Successful companies trust us to
improve the way they develop software.

Read their real-life, results-oriented stories inside.

Construx®
SOFTWARE DEVELOPMENT BEST PRACTICES

You always want peak productivity and quality from your organization. To stay on top, you need it.

In the following pages you will read true stories of companies that share your need for productivity and quality. They are smart, successful companies, just like yours. No two stories are exactly the same, but a common theme stands out: *success depends on investing in improvement.*

For over a decade, hundreds of companies have invested in software best practices improvement with Construx. Whatever their specific challenges or goals, the end results are the same: *improved quality, efficiency, and productivity that lead to greater profitability.*

To learn more about Construx training and consulting services, visit our website at **www.construx.com/consulting** or call **+1-866-296-6300.**

Why do so many companies choose Construx for consulting?

They get just what they need.

- **Expertise in software best practices**
  Our consultants have deep knowledge on proven practices as well as leading-edge trends.

- **Experience that is relevant to your needs**
  We have worked with hundreds of clients across numerous industries so we have seen and helped solve the most common, and the most destructive, software development problems.

- **Actionable solutions and advice**
  We provide targeted input and action plans based on companies' specific needs and goals—not theoretical fluff.

> "We went from a shop that was about 40% success rate of every delivery to a shop that was 95% on time, on budget, on scope for five straight years."
>
> *– Bill Tucker, VP, Nordstrom*

Agile Adoption

Integrate, adopt, or enhance any Agile program.

Construx consultants know all the ins and outs of Agile, as well as a wide range of other software development approaches. Rather than push any one methodology, we work with you to find the right fit for your team or project and then help you implement for optimal outcome.
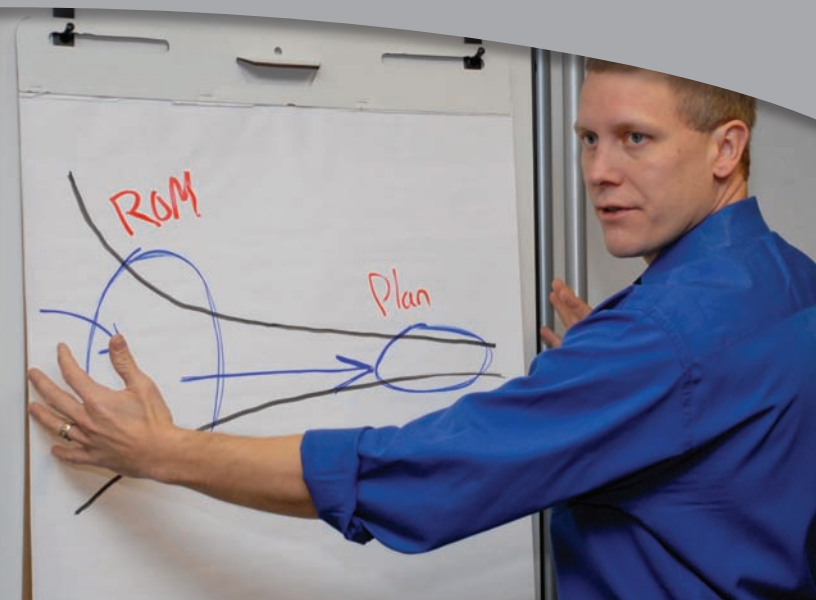
PROJECT SNAPSHOT:
Breaking Away From Waterfall Development

Client: *Manufacturing company in the transportation industry*

Challenge: *Move toward Agile development while meeting governance needs*

A manufacturing company in the transportation industry was locked into waterfall development when a co-development partner recommended using an Agile approach on a new project. Our client wanted to verify that Agile would produce real business value and satisfy its governance needs.

Highlights:

Construx was engaged as a trusted third party to ensure that the Agile development approach would be beneficial and would work within our client's stage-gate framework. Core activities included:

- Conducting a review workshop to assess the co-development partner's proposed Agile approach
- Customizing the general Agile approach to satisfy our client's quality goals
- Modifying our client's waterfall tracking approach to work within the Agile development framework and still meet governance needs
- Monitoring the project to maintain productivity and keep the project on course

Results:

The company used the customized Agile approach to deliver the project on time, at the desired quality level, with full governance.

