

AGILE IMPLEMENTATION ROADMAP FOR OPERATIONAL EXCELLENCY WITHIN ORGANIZATION

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Abstract:

Industry 4.0 is all about driving digital technologies to the core of traditional manufacturing and industrial practices/processes. For manufacturers to be able to remain competitive, they must embrace the digital transformation and everything it has to offer. There is an inherent need to pay attention to the digital transformation trends which are and will be driving industry 4.0. The industry is getting disrupted by technologies like advanced data analytics, artificial intelligence machine learning, IoT and others taking a center stage.

In this paper we will be discussing about a digital ecosystem and its constituent elements, we will also focus on the industry trends and the value at stake across few industry verticals like consumer centricity, Connected digital enterprise, change ready mindset, etc. Consumer journeys and experiences will be driving future business strategies, culture & operating models of all the industry sectors and manufacturing is not untouched. For an enterprise to be transformed, Digital must shift to the core of the business, with digital platforms, processes and data fully connected from CMO, CIO to COO. Perhaps the most challenging part of a transformation journey is around the mindset. We will be diving deeper into each of the above aspects and discuss how organizations may make use of digital technologies (Artificial Intelligence, Machine Learning to name few), focus on consumer experience and adopt an agile mindset to have a successful digital journey.

Keywords: Transformation, Agility, Connected Experiences, Artificial Intelligence, Machine Learning, etc.

Introduction

Agile roadmap is always a phenomenon of implementation since its inception, fundamentally everyone agrees that Agile will lead to the growth of progress. On the other end, same feeling is with lean product development. There are few frameworks who are advocating and combining both to manage project along with operational excellence in the organization. Even this is an integral part of Implementation to achieve the objective of Industry 4.0.

Agile Mindset

At the initial time, Agile was talked to the level of project execution but that cannot be the only area to implement agile even implementation cannot be fully functional until it is not executed on the organization level. There can be two approaches which should work at the same time. The thought process and mindset change from leadership to the execution team and implementation should be from the Implementation team to leadership.

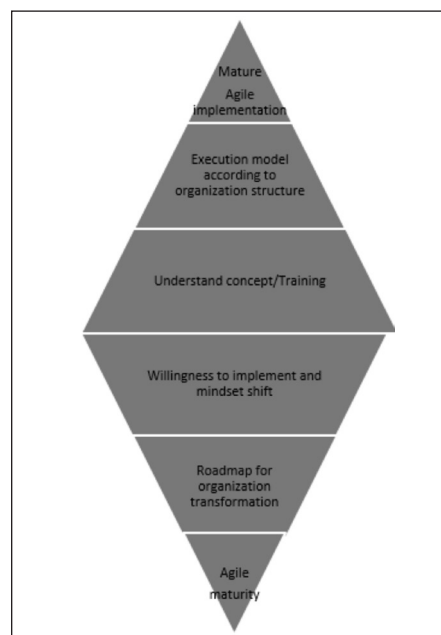


Figure 1: Agile Roadmap For Operation Team And Leadership

Guiding Principles

According to <http://agilemanifesto.org>, there are twelve guideline rules for agile.

1. Our highest priority is to satisfy the customer through early and

continuous delivery of valuable software.

2. Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.
3. Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.
4. Business people and developers must work together daily throughout the project.
5. Build projects around motivated individuals. Give them the environment and support they need and trust them to get the job done.
6. The most efficient and effective method of conveying information to and within a development team is a face-to-face conversation.
7. Working software is the primary measure of progress.
8. Agile processes promote

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

9. Continuous attention to technical excellence and good design enhances agility.
10. Simplicity-the art of maximizing the amount of work not done--is essential.
11. The best architectures, requirements, and designs emerge from self-organizing teams.
12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behaviour accordingly.

These rules are self-explanatory but the implementation is always a challenge. Actually, it is a cultural shift for the organization and this is not an easy task to shift the thinking and culture of the organization.

Four Dimensions of Agile

There are four dimensions of Agile:

1. Value- based pricing
2. Cooperation to enhance competitiveness
3. Mastery to respond over change or uncertainty
4. Leverage the impact of the people and information

Cultural Shift

Agile mindset is a cultural shift, here leadership must start incorporating following in the thinking:

1. People and resources are two different entities. People are living things and can not be treated as other resources like infrastructure etc.
2. There is a need to follow the practice of servant leadership. Leadership is to enable the team to perform to get the result, they are actual people who work to deliver, and leadership role is to facilitate the same that's why the term servant leadership

announced within the agile practice.

3. Leadership should encourage positive disruption, it will help the organization to fail early and adopt the better mechanism. Tackle failure as a learning curve and improve fast.
4. The system should be agile to respond quickly for any change either due to positive disruption or due to the outcome of the failure.
5. Success should be celebrated, it helps in building the team and people are focused towards common goals. Even small success should be celebrated.
6. Feedback is a necessary process and every level. It enables people with the right philosophy with respect to organization vision and goals. It should be in multiple directions. It will help to grow together and reduce a lot of effort and create better understanding to achieve a common goal.
 - a. From top management till execution team
 - b. Execution team to top management
 - c. Supplier/ vendors to organization and vice versa
 - d. Customer to organization and vice versa
7. Culture should be people friendly, these are people only who provide the result and execute in real terms. If people are motivated and focused towards the common goal, the organization can grow exponentially.

