

Evolution of Process Framework at Cybage with Emerging Trends

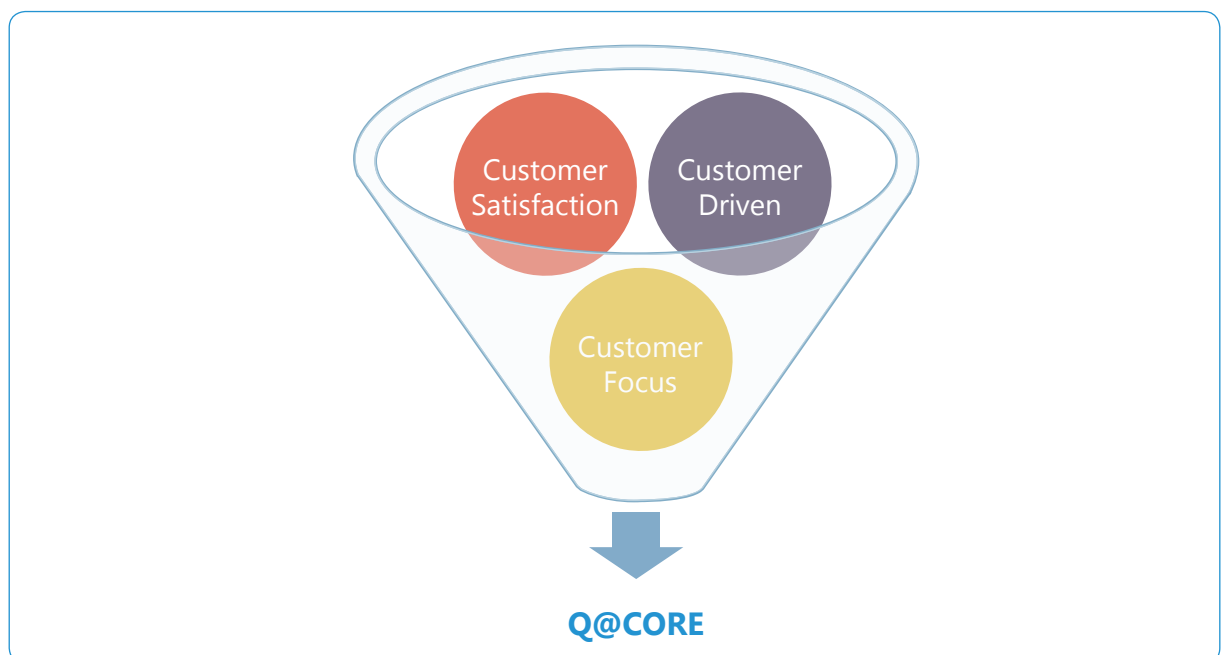


From the IT industry perspective, software excellence and customer satisfaction usher the triumph of a project. The critical success factor of an organization is reliant on the software processes used in the project. Capability Maturity Model Integration (CMMI) is a framework that guides process improvement to achieve quality across a project, a division, or an entire organization. The CMMI model provides us a cognizance of discrete elements in an organization and helps to formulate language and discussion for purview of improvement and several approaches to achieve it.

The IT industry has professed new modernizations in computing that has changed the way IT services deliver business. Today, technology has transformed the way enterprises conduct business. It has brought them closer to their customers, with minimal cost and better impact. Quality has a significant role to play in the ever-changing business environment. It is an important contributing factor that helps organizations to survive in a head-to-head competition. The quality of deliverables, the ability of the organization to meet and exceed delivery expectations, and user-friendly business practices are the factors contributing to customer satisfaction.

The key to improving customer satisfaction is to implement a system that will measure and track the performance of key customer touch points such as quality, and on-time and defect free delivery. Cybage is a value-driven and customer centric-organization, and these beliefs are deep rooted in our mission statement, policies, internal processes, workflows, and daily routines at the project and employee levels. These values have been infused in our culture and the process governance framework. Cybage handles process governance using an innovative, compliance-oriented strategy, which focuses more on:

- Result-oriented and cost effective approach
- Capitalizes on the in-house potential to perceive people and position.



