

The Business Value Game

v2.0

Playing to learn
How to release the right products with
the right features at the right time

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Table of Contents

Why and when to use this session.....	3
Prepare for the session	5
Run the game – Introduction.....	6
Run the game – Iteration 1	7
Run the game – Iteration 2	14
Debrief Iterations 1-2.....	18
Run the game – Iterations 3 and 4	19
Debrief Iterations 3-4	23
Run the game – Iterations 5 and 6	24
Final debrief.....	27
If you want to know more.....	29
Session materials.....	30
License	32

Why and when to use this session

Format and length

90 minutes tutorial and simulation game.

Sample timeline:

Length	Total	Contents
5'	5'	Create teams and hand out materials
15'	20'	Play iteration 1 and explain rules
10'	30'	Play iteration 2
10'	40'	Debrief first two iterations
15'	55'	Play iterations 3-4
10'	65'	Debrief iterations 3-4
10'	75'	Play iterations 5-6
15'	90'	Final debrief and conclusions

When and why

Use this session to:

- Involve salespeople, product managers and executives in an Agile improvement project
- Extend Agile Planning from Iteration Planning to Release Planning; from prioritising stories to prioritising client requests and products
- Clarify the concept of “Business Value”
- Complement the “XP Game” and answer questions raised by the XP Game. Where the XP Game concentrates on Iteration Planning and the developer role, the Business Value Game concentrates on Release Planning and the client role.
- To start to define your organisation’s “Business Value Model”.

Participants

People who are involved in release planning: product owner, product manager, salesperson, development lead, tester, project manager, scrum master or team lead. People who teach or coach people in the above roles.

Maximum number of participants:

- 5-7 players per team
- 1-2 teams per coach

Coaches

The coaches:

- Introduce the theory

- Manage the simulation
- Moderate debriefing and discussion
- Provide hints and tips.

The coaches should be familiar with Agile, especially the client and planning techniques, and have experience of applying it in real projects. They should also have basic coaching and session leading skills and experience. Any experience in business analysis or in creating business cases is a benefit.

We recommend that you only coach one team the first time you run the game.

Prepare for the session

Prepare the session materials

Print out a set of Client Persona Sheets, Client Request Sheets, Story Cards and one Iteration Sheet (see “Session materials”) per team.

We recommend laminating the playing cards and using water-solvable ink pens so that you can reuse the cards, reduce preparation time and be more environmentally friendly.

Lay out the room

You need a large table with 6-7 chairs per team. Spread out the tables evenly around the room, so that teams don't distract one another.

Prepare the participants

Invite the participants to the session and make the goal of the session clear: to learn and *experiment* in a safe, fun environment with methods for prioritising development to maximize delivered value. You can tailor the following session description for your invitation.

Short session description for use in your session invitation

Objectives: learn how to assign business value to projects and stories, prioritise and make plans that bring value. Learn why and how to build and use a “Business Value Model”. Learn how to teach the approach and techniques.

Contents:

Agile teams want to deliver maximum business value. That's easy if the Onsite Customer assigns business value to each story. But how does the Customer do that? How can you estimate business value?

How do you decide between stories? How do you decide between projects? How do you decide between clients?

This session gives you some simple business value estimation techniques that are "good enough" for everyday use. A Business Value Model helps you to prioritise efficiently and consistently, by making the important *value drivers* explicit.

The session is run as a game, where teams of salespeople have to make plans for their development team. The goal of the game is to deliver the highest possible business value, like in the XP Game. This game is a complement to the XP Game: how do these 'business value points' on the XP Game story cards get chosen?

Each salesperson in the team represents one (or more) clients who will buy the team's product IF their feature(s) is in the product. The team is going to have to make some tough decisions. The team is going to have to disappoint some clients, because the development team has a finite capacity.

We provide the clients and their wishes. We provide a well-performing development team. We suggest the techniques to estimate business value. The rest is up to you.

Run the game – Introduction

Introduce the session and set up the simulation

Goal of the session

To experiment with different strategies when assigning Business Value and prioritising development work to maximise value generated.

Create the simulation team(s)

Form teams of 5-7 players. Ideally, each team contains a good mix of different roles from different companies or departments within a company. One way to create balanced teams is to group participants by the role they have in real life, and then form teams by taking one person from each group. There are three roles in the game:

- Salespeople who bring in requests from one or more clients
- The Development team which receives the set of stories to implement each iteration and marks the stories as completed
- The Accountant who keeps the score, verifies that the team follows the rules and serves as an observer during planning.

