



**BHADALE GROUP OF COMPANIES
- IT AND REAL ESTATE**



Jun 23 2020

Agri Products details

Level 2- DRAFT

Bhadale IT Developers Pvt. Ltd | Bhadale Real Estate Developers Pvt. Ltd (registration due)

Plot No. 52, Hindwadi, Belgaum, KA, India | Mobile: +91- 9741040195 | Website: TBD

Bhadale Group of Companies

Bhadale Group of Companies consists of Bhadale IT Developers Pvt. Ltd and Bhadale Real Estate Developers Pvt Ltd.

1. **Bhadale IT Developers Pvt. Ltd** is an IT and Computer Engineering company

This company provides consultation in areas of cutting edge technologies, research outsourcing, and software consultation related to data center and related engineering practices

2. **Bhadale Real Estate Developers Pvt. Ltd** is a Real estate company

This company provides development of Infrastructure for IT Datacenter and allied sectors. It manages the engineering design, landscaping, civil architecture, presently serving internal projects.

Bhadale Group of Companies has aggressive programs in place to serve the niche market.

Bhadale Group Business Division, Agri Products department

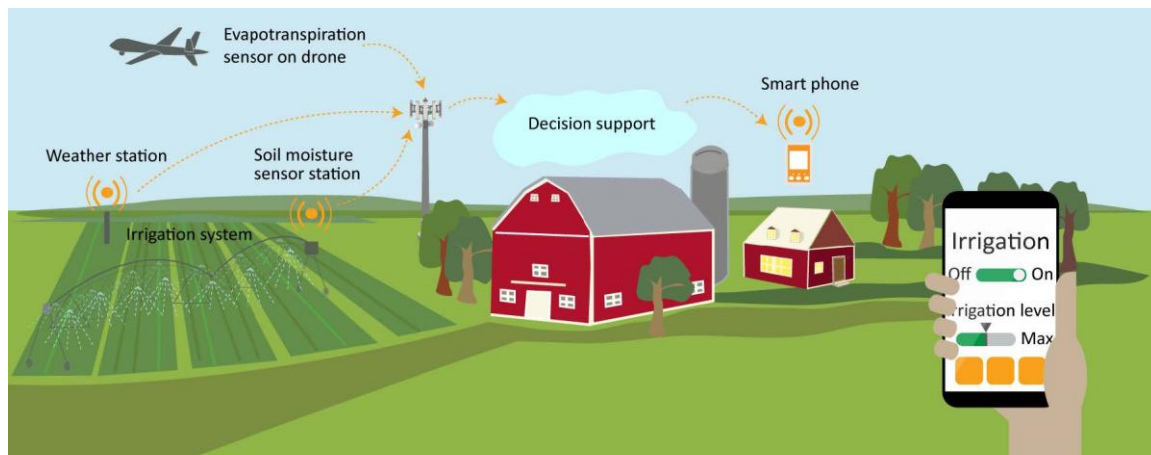
Agriculture department hosts various products leveraging upon latest emerging technologies. Most of our products have got a matured approach that offer full benefits and ever growth potential to the consumers. We offer scientific ways of solving the pain points of farmers, research clinical trials and allied industries that enable faster, easier and economical ways of managing the farming industry across major downstream, mid stream and upstream business units. We offer value added products that enable various players like farmers, scientist, trainer, climate, distributor and seller to get the best value from this market segment and make better profits with help of AI, automation and engineering systems that enable the user to lift heavy tasks with ease.

Below are our products in summary (Level 1)

1. **Climate aid:** Use of weather patterns to forecast weather for farmers
2. **Precision agriculture/satellite farming aids**
 - a. **Precision agriculture (PA), satellite farming or site specific crop management (SSCM)** is a farming management concept based on observing, measuring and responding to inter and intra-field variability in crops. The goal of precision agriculture research is to define a decision support system (DSS) for whole farm management with the goal of optimizing returns on inputs while preserving resources
3. **Agricultural tube farming aids:** Thousands of 100-mile-long robotically managed closed-environment agricultural tubes, interspersed with photovoltaic strips

Details of Level 2 for the above are put in the table below

Product details (Level 2)



Source: GAO. | GAO-20-128SP

Image courtesy (The Web), no intention for copyright infringement

We have a large set of offerings at Level 2; few key ones are mentioned below.

As shown, company's vision as we have catalogued as Level 1 document is the first step. After this we need to define mission, objectives and strategies that enable a common high level framework for key portfolios to be developed, that enable requirements being generated to fulfill the vision. PMI offers Organizational context for portfolio management as below

