

Table. Scrum implementation degree in assessment in case studies EOne and ETwo.

#	Phases	#	Activity name in Mr. Scrum	Questions proposed in EvaScrum
1	Start Phase	1	Defining Scrum team.	Do you identify and choose a person who is responsible for exercising as a Product Owner? Do you identify and choose a person who is responsible for exercising as a Scrum Master? Are the people responsible for exercising as development team identified and chosen? Is the Scrum team composed of a maximum of 9 people? Is there a meeting with the customer or a representative of the customer to obtain the general description of the project?
		2	Create the vision of the project.	From the meeting held to obtain the general description of the project, is there an artefact containing the description generated? Do you use a tool or strategy to identify the requirements at a high-level of abstraction? Is there a meeting with the customer or a representative of the customer, where a general description of the project requirements is made?
		3	Identify the requirements from the customer's point of view.	Do the attendees at the requirements gathering meeting actively participate in that meeting? Are the requirements obtained described in a wish list?
		4	Identify all interested (partners, sponsors, stakeholders) related to the Project.	Is an analysis carried out to determine the end users, as well as all possible interested parties and their participation in the project?
		5	Formalize the creation of the Project through a constitutive act of the project and budget.	Is a method (record, document, mail, etc.) used to start a project? Is a formal document presented where the project begins?
		6	Prioritize the elements of the wish list according to the needs of the customer.	Is the customer or a representative responsible for prioritizing the requirements according to their need? Is the wish list organized according to customer priority?
		7	Ensure that resources are available for the proper functioning of the project.	Is it verified that there are sufficient resources (economic, personal, space) to carry out the project? Do members of the scrum team have timely access to the information regarding the project?
		8	Validation and / or re-selection of the development tool.	Is the development team clear about what work tools are going to be used in the project? Does everyone involved in the project have access to established work tools?
		9	Detail the customer's wishes and generate a list in the form of requirements that allow to have detailed information of what should be done in the project.	Does everyone involved in the project know how to use the established work tools? Are the requirements written at a high-level of abstraction? Do all Scrum team members have a clear understanding of the requirements?
		10	Define criteria that allow the Scrum team to know clearly and unanimously when an activity / task is ready or finished to be entered / updated in the sprint backlog (Definition of Ready (DoR) and Definition of Done (DoD)).	Is the product backlog generated from the customer's requirements? Is it verified that each requirement is sufficiently decomposed?
2	Planning and estimation Phase	11	Evaluate and control the possible risks that may occur during a Sprint.	Is the ready criterion (DoR) generated? Is it clear on the part of the team when a task is ready to be developed? Is the done criterion (DoD) generated?
		12	Analyse the changes that are received for each Sprint in order to socialize and verify requirements and other circumstances that are affected by change requests.	Is it clear to the team when a task is finished and ready to be integrated into the project (DoD)? When starting a new sprint, are the risks that may arise throughout the sprint evaluated? Do you have a guide, act or instrument that allows you to have a route to lessen the risks that may arise along the sprint?
		13	Adapt and / or refine the structure used in the project to adapt to changes that arise in the development of the plan.	Is there a meeting to analyse and socialize the changes in the project? Is the estimation of the changes made and how these affect the rest of the tasks? Is the cost and impact of changes in the project socialized to senior management or the Scrum team?
		14	Define the objective of the sprint that will be carried out in such a way that it is related to the activities / tasks that will be developed in it.	If a change is necessary, is the respective adaptation made in the project?
3	Implementation Phase	15	Obtain information about the events that occur in the team to resolve any impediment that affects the normal development of the project.	Are strategies established to maximize the product increase? Is a planning meeting held for each Sprint? Does the Sprint have a duration that does not exceed 5 weeks? When starting a sprint, is the launch schedule for the current sprint set? Is the objective of the next sprint defined? Are the requirements explained in such a way that they are clear to all team members? Is it possible for all team members to understand the goal of the next sprint? Is the ready (DoD) criterion verified for the tasks that will be included in the next sprint? Do all Scrum team members know how long the next sprint will last? Is the sprint backlog generated with the requirements to be developed in the next Sprint?
		16	Develop the client's requirements.	Is there a daily meeting that allows to know the events of the development team? Does the daily meeting last a maximum of 15 minutes? Is the team's work known for the next 24 hours? Are you looking to solve all the problems that are exposed in the daily meeting or its equivalent? Are the impediments recorded by the Scrum team recorded? Are designs of diagrams, databases or elements required by the project generated for each project?
		17	Update the Scrum dashboard and the impediments log.	Does the increase take place according to customer needs? Is documentation of the process being carried out? Are sprint backlog elements updated? Do you have artefacts (kanban, boards, post it, etc.) or software tools (taiga, trello, etc.) that allow the team to know the status of the project?
				Are the tools updated (Scrum board, post it, taiga, trello, etc.) that are used to know the work of the team? Is the impairment record updated?