PROJECT SNAPSHOT:
Scaling Agile to Multiple Teams

Client: *Global pharmaceutical company*

Challenge: *Scale Agile to a multi-team product development effort*

A global pharmaceutical company was building a major new system that would improve its ability to govern its multi-billion dollar product portfolio. To meet its needs for incremental investment and transparency, the company needed to transition from waterfall to Scrum methodology.

Highlights:

Construx helped expand Scrum deployment from a single team to 100 people in nine teams working together to implement coordinated aspects of a comprehensive program. Core activities included:

- Agile training with each team in the program to develop a shared understanding of the methodology and approach
- Coaching to set up a Scrum of Scrums to oversee the entire program
- Tailoring Scrum to work within the existing software product lifecycle

Results:

The program is considered a significant success—from customers and managers to the CEO. Other groups within the organization have adopted Scrum after seeing the success of the program. Most important, the company's products now reflect an awareness of customer needs like never before.

Organizational Assessments & Improvement

Focus on changes that make a true difference.

Assessing your organization's strengths and shortcomings is an important first step. Yet assessment is only half the journey. A structured and focused improvement effort will bring real and lasting change, help you rise above the rest, and guarantee you stay there.

PROJECT SNAPSHOT:
Achieving World-Class Product Quality

Client: *Multinational wireless company*

Challenge: *Improve software quality practices*

A large wireless company dedicated itself to becoming a world-class software development organization. It had set goals to decrease time to market, respond to changing customer needs, and improve quality of its software running on 200 million handsets.

Highlights:

Construx worked with the company over a five-year period. Core activities included:

- Conducting an Organizational Assessment, including reviews at sites in Europe and Asia, and providing specific recommendations for improvement
- Leading multiple custom seminars on quality throughout the organization
- Facilitating workshops in targeted improvement areas

Results:

The company made major quality improvements, including dramatically reducing defect insertion rate and substantially decreasing customer-reported defects.

PROJECT SNAPSHOT:
Responding to Dynamic Global Markets

Client: *International brokerage firm*

Challenge: *Increase ability to respond quickly to changing market conditions*

A top international brokerage firm needed an in-depth review of its software development practices to identify opportunities for innovation and improvement. Specifically, it wanted to find ways to release more frequently, support future organizational growth plans, and build strong cross-functional teams.

Highlights:

Construx came alongside the company and provided deep support over a four-year period. Core activities included:

- Conducting an Organizational Assessment and providing prioritized recommendations for improvement
- Providing requirements training to avoid common requirements pitfalls
- Leading retrospectives to improve future projects by identifying weaknesses and producing implementation action plans

Results:

The company has realized key goals across the organization, namely:

- Release cycles measured in months rather than quarters
- Marked improvement in coordination between teams in New York, Toronto, London, Japan, and Hong Kong
- A software development lifecycle that exactly meets its business needs

Team and Project Consulting

Get peak performance and predictability.

Teams and projects don't always deliver as expected, or as needed. Construx can step in at any point and work with teams of any size to produce the results you need. The best part? The benefits last well beyond the short-term need, strengthening your organization as a whole.

PROJECT SNAPSHOT:
Improving Productivity

Client: *National internet retailer*

Challenge: *Improve team predictability and productivity; reduce fire fighting*

A leading internet retailer was struggling with predictability and with the productivity of its software teams. The culture and diversity of the company did not lend itself to standardized estimation and planning tools, so they needed a customized approach.

Highlights:

Construx performed a grass-roots pilot exercise with six teams that introduced new concepts and simple spreadsheet-based tools for estimating, planning, and tracking project work.

Results:

In just a few weeks, the teams identified the root cause of their challenges. Conventional wisdom said they spent 20% of their time putting out fires; project tracking showed they were actually spending 50-75%. This realization allowed them to:

- Realign expectations for what teams could produce by accounting for the fire-fighting work in their project plans

- Focus on reducing crisis management time so they could increase the amount of time spent developing new functionality

Over time, the teams were able to further customize and evolve the estimating and tracking tools for their own needs and incorporate these practices with Agile methodologies and other development approaches.

PROJECT SNAPSHOT:
Catching Up to the Market

Client: *Data analysis company*

Challenge: *Ensure a successful outcome for a mission-critical program: re-architect a key product line*

A data analysis company had let its flagship product lag several years behind current technology and needed to replace the underlying architecture. It was clear to management that the waterfall approach the company had been using for 20 years and the existing project management expertise wouldn't support the comprehensive redesign initiative.

