EMBEDDED SYSTEM PROJECT MANAGEMENT

- There are two approaches for the embedded system design

(1) The software life cycle ends and the life cycle for the process of integrating the software into the hardware begins at the time when a system is designed.

(2) Both cycles concurrently proceed when co-designing a time critical sophisticated system. The final design, when implemented, gives the targeted embedded system and thus the final product.

EMBEDDED SYSTEM PROJECT MANAGEMENT

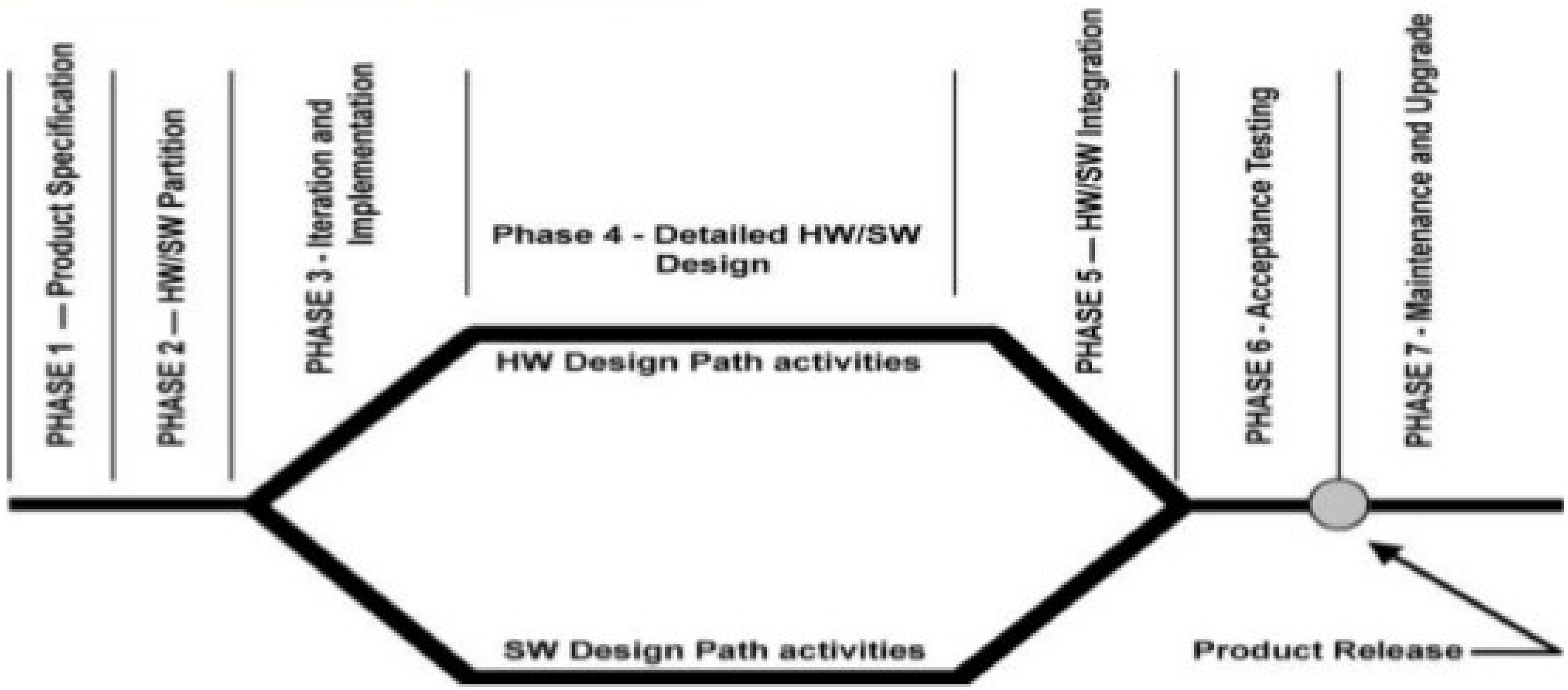
- Therefore, an understanding of the

(a) Software and hardware designs and integrating both into a system and

(b) Hardware–software co-designing

are important aspects of designing embedded systems.

Embedded system Life Cycle



Development of Hardware and software goes in parallel which is a major challenge.

Embedded System Project Management four Components

1. PEOPLE

i. Senior Manager	• Senior Manager Defines the business issues
ii. Project Technical Manager or Team Leader	• Selects the software and Hardware Languages tools and software development process life cycle models .
iii. Implementers	• Implements Software and hardware development process and integration process by using modeling, source code engineering, testing , simulation debugging and product varification

Embedded System Project Management four Components

1. PEOPLE

iv. Customer of Embedded system	• Specifies the product and its quality requirements and negotiates cost with senior manager
v. End Users.	• Uses the product in suggested Boundries

Embedded System Project Management four Components

2. PRODUCT

- Before a software project is planned, the product objectives and scope should be established, technical and management constraints should be identified. Without this information it is impossible to define a reasonable cost, amount of risk involved, the project schedule etc. A software project scope must be unambiguous and understandable at the management and technical levels. To develop a reasonable project plan we have to functionally decompose the problem to be solved.

Embedded System Project Management four Components

3. PROCESS

- Here the important thing is to select an appropriate process model to develop the software. There are different process models available. They are Water fall model, Iterative water fall model, Prototyping model, Evolutionary model, RAD (Rapid Application Development) model, Spiral model. In practice we may use any one of the above models or a combination of the above models.

Embedded System Project Management four Components

4. PROJECT

- In order to manage a successful software project, we must understand what can go wrong (so that problems can be Avoided)and how to do it right. A project is a series of steps where we need to make accurate decision so as to make a successful project.