Agile Framework as a Key to Information Management Systems Delivery

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Abstract. The article examines the nature of the agile framework, and explores the peculiarities of its management. Project oversight and controls are key for delivering expected project and service outcomes. Building consistency and learning from each other helps to improve every project. The objective of our research, based on the agile framework, is to provide a set of practices for project teams to deliver success and promote information management systems. It leads to reliable delivery based on project management competencies, agile working methods, scaled agile framework techniques, and project-based service provision. The proposed framework defines what work needs to be done and how it can be accomplished at the engagement. The framework is comprehensive, covering critical areas that impact solution delivery, including strategy, planning, mobilization, management, development, and operations which is essential to consider information management systems specific. The research is based on the following engagements: to promote consistency across engagements worldwide with a common language and standard approach; to support the industrialization approach with a disciplined process for delivering high-quality solutions across multiple locations, multiple workforces, and multiple cultures; to enhance reliable, high quality and on-time delivery of engagements by providing a field-tested approach gleaned from current subject matter experts' experiences.

Keywords: Agile Framework · Delivery Management · Increasing Efficiency · Sustainable Manufacturing

1 Introduction

Agile Delivery Framework is a key to effectively delivering information systems in the modern consultancy industry for successful project and portfolio management. Client Portfolio Management is leveraging the correct information to make client portfolio decisions, categorizing clients based on their growth potential, and factoring client prioritization information into ongoing sales decisions. Regular client portfolio management is essential to ensure they focus their investments on relationships with the greatest potential return.

In our research output, the clients are classified into several categories to identify and target the right consumers as key stakeholders. These classifications are used to influence and/or drive actions around Sales Planning and Targeting, Account Planning, Business Development investments, New Business Management (NBM) Approvals, and Access Protocols (see Fig. 1).
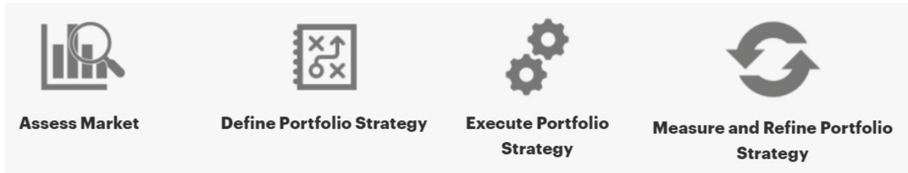

Fig. 1. The workflow of targeting new clients.

2   Literature Review

Account Planning is a key vehicle for driving organic growth and a means to understand issues/shortfalls in achieving our long-term strategic growth agenda [1].

The proposed Agile Framework delivers information management systems [2] based on the research from at least 1500 client persons to connect with daily about how to deliver the projects and what can be done more for the client accounts. Therefore, in the Agile ways of working, we have introduced the role of Delivery Lead [3]. So, we could bring one of the delivery frameworks to support the client and overall project and portfolio management team.

It is essential to understand the business environment, which helps to run pre-sales and staffing of the human resources. The information technology consulting industry faces unprecedented challenges, including weak markets, the global economic downturn, mergers and consolidations, stringent regulatory requirements, natural disasters, and the need to operate worldwide. Some examples of industries were collected in the research: Digital, Azure industry X, DevOps Data engineering, Interface Design, Data Engineering, etc.

These challenges are further compounded by the emergence of a host of operational challenges [4]:

- time to market for new products and new channels;
- the need for alternate sales channels;
- replacement of basic legacy systems with following generation insurance systems;
- concentrating exposures and creating a single view of the customer;
- price, service, and time pressures for new entrants to the market;
- difficulty entering new global markets – lack of understanding of the unique market conditions of each country.

In our Agile Delivery Framework, Compliance management is assessing and monitoring compliance with engagement policies, such as international standards, customer

data protection and records management, and identifying and monitoring corrective actions to avoid or reduce engagement risks [5].

