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Bridging the Intra-Millennial skill gap using Inclusive Project Management

Theme: Project Management Leadership > Harmony in Diversity &

Millennial Generation

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ABSTRACT

Millennials from Tier 1 cities get to work on latest technologies, learn and develop new skills and interact with technology leaders. Companies and Startups are mostly concentrated in Tier 1 cities and this gives the millennials there an opportunity to work on the latest and greatest technologies and contribute to nation building through these startups. Millennials from Tier 2 and Tier 3 cities are lagging behind only due to the heavy concentration of skills, technologies and startups in Tier 1 cities. If these millennials are provided the exposure to these technologies and skills, they will be on par with their counterparts in tier 1 cities and will also be able to contribute their innovations at national level. This will evidently increase the overall millennial population with skills and technology awareness required to contribute to the growth of the nation. This paper proposes to address this issue of intra-millennial skill gap through inclusive project management using which the millennials from tier 2 and tier 3 cities can be enabled and empowered to contribute their innovations along with the millennials from tier 1 cities. Corporates, startups and Millennials from tier 1 cities will play a key role in bridging this skill gap. Modifications to Project management methods will be proposed to include millennials from tier 2 and tier 3 cities as well into projects along with the veterans and the millennials in tier 1 cities. Inclusive project management will ensure that the entire innovative generation across India are equally skilled and capable.

INTENT

The intent of this paper is to make the audience aware of the skill gap between tier 1 and tier 2/3 cities due to environmental circumstances like accessibility to new technologies, proximity to major corporate and startups and better awareness of latest technologies and how it can be overcome by doing some changes to project management techniques making it more inclusive for the entire millennial generation. The methods proposed in this paper envision strong collaboration between corporates, startups, veterans, NGOs and tier 1 millennials to empower and enable millennials from tier 2/3 cities to contribute on par with their counterparts in tier 1 cities to enhance the overall innovation capability of the nation.

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INTRODUCTION

Millennials are the young generation of workforce with lot of creativity and talent that needs to be nurtured and channelized in the right direction. Millennials are always eager and enthusiastic to learn and implement new technologies and think out-of-the-box. The Millennial generation is wide spread across the nation but it is very evident that millennials from tier 1 cities are able to contribute much more to the nation's innovation space than their counterparts from other cities.

Millennials from tier 1 cities get much more opportunities to create innovative products are able to take up these opportunities confidently with their skills. The opportunities are concentrated more in the tier 1 cities due to heavy concentration of corporates and startups. Millennials in tier 1 cities are able to acquire the skills required for these opportunities due to better exposure to latest technologies, closer proximity to companies working on these technologies and to senior people working on them.

Millennials from tier 2/3 cities are unable to take up the opportunities in tier 1 cities as they do not possess the skills required for them. This is mostly due to lack of awareness of these latest technologies and the heavy concentration of all the supporting infrastructure like education, firms, people, events, trainings etc in tier 1 cities. Millennials in tier 2/3 cities need to be enabled and empowered to work on the latest technologies and contribute to nation's innovation by bridging the skill and knowledge gap that exists between them and their counterparts of the same generation from tier 1 cities in which project management plays a key role.

KEY FACTORS FOR SKILL GAP

Millennials can be characterized by 5 C's as below [1, 2] (Figure 1):

Cause: Millennials are highly dedicated contributors and they would love to work for a cause. The cause gives them a sense of purpose and dedication to complete the task at hand.

Creativity: Creating amazing solutions to solve perineal problems with use of latest technologies is a dominant characteristic of millennials. Their ability to quickly grasp and learn new technologies and implement them is their key strength.

Collaboration: Millennials believe more in collaborative work atmosphere. They do not like taking orders but are more open to be provided the right direction, support and mentoring.

Connections: Millennials rely heavily on their connections and can use them effectively to learn new areas and gain information.





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Convenience: Millennials are not comfortable with process and structure. They would always prefer faster and easier methods for decision making.



Figure 1: Five C's: Characteristics of Millennials

Although the five characteristics are common across the entire millennial generation, there exists a drastic difference in the magnitude of these characteristics between the tier 1 and tier 2/3 millennials due to the skill gap that exists between them which makes the tier 1 millennials superior on all these five characteristics.

There are various factors that have resulted in the skill gap that exists within the millennials [3,4,10] (Figure 2):

- 1) Social Factors: Social factors like Demographics, cultural influences and powerful influencers have an impact on shaping the skills of the millennials. Tier 1 millennials are exposed to a higher strata of the society where they get exposed to high quality discussions on emerging trends, technologies and get to meet and listen to some of the most influential people
- 2) Family Factors: With more nuclear families and working parents in Tier 1 cities, the Millennials tend to be more independent and possess explorative skills which make them explore new trends with ease. The level of quality of education of parents tend to be better in Tier 1 cities which has a strong influence on the learning capability of children in Tier 1 cities.





