Navigating safely down the digital **transformation** waterfall

Agile versus waterfall: The conundrum that continues to tax the minds of project and program managers in the world of financial services technology.

Contributed by Alan Goodrich, ERI

Ever since the 70s, the question of whether waterfall or agile is the best approach for systems development and deployment projects has been keenly debated. The current trend towards API-first, cloud-based solutions that promise greater flexibility and better cost control appears, on the face of it, to favour an agile approach – or does it? Perhaps the secret to safely navigating the digital transformation waterfall lies more fundamentally in the architecture of the core system.

If one was launching a start-up business, then taking incremental steps in an agile approach would certainly be an interesting option to consider. However, for most financial services providers, the starting point is a legacy systems' landscape that supports ongoing business activities, while complying with a myriad of regulations. Migrating existing products, services and customers to a new platform, while minimising operational disruptions and remaining compliant does not naturally suit a gradual, or agile, approach. The architecture of the new solution must support and enable an agile approach that will allow new delivery channels, products and services to be introduced incrementally going forward. However, for the initial digital transformation of the business, a waterfall approach offers lower risks in terms of customer satisfaction, system integrity and regulatory compliance. Once the waterfall has been successfully navigated then an agile approach may be adopted to introduce those new delivery channels, products, services and processes.

But is the change motivated?

From a customer perspective, changes to the user experience (UX) that are too frequent, with little apparent added-value, can become frustrating. As customers, we like to see progress but, as creatures of habit, we also like consistency. Continual change may have the opposite effect, from that intended, on customer satisfaction.

For internal operations and customer support, the impact of perpetual updates should also not be underestimated. The cost savings and efficiencies, which may have been realised in the development and delivery of the enhancements, could be swallowed up entirely by additional expenses, as the staff need to be continuously trained to manage the new features, func-

tions and processes being incrementally delivered.

With the introduction of; new standards, such as ISO 20022, new technology, such as blockchain, and associated new business models, a piecemeal approach may also be impractical. These involve complex end-to-end processes that need to be developed and tested in a holistic manner, i.e. using a waterfall approach, before being deployed.

By no means least, is also the challenge of both complying with existing regulations and keeping up with new ones. Here again, an agile approach may need to give way to a waterfall one. The risk of compliance failures is elevated when multiple systems need to combine either data or processes coherently in order to ensure auditable conformity. Add to this the potential for integrity to be compromised through incrementally applying new features, functions, or processes, and the waterfall suddenly looks the easier option.

Stay on top

Be careful not to get swept along by the trendy, safe agile wave, if it is not the appropriate approach. Choose a core system that allows for an API-first approach built upon a Service Oriented Architecture (SOA) with a decoupling of the presentation, business services and data layers. Once your initial digital transformation journey has been navigated successfully, using a waterfall approach to minimise the costs and risks, then it may be safe to adopt an agile approach to introduce new products, services and processes. However, remain mindful of the possible impacts on customer user experience, internal operations, external business flows and regulatory compliance. ∎

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