

## Agility in Emerging Markets Technology

By David Chapman, managing partner, SunGard Global Services

With emerging markets growing rapidly, investment in technology is the key to an organization's success.

With emerging markets growing rapidly, investment in technology is the key to an organization's success. In an environment with constantly changing requirements, time-to-market is crucial, requiring effective project control, discipline and successful delivery to quickly meet business demands. At the same time, achieving return on investment and keeping IT costs under control will be mandatory.

To successfully deliver value to the business, the underlying methodologies and processes used within IT departments must be highly efficient, disciplined, reliable and flexible. That means value must be delivered even when all the requirements may not be known up front.

In this setting, the way IT projects are defined, implemented and delivered will become increasingly important. Historically, projects were managed using the "waterfall" project model, a sequential and often intense project management and software development methodology. The track record for the waterfall model is poor, especially in emerging markets where requirements are constantly changing. Alternatively, the "Agile" project model, an approach becoming prevalent throughout financial services, offers a better way to deliver business value quickly and in a controlled and disciplined manner.

### The needs of emerging markets

In the emerging markets, businesses and IT organizations need to respond quickly and reliably to demanding and rapidly changing business needs. New financial instruments are being created daily by traders and often executed before full, or sometimes any, systems support is available.

The downstream effects of trading new instruments can effect numerous departments throughout the organization, including the front-office (trade capture and order management), the middle-office (risk management), and the back-office (clearing and settlement). On top of core trading system support, there is ever-increasing demand and support for other departments for consideration, including compliance and regulation, reporting, and risk.

Using waterfall methodology, business users and sponsors are forced to define 100 percent of all their needs up front and not allowed to make any changes until the end of the project. All they receive along the way is a pile of documentation, and when they see what is delivered at the end (if anything), their requirements have already changed. To remedy the situation, the project is re-evaluated, incurring delays and extra costs in a cumbersome change management process.

From a risk perspective, all the coding, implementation, integration and testing takes place towards the end of the project in this scenario. Frequently, waterfall projects look healthy during the early and intermediate stages, but issues are recognized in the end

Agile methodologies are the key to successful projects, and are especially applicable to environments that are rapidly changing and require specific time-to-market and return on investment objectives be met.

when it is too late to rectify or make changes. It is this reason that the waterfall approach would not work well in the emerging markets.

In Agile projects, business and IT teams work closely together throughout the project. It is understood that the requirements may change, but the key functionality is prioritized and frequently delivered. The methodologies and processes used are disciplined and executed in a controlled manner. Using the Agile approach is not an excuse to cut corners.

## Best practices of Agile methodology

Agile methodologies can be used for project management, software development and solution implementation of financial services software products. The most widely used Agile project management methodology is called "Scrum," a light-weight methodology that enables projects to deliver business value in short durations called "sprints." Sprint duration is agreed upon at the beginning of the project and is typically monthly. At the end of each sprint, the business users review the deliverables and set the priority for the next sprint. Business users and sponsors are engaged throughout the project and overall project process improvement is considered.

The Scrum methodology calls for collaboration and transparency at all times. Solutions are delivered frequently focusing on early delivery of prioritized business functionality. This means business users see value early in the project and measure return on investment throughout. Business users remain engaged during the project, and as deliverables continue, the direction of the project and requirements may evolve and change over time. This is a key concept especially in the emerging markets where the business is evolving and changing rapidly.

Agile methodologies work well for different types of mission critical financial services projects in which demands on solutions are high and failure to deliver can have significant business risk and penalty. These include risk, compliance, regulatory and information management initiatives, in a broad range of financial services business domains such as equities, fixed income, commodities and energy. New regulations are being defined

all the time, and businesses need to respond and adapt quickly. This is where the Agile project model can help.

## Increasing data and reporting requirements

Many emerging markets solutions increasingly will rely upon data and reporting. Therefore, a solid information management strategy and implementation will form the underpinnings for future needs.

Projects around data are especially complicated in the emerging markets. The breath of financial instruments and products is enormous and evolving. Customer data is complex since, in many cases, businesses are dealing with global organizations that have numerous subsidiaries and legal entities. Market data is vast and new exchanges are coming online frequently.

The delivery of information management projects can be enhanced using an Agile approach to help ensure best practices around architecture, modeling, governance and reporting are employed.

## Tactical vs. strategic solutions

Another challenge emerging markets face is choosing between tactical and strategic solutions, as it is always difficult for one solution to satisfy both needs. Agile can help deliver high-priority business functionality quickly, although it is always recommended to think strategically and long-term at all times. If strategic direction is overlooked, business and IT organizations can face issues down the road as the systems and solution could easily spin out of control.

IT projects in the emerging markets are often defined as "run the business" and "change the business" focused. Day-to-day processes and procedures need to be maintained while game-changing business opportunities are explored. A balance is required and any methodology should be able to support both types. Running the business is critical; however, at the same time, changes need to be made in order to promote innovation, and existing business processes need to be integrated with these process changes.

New regulations are being defined all the time, and businesses need to respond and adapt quickly.

The four key attributes of any project are cost, scope, time and quality. In waterfall projects, quality is usually compromised when deadlines are set in place on a fixed budget calling for 100 percent of the defined functionality. In reality, 100 percent of the functionality will probably never be achieved, and even worse, 80 percent of the cost may be associated to the 20 percent of the functionality that may never be used or required.

Agile focuses on quality. As projects evolve, scope and required functionality may change as the business starts to see frequent deliveries of the highest-priority features. Often, development is completed ahead of schedule as a result of the efficiency Agile projects provide.

## Moving to Agile

Agile methodologies are the key to successful projects, and are especially applicable to environments that are rapidly changing and require specific time-to-market and return on investment objectives be met. Emerging markets are a prime contender for the adoption of the Agile model as an instrument to success.

Agile can be applied to all types of projects and solutions within large and small financial organizations alike. However, making the transition to the Agile model is not easy. It is a major change in the way financial services solutions are defined, implemented and delivered, especially in fast-moving business environments like the emerging markets. Financial institutions will be best served by using mentors and seasoned financial services technology consultants and specialists who are familiar with the methodologies.

## About SunGard Global Services

SunGard Global Services combines business consulting, technology and professional services for financial services firms, energy companies and corporations. Leveraging SunGard's global delivery model, more than 5,000 employees worldwide help customers manage their complex data needs, optimize end-to-end business processes and assist with systems integration, while providing full application development, maintenance, testing and support services.

