Case Study and Exercises

AgilePM® Foundation

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Revision History

Version	Revision Date	Summary of Changes	By
02.00	06/04/2015	Initial version – upgrade based on APMG vanilla and beProjectized v01.01	Steven Deneir
02.01	21/05/2015	A set of requirements in the MoSCoW list was not available – added this back	Steven Deneir

Approvals

Name	Title	Date of Approval	Version
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Table of Contents

Agile Project Management Exercises 4
Foundations Exercise 4
Case Study – Millers Marmalade 5
Exercise 1 - Outline the Project Exercise 7
Exercise 2 – Roles - Identifying people for the Business Roles 8
Roles Exercise – Millers Marmalade - People profiles for the project team 9
Exercise 3 - Using DSDM Products to support Tracking and Control 11
Exercise 4 - Prioritising Requirements 12
Prioritisation Exercise - Millers Marmalade – Requirements list for the new website (total 62 days' effort) 12
Exercise 5 - Communicating with Stakeholders 15
Exercise 6 - Delivery Planning 17
Exercise 7 – Identifying Risks 18
Project Approach Questionnaire for the Case Study Exercise 19

Agile Project Management Exercises

Unless otherwise stated, throughout these exercises assume:

- Your group can add any information about the case study not provided (or ask your trainer)
- The exercises may be stopped part way through if your trainer has seen that the learning points have been sufficiently achieved.
- You are going to be the project manager for this project if / when it takes place.
- You work for a small consultancy in the town near to Miller's Farm.

Foundations Exercise

Note: this exercise is applicable for the Practitioner training and for the short-track training. It can also be used as a closing exercise at the end of the Foundation training.

Working in small groups, from what you have learnt so far, create a short presentation from the views in your group on the major benefits of running a project in an agile way.

Include at least one of each of the following in your presentation.

- The Principles
- The Roles
- The Products

Exercise objectives:

1. Using Agile often involves a PM "selling" the approach to be taken, e.g. to senior executives who are new to the concepts.
2. To revise and distil information provided by the AgilePM Foundations course.

Case Study – Millers Marmalade

History and Background

The Miller family are farmers, and three years ago they successfully expanded into a new area: making and selling of a wide range of marmalades (citrus fruit jams – typically orange jam). They have been so successful that Food World (FW), an international food company has recently taken a 20% share in Millers Marmalade. Although this has helped provide capital and advice on accessing international markets, the parent company has left Millers reasonably independent and in charge of running their own business.

Millers sell most of their marmalade to national supermarkets ('trade sales'). This is the core of their business and is handled by account managers who have built up good relationships with several large customers. They currently use informal systems such spreadsheets and simple database applications but this is now inefficient and results in mistakes being made as the trade volumes are growing rapidly. They now want to expand the sales of marmalade more widely to the general public.

The general public can already buy marmalade from a very basic website that Millers run and maintain. However, supporting and enhancing the website is now causing problems for Millers.

Millers have converted several farm buildings to provide facilities to create large volumes of marmalade. Some of their processes are fully automated such as the making of the marmalade, temperature controlled storage and the cleaning and filling of the marmalade jars.

Millers employ 27 staff who run the machinery, customer service and distribution. They have recently outsourced most of their delivery functions to national transport contractors and to local delivery companies.

Last year Millers made a profit of 50,000 which pleased the directors as they had invested heavily in the marmalade side of the business since it launched three years ago.

Award Winners

Recently Millers Marmalade won the special “Orange d’Or” award at an international marmalade festival in France and the publicity this created has led to a significant rise in orders and enquiries. Everyone at Millers has been very excited about the award and the directors of Millers have decided that they can harness the staff enthusiasm to set another target with a deadline in 6 months’ time: to get Millers listed on the “100 Best Food Websites” which is a very popular national television (TV) programme. Achieving this could double the demand for Millers Marmalade within months, (specifically Millers would aim to double sales within 2 months following the TV programme)

Work to be done

If Millers go forward with the idea of being listed in the “100 Best Food Websites” the current work they have identified is:

- A significant upgrade to the existing website (or even a new website) in order to offer more advanced features to engage with their customers
- A complete rebranding of the Millers Marmalade image
- Creation of a larger office by moving from the current office: from their small farm building to one of the much larger ones.
- Recruitment of 6 more staff to help with the increased workload
- A marketing campaign to take advantage of the success of the recent award

From initial research done it seems that Millers could rebrand for 20,000. The office move and refit would cost 35,000. A recruitment campaign including a local recruitment event would cost 18,000 (assuming a percentage fee to be paid for 6 staff, based on an average salary of 20,000 per annum). A local company would be engaged for the recruitment.

