Insights

AgilePM® Foundation & Practitioner

APMG International™ AgilePM

Pre-Course Study Guide

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Insights

Contents

Introduction

Welcome to the Insights AgilePM course.

If you require any special arrangements concerning the examinations or the training, then please contact Insights on +44 (0)345 1201235 so that any special needs are actioned appropriately.

Who is the course suitable for?

In today's ever-changing world, organisations and businesses are keen to adopt a more flexible approach to delivering projects and want to become more agile. However, this can be seen a risky for those organisations that use a formal project management approach, such as PRINCE2. A mature agile approach can provide agility within the concept of project delivery.

Training in Agile is suitable for

- existing programme & project managers,
- programme and project support teams,
- team managers and team members and
- senior managers

Objectives of the course

- Understand the benefits and principles leading to a structured approach to project management.
- Understand the principles of Agile and how they are embraced in project delivery.
- Use a structured project management environment to ensure effective sustainable outcomes.
- Understand the AgilePM framework at Foundation and can apply it at Practitioner level.

Training Approach and Content

The course is delivered by experienced and APM Group approved trainers.

You will be expected to have completed approximately 4 hours pre-course preparation in the form of reading this document and reviewing the information using set revision questions prior to attending the course.

We suggest you read the necessary extracts for each topic then attempt the set revision questions and review your answers using extracted text.

This pre-read material is important if you wish to have a better chance of passing the examinations. In our experience, those delegates that complete the pre-read study will be better prepared for the course delivery also.

Your tutor will guide you through the course, but if when completing the pre-read materials, you have difficulty on certain subjects, please raise these with the tutor on the course.

The Structure of the course

The course focuses on the Foundation levels over the first two days of the course. The third and fourth day is usually set aside to consolidate understanding and application of the methodology at Practitioner level. The practitioner part of the course focuses in a deeper understanding and includes sample exam practice.

It will be necessary for at least 1.5 to 2 hours of evening work to be undertaken as required. This usually takes the form of Sample Foundation and Practitioner type exam questions on the first two evenings and Practitioner type questions on the third evening. The evening study is critical for being prepared for the examinations.

The course will typically start at 9am and finish by 5pm.

The Examinations

The Foundation exam is usually taken at the end of the second day in the afternoon. It consists of a multiple-choice paper that lasts 40 minutes, and has 50 questions to answer, of which 25 need to be scored correctly to pass. It is a closed book exam. The exam is usually marked by the trainer and a provisional result can be given out immediately after the exam, if required.

The Practitioner exam is taken on the afternoon of the fourth day. It is a 2.5-hour objective reasoning exam in a computer marked tick box format. You may only use your manual as a reference in the exam. It consists of 80 marks and a candidate must score 40 or more to pass. The exam tests the candidate's understanding of Agile and how it can be applied to a given scenario. The exam is marked externally, and the results can take up to 3 weeks to be distributed from APM Group.

Delegates passing the exam are accredited at Practitioner level for 5 years. Between the 3 and 5 years point, a Practitioner would need to pass a one-hour refresher exam to remain a registered Practitioner.

The Course contents

The course covers the following:

AgilePM brings together all the elements of a project in an agile content:

- Principles (the behaviours);
- People (roles and responsibilities);
- Process (the life cycle);
- Products (what is produced and when); and
- Practices (timeboxing, modelling, iterative development, prioritization and facilitated workshops).

Course Timetable

(This is a guide only and the trainer may change the order)

Monday **Day 1 foundation**	**Tuesday** **Day 2 foundation**	**Wednesday** **Day 3 Practitioner day**	**Thursday** **Day 4 Practitioner Day**
Introduction What is Agile?	MoSCoW Timeboxing	Review of evening work Digging Deeper - Roles	Review evening work
Philosophy & Fundamentals Principles	Planning & control	Digging Deeper – Process Digging Deeper - Products Digging Deeper – MoSCoW & Timeboxing	Tutor led Revision –
Break	Break	Break	Break
Preparing for Success Process Overview	Planning & Control Other Practices	Digging Deeper – People, Teams & interaction Digging Deeper - Requirements	Tutor led Revision
Lunch	Lunch	Lunch	Lunch
Roles Overview Products Overview Process detail	Revision	Digging Deeper – Estimating & Planning Digging Deeper – Quality & Risk	exam
Break	Break	Break	
Principles detail. Roles detail	Exam administration Foundation exam	Sample Practitioner Exam – People & Roles questions	
Evening Work Reading Sample Foundation Exam	Evening Work Sample Practitioner paper – Introduction to the scenario. Techniques questions	Evening Work Sample Practitioner Exam - Planning & Control questions & Lifecycle & Products questions	Course close

Objectives of Pre-course Study

THE MORE STUDY YOU COMPLETE BEFORE THE COURSE, THE BETTER THE CHANCE YOU WILL HAVE OF PASSING BOTH THE FOUNDATION AND PRACTITIONER EXAMS.

This pre-read materials will introduce the main chapters of the AgilePM Handbook and include extracts from those chapters. It is important that you read through the introductions and answer the subject review questions at the end of this document as you go through each subject.

After completing the subject review questions, review your answers against the extracts. Make a note of your performance, in particular, any subjects that you struggled with, so that this can be referred to the tutor during the course.

The AgilePM® Manual

The Agile Project Management Handbook® is the main reference document for the course. You will receive this on arrival at the course. You will be directed to extracts from the relevant chapters during this study.

It is important to understand that the manual is a “reference” manual not a “training” manual. The AgilePM handbook is available to be used during the Practitioner exam as an open book exam.
The Foundation exam is closed book.

During the course you may find the Glossary (pages 197-203) useful in explaining some of the terms found in the manual.