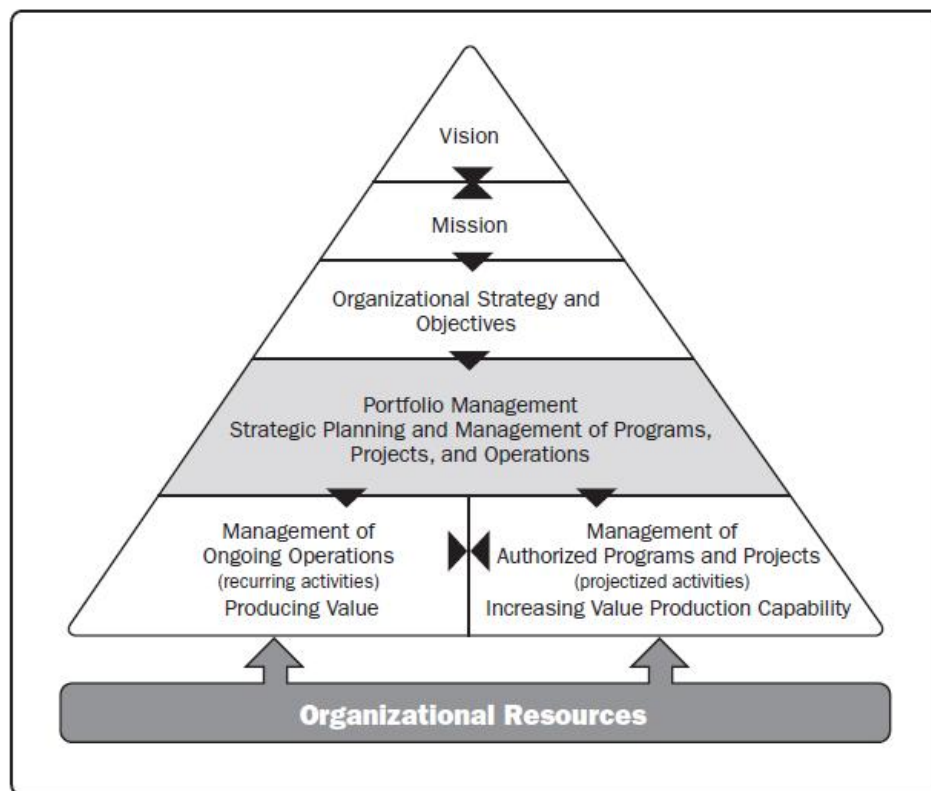


Image courtesy: PMI

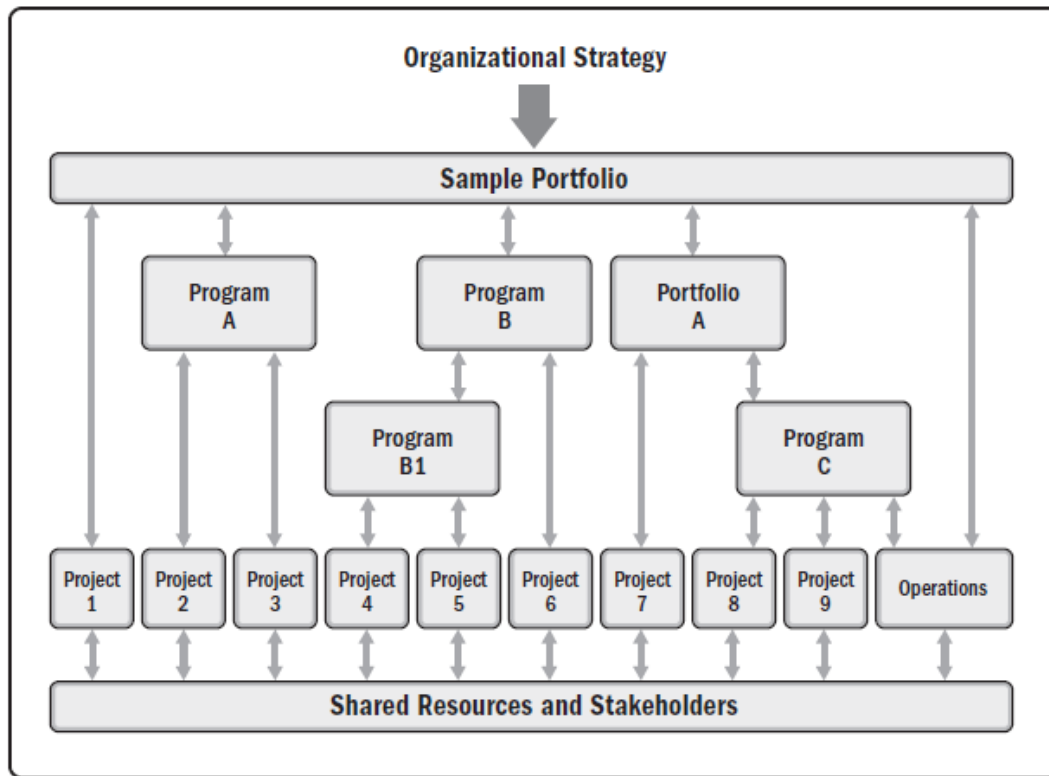


Image courtesy: PMI

Based on PMI's sample portfolio, we plan to structure our programs and projects. Another way to look at the same theme

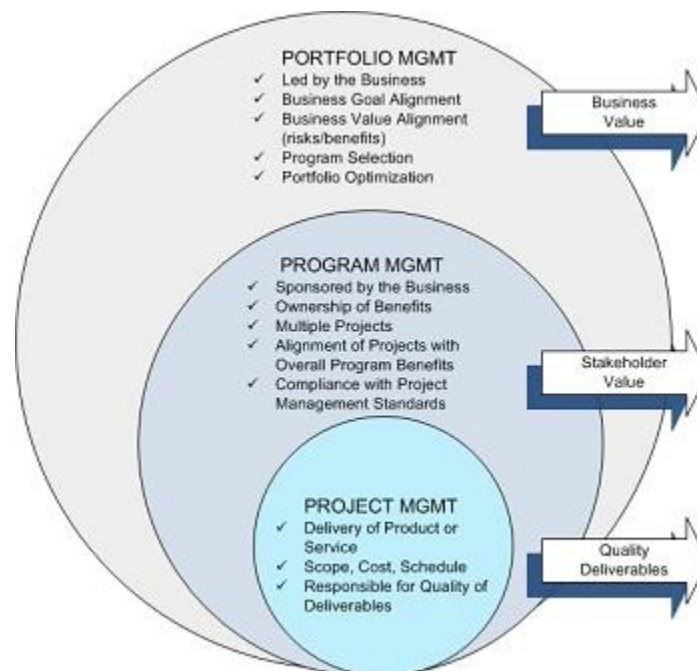


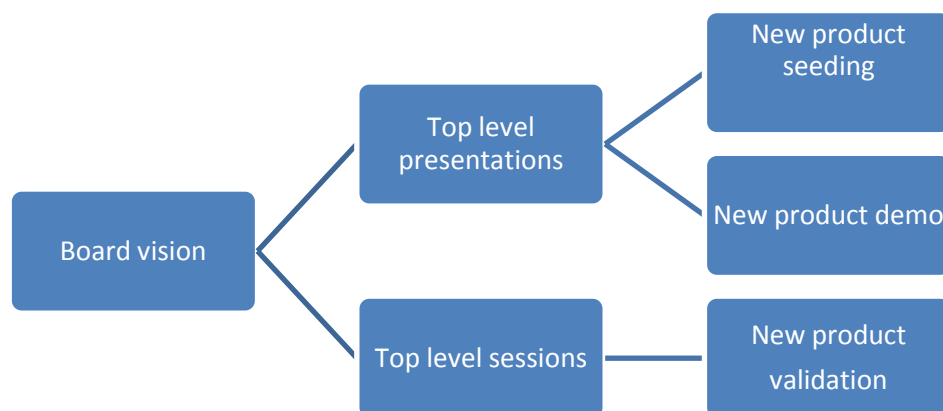
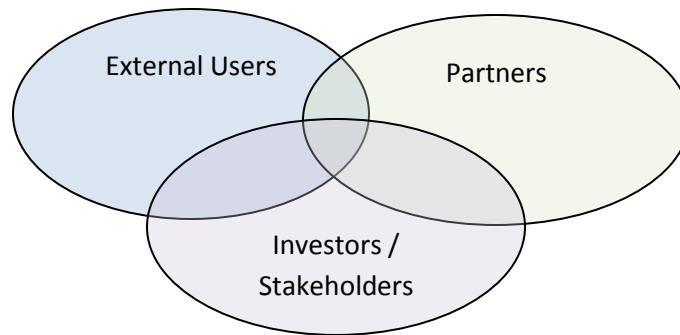
Image courtesy: Projection

