Development Approach and Planning: Timing & Frequency
The chosen development approach significantly impacts how often and when you plan throughout a project. Let's explore the three main approaches and their influence:

1. Predictive Approach (Waterfall):

Planning: Upfront and comprehensive. Defines the entire project scope, timeline, and resources before development begins.
Timing: Fixed and infrequent updates. Major planning happens at the project's start, with revisions occurring mainly at milestones or significant changes.
Methods: Work Breakdown Structure (WBS), Gantt Chart, Project Management Plan (PMP).
Artifacts: Detailed documentation of requirements, specifications, and design documents.

2. Adaptive Approach (Agile):

Planning: Iterative and incremental. Smaller planning cycles for shorter sprints (e.g., 2-4 weeks), focusing on immediate work.
Timing: Frequent and ongoing. Planning occurs at the beginning of each sprint and is adapted based on learning and feedback.
Methods: Scrum, Kanban, User Stories, Sprint Planning.
Artifacts: Product Backlog, Sprint Backlog, Burn-down Charts.

3. Hybrid Approach:

Planning: Blends elements of both predictive and adaptive approaches, depending on project needs and uncertainties.
Timing: Variable, incorporating upfront planning for core aspects and iterative planning for less-defined areas.
Methods: Phased development with sprints within phases, risk management techniques adapted to specific needs.
Artifacts: Combines elements of predictive and adaptive approaches, like milestone plans, sprint backlogs, and risk registers.
Examples:

Predictive: Building a bridge requires upfront planning for permits, materials, and construction phases. Major revisions might occur if environmental issues arise.
Adaptive: Developing a mobile app uses sprints to design, build, and test features iteratively, adapting plans based on user feedback.
Hybrid: Launching a new product line may have upfront market research and product roadmap, but marketing campaigns might use agile sprints for ongoing optimization.