



The Quality Journal

A publication of the Chicago Quality Assurance Association
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Message from the President

In September, CQAA reached a major milestone. We now have 1,500 members. Since converting to our new CRM database one year ago, we greatly improved the ease of becoming a member and our ability to reach out to guests who attend our CQAA events and invite them to become members. Our CQAA Membership Director launched a membership campaign this month to explain the value of joining the CQAA community to over 600 QA professionals. You can read more about it on page 2. Remember to tell your colleagues and friends about CQAA.

Another exciting statistic from our CRM dashboard is that since January, 2010, over 1,100 individuals register for one or more of our programs, lunch & learns, and webinars. All of our 2011 events received a rating of 4.3 and over (on a five point scale). We are delighted to be satisfying the educational and networking needs within our local professional community.

In this issue, we discuss a few topics that seem to be major areas of interest for our industry. Thanks to Peter DuPre' of Borland / Micro Focus who challenges all of us to look at and begin working with the Agile project framework. Our first Member Perspective arrives this issue featuring Rivka Papoff of Anixter, who shares some communication techniques from an Agile project. Also, for those of you who couldn't be there to hear Pete DuPre', we are providing a recap of the Fall Dinner discussing his insights into the latest industry trends. We hope you find all of the articles useful to dealing with your daily challenges.

We hope you had a great summer and enjoy the fall colors!!

Nancy Kastl, President CQAA

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TAP Group



The Quality Journal

September 2011

CQAA News



Save the Date

QUEST 2012

April 30 - May 4, 2012



Chicago is the hosting city for the 2012 North America QUEST Conference (Quality Engineered Software and Testing). QUEST will be at the Westin Lombard Hotel. Be sure to plan the QUEST Conference in your 2012 budget. CQAA members receive a 10% discount. Watch for more details. www.gaiquest.org/2012

Membership – A Great Option to Consider

For those of you who are part of CQAA as Contacts, **Cindy Glaser, CQAA's Membership Director**, has a great message for you below.

If you're a QA/QC professional, or any other IT professional who values quality, the last few years have been a time of tremendous change for you. Perhaps you have made the transition to Agile. You may be working with offsite or offshore teams. Most likely you're being asked to do more in less time, and find yourself as much as a risk manager as you are a software tester. You may even be in transition and are planning your next move. Staying ahead of the game, staying relevant, is crucial as our industry changes.

As you're already aware, the Chicago Quality Assurance Association is working to identify trends and issues in our industry and provides opportunities for our members to learn, network and collaborate with peers, and establish credibility through certification. Chances are you have already attended a CQAA program or conference and have applied what you've learned back at the office.

As a member of CQAA, you will be the first to learn about our monthly programs, conferences and classes, and you will receive the CQAA Quality Journal, a periodic publication that reports from the front lines of our industry, all presented and written by professionals like yourselves who know how to succeed, now and in years to come.

I invite you to become a member of CQAA. Becoming a member is as simple as going to our [website](#) and signing up. **There is no cost to become a CQAA member**; in fact membership in CQAA can mean discounts on conferences and special events. If you do not become a member, you may miss out on offerings that are valuable to you.

I hope you will join the Chicago Quality Assurance Association and look forward to seeing you at one of our upcoming events.



October Speaker Program

Functional Testing and Automation within Behavior Driven Development

Wednesday, October 26, 2011 – 1:30 to 4:00 PM

About the Topic

Many quality issues stem from poor communication between a project's various stakeholders. Behavior Driven Development (BDD) attempts to address this problem by clarifying desired software behavior through discussion between stakeholders - the BA who thinks about the business' objectives, the QA who thinks about the edge cases, and the Developer who thinks about the implementation. The outputs of these discussions are specifications, which describe a system's requirements in high-level natural language. These specifications are used by the developer to guide their implementation. After a given feature has been implemented, the developer and tester sit down and automate the specification as a regression test which continues to exist after the software is delivered as "living documentation." These automated tests are not the same as a test script. Since they are written in a non-technical way, test failures are understood by both technical and non-technical stakeholders and defect triage is simplified. JBehave and Selenium/WebDriver will be used to demonstrate these automated tests within Behavior Driven Development.

