

Topics to be covered

- Agile and waterfall development methodologies
- When should each approach be used
- Project management in this hybrid world
- Impact on key vendor relationships
- Project delivery and commercial implications
- Best practices for successful business and commercial outcomes
- Key takeaways



Agile and waterfall development methodologies

Agile and waterfall development methodologies

- Many companies are increasingly adopting Agile development methodologies alongside the traditional waterfall approach to SDLC
- How are Agile and waterfall development methodologies different?

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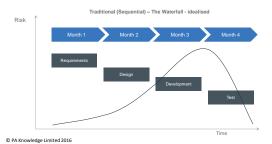


How Agile and waterfall development methodologies differ

Agile and waterfall development methodologies

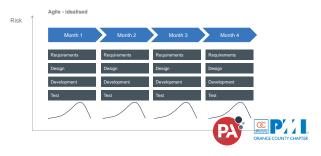
Waterfall:

Borne from a traditional engineering approach used for a physical delivery (e.g. a bridge) and focus on defined and gated phases. They are easy to understand and are still sometimes useful for straightforward development work. The problem is that risk is built up, often excessively so.



Agile:

Attempts to address the challenges of a sequential approach, using short but regular cycles to regularly deliver value to users. By engaging continuously with users and leveraging communication more than documentation, the aim is to achieve higher user satisfaction, lower delivery risk and cost.



So why is Agile becoming more prominently used?

Agile and waterfall development methodologies

Agile is an iterative and incremental, customer centric, method of doing work in a highly flexible and interactive manner:

- Avoids big upfront design and 'big bang' delivery in preference to iterative development, short feedback loops, and multiple releases
- Fixed time and budget, floating scope
- Promotes adaptive planning, evolutionary development, early delivery, continuous improvement, and encourages rapid and flexible response to change
- Useful not only for improving the software development lifecycle but other business activities

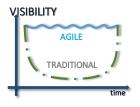
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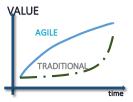


What makes Agile great for project delivery?

- Visibility: frequent Sprint reviews, show & tell
- Value: early delivery of real working software
- Adaptability: requirements and solution not fixed in detail up-front.
- Risk: early delivery of real working software targets risky areas early
- Resulting Satisfaction: should be far higher for all stakeholders















Agile does require a change in ways of working and different roles

Agile and waterfall development methodologies

- Self organizing teams
- · Focus on collaboration and continuous improvement
- Welcomes change
- The business, via the Product Owner role, are a core member of the Agile team







Scrum Master

Facilitates the 'process' and a coach for the team

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Product Owner

The voice of the customer and stakeholders

Team Members

5-9 dedicated cross functional team members with the skills to define, build and test a solution





When should each approach be used?

When should each approach be used

• When should each approach be used in lieu or in conjunction with one another?





When should each approach be used?

When should each approach be used

Waterfall

- Early agreement on requirements strong focus on documentation - makes planning, design and future improvements potentially easier
- Full scope known in advance progress more easily measured
- Throughout lifecycle team members can be involved in other work depending on active phase of project
- Except for reviews/ approvals / status meetings etc customer presence not strictly required
- Early complete design supports multiple software components to be designed in parallel for integration with external systems (not as piecemeal)

Agile

- Customer has frequent and early visibility of outcome – supports requirements refinement
- Strong sense of customer ownership and involvement
- Time to market more critical than full feature set
- Features and development focused on delivering business value
- Development more user focused than only functionality





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Project management in this hybrid world

Project management in this hybrid world

• How can project management best function in this hybrid world?



What might be the impact of Agile on key vendor relationships?

Impact on key vendor relationships

• Given companies have existing outsourcing relationships with vendors to provide development and support services in support of projects, what impact might that have on key vendor relationships?

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Vendor relationships

Impact on key vendor relationships

- The Agile approach works best with a collaborative relationship rather than the transactional type.
- Where vendor relationships have soured, Agile may not be the best approach as it requires trust and close working
 - The client must trust that suppliers will behave reasonably as requirements emerge and change
 - Suppliers must trust that the client has gone to reasonable lengths to articulate the perceived complexity of the challenge from the outset
- Where relationships are perceived to be poor a greater level of upfront requirements specificity may be helpful





Project delivery and commercial implications

Project management and commercial implications

• What are some of the potential project delivery and commercial implications regarding how projects are run?

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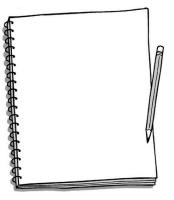


Discussion questions

Project management and commercial implications

Prepare your thoughts on the following points for discussion in the group:

- Does Agile allow the client to use fixedprice contracts? How does this compare with Waterfall?
- How easy / hard do you think it would be to deal with an ineffective supplier with Agile?
- Do you feel Agile yields a competitive tendering environment?







