## IFB295 IT Project Management

# DSDM Agile Project (DAP) Framework

# "The Right Solution at the Right Time"

Timebox 6 of 13



Lecturer: Nev Schefe

### **Unit Themes**

#### Project Leadership Framework

Project Management Standards - ISO 21500:2012 -

Phased Models (Waterfall)

PRINCE2

Incremental & Iterative Models (Agile)

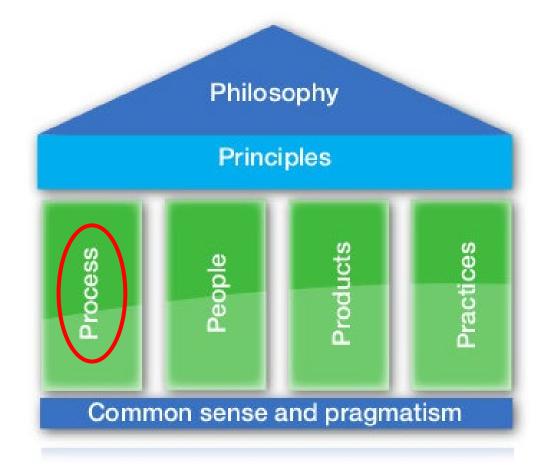
Scrum ✓ DSDM

**Tutorials** 





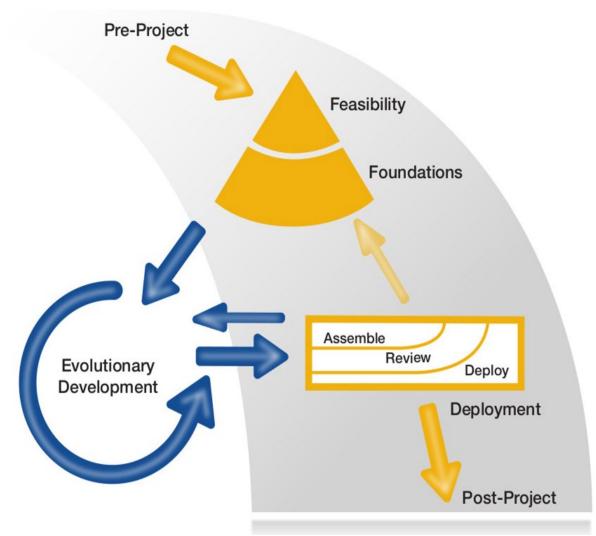
## Composition of DSDM





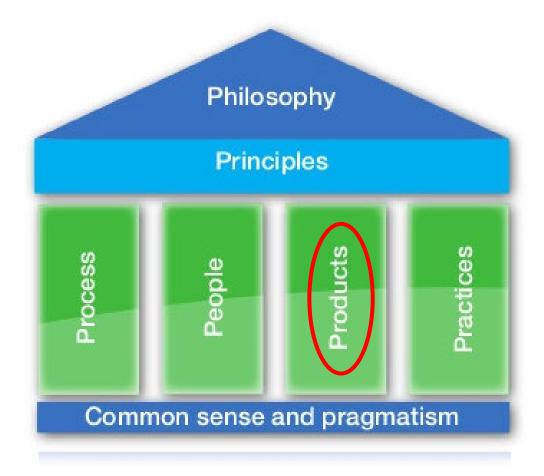


## **DSDM Process**





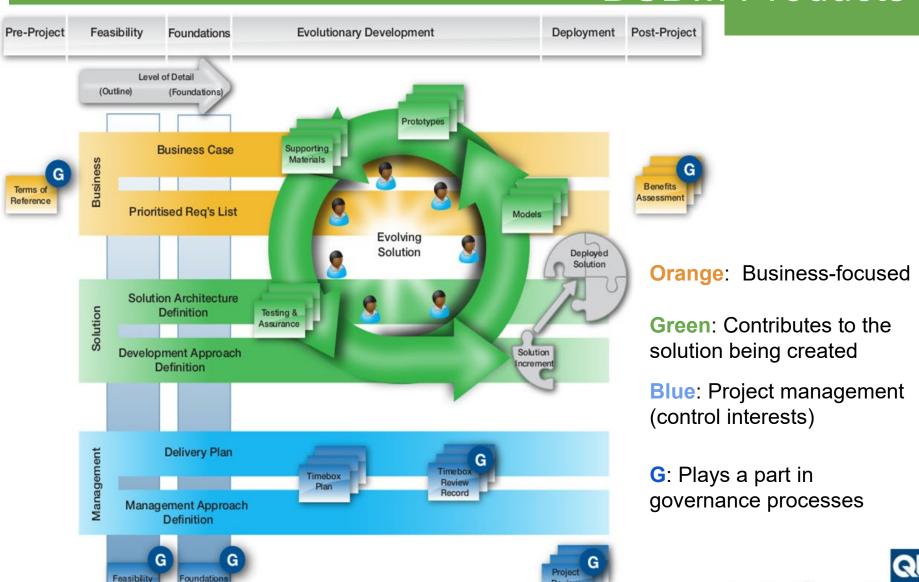
## Composition of DSDM







### **DSDM Products**



Report

Assessment

Summary





### **DSDM Products**

#### DSDM identifies two distinct types of product:

- Milestone products
  - Created in a phase
  - Typically fulfil a specific purpose within that phase as a checkpoint, or to facilitate governance processes
- Evolutionary products
  - Evolve over time
  - Typically, but not always, span a number of project phases and may be baselined more than once during that time



## Products – Summary

- Ensuring the right information is available at the right time
- Some products are specific to one lifecycle phase, others continue to evolve
- Flexibility
  - Not all products are required for every project
  - Formality of products varies from project to project and organisation to organisation
- Progress demonstrated by delivery of products





## Pre-Project Phase

#### **Objectives**

Describe business problem being addressed

Identify Business Sponsor and Business Visionary

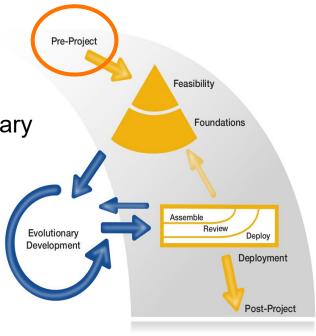
Confirm project is in line with business strategy

Scope, plan, and resource Feasibility phase

Keep Pre-Project short and sharp

Main purpose is to position project and justify
 Feasibility

Formality varies, depending on organisation

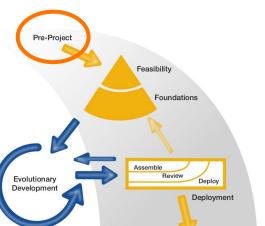




## Pre-Project Phase Products

#### Terms of Reference

- Milestone product
