

Project Delivery Playbook

Using Agile Methodology















Reaching the full potential

OutSystems Platform

outsystems **Delivery practice** Architecture UX/UI Development



Keeping High Speed delivering Maximum Value with **Quality**

Skill sets mapping

Biz Innovation	Strategic, innovative ideas to digitize business	<customer></customer>	
Biz Analysis	Understand the requirements, design and validate the digital		
Biz / ii iai yolo	system / application	OutSystems	
		<customer></customer>	•
Custom Software Development	Develop and deliver the application	OutSystems	Development capacity from
Systems Integration &	Understand the complete IT picture, integrate with existing		<pre>capacity from <customer> (wher applicable)</customer></pre>
Architecture	systems, define the enterprise architecture	<customer></customer>	

OutSystems Team Responsibilities

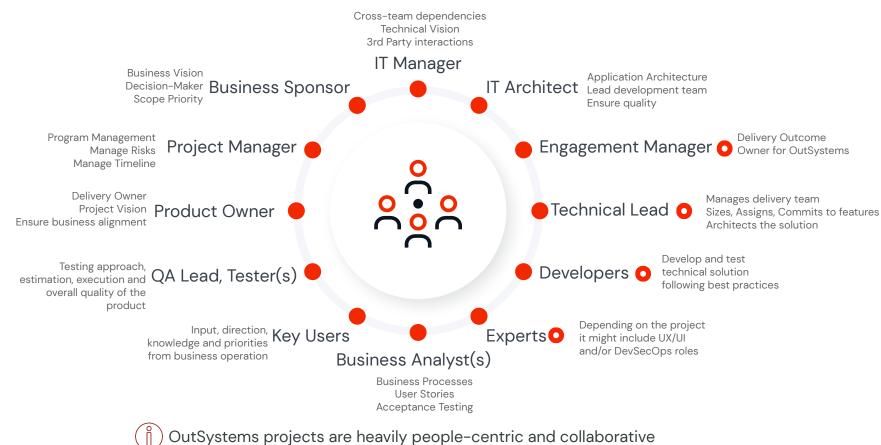
	Program Manager	. Ensures the several project tracks are well orchestrated towards meeting program strategic goals
OutSystems	Engagement Manager	Responsible for the OS delivery services execution Acquires business context and knowledge Facilitates the creation of a project vision and ensures alignment on the implementation Helps validating the User Stories and Acceptance Criteria in alignment with the business, promoting convergence and simple, pragmatic solutions (when 100% allocation) Coaches the delivery process Manages the backlog in tight cooperation with the customer's PO Represents the business before the delivery team Manages engagement topics (change requests, status reports, risks, budget, and resources) Conducts functional testing (when 100% allocation, it includes end-to-end tests) Conducts feature delivery demos and collect feedback Continuous monitoring and improvement, through sprint retrospectives Ensures proper project handover (when 100% allocation)
	Technical Lead	. Designs, sizes and builds a functional and technical system architecture based on the business needs and drivers . Designs and sizes third-party integrations, being the technical point of contact . Leads the delivery team, ensuring teamwork, commitment, and control of the progress . Is the responsible for the delivery on each sprint and at the end of the release, of a viable and scalable solution . Is the responsible for solution non-functional requirements (like solution performance, scalability, and security) . Guarantees quality procedures and OutSystems behaviors . Supports feature delivery demos . Manages solution staging life-cycle, conducting QA and production deployments and supporting overall solution rollout procedures . Capacity reserved for development activities: 30-50% of DM allocation for teams with 1 Dev, 0% with 2 or more
	Developer	. Develops and tests the technical solution following the engineering best practices
	Expert (UX, Architect, PlatformOps, Front-End,)	. Expert executing a service in the context of the project. Can be a UX, UI, Architecture or Platform expert fully aligned with the project goals



