

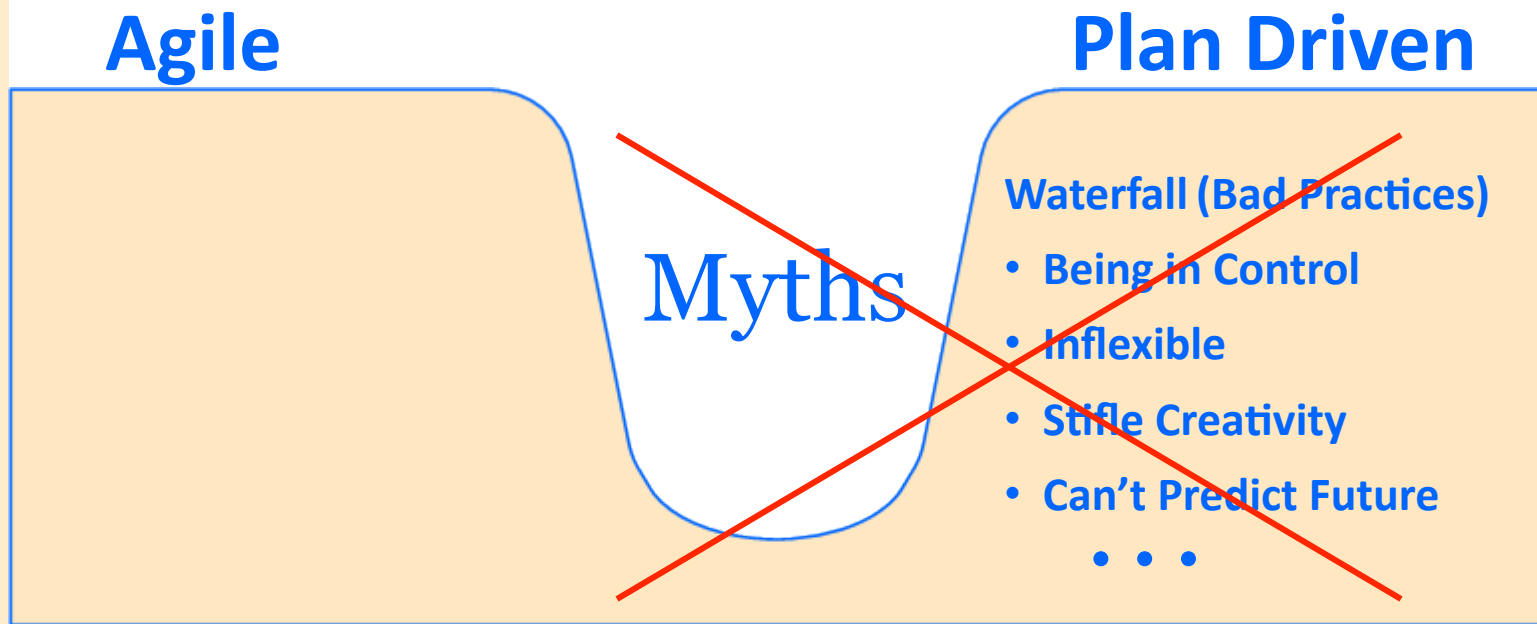


Agile-Like Iterative Development for Large, Complex Projects

Vincent McGevna, PMP
www.pmsuccess.com

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Agile is an Alternative to Plan Driven





Continuum Between Agile and Plan Driven

Agile

Plan Driven

Agile Core Values and Principles



Let's see how Agile Principles can be Used

1. Step back and look at Agile and Planning
2. Focus on an iterative approach: creating a Strategy
3. Examine the advantages of a good Strategy



Agile Manifesto Core Values

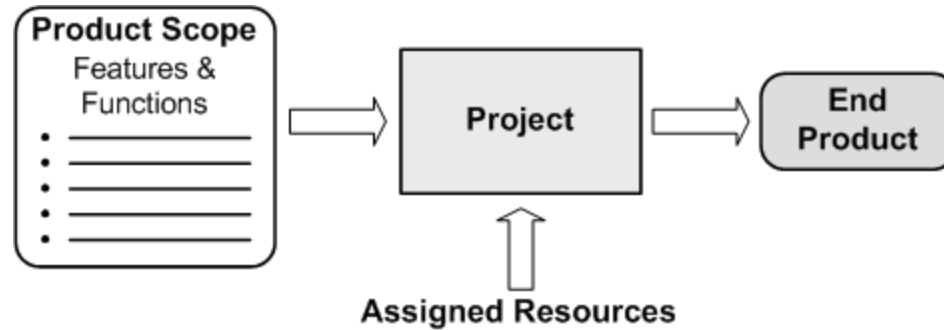
Individuals and interactions over process and tools

