Idea as a Project – Incremental Innovation on Agile Platform

Sub-Theme: Project Management Leadership > In Rapidly Changing World

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ABSTRACT

Today competitive global market is driven by technology and business intelligence which together ensures best in class business solutions and service delivery. Today IT companies are facing empirical challenges to sustain in the rapidly changing business environment and therefore they have incubated innovation labs for fostering innovative ideas having potential to disrupt the market completion by transforming the trends of project and service delivery. Idea as a Project (IAAP) is one of the unique and flagship frameworks which advocates how ideation can be stimulated to induce incremental innovation which further can bring a radical innovation over an agile platform which is holistically wrapped within IAAP framework.

IAAP allows ideations to be compartmentalized under various sections, like Automation, Robotics, AI, and Process Optimization (Lean Six Sigma) which ultimately helps to attain service and project delivery excellence. IAAP framework strategically demonstrates solution maturity level on a cognitive delivery model. IAAP defines a complete Innovation cycle from Ideation to Implementation to Innovation to Improvement realization, ROI.

IAAP stimulates momentum to bring agility on every autonomous implemented idea which further clubbed together based on symmetric behavioral pattern and business needs customization to formalize a radical innovation thus continuing the ideation & innovation cycle.

Designed over agile platform every single idea is considered as business-case project. Idea submitter implements the idea wherein he figures out task items (story boards) and prepares development plan under every task item, called story point ascertaining milestone.

IAAP is an indispensable framework which shows complete analytical figure to the company demonstrating its innovation capability and maturity level.

INTENT

Fundamental objective behind **Idea as a Project (IAAP)** is to address today's global challenge of instantly changing business environment and technology eco-system. Clients are expecting high-end technology solutions with low investment while IT industries are committed to provide their best solution adopting robotics, process automation, Artificial Intelligence, etc. However, innovation remains a challenge.

IAAP framework ensures continual innovation by idea incubation and transformation. IAAP allows ideations to be compartmentalized under various categories, like Automation, Robotics, AI, and Process Optimization which ultimately helps to attain service and project delivery excellence.

IAAP framework holistically demonstrates solution maturity levels on a cognitive delivery model. IAAP defines complete Innovation life cycle from Ideation to Implementation to Innovation. Complete idea life cycle has been developed over customized agile framework which lays foundation for nano-innovation. Every autonomous implemented idea can be clubbed together based on symmetric behavioral patterns and business needs customization to achieve radical innovation.

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1. INTRODUCTION

Today when the global business is driven by cutting edge technologies and solutions, innovation has become an indispensable need of the hour. Innovation is an art to scientifically transform an idea to a live innovation. IAAP is a holistic framework developed over agile project management suite, which ensures every SMART Innovative idea should go through a cohesive idea life cycle, wherein an idea is first compartmentalized within different categories like: Automation, Robotics, Artificial Intelligence, and Process Optimization.

While initiating the life cycle, original idea is decomposed into various manageable meaningful sub-ideas or sub-activities, which are individually developed in parallel to form nano-innovations and can be used as an API for cross-functional task orchestration or as communication transponder in a hybrid solution model. When individual units are developed then they again clubbed together transform the idea into an innovation.

Ultimate objective of IAAP is to attain service and project delivery excellence by laying a foundation for nano-innovation which enables clubbing of autonomous implemented ideas together based on symmetric behavioral patterns and business needs customization to achieve a radical innovation. Nano-Innovation is a flagship concept of IAAP.

This is important for the implementer to understand that the idea should have specific and measurable goal, can be attainable, should be realistic, and must have definite timeline for every individual task associated as part of the original idea.

IAAP quantifies maturity level of a solution based on logical metrics and thus signifies solution efficiency, productivity, agility, reusability, scalability, cost benefits, flexibility of customization, etc. based on cognitive delivery model, which together helps clients to assess their ROI for the given or intended technology solution. Hence IAAP gives a complete analytical figure to the company demonstrating its innovation capability and overall maturity level.

Gamification is one of the key components in IAAP framework to give an implementer a real-time excitement to strategize the solutions to bag maximum innovation points.

Symmetric behavioral pattern analytics and business needs customization assessment are two major components of IAAP framework, which enables cross-functional innovation to attain either incremental or radical innovation.