- High level definition of business driver for, and objectives of, the project
- Primary aim is to scope and justify Feasibility investigation
- Identified as a governance product because it may be used for purposes such as prioritisation of a project within a portfolio





Orange: Businessfocused

**G**: Plays a part in governance processes





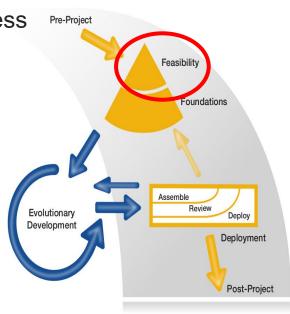
## Feasibility Phase

#### **Objectives**

Establish if there is a feasible solution to the business problem

- Both from business and technical perspective
- Identify benefits likely to arise from delivery of proposed solution
- Outline possible approaches for delivery
  - Including solution sourcing and project management strategy
- Describe organisation and governance aspects of project
- State first cut estimates of timescales and costs for project overall
- Plan and resource Foundations phase







## Feasibility Phase Products

#### **Feasibility Assessment**

- Milestone product
- Snapshot of evolving business, solution, and management products at end of Feasibility
- May be expressed as a baselined collection of the products

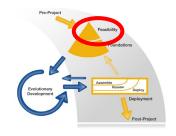
#### G Feasibility Assessment

Blue: Project management (control interests)

**G**: Plays a part in governance processes

#### **Evolutionary products**

- Business Case: vision and justification for the project from a business perspective
- **Prioritised Requirement List (PRL)**: high-level description of the requirements that the project needs to address, and their priority to meet the needs of the business
- Solution Architecture Definition: high-level design framework of the solution
- Development Approach Definition: high-level definition of the tools, techniques, customs, practices and standards
- Delivery Plan: high-level schedule of Project Increments
- Management Approach Definition: approach to the management of the project