The team should call the game coach to verify the acceptance of stories and requests. If any player has a question, they should ask the game coach.

Hand out the Persona cards to each team and let the players choose their role and the client(s) each salesperson represents.

The rules of the game

Each team tries to earn as much money as possible over six iterations. A team earns money by:


- Releasing products that contain features that clients requested.
- Keeping clients happy
 - The team are paid “goodwill” money at the end of the game based on client happiness level
 - Clients whose happiness reaches zero leave. All their requests become invalid.

Run the game – Iteration 1

The goal of the first iteration is to teach the participants the rules of the game. The coaches guide the players through the steps one by one.

Step 1: Assign Business Value to Client Requests

Hand out the Client Request cards for the first iteration

Client Request: Castle		
Client: Petra		
Iteration: 1		
Income: 2500 €	😊: +5	BV:
		
Done	Released	Stories
		Big square tower
		Group of small towers
		Surrounding walls
		Drawbridge
		Portcullis

Explain the fields on the Client Request card:

- The **Income** indicates how much money the Client will pay for delivering this request.
- The 😊 **Happiness** indicates how much the Happiness of the Client will increase by when the request is delivered.

Players need to estimate the Business Value (BV) of each Request.

In the first iteration, we do the simplest thing that could possibly work:

- Sort the Client Requests by Income and lay them out at the top of the table
- Set the Business Value equal to the Income. In the first iteration, we only take Income into account when estimating Business Value. The players can take other variables into account in later rounds.

Ask the players to sort the Client Requests by Income. Ask the players to set the Business Value of each Request equal to the income of the Request.


Step 2: Distribute Business Value over User Stories

Each Client Request consists of a set of User Stories.

Hand out the User Story cards for the first iteration

Client Request: Castle
Iteration: 1
Story:

Big square tower



Business Value	
Cost Estimate	4
BV / Cost	
Done	

1/5

The Development team has already estimated each User Story in Story Points. The players need to estimate the Business Value of the User Story.

In the first iteration, we do the simplest thing that could possibly work: divide the Business Value of a Client Request equally over all its stories. For example, each of the five stories of the Castle Client Request (worth 2500 BV) is worth 500 BV.

Ask the players to assign Business Value to each story by spreading the Business Value of the Request evenly over all the User Stories.