Working products over comprehensive documentation

Customer collaboration over contract negotiation

Responding to change over following a plan

Agile vs. Plan Driven



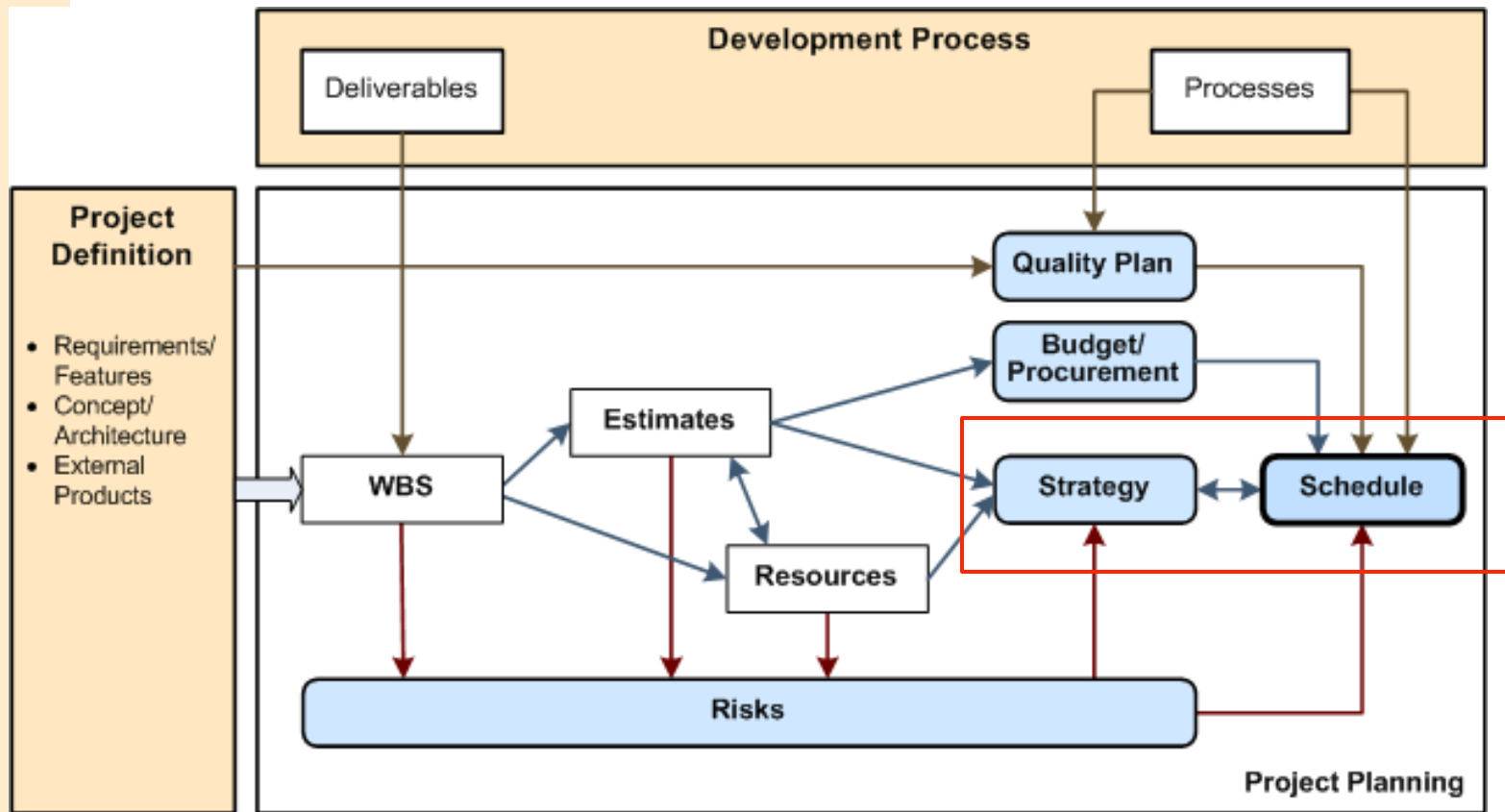
Factor	Agile	Plan-driven
Requirements	Not Well Defined	Well Defined
Requirements	Volatile	Stable
Features	Weakly Interrelated	Highly Interrelated
Resources	Less Specialized	Specialists



Let's see how Agile Principles can be Used

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- 2. Focus on an iterative approach: creating a Strategy**
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Schedule Centered Planning



What is Your Strategy?

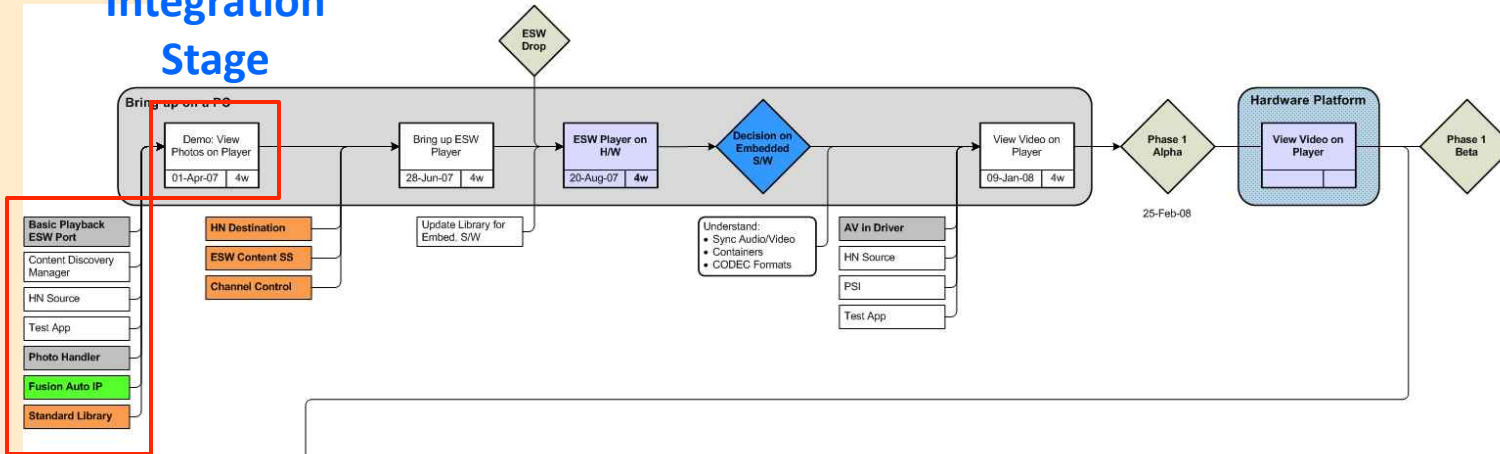
- Big Picture View – Game Plan
- Partition project into Milestones or Stages
 - Stages Lay Out Iterative Development
- Meaningful and Measurable
- The PBS breaks down the end deliverable;
The Strategy puts the pieces together