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- 3) Economic Factors: Tier 1 millennials have better living standards and can afford better quality education, vocational courses, trainings, visits places, industries and access various other resources that equip them with skills needed to work on the latest technologies.
- 4) **Technology Factors**: Tier 1 Millennials have higher exposure to latest technologies as they are more widely used in Tier 1 cities than Tier 2/3 cities. This allows them to pick up new skills with ease through self-learning and also use them to stay informed on latest and emerging trends in the technology space.

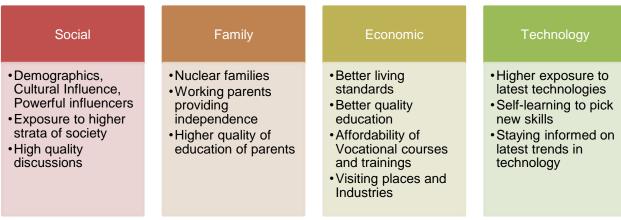


Figure 2: Factors influencing skill gap within Millennials

These factors are varying in magnitude between Tier 1 and Tier 2/3 cities which have a strong influence on shaping the skills and characteristics of the Millennials who hail from these places. Due to these differences, the skill gap emerges between the millennials of Tier 1 and Tier 2/3 cities.

INCLUSIVE PROJECT MANAGEMENT

The skill gap between the Millennials across places in India is detrimental to the overall progress of the nation as the massive potential of Millennials from Tier 2/3 cities goes untapped and the entire growth will continue to be concentrated in Tier 1 cities. Corrective measures need to be taken to bridge this gap in order to ensure overall progress of the nation. One such measure that is proposed is to introduce inclusive project management across major organizations and startups in Tier 1 cities. Inclusive project management calls for taking measures to include Tier 2/3 Millennials along with Tier 1 millennials and veterans into project related activities like planning, execution etc involving emerging technologies. The most important area for change would be the Tuckman ladder for team development that is defined in the Develop Project Team process in the PMBOK Guide [5,6] (Figure 3). The changes needed in this area and how it will have an influence on bridging the skill gap is described in the following sections of the paper.





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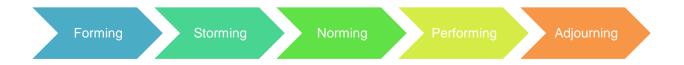


Figure 3: Tuckman Ladder for team development

FORMING

The project team that is being formed will be required to have a good mix of veterans, Tier 1 millennials and Tier 2/3 Millennials [8]. This could be a virtual team with the Tier2/3 Millennials continuing to work from Tier2/3 cities. Identifying the right set of Millennials with strong interest in learning and exploring new technologies will be key. Traditional methods like written tests, interviews, coding challenges etc need to be conducted to identify the right set of Millennials. In Tier 1 cities, the process is more reactive as the candidates themselves apply for roles. However, the challenge will be reaching out to the Tier 2/3 millennials, where NGOs will have to help by identifying outstanding performers in colleges with strong inclination towards technology who can then be going through the normal selection process.

Since the Tier 2/3 Millennials are new to the technology and to the project, the first stage within Forming would be training. Training needs to be imparted by the below:

- 1) Veterans who would be either managing the project or possess strong domain expertise
- 2) Tier 1 Millennials who have already worked on the technology or possessing deep knowledge of the emerging technology and are part of the project
- Startups that have in-depth knowledge and specialize in the emerging technology that is needed for the project

These trainings are key to bring the Tier 2/3 Millennials up to scale to start working and delivering innovative ideas for the project in which they will be part of. The trainings can be done in classrooms either in Tier 1 cities or in Tier 2/3 cities. NGOs concentrating on education and Social Startups need to take lead in facilitating these trainings by providing infrastructure or labs if needed, for virtual online trainings as well. The trainings and interactions allow Tier 2/3 Millennials to deeply understand the domain that they are required to work on. The Tier 1 millennials are also highly motivated in this as they get the pride of sharing their expertise and also of working on a social cause [7]. Veterans get to know the nuances of the new technologies that they might have been unaware of earlier [8] (Figure 4).