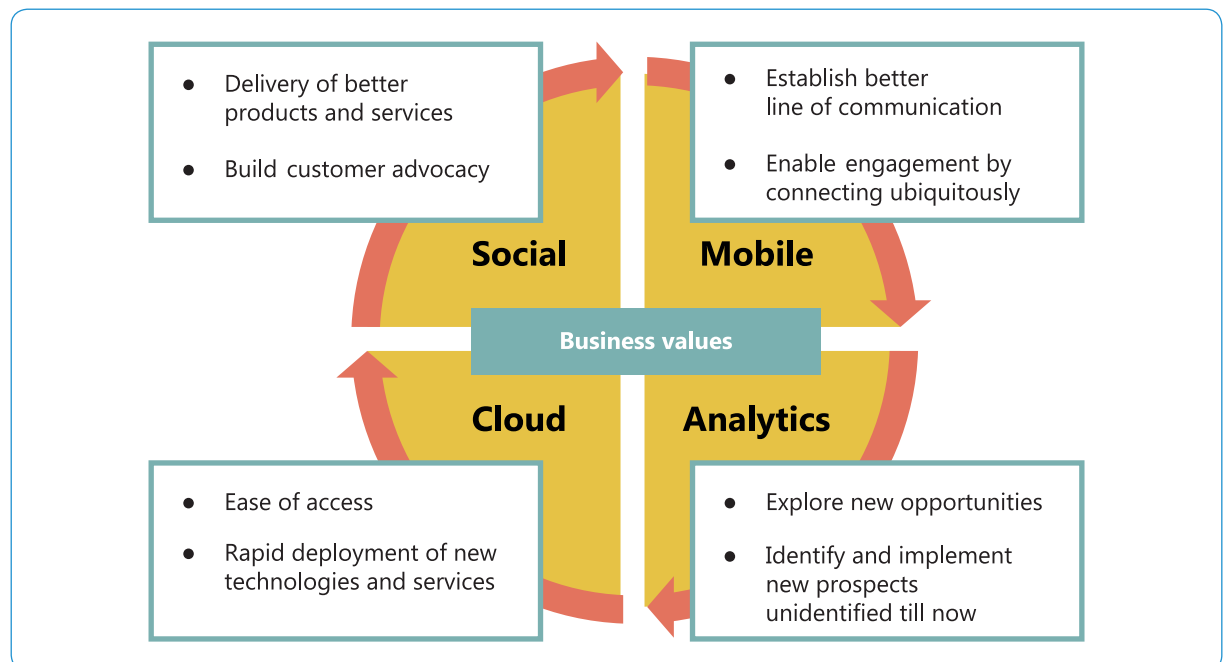
We, at Cybage, believe in imbuing and delivering such quality solutions. Our Quality Management System (QMS), widely known as Q@Core, plays a vital role in our ecosystem. Cybage Q@Core and ExcelShore® are unique models that de-risk our approach, provide better predictability, and ensure a better value per unit cost to our clients, reflect on resolutions to integrate applications and optimize processes to achieve Customer Satisfaction. This is achieved through proven frameworks, models, standards, technologies, and delivery methods. With our experience and technology insight, we deliver salient results in process discovery, documentation, integration, automation, monitoring, and continuous improvement.

Cybage's domain expertise spans across the business verticals and Centres of Excellence (COE). A COE provides leadership, best practices, research, support, and/or training for a focus area. This synergy renders solutions that accelerate, simplify, and enrich business processes to give its clients an edge over competition.

Proliferation of social media, Google Drive, mobile devices, and smart cards are touching upon the new era of corporate IT. These are characterized by a master IT architecture comprising social, mobile, analytics, and cloud technologies collectively known as SMAC. Earlier, these technologies grew and functioned independently. However, now they are being united together and transformed into an emerging business model or stack in order to gain business advantage. Several names are given to this technology stack, such as 'Third Platform', 'Nexus of Forces', and 'SMAC'. SMAC molds a structure, empowering a business to enhance its performance and fulfill customer expectation.



When Akon composed the song 'Smack That' in 2006, little did he know his chartbuster song title would bring in an overwhelming wave in the future of IT innovation, driving businesses to enhance productivity and customer reach!



While organizations understand the value and are finding ways to embrace these technology trends, they also need to adopt new ways to initiate the implementation, foresee the business results, approach the market quicker, and respond to change. This means that organizations should adopt methodologies that enable them to innovate at a faster pace and catch up with the ever-changing requirements of their customers.

Borrowing from a Forbes article: *"The luxury of long technology evaluation cycles, introspective analysis of systems, and long deployment timeframes are giving way to rapid deployments and systems designed for accuracy and speed."* While the USPs of SMAC are quick feedbacks, just-in-time replenishment, and adapting to change, then why not adapt to a methodology that has all these core qualities. Agility is the way!