Costs for the website are 24,000 to build, plus a support contract of 400 per month. Initial estimates suggest that the profit from increased sales could pay for the cost of the website within a few months.

It is critical that the efficiency of the existing website, processes and systems are not affected while any changes are made.

Exercise 1 - Outline the Project Exercise

Working in small groups:

- Create a short project objective statement: describing why the project detailed below is taking place (to explain to the CEO of your company in a couple of minutes)
- From what you have learnt so far, create a short presentation from the views in your group on:
  - the major benefits and risks of running this project in an agile way (Note: here we are not looking for the project risks/benefits which would be true for any approach. Consider here the risks of using Agile.)
  - With what you know about Agile up to now, would your group run this project using an Agile Project Management approach?

Exercise objectives:

1. Using Agile often involves a PM "selling" the approach to be taken. This works best when supported by a balanced assessment of benefits and risks, rather than just enthusiasm (although enthusiasm is good!).
2. It is a good practice, at the outset of a project, to summarise in a short, succinct way, what the project is about, to help to promote a unified vision of the objectives and direction of the project. This is particularly useful in Agile to keep the project on track and in line with the strategic goal.

Exercise 2 – Roles - Identifying people for the Business Roles

Working in small groups:

Using the role briefs provided:

- List the best person to fulfil each of the 4 business roles
- Make a note of your reasons and any risks with your selections.
- You may be asked by your trainer to consider other DSDM roles too

Be prepared to feedback your group's views to the others, including:

- whether or not you would combine any roles and why
- whether you would assign more than one person to a particular role and why

Exercise objectives:

To help Agile Project Managers understand the benefits of having the most suitable person in the business roles, be able to recognise the risks of having less suitable people and find the best fit for the roles from the people available.. Getting the right people in the business roles is one of the most important factors contributing to the success of an Agile project.

Roles Exercise – Millers Marmalade - People profiles for the project team

Mrs. Miller

Strong accountancy skills. She authorised the 'Top 100' project. Responsible for the running of the farm. Very decisive. Doesn't like the impersonal nature of the internet.

Mr. Miller

Likes to play around with ideas. Starts many things but rarely finishes anything. Decides where the family business should be going at a strategic level. Very keen on technology and technology gadgets.

Jake Miller

'Hands-on' day to day running of the marmalade business. Leads a small team. Is very operationally focussed on getting the right thing to the right customer. Takes most of the telephone calls that do not go directly to the account managers. Very reactive – responds to problems when they have happened.

Kerry Miller

Handles Customer Service and Marketing. Tries to keep everyone happy. Responsible for dealing with any queries including those about the machinery in the marmalade process. Responsible for the 'image' and reputation of Millers Marmalade. Cares passionately about environmental issues.

Victor Popov

The IT Manager who started as a website designer at Millers three years ago. Knows all of the existing systems and applications in detail, works long hours and leaves his phone on all the time in case of problems. Likes to straighten the pictures that hang in the reception area so that they look neat and tidy.

Sanjay Patel

Responsible for looking after the team of account managers. His team are involved in selling, and organising the companies who deliver the marmalade (order fulfilment). Very good inter-personal skills. Really loves marmalade.

Mimi Bertillon

Works very hard in order fulfilment. Is involved in the essential part of the process where the orders are packed and addressed according to the instructions provided by Sanjay and Jake and their colleagues. Is allergic to oranges and marmalade.

Sam O'Farrell

General 'all-rounder'. Has worked for the Millers for many years and is seen as the 'old timer'. Has experience of all areas of the marmalade business (and the farm as well). Is currently looking after the production line from cleaning the jars to filling them. Affectionately known as 'Grumpy'

Exercise 3 - Using DSDM Products to support Tracking and Control

Working in small groups:

Which of the DSDM products would your group suggest to support tracking and control of progress? State how you (as the PM) and the SDT would use those products throughout the lifecycle? Include in your comments the medium used for each product chosen.

Remember to support the agile approach in all of your suggestions.

Exercise objectives:

To help Agile Project Managers understand how the DSDM Products support the principle of Demonstrate Control, both for a PM and for the Solution Development Team.

To demonstrate how appropriate use of DSDM products provides the ability to track the project progress, as well as ensuring Transparency.