Defining the Stages

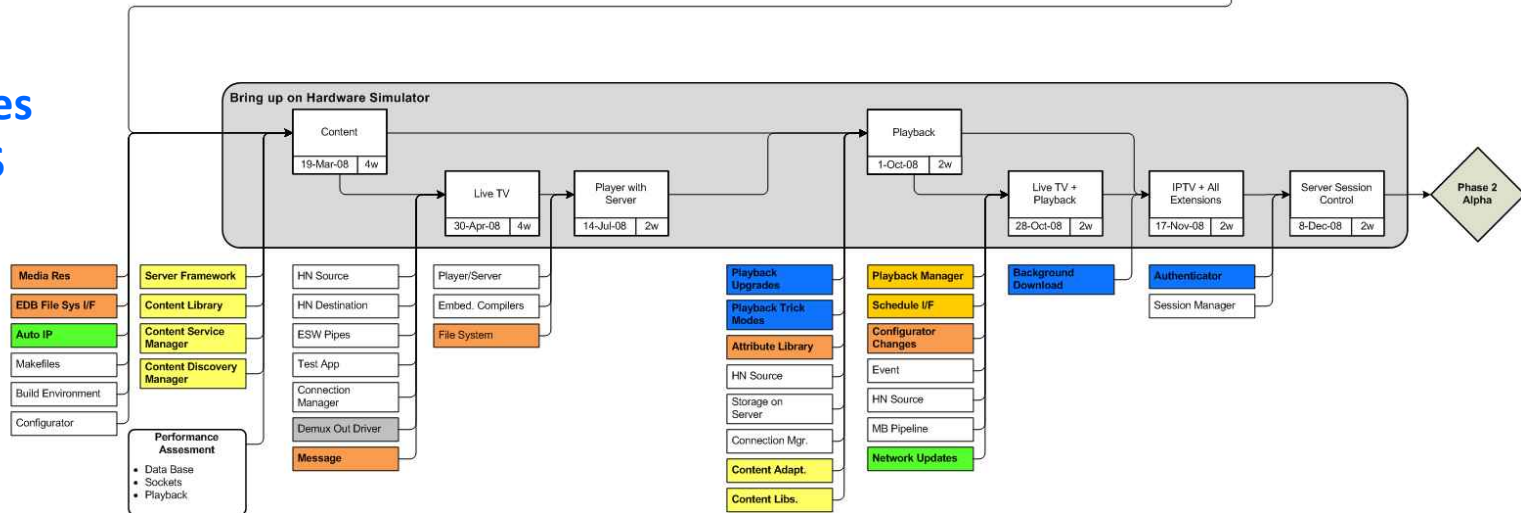
- Start with something basic or simple and then add features/complexity
- Provide meaningful deliverables early
- Address customer priorities
- Consider Duration and Logistics
- Manage Risk