Philosophy and Fundamentals

Introduction

The DSDM philosophy is that

"best business value emerges when projects are aligned to clear business goals, deliver frequently and involve the collaboration of motivated and empowered people"

This is achieved when all stakeholders:

- Understand and buy into the business vision and objectives
- Are empowered to make decisions within their area of expertise
- Collaborate to deliver a fit-for-purpose business solution
- Collaborate to deliver to agreed timescales in accordance with business priorities
- Accept that change is inevitable as the understanding of the solution grows over time

(Stakeholders encompass everybody inside or outside the project who is involved on or affected by it)

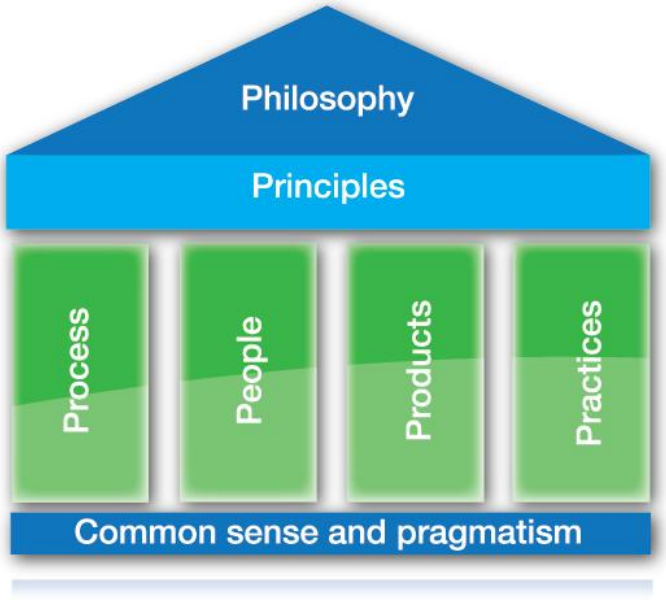

Figure 3a: The composition of DSDM

The DSDM *Philosophy* is supported by a set of eight *Principles* that build the mindset and behaviours necessary to bring the philosophy alive. The principles are themselves supported by *People* (with defined roles and responsibilities), an Agile *Process* (enabling an iterative and incremental lifecycle to shape development and delivery), clearly defined *Products* and recommended *Practices* to help achieve the optimum results.

DSDM's approach and style has always been found on an underlying ethos of common sense and pragmatism. It may be useful to clarify the meaning of these words:
Common sense – "sound practical judgement independent of specialized knowledge or training; normal native intelligence."
Pragmatism – "action or policy dictated by consideration of the immediate practical consequences rather than by theory or dogma."

This is the style of thinking that underpins "the way DSDM works". It is this flexibility of thinking that enables DSDM to avoid the dogma that is sometimes encountered in the world of Agile. The ethos of common sense and pragmatism ensures that "individuals and interactions" continue to take precedence over "processes and tools"

Understanding Project Variables

Projects have to balance conflicting demands, and the four most common demands are: time, cost, features and quality. Trying to fix all four at the outset of a project is unrealistic, as this would only work in a perfect world where the business need never changes, everything is fully and precisely understood in advance, and problems never happen. This desire to fix everything is the cause of many project failures, as the lack of sufficient contingency results in flawed decisions that are often only noticed towards the end of the project when it is too late to correct them.

For this reason, it is important at the start of a project to ask the question "If we hit a problem, what do we protect (fix) and what can we negotiate (vary) if necessary?"

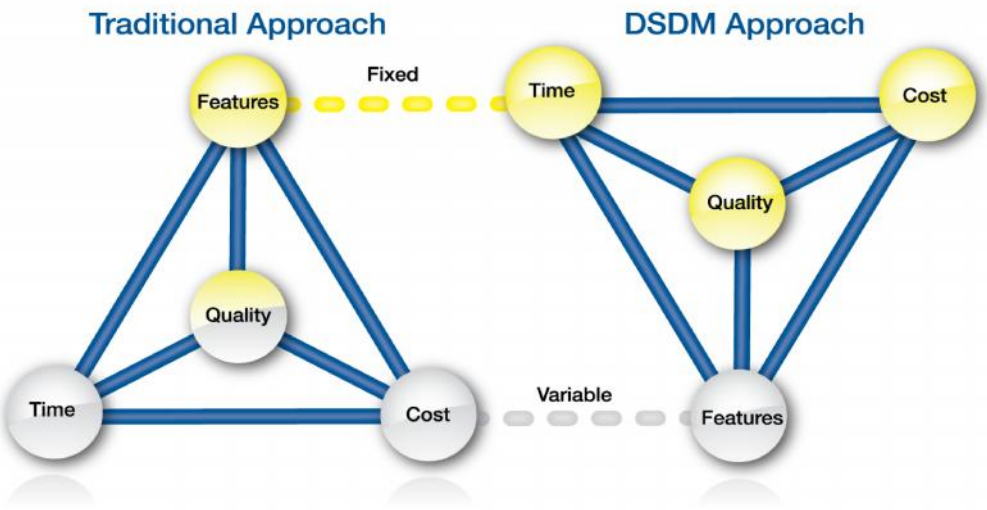

Figure 3b: Project variables – traditional and DSDM

Typically, in the traditional approach to managing a project (left-hand diagram), the feature content of the solution is fixed whilst time and cost are subject to variation. Quality also tends to become an unplanned variable primarily due to the fact that testing is typically left to the end of the project and, as a result of an attempt to make up for project overruns, is either truncated in terms of testing effort or the time available to fix any defects identified.

By default, DSDM's approach to managing the project (right-hand diagram) fixes time, cost and quality to the end of the Foundations phase whilst contingency is managed by varying the features (the requirements) to be delivered. As and when contingency is required, the business roles identify the least valuable of the remaining requirements. These are the dropped or deferred in order to keep the project on track.

A DSDM project will always deliver a viable solution, on time and on cost (budget), as long as the practices of MoSCoW and Timeboxing are followed. Delivery of a Minimum Usable SubseT of requirements is guaranteed as a worst case scenario. However, in all but the most extreme circumstances, the expectation is to deliver far more that the bare minimum.

The iterative and incremental approach to development ensures that the more important requirements are built to the agreed level of quality. Only once this has been achieved does development start on the less important requirements. Incremental delivery of the Evolving Solution ensures that, on the day that the solution is deployed into live use, quality is at the level expected and previously agreed

Now attempt the Review Questions on page 28 of this document

DSDM Principles

Introduction to the DSDM Principles

The eight principles of DSDM support DSDM's philosophy that

"best business value emerges when projects are aligned to clear business goals, deliver frequently and involve the collaboration of motivated and empowered people"

Compromising any of the principles undermines the philosophy of DSDM and introduces risk to the successful outcome of the project. If a team doesn't follow all of these principles then it won't get the full benefit of the approach. The collective application of DSDS's principles brings the philosophy to life.
The eight principles are:


1. Focus on the business need


2. Deliver on time


3. Collaborate


4. Never compromise quality


5. Build incrementally from firm foundations


6. Develop iteratively


7. Communicate continuously and clearly


8. Demonstrate control

Principle 1 – Focus on the Business Need

Every decision taken during a project should be viewed in the light of the overriding project goal – to deliver what the business needs to be delivered, when it needs to be delivered

Principle 2 – Deliver on Time

Delivering a solution on time is a very desirable outcome for a project and is quite often the single most important factor. Late delivery can often undermine the very rationale for a project, especially where market opportunities or legal deadlines are involved. Even for projects without a need for a fixed end date, on-time delivery of intermediate or contributing products is still the best wat to demonstrate control over evolution of the solution.

