



Kitman Yiu

Software Development Life Cycle

Eric Lam

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INTRODUCTION

It is important that the game industry choose a suitable method for a team , with choosing the wrong method not only lose thousand and billions of money , and also lose a lot time of making nothing , so choosing the right methodology to help the company becomes very important , in this article I will write about the benefits and drawbacks of two agile method which are SCRUM and (do not know yet) , so I will have a little bit of introduction of two methods before I talk about the benefits and drawbacks , at the end I will compare two methods and draw a chart to show the difference.

DSDM

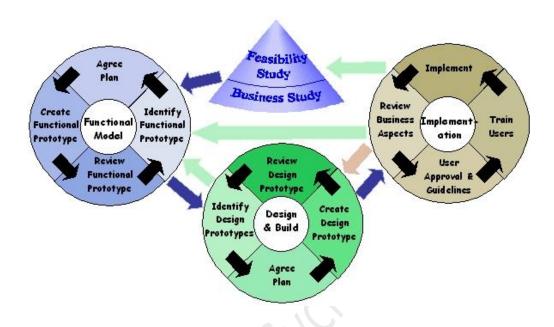
INTRODUCTION

Dynamic systems development method (DSDM) is an agile project delivery framework, primarily used as a software development method, in this paragraph I will just to shoot bullets, if you are interesting about DSDM please goto the following website: http://www.codeproject.com/Articles/5097/What-Is-DSDM

DSDM PUPORSE

According to (The Advantages and Disadvantages of Agile Development Software Methods)

- Focus on what the business needs
- Deliver work on time
- Collaborate effectively
- Never, ever compromise quality
- Build the project incrementally using solid foundations
- Develop the project iteratively
- Continuously communicate with clarity
- Demonstrate control



According to (What is DSDM?)

The DSDM development process consists of <u>7 phases</u>. The project flow may move between the different phases in the directions indicated by the arrows above.

The blue arrows in the diagram indicate the normal forward direction of project flow.

The green arrows indicate directions that may be taken as necessary under normal circumstances. For example, if the team has finished a "Design and Build" iteration, but the system cannot be released until another area's functionality has been defined and it has been built, the project flow may go back to the "Functional Model" iteration to complete that area.

The red arrow represents a direction that is only taken if the project has been found to not meet the required functionality.

• Pre-Project

The pre-project phase is not strictly defined. It occurs before the project officially begins. In this stage, the project is concentualized, and the decision is made to start the project.



• Design And Build

In this stage, the product is designed and developed in iterations. In each iteration a design model is made of the area being developed, and then that area is coded and reviewed.



Functional Model

In this stage, functional prototypes of the system are made and reviewed. A functional prototype is a prototype of the functions the system should perform and how it should perform them.



• Implement/Deploy/Maintain

In the last phase, the product is wrapped up, documentation is written, and a review document is drawn up comparing the requirements with their fulfillments in the product. The users are trained in how to use the system, and the users give approval to the system.



Post-Project - Maintenance

After the product is created, maintenance will inevitably need to be performed. This maintenance is generally done in a cycle similar to the one used to develop the product.

DSDM ROLES

According to (What is DSDM?)

DSDM defines several key roles that should be filled by members of the team:

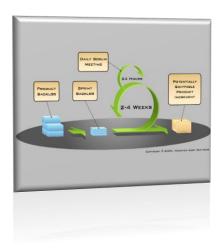
- Ambassador
- Visionary business goals.
- Advisers
- Technical Coordinator
- Executive Sponsor
- Project Manager
- Team Manager
- Senior Developer

- Facilitator.
- Scribe

EXAMPLE IF USING DSDM

You are trying to sell you game idea, so first the business people will start and do some study and see does the game idea work or some ideas why some of the similar games would be fail or success, If it works it will go into the start create the prototype it will be looping until everyone agree the plan. After that the designer will that making a plan and setup timetables this also will be keep looping until it can be finish. And the large stages are to design the game, if something goes wrong at that stage people will go back and do revision again until the game is finish.

SCRUM



INTRODUCTION

Same as above the paragraph, I will first talk about the history of Scrum and how does scrum work or in other word what element does scrum have after that I will talk about the advantage and disadvantage of Scrum, and of course at the end give an example that how does scrum work.

CONTENT

(Wikipedia:Scrum(software development)) Scrum is an iterative and incremental agile software development framework for managing product development.

NEW Intro to Agile Scrum in Under 10 Minutes - What is Scrum?(2012) would indicate that In Scrum there are three few elements: roles, meetings, artifacts, and the different roles are: Product Owner, Team, and Scrum Master.

ELEMENTS

ROLES

Product Owner

The Product Owner responsibility is to remove any impediments that

obstruct a team's pursuit of its sprint goals.

Scrum Master

The Scrum Master has to make sure that the project is on track . any commutate with Product Owner that can tell him what can be done and what not

Team

And the last role in SCRUM is the team, the team is

responsible for completing work

ARTIFACTS

Product Backlog

The collection of all these user-stories is called product backlog. The user-stories are kind of feature requests from the customers executives or even other team members that have been written from the perspective of the end – user.