A Real Strategy

Integration Stage

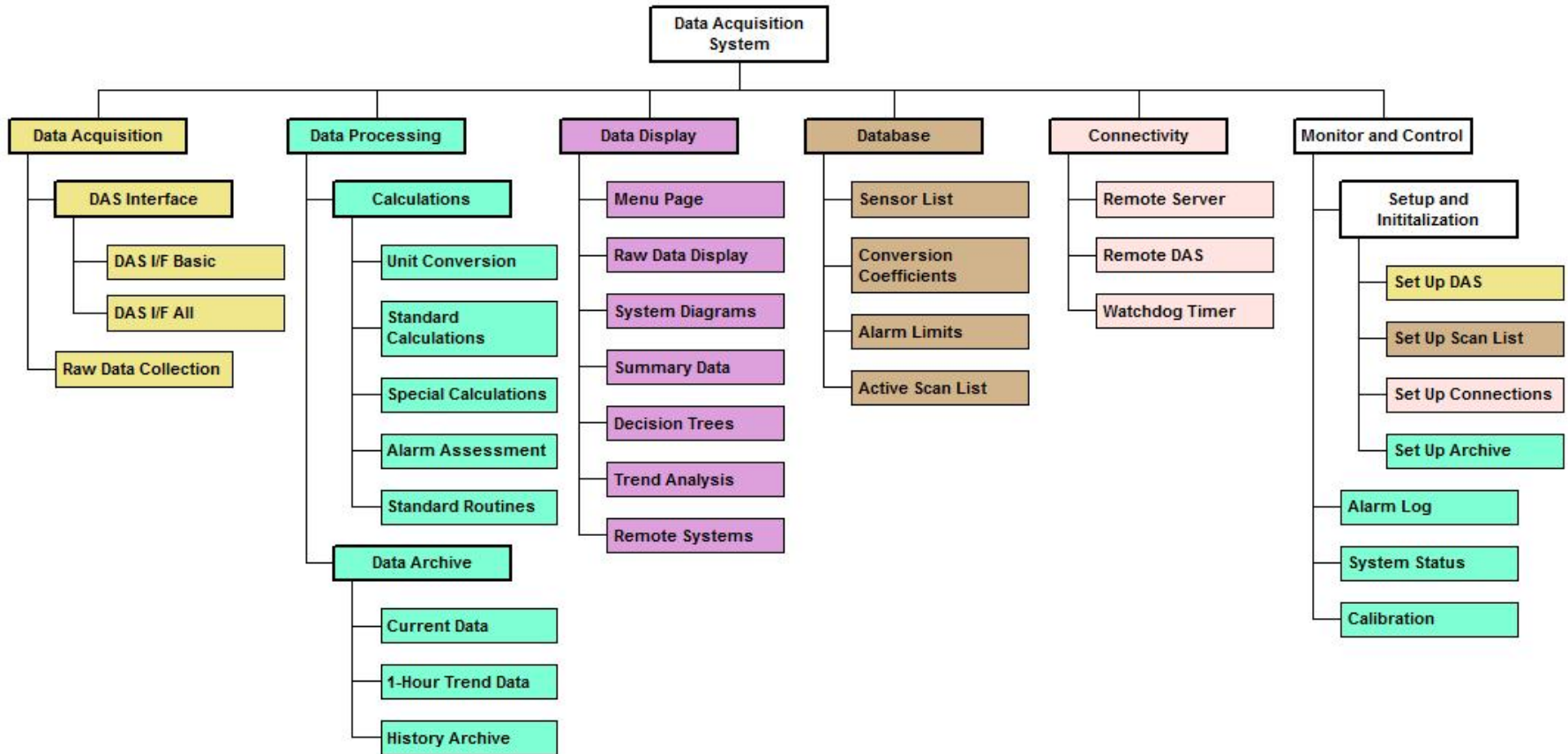


Deliverables From PBS





PBS for a Data Acquisition System

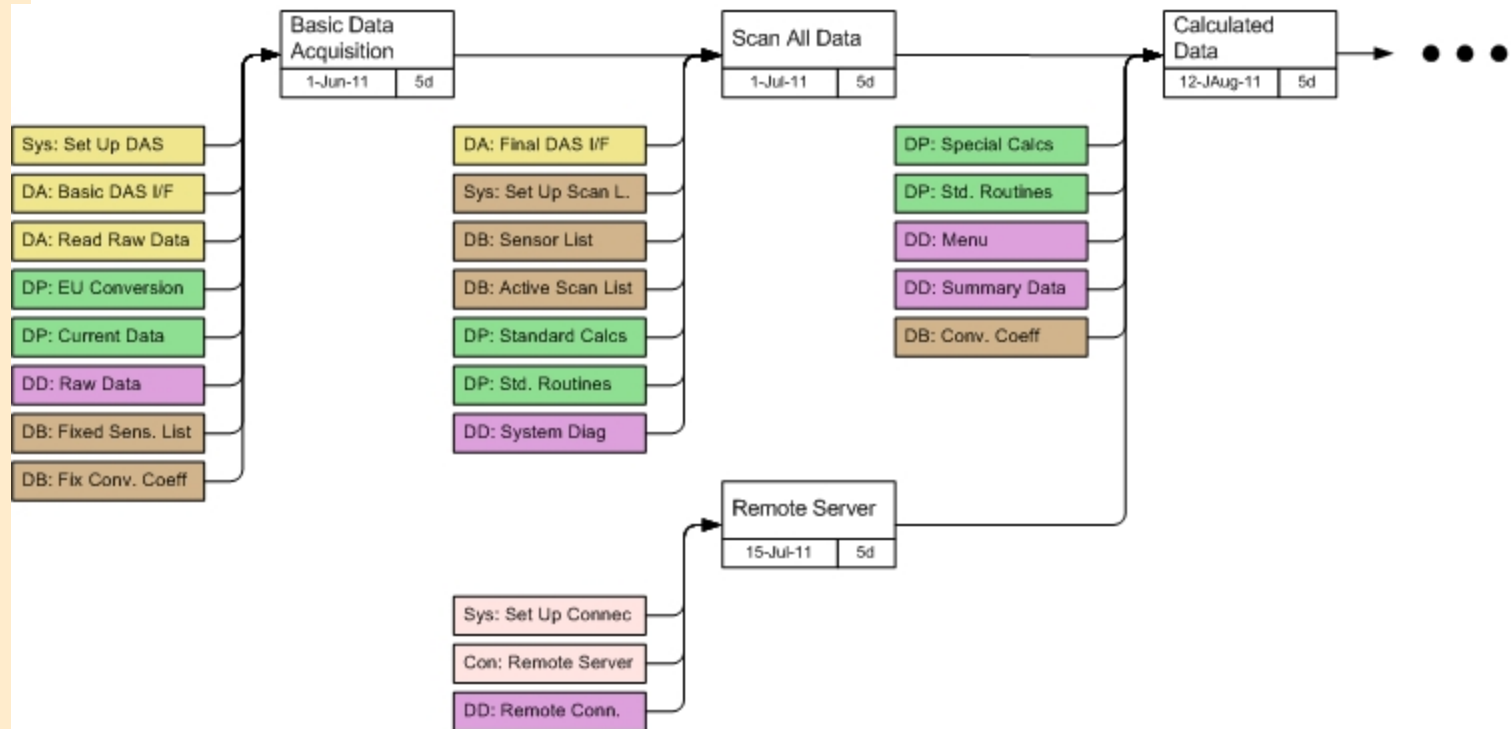




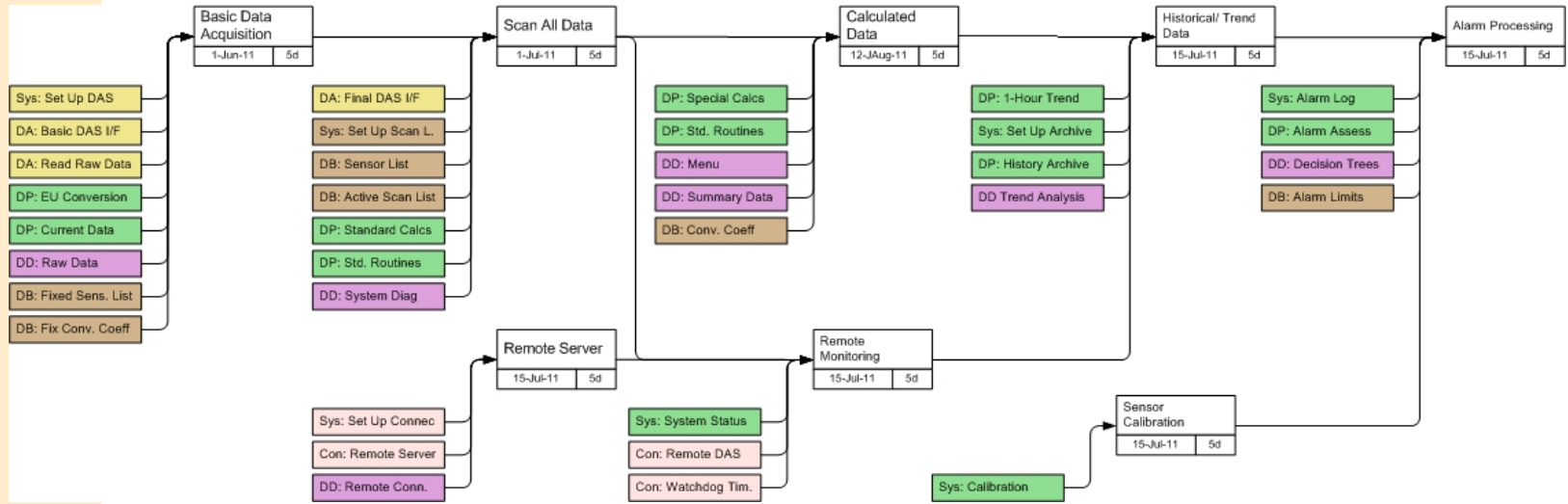
Stages for DAS Software

- Basic Data Acquisition and Display
- Scan all Data
- Calculated Data
- Alarm Processing
- Historical and Trend Data
- Remote Server
- Remote Monitoring
- Sensor Calibration

An Initial Strategy



Completed Strategy – First Pass





Let's see how Agile Principles can be Used

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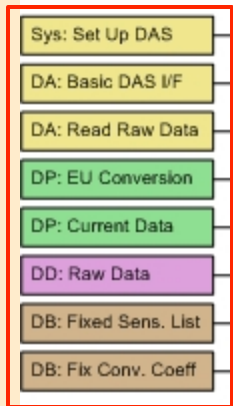


What are the Advantages of a Good Strategy?