Principle 3 – Collaborate

Teams that work in a spirit of active cooperation and commitment will always outperform groups of individuals working only in loose association. Collaboration encourages increased understanding, greater speed and shared ownership, which enables teams to perform at a level that exceeds the sum of their parts

Principle 4 – Never Compromise Quality

In DSDM, the level of quality to be delivered should be agreed at the start. All work should be aimed at achieving that level of quality – no more no less. A solution has to be 'good enough'. If the business agrees that the features in the Minimum Usable SubseT meet the agreed acceptance criteria, then the solution should be 'good enough' to use effectively.

Principle 5 – Build Incrementally from Firm Foundations

One of the key differentiators for DSDM within the Agile space is the concept of establishing firm foundations for the project before committing to significant development. DSDM advocates first understanding the scope of the business problem to be solved and the proposed solution, but not in such detail that the project becomes paralysed by overly detailed analysis of requirements.

Once firm foundations for development have been established, DSDM advocates incremental delivery of the solution in order to deliver real business benefit as early as is practical. Incremental delivery encourages stakeholder confidence, offering a source of feedback for use in subsequent Timeboxes and may lead to the early realization of business benefit.

Principle 6 – Develop Iteratively

DSDM uses a combination of Iterative Development, frequent demonstrations and comprehensive review to encourage timely feedback. Embracing change as part of the evolutionary process allows the team to converge on an accurate business solution. The concept of iteration is at the heart of everything developed as part of the DSDM approach. It is very rare that anything is created perfectly first time and it is important to recognise that projects operate within a changing world.

Principle 7 – Communicate Continuously and Clearly

Poor communication is often cited as the biggest single cause of project failure. DSDM practices are specifically designed to improve communication effectiveness for both teams and individuals.

Principle 8 – Demonstrate Control

It is essential to be in control of a project, and the solution being created, at all times to be able to demonstrate that this is the case. High-level plans, designs and standards outline the fundamentals of what needs to be achieved, how, by when, etc. It is also vital to ensure transparency of all work being performed by the team.

Summary of Principles

The eight principles help direct and shape the attitude and mindset of a DSDM team. Compromising any of the principles undermines DSDM's philosophy, as together they deliver a collective value that outweighs their individual benefits.

Now attempt the Review Questions on page 28 of this document

The DSDM Process

Overview

In line with the DSDM philosophy that *"best business value emerges when projects are aligned to clear business goals, deliver frequently and involve the collaboration of motivated and empowered people",* the DSDM approach to development and delivery is both iterative and incremental, with the most important business needs typically being addressed early while less important features are delivered later.

Unlike most Agile approaches, DSDM integrates project management and product development into a single process. For many organisations, DSDM is all that is needed, although some gain value from integrating DSDM with other methods e.g. project management methods, such as PRINCE2 and PMI, or software engineering practices from, say, eXtreme Programming (XP).

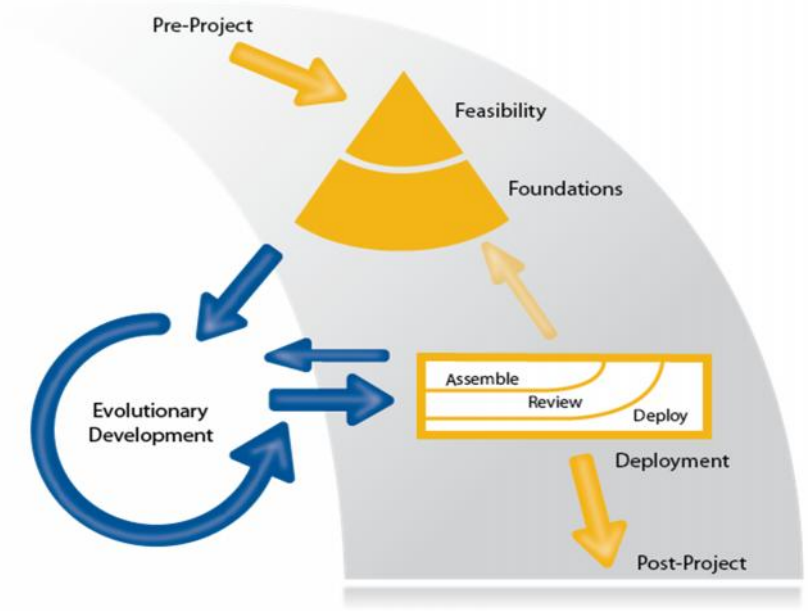

Figure 6a: The DSDM Process

The DSDM process model comprises a framework which shows the DSDM phases and how they relate to one another. This process model is then used be each project to derive their lifecycle.

Pre-Project Phase

The Pre-Project phase ensures that only the right projects are started, and that they are set up correctly, based on a clearly defined objective.

Feasibility Phase

The Feasibility phase is intended primarily to establish whether the proposed project is likely to be feasible from a technical perspective and whether it appears cost-effective from a business perspective. The effort associated with Feasibility should be just enough to decide whether further investigation is justified or whether the project should be stopped now, as it is unlikely to be viable.

Foundations Phase

The Foundations phase takes the preliminary investigation from Feasibility to the next level. It is intended to establish a fundamental (but not detailed) understanding of the business rationale for the project, the potential solution that will be created by the project, and how development and delivery of the solution will be managed. By intentionally avoiding low levels of detail, the Foundations phase should last no longer than a few weeks – even for large and complex projects. The detail associated with requirements, and how they should be met as part of the solution, is intentionally left until the Evolutionary Development phase of the project.

The aim of Foundations is to understand the scope of the work, and in broad terms, how it will be carried out, by whom, when and where. The Foundations phase also determines the project lifecycle by agreeing how the DSDM process will be applied to the specific needs of this project.

