



ISSN NO. 2320-5407

Journal homepage: <http://www.journalijar.com>

INTERNATIONAL JOURNAL  
OF ADVANCED RESEARCH

## RESEARCH ARTICLE

## Chak De India Movie demonstrates the values of Scrum Team & Scrum Master – A Case Study

\*Vandana Gaikwad<sup>1</sup> and Dr. Prasanna Joeg<sup>2</sup>

1. Research Scholar, Bharati Vidyapeeth Deemed University College of Engineering, Pune, India

2. Professor, Dept. of Computer Engineering, Vishwakarma Institute of Technology, Pune, India

### Manuscript Info

#### Manuscript History:

Received: 18 April 2015  
Final Accepted: 23 May 2015  
Published Online: June 2015

#### Key words:

Agile, Scrum, Scrum Master

#### \*Corresponding Author

Vandana Gaikwad

### Abstract

Chak De! India is a sports drama film in Hindi about field hockey in India. It's the story of how the coach Kabir Khan train the team of 16 girls & inspire them to win the World Cup. In this paper we relate Kabir Khan the coach of Indian Hockey team to that of a Scrum Master & the 16 girls team as the Scrum Team and their single pointed aim to win the World Cup. Our objective behind writing this paper is to demonstrate how a self-motivated & self-organized team, lead by a coach acting as a change agent & motivator can create a winning team which then goes on to create a winning product (in this case winning the world cup). We draw parallels from the scenes in the movie with the best practices prescribed by the agile principles in the Scrum framework. We also demonstrate how the Scrum Master qualities are demonstrated in the movie by the coach Kabir Khan. The take away from this study is to be able to better understand the principles of Scrum which state that building a winning team automatically creates a winning product. Also examples from this paper can be used to teach agile principles during an agile training class with help of video clips from the movie.

Copy Right, IJAR, 2015., All rights reserved

## Introduction

This paper attempts to explain the parallels from the scenes in the movie with the best practices prescribed by the agile principles in the Scrum framework. It also discusses the Scrum Master qualities demonstrated by the coach Kabir Khan. Up till now, organizations used waterfall model for software development. The style of project management was command & control. In command control style, the thinking part of planning, decision making was done by management and architects & once that was finalized the engineers were told to follow orders & execute. This model has multiple problem as discussed. For one, it introduces a single point of failure, the success or the failure of the project dependent on how smart your project manager or architects were. This model also undermines the team's ability for course correction or accept change late in the development. Also the team gets a limited view of the product under development, working in silos they build a disconnected & incomplete view of the end business goal and the product vision. Team members can satisfy functional requirement, but they become incompetent to meet business requirements.

Agile is a software development practice which uses iterative and incremental development principle. Requirements and solutions evolve through collaboration between self-organizing & cross-functional teams. Scrum team focuses on leadership and collaboration instead of command and control. Peter Drucker et al (1998) states that teams themselves are best placed to make decisions about how to perform their work. In agile planning, decision making & execution is done by self-organized & self-driven team (Abrahamsson et al 2002). In agile entire team is involved in

product development process so it's does not introduce single point of failure. In this model success or the failure of the project is dependent on how smart your team will perform.

Agile model believes in change and adapt. Scrum is an agile process that allows us to focus on delivering the highest business value in the shortest period of time. Every two weeks to a month anyone can see real working software so if any changes are introduced it is very easy to adapt in next iteration. It gives flexibility to change when change is needed which creates good business commitment and customer satisfaction.

Agile promotes collaboration among all team members to deliver results, capture feedback and implement learnings on the next iteration. Agile also believes in constant feedback and improvement. Agile project teams collaborate on the planning, design, development, testing and reworking of each incremental build. It is continuous collaboration with the customer that promotes success of business.

