Release and Iteration Planning with Innovation Games



In this post I outline some really useful techniques for planning releases and iterations. They are adapted from a great book called "Innovation Games: Creating Breakthrough Products through Collaborative Play by Luke Hohmann

http://www.amazon.com/Innovation-Games-Creating-Breakthrough-Collaborative/dp/0321437292/ref=pd bbs sr 1/102-0940561-2297760?ie=UTF8&s=books&gid=1174418537&sr=8-1

Some thoughts on the term "Games"

I have never been a fan of suggesting the use of "games" in the enterprise workplace, as in XP's "Planning Game". The term does not sit well with some traditional-type folks; to them it sounds unprofessional and not serious enough for important work. Yet the Innovation Games described by Hohmann are high performance facilitated workshop exercises that produce great results. If the project is serious enough to engage busy stakeholders then I think we owe it to the business to use the most effective tools at our disposal. If calling them "facilitated workshop exercises" eases their acceptance then I'm all for it, because it is the results I'm really interested in, not so much what we call them.

The Games

In Luke's book, he outlines a number of games (exercises) that can be used in a variety of settings. Some like "Design the Product Box" and "Buy a Feature" are probably familiar to many people working on agile projects, others will likely be new. To keep this post a reasonable length I will focus on adapting three exercises for use in release and iteration planning.

The three we will look at are "Remember the Future", "Prune the Product Tree", and "Speedboat". I use slight variations on the last two, I call them "Shape the Product Tree" and "Sailboat" and I will explain the differences when we get to them.

Selection and Sequence

Using these three exercises in this order for release and iteration planning is very helpful because they build on each other, extract different but complementary information, and round out the main information gathering elements of release and iteration planning. By all means pick and choose your own combination of Innovation Games if you wish, but consider this as a starting point for agile planning.

We start first with the exercise that targets the most distant time point "Remember the Future", and then move back towards the present with "Shape the Product Tree" and last "Sailboat". While this seems backwards (it intentionally is) there is a good reason for this sequence which I explain later.



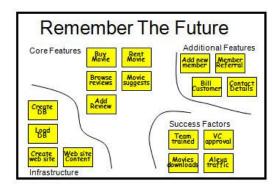
1) Remember the Future

This is a facilitated workshop exercise that engages project stakeholders in imagining the release or iteration is now complete and then gets them to describe what has occurred for it to be successful.

Concrete Example

For planning a release six months out, get the project team, users and sponsors together and ask them to imagine the date is now, say September 5 (6 months from now + 2 weeks). Their job for the next 20 minutes is, working alone, list what was completed for this release to be successful. (The reason we choose two weeks beyond the end of the release is to allow all the acceptance and implementation dust to have settled.) We can phrase it as asking people to imagine they are writing a report of how the release/iteration went for their boss/department and they are listing all the things that were completed/delivered.

Give people sticky pads and ask them to write one item per sticky. Once the 20 minutes is up people should transfer their stickies to a wall, and as a team, group them into associated clusters and remove duplicates. This process can also take another 20 minutes as people clarify the meaning of notes and create headings that correctly identify that group.



The Secret Sauce

Hohmann explains that this game is based on numerous studies in cognitive psychology. When asked the open question of: "What should a system or product do?" people are poor at generating complete lists of features and interim steps. However, varying the question just slightly and asking people to imagine the date is some point past the delivery date and then "remember" all the things the system or project has done to be successful yields significantly different results. Now because the event is "in the past" we must mentally generate a sequence of events that

caused this result to have occurred and this gives rise to better quality definitions and more detailed interim-step descriptions.

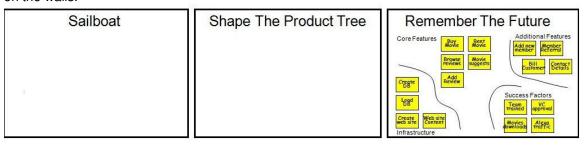
Of course the purpose of "Remember the Future" is not to really predict the future, but to better understand the stakeholders definition of success and how that successful outcome happened.

Materials and Facilitation

This exercise requires lots of sticky note pads, enough marker pens for everyone and some flipcharts or space on a wall for the answers to be posted, affinity grouped and named. Someone in a facilitator role making sure people have materials, only write one item per sticky, and reiterate the instructions is also required.

Posting the Results

When release or iteration planning, perform this exercise first and have people post their results on the far right hand side of the wall space you have available. The remaining two exercises will post their results to the left of these outputs. We are working backwards in time from the end of the project, when all three exercises are done we want a logical left to right flow of time and detail on the walls.

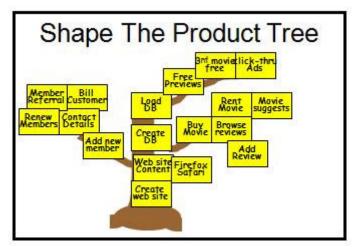


2) Shape the Product Tree

In this exercise we now get everyone to take the post-it notes from Remember the Future and transfer them onto a depiction of a product tree.

Concrete Example

Draw a big tree on a white board or flip chart with a trunk and branches, your artistic ability does not matter here we are just looking for a placeholder for features. Invite the participants to transfer the features and deliverables from the "Remember the Future" exercise onto the Product Tree. Explain that the tree is like our system, the trunk represents what we already know or have built so far, and the outer branches represent new functionality yet to be designed. Encourage people to group related features close to each other with supporting features closer to the trunk and features dependent upon these further out.