For smaller, simpler project, the Feasibility and Foundations phases can often be merged into a single phase. For larger, more complex projects, it may sometimes be necessary to revisit Foundations after each Deployment phase.

Evolutionary Development Phase

Building on the frim foundations that have been established for the project, the purpose of the Evolutionary Development phase id to evolve the solution.

The Evolutionary Development phase requires the Solution Development Team(s) to apply practices such as Iterative Development, Timeboxing, and MoSCoW prioritization, together with Modelling and Facilitated Workshops, to converge over time on an accurate solution that meets the business need and is also built in the right way from a technical viewpoint.

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

Deployment Phase

The objective of the Deployment phase is to bring a baseline of the Evolving Solution into operational use. The release that is deployed may be the ultimate solution, or a subset of the ultimate solution. After the last release, the project is formally closed.

Post-Project Phase

After the final Deployment for a project, the Post-Project phase checks how well the expected business benefits have been met.

The Lifecycle in Practice

Whilst there is a clear progression of phases from Pre-Project to Post-Project in the process diagram above, there are also arrows indicating a return path within the process, specifically the arrows from Deployment to Foundations and from Deployment to Evolutionary Development. The process shows the framework and the options available. Each project derives their lifecycle from this process. The lifecycle of the project is defined and agreed as part of the Foundations phase.

Summary of DSDM Process

DSDM provides an iterative and incremental process, with a total of six lifecycle phases. Each phase has a specific purpose, together with a number of defined products intended to support the evolution of the solution and the smooth running of the project. The DSDM Agile Project Framework is designed to work effectively with projects of varying size and complexity. Through the tailoring of its various products, DSDM ensures control is demonstrated to a level of formality appropriate to the organisation, thereby running a project so that all the benefits of Agile are achieved without compromising effective project governance.

Now attempt the Review Questions on page 29 of this document

Agile Products

Introduction

The DSDM Agile Project Framework describes a set of products to be considered as the project proceeds. These products describe the solution itself (the main deliverable of the project) and anything created to help with the process of evolving it, and anything that is required to help with the project governance and control.

Not all products are required for every project and the formality associated with each product will vary from project to project and from organisation to organisation. The formality of the products is influenced by factors such as contractual relationships, corporate standards and governance needs.

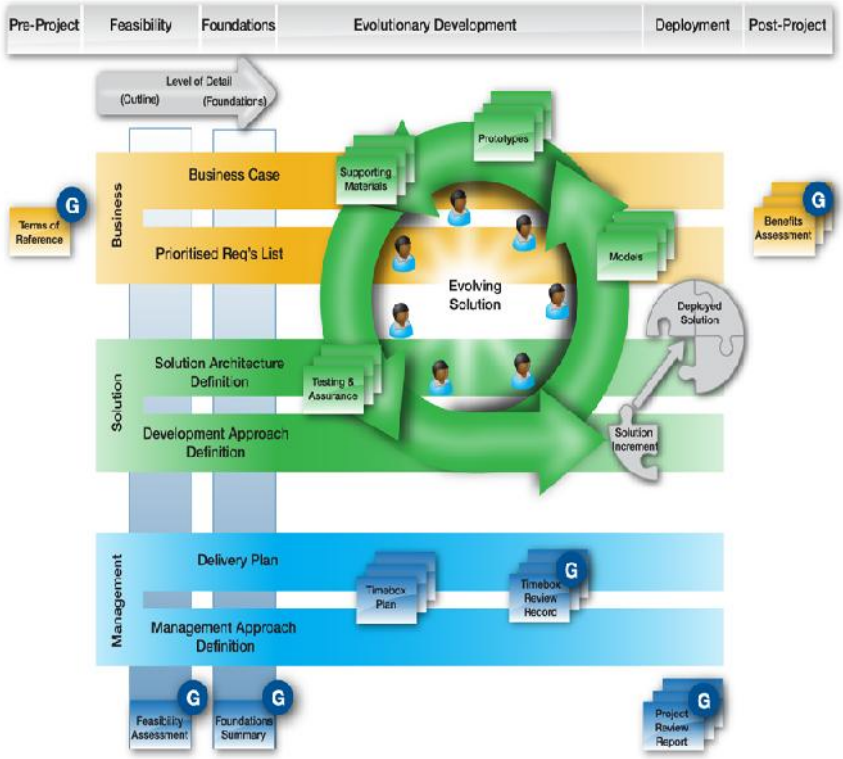

Figure 8a: DSDM Products

The products, and where they feature in the project lifecycle, are shown in the diagram above. Orange products are business focused, green products all contribute to the solution being created by the project and blue products cover project management/control interests.

Several of the products – those marked with G - may also play a part in governance processes such as approval gateways, and may be used to demonstrate compliance of the solution with corporate and regulatory standards where this is required.

The DSDM Products

Terms of Reference

The Terms of Reference is a high-level definition of the overarching business driver for, and the top-level objectives of, the project. The primary aim of the Terms of Reference is to scope and justify the Feasibility phase. It is identified as a governance product because it may be used for purposes such as prioritization of a project within a portfolio.

Business Case

The Business Case provides a vision and a justification for the project from a business perspective. The business vision describes a changed business as it is expected to be, incrementally and at the end of the project. The justification for the project is typically based on an investment appraisal determining whether he value of the solution to be delivered by the project warrants the cost to produce, support and maintain it into the future, all within an acceptable level of risk.

Baselines for the Business Case are typically created first as an outline by the end of Feasibility, then as a basis for approval of development by the end of Foundations. It is formally reviewed at the end of each Project Increment in order to determine whether further work is justified.

Prioritised Requirement List

The Prioritised Requirement List (PRL) describes, at a high-level, the requirements that the project needs to address and indicates their priority with respect to meeting the objectives of the project and the needs of the business. Consideration of requirements begins in Feasibility and a baseline for the PRL describes the scope of the project as at the end of Foundations. After that point, further change will happen naturally in terms of depth, as a result of emergence of detail. Change to the breadth (adding, removing or significantly high-level requirements) needs to be formally controlled in order to ensure ongoing alignment with the business vision for the project and to keep control of scope.

Solution Architecture Definition.

The Solution Architecture Definition provides a high-level design framework for the solution. It is intended to cover both business and technical aspects of the solution to a level of detail that makes the scope of the solution clear but does no constrain evolutionary development.