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•Strong domain expertise
•Knowing what needs to be implemented

•Prior knowledge of technology
•Deep knowledge of the domain with/without prior experience

•Specialization in technology domain
•Support with Infrastructure/Labs/Trainings

•Identifying the right Tier 2/3 Millennials for inclusive projects
•Facilitating trainings with infrastructure/labs

Figure 4: Training the Tier 2/3 Millennials

Inclusive project teams need to have a good mix of veterans, Tier 1 Millennials and Tier 2/3 Millennials. This will ensure a healthy mix of skills and also provides an opportunity to the Tier 2/3 Millennials to get exposed to latest technologies and also to work on them. Veterans who are mostly domain experts can play the role of a project manager and chief mentor, mostly involved in overall project management, training and mentoring. Few of the veterans can be part of the project team itself to contribute with their expertise and guide the millennials. The Tier 1 millennials form the last layer of the team but are better skilled to take up tasks related to the new technology and also implement it, they also act as peer mentors and guides working closely with the Tier 2/3 Millennials. The Tier 2/3 Millennials are also part of the last layer of the project team who will be contributing to the project based on their learnings from the trainings and also learnings on the job, they will be reaching out to Tier 1 millennials and veterans for any technical support that they might need and they can also be mutually helping each other (Figure 5)

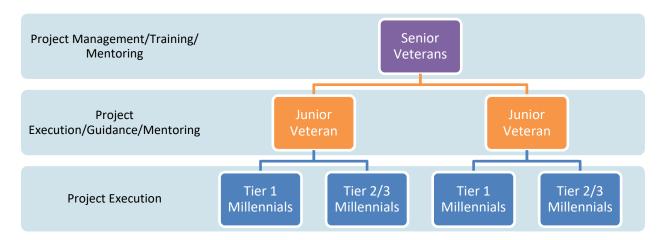


Figure 5: Inclusive project teams





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STORMING

In this stage, team members start to take technical decisions and also work on the overall project management approach. It is key in this stage to make Millennials part of the decision making process, this will give them awareness of the problem that they need to solve using the emerging technology and also a sense of ownership which is important for them to contribute [9]. Millennials generally do not like to take orders or work on decisions taken by others, so involving them in the decision making process is needed so that they own the decision and also contribute any innovative suggestions that the veterans might not have thought of. Tier 2/3 millennials might have some challenges in getting accustomed to the new work but it is necessary to make them feel comfortable, ask them to contribute to the technical decisions and also participate in discussions. The Tier 2/3 millennials being exposed to the new technologies for the first time might just come up with some outstanding ideas that the veterans or even the Tier 1 millennials might not have thought of due to the bias in their thinking due to their prior experiences. Including Tier 2/3 Millennials in every discussion with an environment of openness will help in obtaining these ideas with ease (Figure 6)

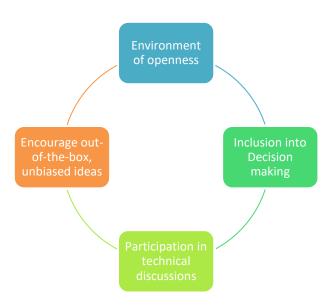


Figure 6: Inclusive decision making

There might be instances of differences of opinions, minor discomforts and information asymmetry between the Tier 1 millennials and the Tier 2/3 Millennials due to differences in culture, background and prior experience levels. The veterans need to play a key role in taking corrective steps whenever such incidents happen between the Tier 1 and Tier 2/3 millennials and foster collaboration between them to ensure project success. There could also be differences of opinions between the veterans in the team and the millennials due to gaps in generation and technological awareness. Veterans managing the





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projects need to take steps to ensure that the voices and opinions of everyone is heard including the millennials and collectively decide on which opinions to be encouraged. There might be many instances where the opinion of the millennials made better sense in the context of the project as compared to that of the veterans, such instances need to be dealt with in a smooth manner [8] (Figure 7)

Intra-Millennial differences

- Difference of opinions, minor discomforts, information asymmetry
- Differences due to culture, background and experience levels
- Corrective actions necessary to foster collaboration

Veteran-Millennial differences

- Difference of opinions due to gaps in technological awareness and generational gap
- Ensure every opinion is heard and the right one is encouraged
- Age and experience does not justify opinion correctness

Figure 7: Differences of opinions

NORMING

Team members begin to work together in this stage. Tier 1 Millennials and Tier 2/3 Millennials will have to start working in close collaboration to achieve the tasks assigned to them. Tier 2/3 Millennials will start getting accustomed to the work culture and working style of corporate organizations by observing and learning from their peer Millennials and their mentors. The veterans in the team will have to ensure that they facilitate frequent discussions to bring together the Millennials to understand any challenges that they might be facing in understanding their role in the team and also to clarify any queries they might have related to the work. Millennials will start knowing their peers and also their mentors along with their capabilities. Millennials and veterans will start supporting each other to achieve the overall project goal (Figure 8)





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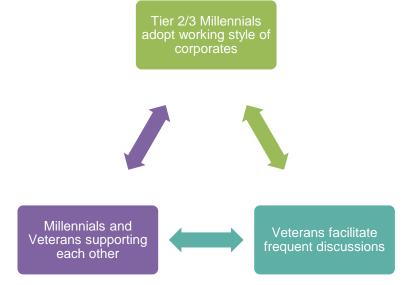


