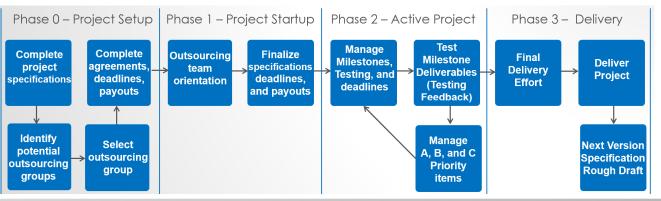
Outsourcing Product Development CheatSheet

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Objective:

Deliver a digital technology product or service that will delight and engage your users on deadline with a reasonable budget then prepare for the next release.

Outsourcing Product Development Tools, Tips, Tactics, Checklists and Strategies

Outsourcing Product Development- 3 MOST IMPORTANT THINGS

- 1)Before you start live product/service development be sure you are really ready to start. See checklist.
- 2) Take the time to prototype and test your specification before beginning the development phase.
- 3) Clearly define A, B, and C priority items based on user needs and expected revenue. Be ready to change these priorities as needed. A= Must-have, B= Like-to-have, C= Can wait for next version

GOALS, OBJECTIVES, & DELIVERABLES

- Identify the best technology outsourcing partner possible.
- Tight Project Management of the project from day one.
- Keep lines of communication open. Manage deadlines and deliverables. Be ready to set and manage development priorities.
- FINAL DELIVERABLE: Work with an outsourcing firm to deliver a
 digital technology product or service that will delight and engage
 your users on deadline with a reasonable budget then prepare for
 the next release.

Development Phase 0 – Project Setup

ASSEMBLE YOUR IN-HOUSE PROJECT TEAM (may combine functions)

- A project/product manager who is fully committed to the project. Real Ownership! This is your Point Of Contact with outsourcing team.
- An experienced lead programmer + An experienced tester.
- A graphic artist. Note: Don't let programmers do graphics work.
- A marketing person to represent target users and plan learning launch.

COMPLETE PROJECT SPECIFICATIONS

- See section on page 2 on creating a project specification.
- Once your specification is completed review it with target users to get their feedback.
- Review project specification with your in-house team and make modification as needed.
- $\bullet\,$ Get final approval on project specification from the in-house team.

IDENTIFY POTENTIAL OUTSOURCING GROUPS

- Use recommendations and research to identify potential technology outsourcing groups.
- · Review each group's past projects and capabilities.
- Chat with past customers of the outsourcing group to get a clear understanding of capabilities and shortcoming.
- Create a short list of potential outsourcing groups.

SELECT OUTSOURCING GROUP

- From your shortlist talk with each group to determine which might be the best cultural/chemistry fiot for your company and the project.
- Determine which outsourcing groups have time/resources available for \Box the project
- Assign a test project that may be a component of the final project to test the outsourcing group.
- Select the outsourcing company that performs best.

COMPLETE AGREEMENTS, MILESTOMES, DEADLINES, & PAYOUTS

- See section on Page 3 related to project agreements.
- Get clear understanding of all project specifications, milestones, and payouts.
- Don't start the project until the agreement are completed and signed by all parties.



ARE YOU READY TO START PRODUCT DEVELOPMENT - A CHECKLIST

- ☐ The CEO must be 100% committed to outsourcing the project.
- ☐ You know what you will make (at least 90% sure). This is about the making not about the dreaming, talking, or designing.
- ☐ You have a Project Manager who will own the project to lead the entire project from end-to-end.
- □ Solid idea tested with target users. Your main assumptions for behavior change are proven. How have you proved this out?
- ☐ Tight, tested, prototypes. (Even if they are just on paper) Every page, option, menu item. You need to decide not someone else.
- ☐ The product/service specification In one document. Precisely define the product. Use pictures. If more than 10% of your spec is still not really known. Then work on your prototypes until they are known. This is not the time to experiment.
- □ Keep it simple at first Go for the Minimum Viable Product (MVP) but have your other feature ideas prioritize just in case you have time/budget. Or for you developers to work on while you are running tests.
- □ You have a clear product feature list with every element tagged as A, B, or C priority. A= Must have B= Nice to have C= Not really needed now
- Get the best project team you can. They may not be within 50 miles of your office. People who have done this before. Many times. You may have to pay more for an experienced team. Find a way to test team members before the live project starts.
- ☐ Get the right tools and use them. Examples: Fast computers, fast internet, BaseCamp for project management.
- ☐ How will you avoid reinventing the wheel? Leverage as much technology components as possible.
- Ready to focus your time/dollars on your real value add. (Unique technology, Market exclusive, essential service, IP, etc...)
- ☐ A plan to split up the project tasks. One developer may not be able to do everything. Parallel development.
 - You have built a project contact list... Emails, phone numbers, addresses. Team members and bosses.