## Background

Chak De! India is an Indian sports drama film. Story of a coach's hard work of making his team a winning team. It's a story about honesty, determination, perseverance, sincerity integrity, and human spirit to fight and win. This film was released in August 2007 & has been directed by Shimit Amin and produced by Yash Raj Films. Sahani was inspired from winning of the Gold by the Indian women's field hockey team at the 2002 Commonwealth Games. All characters and roles are invented by Sahani. But coincidently role of Kabir Khan matches with real life hockey player Mir Ranjan Negi.



Fig 1: Coach Kabir Khan with his 16 members of team

## Agile Adoption

As per the survey concluded from a conference in Dallas in year 2012, 49% of businesses say most of their company is using agile development, additionally businesses who plan to implement agile development in future projects have increased from 59% in 2011 to 83% in 2012.

Agile practices have evolved & been adopted by Organization worldwide from the time its Manifesto was defined in year 2001.

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change over following a plan

Supplementing the Manifesto, the Twelve Principles further describe what it means to be Agile (Beck, Kent et al. 2001). As we read through these principles it was identified that there are eight principles which got demonstrated in various scenes of the Movie.

These are -

1. Business people and developers must work together daily throughout the project.

During the World Cup tournament, starting from the first match coach and the team reworked the strategy & practiced hard after every game. Even when the team had lost their first match to Australia, they learned a lesson & went on winning rest of the matches of the World Cup.

2. Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.

The Women hockey team was lacking spirit. Kabir Khan shakes them to wake up the winning spirit. All team members were having their own interests. They were more involved into other things than playing hockey. Kabir Khan motivated them to look beyond these regular things and to play the game for pride, glory & victory.

In the final match of the World Cup against Australia, the coach met all team members before the match started and motivated them to play their natural game. The team got inspired, dissolved all their differences and won the match.

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

In the beginning Kabir Khan used to communicate with the team members in negative manner by firing and suspending the players who were not giving the desired performance. Afterwards, he tries to come close to them to provide positive motivation and bring out the desired outcomes.

4. Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.

In the movie, from second match of tournament the team kept their performance consistent by working hard before the game. Because of sustainability of team they won the match.

5. Continuous attention to technical excellence and good design enhances agility.

In the movie Bindiya Nayer was the only one player who knew how to play against one to one marking strategy. Because of this reason coach met her personally & requested her to play the match. Finally, she agreed and they won the match. Coach Kabir Khan had a close eye on excellence. He kept eye on each and every player in all matches of tournament and gave his feedback and suggestion for improving performance in future.

6. Simplicity—the art of maximizing the amount of work not done—is essential.

Let's pause on this concept for a moment – An agile team can spend an amazing amount of time building a complex system that will handle all possible eventualities - or it can do only what is needed right now, get it right, and get it out the door.

Bindiya Nayer was senior player in Indian Hockey Team, but she had rebellious, non-cooperative attitude and had strong desire to captain the team. Due to this reason Kabir Khan did not allow her to play throughout the tournament until the final game thus avoided the complexity in team dynamics.

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

In World Cup series when there was match against Russia & Kabir Khan knew strategies of Russians is that they play roughly against every team and injured the Players. But still he & his team was determined and made a strategy against team and result of this is Indian team won the match.

8. The best architectures, requirements, and designs emerge from self-organizing teams.

To train the 16 girls from various states & background was a very tedious task for Kabir Khan. When he began the training, the girls were snarling, whining and ready to tear one's eyes out. Gradually but surely, Kabir Khan makes them understand their strengths and above all, their unity which alone can get them to the winning goal.

## Importance of Agile roles

The main goal of Scrum Master is to build a winning Team. In order to achieve this goal, he should perform the role of agile leader, Coach, Facilitator and Change agent (Johanna. et al 2014). Winning teams can themselves then go ahead to build winning products. This is demonstrated in the movie Chak de India where coach Kabir Khan plays role of Scrum Master. He gets hockey players from different states which are like cross functional team with unique capabilities & then prepares them to work as a team to go on to win the world cup. In the next session we draw the parallels using scenes from the movie.