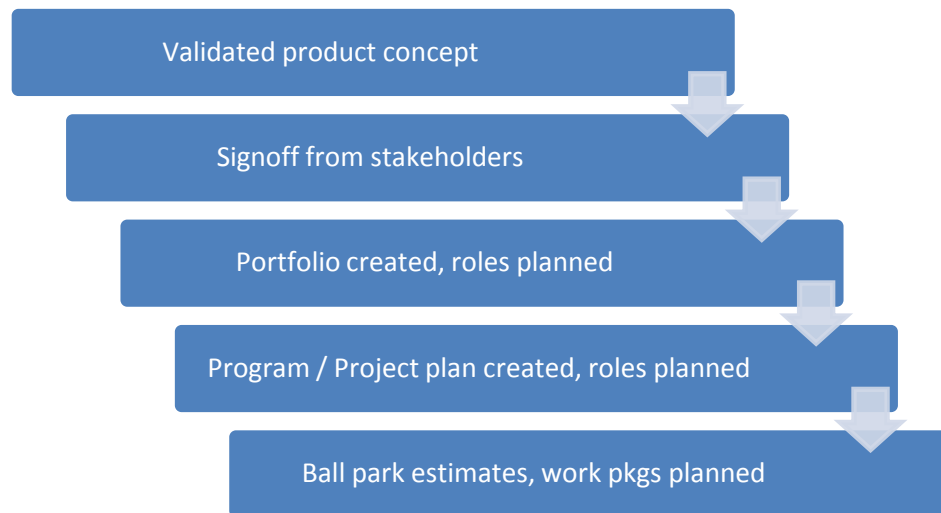
Based on the guidelines, we offer below high level frameworks that enable to address the business vision.

1. Common framework to transform product catalogue vision to Agricultural portfolio, high level program requirements, projects

- a. Enterprise Framework that allows easier product design, development and implementation based on client needs. This framework is closely related to external users, business teams, partners, auditors, Govt agencies and investors. Top level meetings, presentations happen using this framework. This is not the framework that supports technical stuff. Better to keep it simple and operate. Innovations for newer products are brainstormed here with stakeholders, investors, market clients. World bodies programs like SDG, UN 2030 agenda and others become part of this framework
- b. Once there is an approval, sign off with new product, there is a need to design the portfolio of programs, projects and shared services
- c. Using the above framework, we then design the requirements, work breakdowns, work packages, ball park estimates and processes

Section Details

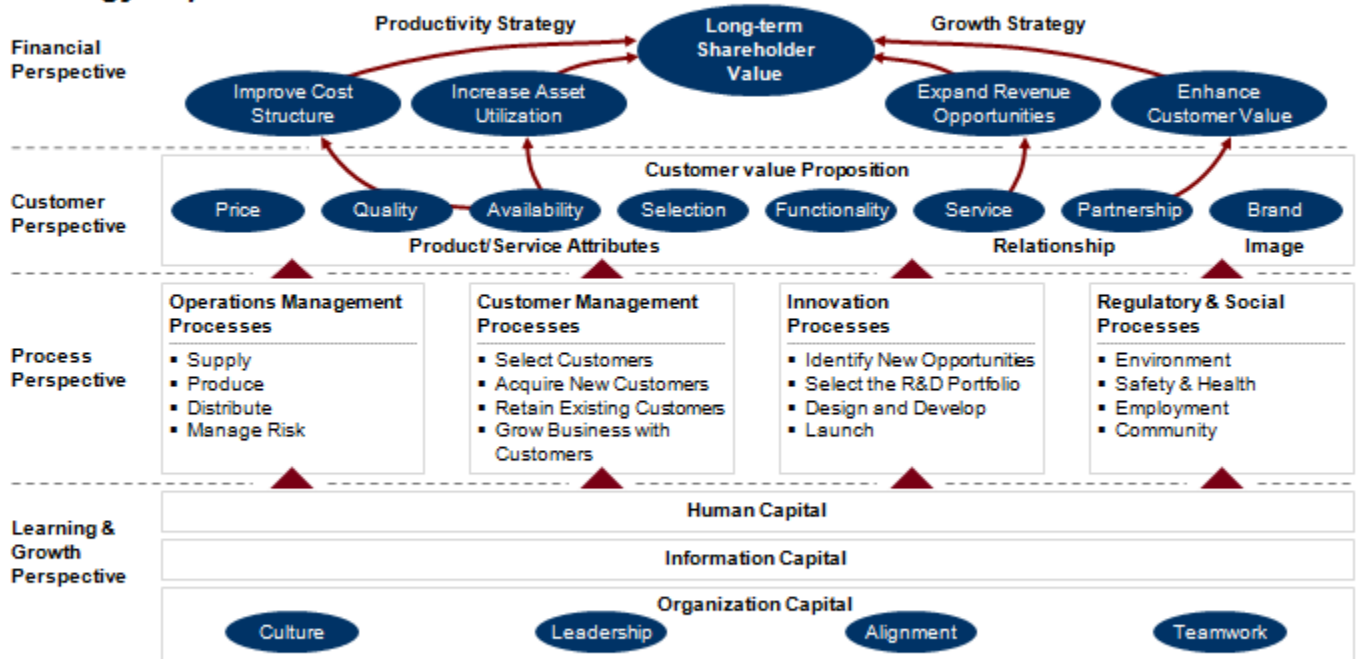




To ensure proper mapping of our vision to our strategy we adopt below map

Bhadale IT : Vision mapping to strategy

Strategy Map



Source material: Strategy Map

<https://flevy.com/browse/flevypro/strategy-map-2488>

2. Enterprise transformation processes (new or realign existing ones)

- Using the earlier high level definitions, we then elaborate these into the hi level processes at an enterprise level

Section Details

This is a part of change management strategy, be it a new venture or modifying existing system.

<https://www.bptrends.com/the-enterprise-transformation-architecture-eta/>

As we are a new venture, we will use a simplified transformation with new idea only. Once the high level portfolio has been approved to deliver value to customers using newer innovative product, we bring that to the floor for implementation.