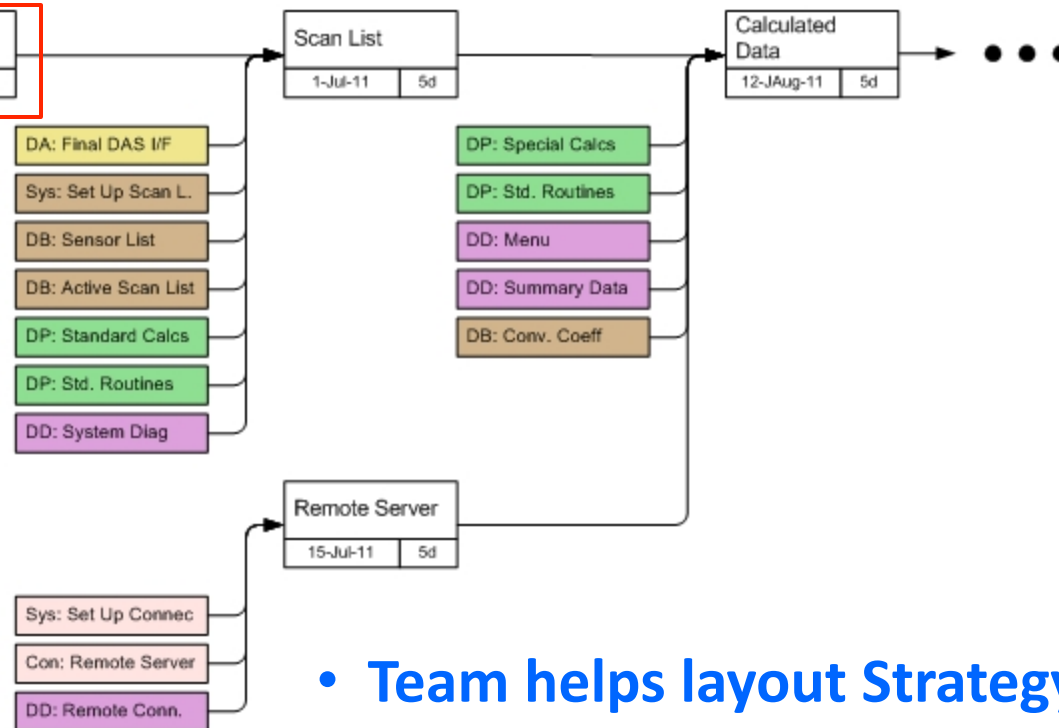
- Foster Teamwork
- Deal with Major Risks
- Manage the Project
- Deal with the “Project Crunch”