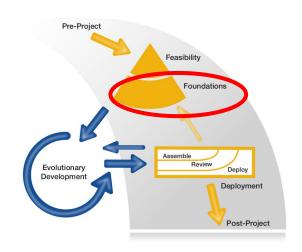


### **Foundations Phase**

#### **Objectives**

- Establish:
  - Firm business foundations for the Project
  - Firm foundations for the Solution
  - Firm foundations for the management of the Project
- Assess the continuing viability of the Project
  - Both from the business and technical perspectives
- Do just enough to move on Enough Design Up Front
  - Compressed timeframe (a few weeks at most)
- Models are preferable to contextual specifications

For smaller, simpler projects, the Feasibility and Foundations phases can often be merged into a single phase.





### Foundations Phase Products

#### **Foundations Summary**

- Milestone product
- Snapshot of evolving business, solution, and management products at end of Foundation
- Each of the products should be mature enough to make a sensible contribution to the decision as to whether the project is likely to deliver the required return on investment
- May be expressed as a baselined collection of the products

#### **Evolutionary products**

- Business Case: vision and justification for the project from a business perspective
- Prioritised Requirement List (PRL): high-level description of the requirements that the project needs to address, and their priority to meet the needs of the business
- Solution Architecture Definition: high-level design framework of the solution
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Blue: Project management (control interests) G: Plays a part in governance processes

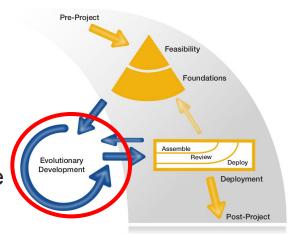


## **Evolutionary Development Phase**

## The Evolutionary Development phase evolves the solution

#### **Objectives**

- Elaborate requirements baselined in PRL during Foundations
- Explore full detail of the business need and provide detailed requirements for evolving solution
- Create a functional solution that demonstrably meets the needs of the business through iterative development
- Give wider organisation an early view of solution
- Evolve Business Area Definition and System Architecture Definition, if required
- Plan detail of how solution (or partial solution) under development will become operational





## Evolutionary Development Phase

To converge over time on an accurate solution that meets the business need, and is built in the right way from a technical viewpoint, this phase requires the Solution Development Teams to apply practices such as:

- 1. Iterative Development
- 2. Timeboxing
- 3. MoSCoW prioritisation
- 4. Modelling
- 5. Facilitated Workshops

Working within Timeboxes, the Solution Development Teams create Solution Increments, iteratively exploring the low-level detail of the requirements, and testing continuously as they move forward.

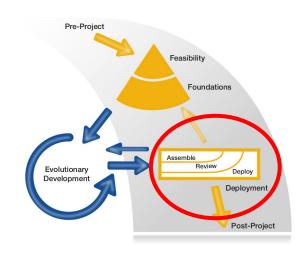




## Deployment Phase

#### **Objectives**

- Bring a baseline of the Evolving Solution into operational use
  - The release that is deployed may be the final solution, or a subset of the final solution



#### **Activities**

- Assemble
- Review
- Deploy

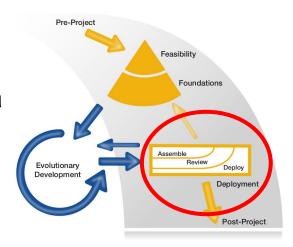
After the last release, the project is formally closed.





## What can be Deployed?

- Business change
  - Introducing a new way of working into a factory (deploying a business change as a single release)
- Early deployment of a corporate intranet, providing a limited number of features, with more features to be provided later (deploying the first release of many)
- A complex product
  - For example, the launch of a new mobile phone, bringing together parts of the solution from multiple projects run in different locations (deploying a new product as a single release)

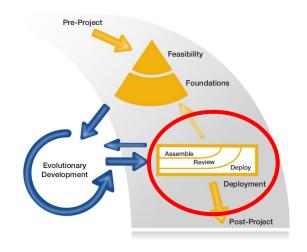




## Deployment Phase – Assemble

Assemble encompasses the work to "bring together" what is to be released to ensure that what is being delivered is coherent

