

## ISSUE BRIEF

# Agile for state government

## Separating myth from reality

### CAN STATE AGENCIES BE SUCCESSFUL WITH AGILE METHODOLOGIES?

Everyone seems to be talking about agile development.

State agencies and their federal partners are rapidly moving away from “big-bang” software development projects, toward an incremental or modular approach. This is largely in response to the high number of failed IT projects, and increased public scrutiny around the associated costs of those failures. The industry is waking up to the reality that the majority of failed projects were delivered based on a waterfall, or linear, implementation methodology – challenging the status quo.

The reasons IT projects fail are numerous, and states are faced with additional complexities inherent in delivering citizen services. Resources are scarce due to competing priorities and a skilled but aging workforce. State agencies are dependent upon legacy IT systems to manage and meet increasingly complex program needs. Additionally, the promise of commercial off-the-shelf (COTS) technologies has not been fully realized, as these so called plug-and-play systems often require far more customization to meet requirements than either the agencies or their vendors had ever expected.

### WHAT IS AGILE?

There are a number of differences between waterfall and agile development approaches. One of the most notable is that waterfall assumes significant groundwork is done up front in terms of defining requirements and expected benefits, but the outcome of that work is not visible until the very end of the project at “go-live.” The combination of large, monolithic projects and a rigid implementation methodology has created much of the drive toward “no more big bang” projects. By delivering incrementally, there is time for the business to provide feedback. In addition, evolving requirements can be addressed throughout the project, not just at the end.

## Three common myths of agile

As the national conversation around “agile for government” continues, viewing the agile methodology through the lens of state agencies becomes increasingly challenging. Will what worked in the private sector transfer smoothly to government?

### MYTH 1 | AGILE PROJECTS ARE DIFFICULT TO EXECUTE AND MANAGE BECAUSE THE METHODOLOGY LACKS STRUCTURE

There is a common perception that agile projects lack structure and a schedule, leaving an agency with few tools to manage vendors and no clear sense of when an effort is completed. Agile is in fact highly structured, executing a set of tasks based on priorities defined by the business. Stakeholders have a high degree of visibility and strategic information, such as how long the work is taking based on what was expected, and early insights into technical problems or operational barriers. Feedback is immediate and allows for course correction along the way.

With waterfall, the low value activities often get done before more critical tasks. Also, the lack of a feedback loop during the development lifecycle increases the probability of a disconnect in the future.

### MYTH 2 | THERE IS NO GOVERNMENT CONTRACT MODEL THAT WORKS FOR PROCURING AGILE PROJECTS

It is true that traditional procurement models, which are generally fixed-price and milestone-based, do not support agile, and failure is almost guaranteed if used in combination. Yet, agencies do not need to be bound to traditional vehicles to procure agile projects. For many states, an IDIQ (Indefinite-Delivery, Indefinite-Quantity) or MSA (Master Services Agreement) provide viable options. These umbrella-type contracts can be awarded to one or multiple vendors and begin with a high-level statement of work. No funds are committed or implementation approach prescribed. The agency can issue task orders for which they control the scope, priority and timing. Each task order contains final requirements and costs. Agencies can not only closely manage and monitor vendor activities, but also show progress to stakeholders with quick wins.

### MYTH 3 | AGILE IS THE SILVER BULLET

As more states consider an agile approach, and the federal government expands its support, it is easy to view agile as a cure-all. The challenges agencies face – such as lack of resources, legacy systems across states and failed COTS implementations – are not solved by an agile approach. Agile can, however, help reveal these issues, whereas waterfall lacks the flexibility to do so.

## Should agencies try an agile approach?

The world is changing. The traditional, “big bang” waterfall approach has demonstrated it can often be a path to failure before the project has even begun. Some state agencies are making a compelling case for agile and experiencing significant benefits including greater transparency, minimized risk, improved quality and on-time, on-budget delivery of projects. Success, however, will be dependent on agency investments in training, stakeholder engagement and communication and resource planning around agile methodology.

### About CGI

Founded in 1976, CGI is one of the largest IT and business process services providers in the world, delivering high-quality business consulting, systems integration and managed services.

### Implementation approaches for complex technology projects are evolving quickly, presenting states with significant opportunities

The notion of “no more big bang” is being heard more frequently, as both federal partners and public stakeholders demand an end to the seemingly endless stream of failed IT projects. Whether the approach is modular, incremental, or full modernization, implementations where all the work is done at one time – often over a period of years – is coming to an end.