<Customer> Team Responsibilities

	Project / Program Manager	. Embraces the Program/Project Management activities at the customer side. Manages and mitigates risks. Manages timeline
<customer></customer>	Business Sponsor	Provides business vision, direction and guidance Participates in feature negotiation, demos and steering meetings Is a decision making authority Scopes prioritization, considering both strategic and business operation goals
		. Coordinates cross-team dependencies, the support from the rest of the IT organization (including infrastructure changes, availability of test environments and release process), the delivery of cross-product software dependencies and the removal of cross-product impediments within the chain . Leads the technical vision and direction for the product . Manages the integrations / data migration . Manages the 3rd party interactions
	Product Owner	. Manages the Business Analyst output . Manages the product vision and overall output . Is the delegated decision making authority (*) . Monitors the cost-benefit trade-offs in the project . Represents the end users, creates User Stories . Facilitates the product backlog prioritization and sprint planning . Performs the acceptance testing . Performs the demos to business . A senior BA sometimes fulfills this role
	Business Analyst	. Promotes the complete definition of the business processes next to key-users . Conducts Business Analysis , clarifies processes, breaks them down into User Stories and provides their Acceptance Criteria . Perform acceptance testing
	Key User	. Provides input , direction and priorities from the business operations
	Tests / QA coordination	. Define test cases based on US acceptance criteria. Coordinate User Acceptance Testing (UAT) and perform tests

Project Responsibilities



Reference Allocation



Project Phases



Project Delivery

Go Live

Sprint Development



Solution Release

Post Production

Where we start the actual project. The key focus is on understanding the business and users needs to build with <customer> the vision of the future application:

How will it answer to the most important Users Stories? What will it look like? What will its architecture be?

Sprint Development An incremental and iterative process delivers the application. This means that every 2 to 3 weeks there is a checkpoint with the users and stakeholders to demo the part of your application developed during that time. These checkpoints are also the way to respond to business changes.

Detailed analysis, development, and testing are done incrementally, so if a change or a new requirement that brings significant value to the business comes up, it can replace another one with lower business value.

During the Sprint Development and after each demo, the users are also invited to test the application. Doing so allows them to provide feedback that will improve the application's overall quality and usability.

Solution Release

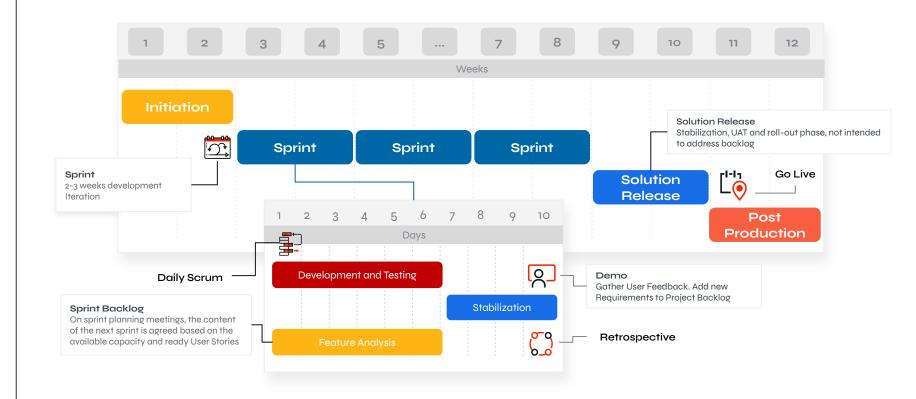
This phase is the moment for the stakeholders and users to test the entire application end to end thoroughly, and for the delivery team to make the final improvements before the new solution goes live. At the end of this stage, the new solution is live, and the business starts benefiting.

Post Production

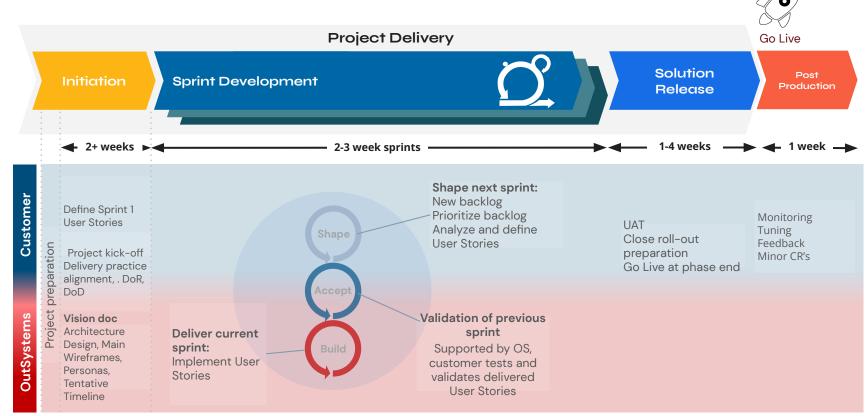
When users start using the application, some usability and performance issues may arise. This phase aims at performing a fine-tuning that improves the adoption and promotes an excellent user experience. This is also the right moment to plan for the future and discuss how to ensure the application continuously supports the business over time.