2. COST CUTTING AT THE COST OF TECHNOLOGY INNOVATION – A CASE STUDY

Today cost cutting and optimize cost to serve have become key objectives in almost every ITES organization. To improve CSI (Client Satisfaction Index) metric, many big IT giants have come up with an annual target to cut down approximately 15% of total FTEs and aiming to increase 15%-25% productivity. This has created a rift in the delivery units because of the contradictory annual targets. One of the global IT consultancy and solution firms had faced a lot of challenges due to increasing client expectations in the competitive market and a pressure for cost cut-down. Overall annual profitability of the company in the past 3 years has dipped drastically by 20%-25%. The company has also faced sudden termination of business contracts from various clients unexpectedly. The firm had age old technology competitiveness and large gamut of employee base across the globe but what went wrong! Probably correct technology solution and cost optimization were the bottle neck which have made the company to face a loss of millions of dollars.

To maintain the profitability and business continuity, firm has also outsourced some of the delivery operations to the third party in accordance with the clients' agreement, however this also didn't go well due to lack of technology expertise and under skilled resources at the vendor's end, which ultimately impacted the overall delivery quality.

Ultimately, the fact was that the innovation which was demanded by the clients and the firm had challenge to adopt accurate tools and techniques to incorporate innovation in the delivery system. Despite of several initial attempts firm could not make a remarkable success due to missing holistic framework and challenges accommodate client's requirements in the limited period. Fundamental automation was adopted however the organization couldn't create an automation framework which could not only enhance the productivity but also cut down the operational cost.

3. KEY CHALLENGES

Innovation is an art to visualize a problem more holistically and technically to formalize a concept and then plan its implementation. Unlike technology, innovation is not a readymade product or solution rather it requires a visionary outlook, time, and continuous strategic effort to foster an idea to yield a pathbreaking solution. In the above case study, although the organization realized the need of the hour but failed to device a framework which can create a complete development and execution plan of an idea from the inception till its closure and deployment in production.

In a broad sense, we can list down below key challenges with respect to the above case study:

- ✓ Lack of futuristic vision
- ✓ No structured channel designed for ideas submission for idea segregation, discovery, assessment, implementation, testing, and deployment
- ✓ Least concern for innovation and more focus on traditional delivery approach
- ✓ Lack of insight for innovation tools and techniques
- ✓ Lack of holistic approach for idea development and implementation plan
- ✓ No metrics defined to measure Innovation maturity level
- ✓ No proper project plan for innovative ideas resulting them to either become orphan or undeveloped idea
- ✓ Lack of expert groups to assess the ideas and mentor the implementer to implement the idea
- ✓ No structured process defined to monitor idea life cycle
- ✓ No business case prepared to sell the idea and innovation to the clients
- ✓ No specific compartmentalization of an idea resulting to unplanned innovation and no or less test cases
- ✓ Limited test cases to check the reliability, customization capability, reusability, scalability of an innovation
- ✓ No process developed for symmetric behavioral pattern analytics and business needs customization assessment which further could pave a way forward for scalability, reusability, and customization

4. METHODOLOGY/PROCESS FOLLOWED

In the above case study, we have observed a technical gap which restrain the organization to meet its target. This gap has emerged due to lack of proactive initiatives towards innovation and idea implementation.

In a common language, an idea can be a suggestion but here it is more about an out of the box thought, an innovative and visionary idea irrespective of how much big or small it is. Only tool that we need is a holistic framework which can ascertain the execution of an idea till its closure adhering complete project management principles fabricated over agile methodology.

From the above case study, we can figure out 8 major roadblocks:

1. Lack of visionary approach
2. More focused onto traditional delivery models
3. Doesn't have well planned innovation lab and a framework to capture ideas to execute them through a cohesive workflow
4. No ready to use customizable re-usable solutions and components to cater instant business and clients' needs
5. No predictive requirement delivery practices which works upon complex algorithms like Symmetric behavioral pattern analytics and Nano-Innovation component DNA fusion
6. No metrics defined to quantify maturity levels of solution and service delivery, which ultimately impacted overall CSI
7. No or very thin CoE and TEG units responsible for Innovation and Automation promotion and research
8. No adequate proactive market research done to forecast future technology needs

Perhaps all or most of the above factors contributed in the downfall of the revenue of the organization.