Bhadale IT: Transformational KPI

4 Problems in Reorganizations

1	CUSTOMER VALUE PROPOSITION	The new organization must have a clearly defined and compelling Customer Value Proposition—one that is recognized by its customers. Otherwise, the organization will be a target for any future consolidation. It will also struggle to justify its budget within the broader organization
2	ROLES AND GOALS	After a reorganization, it often becomes unclear what each group is responsible for. Likewise, it is unclear how the new business units align and their individual goals are. Until roles and goals for each group are clearly defined, duplication of effort and initiatives will occur, causing inefficiencies and be a potential source of political conflict
3	OPERATING MODEL	A reorganization may cause the Operating Model to become dysfunctional. The decision-making process is uncertain, resulting in too many meetings with the incorrect stakeholders involved and the lines of communication are incorrectly defined. This leads to frustration within the company and frustration with dealing with the newly reorganized company from those outside the organization
4	EMPLOYEE VALUE EXCHANGE	Having an uncertain Employee Value Exchange negatively affects the organization from resulting behavior from both top and low performers. The top performers may look for new jobs, since they feel the required level of performance and rewards process are unclear. The low performers are easily hidden and protected in such an organization

Source material: Reorganization – New Organization Effectiveness

<https://flevy.com/browse/flevypro/reorganization-new-organization-effectiveness-2700>

Using the key elements related to transformation, we find 4 items that need absolute attention. These are shown in the diagram.

Based on the change management policy, a plan is designed (refer Smart sheet) that ensures the proposed plan is visible and communicated to all stakeholders.

<https://www.smartsheet.com/free-change-management-templates>

At portfolio level, the new product is offered PMI based life cycle management. At program /project level the components, are designed that ensures projects get ready for implementing the new product. Portfolio + Program+ project charters are designed, reviewed and approvals obtained from higher management

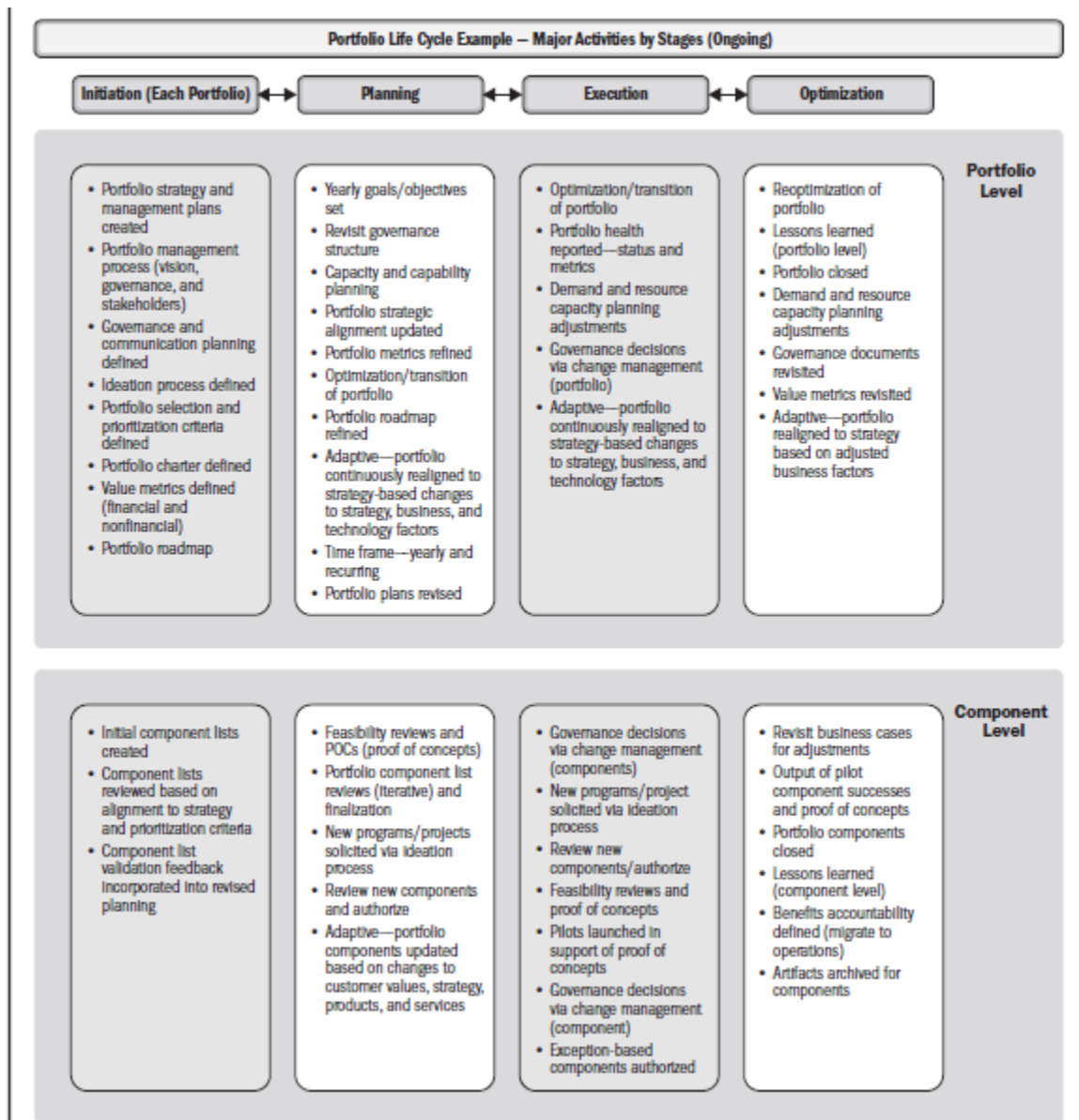


Image courtesy: PMI (to be tailor made)

The transformation request (engineering request) for new product, newer change request, and gap fitment triggers the change process. This brings in engaging newer roles like Program and Project Manager. For smaller projects, these two roles can be managed by one resource. Based on this the roles then engage with required tools, metrics, delivery processes, engineering the product for given opportunity, capability, features and performance. All features as specified by PMI are leveraged to ensure proper tracking of work completion, resource engagement, and request for experts if required.