Exercise 4 - Prioritising Requirements

Working in small groups:

Decide on your group's 'MoSCoW' for each of the requirements provided.

Remember that Must Have requirements will create your Minimum Usable Subset for an early release. Without all the Must Haves, it would be unviable / unsafe to release anything. The difference between Should Haves and Could Haves will be in the value or impact, or the difficulty / ease of a workaround.

How close is your output to the "no more than 60% Must Have effort, at least 20% Could Have effort" guideline?

What value does each of the requirements add to the overall business objective?

For this exercise, some group members should take the role of the Business Ambassador and Business Visionary to ensure that the MoSCoW prioritisation is business driven. The others should take other roles.

Where you are unsure about a business related question, your trainer will provide an answer, alternatively you may make an assumption so that you can move on quickly.

Exercise objectives:

As the delivery and balance of the MoSCoWed Prioritised List is essential to the success of an Agile project, it is important to understand prioritisation. Also it is useful to have experienced prioritisation from perspectives other than your usual job role.

Prioritisation Exercise - Millers Marmalade – Requirements list for the new website (total 62 days' effort)

No.	Requirement	MSCW	Estimate
	As a <role> I want <something> so that <outcome>		
1	As a **customer** I want **to order marmalade** so that **I can specify what I want to receive**		2
2	As a customer I want to change an existing open order (i.e. size, amount) so that I can ensure my order is what I actually want		3
3	As a customer I want to remove some marmalade from an existing order so that I can ensure my order is what I actually want		4
4	As a customer I want to choose to have the order gift wrapped so that I can send it as a present already-wrapped to someone else		2
5	As a customer I want to browse product information (e.g. ingredients) so I can make sure the ingredients are healthy / will not cause an allergic reaction		5
6	As a customer I want to see a price list/catalogue of marmalades so I know what my order would cost		2
7	As an I.T. manager I want to ensure that the transaction over the web is secure so that customers have confidence in using our website		3
8	As a customer I want to search and filter by size, price and type of marmalade so I can quickly search for the exact item(s) I want to order		4
9	As a Customer Services Manager I want to allow a visitor to sign up to receive a newsletter so that we can provide more information in order to encourage further sales		2
10	As a Customer Services Manager I want to have a customer feedback facility so that we can act on negative comments quickly		1
11	As a Head of Operations I want to promote special offers so that we can easily draw these to our customers attention		2

12	As a customer I want to be able to enter a separate invoice address so that I can send marmalade to addresses other than my own		4
13	As a customer I want to be able to enter alternative delivery addresses so that I can get my orders delivered to friends and family, and to my workplace		1
14	As an Owner of Millers I want to provide information about Millers ('about us') so that we can promote the Millers family image		1
15	As an Owner of Millers I want to allow payment by credit card/debit card so that we avoid cheque handling, which will cost us more money per transaction		4
16	As a Head of Operations I want to automatically authorise credit card payment so that the order payment process needs the least possible number of staff		3
17	As a customer I want to have other payment methods (e.g. cheque) so that I can buy marmalade even if I do not have a credit / debit card		2
18	As a Fulfilment Manager I want to notify the customer that the order has been dispatched so that the customer knows their order is on its way		2
19	As a customer I want to create, view and amend my customer details so that my details are always correct		5
20	As a customer I want to delete my customer details so that I will no longer receive marketing information from Millers		2
21	As a Head of Account Management I want to provide a trade area sign on facility so that my large order customers can process their orders as quickly as possible		2
22	As a customer I want to receive discounts related to size of order so that I can see I am getting good value on larger orders		3
23	As a customer I want to have a choice of delivery times so that I can be sure I am at home to take delivery		3

Exercise 5 - Communicating with Stakeholders

Working in small groups:

- Run a small facilitated workshop :
- Some of you will take the business roles identified earlier and possibly other team roles (your trainer will advise)
- One of your group will be the facilitator

Outcome:

After exploring the specific communication issues with these stakeholders produce a list of your group's top 5 ways to ensure successful communication with them.

Discuss agile communication for all stakeholders involved in the project. Consider the following during discussion: location, frequency of communication, communication medium, information needed, reporting, decision making, numbers of people involved, types of community, types of information etc.

Further conversations have identified the following additional stakeholders the project will need to involve:

Health and Safety (H&S) Auditors – Millers Marmalade has to be audited annually to make sure that they comply with H&S standards for marmalade production. They also have to be able to provide local language ingredient and allergy information in all countries where their marmalade is marketed.