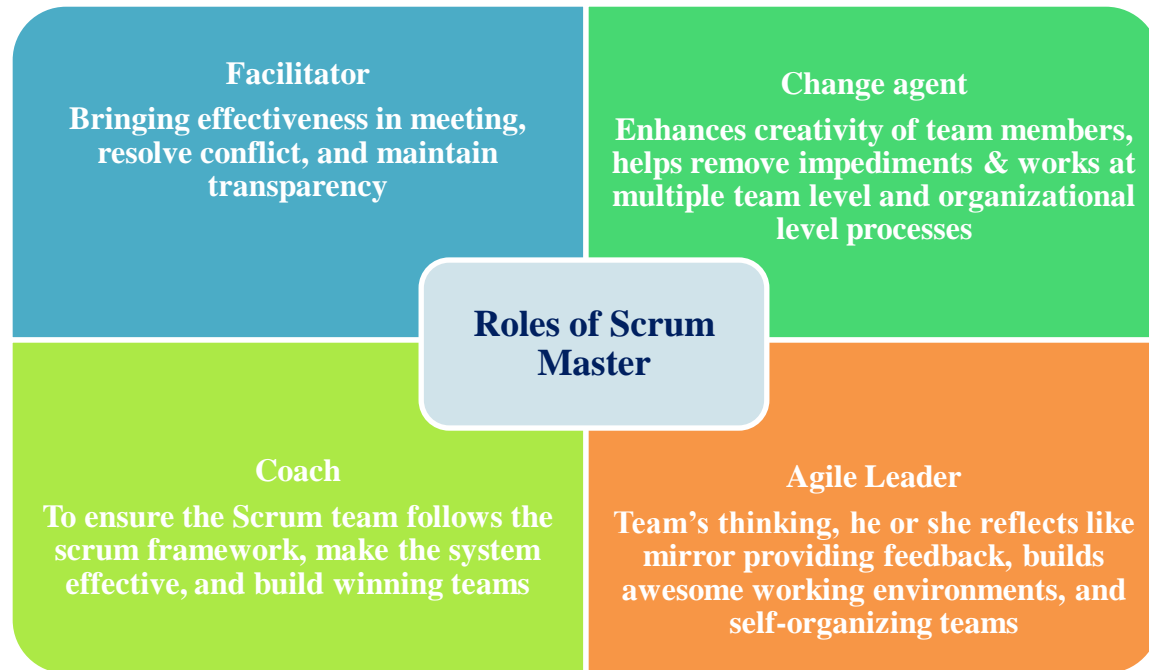


Fig 2: Roles of Scrum Master

## Facilitator

Scrum master perform role of Facilitator which consist of bringing effectiveness in meeting, resolve conflict, and maintain transparency.

In the movie Kabir Khan has performed the role of facilitator. In the scene when he meets the team members for the first time he demonstrates that he means business when he asks one of the players to go back home after she turns up late for the national camp. Also throughout the movie, all his interactions with the team on the field are very professional & effective.

The coach realizes that he can only unite the women if they develop the discipline to work as a team. So in the movie, when the team players fight among themselves to get preferential bed in the dormitory next to a player of their own state, the coach resolves the conflict by designating sleeping location for each team player such that no player is adjacent to another of her own state.

Also the coach is seen to be giving impartial & direct feedback to the team players, which helps the team players to improve their game.

## Change Agent

The Scrum Master also performs the role of a change agent demonstrating the following attributes - enhances creativity of team members, helps remove impediments & works at multiple team level and organizational level processes.

The coach keeps the team focused & helps team members to overcome external impediments. One of the team player was being forced by her family to come back for a family event but she wanted to continue playing & not

miss the practice. The constant cribbing of her family was distracting her. At this point, coach Kabir Khan has a dialogue & helps her to bring focus back on the game.

