# Team Psychology:

Generally, psychology is referred as the study of the mind and its capacities, especially those influencing behavior in some random setting. Nevertheless, in context of group circumstances, team psychology is referred as the psychological attributes, attitudes and behavior of the group/team including its individuals. With regards to the same, agile processes aim to shape behavior with the goal of creating productive, effective and successful teams. Hence, any agile team respects psychology as one of the fundamental aspect.

Agile methodology’s one of the key aspect is that it is an immediate move away from conventional business management practices. Basically, rather than taking guidance and direction from the directors/managers, members of the team are given the power settle on their own choices and this practice has been proven effective too. However, this technique demands the teams to take up an altered psychology, one that guarantees that procedures are possessed by the team, forming the project from the base up, and conflicts with our characteristic manner for adhering to the directions went down the levels of leadership. Likewise, it implies that the team needs to figure out how to work and self-arrange in a manner that it is most likely unfamiliar to them, which takes a tremendous measure of self-restraint, and it additionally entrusts individuals by providing them obligation and making them responsible for their tasks.

Perhaps the greatest advantage of working in Agile is the mental effect generated on the team and its individual’s ability to carry out their designated tasks. Furthermore, there is a notable psychological marvel referred as “***The Pygmalion Effect***”, which relates to the hypothesis of inevitable outcome, or in business terms, that more prominent desires drive noteworthy performance. In this way, embracing agile strategies and taking responsibility for ventures, our team will have better standards of ourselves and in that capacity be increasingly persuaded to convey an epic outcome.

Dread of disappointment, also called ***Atychiphobia***, is additionally an immense mental boundary to accomplishment in the working environment. Although it is natural to encounter a little worry or apprehension, numerous patients of ***Atychiphobia*** fear that team circumstances can uplift the issue since huge audience can witness their failure. Such an issue is addressed by the Agile methodology by teaching the team members to build a situation where errors are endures, however empowered. Similarly, Agile’s one of the core tenant is to *“fail fast and often”*- which considers quick development, minor changes and blunders for cost efficiency while permitting individuals to learn and build up their aptitudes.

Agile’s another key component is distribution of work into reasonable segments, referred as sprints or iterations. This feature enables the team to praise their accomplishments often, also momentary successes have been demonstrated to be fundamental for improved team psychology, improving confidence and inspiration. Additionally, feedback is critically significant in agile teams. Along with the feedback sessions at the end of sprints or iterations, there must be a daily feedback session, either during the daily stand-up meeting or any other time of the day in order to ensure that the development of the product is on the right track. To conclude, each agile procedure, may it be open plan workplaces, daily stand-ups, reviews, etc. are intended to encourage social collaborations which thus advance a positive working psychology.

# Team communication:

In terms of project management, communication is defined as the formal and casual ways the individuals on the project team transfer information or messages to one another. Although good communication is a need for agile projects, communication in Agile differs by a certain margin than in conventional projects. Nevertheless, agile principles set an alternate pace for agile projects, stressing effortlessness, straightforwardness, and face to face discussions.

The following are the principles of agile that are related to communication:

(4) Business people and developers must work together daily throughout the project.

(6) The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

(7) Working software is the primary measure of progress.

(10) Simplicity — the art of maximizing the amount of work not done — is essential.

(12) At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

In fact, the real key to agile success is also communication. It is because of the common practices of an Agile team : daily stand-up meetings, retrospectives after every sprint, pair programming and buddy reviews, collaboration with customers, and more face-to-face time instead of mountains of documentation. If we analyze the agenda behind all these tasks, the answer is obviously frequent and open communication.

Even after knowing the importance and applications of good communication in an agile team, in reality, it is quite hard to implement one. Because of the same reason, many organizations face issues while shifting to an agile workflow and call it quits just after starting.

Here are some of the factors affecting effective communication among agile teams:

* Absence of written as well as verbal communication skills among the individuals of a team.
* Reluctance to partake top-to-bottom information of tasks, endeavors, and estimates.
* Not detailing dangers or concerns early enough.
* Lack of communication between developers and testers about the user stories.
* Exclusion of testers from vital design-related or technical discussions for applicable user stories.
* Hesitation of team members while recommending enhancements or changes at the time of designing.
* Outweighing other’s thoughts and ideas by ruling the discussion.
* Absence of team discussions such as daily stand-ups and retrospective meetings for iterations or sprints.
* Lack of regular discussion and presentation with client and team members for feedback.