John Jones – Television Producer responsible for the '100 Best Food Websites' programme. His 3 researchers are planning their approach to finding and checking food websites. They will be short-listing the top 500 for more detailed investigation in months 4 and 5, with final production during month 6

Mary Hannington – a manager with TestyToo (responsible for this account). TestyToo are an agile testing company and have been appointed by your management to work with your company to perform testing. They are very familiar with Agile. Although Mary is reasonably local to you, many of the testers are based offshore – with an 8 hour time difference.

Jeanne Haute – marketing director for the Orange D'Or Award and very specific about how award winners promote the Award in their marketing materials. Has been known to take to court anyone breaking the Terms and Conditions of the brand. Also very particular about the look and feel of the websites where the award logo appears – doesn't want anything 'low quality'.

Exercise objectives:

Improving communication is a key aspect of project success, and particularly important when using Agile. This exercise is designed to prompt thought about a variety of important communication considerations.

Exercise 6 - Delivery Planning

Working in small groups :

Using your MoSCoWed requirements from the previous exercise, create a Delivery Plan (using sticky notes on the table or wall) for the website element of the project. Define a number of Increments and specify the objective of each increment.

Exercise objectives:

To demonstrate the style of Agile planning. Agile Planning should be product based, aimed at showing what products will be produced when, and who will be involved in the product. Agile plans are normally created collaboratively, rather than as solitary exercise Project Manager exercise. Sticky note planning is a common style of achieving a plan, as it allows engagement and buy-in from the whole group.

Exercise 7 – Identifying Risks

Working in small groups, explore the following aspects of risk:

For this project as you currently understand it, use the 8 Principles and the Project Approach Questionnaire (PAQ) to identify risk. To ensure your team understands how the PAQ is used, each group member should select a few statements from different parts of the questionnaire.

Identify your group's 3 biggest risks to using an Agile approach.

For each of your top risks identify mitigation actions for them.

For balance, also be prepared to talk about the key risks of choosing a traditional approach to project management on this project.

Exercise objectives:

Successful Agile is about preparing as much as possible in the early stages. Often the situation is less than perfect, and being clear where the risks lie and how these may be managed is key.

Project Approach Questionnaire for the Case Study Exercise

DSDM Atern Project Approach Questionnaire		Indicate the closest collective opinion				
Ref	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	All members of the project understand and accept the DSDM approach (Philosophy, Principles and Practices)					
2	The Business Sponsor and Business Visionary demonstrate clear and proactive ownership of the project.					
3	The Business Vision driving the project is clearly stated and understood by all members of the project team					
4	All project participants understand and accept that on-time delivery of an acceptable solution is the primary measure of success for the project					
5	The requirements can be prioritised and there is confidence that cost and time commitments can be met by flexing the scope of what is delivered					
6	All members of the project team accept that requirements should only be defined at a high level in the early phases of the project and that detail will emerge as development progresses					
7	All members of the project team accept that change in requirements is inevitable and that it is only be embracing change that the right solution will be delivered					

DSDM Atern Project Approach Questionnaire		Indicate the closest collective opinion				
Ref	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
8	The Business Sponsor and Business Visionary understand that active business involvement is essential and have the willingness and authority to commit appropriate business resources to the project					
9	It is possible for the business and solution development members of the Solution Development Team to work collaboratively throughout the project					
10	Empowerment of all members of the Solution Development Team is appropriate and sufficient to support the day-to-day decision making needed to rapidly evolve the solution in short, focused Timeboxes					
11	The DSDM roles and responsibilities are appropriately allocated and all role holders understand and accept the responsibilities associated with their role					
12	The Solution Development Team has the appropriate collective knowledge and skills (soft skills and technical skills) to collaboratively evolve an optimal business solution					
13	Solution Development Team members are allocated to the project at an appropriate and consistent level sufficient to fully support the DSDM Timeboxing practice					

DSDM Atern Project Approach Questionnaire		Indicate the closest collective opinion				
Ref	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
14	Tools and collaborative working practices within the Solution Development Team are sufficient to allow effective Iterative Development of the solution					
15	All necessary review and testing activity is fully integrated within the Iterative Development practice					
16	Project progress is measured primarily through the incremental, demonstrable delivery of business value					
17	There are no mandatory standards or other constraints in place that prevent the application of the DSDM Philosophy and Practices on this project					