified Process



- **NOTE:** Most of the requirements work or workflow is done in the inception phase.
- However some is done later.

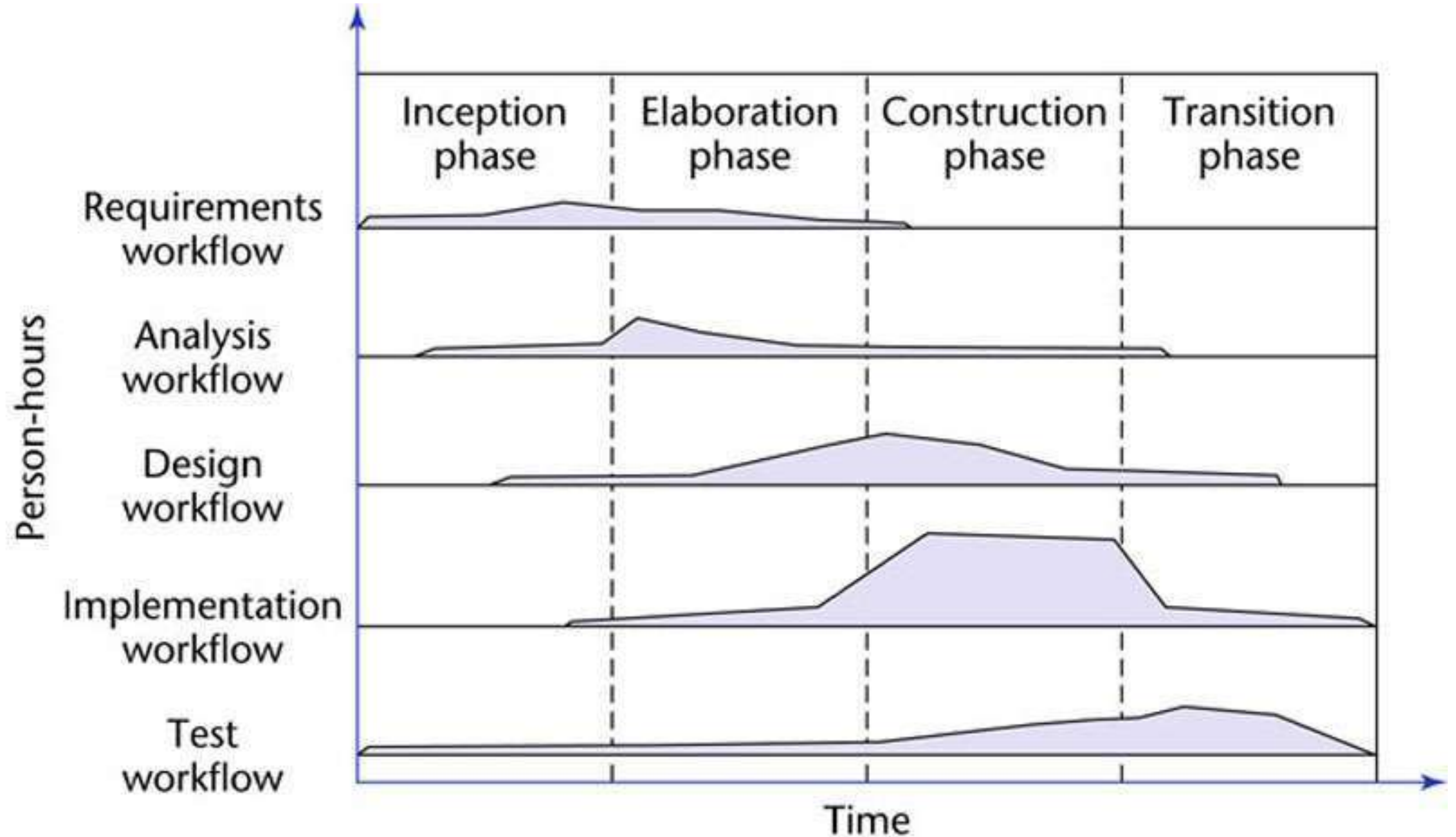




The Phases/Workflows Of Unified Process



- **NOTE:**
Most of the implementation work or workflow is done in construction
- However some is done earlier and some later.





Example roles in UP

- *Stake Holder*: customer, product manager, etc.
- *Software Architect*: established and maintains architectural vision
- *Process Engineer*: leads definition and refinement of Development Case
- *Graphic Artist*: assists in user interface design, etc.



Assessment 1



1. What is Unified Process Model?

Ans : _____

2. What are the Phases in Unified Process model?

Ans : _____





References



1. Roger S. Pressman, Software engineering- A practitioner's Approach, 10th Edition, McGraw-Hill, 2017.
2. Ken Schawber, Mike "Agile Software Development with Scrum" Pearson Education, 2nd Edition, 2015.

Thank You