In one of the scenes, the chairman of the Indian Women Hockey Association decides that the women's team will not travel to the "The World Championship" since he wanted to divert the sponsorship to the men's team. Coach Kabir Khan overcomes this impediment by proposing a challenge between the men's team & his team. Ultimately the girls lose that match, but their bold performance is well praised by the men's team and forces the chairman to change his decision and continue their sponsorship.

## Coach

One another responsibility of the Scrum Master is to be a coach, to ensure the Scrum team follows the scrum framework, make the system effective, and build winning teams.

In Agile, there is no concept of a team leader in a Scrum team. So should be the case in a hockey team. A team captain should be playing a role of a servant leader. So when one of the player wanted to be the captain just because she was the captain of her state team, coach Kabir Khan turns her down & in turns chooses a captain who always puts her team's interest before her own.

When one of the senior most players is dominant & shows rebellion on the field, the coach makes her the water-girl for the team during the world cup. She is neutralized several times in the film for her ego. Even if she is most qualified player of the team, she is not allowed to play because of her disobedient behavior.

The coach in his interaction with the team on the field as well as off the field, portrays emotions like anger, discipline, wit, effort, triumph and disappointment with an unusual naturalness and calm.

## Agile Leader

The Scrum Master is also a catalyst to organization and team's thinking. He or She reflects like mirror providing feedback, builds awesome working environments, and self-organizing teams.

When one team player was in trouble, rest of the team players pitched in & support her, similar to what Scrum team members do so that work does not get affected. This is demonstrated in the McDonald's scene, when one of the team player is eve-teased the entire team shows team spirit by entering into a physical fight with the eve teasers.

At times, even the best and the most experienced person if not handled properly could lead to disastrous results for the team. However if channelized in the correct direction, the same person certainly yields rich dividends (as seen in semi-finals and finals). You must have the each & every team member working unselfishly towards common goal. Understand & respecting each other's roles & contribution is the important first step to cooperation.

Vidya Malvade lead the team in a positive direction and then later without any biasness she was selected as the captain of the team. She was supportive, loving, kind but at the same time she is very strong and determined

When everyone is having different opinions then that means they had Individual differences. When participants came from their respective states, everyone had their own mother tongue influences, their own ideas, their respect for only their state, etc. But the coach managed to keep all the differences at one place and made it from an individual players to a synergy team. Because, during work everyone should have one goal and should be one.

## Conclusion

The movie "Chak De India" demonstrates few of the people qualities of what a Scrum Master plays for a Scrum team. In this paper we demonstrate how a Scrum Master who is acting as Facilitator, a Coach, an Agile leader and a Change Agent helps shape up a self-motivated & self-organized team. We draw parallels from the scenes in the movie with the best practices prescribed by the agile principles in the Scrum framework. Main objective of our study is to better understand role of Scrum Master through the illustrations in the movie. There a lot of things to be learnt from the movie to develop and understand role of Scrum Master. Finally, it is strongly recommend that examples from this paper should be included in the Agile training classes with help of video clips from the movie.

## References

**Peter Drucker. (1998),** *Management's new paradigms*. Forbes Magazine, 1998.

**Abrahamsson, P, Salo, O, Ronkainen, J, Warsta, J. (2002),** *Agile software development methods: review and analysis. Technical Report # 408, VTT Publications, Espoo.*

**Shimit Amin. (2007),** *Chak De India*. Yash Raj Films, India.

**Beck, Kent; et al. (2001),** *"Manifesto for Agile Software Development"*. Agile Alliance.

**Beck, Kent; et al. (2001),** *"Principles behind the Agile Manifesto"*. Agile Alliance

**Johanna. (2014),** *What Do You Look for in a Servant Leader or a Scrum Master?*

**Emam Hossain, Muhammad Ali Babar, Hye-young Paik,( 2009)** Using Scrum in Global Software Development: A Systematic Literature Review, Fourth IEEE International Conference on Global Software Engineering