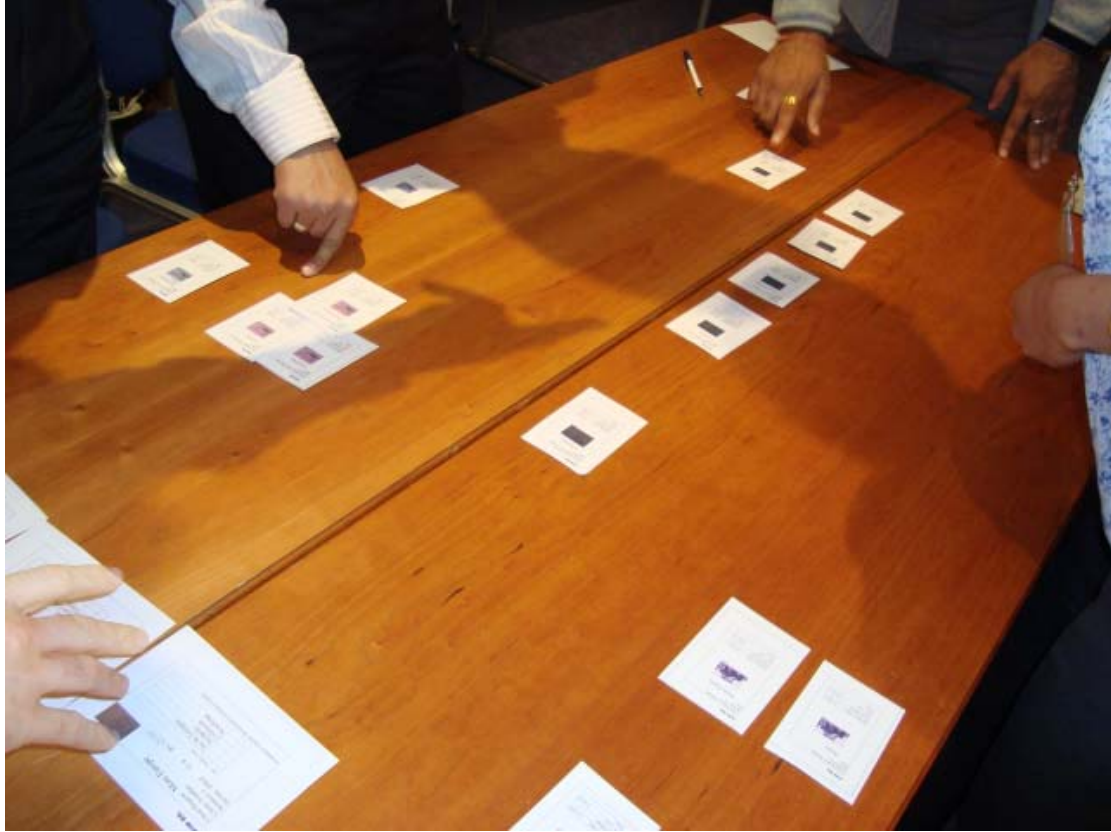
Step 3: Sort the stories by Value/Cost

Ask the players to calculate Business Value / Cost for each story and lay out the User Story cards vertically ordered by highest to lowest BV/Cost



Step 4: Align User Stories per Client Request

Ask the players to slide the User Story cards horizontally (so that the BV/Cost ordering is preserved) to align the User Stories with their corresponding Client Request.



Step 5: Select User Stories for the iteration

The players must now select the User Stories they want to be implemented, in the order they want the stories to be implemented. Each Development Team has a velocity of 15 points.

The players can choose their own strategy, taking these points into consideration:

- The goal is to maximise money earned; maximising Business Value is the tool.
- Clients pay for complete requests, not individual stories.
- Clients become less happy the longer it takes to release their requests.

To deliver the Client Request to the Client (and to be paid), the team needs to implement all User Stories in a Client Request and “**release**” the stories. When the Release Card is part of the iteration, **all** the unreleased stories in this and previous iterations are put into production (including those that are scheduled after the Release Card). As the Release Card has a cost, the players need to weigh the trade-off of releasing often (and getting paid earlier) versus getting more User Stories implemented.

Ask the players to build their iteration plan with User Stories prioritised in the order they are to be implemented

Step 6: Implementation

Ask the Development Team to “implement” all User Stories by marking them DONE.

The Development Team player marks each story as done, as long as the total cost of the stories is less than or equal to the “velocity” of the development team: 15 points.

Step 7: Update Client Requests

Ask the Salespeople to mark the User Stories DONE and RELEASED on their Client Request cards

The Salespeople keep track of the progress of their Client’s Requests. A Client Request can have 3 states:

- **Incomplete:** one or more User Stories have not been implemented
- **Completed:** all User Stories have been implemented but not released
- **Released:** all User Stories have been implemented and released

Step 8: Calculate the results

Scores are calculated based on Completed and Released Client Request. The Accountant doesn’t deal with details such as User Stories or incomplete Client Requests.

Give the Score Sheet and a pen to the Accountant and guide them through how to fill in the sheet

The top of the Score Sheet looks like this:

Team name:										
Iteration	Planned Velocity		Actual Velocity	Business Value	Potential Value	Released? Y/N	Earned Value	ROI	Iteration Total	Running Total
1	15		15		€		€		€	€
2	15				€		€	€	€	€
3	15				€		€	€	€	€

Ask the Accountant to fill in the sheet as follows:

- 1. Choose a team name**
- 2. Fill in the total Business Value of all Completed Client Requests**
- 3. Potential Value is the sum of the Income of all Completed Requests**
- 4. Indicate if the Release Card was played**
- 5. If the Release Card was played, the Earned Value equals all previously unreleased Potential Value. Otherwise, Earned Value is zero.**
- 6. Iteration Total is the Earned Value for this iteration**
- 7. Running Total is the sum of all Iteration Totals**

Some clarifications:

- Potential Value is the amount of money that we could get paid by developing Client Requests. But this isn't money in the bank, as the Client only pays when we release.
- Earned Value is an important value to track: this is the amount we can invoice to the Client!

Example sheet for a team that implemented and released “Amusement Park”

Team name: XXX										
Iteration	Planned Velocity		Actual Velocity	Business Value	Potential Value	Released? Y/N	Earned Value	ROI	Iteration Total	Running Total
1	15		15	1800	1800€	Y	1800€		1800€	1800€
2	15				€		€	€	€	€
3	15				€		€	€	€	€

If this team hadn't released, their Earned Value, Iteration Total and Running Total would be 0€

Step 9: Update Client Happiness

Each Salesperson updates their Client Persona Sheet:

- If a request for this customer was part of the product release, increase customer happiness by the happiness value indicated on the request.
- Else, decrement customer happiness by one.