Waterfall contracting model

Project management and commercial implications

Typical contract inputs

Full signed off requirements

Agreed quotation for work

Project Purpose

How the Project is Run

What Happens When Things go Wrong

Contract

Expected outputs

pplier payment per

Assumptions

- · Can reasonably articulate target state at the beginning
- With the target state articulated correctly, failures will then be due to the supplier; this is the risk to be managed

Challenges to be managed

- · Contract sets up a transactional customer / supplier basis that often carries through to the way of working on project
- Motivations between customer and supplier misaligned in a standard fixed price contract

Recourse

- Lack of evidence in Waterfall lifecycle can mean issues come to light after most of the time and budget has been consumed
- Ultimate performance sanction is the threat of legal recourse
- Legal recourse is rarely straightforward though, often expensive and drawn out

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Agile contracting model

Project management and commercial implications

Typical contract inputs

Agreed set of target outcomes
Way of working and estimating

Project Purpose

How the Project is Run

What Happens When Things go Wrong

Contract

Expected outputs

System increments
Supplier payment per increment

Assumptions

- · Cannot reasonably articulate target state at the beginning
- · With outcomes and ways of working agreed, failures occur when the relationship breaks down or a party takes advantage

Challenges to be managed

- · Without an agreed specification it can be challenging to identify the most cost efficient supplier
- · Estimation models must be used to maintain a level of cost control but these can be gamed

Recourse

- · Performance management is via the relationship and commercial threat of ending the contract early
- Incremental delivery provides concrete performance data that can be used to manage the supplier before the full budget and time has expired

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Can we contract in a better way for Agile delivery?

Project management and commercial implications

Contracting Challenges

- Usual contracting approach for waterfall doesn't work with Agile
- Waterfall contracting isn't that great anyway - adversarial & generally blows up in testing
- How can we fix price without fixing scope?
- How do we distinguish between suppliers?

Goals in contracting for Agile

- Align motivations
- Partnership model vs adversarial
- Move away from customer carrying most of the risk via T&M
- Limit or reduce risk of loosing \$\$





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Best practices for successful business and commercial outcomes

Best practices for successful business and commercial outcomes

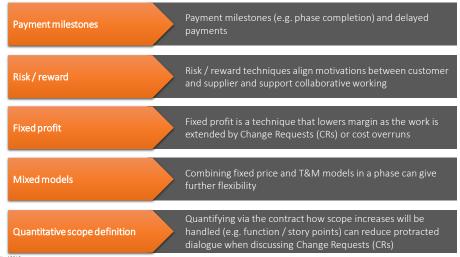
• What are some of the best practices to manage programs/projects to successful business and commercial outcomes?





Choose commercial techniques

Best practices for successful business and commercial outcomes







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Two phase and progressive acquisition contract models

Best practices for successful business and commercial outcomes

Two contract types are commonly used in the Agile model:

- Two phase: The two-phase model uses one contract for 'System definition' and one contract for 'System acquisition'
- Progressive acquisition: This model uses a head contract and a separate call off for each Iteration

There is also a Start phase which is completed by the customer only.

A single contract covering the entire supplier engagement doesn't typically give the same flexibility as the two above models.

We will look at the two-phase model.









Customer & supplier motivation in a two phase contract

Best practices for successful business and commercial outcomes

No contract, customer only Contract 1 Contract 2 System definition System acquisition Motivations Motivations Motivations Getting scope clear • Getting the architecture base-·Showing the right rate of progress throughout the phase Securing funding for • Ensuring that quality is acceptable the project • De-risking & demonstrating • Users increasingly satisfied with incremental product Stakeholder access quick win functionality releases • Getting the right partner • Delivering on time and budget Motivations Motivations Key concerns • Winning the System · Winning the much more lucrative • Continuing the contract through the high-value period Definition contract contract Preserving profit margin through: • High quality releases with few fixes Demonstrating Demonstrating delivery capability capability • Being seen to go the extra mile Stakeholder satisfaction Building relationships • Maintaining a good relationship through strong delivery

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Benefits

Best practices for successful business and commercial outcomes

- Supplier will put their 'A' team on Initiate/Definition phase as they want to win the Acquisition contract, customer is getting high value delivered and reducing risk
- You know more information going into Acquisition than you would with waterfall phases. Still some uncertainty but enough confidence to go Fixed Price on both sides
- Contract is structured such that both parties have to invest, embeds partnership principles
- Underpinned by Agile Manifesto
- Risk carried jointly





Key takeaways

Key takeaways

- An understanding of the different implications of Agile and Waterfall with respect to projects
- Practical, best practice approaches for commercial engagement on project delivery in this hybrid world
- The PM's commercial levers to manage Agile project delivery
- That Agile delivery is about creating quality, working deliverables that provide the highest possible business value whilst reducing the risk of failure