IAAP framework, on the other hand, could have played a vital role to deal with the above scenario:

- ✓ IAAP is an independent framework and can be applied with any process or technology even in market research

- ✓ IAAP is well defined framework which gathers ideas and performs idea discovery which are validated by the designated subject matter experts at various levels and following to that, post approval, idea is sent for implementation
- ✓ Every such idea is considered as an independent project and all PM principles are applied on it to ascertain successful timely implementation
- ✓ Every idea is decomposed into various tasks and sub-tasks following Agile principles, hence every release contributes to a Nano-innovation component (NIC)
- ✓ NICs are loosely coupled components which can be plugged with other components based on Symmetric behavioral pattern analytics to pave a way forward for incremental and radical innovation
- ✓ Every such innovation contributes to automation and process optimization, which further helps to assess maturity level of every workstream contributing to delivery excellence and continual agility
- ✓ IAAP enables KDB to maintain Innovation tools and techniques which can be re-used, customized, and re-updated post idea implementation
- ✓ Every innovation release goes through rigorous testing enhancing quality and robustness of the solution
- ✓ Enablement of Integrated ***Project Management System (IPMS)*** tool helps an implementer to plan and execute the idea giving 360-degree view to every stakeholder
- ✓ Overall IAAP is an indispensable framework which shows complete analytical figure to the company demonstrating its innovation capability and maturity level.