Ask the Salespeople update their Client's Happiness

Note: **every** Client without a release sees their happiness go down, **even if they haven't entered any requests**. The equivalent in the real world is that software that is left untouched gradually loses value as it gets further away from a changing market demands.

Give each Salesperson who released their Client Request (and earned money for the team) a chocolate as sales bonus

If the players don't bring it up, talk about "unfair" bonuses in the retrospective after the second iteration. Make sure that there are both single-serving and shareable bonuses, so that team-spirited salespeople can select chocolates to share with their team.

Summary of the first iteration

The teams have gone through one iteration. Verify that everybody understands the goals and rules of the game. A summary of the different steps is in the handout. The structure of the following 5 iterations will be similar, but we gradually introduce some more tricky situations. We will run another iteration and then look back on what happened. From now on, we will assign business value to the requests by comparing them with the requests from previous iterations.

Run the game – Iteration 2

Second iteration


Hand out the additional Client Request and User Story cards for the second iteration

A few new features are introduced in this iteration. Explain these changes before asking the players to start planning.

Estimating business value by comparative estimation

New requests are introduced with the same income as requests from iteration 1, but with a different customer happiness result. Business value is assigned to the request by comparing with existing requests. If two requests have the same income, the one with a higher customer happiness value will have higher business value. From now on, we will always assign business value by comparing with other requests.

The players have to devise their own way of estimating Business Value. Gradually, they begin to create a shared “Business Value Model”, an agreement on how to estimate the value of Requests.


Client Request: Europe																					
Client: Jonathan																					
Iteration: 2																					
Income: 2500 € 😊: +8 BV:																					
<table border="1" style="margin: auto; border-collapse: collapse;"><thead><tr><th style="width: 10%;">Done</th><th style="width: 10%;">Released</th><th style="width: 80%;">Stories</th></tr></thead><tbody><tr><td style="height: 20px;"></td><td></td><td>Atomium</td></tr><tr><td style="height: 20px;"></td><td></td><td>Eiffel Tower</td></tr><tr><td style="height: 20px;"></td><td></td><td>Anne Frank House</td></tr><tr><td style="height: 20px;"></td><td></td><td>Big Ben</td></tr><tr><td style="height: 20px;"></td><td></td><td></td></tr></tbody></table>				Done	Released	Stories			Atomium			Eiffel Tower			Anne Frank House			Big Ben			
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		Atomium																			
		Eiffel Tower																			
		Anne Frank House																			
		Big Ben																			

The income of this request is 2500€ the same as the Castle Request from the first iteration. The happiness is higher: eight versus five. Thus, this Request has a higher Business Value. As the team can earn 100€ per happiness point at the end of the game, we could say that this Request is worth 300€ more than the Castle. A first approximation of the Business Value model could be:

- $BV = \text{Income} + 100\text{€} * (\text{Happiness} - 5)$ or
- $BV = \text{Income} + 100\text{€} * \text{Happiness}$

So the Business Value of this Request might be 2800

Client Request: **Farm**
Client: Arnold
Iteration: 2
Income: 1500 € 😊: +2 BV:



Done	Released	Stories
		Tractor
		Cow stables
		Cows

If we use the Business Value model, this Request would have a Business Value of 1200, as it doesn't bring much happiness.

Developer variation

In the first iteration we knew the exact velocity of the development team. The velocity of real teams is more variable: they typically implement a bit less or a bit more than their average velocity. To simulate this, the "Development Team" player throws a die to determine the real velocity **after planning**, just before implementing. The following conversion table is also available in the score sheet:

Die throw	Velocity
1	Base -1 = 14
2	Base -1 = 14
3	Base = 15
4	Base = 15
5	Base +1 = 16
6	Base +1 = 16

If the velocity is less than 15, the "Development Team" implements all stories in the order given by the players, until the total cost of the stories is less than or equal to the velocity. If the velocity is higher than 15, the team can select an extra story for 1 point. Write the actual velocity in the Iteration Sheet. In the following iterations, the team should prepare a plan that takes into account this variation.

Players have to order their stories carefully, based on business value, so that the most valuable stories are least likely to get dropped from the iteration. This includes the Release Card: if you schedule the release card as the last card in the iteration and there aren't enough velocity points to implement it, you can't release.

Release improvement

The team gets a “Release Improvement” card. This card has a cost in points, like the stories. When this card is implemented in the iteration, the cost of future releases is reduced to 1 point.

The team has to choose between invest in long-term improvement or developing features that bring in money in the short term.