Development Approach Definition

The Development Approach Definition provides a high-level definition of the tools, techniques, customs, practices and standards that will be applied to the evolutionary development of the solution. Importantly, it describes how quality of the solution will be assured. A strategy for testing and review is therefore a key part of the development approach and described in the Development Approach Definition.

Delivery Plan

The delivery Plan provides a high-level schedule of Project Increments and, at least for the first/imminent Increment, the Timeboxes that make up that Increment. It rarely deals with task-level detail unless there are tasks being carried out by people who are not part of the Solution Development Team or before the Solution Development Team if formed.

Management Approach Definition

The Management Approach Definition reflects the approach to the management of the project as a whole and considers, from a management perspective, how the project will be organised and planned, how stakeholders will be engaged in the project and how progress will be demonstrated and, if necessary, reported. The product is outlined in Feasibility and baselined at the end of Foundations and will only evolve beyond that when circumstances change or if review of the approach identifies areas of improvement.

Feasibility Assessment

The Feasibility assessment provides a snapshot of the evolving business, solution and management products described above as they exist at the end of the Feasibility phase. Each of the products should be mature enough to make a sensible contribution to the decision as to whether the project is likely to be feasible or not. The Feasibility Assessment may be expressed as a baseline collection of the products or as an executive summary covering the key aspects of each of them.

Foundations Summary

The Foundation Summary provides a snapshot of the evolving business, solution and management products described above as they exist at the end of the Foundations phase. 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. The Foundations Summary may be expressed as a baseline collection of the products or as an executive summary covering the key aspects of each of them.

Evolving Solution

The Evolving Solution is made up of all appropriate components of the ultimate solution together with any intermediate deliverables necessary to explore the detail of the requirements and the solution under construction. At any given time, such components may be either complete, a baseline of a partial solution (a Solution Increment), or a work in progress. They include, where valuable: models, prototypes, supporting materials and testing and review artefacts. At the end of each increment, the Solution Increment is deployed into live use and becomes the Deployed Increment.

Timebox Plan

The Timebox Plan provides depth and detail for each Timebox identified in the Delivery Plan. It elaborates on the objectives provided for that Timebox and details the deliverable of the Timebox, along with the activities to produce those deliverables and the resources to do the work. The Timebox Plan is created by the Solution Development Team and is often represented on a Team Board as work to do, in progress, and done. It is updated at least on a daily basis at the Daily Stand-ups.

Timebox Review Record

The Timebox review Record captures the feedback from each review that takes place during a Timebox. It described what has been achieved up to that point together with any feedback that may influence plans moving forwards. Where appropriate, e.g. in a regulated environment, a formal, auditable record of review comments from expert Business Advisors and other roles make this a governance product.

Project Review Report

The project Review Report is typically a single document that is updated incrementally at the end of each Project Increment by the addition of new sections pertinent to that increment.
At the end of each Project Increment, the purpose of this product is:

- To capture the feedback from the review of the delivered solution and to confirm what has been delivered and what has not.
- To capture learning points from the retrospective for the Increment focussed on the process, practices employed and contributing roles and responsibilities.
- Where appropriate, to describe the business benefits that should now accrue through the proper use of the solution delivered by the project up to this point.

After the final Project Increment, as part of project closure, a retrospective covering the whole project is carried out that is partially informed by the records for each Project Increment.

Benefits Assessment

The Benefits Assessment described how the benefits actually accrued, following a period of use in live operation. For projects where benefits in the Business Case are expected to accrue over a prolonged period, it is possible that a number of Benefits Assessments may be produced on a periodic basis aligned with the timeframe that was used for justifying the investment.

Summary of Products

The products above are guidelines to the information needed to promote good communication within a project. They are not mandatory and may not always be prepared as documents. However, in circumstances where strong governance and/or proof of compliance with standards is important, there is real benefit to creating formal documents rather than just gaining a shared understanding (which is the normal default of DSDM). Although it may not be obvious, it is important to remember that documentation created as part of the development process and/or tied to the proactive way the project is managed is likely to provide the most effective and robust audit trail if one is needed.

It is also critically important to remember that DSDM products are only created if and when they add value to the project and/or to the solution it creates. The most important thing is that the stakeholders and participants in the project understand what is needed and what is being delivered and that quality is assured. If documents genuinely help achieve this then create them, if not, don't waste valuable time and effort doing so.

Now attempt the Review Questions on page 29 of this document

Roles and Responsibilities

Introduction

People working together effectively are the foundation of any successful project. DSDM recognises this and assigns clear roles and responsibilities to each person in a project, representing the business interests, the solution/technical interests, the management interests and the process interests. Everyone involved in a DSDM project works very closely together in order to break down potential communication barriers.

The best solutions emerge self-organising, empowered teams. However, these teams, and the people within them, must actively take on the responsibility of their empowerment within the boundaries that have been agreed.

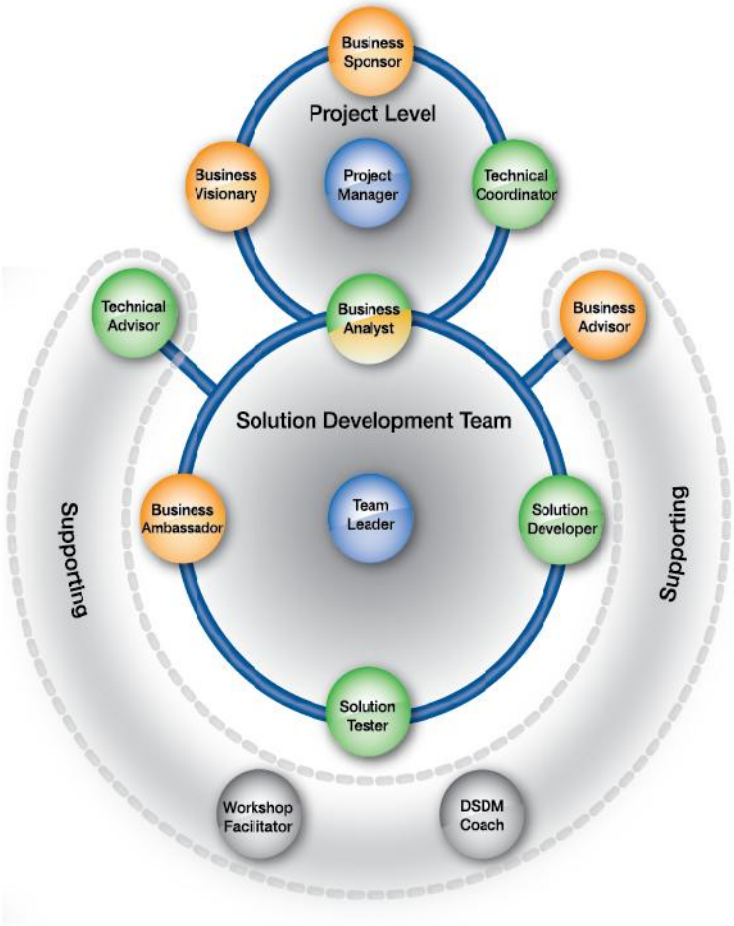

Figure 7a: The DSDM team model

The DSDM Team Model Explained

Role colour scheme – to represent areas of interest

The colour scheme in the picture of the DSDM Team Model is as follows:

Orange – Business interests, roles representing the business view
Green – Solution/technical interests, roles representing the solution/technical view
Blue – Management interests, roles representing the management/leadership view
Grey – Process interests, roles representing the process view
Mix of two colours – A role that covers two separate areas of interest.

Role Categories

Project -level roles

The Project-level roles are Business Sponsor, Business Visionary, Technical Coordinator, Project Manager and Business Analyst. They are the directors, managers and coordinators of the work of the project, where necessary. They may be part of a project board or steering committee for the project, and collectively, have authority to direct the project. They are responsible for the governance of the project, liaising with governance authorities outside the project where necessary.
All roles at the project-level need to adopt the facilitative, empowering leadership style that allows Agile teams to learn as they go, getting to an end point by their own means, within an agreed framework of empowerment.

Solution Development Team roles

The Solution Development Team roles are Business Ambassador, Solution Developer, Solution Tester, Business Analyst and Team Leader. These roles form the “engine room” of the project. They shape and build the solution and are collectively responsible for its day-to-day development and for assuring its fitness for business purpose. There may be one or more Solution Development Teams within a project. Each team will include all Solution Development Team roles and cover all their responsibilities.

Supporting roles

The supporting roles (Business Advisors, Technical Advisors, Workshop Facilitator and DSDM coach) provide assistance and guidance to the project on an ad hoc basis throughout the lifecycle. The Advisor roles may be filled by one or more subject matter experts, as necessary.

Fulfilling the roles

One DSDM role does not necessarily mean one person. One person may take on one or more roles. One role may be shared by two or more people. Where a role is shared it is vital that the individuals communicate and collaborate closely.

The Roles

Business Sponsor

This role is the most senior project-level business role. The Business Sponsor is the project champion who is committed to the project, to the proposed solution and the approach to delivering it. The Business Sponsor is specifically responsible for the Business Case and project budget throughout (however formally or informally this may be expressed).

The Business Sponsor must hold a sufficiently high position in the organisation to be able to resolve business issues and make final decisions.

Business Visionary

This is a senior project-level business role that should be held by a single individual, since a project needs a single clear vision to avoid confusion and misdirection. More actively involved than the Business Sponsor, the Business Visionary is responsible for interpreting the needs of the Business Sponsor, communicating these to the team and, where appropriate, ensuring they are properly represented in the Business Case. The Business Visionary remains involved throughout the project, providing the team with strategic direction and ensuring that the solution delivered will enable the benefits described in the Business Case to be achieved.

Technical Coordinator

As the project's technical authority, the Technical Coordinator ensures that the solution/technical roles work in a consistent way, that the project is technically coherent and meets the desired technical standards. This role provides the glue that holds the technical aspects of the project together while advising on technical decisions and innovation.

The Technical Coordinator performs the same function from a technical perspective as the Business Visionary does for the business perspective

Project Manager

As well as providing high-level, Agile-style leadership to the Solution Development Team, the role is focussed on managing the working environment in which the solution is evolving. The Project Manager coordinates all aspects of management of the project at a high-level but, in line with the DSDM concept of empowerment, the Project Manager is expected to leave the detailed planning of the actual delivery of the product(s) the members of the Solution Development Team. Managing an empowered team requires a facilitative style rather than a "command and control" style.

It is usual that the Project Manager takes responsibility for the project throughout its duration. This responsibility must include both business and technical delivery aspects of the project, from Foundations (if not Feasibility) through to Deployment.

Business Analyst

The Business Analyst is both active in supporting the project-level roles and fully integrated with the Solution Development Team. The Business Analyst facilitates the relationship between the business and technical roles, ensuring accurate and appropriate decisions are made on the Evolving solution on a day-to-day basis. The Business Analyst ensure that the business needs are properly analysed and understood by all members of the Solution Development Team.

Active involvement of the business users in the process of evolving the solution is vital to the success of a DSDM project. Therefore, it is important to ensure that the Business Analyst does not become an intermediary between Solution Development Team members but, instead, supports and facilitates the communication between them.

Team Leader

The Team Leader ideally acts as the servant-leader for the Solution Development Team and ensures that it functions as a whole and meets its objectives. The Team Leader works with the team to plan and coordinate all aspects of the product delivery at the detailed level. The is a leadership role rather than a management role and the person holding it will ideally be elected by his or her peers as the best person to lead them through a particular stage of the product. It is therefore likely that they will perform another Solution Development Team role (e.g. Business Analyst, Business Ambassador, Solution Developer or Solution Tester) in addition to their leadership responsibilities.

Business Ambassador

The Business Ambassador is the key representative of the business within the Solution Development Team. During Foundations, the Business Ambassador has significant input into the creation and prioritisation of requirements. Once the requirements have been agreed and baselined (by the end of Foundations), the Business Ambassador then provides the day-to-day detail of the requirements during timeboxed development. This is either based on their own knowledge and experience, or drawing on the experience of Business Advisors.

During the Evolutionary Development phase of the project, the Business Ambassador is the main decision maker on behalf of the business. For this reason, the Business Ambassador needs to be someone who is respected by their business peers and who has sufficient superiority, empowerment and credibility to make decisions on behalf of the business, in terms of ensuring the Evolving Solution if fit for business purpose.

Solution Developer

The solution Developer collaborates with the other solution Development Team roles to interpret business requirements and translate them into Solution Increment that meets functional and non-functional needs of the business as a whole.

Solution Tester

The Solution Tester is an empowered Solution Development Team role, fully integrated with the team and performing testing throughout the project in accordance with the agreed strategy.

