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CSD380 Mod 1.3

The goal of development is to create products that the customer wants. Over time, the changes in DevOps have focused on creating a more comfortable workflow for developers and a higher-quality product for the customer. Some of the guiding principles behind this are the Agile Manifesto, Continuous Delivery, and the Lean Startup.

Agile is a theory about thinking smaller and working faster. The goal is to create a better product from more iterations, prioritizing quantity to create quality. By doing multiple releases, you get more valuable feedback earlier, which drives the product's direction. A central component of working in agile is determining the smallest goal possible and focusing on that as the primary delivery. This can break up the complex task of creating new software and handling customer needs into more manageable components. Just like we learned about “Limiting work in Progress,” this fits into that idea.

Based on Agile’s view of software, Lean Startup applies this concept to business. Lean startup turns the product design into a hypothesis, which is presented to the customer and continuously revised until it seems like a viable product. By doing this, you don’t need to seek out as much initial funding or create a prototype as elaborately. Again, the goal is a minimum viable product, just like agile determines in software.

Continuous Delivery is the idea of having environments and automated testing so that any changes to the software are ready at the moment of finishing development. Any builds that pass all tests are automatically pushed to customers without human intervention. This requires rigorous tests and environments so that only working code is given to consumers.

All three of these share the idea of “speed equals quality,” which many studies have shown to be true for software development. Teams are happier as their work is more focused on a more discrete product. I worry about the inherent cost and never realized products with this mentality. If you always have an inherently lower-quality good to begin with, how long before it becomes a high-quality version? There’s clearly a great need for this kind of thinking, and I would love to see it in person, not just on paper.

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