Ask the teams to begin playing one iteration until they have to fill in their score sheets

Second iteration scoring

Return on Investment

When we release requests to our clients we get paid. We can use this income to invest in other projects. Each round, we gain a Return on Investment of 10% of our Total income, rounded down to the nearest multiple of 100€

Thus, there is a large difference between Potential Value (future income due for features implemented but not released) and Earned Value (money earned now for released features): the latter represents real money that we can invest to bring more value. Releasing early and often has a dramatic effect on cash flow and income over time.

Fill in the Iteration sheet

There are two changes in this round:

- The actual velocity may be different from the planned velocity, due to the die throw.
- We need to calculate the Return on Investment we get from the money we earned in earlier iterations. The money we invest has a return that is about 10%. $ROI = 10\%$ of the previous iteration's Total, rounded down to the nearest multiple of 100€ ROI is like compound interest, the sooner we earn money, the bigger the effect on ROI.

Example sheet:

Team name: The Smarties										
Iteration	Planned Velocity		Actual Velocity	Business Value	Potential Value	Released? Y/N	Earned Value	ROI	Iteration Total	Running Total
1	15		15	1800	1800€	Y	1800€		1800€	1800€
2	15	5	16	2800	2500€	Y	2500€	100€	2600€	4400€
3	15				€		€	400€	€	€

The example above shows an iteration sheet after two iterations. What happened?

- In iteration 1, a Customer Request worth 1800€ was implemented and released. The team's total earnings are now 1800€

- In iteration 2, a Customer Request with Business Value of 2800 points and an Income of 2500€ is completed and released
- In iteration 2, the money earned from the previous iteration is invested and returns $100€ = 1800€ / 10$, rounded down to the nearest multiple of 100€
- In iteration 2, the development team threw a 5 with the die. Velocity is one story point higher than usual.
- In iteration 3, the team will earn an ROI of 400€

Debrief Iterations 1-2

Hold a brief standup retrospective with all the players. Ask each team to announce their team name and earned value. Display the scores prominently to encourage competition. We will update the scores after iterations 4 and 6.

Ask each team the three standup questions:

- What have you done: which strategy did you use and what was the result?
Teams shouldn't be afraid to share their ideas and techniques with the other teams. After all, Agile is all about collaboration. Remember: the goal of the game is to maximise each team's income, not to minimise the other teams' income.
- What will you do: which strategy will you use in the next couple of iterations?
- Impediments: is there anything that is unclear or needs to be resolved?

Some further questions to ask:

- Why are there differences in earned value?
- Is the prioritisation process easy and fast to implement? If not, why not?
- How did you decide to release?
- What changes have you made to the basic prioritisation process?
- How did you estimate the value of the Release Improvement card? Did you improve your release process? Why? Why not?
- How happy are your customers? How did you optimize customer happiness?
- How did you negotiate the priorities? Did each player defend 'their customer' or did you look at the global picture? Remember: the goal is to have maximum earned value and customer happiness per team, not per player.
- What is the effect of rewarding the salespeople for releasing requests?

Run the game – Iterations 3 and 4

The teams have 15 minutes to perform both iterations. Keep the team informed of remaining time. As soon as they've completed an iteration, the team should call their coach to verify if all the acceptance criteria of the requests have been honoured. Only then do they get the next set of Requests and Stories


Third iteration

Hand out the additional Client Request and User Story cards for the third iteration.

Ask the players to run a whole iteration and call the coach when they're ready.

The extra Client Requests and Stories marked for iteration 3 are handed to the teams. A few new features are introduced in this iteration. If the players don't pay attention to the acceptance criteria and constraints on the Client Requests, the coaches may gently remind them to "read the small print". The coaches should ensure they verify that all the constraints are satisfied at the end of the release. The team will learn a memorable lesson if the coach rejects a release because some constraints weren't obeyed.


Dependent requests

Client Request: Castle Extensions			
Client: Petra			
Iteration: 3			
Income: 3000 € 😊: +5 BV:			
Done	Released	Stories	
		Stables	
		Living Unit	
		Water well	

Condition: ordered if Request "Castle" is released

The Castle Extensions request can only be brought into play if the "Castle" request was previously released. The basic prioritisation process is still the same, but the customer representative now has to take this constraint into account when selecting stories. This constraint might lead to implementing stories with lower business value (first request) before stories with higher business value (dependent request). The "Accountant" should verify that the constraints are satisfied before recording the value of the requests.