• Release Backlog

The product owner will identify the user-stories they want to put into this release.

After he decided what he want to put in the release he will put it into the release backlog.

• Sprint Backlog

Which take from the release backlog and split it up into several of these. One of the most important things remember about sprints is that the goal each sprint is to get a subset of the release backlog to a ship-ready state, so at the end of each sprint.

Burndown chart

The burn down chart is the number one reason for Scrum's popularity, because this ensure a project is progressing smoothly by this visibility tool. The burn down chart provides a dayby-day measure of amount of work that remains in a given sprint or release. The burn down chart provides a day-by-day measure of the amount of work that remains in a given sprint or release

MEETINGS

The sprint meeting

Every iteration starts with a sprint planning meeting. The product owner holds a conversation with the team and decides which stories are highest in priority, and which ones they will tackle first. Stories are added to the sprint backlog, and the team then breaks down the stories and turn them into tasks.

Daily Scrum

(wikihow:Run a Daily Scrum)The daily scrum is also known as the daily standun meeting. This serves to tighten communication and ensure that the entire team is on the same page. Fach member goes through what they have done since the last standun, what they plan to work on before the next one, and outline any obstacles.

Sprint retrospective meeting

Finally, after a sprint, the scrum master meets with the team for a retrospective meeting. They go over what went well, what did not, and what can be improved in the next sprint. The product owner is also present, and will listen to the team lay out the good and had aspects of the sprint. This process allows the entire team to focus on its overall performance and identify strategies for improvement. It is crucial as the Scrum Master can observe common impediments and work to resolve them.

EXAMPLE OF USING SCRUM

- 1. We get all the request from the customers, executives, or even team members and write to the user stories
- 2. After collected all the user stories and put it into product backlog
- 3. Then the product owner we decide which user stories are going to put into the product
- 4. The Scrum master sets up meeting, monitors the work being done and facilitates release planning
- 5. The Team will start building the product building the sprint
- 6. Redo until finish

BENEFITS AND DRAWBACKS

INTRODUCTION

In this selection I will write about the benefits and drawbacks of two agile methodology from my own perspective and also from the perspective of game industry, after that I will do a conclusion this selection.

SCRUM

(SBGames2010) said SCRUM is become popular is because SCRUM can minimal as possible delays and mistakes. Although some people may already have knowledge in software development, there are specific features of game development that can prevent the success of great games. This results on major problems in project management. The use of this methodology is to focus on game development to avoid those problem.

Statement	Reason / Explain	Website and author
corrections frequently, and collect feedback from clients as quick as possible	Since the each sprint end every two to three weeks, so another which means the testing state will end every two to three weeks which leads to having a faster feedback	http://www.intland.com/blog/agile/the-main-benefits-of-using-scrum/
The Scrum Approach four elements to the Teams including :Cross-discipline, Self-management, Self-organization, True leadership	Cross-discipline Enables teams to deliver features and mechanics that have clear value to customers and stakeholders Self-management:	http://www.gamasutra.co m/view/feature/6040/agil e_game_development_wit h_scrumphp?print=1
	Because enables teams to select the amount of work they can commit to every sprint and complete that work through whatever means they find appropriate.	
	Self-organization: Enables teams to have a degree of authority and	

	responsibility to select their membership	
	True leadership	
	Provides leadership focused on mentoring and facilitation to free the best performance possible from the team	
Experience	To allow the company to maximum their profits	By Shelly Warmuth,
"At the heart of scrum is the interaction of the team. A daily meeting around the task board is interactive, vibrant, collaborative, visual, and tactile. It is a visual way of showing the goal the team is striving toward and the progress they are making. They, each and every member of the team, are peers. "They own the goal. It's a team effort. They gather around the board to align themselves with each other, to honor others' contribution to the effort, and to course-correct when they are missing the mark. They argue, discuss, share, learn, continually improve, celebrate, boost each other up, and create solutions.	there must be able a way that all team member can visual the same goal, and also create transparency, avoid create a structed militant environment.	http://www.gamasutra.co m/view/feature/6040/agil e_game_development_wit h_scrumphp?print=1
"There is another thing that Scrum does for the team: It creates transparency. Since Scrum depends on collaboration and continual forward progress, problems are addressed by the team as they crop up instead of dealing with them later or covering the problem under a layer of 'spin.'	1982	
"A structured, militant environment will never create a team. A team works together toward a shared goal. A group works together toward a goal given to them. Scrum is messy and noisy. It lives, it breathes, it stretches, it morphs, and it expands. Interaction is the heart of the team. The heart of Scrum is the team."		
Shelly Warmuth, freelance writer and game designer		
Based on my experience, I would say the key features of Scrum are: High visibility of progress. Regular feedback from customer. Predictable rhythm. Measurable productivity (via burndown, velocity, etc.). Cross-functional, self-organising teams. Inspect and adapt. Low bureaucratic overhead (meetings, documentation, etc.). Emphasis on face-to-face communication. And these features lead to the following benefits: Project can respond easily to change. Problems are identified early. Customer gets most beneficial work first.	n/a	http://stackoverflow.com/ questions/208442/what- are-the-major-benefits- of-scrum-as-a- methodology

•	Improved productivity.	
•	Ability to maintain a predictable schedule for delivery.	