Foster Teamwork

Assign Owners to Integration

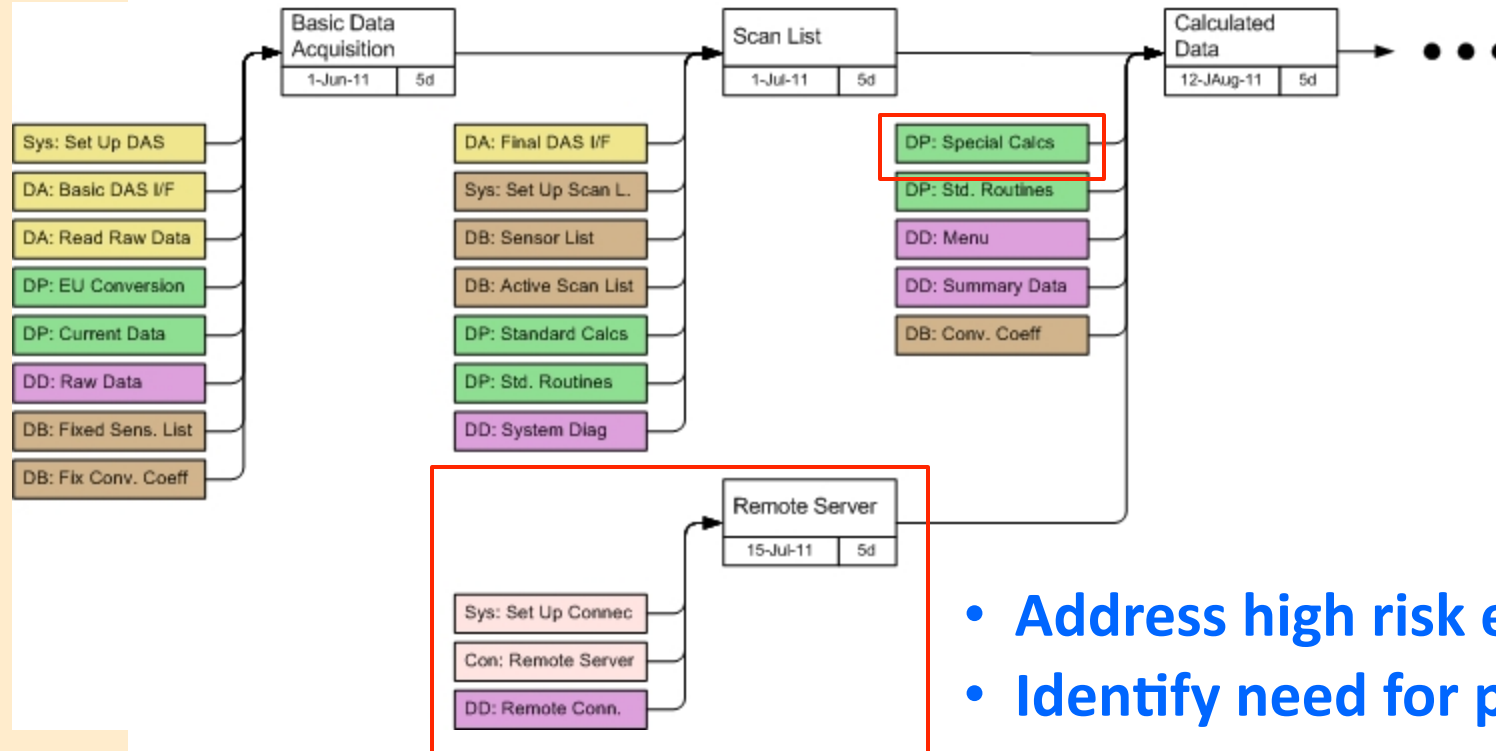


Assign Owners to Deliverables



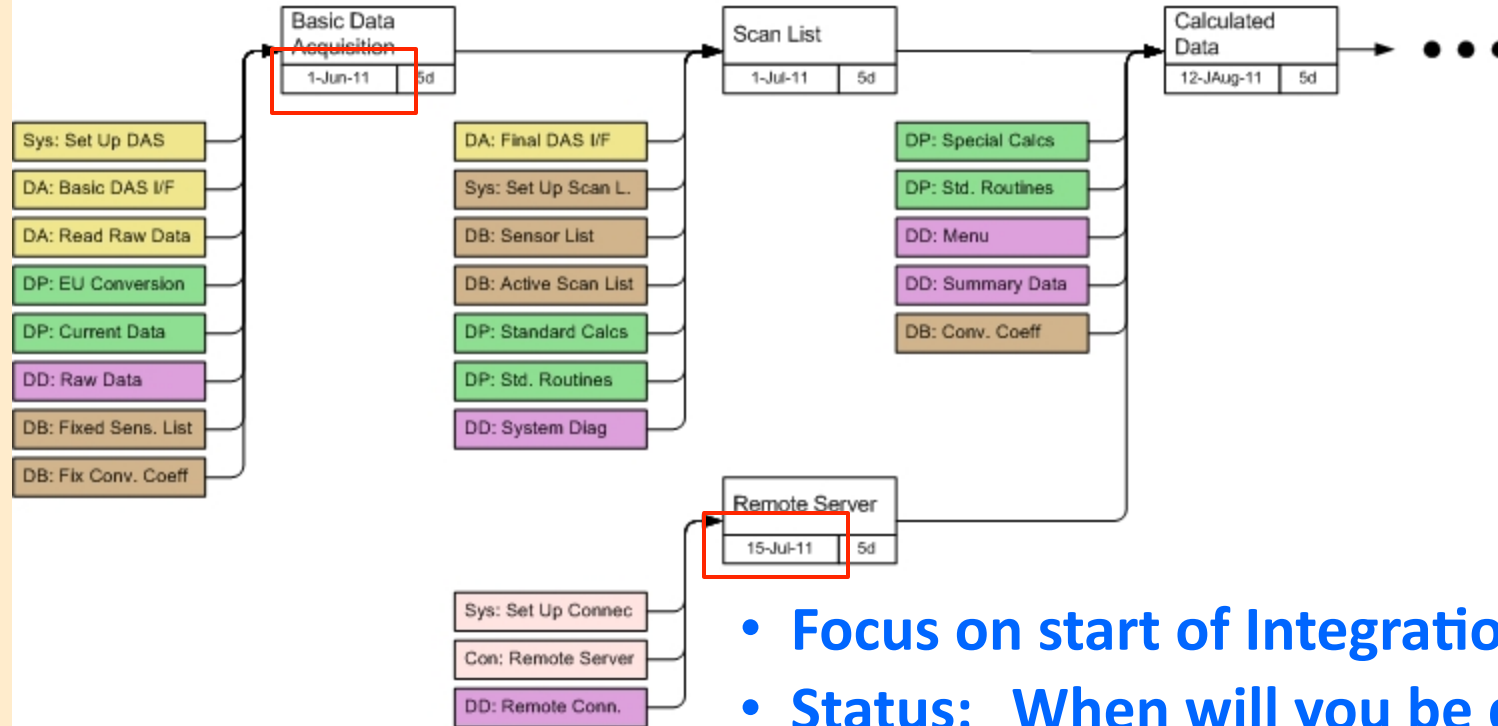
- Team helps layout Strategy
- Individuals see where they fit in
- Collaboration starts early

Manage Risk



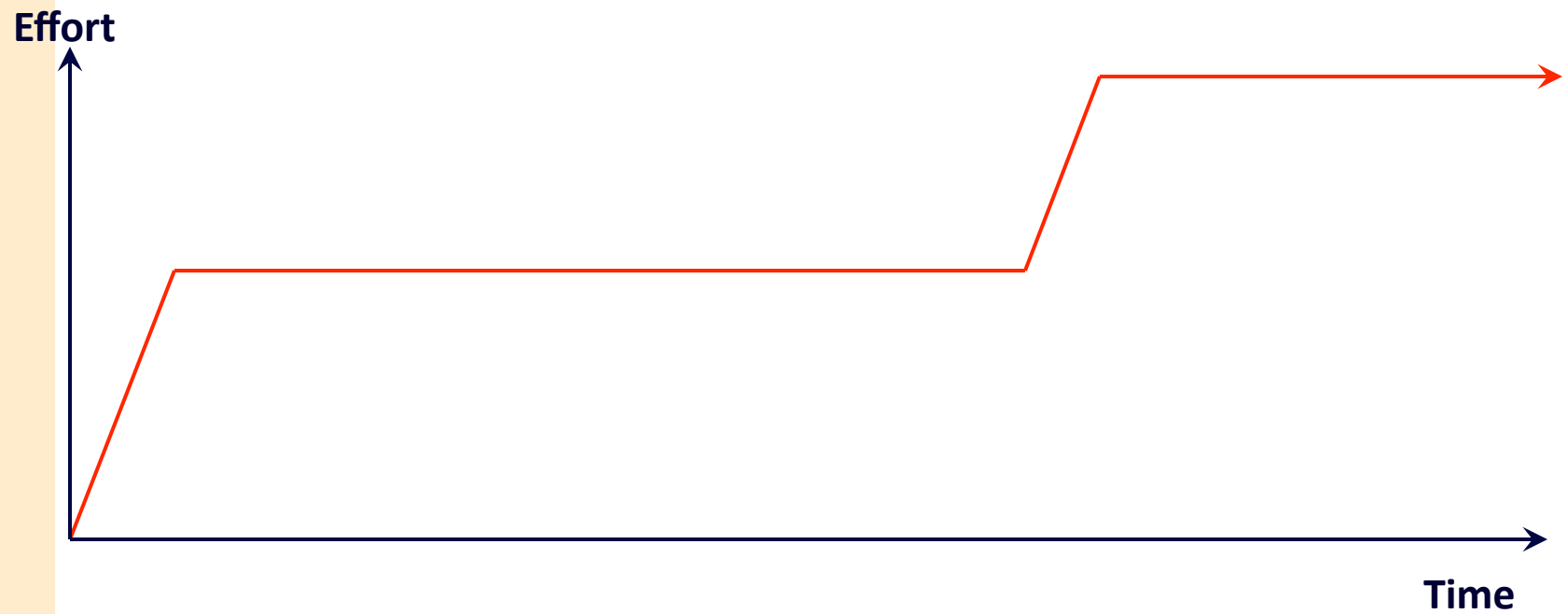
- Address high risk early
- Identify need for prototype
- Move tasks around/
redefine deliverables