Business Advisor

Often a peer of the Business Ambassador, the Business Advisor is called upon to provide specific, and often specialist, input to solution development or solution testing – a business matter expert. The Business Advisor may be an intended user or beneficiary of the solution or may, for example, provide legal or regulatory advice with which the solution must comply.

Technical Advisor

The Technical Advisor supports the team by providing specific, and often specialist, technical input to the project, often from the perspective of those responsible for operational change management, operational support, ongoing maintenance of the solution etc.

Workshop Facilitator

The Workshop Facilitator is responsible for planning, organising and facilitating workshops to ensure that a group of people collaborate to meet a predetermined objective in a compressed timeframe. The workshop Facilitator should ideally be independent of the outcome to be achieved in the workshop.

DSDM Coach

Where a team has limited experience of DSDM, the role of the DSDM Coach is key to helping team members get the most out of the approach, within the context and constraints of the wider organisation in which they work.

Roles Summary

DSDM identifies roles in two dimensions – categories and interests. Roles are grouped into three categories:

- Project -level roles – Business Sponsor, Business visionary, Technical Coordinator, Project Manager and Business Analyst (also a member of the Solution Development Team.
- Solutions Development Team roles – Business Ambassador, Solution Developer, Solution Tester, Team Leader and Business Analyst (also a Project level role)
- Supporting roles – Business Advisor, Technical Advisor, Workshop Facilitator and DSDM Coach.

And four interests:

- Business interests – covered by the Business Sponsor, Business Visionary, Business ambassador and Business Advisor roles
- Solution/technical interests – covered by the Technical Coordinator, Solution Developer, Solution Tester and Technical Advisor roles.
- Management interests – covered by the Project manager and team Leader roles
- Process interests – covered by the Workshop Facilitator and DSDM Coach

The Business Analyst role covers both business and solution/technical interests.

Now attempt the Review Questions on page 30 of this document

MoSCoW Prioritisation and Timeboxing

DSDM Practice – MoSCoW

Introduction

In a DSDM project where time has been fixed, it is vital to understand the relative importance of the work to be done in order to make progress and to keep to deadlines. Prioritisation can be applied to requirements/User Stories, tasks, products, acceptance criteria and tests, although it is most commonly applied to requirements/User Stories.

MoSCoW is a prioritisation technique for helping to understand and mange priorities. The letters stand for:

- **M**ust Have
- **S**hould Have
- **C**ould Have
- **W**on't Have this time

The MoSCoW Rules

Must Have

These provide the Minimum Usable SubseT (MUST) of requirements which the project guarantees to deliver. These may be defined using the following:

- No point delivering on target without this; if it were not delivered there would be no point deploying the solution on the intended date.
- Not legal without it
- Unsafe without it
- Cannot deliver a viable solution without it

DSDM recommends that the effort associated with delivering the Must Have requirements should not exceed 60% of the total effort available. If the effort to deliver the Must Haves exceeds 60% of the total that is available, then the guarantee to deliver the Minimum Usable SubseT is put at risk.

Should Have

Should Have requirements are defined as:

- Important but not vital
- May be painful to leave out, but the solution is viable
- May need some kind of workaround, e.g. management of expectations, some inefficiency, and existing solution, paperwork etc. The workaround may be a temporary one.

One way of differentiating a Should Have requirement from a Could Have is by reviewing the degree of pain caused by the requirement not being met, measured in terms of business value or numbers of people affected.

Could Have

Could Have requirements are defined as:

- Wanted or desirable but less important
- Less impact if left out (compared to Should Have)

These are the requirements that provide the main pool of contingency, since they would only be delivered in their entirety in a best-case scenario. When a problem occurs and the deadline is at risk, one or more of the Could Haves provides the first choice of what is to be dropped from this timeframe.

DSDM recommends that the effort associated with delivering the Could Have requirements should be approximately 20% of the total effort available.

Won't Have this time

These are requirements that the project team gas agreed will not be delivered (in this timeframe). They are recorded in the Prioritised Requirements list where they help to clarify the scope of the project. This avoids them being informally reintroduced at a later date. This also helps to manage expectations that some requirements will simply not make it into the Deployed Solution, at least not at this time.

Summary of MoSCoW

MoSCoW Prioritisation (Mut Have, Should Have, Could Have, Won't Have this time) is primarily used to prioritise requirements although the practice is useful in many other circumstances.

When prioritising requirements, DSDM recommends that Must Haves should take no more that 60% of the available effort in a given timeframe and that around 20% of the effort should be associated with Could Haves.

If the effort to deliver the Must Haves exceeds 60% of the total that is available then the guarantee to deliver this Minimum Useable SubseT is put at risk.

MoSCoW Prioritisation is applied at multiple levels – for the project, the Project Increment and the Timebox. In each case, the Could Have requirements provide the primary contingency that makes delivery of the higher priority requirements more likely.

DSDM Practice - Timeboxing

Introduction

DSDM defines a Timebox as a fixed period of time, at the end of which an objective has been met. The Timebox objective is usually completion of one or more deliverables making up a Solution Increment. This ensures the focus for a Timebox is on achieving something complete and meaningful, rather than simply "being busy". At the end of a Timebox, progress and success are measured by completion of products (requirements of other deliverable) rather than completion of a series of tasks.

The optimum length for a Timebox is typically between two and four weeks – long enough to achieve something useful, short enough the keep the Solution Development Team focussed. In exceptional circumstances, a Timebox might be as short as a day or as long as six weeks.

Timeboxing is more than just setting short time-periods and partitioning the development work. It is a well-defined process to support the creation of low-level products in an iterative but controlled fashion. Timeboxing incorporates frequent review points to ensure the quality of those products and the efficiency of the iterative Development process.

By managing on-time/on-target delivery at the lowest level, on-time and on-target delivery at the higher levels can be assured.

The Project Increment and the entire project can also be considered as Timeboxes, as they share the same characteristics of delivering a fit-for-purpose solution in a pre-set timeframe. The higher-level Timeboxes are managed through the control applied at the lowest level – the development Timebox. Unless qualifies by Project or Increment. The word Timebox always refers to the lowest level Timebox used during the Evolutionary Development of the phase.