4	Retrospective and review Phase	18	Review and verify with DoD criteria the tasks that have been completed in the sprint.	<p>Is there a review meeting to review and verify the tasks performed in the sprint?</p> <p>Does the Sprint review meeting have a duration that does not exceed 4 hours?</p> <p>At the end of a Sprint is the presentation of the tasks developed?</p> <p>When a Sprint is finished, is a functional review carried out verifying the Sprint objectives?</p> <p>Are the functionalities terminated in the sprint verified under the DoD criteria?</p> <p>Is a list generated with the functionalities that do not meet the DoD criteria?</p> <p>Are the tasks that meet the criteria for completion (DoD) integrated into the rest of the product?</p> <p>When not all the tasks defined for the Sprint can be performed, is the product backlog updated with the tasks that have been pending?</p> <p>Is the product backlog prioritized with tasks that were not completed in the finished sprint?</p> <p>Is a report made justifying the rejection of activities that were not approved?</p> <p>At the end of a sprint, a feedback meeting is held to collect experiences obtained by the Scrum team?</p> <p>Are problems that affect the equipment solved?</p> <p>Are facts and experiences obtained by the team documented during the sprint?</p> <p>According to the facts and experiences obtained by the team during sprint, is a proposal for improvement defined?</p> <p>Does the development team receive support from the Product Owner and the Scrum Master in the creation of the deliverables agreed upon for the Sprint?</p> <p>Is a strategy defined (Customer training, server deployment, space adaptation, etc.) for the project launch?</p>
		19	Update the launch plan and the prioritized list of pending products.	<p>Are system tests performed in the environment for which it was designed?</p> <p>Is formal delivery of the finished product made to the customer?</p>
		20	Sprint Retrospective. Post-mortem analysis of what has been done, learned, obstacles, improvement actions, lessons learned, among others.	<p>At the end of the project process, is a feedback meeting held to discuss lessons learned?</p>
		21	Help with the launch of the project: In this activity it is prepared what is necessary to release the final product.	
5	Closure Phase	22	Implementation tests.	
		23	Delivery of the product.	
		24	Launch meeting.	
		25	Facilitate Scrum events as required or needed throughout the process.	<p>Is there a person or group of people to whom you can go if you have any questions about the Scrum?</p> <p>Is there a person or people in charge of informing about the events, activities and artefacts that Scrum proposes?</p> <p>Do all Scrum team members actively participate in the events that Scrum contemplates?</p> <p>Is control of the activities carried out by the team throughout the project?</p> <p>Is the utility and need to comply with the Scrum guidelines clear to all Scrum team members?</p>
6	Transverse Phase	26	Monitoring progress.	<p>Is there a proposed work plan?</p> <p>Do team members and the Scrum Master contribute to the creation of the work plan?</p> <p>Does the team have an environment and space conducive to develop the different activities it must face?</p> <p>Does the team manage to be motivated and deliver the maximum possible value to the customer?</p> <p>Does the product owner know how the product backlog should be ordered?</p> <p>Are the elements of the product backlog constantly reviewed avoiding obsolete items?</p> <p>Are you constantly interacting with the customer to agree on the delivery that best suits your needs?</p>
		27	Help to develop the team plan with the Scrum Master.	
		28	Ensure that there is an ideal environment for the Scrum team during Sprints.	
		29	Help the owner of the product in the creation of the prioritized list of outstanding products.	