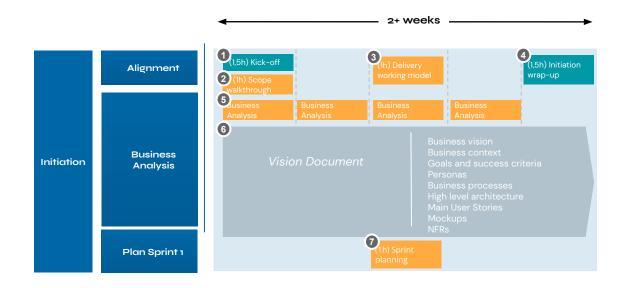


Agile Delivery with OutSystems



OutSystems Delivery Method





* For longer duration releases (by reference > 3 months of Sprint Development), the Initiation should have another week: the first focusing on gathering info on site with the customer, and the second week to compile and close phase deliverables (a week wrap-up session should still take place at the end of week 1)

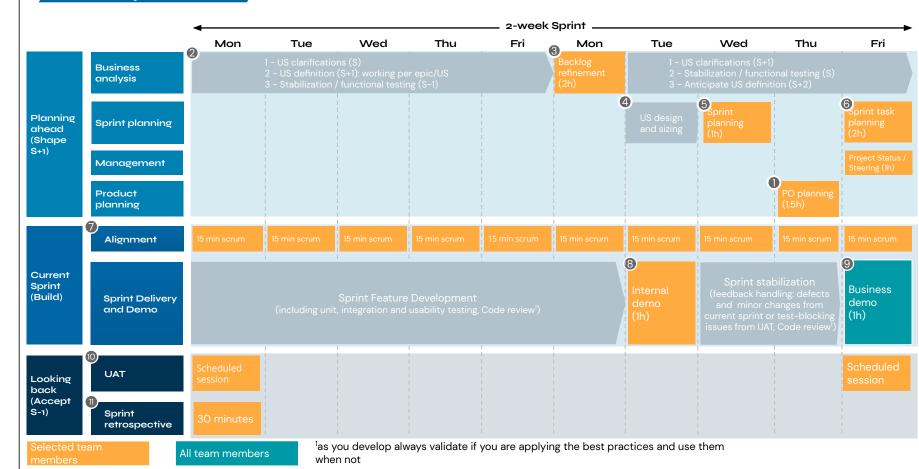
Selected team members

All team members

Initiation - Events Calendar

_	Event	Inputs	Activities	Outputs	Participating
0	Kick-off	Kick-off presentation	 Kick-off meeting Align project goals, success criteria, plan Establish communication plan and schedule all regular sprint activities 	First alignment between all major stakeholders	All (mandatory attendance from stakeholders, sponsors and key-users)
2	Scope / OS services walkthrough	Proposal Sizing Sales handover session output	The EM presents the included OS offer services and the sizing, validating important assumptions and discussing major issues / risks	Align on how the project timebox / available capacity was determined Align on version 0 of the scope	BS, PM, PO, BAOutSystems team (incl. Sales)
3	Delivery working model	Project Delivery Playbook	The EM presents the iterative working model, focusing on its main challenges on how, together, the full <customer>-OS team can overcome them Establish DoR, DoD and how these can be met</customer>	Full team is clear on how sprints will work and their role in it	PM, PO, BA, QA OutSystems team
4	Initiation wrap-up	Initiation week achievements	 Present the achievements and conclusions of the initiation week Re-validate project plan 	Vision DocumentProject PlanMock-ups	All (mandatory attendance from stakeholders, sponsors and key-users)
5	Business analysis meetings	Project scope Business context • Business context	Define the business process diagrams Identify the personas Define the User Stories and have their validation from both business and IT	Sprint backlog and plan	• QA, KU, PO, BA, IT
6	Vision Document	Project Data User research data Business analysis	 Project Goals and business context Business processes and main user stories Mock-ups and information architecture 	Vision Document	- EM, TL
7	Sprint 1 Settlement	User Stories	Prioritize and estimate the backlog Decide what's going to be delivered in sprint 1	Sprint 1 deliverables	PM, PO, BA, QAOutSystems team