The Agile approach helps get projects off the ground faster and provides business results sooner. The Agile (Scrum) method fits the bill perfectly; it enables enterprises to not only meet fast-changing customer needs, but to also innovate faster. Scrum helps with rapid and frequent deployment cycles that accommodate the changing requirements and course correction.

As enterprises explore and implement SMAC solutions, Agile implementation advances itself really well to the emerging technological innovations. The SMAC strategy will help enterprises achieve their goals quicker. Agile (Scrum) helps organizations to meet objectives and overcome challenges created by a complex and dynamic technology landscape, if implemented correctly.

In software development, functional quality and structural quality are the two measures to achieve customer satisfaction. If failed to achieve, it can be a potential threat to the project. Risk management is applied to software development projects to control such threats and enhance the likelihood of achieving project objectives. The change of execution methodologies from traditional models to Agile has created new challenges in the field of risk management. Agile methodologies, when implemented correctly, inherently reduce risk in software development. Also, development in sprints shortens the time span between project inception and deployment. Agile by-products such as sprint review sprint retrospective, and the product owner's involvement during each sprint provides constant feedback. This helps prevent deviations between product expectations and the completed product.

The main limitation of Agile methodology, however, is the team size. Larger projects may be built by teams of teams, or teams of teams of teams, that may work in distinct physical locations. This type of work requires coordination. An increased team size, increases communication, meetings, management, standards checking, peer reviews and all other activities for project completion. The productivity per team member decreases as the team grows. This poses a problem in scaling up Scrum and other Agile methods, because these were originally meant for individual team. Organizations developing software have increasing interest in deployment of Agile methods.

As larger organizations scramble to apply Agile software development methodologies, paving the way for a new methodology to emerge, widely known as the 'Scaled Agile Framework[®], or SAFe[®]'. SAFe[®] is a highly structured and prescriptive method that helps large enterprises on the road to Agile.

SAFe® helps enterprises to get more value on a larger scale. Scrum is ideal for teams, but **SAFe®** helps to address the problems enterprises face as they scale their Scrum process from one team to multiple teams, along with the other problems that may be associated with scaling.

What Scrum is to Team, SAFe is to Enterprise

Cybage has always shown continuous improvement in its processes and ensures the numerous effective factors that analyses and suffices the need of customer.

“If you only have a hammer, you tend to see every problem as a nail.” ~Maslow

The definition of need depends on an individual’s perception and approach towards it. A prevalent adage exemplifies this goal with a riveting analogy.

- 1) *To a man with a hammer, everything looks like a nail.*
- 2) *If only tool is a hammer, then every problem looks like a nail.*
- 3) *Give a hammer, and everything will be treated as a nail.*

Cybage’s ardent interest in exploring the latest technology from the industry and meeting customer satisfaction paves the way for assessment of Project Complexity using SAFe®.

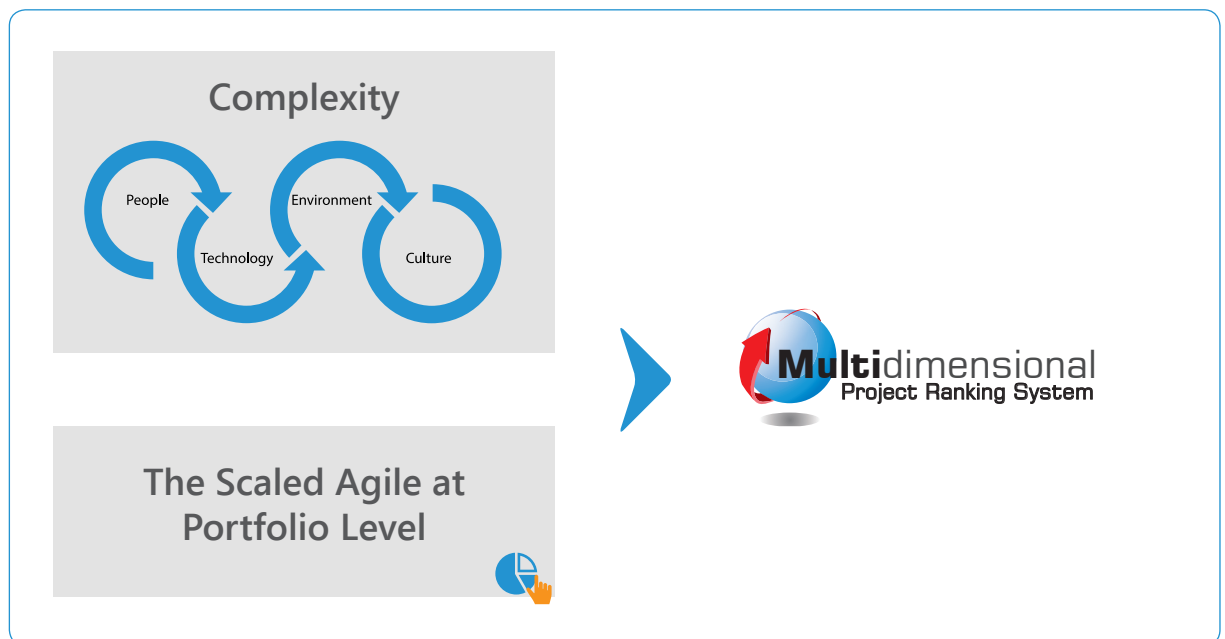
Complexity focused on “Need of Projects”



