



Three Keys to Delivering Digital Transformation

Alan W. Brown

Professor at University of Exeter
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Business leaders, industry strategists, academics, and policy makers are all scrambling to make sense of digital transformation and to define strategies for success in our increasingly digital economy.

In a series of 4 articles, [based on my latest book](#), I will look at the importance of the leader's role in delivering digital transformation in today's digital economy. I believe there are three key's to success; Agility, Innovation, and Disciplined Management.

Part 2: Becoming an Agile Organization

In this second article I review the context for agile practices and address what it means to increase agility within an organization and across an ecosystem of partner organizations.

Today's organizations are increasingly under pressure to respond ever more quickly to the needs of their customers and broader stakeholders. Not only is the drive for increased flexibility resulting in more new products being brought to market faster, it is also accelerating the evolution of existing solutions and services. Handling such change is critical for business success, driven by external factors such as market fluctuations, new technologies, competitive offerings, and new laws.

The instability driving business change has become a dominant issue for many organizations. The disruption that digital transformation triggers within a market context of fast-paced evolution has analogies in military combat. In recent years, much military strategy has focused on techniques appropriate for extremely fluid situations with unprecedented, confusing scenarios. These situations are referred to with the acronym VUCA: Volatility, Uncertainty, Complexity, and Ambiguity.

Dealing with VUCA

Traditional problem-solving approaches seek to optimize the stable aspects of strategy to control variations and anomalies. VUCA situations are, however, characterized by their lack of uniformity and therefore require approaches that recognize and thrive in conditions of inherent instability. But change cannot mean chaos. Every organization's activities, in

particular its changes to ongoing ways of working, must be governed by a plethora of formal and informal procedures, practices, processes, and regulations. These governance mechanisms are essential to the organization's success in managing and controlling how products and services are delivered into production, maintained, evolved, and brought to end-of-life.

Much has been learned over the past two decades to offer a clear direction in agile delivery. The rapid evolution of digital technology and resulting digital transformation activities have forced organizations to invest in techniques that remove friction and increase flexibility in their delivery approaches, without abandoning all forms of control. They face pressure in balancing their delivery capabilities across four key dimensions:

- **Productivity of individuals and teams.** Traditional productivity approaches are based on the quantity of units of capability (i.e., new features, lines of code, or function points) delivered over time. Producing more in a shorter amount of time may, however, not be the most effective metric for productivity in highly volatile environments. Other metrics have begun to emerge, such as those based on rapid learning through adoption of experimental techniques.
- **Time-to-market for projects to complete and deliver a meaningful result to the business.** Long planning cycles and multiple levels of sign-off may be appropriate in well-understood environments. However, their value diminishes where speed of delivery and early feedback with customers is necessary. In such cases, rather than focus on overall project completion, it is more effective to optimize the delivery of usable capabilities in short bursts into the hands of product and service users.
- **Process maturity in the consistency, uniformity and standardization of practices.** External auditing and internal corporate mandates often require procedures to conform to rigorous scrutiny. Often it is not just the quality of the outputs that are assessed, but also the way in which those outputs are produced and maintained. Various industry frameworks can help, but usually bring with them a heavy overhead in documentation, sign-off, and management.
- **Quality in delivered product and services, errors handled, and turnaround of requests.** A focus on high-quality products and services is essential. However, for the viability of many solutions the risk of product error (and the impact of that error) must be aligned with the resources needed to achieve specific levels of quality. Traditional measures of success are typically combinations of defect density rates and errors fixed per unit time. These must be balanced with a broader view of quality, one that focuses on how efficiently products and services better able to achieve the outcomes that matter to consumers are put into their hands.

Finding an appropriate balance across these success factors when delivering digital transformation is a constant struggle. One of the most challenging aspects is achieving the change in perspective necessary to balance speed of delivery with governance and predictability of the delivery process. Traditionally, methods and processes for any transformation placed the highest priority on ensuring that everything was rigorously specified before they were executed, and that comprehensive assessment plans were followed to satisfy external auditors that the changes conformed to the specification as closely as practically possible. But such approaches assume that significant elements of the

future desired state are both knowable and known when embarking on the transformation. In a digital context this may not be the case.

Also, many organizations in today's digital economy view the relationship between 'operational risk' and 'delivery risk' to be very different than it was a few years ago. There are many occasions where the risk of delivering late or with capabilities that do not meet evolving market needs outweighs the risk of failing to analyze every possible usage model, run every possible test case, or follow every step in the defined delivery process. This is particularly true in situations where changes to existing products and services must be quickly understood, analyzed, and brought into the hands of consumers. This kind of flexibility, or agility, in delivery has become an essential element of the digital economy. Providing this flexibility is an essential aspect of an organization's strategy and approach to product and service delivery.

Taking the Next Steps

Despite early successes, many organizations have seen their ambitions thwarted when their agile software development teams become swamped by overbearing, slow-moving engineering and management practices. Hence, from an agile software delivery context, it is critical that substantial effort is invested in essential activities such as hiring staff, obtaining and setting up test equipment, interacting with project and program management coordinators, and training sales teams on new capabilities. Without that focus, the gains from agile software development become insignificant in the daily cut-and-thrust of a project, or else they are choked by broader organizational inertia and inefficiencies. Any organization with ambitions to be more agile must understand and support those leading the way.

Perhaps the biggest challenge of transforming into an agile organization is to achieve a shift in thinking, from which agile actions must flow. For many organizations this change is simple in theory, but very difficult to execute in practice due to a variety of scaling issues. As a result, moving to an agile organization mindset requires focus on practical areas where demonstrable, measured progress can be made: technology, process and people.

The remaining 2 articles in this series address these two additional keys to delivering digital transformation: Innovation and Disciplined Management.

For a deeper examination of the ideas raised in these articles, take a look at: "[Delivering Digital Transformation: A manager's guide to the digital revolution](#)".