Sprint Development



Sprint Development - Events Calendar

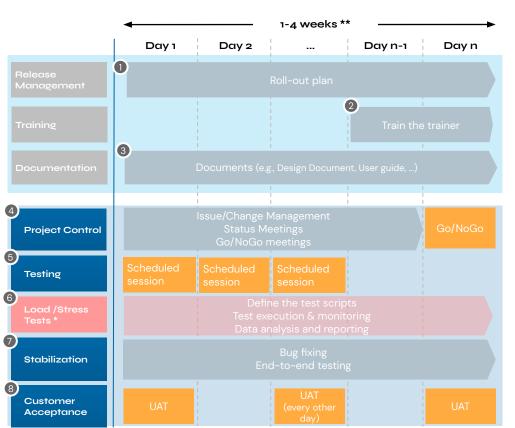
Event	t	Inputs	Activities	Outputs	Participating
1) Prod plan	luct owners ning	Business findings Stakeholder input Feedback from previous sprint	 Plan the product roadmap and discuss the overall progress against the goals Identify the backlog epics (always mapped against the business process) Prioritize the backlog Identify the goal, candidate epics and required BA Squads for the next sprint 	Prioritized backlog Next sprint goal Candidate epics and Squads for the next sprint	• PO • EM
~ /	Story nition	Candidate epics for next sprint	The BA breaks down epics and define the US (mapping back to process) Business and IT dependencies are identified Close follow-up with the EM ensuring the US functional readiness	Ready US candidates for the next sprint	• BA, IT, QA • EM
Prod back		"Functional DoR" US candidates for next sprint	The BA presents the candidate US to Dev team Held in several sessions during week 1, as soon as a BA finishes	Functional knowledge for the next sprint shared with the team	BA, PO, ITOutSystems team
	lesign and	Get the US candidates ready for the next sprint	Technical design for adding the US to the existing solution while meeting non-functional requirements US sizing	Ready US candidates for the next sprint	BA, IT OutSystems team
5) _{Sprir}	nt planning	Get the US candidates ready for the next sprint	The US design and sizing is presented by the EM, and a sprint scope settlement is agreed BA / IT do a final validation on design (adding to iterations during design step) This understanding is also used for distinguishing defects from changes	Sprint backlog and plan	BA, IT,PO OutSystems team
6 Sprir	nt task ning	Sprint backlog and plan	Break prioritized US for upcoming sprint into tasks Define the work and delivery plan based on the task dependencies	Sprint work and delivery plan	OutSystems team
7) Sprir	nt alignment	Sprint progress	Each person gives a short summary on the 3 questions: "What I did yesterday / What I will do today / What impediments I have" For efficiency, consider scrum of scrums when, otherwise, there would be more than 8 people involved (rule of thumb)	Updated sprint progress Updated list of impediments and related mitigation actions	- BA, IT, QA - EM, TL
8 Inter	nal demo	First sprint delivery version, after Dev team implementation and tests	The Dev team presents the sprint to the BA and the QA, which can perform tests to support sprint stabilization until the business demo	Sprint version ready for stabilization phase	BA, QA, PO, IT OutSystems team
9 Busii	ness demo	Potentially shippable increment of product Metrics from the sprint Updated release plan	The BA and the EM present sprint to business: demo script takes the user's perspective to provide a walk through (telling a realistic story about) the end-to-end business process set as sprint goal	Signed off USImprovementsNew stories	All (mandatory attendance from stakeholders, sponsors and key-users)
10 UAT		Sprint delivery	BA, QA and KU execute the test cases to validate the US acceptance criteria Support by dev team: removing test roadblocks and addressing findings preventing acceptance	Accepted US Feedback (defects, changes) Usability tests	BA, QA, KU OutSystems team
Sprir retro	nt espective	Sprint experiences from last sprint	Each person gives a short summary of the 3 questions: "What went well / What is not going well / What can we do to improve" For efficiency, there might be more than one retrospective with different attendees, to focus on different areas (ex one for tech and another for PM)	1 or 2 actions for improvement Own reflections	- All

