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Program governance:
SAFe agile versus EVM

When managing implementations of large projects, you will need to decide which project management methodology is best suited for the program.

Project management methodology refers to a set of principles and practices that guide you in organizing, planning, executing, and managing the program. Each methodology presents its own set of pros and cons, where certain methodologies work better in particular industries and projects than others. Picking the right methodology for your program is vital in the success of the overall implementation. For the purposes of this article, we will be focusing on comparing traditional agile and SAFe agile methodologies to earned value management (EVM) and detailing when to use each.

Agile versus earned value management (EVM)
Earned value management measures project performance and progress in a systematic way. EVM is used as a periodic (typically monthly) measurement of linear programs with firm baselines established prior to starting development. In other words, there is known scope, which is static. In EVM, the final deliverable may have a set date, but changes within the schedule can be made, and there is more flexibility in getting to the end deliverable as long as dates are met and the critical path is not affected.

Agile, on the other hand, is dynamic, rapid, and adaptive with unknown or uncertain scope. Agile also has shorter fixed schedules where different iterations, sprints, stories, etc., almost become single projects that are short in duration (e.g., four weeks). These are usually based on fixed schedules due to the nature of the work and requirements of the sprints or iterations.

SAFe agile takes the traditional agile foundation and expands upon it. SAFe agile allows for enterprise-level application and is better suited for large-scale, mission-intensive projects. It's a leaner, scaled agile framework that helps companies and firms work effectively and rapidly. SAFe agile methods organize the workflow so that multiple teams can work together with fewer impediments.

Given the dynamic nature of agile, implementing a batch-oriented EVM system has limited value in an agile environment. By its nature, agile provides dynamic and ongoing feedback to stakeholders participating on development teams. The opposite is true for EVM techniques, which take a static measurement at a point in time. EVM is considered a legacy program management system or approach. EVM is typically reported once per month where it becomes incredibly time-consuming and program control-heavy to monitor both cost and schedule weekly. However, weekly reporting, due to the short time frames within agile on iterations and sprints, is necessary. Performance feedback for agile is in real time with iterative detail versus static written detail to be interpreted in a static tool or report.

EVM also requires rigorous baseline management where baseline changes must be documented and tracked via a baseline change control log. Given the dynamic nature of agile, one would have to constantly make baseline changes due to the rolling-wave nature of a dynamic and adaptable plan. This again, will be incredibly time-consuming, costly, and inefficient.

Another shortcoming of EVM is that it does not measure product quality. A program could perform ahead of schedule and under cost, according to EVM metrics, but deliver a capability that is unusable by the customer. Agile considers quality, not just budget, schedule, and technical scope.

Finally, EVM is a waterfall program management approach, where agile is a cyclical, iterative approach. In most instances, agile conflicts with EVM or has an inverse relationship to many of the requirements and management techniques utilized within an EVM environment. Traditional EVM metrics may not always provide accurate insights into progress and performance, as agile values flexibility, collaboration, and continuous improvement over rigid deadlines and budgets.

Commerciality and earned value management systems (EVMS)

According to the Federal Acquisition Regulation (FAR), the use of earned value management systems (EVMS) is required in major acquisition development. The document states that EVMS is required for major acquisitions for IT development in which the development, modernization, and enhancement costs are anticipated to equal or exceed $25 million over the life of the acquisition. There are, however, exceptions to using EVMS, such as with the use of firm fixed-price-type contracts, subcontracts, and other agreements.

When we look deeper into large-scale implementations of ERP or other commercial software systems, these are services that are competitively bid and are performed in the majority of cases for commercial customers, higher educational institutions, and the public sector, which includes state and local governments, and foreign governments and entities. These organizations do not use EVMS but use Agile only and with consistent success. Deloitte performs ERP implementations in high volumes across all commercial, civilian, and government sectors of its business. These services are offered and sold regularly to public sector clients, as previously mentioned, and throughout Deloitte's commercial practice for entities and companies that fall outside of the Department of Defense and any other federal agencies. Deloitte's ERP implementation terms and conditions are standard, except for customizations that are made to the commercial ERP product, which are common modifications or customizations found in the commercial marketplace. In fact, commercial off-the-shelf (COTS) implementations rarely exist as it is common practice for major ERP, MRP, or other software systems to require customizations for each individual client or company based on their structure, resourcing, nature of the business, etc. These customizations are commonly referred to as value-added COTS.

Conclusion

When choosing a project management methodology evaluating the program's size, scope, commercial applicability, and complexity is an important factor to ensure the appropriate approach is chosen. SAFe agile is a lean approach for more streamlined, less complex commercial software implementations and projects. The project is managed at the enterprise level rather than at a lower, more detailed level. This is a perfect approach for a commercial software implementation that doesn't include a lot of development effort other than legacy customization, as opposed to other project management methodologies like EVM. Deloitte has a vast array of experience conducting ERP implementations, and we believe that SAFe agile—which focuses on predictable delivery, not learning or development—is the best software performance management approach providing the most cost-effective and efficient solution.

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