Acceptance Criteria

Client Request: More Europe																				
Client: Jonathan																				
Iteration: 3																				
Income: 2500 €	😊: +8		BV:																	
<table border="1"><thead><tr><th>Done</th><th>Released</th><th>Stories</th></tr></thead><tbody><tr><td></td><td></td><td>Arc de Triomphe</td></tr><tr><td></td><td></td><td>Acropolis</td></tr><tr><td></td><td></td><td>Colosseum</td></tr><tr><td></td><td></td><td>Stonehenge</td></tr><tr><td></td><td></td><td></td></tr></tbody></table>			Done	Released	Stories			Arc de Triomphe			Acropolis			Colosseum			Stonehenge			
Done	Released	Stories																		
		Arc de Triomphe																		
		Acropolis																		
		Colosseum																		
		Stonehenge																		
Acceptance Criterion: Monuments in European Capitals																				

The “More Europe” request has as acceptance criterion “Monuments in European Capitals”. Attentive players will spot that “Stonehenge” is not a building in a capital. The request will be accepted even if the “Stonehenge” story is not implemented; this story has a business value of zero! If the team implements the story, they’ve wasted effort on delivering a story without business value.

This underlines the importance of understanding and building what the client really NEEDS, not only what the customer asks for.

Not all teams will notice this fact. Be sure to mention the acceptance criteria during the standup retrospective. A similar situation will arise in later iterations.

Development team improvement

The team gets a set of “Team Improvement” cards. These cards have a cost in points, just like the stories. When all three cards are implemented, the average velocity of the team is increased from the next iteration onwards. Put the new planned velocity in the Iteration Sheet. The die modifiers (-1 to +1) are still applicable to the new average velocity.

These small, low cost process improvement stories underline the importance of doing process improvement in small steps. These one point stories are useful to “fill out” a release, especially if no story will fit in the remaining velocity.


Fourth iteration

Hand out the additional Client Request and User Story cards for the fourth iteration after you've verified that the third iteration was completed correctly.

Ask the players to run a whole iteration and call the coach when they're ready.

A few new features are introduced in this iteration. If the players don't pay attention to the constraints on the Client Requests, the coaches can gently remind them to "read the small print".

Request based on client happiness

Client Request: Manege			
Client: Arnold			
Iteration: 4			
Income: 3000 € 😊: +6 BV:			
Done	Released	Stories	
		Horse stables	
		Horses	
		Meadow	

Condition: ordered if Arnold's 😊 ≥ 4

When clients have to wait long for their releases they may lose trust in the software developer. When a client's happiness goes below zero they leave and go to a competitor. Some clients will leave before that: Arnold will only place a new order if his happiness is more or equal to four.

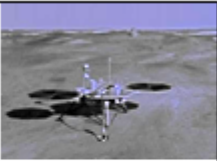
By this iteration Arnold's happiness is probably low: teams are unlikely to implement his requests as they have low business value. The teams will have to decide if they want to implement a low value request to keep Arnold happy. Sometimes it's best to decide to no longer serve a certain client, but to concentrate on other clients.

Look at business value/cost

Client Request: Mars Exploration
Client: Peter
Iteration: 4
Income: 1500 € 😊: +5 BV:

Done	Released	Stories
		Robot
		Lander
		Meteorological Station

Deadline: must be released no later than Iteration 5



The Mars Exploration request seems to have a really low value. But the business value/cost of the request is high. Small requests with low cost can be very useful to “fill out” releases if there are a few points of velocity left or to release quickly and earn money quickly.

It won’t be easily visible that this request has a great value/cost ratio, unless the team start to “roll up” the cost of the individual stories to the request.

Client deadlines

The Mars Exploration request has a client deadline. The request must be released in iterations 4 or 5; otherwise the client won’t accept the release. In other words, the Business Value of the request changes with time: from iteration 6 on, the Business Value is zero!

Debrief Iterations 3-4

Hold a standup retrospective with all players. Ask each team to announce their earned value. Display the scores prominently to encourage competition. We will update the final scores after iteration 6.

Ask each team the three standup questions:

- What have you done: which strategy did you use and what was the result?
Teams shouldn't be afraid to share their ideas and techniques with the other teams. After all, Agile is all about collaboration. Remember: the goal of the game is to maximise each team's income, not to minimise the other teams' income.
- What will you do: which strategy will you use in the next iterations?
- Impediments: is there anything that is unclear or needs to be resolved?

Some further questions to ask:

- Why are there differences in earned value?
- What parameters do you take into account to determine business value? What does your Business Value Model look like?
- How did the acceptance criteria affect your decisions? If none of the teams mentions that "Stonehenge" has zero value, bring it up.
- How did you deal with deadlines and dependencies?
- Did you implement the Development Team Improvement cards? Why? Why not?
- How happy are your clients? How does that affect your decisions?