Highlights:

Construx introduced and implemented a new development process and project management office for the redesign program. Throughout the two-year project, core activities included:

- Creating an implementation roadmap that defined how evolutionary delivery would be used to deliver the program

- Developing an estimation model suited to the new development process

- Conducting milestone and project retrospectives to provide timely feedback and make mid-course corrections

Results:

By project's end, the company had developed and released a completely new technology platform on time, on budget, and with 100% of the originally scoped functionality. Top executives had better project visibility than ever before and staff effectiveness was enhanced across the board.

Technical Consulting

Address risks in design and code before it's too late.

Weaknesses in your software's design and code can cause ripple effects into quality, budget, and delivery timeframes. Construx can help you identify and fix technical issues both in your own systems and in those you are looking to acquire.

Managing Risk in an Acquisition

Client: *Large internet firm*

Challenge: *Assess acquisition viability*

An internet firm was considering acquiring an internet startup. They needed confidence that the startup's software would support their business goals and wanted to understand the risks, if any, up front.

Highlights:

A team of Construx experts performed a two-week review of the startup's software. The team reviewed the code, design, tests, and practices for maintainability, scalability, security, open source dependencies, and other issues. Construx provided ongoing feedback and helped adjust priorities as risks were uncovered.

Results:

Through Construx's assessment, it became clear that the platform was solid enough to meet the company's business goals and the acquisition went forward. By using Construx, the company was able to:

- Update plans (including valuation) to account for the investment of time and money needed to bring the new software up to internal standards

- Set realistic expectations at the start of a new relationship

- Maintain an arm's length relationship from the startup's intellectual property—in case the deal fell through

$20 Million Platform Mistake?

Client: *Insurance firm*

Challenge: *Review and assess project design, code, and practices*

An insurance firm was developing an internal system to provide major gains in efficiency and the project was over budget and behind schedule. The system leveraged an unproven technology, appeared unstable, and had not yet demonstrated the planned efficiency gains. With $20 million invested in the project, management was considering cutting its losses and killing the project.

Highlights:

Construx performed an independent review of the troubled project's design, code, and management and technical practices to determine its viability. A number of improvement opportunities were identified in the areas of estimation, planning, and testing. Despite a few weaknesses, the overall system design and implementation were deemed sound and close to completion.

Results:

Instead of being cancelled, resulting in the loss of $20 million and many years' time, the project moved forward and was soon providing a viable next-generation platform.

Breadth of Services

We help where you need it the most.

The services we provide and the way we work are based on our expertise and experience, but more importantly, on what you need the most. Whether your challenges and goals are at the team, project, or organizational level, Construx can help.

	Enterprise	Project
Methods & Process	• Enterprise Agile Adoption • Software Development Audit • SDLC Adoption	• Scrum Adoption • Project Assessment • Agile Practices Recommendations
Management	• Professional Development Programs • Estimation Practice Improvement • Project Management Office	• Project Chartering • Project Plans • Release and Sprint Planning
Requirements	• Requirements Process Definition • Requirements Practice Improvement	• Requirements Workshop • Agile Requirements • Requirements Reviews
Test & Quality	• Quality Practices Review • Testing Practices Adoption	• Unit Test Adoption • Quality Planning • Test Planning
Technical	• Technical Due Diligence • Code Metrics • Benchmark	• System Evaluation • Architecture Review • Code Assessment

ABOUT CONSTRUX

Construx Software is the market leader in software development best practices training and consulting. Steve McConnell, Construx's CEO, is the author of some of the most accessible books on software development ever written, including *Code Complete, Rapid Development,* and *Software Estimation: Demystifying the Black Art*. Steve leads a team of seasoned consultants whose pragmatic approach and broad and deep experience in real-world development have helped companies in diverse industries to solve a wide range of software challenges resulting in higher quality software —delivered faster and with greater predictability.

Want to write your own success story? To learn more about Construx training and consulting services, visit our website at **www.construx.com/consulting** or call **+1-866-296-6300.**

"The assessment has been far more valuable than I expected! It's enabled our software managers to rally around a roadmap to improve quality. We're making great progress one step at a time."

– Jon Ramberg, Software Engineering Manager, Intermec

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