Silver bullets, we are told, are very effective for managing werewolves. Decades of experience, however, have shown them to be dramatically less effective for managing software development. Magical creatures invented in previous centuries still haunt us today despite our best efforts to manage them away. Our bright hopes for prosperity and satisfying work that we can take pride in remain even more rare than werewolves in contemporary software development organizations.

Albert Einstein claimed that, “The world we have made as a result of the level of thinking we have done thus far creates problems we cannot solve at the same level of thinking at which we created them.” Thinking more carefully about software development as a magical process that turns requirements into valuable software may actually be the problem rather than the solution we seek. Even beautifully crafted, flawless software actually has very little practical value in and of itself. The design of the product or the business process the software is embedded in determines its potential value. The actual value comes when the product is used to satisfy some need. The job is not done until the need is met.

When you examine the value chain from initial concepts of unmet needs or goals to the achievement of those goals through ongoing use of a new product or business process, it immediately becomes clear that software is just one part. Thinking at the value chain level strives to avoid the sub-optimization that follows from separating design and implementation of the software from design of the product or process (requirements) and from integrating, deploying, supporting, and actually using the software-enabled product. Decisions made in each area significantly affect work in each of the other areas. Your teams will deliver the greatest value when tradeoffs are made to optimize the value chain rather than any one area at the expense of the others.
Organizations that depend on software maintain an entire menagerie of mythical creatures, governance processes, requirements processes, software development processes, sales and marketing processes, operations processes, and more. Each is strong and beautiful and constantly fighting with the others and delivering more waste than prosperity for the organization or value for the customer. Silver bullets aimed at optimizing any one usually make life miserable for the others.

Each part of the value chain, from concept to sustainable cash flow is of course carried out by people. People are required because design and development are fundamentally learning activities, not production. People skilled in each area must communicate richly, clearly, and frequently to make coordinated and consistent design, implementation, and delivery decisions that rapidly deliver the best results they are jointly capable of. Cross-functional teams take deep pride in delivering great products and effective business processes.

Solid software practices are necessary but alone are sadly insufficient. Instead, the value delivery problem must be thought of from the outside in. In this book, Carl Kessler and John Sweitzer offer a helpful approach to framing the problem, starting with identifying key stakeholders who determine the real value of the final result. They identify how decisions made by the product development team need to respect the contexts and typical concerns of each stakeholder category.

Outside-in thinking complements any approach your teams may be taking to the actual implementation of software, but it changes how you measure success. A successful outside-in team does a lot of learning and not much speculation. Agile software processes, which emphasize frequent feedback, are most likely to deliver the solutions all the stakeholders will truly value. But, without an outside-in context, even well-executed agile processes risk coming up with ‘technical success,’ which is a euphemism for business failure.

An outside-in approach is a systems thinking approach. Treating the end-to-end value chain as a value delivery system will not slay our menagerie of mythical creatures; it will enable them to function as a balanced ecosystem. This takes hard, disciplined work that integrates all levels of an organization. It is a higher level of thinking than the one that falls under the spell of the promise of yet another silver bullet.

—Tom Poppendieck