Development Phase 0 – Project Setup (continued)

It's important to be ready to start development before you BEGIN.

- 1. Once you start development you will be spending money quickly.
- 2. Once you start development your team will expand quickly.
- 3. It gets very expensive to make design changes once active development begins. (Even if you're not "paying" for development.)
- 4. If your budget runs out before you complete development it will be a disaster for your company, your investors, your employees, cofounders, and you.
- 5. WARNING: Do not flip the "Development Switch" on until you are really ready to start. The downside is huge.



Development Phase 1 – Project Startup

Outsourcing Team Orientation

- 1. Document this and every step using a project management and communications system like BaseCamp.
- 2. Build a project contact list... For each team members and manager: eMail Address, phone number, mailing address, preferred working hours/Time Zone. Have everyone meet even it is by Skype.
- 3. Clearly define expected response times for all types of communications like missed milestones, testing feedback, feature changes, changing priorities, etc...
- 4. Share the full concept and intent of the project. Why it should exist.
- 5. Clear understanding of what each person on the team "owns". What is their clear responsibility and authority.
- 6. An understanding of how vacations, local holidays, employee turnover and team member burnout will affect the project schedule.
- 7. Discuss and give examples of typical target users. Create prototype users and testing steps for most used features/functions.
- 8. Be ready to change your A, B, and C priorities based on time estimates. Do not delay essential and/or difficult components until the end of the project.
- 9. Be sure your A, B, and C priority decisions take into account potential revenues. User needs, revenues, and profitability need to drive service/product priorities.
- 10.Get a general high level understanding of deliverables, dates and payments. Save the fine details for the next step below.
- 11.An understanding of what tool availability and other dependencies could affect the project deadlines.
- 12.Look for off-the-shelf tools and resources that allow you to avoid reinventing components that are already available somewhere. Focus on your company and each team member's real value ad.
- 13.A Plan B. (Just in case...) What to do when things go wrong.
- 14.Be clear that project breakdowns (anything that could delay a delivery) should be quickly communicated. Better to handle things sooner than later. Delaying bad news does not help anyone.
- 15.Depending on how this process goes consider replacing or adding new project team members. If people can't get through this phase without conflict, confrontation, or a display of an ability to collaborate they will not make it through the rest of the project.

 16.DO NOT move to the next step until this step is completed.

Finalize Specifications, Deadlines, and Payouts

- 1. When working with technology outsourcing subcontractors require a clear understanding of deliverables, milestone dates and payments. And that all code be professionally commented. Require a daily source code deposit.
- 2. Require precise documented, detailed, deliverables and milestone deadlines every week or two.
- 3. Focus on your company's real value ad when developing the detailed specifications. Don't build things some else already offers unless you can be vastly better.
- 4. A clear understanding of what tools and dependencies could affect the project deadlines.
- 5. Clear assignment of all Intellectual Property rights to your company. You must own all project components. Subcontractor should provide a signed release and indemnification agreement for all project components they are developing. This protects you in case the subcontractor uses unlicensed, patented, or copywritten material without permission.
- 6. Clear written detailed agreement signed.
- 7. Be sure the final specification has provisions for a Plan B. Just in case deadlines are missioned or other problems arise.
- 8. Structure payouts so they are back loaded. Always hold out at least 10% to 20% of payment until final delivery.
- 9. The final step Clear written detailed agreement signed.
- 10. This is the last "live" test for the outsource subcontractor... No money should be paid out before the step is completed. If you determine that the subcontractor hs not gone through this phase well... Find another subcontractor to work with and start over.



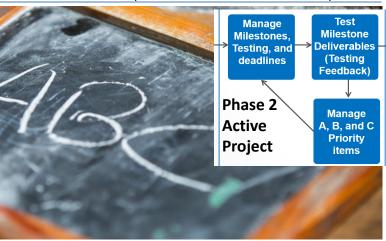
BONUS: What is a specification, and how do you create one?