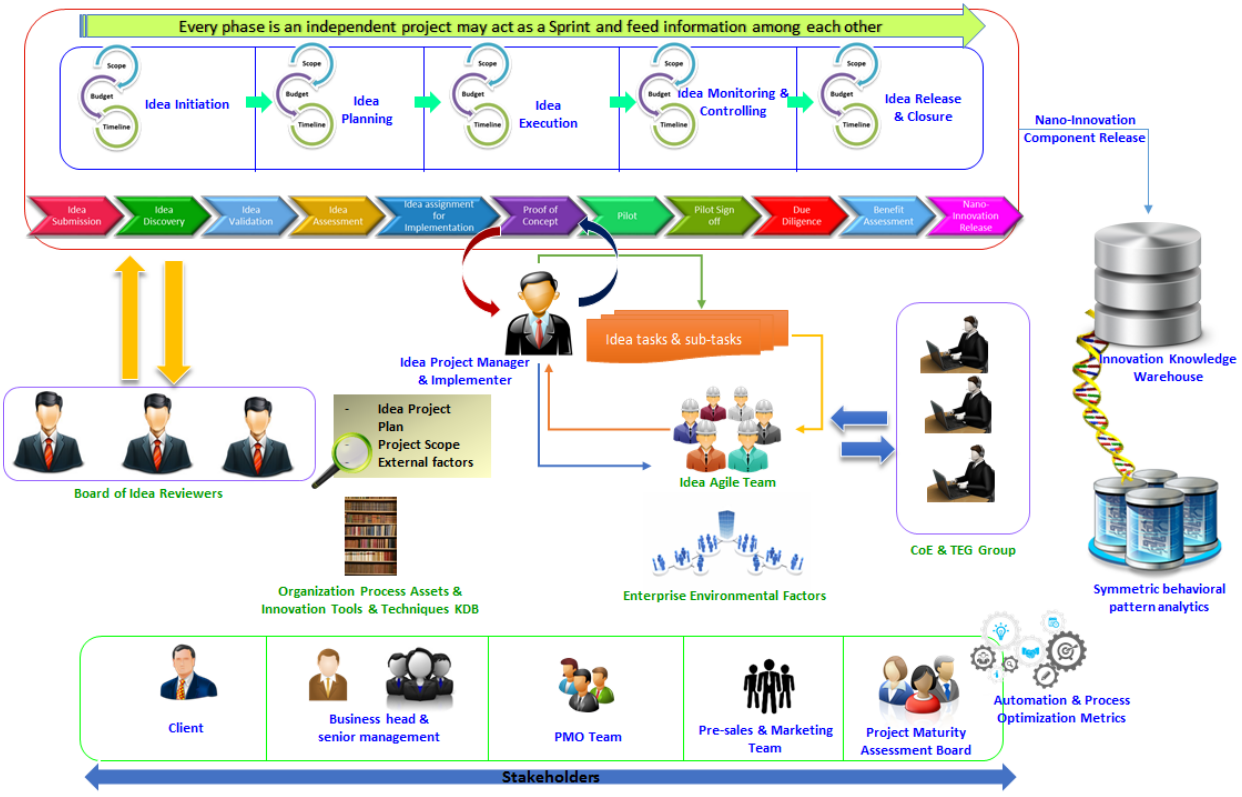

Fig 6.1: Here the complete IAAP framework is depicted in a pictorial form wherein the Idea implementer acts as a project manager responsible for idea planning, identifying tasks and sub-tasks and forming a cloud agile team to implement the complete idea.

Complete idea life cycle follows agile framework and every release contributes to an autonomous nano-innovation component which is captured into Innovation Knowledge Warehouse (IKW) and on that Symmetric Behavioral Pattern Analytics is applied to identify components which can be fused with other components or solutions to bring incremental or radical innovation.

5. CRITICAL SUCCESS FACTOR

- ✓ Organization's visionary approach for Innovation & Automation
- ✓ Well defined guidelines depicting tools and techniques for Innovation
- ✓ An idea must follow certain stringent protocols:
    - Specific to its goal
    - Outcome must be quantified
    - Must be achievable within given timeline
    - Should be realistic and not hypothetical
- ✓ Every validated idea, should be considered as a project and a team must be identified before initiating idea development
- ✓ Idea must be well decomposed into sub-activities to get fabricated into agile framework as story points and thus can be managed and developed independently having definite timeline for each
- ✓ Every such story point must be assigned to an individual team member (in case of a team) otherwise the idea implementer must assign the activities to himself along with definite timeline
- ✓ Maturity level is assessed based on pre-defined assessment metrics against every workstream post idea implementation which stimulates gamification
- ✓ Maturity level scale ranges from level 1 to level 5 against every workstream which together when combined confirms the overall maturity level of a deal:
    - Maturity Level 1 - Foundation
    - Maturity Level 2 – Optimized
    - Maturity Level 3 – Accelerated
    - Maturity Level 4 – Intelligent
    - Maturity Level 5 – Legend
- ✓ Well planned lab comprised of Centre of Excellence and Technology Excellence Group to support innovation and automation with tools and technologies
- ✓ Adoption of a holistic framework, IAAP, which ascertains complete idea lifecycle and development workflow from inception to closure
- ✓ Symmetric behavioral pattern analytics to match and create business rule metaphor for quick plugin with other middleware interfaces or nano-innovation objects for scalability and reusability
- ✓ Well defined signed off idea project plan along with the tasks and associated sub-tasks to enable phase-wise release, called as nano-innovation
- ✓ Close vigilance during project management life cycle until the final release
- ✓ Vigorous communication protocol with the key stakeholders for closely tracking the idea progress
- ✓ Well defined risk mitigation plan along with detailed test plan for each module to ensure quality

6. QUANTIFIED BENEFITS TO BUSINESS

- ✓ Competitive edge in the global business and technology environment
- ✓ Continuous acceleration in terms of innovation and automation assigns a new rank to the organization as against its competitors
- ✓ IAAP is a completely novel framework designed over agile framework ensuring a complete lifecycle workflow for an idea initiation to its delivery and closure defining a modern approach of project management unlike traditional manner
- ✓ Nano-innovation is the flagship initiative which acts as Intelligent bots and can be used as an autonomous component as well as plug-in components cross-technology and cross-application plugins
- ✓ Symmetric behavioral pattern analytics is a predictive analytical tool which can interpret how and what nano-components can be used to ascertain reusability, scalability, and availability
- ✓ Unlike traditional approach of application development and delivery, this is overall a new mechanism which stimulates a real-time gamified environment around
- ✓ Cutting edge innovation and automation would reduce operational cost and for some extent capital cost as well, thus induces business growth and improved ROI and KPI
- ✓ Reusable nano-components will form a complete new set of cloud infrastructure wherein they can be used as a service opening a new avenue for business growth and technology expansion
- ✓ Nano-innovation components can further contribute for the development of Internet of Things (IoT) giving completely a new dimension to the Information Technology
- ✓ Assessment matrices lays foundation to measure and enhance maturity level of various applications and processes within respective workstreams
- ✓ IAAP framework can be used in every organization irrespective of its of line of business, however highly recommendable for IT product companies, ITES, BPO/KPO, etc.
- ✓ As IAAP life cycle has a stringent workflow having automated testing modules with several test cases, therefore the product is bound to be secured and best of its quality
- ✓ Forecasting risk and preparing mitigation plan becomes easy as multiple units are logically working together for a bigger goal and at the same time every component released is loosely coupled enabling a platform for nano-innovation
- ✓ Symmetric behavioral pattern analytics also enables roadmap for radical innovation as multiple hybrid sub-components can be fabricated together to cultivate roadmap for pathbreaking innovation
- ✓ It also opens a corridor for industry-academic research consortium (IARC) for strategic innovation programme giving a new social avenue and branding to the organization