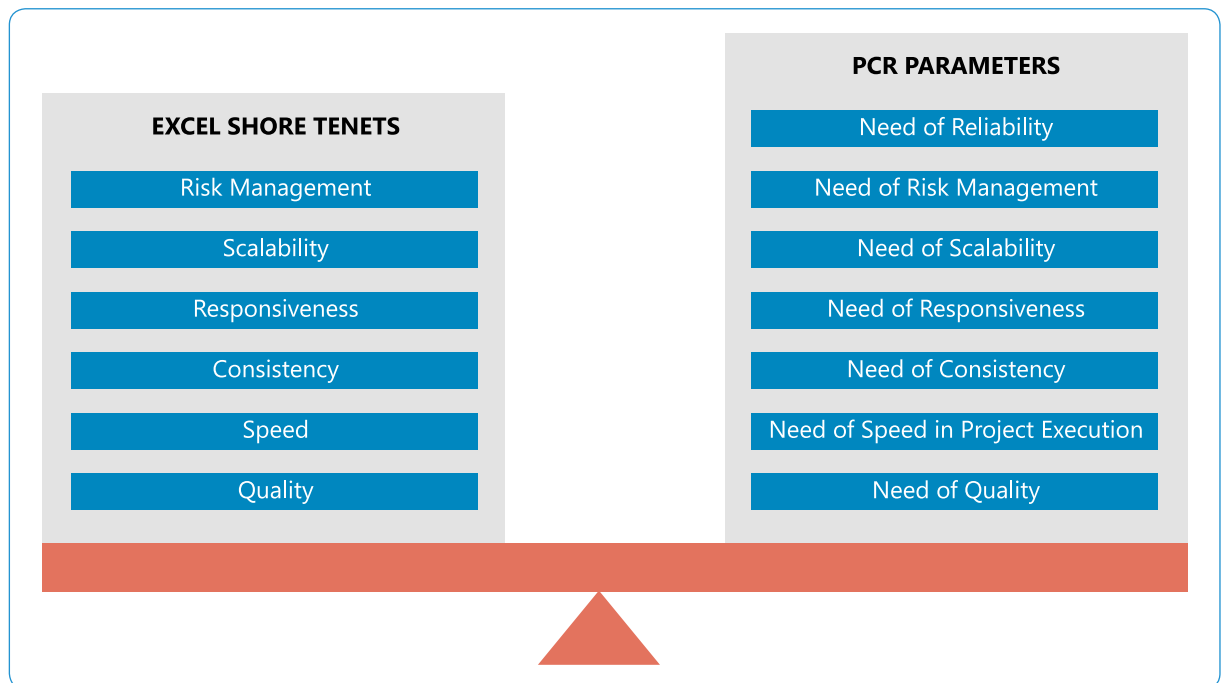
Project Complexity is a multidimensional construct, and is referred to as the extent to which the project is difficult to execute in its engineering lifecycle.

SAFe® has Team, Program, and Portfolio levels. It is not enough to deploy Agile methods only at the team or program level because of the dependencies that teams have on each other when developing large software systems and also because software engineering teams need input for their decision making (or actual decisions) and need to be synchronized with other activities.

If we endeavor to identify the complexity of a single project without considering the other parameters, it may lead to ambiguous values and would not suffice the entire objective for finding the complexity of the project. **The Scaled Agile at Portfolio Level** aids in making strategic decisions on a large scale to achieve fiscal and business objectives. This paves the way for a concept called 'Analytic Hierarchy Process' wherein projects are rated based on a set of defined parameters. In the real world, these rating work as an effective measure while purchasing daily products. Cybage uses this technique for project needs assessment. **The Multidimensional Project Ranking System (MDPRS)** has emerged from the Analytic Hierarchy Process.