- On a small simple project, the work involved during Assemble may be minimal.
- On larger more complex projects or programmes, where multiple projects are feeding into a single release, the amount of work to assemble a number of Solution Increments into a single release could be significant, for example, combining:
  - A new business process
  - A schedule of training
  - User guides
  - New IT solution





## Deployment Phase – Review

Review encompasses the work required to check the solution is ready to be deployed before it goes into operational use, to ensure the proposed release meets the appropriate standards and is complete enough to be viable

In a simple environment, this can be very informal (basic checklist) but in a more complex environment, it may be as formal as a go/no-go checkpoint workshop.

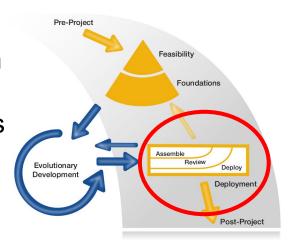
The team also carries out a retrospective for the Project Increment, focusing on ways of working and potential areas for improvement. Information from both the retrospective and the formal review help shape plans for future increments, and can be used to facilitate learning across projects.



## Deployment Phase – Deploy

#### **Deploy**

Deploy is the physical act of putting what has been assembled (the release) into operational use. It occurs after approval has been given, and includes any technical work, such as transfer of the solution into the live (production) environment, but also the enactment of any plans for business change.



#### Closing the project

After the final Deployment, the project is formally closed.

At this point, the whole team holds a retrospective to review the overall project performance, both from the technical and process perspective, and from the business perspective.





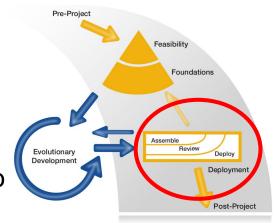
## Deployment Phase – Complexity

A release can encompass one or more Solution Increments, and can span one or more projects, so the Deployment phase can be a simple or a complex activity.

How deployment is done varies from organisation to organisation, and from project to project. For many organisations, decisions about how deployment is handled are imposed by the organisation itself, and are not negotiable by an individual project.



- Project controls deployment
- Project controls Assemble and Review but not the final Deploy activity



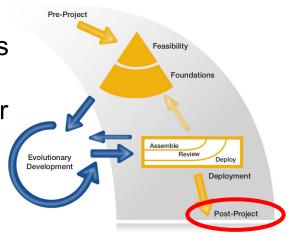


## Post-Project Phase

#### **Objectives**

 Checks how well the expected business benefits have been met

 Produces one or more Benefits Assessments for these realised benefits in relation to the business case



#### **Assessing Benefits**

- Most benefits accrue over a pre-defined period of live use of the solution
- Benefits can be assessed for individual releases, for the whole project, or can be omitted completely, depending on the needs of the organisation.





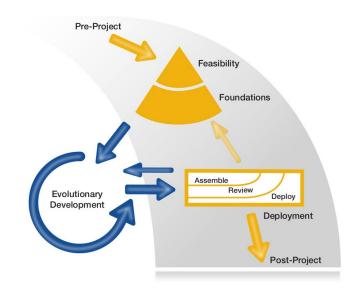
## Lifecycle in Practice

The lifecycle for a project is determined by factors such as the number of intended Project Increments, and is defined and agreed as part of the Foundations phase.

The process shows the framework and the options available.

There is a clear progression of phases from Pre-Project to Post-Project but the arrows indicate a return path within the process specifically from:

- Deployment to Foundations
- Deployment to Evolutionary Development







## DSDM Process - Summary

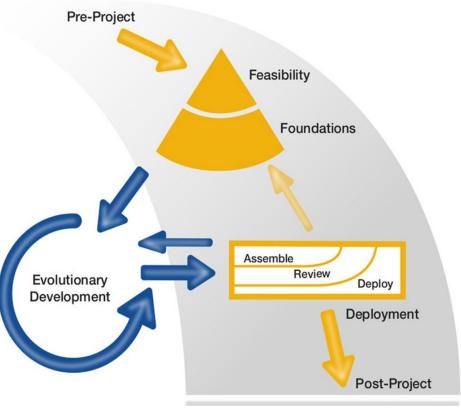
#### DSDM provides:

An iterative and incremental process with six lifecycle phases

Each phase has a specific purpose and a number of defined products

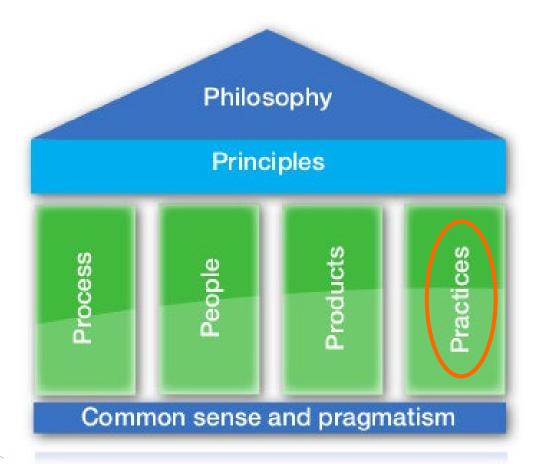
A framework designed to work effectively with projects of varying sizes and

complexity





## Key Practices - Control



#### **Key Practices**



Iterative Development



Facilitated Workshops



**Modelling** 



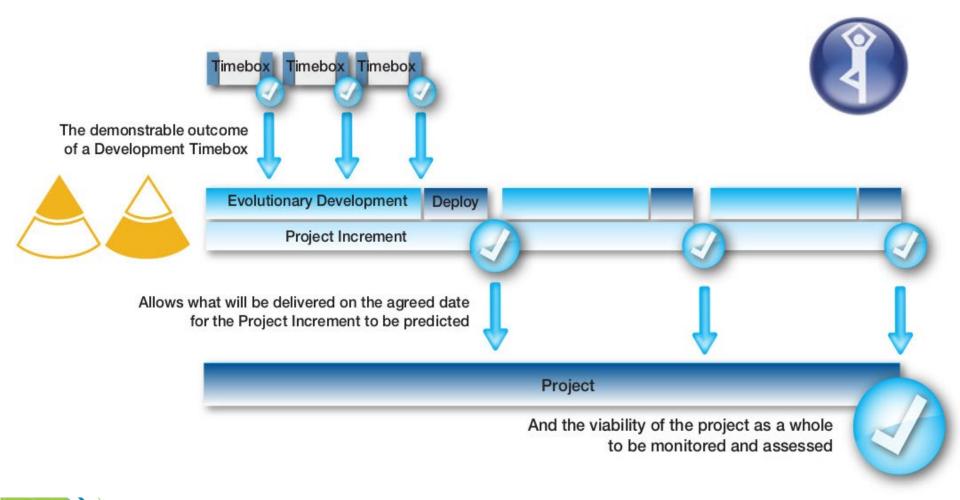
**Timeboxing** 



MoSCoW Prioritisation



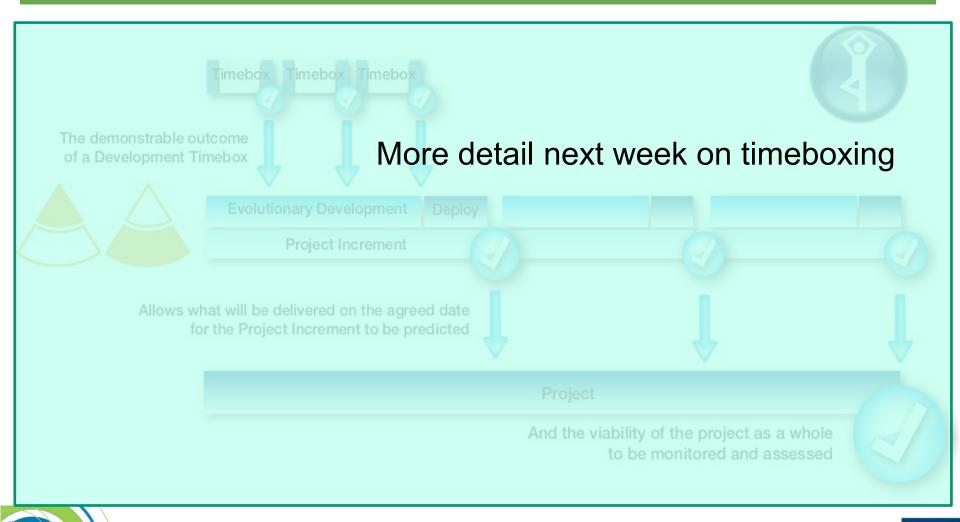
## Agile Control – Timeboxing and MoSCoW