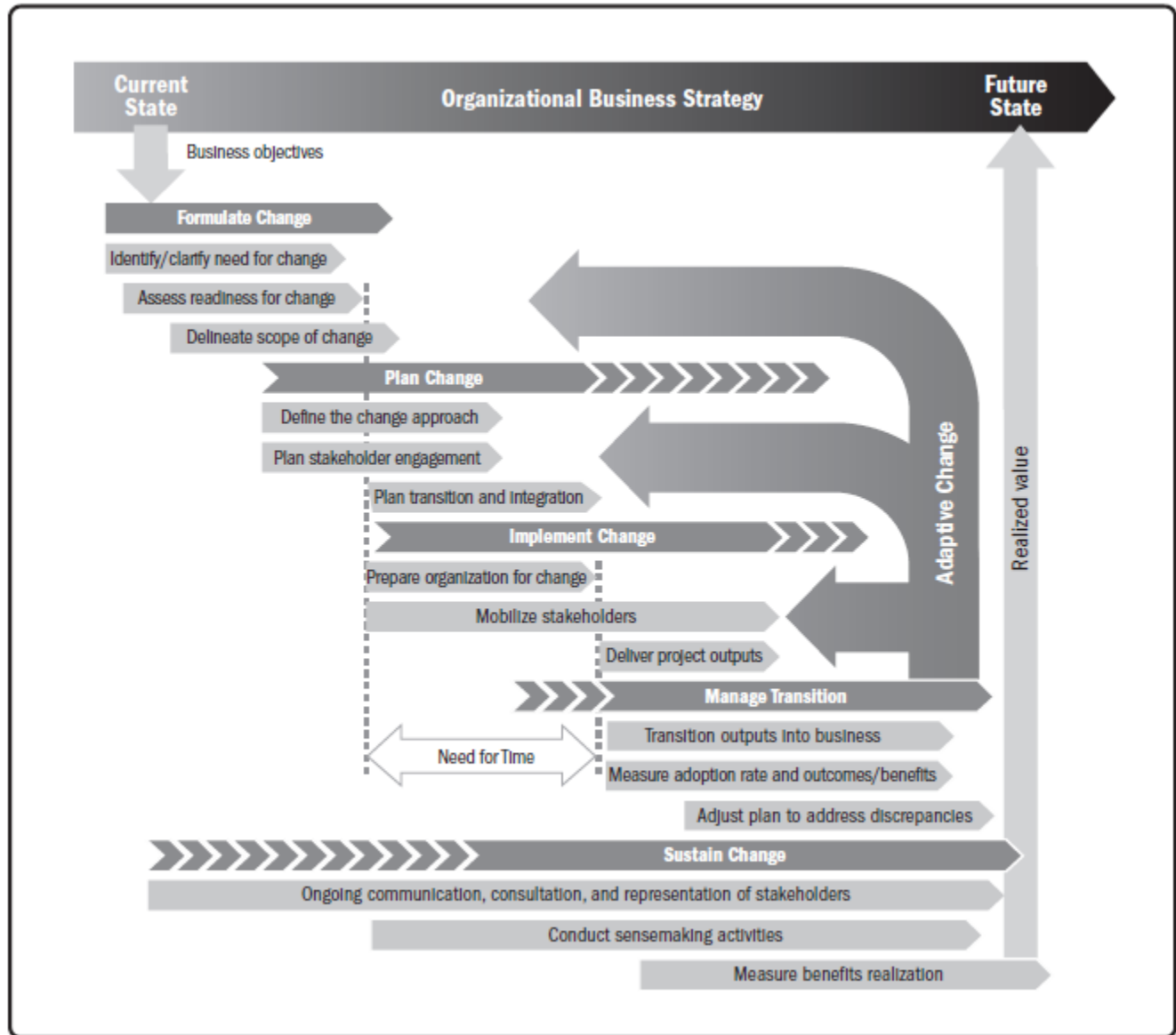


Image source: PMI

Change management as per PMI is being followed to ensure, we are in line to industry standards. Above steps will be followed to get the business transformation (new or existing) transit properly with well qualified staff.

3. Enterprise frameworks that are leveraged

- Frameworks that match our processes, and requirements are selected or home grown to meet our needs

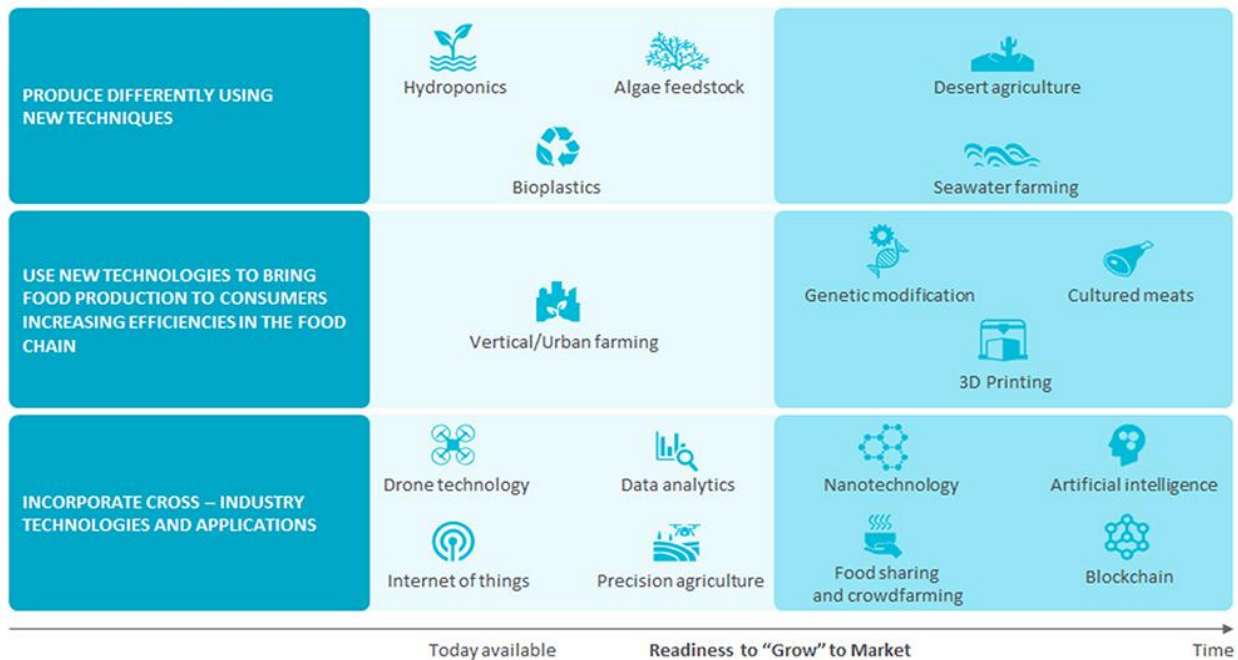
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Upon request, PM selects the right domain frameworks, libraries, tools, assets, server configuration, develops, Devops framework, project templates, managerial templates, process templates, methodologies, partner resources that enables the project is initiated with all the required features and minimum risks.