MDPRS facilitates project ranking by delivery managers, across parameters aligned to the seven tenets of ExcelShore® (Quality, Speed, Consistency, Responsiveness, Scalability, Reliability, and Risk Mitigation). MDPRS is an imperative output based on these ExcelShore® tenets, creating a synergy with both the ExcelShore® tenets and the human appraisal attributes, giving the management insights into the types of investment to be made. This insight is used for making decisions at the Executive, Managerial, and Operations level.



While ranking a project based on complexity, the specific need of the project must be given more importance as compared to the current execution facts or the customers' strategic importance.

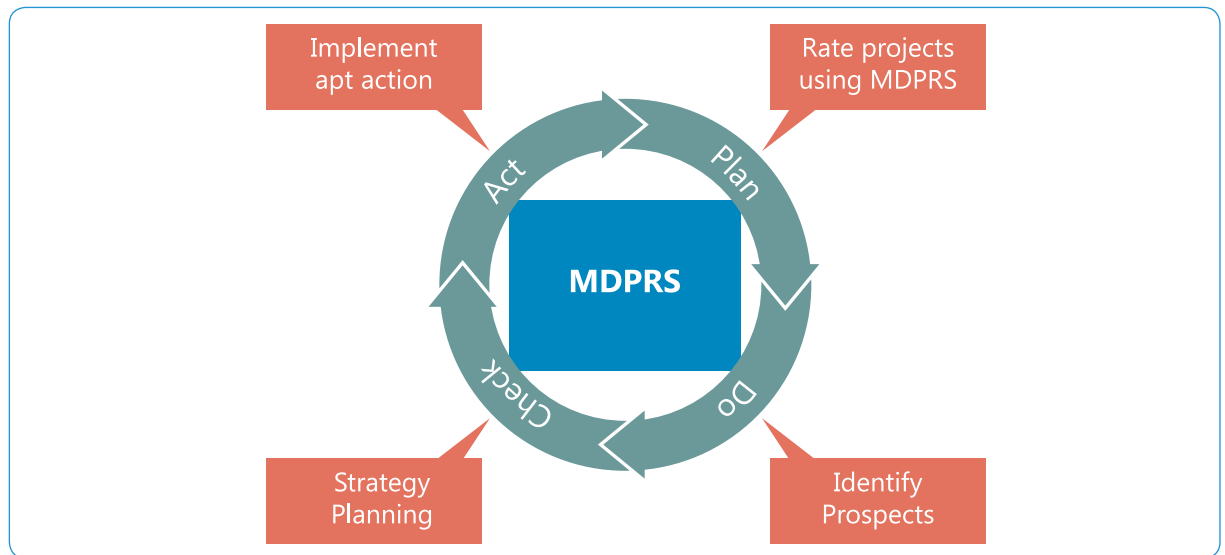
'Prevention is better than cure' is an ancient saying, but it still applies today, especially when it comes to risk management.

It is in everyone's interest that we prevent the risks, rather than dealing with its consequences. It is important to take on **pre-emptive risk** planning and learn from each experience. The resultant obtained from ranking is used by the Management to align or remove the resources based on the project requirement. The main objective of MDPRS is to assess the project requirement in terms of tools and technologies, skill sets, resources, the level of investment, among others parameters.

Just like the Plan Do Check Act Cycle (PDCA) approach, MDPRS renders with mechanism to analyze the prospect, identify **pre-emptive risks** and propose a strategy to circumvent the risks. The resultant complexity obtained from MDPRS assists the management in understanding the project need and espouse pertinent strategy to avert those risks.

In the actual practice of risk management, identifying comprehensive set of risk factors, and creating mitigation and/or contingency plans to manage these risks require more focus and efforts. Evaluation of costs linked to risks and monitoring of these costs over the risk management cycle need to be practiced and understood more.

Collaboration is the key to Risk Management. Identifying potential risks is supported by the cumulative experience of projects at the account level or the portfolio level. A consolidated view of risks in a single mechanism helps to ensure total risk coverage. The prospects generated from MDPRS lead to identification of risk or opportunity at the account and project levels. This provides a framework to the organization to scale risk management efforts, ensuring traceability of risks and their coverage.



"The ultimate test of success for organization is not whether it can win today but whether it can keep winning tomorrow and the day after"

~ N. M. Tichy and E. Cohen



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