

**cognence helps you integrate best practices, automation tools, and training, increasing IT and development productivity by 50% or more**

## Experience World-Class Results with a Scalable, Repeatable Engineering System

World-class businesses are built on one simple principle: create repeatable, scalable systems to deliver products and services better than the competition. Because of this systematized approach, leading software teams enjoy 50% more productivity than trailing ones.

Yet many companies that rely on software development for their bread and butter still don't have an engineering system that can be leveraged and scaled across the organization. The consequence? Increased costs due to longer development times, lower quality and people who aren't able to work across functions or projects.

### Process, Tools, and Training – The **cognence** Advantage

There are many companies that specialize in process improvement, engineering automation tools, or training, but **cognence** solutions incorporate all three. We optimize the mix between best practices, automation, and training to build a repeatable, scalable engineering infrastructure for your organization.



**cognence** consultants apply their expertise in best practices including Agile, RUP, CMMI and Enterprise Architecture to craft an engineering system that scales success.



As a trusted partner of IBM Rational and Serena, **cognence** helps you select and implement automation tools to streamline your processes, freeing up time for other efforts.



**cognence** offers more than three dozen training classes that teach your people to effectively apply new processes and tools, ensuring an optimum return on your investment.

## Implement Engineering Improvement Efforts That Work

If organizational change were as simple as reading about best practices and implementing them, everyone would be operating world-class organizations. At **cognence**, we understand the intricacies of RUP, Agile, CMMI and Enterprise Architecture and how to implement them successfully. But we also understand that buy-in is the key to lasting change.

Following our proprietary APEX (Assess/Appraise, Plan, Execute, Transition) transformation process, we benchmark your company against the best in the industry. We then collaborate with key players at all levels of your organization to plan and execute a realistic engineering improvement plan – one that's in line with your organization's business goals and suitable to your environment. At the end of the project, we provide customized training for a smooth transition out of your organization, giving you all the tools you need to run your new, well-oiled machine on your own!

**cognence** has helped more than three dozen Fortune 1000 organizations achieve efficiencies and savings. To find out more about how we can help you, contact us at 303-377-9934 or email [solutions@cognence.com](mailto:solutions@cognence.com).

### The **cognence** Brand Promise

As a **cognence** client, you can expect:

- Accelerated progress and results on improvement efforts
- Lower development costs
- Increased organizational productivity
- Improved product quality
- Standardized, scalable processes
- Integrated tools
- Aligned, trained teams
- Increased capabilities

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“ Over the course of one year, **cognence** was able to unlock millions of dollars of productivity by helping us improve our software engineering capabilities. ”

Russ Kennedy  
Sun/StorageTek





Through a blend of **best practices, automation tools, and training**, we help you realize an immediate savings on current projects while laying the groundwork for an ongoing return on investment. We offer a broad range of services to improve your IT and software development efforts.

## Appraisals/Assessments

It's difficult to understand where you should go if you don't have a clear idea of where you are. **cognence** offers a variety of assessments and appraisals to benchmark your company and identify areas where change will impact your bottom line the most.

- CMMI® SCAMPI<sup>SM</sup> A, B, C, targeted Process Area(s)
- Personnel Alignment
- Cost of Quality (CoQ)
- Project Retrospective/Lessons Learned
- Automation Tool Selection, Usage, and Needs Analysis
- Software Inspections, Code Reviews, Size, Complexity

## Strategy/Planning

Lack of buy-in can sabotage even the best-laid plans. That's why **cognence** conducts a series of workshops to gain perspectives from all levels and involve key players in the change process. Working in collaboration with your team, we identify top issues and develop an executable plan that's in line with your business goals and suitable to your environment.

- Strategic Planning
- Detailed Engineering Improvement Planning
- Detailed Project Planning
- Detailed Tool Implementation Planning
- Engineering Improvement Business Case/ROI Planning

## Engineering Improvement

Whether you're looking for improvement across all engineering disciplines, or in just a targeted few, **cognence** can help. We've helped dozens of Fortune 1000 companies apply software engineering best practices. We have documented expertise in:

- Process Development
- Process Asset Library Implementation
- Process Deployment
- Process & Product Quality Assurance
- Mentoring & Coaching
- Measurements & Metrics Collection & Analysis
- Supplier Quality Assurance & Audit

## Automation Tools

Automated engineering support tools can significantly reduce development costs; however, because many organizations don't know how to properly integrate automation tools, Meta estimates that nearly 75% of purchases end up as shelfware within two years. **cognence** integrates tools to support configuration management, software modeling, project management, requirements and change management, functional and load testing and regulatory compliance.

The **IBM Rational** Unified Process and corresponding software tools can help organizations implement an engineering system. **cognence** is an IBM Rational Partner and has installed and trained teams on IBM Rational solutions listed below for more than a decade.