DSDM

Statement	Reason / Explain	Example of using in game industry
early implementation to business problems	To allow the company to maximum their profits, it is important the early implement to business problem	These means the game companies would need to study the business from other game companies aspects of the project before starting the project.
risk of building the wrong computer system is reduced	To allow the company to maximum their profits is try to avoid building the wrong computer system	The Feasibility Study phase would need to be study the other game project before starting the project which reduced building the wrong system
the final system is more likely to meet the users' real business requirements	To allow the company to maximum their profits, the system must meet the users need.	In these three phase Implement/Deploy/Maintain the user would need to be keep testing the system
IT professionals and end users become partners	To allow the company to maximum their profits, it is important that the IT professionals and end user become partners, because understanding what the end user needs are important.	In these three phase Implement/Deploy/Maintain the user would need to be keep testing the system and give feedback to the IT professionals
the users will be better trained, since their representatives will define and co- ordinate the training required	To allow the company to maximum their profits it is important to define a system how to train up the user	In DSDM of these three phase Implement/Deploy/Maintain the game players are trained in how to use the system, and the users give approval to the system.
implementation is more likely to go smoothly, because of the co-operation of all parties concerned in development	To allow the company to maximum their profits, making sure all parties concerned most co-operation in the development	In the Functional Model Phase all the development will sit down and chart together.
Active user involvement is imperative.	To allow the company to maximum their profits, the active user must be involvement to the project	The active player must able to do some play testing in the alpha and beta stage of the game.
DSDM teams must be empowered to make decisions. Iterative and incremental development is necessary to converge on an accurate business solution. Initial design constantly improved	To allow the company to maximum their profits, since there no decisions have to be verified, so making the	The team will have power the make decisions every couple months/weeks.

The focus is on frequent delivery of products. Business suitability is the essential criterion for acceptance of deliverables. Meets business goals and objectives too.	development process more efficient is important. To allow the company to maximum their profits, the company should frequent delivery the product so they can get feedback as soon as possible To allow the company to maximum their profits, we	The team will need to people to test put the game every couple months/weeks. The game companies would need to see how much download and feedback they have from the player
Disadvantage	must measure how suitability is it for the company	
Excessive time spent on decision making	Spending on too much time make decision and not doing the project will increase the development profits	Game companies would need to spent and discussion is that discussion
Irreversible increments are developed	Not allow the inrecerse the increments make the game feel bad will decrease the game value	If something feature had been add in the game and recognize it did not work.
Team focus on activity rather than delivery of products	Spending on to much about the activity will increase the development profits	The team will have a lot meeting about the business wise not planning how to do the project.
Users allocated to the project are "not wanted" by the organisation	Allowing the team members do something they don't like will increase or something they weak at will increase the development time which also means increase the development profits	The team members will get some jobs that they do not want to do
Users get too involved in the project	The player will not want to buy the game since they already played a lot of timer this leads to decrease the sales of the game.	The user will keep testing the project
Data structures get too monolithic and inflexible due to rapid prototyping	Not allow change, we either increase the development profits or decrease the sales.	If something runs out the plan there will be no solution to handle that
Is costly to implement, as DSDM requires both developers and users to be trained to employ it effectively, therefore it may not be suitable for small organizations or one-off projects.	The companies would need increase the development profits because of training and buying tools.	The use DSMD the companies need to put a money for training and also for the tools

COMPARE

The difference between Scrum and DSDM is scrum is good for project that team size is lower than 8 person, SCRUM is aimed more for a specific sector, the IT and software development industry. Which DSDM can be used in a more wide range of industries the DSDM is more for business wise it doesn't take a lot about how to solve process of implementing the project, just focusing on how to find the maximum value between the player and game. And if the player change their mind it will be a big hurt for DSDM. And since if games test a lot the value of people buying the game will decrease. And the DSDM looks more complicated for people to understand how to use since it's for a wider range industries and there is not a lot of video that explain how the DSDM actually work. But the SCRUM has quite a lot on YouTube so people can understand it more easily. However the Scrum does not have enough solution talking about the business wise. So what I recommend is when you doing the project use SCRUM, but when finding the business it will be a good choice the use DSDM.

CONCLUSION

In conclude, both method are great, because SCRUM is created for game companies and DSDM it create for all the wider range if companies in the world. So when the game companies are creating the game, SCRUM is more suitable for game companies to work on because the SCRUM is talking about the working flow and make sure people can reach the aim by choosing a suitable amount of job by themself. Also more research would be done just the solve these specific problems that we have in game industry. However but when publishing a game to the world the DSDM is more suitable for the company because SCRUM does not instruction of how can you publish a game DSDM will be more suitable.

CONTENT

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How Does DSDM Help to Overcome Development Pitfalls?

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