Challenge
When architectural standards in software development are not consistent across an enterprise, quality is impacted and best practices are not embraced.

Focus
This CA Labs research project is focused on methodologies and tools that will standardize architectural and development processes and make them more efficient.

Result
Software will have increased quality, be easier to adopt with framework alignment, and architect and development communities will be more efficient.

Agile development has ushered in faster and more focused approaches that require architectural and development flexibility in software. Widespread adoption of agile has disrupted traditional software development processes and created opportunities for organizations to define and implement new software engineering practices, including methodologies that increase software quality and align with agile development.

Software engineering organizations function at peak efficiency when architectural standards are embraced. They deliver solutions with deeper designed-in and built-in quality that delights customers with reduced overall cost of ownership. Software organizations also gain benefits from shorter time to market, higher deployment success rates and fewer support calls. To embrace best practices, software teams need tools, processes and programs that are aligned to current development methodologies.

The CA Labs Q-DAP research project is targeted at providing a cohesive and consistent architecture process, containing a framework for architecture policies, roles, procedures, best practices, learning materials, templates and checklists. The research will develop architectural standards that guide systematic, elastic processes for continual evaluation and improvement of solution architectures that are delivered using an agile scrum development methodology.

Researchers will take human aspects into consideration in proposed adaptations of architecture processes and workflows, accounting for different types of software development lifecycle (SDLC) processes. The project will also include the specification of programs to establish learning systems and a professional development roadmap for the architect community.
More information on CA Labs Q-DAP research project

CA Labs is collaborating with researchers from the University of Haifa, Israel. The following papers were published about this research project:


For additional information about this or other CA Labs projects, please contact Ethan Hadar at Ethan.Hadar@ca.com.