Run the game – Iterations 5 and 6

Fifth iteration


This time, the teams only have 10 minutes to play two iterations. By now, they should have come to agreement about their Business Value Model, know how the game works and know what each role does.

Hand out the additional Client Request and User Story cards for the fifth iteration.

Ask the players run a whole iteration and call the coach when they're ready.

The extra Client Requests and Stories marked for iteration 5 are handed to the teams. A few new features are introduced in this iteration.


Cheap request with acceptance criteria

Client Request: Mars Space Port			
Client: Peter			
Iteration: 5			
Income: 1500 € 😊: +5 BV:			
Done	Released	Stories	
		Launch Pad	
		Terminal	
		Check In Desk	
		Belgian Chocolate Shop	

Acceptance Criterion: Things you need to fly back to Earth.

The Mars Spaceport is another low value/low cost request. The Business Value/Cost of the stories is a lot higher if you notice that the “Belgian Chocolate Shop” is not really necessary to fly back to Earth from Mars.

More acceptance criteria

Client Request: Garden of Outstanding Beauty			
Client: Petra			
Iteration: 5			
Income: 2000 € ☺: +9 BV:			
Done	Released	Stories	
		Mini Waterfall	
		Mystic Maze	
		Musical Water Fountain	
		Hanging Gardens of Babylon	

Acceptance Criterion: Only features that haven't appeared in history books

The Garden of Outstanding Beauty requires players to know that the Hanging Gardens of Babylon are a historical fact.


Sixth iteration

Hand out the additional Client Request and User Story cards for the sixth iteration after you've verified that the fifth iteration was completed correctly.

Ask the players to run a whole iteration and call the coach when they're ready.

A few new features are introduced in this iteration.

Client demo to increase happiness

Client Request: Amusement Park II			
Client: Susan			
Iteration: 6			
Income: 2000 € ☺: +5 BV:			
Done	Released	Stories	
		Pony Ride	
		Wild Water Ride	
		Indoor Playground	
		Arcade Flying Simulator	

Demo: When you demo the children's attractions, ☺ increases by 3.

The second part of the Amusement Park allows the players to increase client happiness by giving a demo of the children's attractions.

- Demo = the story is implemented but not necessarily released
- Children's attractions = Pony Ride and Indoor Playground

The two Children's Attractions stories have a larger Business Value than the other user stories in this request, because they bring extra happiness. Therefore, the request's Business Value is not simply distributed evenly over the user stories.

In most cases, we won't spend much time assigning Business Value to each story individually, but in some cases there are stories with higher value or even no value, as in the case of the stories that don't add to the acceptance criteria.


Acceptance criteria based on past Requests

Client Request: Europe Revisited

Client: Jonathan

Iteration: 6

Income: 3000 € 😊: +3 BV:



Done	Released	Stories
		Little Mermaid
		London Eye
		Tower of Pisa
		Neuschwanstein

Acceptance Criterion: only countries we don't have yet.

The Europe Revisited request has an acceptance criterion that requires players to look up the requests that they've implemented in the past. Teams that keep their requests and stories well-organised will spend less time to implement this acceptance criterion.

Reminder:

- The Little Mermaid is in Copenhagen, Denmark
- The London Eye is in London, United Kingdom. Don't need it because we have Big Ben.
- The Tower of Pisa is in Pisa, Italy. Don't need it because we have the Colosseum.
- Neuschwanstein castle (the castle pictured in the Castle requests) is in Bavaria, Germany

Final debrief

Calculate the final scores

The players calculate their Running Total after six iterations and the total number of happiness points of all remaining clients. The team earns a “Goodwill” of 100€ per happiness point of all remaining clients. The total score is Running Total + Goodwill.

Each team announces their final score and the winning team gets a prize.

Debrief

Some questions to ask:

- What strategy did the highest scoring teams use?
- What have you learned?
- How will you apply what you learned back at work?

Business Value Game strategy recommendation

Ask the players to identify what strategies lead to success.

In our experience, the best strategies include, in order of importance:

- Concentrate on releasing Requests as soon as possible
- Optimise the release process cost as soon as possible
- Only select development improvements to “fill out” an iteration plan and make use of high die throws, as their payback period is too long for a six round game
- Prioritise based on Request Business Value/Request Cost. This requires the players to “roll up” individual User Story costs to the Request level. This allows the players to see that some seemingly low value Requests are very cheap and provide a good value/cost ratio, something which isn’t easy to see at the User Story level.
- Don’t bother with putting a Business Value on stories, except in exceptional circumstances like the zero-value stories (because of Request-level acceptance criteria) or higher value stories (because a “demo” of individual stories raises happiness).