A Client Data Protection program (CDP) is a fundamental component of information security defenses. CDP provides engagement teams with a standardized approach to managing risk through management processes, controls, and metrics (see Fig. 2) [6, 7].

- Implement Client Data protection controls – for every required control, identify a control point owner, conduct a gap analysis of each control assigned, develop an action plan to close identified control gaps, and monitor overall compliance to controls throughout the contract's life (s) [8].
- Monitor adherence to engagement policies related to travel, time and expense, procurement, mandatory training attendance, and methodology use [9].
- Identify compliance issues and implement corrective or preventive actions.
- Should there be policy changes, communicate the changes to all team members.

| Eligible project notification | Project entry in CDP - CC tool | CC control review and update | Two-step approvals | Annual CC control review and update |

Fig. 2. Lifecycle of Compliance activities as a part of Information Management Systems Agile Delivery.

3   Research Methodology

In our proposed framework, there are a few statements for business quality:

- Quality means meeting business requirements, not adding extras.
- Business quality should be checked before an activity or scope works item is completed.
- Quality should be considered whenever there is a change to any business constraints.
- In the proposed framework, a quality department may perform some quality activities.

Based on these statements business continuity plan (BCP) is an action plan to ensure the continuity of project-critical business processes and services in the event of disruptions caused by internal and external factors. The BCP is a set of documents that defines a recovery strategy during a crisis. As an essential part of the Agile Delivery framework addresses the following aspects:

- people - safety and security of the people;
- communication - communications control to avoid rumors and chaos;

- infrastructure - the ability of the office to support and ensure service delivery during power outages;
- technology - the impact of technology assets on service delivery.
- There is an established business continuity management framework that includes:

  - business continuity management policy;
  - senior management responsible for business continuity management;
  - documented project business continuity plans;
  - an incident management capability;
  - program of testing and maintenance of business continuity plans and recovery arrangements.

Dedicated persons from the Agile specialty take care of people working in small resource supply projects and people on the bench to inform them about business continuity actions and needed training.

The next step is to determine the metrics used to measure and review quality. Quality is an essential means of protecting internal reputation and external Brand. This includes informal guidance and systematic reviews. We expect quality assurance to be applied to all areas of work/services we provide and at all stages of the project lifecycle – continuous monitoring and mitigation of risks, starting with appropriate risk assessment at the opportunity stage, followed by quality control and implementation of best practices (see Fig. 3) [10, 11]. There are several actions needed from the Delivery Lead, who is a driver of the proposed framework [12–15]:

- define quality management processes for the project and have a plan for continuous improvement;
- recommend improvements to organizations standards, policies, and processes, which are expected and welcome by management;
- ensure that it is well understood the customer's definition of quality.

Fig. 3. Applied Quality assurance to all areas of Agile Delivery work across all stages of the project lifecycle.

Project Process Maturity Assessments are performed to ensure the project's compliance with:

- policies;

- Delivery Methods and Specialty track Process & Automation best practice usage Industry best practices based on Capability Maturity Model Integration (CMMI) (see Fig. 4, [16]);
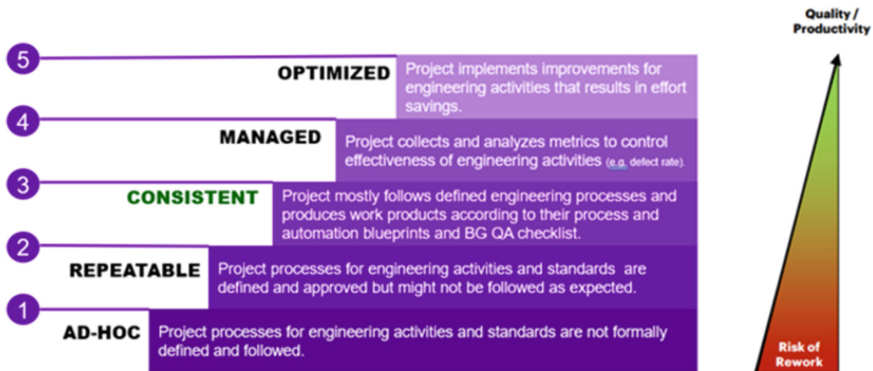- projects defined processes.