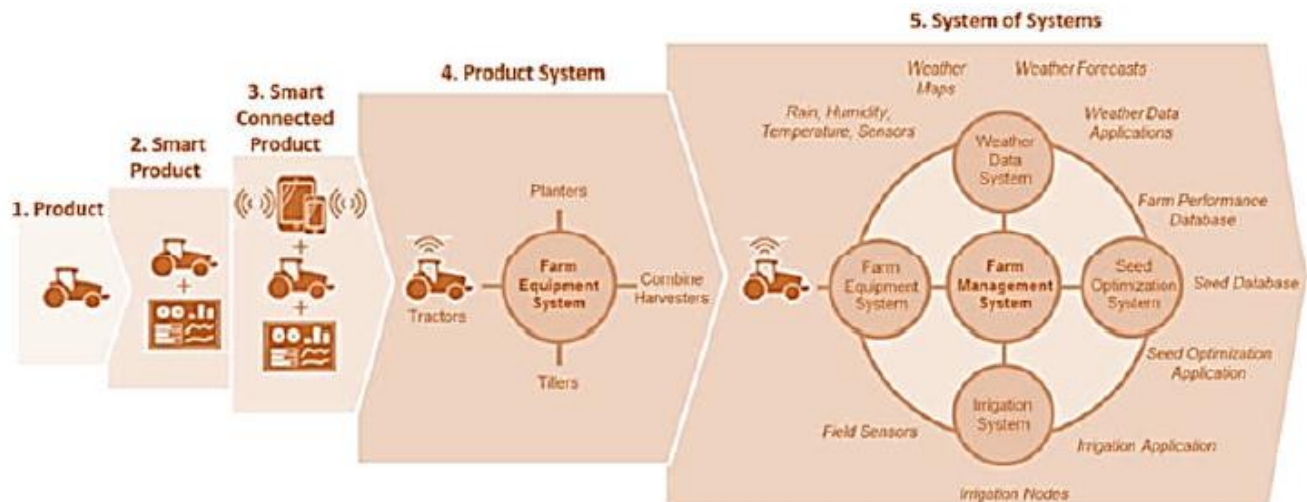
As of writing we have only paper level forms, templates and no digital version of ERP. We plan to start with paper forms, later on adopt suitable digital forms

Here existing agriculture related frameworks are leveraged. We pick few thoughts from Agriculture 4.0, that enable us to see beyond the maturing areas. This helps us to develop product features that work well beyond today

Map of technologies and maturity



Source: Oliver-Wyman-Agriculture-4.0



Source: Processes 2019, 7, 36; doi: 10.3390/pr7010036. Revolution 4.0: Industry vs. Agriculture in a Future Development for SMEs

4. Capabilities development

- Once the high level work has been completed at portfolio and program level, project level capabilities like quality processes, PM tools, resources, merit based staff all are identified that enable better visualization of enterprise visions. ISO, CMMI, ITIL are great tools to develop capabilities

Section Details

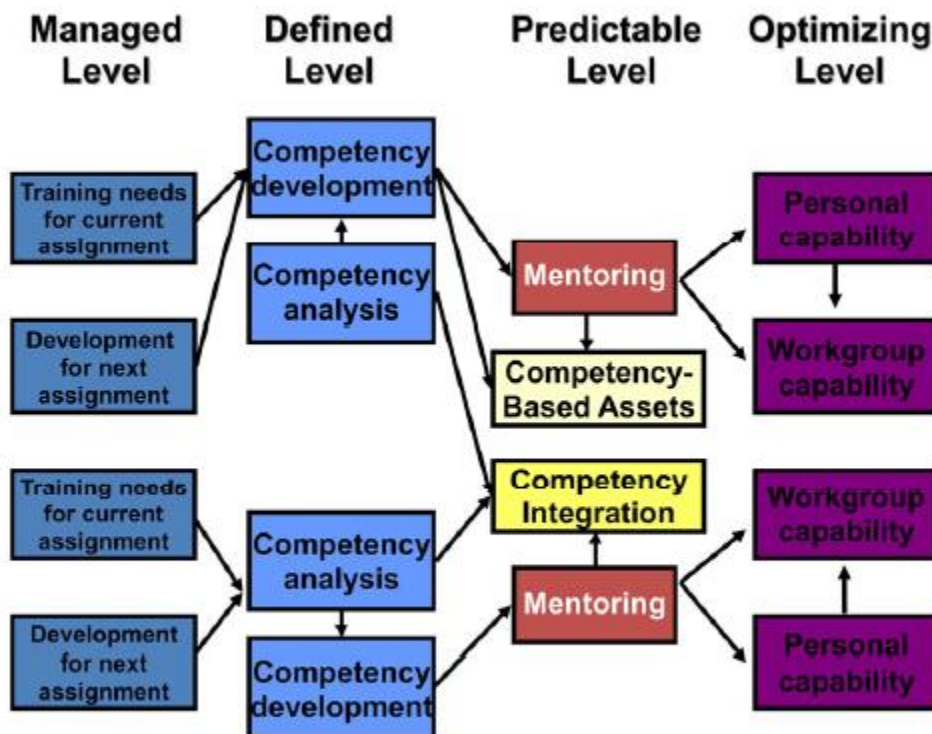
This area is a long term goal, and leverages various standards, capability models, internal trainings to ensure all assets are really capable, unlike various firms that have either great tools or staff, however many firm do not have both due to various socio-economic factors, human bias, bad culture, improper hiring practices. This area is something rare to have as really capable staff do just the right thing, without deep introspection, damages to core functions. Few firms even reverse engineer to design a solution.

Continuous training, change management to improve performance, right set of staff doing only certified and licensed work, self tests, and peer reviews all enable better benchmarks.

Based on the current project needs, we get our staff suitably trained based on role. All aspects like domain, language, local laws, engineering codes, client preferences and our job fitment are assessed to ensure we are fully capable to take on the project. We refer earlier projects that will enable to know resolutions to known issues.

<https://www.mckinsey.com/business-functions/operations/our-insights/a-capabilities-strategy-for-successful-product-development#>

Small subset of P-CMM can be used for people.



Developing competency and capability across maturity levels

Image Source: SEI

Organizational level maturities, Individual level maturity, Asset level maturity, Product level maturity, are key areas that need to improve.