7. LESSONS LEARNT

- ✓ Innovation and automation are the need of the hour to become a leader in the global business and technology ecosystem
- ✓ With the advent of Innovation and automation organization can serve best-in-class services and solutions with cost cutting by reducing FTEs and earning more revenue growth in terms of improved ROI and KPI
- ✓ Client satisfaction index (CSI) would also increase
- ✓ To incubate innovation, there should be a holistic framework which ensures a complete development life cycle of innovation from idea inception to its delivery and closure
- ✓ Every idea should have specific goal, quantified result, must be feasible to implement, should be realistic and not hypothetical, and most importantly time-bound otherwise it could be a complete failure
- ✓ Every validated idea should be converted to a project defining activities within all the five phases Initiation, Planning, Execution, Controlling & Monitoring, and Closure
- ✓ As the IAAP framework is developed over Agile model, hence all the identified activities are considered as story boards and every sub-activity is termed as story-point
- ✓ A complete test plan and risk mitigation plan is needed to ensure quality release
- ✓ Every independent release has certain quantum of innovation imbibed which can be used as a pluggable component with other interfaces, thus these are called nano-innovation component
- ✓ Symmetric behavioral pattern analytics is a complex algorithm which senses how and what all nano-components plugged in with other interfaces and components in a heterogeneous solution architecture
- ✓ Maturity level assessment is an integral part of innovation and automation to ascertain how much an application or a process has gained improvement and maturity within a workstream
- ✓ To ensure a good quality of innovation, it is needed to setup a center of excellence and technology excellence group and thus developing new sets of innovation tools and techniques
- ✓ As it opens a new corridor for academic and industry interaction for research therefore it is serving the society by giving a platform for innovation to the new education system
- ✓ In the competitive edge, it is important to have effective and impressive business cases by showcasing innovation portfolio for long term client engagement and business growth

8. CONCLUSION

In the global market when technology is playing a vital role to disrupt the business environment more and more competitive, it has become important to strategize how to be a first mover by exploiting technologies to foster Innovation.

Today IT companies are facing empirical challenges to sustain in the rapidly changing business environment and therefore they are planning to incubate innovation labs for fostering innovative ideas having potential to disrupt the market completion by transforming the trends of project and service delivery. Idea as a Project (IAAP) is an endeavor in the field of innovation having a holistic framework inheriting the agile delivery model at the core to design idea lifecycle and workflow modules. Every release is loosely coupled component and is termed as nano-innovation component ensuring its ability to fuse with other components or interfaces just as an API. It also paves a way forward for radical innovation.

IAAP allows ideations to be compartmentalized under various sections, like Automation, Robotics, AI, and Process Optimization (Lean Six Sigma) which ultimately helps to attain service and project delivery excellence within several workstream. IAAP framework strategically demonstrates solution maturity level on a cognitive delivery model.

IAAP stimulates momentum to bring agility on every autonomous implemented idea which can further be clubbed together based on symmetric behavioral pattern and business needs customization to formalize a radical innovation thus continuing the ideation & innovation cycle.

IAAP has a potential future in terms of its capability and scalability to transform an idea to an innovation and assessing the maturity level of the application and processes and thus showing proactive and predictive steps to attain next maturity level.

As far as monetary benefit is concerned, innovation certainly brings more business thus induces business and revenue growth and due to automation, it slash-downs operational cost thus improves ROI and CSI.

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