Of course, this strategy reflects the biases of the authors of the game 😊

Business Value tips and techniques

The goal of the final debriefing is to come up with a set of techniques and heuristics that participants can use on real projects. These tips are in the session handout:

- Look at the whole and reward appropriately. Keep the goal in mind.
- Start by collecting some useful base *estimates*: extra income that can be generated, income that could be lost if the product does not contain a feature, how much the client wants the feature, deadlines etc.
- To estimate the value of a request, start by the estimate of value added of the sale (or value lost if the feature is not available). Adjust the value based on factors such as client importance, client happiness, potential of further sales, risk. Compare and assign request business value relative to some baseline requests. This is your **Business Value Model**.

- Prioritise requests based on business value/cost. Adjust the ordering to take into account deadlines and other constraints.
- Sometimes it may pay off to look ahead a bit. For example, a relatively low value request implemented now may enable a high value request.
- Don't over-analyse story-level business value: start by distributing request value evenly over all the stories in the request. Compare and adjust.
- Define acceptance criteria and evaluate all stories against them.
- Value is generated by *releasing* minimal marketable features (MMFs), not by *developing* stories.
- Know your developer capacity and limit the intake of requests and stories accordingly.
- Focus. Sometimes it's better to satisfy one client and lose another than to have two unhappy clients.
- To close the feedback loop:
 - Compare actual income per client with estimated business value per client.
 - Track client satisfaction to see if your estimate of client happiness is correct.
- Update your model.

What is Business Value?

Business Value is not a value.

Business Value is a model.

Business Value is a model of what you value

The parameters (Business Value Currencies or Business Value Drivers) taken into account when estimating business value say a lot about what you really value. Possible Business Value Drivers are:

- Income we'll be paid, possibly discounted to take into account when we'll get paid
- Customer happiness
- Team happiness
- Information gained
- Visibility in the market
- Opportunities for generating other types of revenue

Time is always a factor in a Business Value Model:

- If there's a deadline, the value becomes zero after the deadline
- The later you deliver, the less value the feature may have for the customer as they start earning value later
- The later you deliver, the later you get paid, the less the money is worth
- Some products have a very short value window, delivering too soon or too late have little value. For example: computer games should be in the shops just before Christmas.

If you want to know more

About the authors

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Session materials

Client Persona sheets

Appendix 1 contains a number of sheets that describe a client, and contain the client's happiness score. The players represent these clients at the planning meetings. Each team needs a set of Client Persona sheets.

The sheets are handed to the team over the different iterations, as indicated on the sheets.

Client Request sheets

Appendix 2 contains a number of sheets that describe a Client Request for one of the clients on the Client Persona sheets. Each Client Request Sheet contains:

- A Client Request name and short description
- The name of the Client who made this Request
- Happiness factor: how much happier the Client will be if this Request is released.
- Price: what the Client will pay when this Request is released.
- A list of Story names that belong to this Client Request. Each Story has 2 checkboxes that the participants can use to follow up on the status of the game. The first checkbox means “implemented”, the second one means “released”.
- Some requests have acceptance criteria that define the test(s) that the stories in the request have to pass.
- Some requests have conditions that need to be satisfied before the client will accept the request.

Each team needs a set of Client Request sheets. The sheets are handed to the team over the different iterations, as indicated on the sheets.

Story cards

Each client request is subdivided in a number of stories.

Each Story Card contains:

- Story name and short description
- Name and picture of the Client Request that contains this Story
- Story Effort points (as estimated by development team)

The players have to assign business value to the story. Appendix 3 contains the story cards.

Iteration sheet

Appendix 4 contains a sheet where the team writes their results per iteration. At the end of the game, the team with the highest earned amount of money on their iteration sheet wins.

Rule Summary

Appendix 5 contains a sheet that summarises the rules of the game.

Dice

Each team needs a die, to determine how many story points their development team can implement in an iteration.

Pens and paper

To fill in the sheets, perform calculations. Do not allow calculators to be used: defining business value should not be so complicated that you can't do it by hand.

Timer

The coaches should keep the teams to the timings as described in the session timeline so that the whole game can be played in the allotted time. Make it clear to the players that they should only use simple methods and strategies.

Ideally, use a visible timer like an hourglass or a kitchen timer, so that everyone in the team is aware of elapsed time.

Sweets or chocolates

Reward salespeople who release a Request (and thus generate income) with sweets or chocolates. Try to offer rewards for one person and rewards that can be shared to allow team-minded players to share their rewards with their team.

License

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