Sprint Development

Sprints are a cycle of activities US tuning + validation + estimation around User Stories Conversations with Select set of business High-level Refine Write **Sprint** US to deliver stories: User Stories Backlog Backlog on next sprint **Planning** Start with the highest (sprint is an priority US agreement) If a US is ready: Can go on a sprint **User Stories** Shape Demo and get business feedback US validation Develop Demo React to Dev team works + discover new US After: on selected US & Test feedback testing sessions (KU)

First round of feedback (usually by BA and Testers)

Solution Release





Go Live

Ensure business value Guarantee that everyone is using the solution appropriately.

- * If applicable, based on performance or user volume requirements
- ** Rule of thumb: 1 week of Solution Release for each 5 of Sprint Development

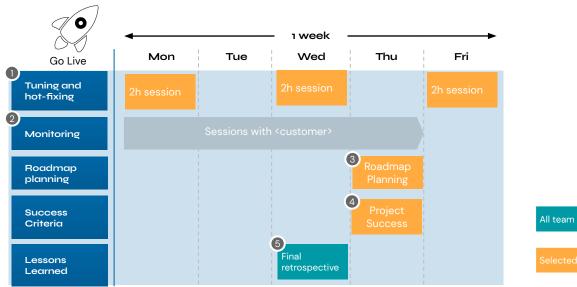
All team members

Selected team

Solution Release - Events Calendar

Event	Inputs	Activities	Outputs	Participating
Roll-out plan	Application Solution Deployment & bootstrap steps App replacement steps	Step by step deployment script for a seamless installation Configurations and bootstraps, infrastructure, 3rd party integration readiness: all considering full architecture Plan to switch from the former app to the new one Understand the business impact of the solution and ensure the preparation of individuals, teams, and organization for the new processes and tools	Roll-out plan	• IT, BA • EM, TL
2 Train the trainer	The app Main user stories	Sessions with the key users/business champion to go through the main user stories	Session video recordings	• KU, QA, BA, PO • EM
3 Documentation	The app OutDoc Customer> IT requirements	Deploy OutDoc on the environment Define with <customer> which are the documents needed (may imply additional effort not considered in sizing)</customer>	OutDoc	BA, PO, IT OutSystems team
4 Project Control	Issues found in the QA procedures Change requests	Backlog prioritization Status meetings to ensure progress Go/NoGo meetings with project stakeholders	Decision towards the go live Prioritized backlog	- BA, IT, BS, PO - EM, PM
5 Testing	All user stories DONE Acceptance criteria End-to-End Test cases	 Execute the tests defined by QA, BA and EM Business process validation End-to-end testing 	Executed tests	• QA, KU, PO, BA, IT
6 Load/Stress Tests	The app Infrastructure Main user stories	 Build the test scripts Execute multiple scenarios Data analysis and creation of a report 	Test scripts Report	OutSystems Experts team
7 Stabilization	Tests feedback Prioritized & estimated Issue list Tests feedback	Hot-fixes to correct the issues Apply hotfixes to all environments Dev team addresses remaining code review issues	The app Stable and scalable application, following OS best	PO, BA, QAOutSystems Team
8 Customer Acceptance	The app User stories	Go through the user stories and validate the functionality against the business needs Accept (or reject) delivered functionality	Delivery sign-off Go to production	BA, QA, IT, PO, BSEM, PM