Manage The Project



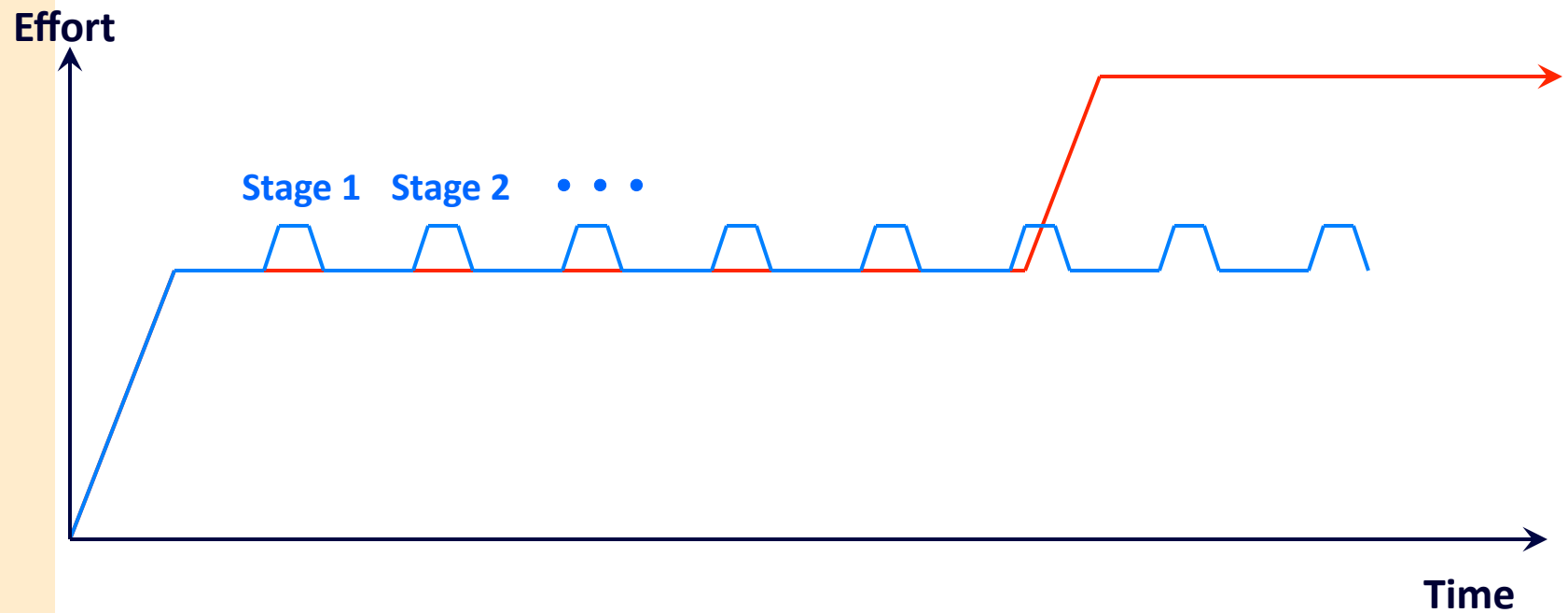
- Focus on start of Integration
- Status: When will you be done?
What is needed for integration?
- Calibrate estimates

The Project Crunch





A Good Strategy Spreads The Crunch



The Advantages of a Good Strategy

- Team creates, understands and buys into big picture
- Big picture used address major risks
- Focus on big picture to manage the project
- Significantly reduce long periods of extended hours

Schedule Centered Planning

An Incremental Approach
for
Plan Driven Projects



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Create a schedule that's a project plan – one that addresses risk, quality and procurement.

Lay out an iterative strategy to incorporate *the* major benefit of Agile into that schedule.

Use **Microsoft Project** as a planning tool.

Vincent McGevena, PMP

vincent@pmsuccess.com

www.pmsuccess.com