Agents of Changes

1. Top management – The top management is the group of the people who ensure the direction of the organization, they should be clear towards the idea of the empowerment rather than controlling the workforce. This

is the level in which mindset shift is required in thinking and processes. They should be adoptive and understanding the benefits of being agile. Most of the time this is the only layer which is talking to the changes but not adoptive in the pattern. These people should be trained in the agile process before implementing and should work as an influencer to the change within the organization. Top management role is to facilitate the adoption to the middle management and make sure disruption is happening in a positive way and not harm to the organization in long run.

2. Middle Management – The middle management should work as a change agent here, they should be adoptive to suggestions and execution point for the concept of empowers the people. They should help top management and team to visualize the exact benefit of process shift. Middle management is the real people who can check the pulse for agile maturity and ensure it is happening at all the levels. Middle management should not act as a barrier between two layers, but they should act as a facilitator and provide a growth opportunity. Environment should be encouraging to all.

3. Team – The team is the real agent to execute the processes and it is the most impacted group of people due to the change and mindset shift. There should be an ample amount of training to the team so that they can visualize the benefit of the process which they are doing. They should be motivated and understanding the impact of the changes which they are doing. They should feel aligned with the organization goals and

- motivated enough to attain the organization. If possible, their growth can be directly connected to the organization elevation in that sense they will feel as a part of the journey. Top and middle layer should enable the potential to the team and create a forum to grow for everyone.
4. Suppliers/Vendors- The suppliers are the group of the organization who are responsible to provide material/ services timely to ensure smooth operations. Within the recent time it has been a big help for the organization.
 5. Dealers/Channel partners - These are an integral part of the organization and culture shift is not possible without including these groups. A roadmap should be defined for these as well because being agile will also transform the delivery pattern and supply chain.
 6. Customers – Ultimately customers are the person who is paying and end point in the chain of using services and product. This depends upon the industry to industry, like in Colgate it may not matter for the customers about the culture of the organization as they are buying from channel partner still feedback loop can help. But the organization like Boing, it will be helpful as the customer is closely involved during the integration journey.

Roadmap at a Glance

Most of the time people agree with the concept of Agile be implementation has its own challenges like and the biggest issue is the mindset. Although SAgile and few other frameworks have already defined the roadmap which looks easy to implement. Following image is taken from <https://www.scaledagileframework.com> which describes how to implement Agile within the organization.

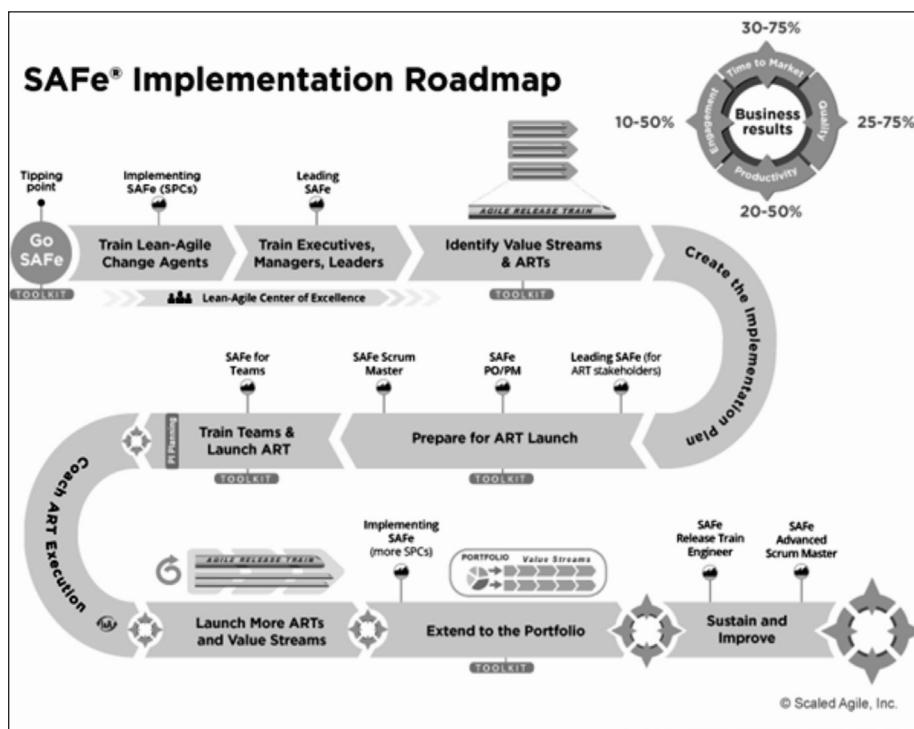


Figure 2: Implementation Roadmap

As these are widely discussed topic and Image is self-explanatory, details about the steps are not covered. It suggests a balanced approach for the top to bottom of the organization.

Other Aspects to be Taken Care

There are few other important which are mandatory to implement Agile in culture to get it completed within the organization

1. Digital transformation
2. Identify right tools to set up the process
3. MIS Process should be defined by the tools suggested in point two only
4. Lean budgeting
5. Change project management mythology from waterfall or hybrid to Agile (SCRUM, XP, Kanban)
6. Communication process
7. System thinking

Conclusion

To conclude, we can say the journey towards implementation starts from mindset shift to culture shift. It involves all the layers in the organization including vendors, suppliers, and customers. Furthermore, using the right tools in place is necessary with transforming digitally and improving processes.

References

- <https://www.scaledagileframework.com>
- <http://agilemanifesto.org>
- Gunasekaran, A. (1999). Agile manufacturing: A framework for research and development. *International Journal of Production Economics*, 62 (1–2) 87-105.