Fig. 4. 5-levels Capability Maturity Model Integration.

Maturity Level (ML) is a degree of process improvement across the predefined set of process areas in which all goals in the set are attained:

1. Builds on the practices at lower levels.
2. Represents an increase in functionality and capability.
3. May add new functionality.

The Delivery Quality Assurance review are independent assessments conducted by the Quality Assurance Directors (QADs). These QAs are designed to review and assess the overall risk based on the Risk Assessment framework. This is accomplished by determining the level of risk associated with the following four Blocks:

- Block 1: Client Expectations and Context.
- Block 2: Contract and Deal Structure.
- Block 3: Solution Plan and Cost.
- Block 4: Underlying Capability.

For areas considered High or Above Normal risk, the assessment requires documented mitigating actions and unambiguous ownership by named individuals for these actions.

On a monthly basis, the Project QA data team receives the data extracted from Quality Assurance & Risk Tool. The project QA data includes:

- Project QA Plan status (Active, Waived).
- Delivery QA Status by QAD (Green, Red, Yellow).

- Last Conduct Date.
- Next Delinquency Date.
- QA Director Name.

The project contract number identifies the project data from the global report. If the project does not appear in the worldwide extract, the team contacts the QA support team and clarifies the reason.

4   Results and Discussion

A result of the proposer agile delivery framework is a continuous improvement phase0 as a part of the value proposition for customers. To deliver more value to customers and businesses, they must strive to provide it more effectively over time. Continuous improvement processes are ongoing efforts to improve products, services, or processes.

Map the AS-IS process	Identify Value and Waste	Eradicate Waste	Identify Automation opportunities	Automate the Value-adding steps
Value Stream Mapping	TIMWOOD Mapping	SCAMPER	Poka Yoke	Automation Blueprint
	Takt Time	JIDOKA	Automation Blueprint	Project Specific Automation
Flow Chart				

Fig. 5. Lean Delivery as a part of continuous improvement.

Lean is a principled approach that focuses on reducing lead times, accelerating speed, and reducing operating costs by continuously identifying and eliminating waste (non-value-added activities) in processes (value streams) (see Fig. 5):

Client Team Satisfaction Survey (CTSS) allows us to understand the client team's assessment of the services and value we have provided, our contribution to overall client expectations, and the overall strength of the relationship. The surveys are launched twice per year or at project closure by the Delivery Excellence team in collaboration with Portfolio and project Leads to clarify the survey scope and audience.

The received project CTSS results, at least for one question, are below the fiscal year projects that should identify improvement actions and implement them. Delivery and project and delivery managers are involved in this process by setting up a discussion on improvements, helping to specify tasks, and monitoring implementation progress. All created CTSS improvement actions are shown as metrics (% Implemented CTSS actions).

Each project should go through the following cycle:

1. Analyze received feedback.
2. Discuss results with the feedback provider.
3. Agree on Improvement activities and implement them in the agreed timeline.

5 Conclusions

The ultimate goal of the agile framework for information management systems delivery is to test and verify that each described stage (phase or deliverable) meets the metrics and requirements as stated in a framework, including the customers' acceptance criteria checklist, and that it is ready to move to validate framework process. Before that, in conclusion, it is important to mention that closing a project or program needs to be planned while the project is still running. It involves thinking through how the final deliverables will be reviewed and approved by the client and the operational activities required to close a contract/project in project systems. The data and processes from closure help us build case studies and trending data to evolve and improve the processes permanently.

Based on provided research outcomes, we can see that Agile Delivery is critical to empowering people to be in charge of the company's future. Everyone can create more value for clients, especially Information Management Systems Delivery as a project, daily operations, and strategic changes.

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