- Created from your prototypes that have been tested with your target users. Test, modify and perfect the prototypes first.
- Prototypes can be drawings on paper, in a word processing document or created on something like MockPlus.
- Along with detailed descriptions and flowcharts use pictures (wire frames) to visually represent what you want.
- All project details must be in one document.
- · A good specification takes time and testing.
- Work out all the details in the specification to make things clear for the programmers. And Testers. And Users.
- Include all possible options. Be specific. Think it through.
- The more time you take on the specification the more time you will save during the expensive development phase.
- The final specification should be able to step through the entire project from start to finish.

Development Phase 2 – Active Project

Manage Milestones, Testing and Deadlines

- 1. The Project Manager should be the primary interface with the development team. All non-developers should funnel comments through the project manager.
- 2. Keep project resources like pictures, videos, text, and other assets in organized files.
- 3. Minimize time-wasting, morale crushing, meetings. Depend on your project management/communications system (BaseCamp) for most project communications. Only call meetings when problems arise.
- 4. Plan testing resources for milestone deadline days. Use "fresh eyes" (new testers) where possible.
- 5. Plan for if/when deadlines are missed. How can project get back on schedule? More resources? More hours? Revise A, B, C priorities?
- 6. Sound the alarm if deadlines/deliverables are missed for any reason.
- 7. Anticipate problems where possible. Identify real/possible roadblocks on critical path and deal with them as soon as possible.



Test Milestone Deliverables (Testing Feedback)

- 1. Provide quick accurate feedback with testing results and other comments. Use pictures, screen shots, And provide exact steps to repeat problems.
- 2. Identify things not in the specification. Are they better or worse?
- 3. Clearly differentiate look/feel/operational design issues from things not working correctly (bugs).
- 4. Test on several different systems and Internet speeds.
- 5. Plan for if/when deadlines are missed.
- 6. Have alternate development/delivery plans ready. Don't wait for things to go wrong to start lining up needed resources.

Manage A, B, and C Priority Items

- 1. Be ready to change your A, B, and C priorities based on customer needs, revenues potential, profitability, and competitive position.
- 2. Be ready to change deadlines/deliverables, A, B, and C priorities based on real-time project delays and unexpected occurrences.
- 3. Do not delay essential and/or difficult components until the end.
- 4. When reprioritizing A, B, and C items be sure to get accurate time/cost estimates and clear representation of project tradeoffs.
- 5. When reprioritizing your A, B, and C priorities take into account potential revenues. User needs, revenues, and profitability need to drive service/product priorities.
- 6. Focus on your companies real value add. What will make the product/service different? What adds the most value for customers.

Active Project Phase Final Deliverable – Alpha product/service

- 1. At the end of phase 2 an Alpha product/service is completed.
- 2. An Alpha version has all the specification items completed but not fully tested against full specification.
- 3. An Alpha version has not been tested under real user conditions. Expect changes and insights from users during this phase.

Development Phase 2 - Active Project - EARLY WARNING CHECKLIST!

- ☐ Missed deadlines and/or partial (incomplete) deliveries.
- □ Specification creep Adding things to the design specification.
- □ Perfection creep unreasonably holding off on approvals until something meets an unreasonable level of perfections. Just get things working and look reasonably good.
- □ Silence Lack of communication in any direction.
- □ Project breakdowns (problems) not being addresses.
- ☐ Lack of task ownership.... Excuses instead of action and results.
- ☐ Testers who do not provide details and step-by-step feedback for their findings.
- ☐ Key assumptions not working. Example: a tool or resource does not do what is expected or a key programmer goes to another project.
- ☐ Team members not using the project management/communication system. Must use something like BaseCamp. Email does not work.
- Overworking people to the point of breakdown. People need a break to perform their jobs.
- ☐ Lack of tight project deadline controls.

Development Phase 3 – Project Delivery

Development Phase 3 – Final Delivery Effort

- 1. Generally the last one to four weeks -> Rapid delivery, review, testing, comments, revisions, priority changes, and approvals.
- 2. Be ready with extensive testing resources. All hands on deck!
- 3. Get the product/service in front of select users and get comments.
- 4. Be sure to listen to user comments and watch how users react to the product/service. Any surprises? Are they delighted?
- 5. Be ready to change your A, B, and C priorities. Maybe add a few of the "B" items back in if there is time and budget available.
- 6. Test everything two more times after you think it is done. Late modifications could have caused problems.
- 7. Always backup at least three versions. Grandfather, father, son....
- 8. The final deliverable from this Final effort is a Beta version of the product/service. All specification items included and fully tested.