Timebox options

Every Timebox begins with a Kick-Off and ends with a Close-Out. Beyond this, DSDM recognises two styles of Timebox:

- A DSDM Structured Timebox
- A free format Timebox (similar to those in other Agile approaches)

The choice of Timebox style may be driven by factors such as the availability of the Business Ambassador and other business roles or the type of product being developed.

A DSDM Structured Timebox

This is the original DSDM-style Timebox, which provides a standard, repeatable internal structure to a Timebox.

The DSDM structured Timebox comprises of three main steps:

- Investigation
- Refinement
- Consolidation

Each of these steps ends with a review.

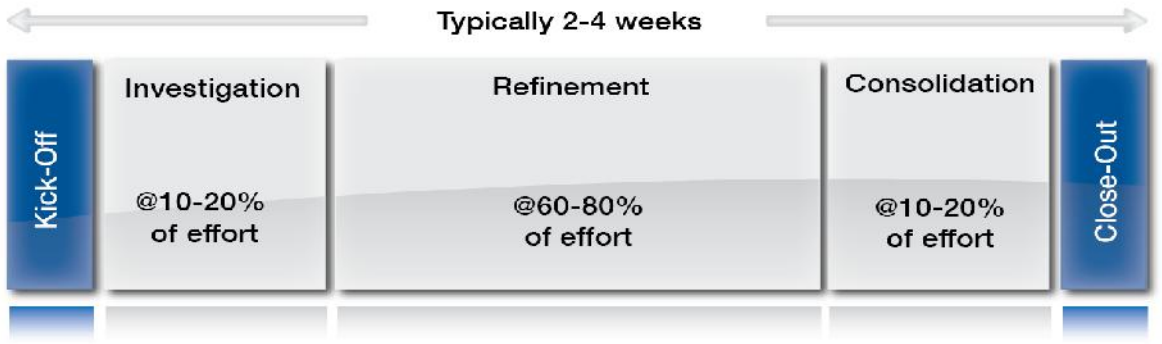

Figure 11a: A DSDM structured timebox

A Free Format Timebox

The Free format Timebox reflects the style used by other popular agile approaches, such as s Scrum Sprint. A free format Timebox may be effective where the formality and structure of the DEDM structured Timebox is not possible or helpful.

Figure 11b: a free format timebox

The Daily Stand-Up

A key integral part of all Timeboxes, regardless of the style adopted, is the Daily Stand-Up. This is the Solution Development Team's opportunity to share information across the team and to do any day-tod-day re-planning and reorganising necessary when issues occur. However, it is important to emphasise that ongoing, informal communication between all team members happens during the day as needed, and not just at the Daily Stand-Up.

On a daily basis, the Solution Development Team get together for a Stand-up session. The Stand-up usually takes place at the same time and same place each day (with the Timebox Plan visible), so the others who are not part of the Solution Development Team may listen in. Normally facilitated the Team Leader, the Stand-up is a daily opportunity for everyone to understand progress against objectives at a detailed level and to expose issues and blockers that may be getting in the way.

The Stand-up:

- Has the following participants:
  - All members of the Solution Development Team including the Business Ambassador(s)
  - Any Business Advisors actively involved in this Timebox
  - Any Technical Advisors actively involved in this Timebox

- Typically uses a simple format in which each participant in turn describes:
  - What I have been doing since the last stand-up that helps achieve the Timebox objectives
  - What I will be doing between now and the next stand-up to help achieve the Timebox objectives
  - What problems, risks or issues (blockers) I have that will prevent me or the team achieving the Timebox objectives.

- Has a short and fixed duration – normally no longer than 15 minutes – 2 minutes per participant + 2 minutes is a good guide

- Is ideally held with all participants standing in a circle by their Team Board, which is sometimes called an Information Radiator.

Summary of Timeboxing

Timeboxing is used in conjunction with MoSCoW Prioritisation to ensure predictable, on-time delivery. Although the term Timebox may be applied to the project as a whole or to a Project Increment, in practical terms the Timeboxing practice is applied on t at the lowest level – the typically 2-4-week timeframe in which a Solution Increment is evolved during the Evolutionary Development phases of the project.

DSDM recognises two styles of Timeboxes:

- The free format Timebox (similar to that used in other Agile approaches)
- The DSDM structured Timebox which segments the Timebox into 3 steps (Investigation, Refinement and Consolidation)
  - Each step ends in a review involving the whole Solution development Team and may also involve other stakeholders
  - If formalised, these sessions can provide a valuable audit trail of review records for regulatory compliance purposes.

Now attempt the Review Questions on page 30 of this document

Review Questions

Print these review question pages and answer the review question – then check your answers against the reference pages in this document.

Philosophy & Fundamentals Review Questions

Attempt these questions after reading pages of this document

Questions	Answer	Reference
List the 3 elements that enable best value to emerge		Page 7
What are the principles supported by?		Page 7 Diagram
What are the four project variables?		Page 8
What will always be achieved on an Agile project?		Page 8
What does incremental delivery of an Evolving solution ensure?		Page 8

Agile Principles Review Questions

Attempt these questions after reading pages of this document

Questions	Answer	Reference
List the 8 Principles of DSDM		Page 9

Agile Process Review Questions

Attempt these questions after reading pages of this document

Questions	Answer	Reference
List the six phases in order		Pages 11 & 12
In which phase will the scope of the work in broad terms be understood?		Page 12
Which phase brings a baseline into operation?		Page 12
Which phase will check how well the expected business benefits have been met?		Page 12

Agile Products Review Questions

Attempt these questions after reading pages of this document

Questions	Answer	Reference
Which report is produced at the end of an increment?		Page 16
When is a benefits assessment carried out?		Page 16
Which plan has a high-level series of increments?		Page 15
What is a PRL?		Page 15
What plan details the deliverables?		Page 16

Agile Roles & Responsibilities Review Questions

Attempt these questions after reading pages of this document

Questions	Answer	Reference
Who owns the business case?		Page 19
Which role makes sure technical standards are achieved?		Page 20
How many categories of team are there?		Page 19
Name 2 supporting roles.		Page 19
What are the 5 roles on the Project level team?		Page 19
Which team is the team leader in?		Page 20

DSDM Prioritisation & Timeboxing Review Questions

Attempt these questions after reading pages of this document

Questions	Answer	Reference
What does MoSCoW stand for?		Page 23
Which requirement always gets delivered?		Page 23
Which requirements are tradable?		Page 23
Name two types of time box.		Page 25
What is a daily stand up?		Page 26