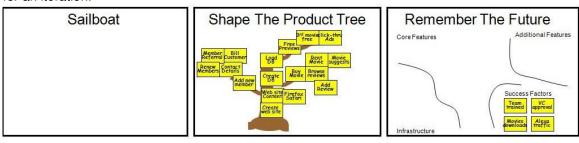
Not everything from the "Remember the Future" exercise will be transferred across to the product tree and this is fine. The first exercise asked for success criteria which will include completed features and non-feature based activities such as training and approvals. We do not want those tasks transferred, now we are focussing on the shape of the project, understanding its feature groups and allowing people to visualize how the work will be structured.

Materials and Facilitation

This exercise also requires sticky notes, marker pens and flip charts or a white board. Encourage participants to add new sticky notes to the tree to indentify additional features or stories not identified in the last exercise. We are in a process of progressive elaboration, adding more detail as stories are split out into sub-stories and other supporting requirements emerge. Yellow stickies look like autumn leaves, and you can expect to see a lumpy tree with patchy leaves emerge as the participants continue to indentify and add more feature "leaves".

Posting the Results

The tree is the output, leave it up after the exercise and expect people to come back and add more story leaves as they think of them. Taking digital photographs is a good way to capture the structure and content at any given moment. Do not worry about scope creep at this stage, we want to get every candidate feature identified before we prioritize and select what will be included for an iteration.



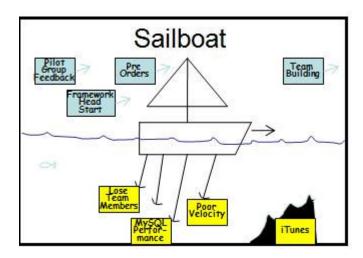
Adaptation from "Innovation Games" Exercise.

The Innovation Games book describes an exercise called "Prune the Product Tree" to describe this process. However pruning involves cutting back and reducing to get the result you are looking for. What we are doing here is encouraging growth and development of product features, hence the name "Shaping the Product Tree". (Another name could be "Growing the Product Tree" but then people start to talk about adding fertilizer and it is a whole other conversation you do not need, trust me.)

3) Sailboat

Sailboat is a risk and opportunity gathering technique that is very quick to set up and facilitate, but generates really good risk and opportunity outputs.

Now that we have candidate features and stories identified on our product tree it is tempting to jump into prioritization and scheduling of these tasks, but there is one very important step that should occur first. We need to identify and plan to mitigate (reduce) or avoid any project risks that may be present and take advantage of any opportunities (good risks) that might be present. We need to do this before story prioritization because many of the risk mitigation steps need to be factored into the prioritization process along with the stories. If you leave risk mitigation until after story prioritization you find yourself trying to shoe-horn important tasks into already full iterations which is not going to work,



Secret Sauce

Some people need to articulate their concerns before committing to undertake work. Once their worries are recorded and recognized they are now less encumbered by these concerns and happier to contribute. They have said their piece, done their duty in identifying the risk, and can now move on more effectively than if they were still carrying it.

Now, this is not so say that simply by recording risks it makes them go away. This is really just where the hard work of risk reduction and avoidance begins. However, the mental obstacle is removed and people can move on happier knowing that their concerns are on the project's "radar" of things to watch and manage.

Concrete Example

Draw a waterline and picture of a sail boat on the left hand panel of the three areas used for this planning workshop. Have it facing in the direction of the Product Tree and describe the sail boat as the project. "Here is the project heading towards the goal we just developed. What are the anchors (risks) that could slow us down or even sink us? And what are other factors (opportunities) that could help propel us towards our goal (wind in our sails)".

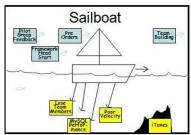
Then get the group to create anchor stickies for the risks and impediments and post them below the waterline. Also ask for opportunity ideas to post above the waterline. You can use yellow or red sticky pad sheets for risks and blue or white sticky pad sheets for opportunities to better distinguish them.

Preparation and Facilitation

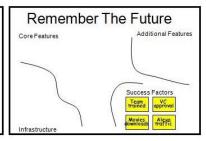
You will need two colours of sticky pad notes, pens for everyone and a flip chart or white board to draw the waterline and sail boat on. Explain the concept of risk probability and risk impact to the

group. Risks that are extremely unlikely (meteor strike, team poisoning, etc) can be ignored, we need to focus on high probability and high impact risks to capture the most significant issues.

Don't let participants put people's names on the anchor stickies, this is a risk workshop not a character assassination session. There is always a more diplomatic way of presenting stakeholder based challenges. Likewise if someone really goes to town with doom and gloom scenarios, thank them for their enthusiasm and ask them to work on opportunities for a while.







Adaptation from "Innovation Games" Exercise.

The Innovation Games book describes an exercise called Speedboat, it has the same idea, imagine the project is the speedboat what could possibly hold us back? Speedboat however does not have the concept of opportunities and focuses on risks only. While this is fine, some people find it too negative and want a chance to share some positive ideas too. Some adaptations of Speedboat talk about adding extra propellers to the boat to act as boosters to its speed, but from a practical point of view it is hard to position a bunch of sticky notes close to where a propeller could go on a boat. Using the whole "sky" in a sailboat analogy allows for better distribution of opportunity stickies.

Next Steps

These three exercises precede story prioritization and selection for an iteration. They aim to generate better acceptance and buy-in for a release or iteration while indentifying risks and opportunities to manage and leverage. The next steps are to take the features from the product tree and the risk mitigation and opportunity maximization steps from the Sailboat exercice and plan the first iteration. We need to balance business value delivery with risk mitigation (see the Smart Planning post) to create the optimal iteration plan.

See more about these Innovation Games and others review the Innovation Games discussion site. http://www.enthiosys.com/igprunetheproducttree.php

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