5. High level projects plan with architecture, shared services across projects and programs

- This is part of the proposed project that is going to realize and deliver the desired product
- Earlier frameworks are refined, tailored that ensures projects are truly unique to fulfill the need

Section Details

PMI based Project plan, charter, assets, tools, Devops, PM, arch diagrams for HLD, ADD, Deployment doc, enterprise views, operations diagram, roadmap, milestones, deliverables, available time, budget and resources, any risks, historical resolutions. Hi level project plan, enterprise views that are to developed as shown by various stakeholders, project steering core team, various value add, like scrum master, agile manifesto, iterative model, military project management style, all are captured in project deliverables and architecture that are to be peer reviewed and approved from above. Expert opinions, other department staff and any sub contracting, partner advises are retained, their billability, all are considered.

ADD captures the essence of the proposed system. TOGAF based models, views and details are depicted. This is the start of the technology team involvement that is to be used by the project manager, designer to make the LLD

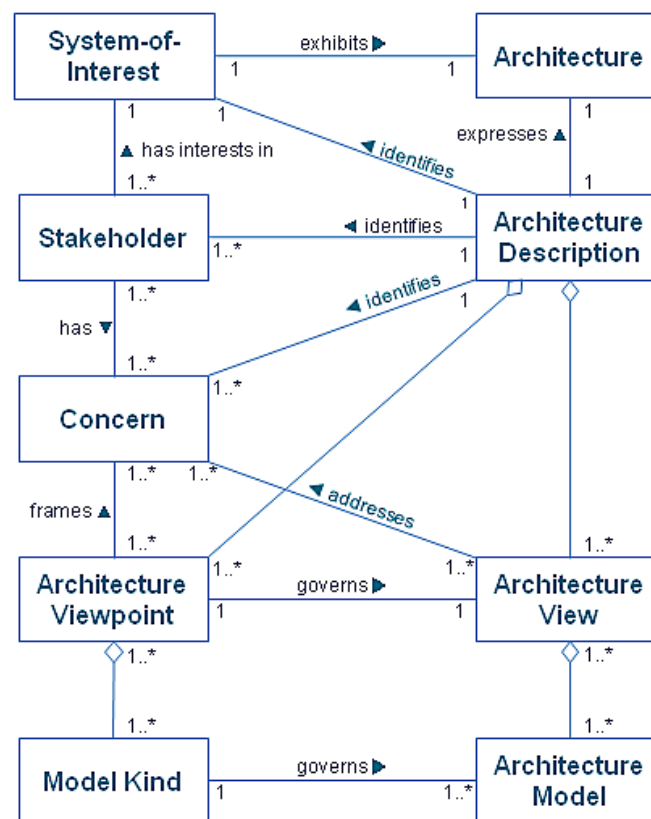


Image source: TOGAF

Shared services are from ERP perspective, that enable better availability, allocation and avoid any risks, threats to dismantle the project. Few are cross- discipline, multi lingual resources, security experts, Build, test teams, DevOps and Scrum master, and a common manager who handles various projects

<https://www.scaledagileframework.com/shared-services/>

Potential members of Shared Services typically include people with the following types of specialized skills:

- a. Agile and software/systems engineering coaches
- b. Application/web portal management
- c. Configuration management
- d. Data modeling, data engineering, and DBA
- e. Desktop support /Help desk
- f. End-user training
- g. Enterprise architecture
- h. Information architecture
- i. Infrastructure and tools management
- j. Internationalization and localization support
- k. ITIL /ITSM
- l. Deployment operations – Build, test, release
- m. Security specialist
- n. Regulatory and compliance
- o. System QA / integrated testing / UAT
- p. Tech writer

6. Program and Project level work break downs, deliverables, tangible/ intangible assets, life cycle management

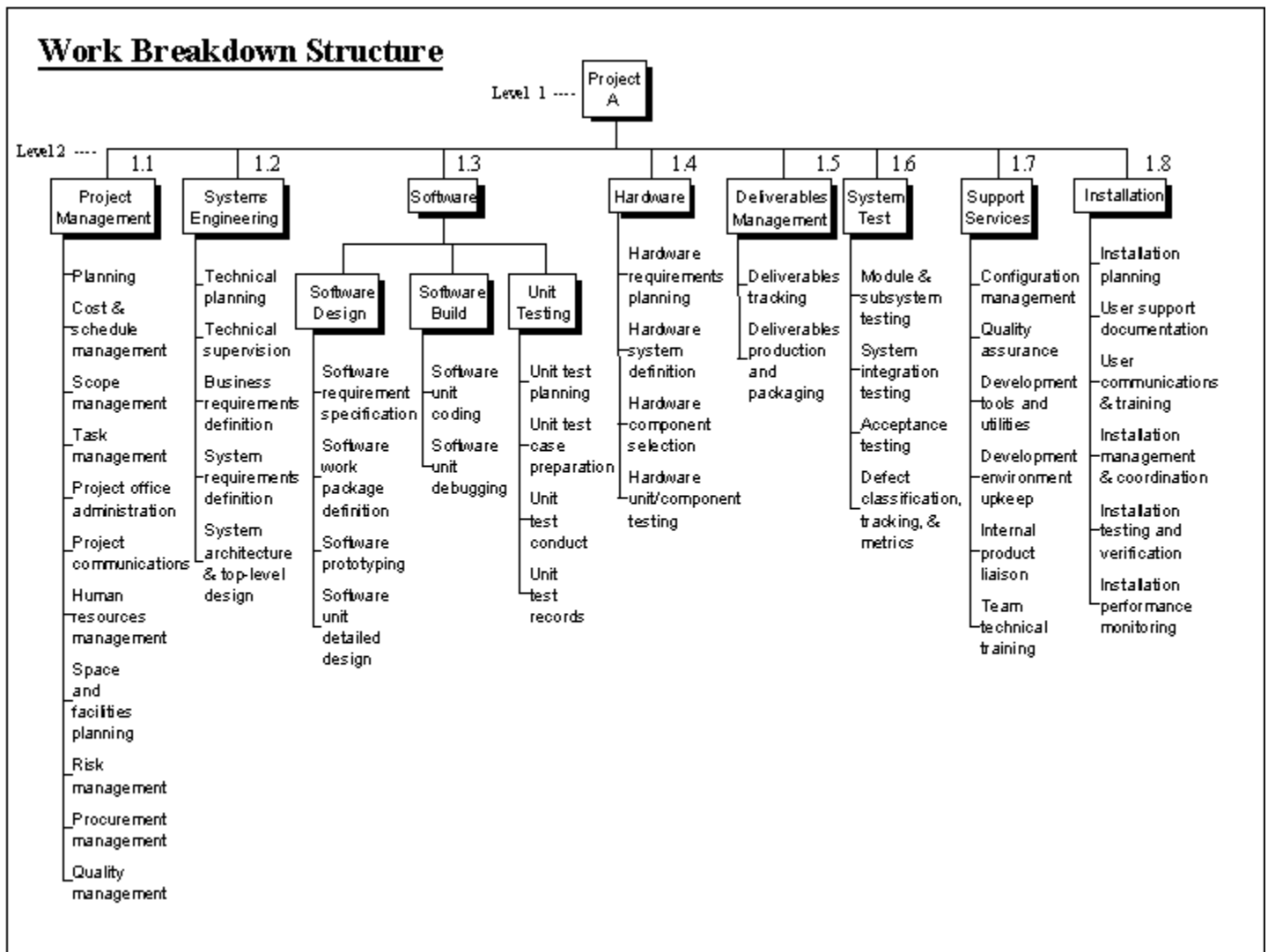
- a. Required features, functions are engineered along with partners, developers and tools
- b. PM , Quality, are leveraged
- c. Transfer of Technology, Business transformation documents