Tuning

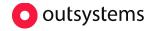


All team members

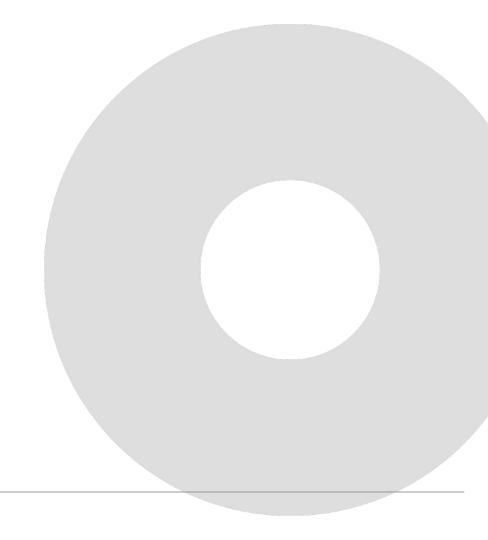
Selected team members

Post Production - Events Calendar

Event	Inputs	Activities	Outputs	Participating
Tuning and hot-fixing	Identified quick-wins Feedback from the Key Users	Develop and deploy the application improvements	• The app	- BA PO - EM, DM
2 Monitoring	ServiceCenter logs Performance Monitor Field observation	Look at signs of slowness (slow queries, actions, timers or screens) Check for errors	Feedback Backlog	PO, BA, IT EM, TL
3 Roadmap planning	Application backlog Identified opportunities	Discuss the next steps Customer autonomy 	A plan (eventually)	- BS, PO, IT, BA - EM, PM
4) Success criterio	Project Charter Kick-off presentation	Go over the results and assess the achievements Check the objective metrics, like financial optimizations, FTE reduction or better response times	Case study (eventually)	BS, PO, IT, BA EM, PM BY BY BY BY BY BY BY BY BY B
5 Final Betrospective		Conduct retrospective covering the business drivers/success criteria, challenges, sales/planned/actual, margin, NPS/CSAT results and lessons learned Include on the retrospective your manager, project team, involved salesperson and RSM	Delivery sign-off Go to production	



Appendix



Glossary

CR	Change Request
CSAT	Survey sent to the customer to assess the customer satisfaction of the service delivered.
DoD	Definition of Done. It is a comprehensive checklist of necessary, value-added activities that assert the quality of a feature and not the functionality of that feature
DoR	Definition of Ready. A "ready" item must be clear, feasible and testable. Set minimum criteria that you must meet before it is ready to include in a sprint.
Epic	Epics are significant features that encompass many user stories that you deliver almost always over a set of sprints.
NFR	Non-functional requirement specifies criteria that can be used to judge the operation of a system, rather than specific behaviors. They contrast with functional requirements that define particular behavior or functions. Examples: robustness, quality, accessibility, compliance, reusability,
NPS	The Net Promoter Score is a customer loyalty metric developed with the objective to determine a clear and easily interpretable customer satisfaction score which can be compared over time or between different industries. The NPS assesses to what extent a respondent would recommend a particular company, product or service to his friends, relatives or colleagues.
Sprint	A time period (typically 2–3 weeks) in which development occurs on a set of backlog items that the team has committed to — commonly referred to as a time-box or iteration.
UAT	User Acceptance Tests consist of a process of verifying that a solution works for the user. It is not system testing (ensuring the software does not crash and meets the requirements documented) but rather ensures that the solution works for the user (i.e., tests whether the user accepts the solution).
US	User stories are short, simple description of a feature told from the perspective of the person who wants the new capability, usually a user of the system. They typically follow a simple template: As a <user>, I can <action> so that <reason></reason></action></user>

Quality Gatekeeper - Definition of Ready



Tells when an item is ready to be developed

- Is written down in the form: "As a <user role> I want to <activity> so that <benefit>"
- INVEST principles are met: Independent, Negotiable, Valuable, Estimable, Small and Testable
- Is mapped as a step in a business process diagram
- Business context and value are clear
- Is prioritized (for example based on MoSCoW)
- Conversations have taken place to clarify US so everyone (business, IT, Dev and QA teams) are aligned on what exactly to build
- Details are captured in acceptance criteria (functional and nonfunctional)
- Wireframes / mockups are drawn or reviewed for major US
- Is validated by business
- Test cases/scenarios are captured
- Meaningful and comprehensive test data is available
- Is estimated (at high level) and fits in a Sprint (recommended max size 8h to 12h, or 3 to 5 story points)



Quality Gatekeeper - Definition of Done



Tells when an item is 100% developed and tested. No more work is left to be done on this piece of functionality