## Agile Control – Timeboxing and MoSCoW





## MoSCoW Prioritisation



	Effort	Description	Deliverable		
	60% or less	Cannot be de-scoped or the project to fails.	Guaranteed ( <b>M</b> ust)		
	20%	Can be de-scoped as a last resort to keep the project on track.	Expected ( <b>S</b> hould)		
	20%	Can be de-scoped without causing significant problems	Possible (Could)		
	0%	Out of scope.	Maybe next time ( <b>W</b> on't)		





## Delivering the Business Case using MoSCoW

In scope for this timeframe

(Project / Increment / Timebox)

Must Have



Typically no more than 60% effort

**Should Have** 



**Could Have** 



Typically around

Out of scope for this timeframe



Won't Have this time





MoSCoW – balancing priorities



### Prioritisation – Who Decides

**Are all Must Haves non-negotiable?** 

A Must Have = "Deliver this or we cancel the project"

Project Manager or Business Analyst may challenge less obvious Must Haves

- Can this requirement be broken down further?
  - A high level Must Have may contain mix of Musts, Shoulds, Coulds, Won'ts at a lower level
- Business Visionary/Business Ambassador have final say
- The Business Sponsor perspective
  - Sponsor expects delivery of all Must Haves
  - Typically expects delivery of most/all Should Haves
    - The recommended split of Musts/Shoulds/Coulds gives 20% contingency for Could Haves
      - 10% contingency is the normal working level on a traditional project a university for the real world





### Prioritisation – BABOK Criteria

## BABOK 3.0 suggests 8 factors that influence the prioritization of requirements:



- 1) Benefit/Value It is the advantage that the business accrues as a result of the requirement implementation.
- 2) Penalty It is the consequence of not implementing a requirement. It can refer to the loss in regulatory penalties, poor customer satisfaction or usability of the product.
- 3) Cost It is the effort and resources that are required to implement a requirement.
- 4) Risk It is the probability that the requirement might not deliver the expected value.
- 5) Dependencies It is the relationship between requirements.
- 6) Time Sensitivity Everything comes with an expiry date.
- 7) Stability The likelihood of the requirement remaining static.
- 8) Regulatory/Policy Compliance Those requirements that must be implemented to meet the regulatory requirements.



# Prioritisation – Example Registry of Births, Deaths and Marriages:

		Criteria							
Product	Benefit or Value	Penalty	Cost	Risk	Dependencies	Time Sensitivity	Stability	Regulatory/ Policy Compliance	
Birth Registration									
Birth Certificate		Sales	s - profit						
Birth Modification									
Death Registration									
Death Certificate					Backlog				
Death Modification									
Marriage Registration									
Marriage Certificate									
Marriage Modification									
Relationship Registration									
Relationship Certificate		New legislation							
Relationship Modification									
Compliance - Completeness									
Compliance - Unique ID				Protect ID			ect ID		
Compliance - Entitlement									
Lodgement - Status									
Lodgement - Client Search							Clier	t Informe	
Lodgement - Dept Search							01101		

# Prioritisation – Example Registry of Births, Deaths and Marriages:

		Criteria for Must Haves							
Product	Benefit or Value	Penalty	Cost	Risk	Dependencies	Time Sensitivity	Stability	Regulatory/ Policy Compliance	
Birth Registration		,				,	,	·	
Birth Certificate	5	Sales - profit							
Birth Modification									
Death Registration	0								
Death Certificate	3				Backlog				
Death Modification									
Marriage Registration									
Marriage Certificate	6								
Marriage Modification									
Relationship Registration									
Relationship Certificate		N			islation		2		
Relationship Modification			·						
Compliance - Completeness									
Compliance - Unique ID				1 Protect ID		ect ID			
Compliance - Entitlement									
Lodgement - Status									
Lodgement - Client Search						4	Clier	nt Informed	
Lodgement - Dept Search					3000				

## Any questions?

Please attend the tutorial you enrolled in.

Thank you. See you next week.