Development Phase 3 – Deliver Project

- 1. Generally the last one week -> The last of the project loose ends are completed, tested and approved.
- 2. A Delivery Pit Get the programmers, testers, designers, copywriters, artists, etc... tightly connected (optimally in one room) to minimize the feedback loop. Feedback loops (test->fix->test) should be minutes not hours.
- 3. The Delivery Pit can last a half day or a week. By ready.
- 4. Review and prioritize A, B, and C items from user feedback. Include As, maybe Bs, but delay Cs.
- 5. Once no more changes are anticipate run one more full testing effort to identify and late stage problems.
- 6. Test everything two more times after you think it is done.
- 7. When this phase is completed you will release the product.



Development Phase 3 – Project Delivery (continued)

Development Phase 3 – Next Version Specification Rough Draft

- 1. Generally allow one to three weeks for this phase although the staffing resources will be much lower.
- 2. Need to keep team available for any problems surfaced by users.
- 3. Expect user experience issues and bugs to arise.
- 4. While you wait for user feedback review your B and C priority list and start assembling your next version specification.
- 5. Review competitors to see if they have changed/upgraded their offerings while you were developing this product/service.
- 6. Observe (with page trackers or in person) how users are moving through the system. Identify areas for improvements.
- 7. Look for new user pain points that could improve the product/service.
- 8. Create a rough draft next version specification.



Bonus – Project Management Tips, Tactics, Tricks

More on Post-Project Planning

- 1. Create a post delivery roadmap. Determine next delivery date, specification, team, and budget.
- 2. Be ready for comments from users. Listen!
- 3. Mend fences. Review budget/actual expenses.
- 4. Delivery can be intense rebuild team.
- 5. What were project surprises? Lessons learned? (unexpected events)

Outsourcing Agreement Essentials - A Checklist

- ☐ A full and detailed product/service specification with drawings, flowcharts, and pictures.
- ☐ Clear milestones and due dates with source code deposits.
- □ Names and contact information for all those on the project.
- ☐ Always use the laws of your home country and state. Enforcing contract terms in some foreign jurisdictions can be a problem.
- □ Defined milestone payments and currency. Best to use your home country currency to avoid currency fluctuation risks.
- ☐ Clearly state communication response times. How long each party has to respond to communications form the other party.
- ☐ Be sure to include time and budget for maintenance and cleanup.
- □ Define each external project component and who will supply it, when, and at what cost.
- ☐ The outsourcing firm should agree to indemnify your company from any claims for intellectual property use for components they provide for the development of the product/service.
- ☐ A clear statement that this is a "work for hire" and your company owns all intellectual property.
- ☐ As the project progresses be flexible in the interpretation of the agreement. You can't cover everything.
- ☐ Golden Rule For Agreements: The words on paper are important but the people behind the words is what makes the project work.

More Project Management Tips and Tricks

- Set firm "red flag" milestone dates When to Panic?
- Don't let things get delayed one day at a time for months.
- The difference between using in-house technology team and an outsource technology team is that you need to be much more precise with instructions. Use pictures when possible.
- Delivery pit Get everyone (programmers, testers, graphics and marketing people) together for the final delivery push.
- Watch for breakdowns Assumptions not proving out.
- · Watch for feature creep -Additional features...
- All testing reports should be step-by-step, repeatable. Pictures!
- Don't expect your outsourcing developer to solve all the tough problem. Solve tough problems as a team.

Manage A, B, and C Priority Items

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- 5. When reprioritizing your A, B, and C priorities take into account potential revenues. User needs, revenues, and profitability need to drive service/product priorities.
- 6. Focus on your companies real value add. What will make the product/service different? What adds the most value for customers.

HOW TOP DEVELOP A PRODUCT ROADMAP

- 1. Keep it in 30 day chunks. (Maybe even two week chunks.)
- 2. Must be user needs/profitability driven...Not technology driven.
- 3. A collection of A, B, and C priority features/functions/benefits. Be sure at least one "exciting" feature is in each release.
- 4. Get tight firm time/cost estimates for each feature item.
- 5. Be sure to budget for maintenance and cleanup.
- 6. Layout each release on a timeline with features/functions for each delivery. Be sure everyone in the organization signs off on the roadmap.
- 7. Start development of the next release version as soon as each version is delivered.