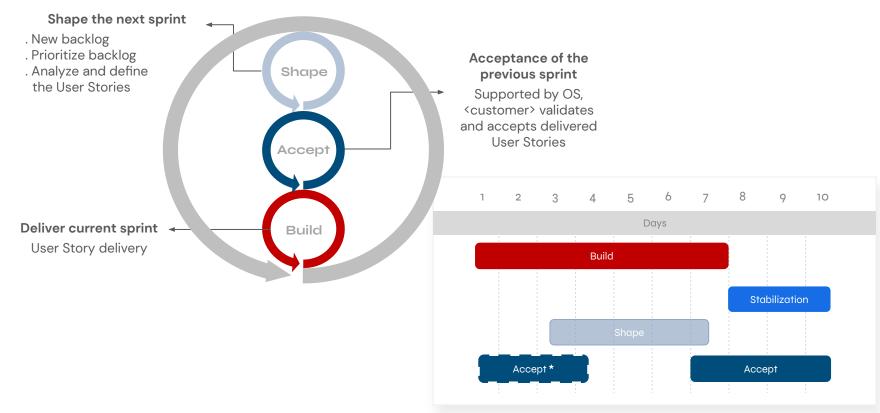
- Code completed, adheres to IT guidelines and is published on DEV and QA environment
- Unit tests completed successfully by developers and confirmed by TL
- Test cases for acceptance criteria executed with success
- Reviewed and approved by EM
- Intermediate (preview) demo took place and a plan is in place to address its feedback during stabilization, before demo to business
- All planned feedback has been addressed and validated by the EM/QA
- All feedback issues associated with this US are closed
- Acceptance by the Customer



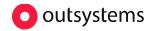
Template for writing effective user stories - Acceptance Criteria format

- Acceptance criteria: "Given that <entry condition/context> when I <perform a specific action> then <expected reaction/response>"
 - The User Story details are captured in acceptance criteria using business user language
 - Clearly identify the impact on the prior and later process steps (always referring to the base process flow)
 - Illustrate the user experience scenarios with pictures, screenshots or mockups
 - Provide real sample data (or as meaningful as possible): to be used during implementation, demo, and UAT
- Non-functional (aka quality) requirements
 - Impose constraints on the design or implementation (such as performance, availability, security or usability)

Sprint Delivery Model



^{*} The Accept track can be at the beginning of the iteration to accept stories from the prior iteration, or at the end of the iteration to accept stories just delivered, depending on your preferred delivery model.



Metrics



Metrics - Goal

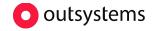
Identify and implement Project Management Metrics to help Project team having a clear and common approach on project's status and health, foresee risks and assess team productivity and quality of work.

- Identification of the Metrics aligned with the goals
- Build reports and dashboard based on the identified Metrics

Metrics - Overview

Scope	Estimation	Productivity	Quality	Lead Time
 Scope Management Backlog Definition Quality Scope Acceptance 	 Estimate Size Estimation Accuracy 	 Velocity Iteration Planning Quality Iteration Burndown 	 Delivery Quality Defect Impact Defect Reopen Rate Post Acceptance Defects Defect Root Causes 	 Defect Aging Speed of Acceptance Defect Resolution Effort Distribution

Note: This is the complete list of Metrics that can be tracked, each team needs to understand which ones are important and make sense for each particular case.



Sprint Communication Plan

Sprint Ceremonies

Ceremony	Description	Attendees	Frequency
Daily Scrum	Review of completed work, plans, and impediments for the day	Mandatory: Full team Optional:	Daily
Backlog Refinement	Full team refinement of user stories to ensure that the team has stories DOR and ready for sprint planning.	Mandatory: Full team Optional:	2 - 3 / weeks
Sprint Planning	Full team plan and agreement on the user stories to be worked in the planned sprint.	Mandatory: Full team Optional:	At the start of each sprint





Sprint Ceremonies

Ceremony	Description	Attendees	Frequency
Sprint Retrospective	Discover what worked and didn't work during the sprint and the corrective actions to take for the next sprint.	Mandatory: Full team Optional:	At the end of each sprint
Sprint Demo	Demonstration of the user stories developed in the sprint and an opportunity for stakeholder review and feedback.	Mandatory: Full team + Key Stakeholders and Users Optional:	At the end of each sprint
Status Meeting	Discussion and review of completed work, upcoming activities, risks, issues and project status.	Mandatory: Full team + Key Stakeholders and Users	Weekly
Other	Defect triage, test planning, steering committee	For discussion	For discussion

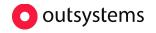




Sprint Ceremony Schedule







Thank You!