Among the listed issues, we did encounter a number of them while working on our agile project. The main issue was lack of communication skills among some members of the team and to resolve it, they were given verbal/written skills training by the other members. Next up was lack of communication between developers and testers, and it was simply fixed with a scheduled meeting just for discussion of user stories with both developers and testers included. Likewise, at the beginning of the design phase, some members were shy to put forward their ideas and recommendations and to work it out they were encouraged to make mistakes and openly discuss them. Lastly, there were days when some members could not manage to attend daily stand-ups which caused delay in reviewing and developing the product. For this problem, we utilized informal communications such as chats and emails to keep the workflow going.

# Agile Processes:

Typically speaking, agile processes/methodologies are just subsets of agile that has much of the same underlying philosophy including practices and characteristics. The only differentiating factor is an execution outlook as single one of them has its own one of a kind blend of practices, strategies and name. Below is a list of popular agile methodologies:

* **Scrum:** It is one of the lightweight agile processes and is widely utilized to oversee iterative and steady projects of numerous types. Because of its proven efficiency, simplicity, and capacity to join different general practices advanced by other agile models, it has been widely popular. Its main features are:
* Product backlog to prioritize system functionality along with features, bug fixes, and non-functional requirements, etc.
* Define the sprint duration.
* After prioritization, estimate and sign-up to deliver “potentially shippable increments” of product during each sprint/iteration.
* If necessary, analyze and reprioritize the Product backlog after delivering a sprint.
* **Lean:** An iterative and highly flexible process without strict rules, guidelines, or methods and solely focuses on delivering value to the client via effective value stream mapping. Its main principles are:
  + Eliminating Waste
  + Amplifying Learning
  + Deciding as Late as Possible
  + Delivering as Fast as Possible
  + Empowering the Team
  + Building Integrity In
  + Seeing the Whole

Its main aim is to reduce waste by ensuring that the customer only selects the truly valuable features for a system. Next, it focuses on efficient use of team resources and also suggests to write automated unit tests along with the coding.

* **Kanban:** It is a child methodology incorporated in Lean and is highly visual workflow management technique. Almost 83% of Lean users use Kanban as it visualizes and administers the development of product with significance to steady delivery without piling up load on development life cycle. Its vital principles are;
  + Visualize what you’ll do today (workflow automation)
  + Limit the amount of work in progress (WIP)
  + Enhance flow
* **Extreme Programming (XP):** Also regarded as one of the popular and controversial agile method, it is a diligent process for high grade software development, focused on quick and steady delivery. Moreover, it aims to enhance software quality as well as responsiveness in the face of changing customer requirements. As the name suggests, it takes traditional practices to “extreme” level. For example, code review is done continuously via ***pair programming***. The following are its supporting practices:
  + Planning Game
  + Small Releases
  + Customer Acceptance Tests
  + Simple Design
  + Pair Programming
  + Test-Driven Development
  + Refactoring
  + Continuous Integration
  + Collective Code Ownership
  + Coding Standards
  + Metaphor
  + Sustainable Pace
* **Crystal:** One of the lightweight method comprised of other models including Crystal Clear, Crystal Yellow, Crystal Orange and etc. These depend upon several factors including team size, system criticality, and project preferences. The primary focus is on individuals and synergy between them during the development process. Additionally, it also addresses business priority and criticality of the system.
* **Dynamic Systems Development Method (DSDM):** Based on the eight key principles, which guides the team and builds a mentality to hand-over on time and budget, DSDM explicitly calls out “fitness for business purpose”. Likewise, it aims to deploy 80% of system within 20% of time. Its eight key principles are:
* Focus on the business need
* Deliver on time
* Collaborate
* Never compromise quality
* Build incrementally from firm foundations
* Develop iteratively
* Communicate continuously and clearly
* Demonstrate control
* **Feature Driven Development (FDD):** The fundamental purpose of FDD is to convey substantial, working software, over and again. The upside of implementing FDD is that it is scalable even to enormous groups because of the idea of “just enough design initially**” (JEDI).** As a result of its component driven procedure, FDD is an incredible answer to uphold control for gradual and innately complex Agile projects. To conclude, its five basic activities are:
* Development of an overall model
* Building a feature list
* Planning by feature
* Designing by feature
* Building by feature