- |                  |                                |
|------------------|--------------------------------|
| RSA/RSM/XDE/Rose | ClearQuest                     |
| PurifyPlus       | Functional/Performance Tester  |
| ProjectConsole   | Rational Unified Process (RUP) |
| RequisitePro     | Portfolio Manager              |
| Build Forge      | AppScan                        |
| ClearCase        |                                |

**Serena** provides solutions that support application lifecycle management, operations process management and regulatory compliance, including Sarbanes-Oxley, HIPAA and ITIL. **cognence** is a Serena partner and has helped numerous customers optimize their investments in Serena products such as:

- |               |                 |
|---------------|-----------------|
| TeamTrack     | Mariner         |
| Dimensions    | Version Manager |
| ChangeMan ZMF | Collage         |
| ChangeMan DS  | Builder         |
| Mover         | RTM             |

## Training

**cognence** training courses explain the fundamentals of software engineering best practices, manifesting a company-wide understanding that results in lasting change. Our instructors help your teams effectively apply new processes and tools, ensuring a positive return on your investment.

### Engineering Improvement Training

Introduction to CMMI  
SCAMPI Appraisal Team Training  
Process Modeling with SPEM and UML  
Process Improvement Fundamentals

### Software Development Training

#### Project Management

Software Project Management with RUP  
Iterative Development Fundamentals  
Risk Management Fundamentals  
Iterative Development for Executives

#### Business Modeling

Business Modeling with UML  
Domain Modeling with UML

#### Requirements

Requirements Gathering Fundamentals  
Requirements Management Fundamentals  
Use Case Modeling Fundamentals  
Requirements Management with Use Cases

#### General

Configuration Management Fundamentals

#### Testing

Test Case Analysis with UML

#### Analysis and Design

Object Oriented Analysis with UML  
Object Oriented Design with UML  
Object Oriented Analysis and Design with UML  
User Interaction Design with UML  
Introduction to Object Orientation  
UML Fundamentals

#### Architecture

Assessing Architecture Viability with ATAM  
Fundamentals of Reusable Architecture  
Model-Driven Architecture Fundamentals  
Modeling Service-Oriented Architecture

### IBM Rational Training

Rational Unified Process Fundamentals  
Customizing Rational Suite  
Introduction to IBM Rational Analyst Tools  
Introduction to Rational ClearQuest  
Rational Rose XDE Design Fundamentals  
Rational SoDA for Word Fundamentals  
Rational ClearCase Fundamentals  
Rational ClearCase Advanced  
Rational ClearCase Administration

[www.cognence.com](http://www.cognence.com)

“ We needed consultants with proven experience in the field and previous successful implementations. Serena provided us with **cognence** consultants who handled the implementation smoothly. I would absolutely recommend them. ”

Kheder Baykal  
Countrywide Financial

## Workshops

**cognence** workshops provide customized training specific to your organization's processes, tools, skill sets and environment. Our workshops are an excellent way to optimize your people.

### Process Workshops

Management Steering Group (MSG)  
Engineering Process Group (EPG)  
Process Architecture/Definition  
Process Implementation Indicator Description (PIID)  
CMMI High Maturity

### Project Management Workshops

Project Management (Planning, Tracking & Oversight)  
Risk Management  
Estimation  
Supplier Management  
Integrated Product and Process Development (IPPD)

### Engineering Workshops

Requirements Development & Management  
Design, Implementation, & Integration  
Verification & Validation (V&V)  
Reviews & Inspections

### Support Workshops

Configuration Management  
Process & Product Quality Assurance  
Measurement & Analysis  
Decision Analysis & Resolution  
Causal Analysis & Resolution

## Management Consulting

In today's market, executives have more on their plates than ever before. To complicate matters, the software development field is constantly changing, making it difficult to keep up with the latest best practices and concepts. At **cognence**, that's our specialty. We also understand things from your point of view. Our consultants have managed IT departments and large-scale software development teams numbering in the hundreds. We can serve as your advisor while you lead your organization to success.

## Project Team Augmentation

**cognence** consultants average more than 20 years experience. We are available to play key roles on your projects, helping them meet your business objectives while simultaneously improving your organization's capabilities throughout the software development lifecycle.

### The **cognence** Team Values:

- **Customer Focus** - *We are dedicated to our customers' success and are proactive in providing innovative solutions*
- **Passion** - *We enjoy our work and continually seek to learn and enhance our knowledge and capabilities*
- **Teamwork** – *We help our customers and each other succeed*
- **Integrity** – *We conduct business in the highest ethical and professional manner*
- **Accountability** – *We deliver on our promises, both to our customers and to ourselves*

If you are interested in learning more about how **cognence** integrates best practices, automation tools, and training to increase your company's IT and engineering productivity, contact us at (303) 377-9934, or [solutions@cognence.com](mailto:solutions@cognence.com).