Figure 8: Working together

PERFORMING

In this stage, millennials and veterans start working together towards achieving the project goals. They start working together in an interdependent manner and take each other's help in resolving issues. Tier 2/3 Millennials gain experience of how to work in an actual project involving an emerging technology. They get hands-on experience of the new technologies and get to implement their learnings in trainings towards achieving the solution. During this course, they might take help from peer Tier 1 millennials and also their veteran mentors. This enhances their learning and their knowledge of the domain they have entered. Tier 1 millennials might take lead on very complex work packages due to their better understanding of the technology as compared to Tier 2 millennials. Tier 2 millennials will work closely with their Tier 1 counterparts on these complex work packages to gain experience of the technology. They can also work independently on smaller work packages with some help from veteran mentors and Tier 1 counterparts (Figure 9)





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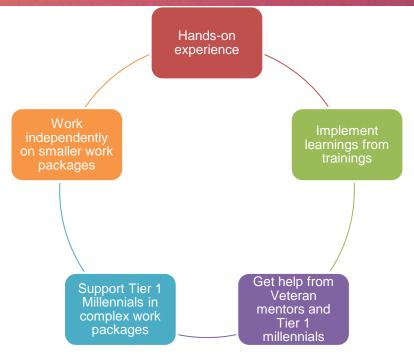


Figure 9: Tier 2/3 Millennials in performing stage

ADJOURNING

This is the stage of closure of the project where the team completes the project and moves on to the next one. Tier 2/3 Millennials at the end of the project would have gained much better understanding of the technology and domain and also would have developed a lot of relevant skills that they might not have developed if they were not part of the project. At the end of the project, the skill gap between Tier 1 and Tier 2/3 millennials would have reduced and some of the Tier 2/3 millennials might have demonstrated potential of working on-par with their Tier 1 counterparts if they are provided the right guidance and mentoring. The Tier 2/3 millennials coming out of the project can be considered for leading complex work packages or for mentoring the next set of Tier 2/3 millennials in subsequent projects (Figure 10)





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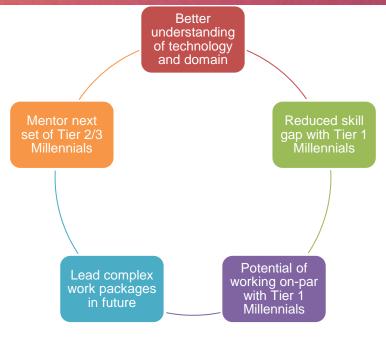


Figure 10: Tier 2/3 Millennials in Adjourning Stage

KEY CHALLENGES TO OVERCOME

Inclusive project management helps in bridging the skill gap between the millennials across Tier 1 and Tier 2/3 cities and also initiates a cycle for millennials from Tier 2/3 cities to get into projects in niche technologies. However, for successful implementation there are a few challenges that need to be overcome. They are:

- 1) Reaching out to all Tier 2/3 cities might be a huge challenge to corporates. Government agencies and NGOs need to help in identifying the right talent from these places because of their reach to even remote places of the country.
- 2) The training and mentoring of millennials in Tier 2/3 cities is not very simple. Corporates would need help from startup companies, NGOs and the government to facilitate this for the brightest of talent in the remotest locations.
- 3) Getting Tier 2/3 millennials to work and support projects in Tier 1 cities needs really good infrastructure in terms of communication, internet and office facilities. Corporates in collaboration with the Government needs to come up with ways by which the necessary infrastructure can be provided in these Tier 2/3 cities.
- 4) Project management activities like planning, execution, change management, risk management might become challenging with the Tier 2/3 millennials being spread across the nation. Methods





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to have senior Tier 2/3 millennials act as local project managers in Tier 2/3 cities could be a viable alternative.

- 5) Tier 1 millennials should not consider Tier 2/3 millennials as threats or competition. Steps should be taken at the project level to keep both sections motivated and work in collaborative manner.
- 6) The initiative should not get concentrated in a few Tier 2/3 cities only. Stage-wise implementation across multiple Tier 2/3 cities needs to be planned. This will need close cooperation between various corporate, government organizations, NGOs and startups.



Figure 11: Key challenges to overcome

CONCLUSION

Inclusive project management provides opportunities to millennials from Tier 2/3 cities to be part of the innovation ecosystem in India. Making these millennials part of the projects along with their peers from Tier 1 cities helps in reducing the skill gap between them. In the long run, this model will ensure that more and more millennials for Tier 2/3 cities get onboard the innovation ecosystem and are equally skilled and capable as their Tier 1 peers, thereby nullifying the skill gap that exists currently. With the entire millennial population contributing to the nation's innovation ecosystem, the nation will emerge as one of the global leaders in innovation.





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