Section Details

The involvement of program will be at minimum as we get into the project details, unless there is a major change request by client. Sample WBS is as shown below.

Project level entities, deliverables, schedules, estimates, architecture and many more artifacts are developed, forms filled and approvals are obtained to start the work package development. Necessary developers are engaged to implement the various units, modules to form an integrated project deliverable.

Necessary documentation, staff training and operations guides are designed as we progress along the roadmap. Any technical issues are peer reviewed and internal support is taken to ensure the schedules are not impacted.



http://www.hyperhot.com/pm_wbs_sw1.htm

<https://www.stakeholdermap.com/plan-project/example-work-breakdown-structures.html>

7. Quality adherence(Men, material & processes)

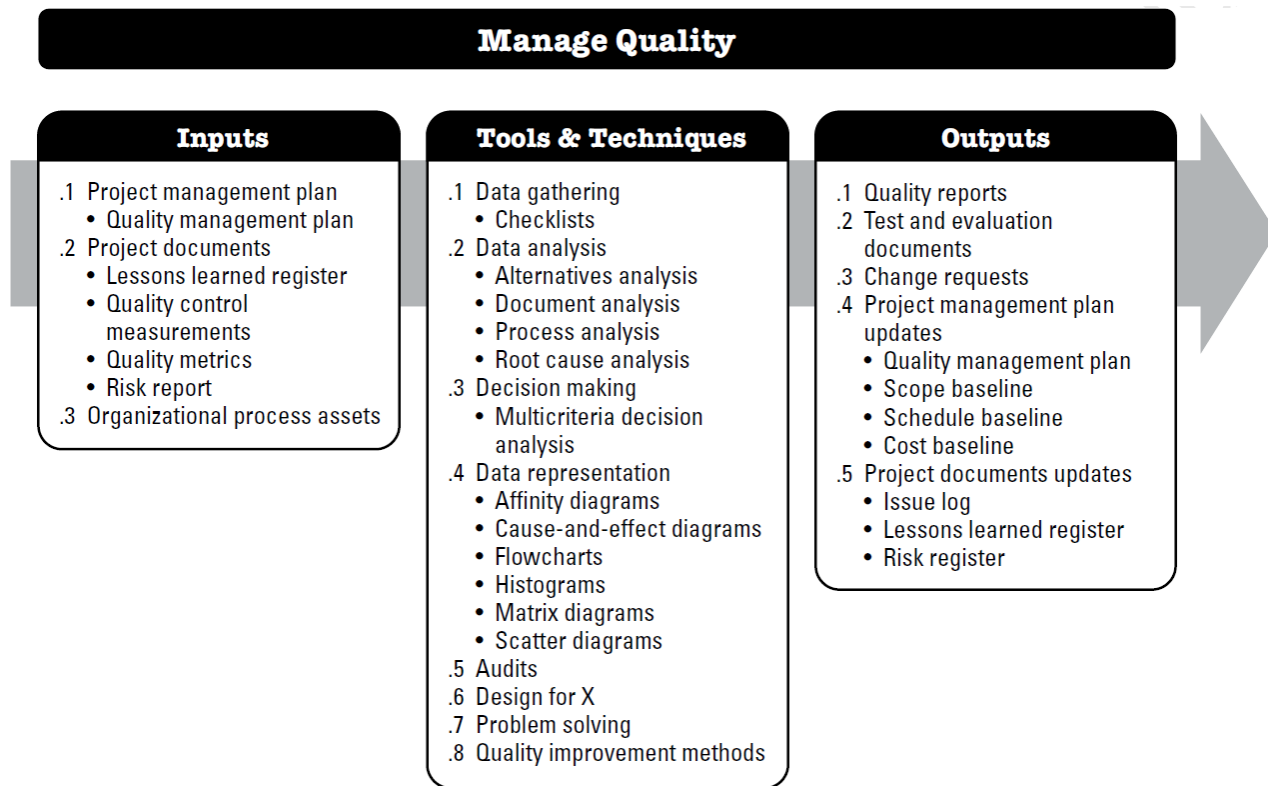
- This is a cross-cutting feature that spans all areas and suitable inspections are done to see if quality is adhered, only researchers and engineers are part of the core team, no unreliable staff, unlicensed staff are allowed

Section Details

We hire Engineers, Doctors and related researchers with valid licenses. We have various QA checklists that we use for various purposes. Employment gap is not a reason to stop hiring a talent.

To ensure proper fitment of the deliverables, we use regular inspections to verify the coding standards, rework purpose, impact testing for change requests, proper env variables for prod servers, cloning of required data tables, configs available from client servers are used. We use various tools to capture quality metrics be it IT, software, hardware or engineered product, we verify the deviations using Six Sigma, Security analysis, scope coverage. We avoid over or under work on the raw material, to ensure the right set of features are made

available. For stress test, volume test, we use lab setup and use semi-auto and automated testing tools. We use web standards, and avoid cross-site injections. We test for UX and maintain uniformity of the project templates, like a background color of the page or a 3D projection. We match that to client's brand.



Source: PMI

8. Profile for investors

- a. This is our value delivered in terms of quality, revenue that ensures investors money is truly being invested to earn profits for them

Section Details- To be filled

End note: The above are the key steps for Level 2 documentation that also fulfills the TRL level 2 needs of transforming basic research to applied research and enables lab work at Level 3. This also fulfills the ISO and CMMI Level 2 needs. We plan to add few more features that satisfy the enterprise needs

Disclaimer: Several details have been sourced from our partner based content like PMI, CMMI, and others. This is form educational purpose only. We have no intention for infringing any copyrights.

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