Key Learning Objectives

The goals of this presentation are to show:

- How communication and silos affect software quality
- Why specification is preferred over scripting
- Basic overview of how tools like JBehave and Selenium may be employed for functional browser testing

About the Speaker

Chris Kozak is a Technical Lead at ThoughtWorks where he straddles the space between Software Development and Quality Assurance. He thinks that the software world should have more overlap of these two roles. He has experience in a number of industries ranging from automotive to retail, mobile to airlines. He is a passionate problem solver and a strong proponent of the behavior-driven approach to software development. He is also an occasional contributor to the JBehave project. In his spare time he tries to hunt down some adventure. This, at various times, has led to his cycling from San Francisco to Washington DC, backpacking in Nepal, skydiving, hiking the Canadian Rockies, and canoeing the Boundary Waters.

Host and Location

Thoughtworks
26th Floor Aon Center
200 E Randolph St
Chicago, IL

Agenda

1:00-1:30 Sign-in & Networking (please do not arrive before 1:00 pm)
1:30-1:45 Welcome and CQAA Announcements
1:45-4:00 Presentation (15 minute break at 2:45)

(Check in with security at front desk on first floor is required)

REGISTRATION IS REQUIRED TO ATTEND THIS PROGRAM. You must be on the registration list for entry into the building.

PLEASE REGISTER BY Tuesday, October 25, 2011 at <http://www.cqaa.org/>. If you have any questions, please contact CQAA Program Director at programs@cqaa.org



November Speaker Program

Successful Strategies for QA-Based Security Testing

Tuesday, November 15, 2011 – 1:30 to 4:00 PM

About the Topic

Involving the QA organization in a software security assurance program is critical, yet it's incredibly difficult to find a magic formula that is both effective, and not overly taxing on the QA organization. The key issue is that fundamentally - while security and QA are both testing functions - they couldn't be any more different.

QA tests applications for known features and functions, while security is tasked with testing the unintended features that developers program into their code. Testing for 'unknowns' is incredibly difficult, but what if security testing was split up in ways that were both defined and undefined? The defined components could be tested, while the undefined could be left to the ethical hackers to test. This talk addresses the practicality of having a 'testable security requirement' for all manner of application development lifecycles.

Key Learning Objectives

This talk will cover:

- Splitting 'security' into 2 separate tasks, a defined and undefined problem space
- Creating and managing sound security requirements, and executing tests against them
- Using security defects, incident response as future security requirements effectively

About the Speaker

Rafal Los is the Web Application Security Evangelist for the HP Software & Solutions business at Hewlett-Packard. Rafal is responsible for bridging gaps between security technologies and business needs. He also focuses on demonstrating business value from risk reduction through measurable gains in enterprise web application security solutions on behalf of the HP Application Security Center group. He has spent over 10 years in various facets of information security and data protection, building programs at companies ranging from startups to Fortune 50 enterprises. Rafal is a frequent speaker at security conferences and quality events. He contributes regularly to organizations such as the Open Web Application Security Project (OWASP) and others promoting education, openness and standards.

Host and Location

TAP Group
33rd Floor Willis Tower
233 S. Wacker Drive
Chicago, IL

Agenda

1:00-1:30 Sign-in & Networking (please do not arrive before 1:00 pm)
1:30-1:45 Welcome and CQAA Announcements
1:45-4:00 Presentation (15 minute break at 2:45)

REGISTRATION IS REQUIRED TO ATTEND THIS PROGRAM. You must be on the registration list for entry into the building. PLEASE REGISTER BY Monday, November 14, 2011 at www.cqaa.org. If you have any questions, please contact CQAA Program Director at programs@cqaa.org.



CQAA News (cont.)

CQAA Sponsor Program Highlights

CQAA offers a number of sponsorship opportunities which are outlined below. Sponsorships help fund a variety of events and activities and serve to minimize participation costs for CQAA members.

CQAA Annual Sponsorships

Service Provider Sponsorship

Visibility through your company logo, description, and website URL incorporated on the CQAA website as a featured sponsor and recognition of your company as a CQAA sponsor in a variety of ways including recognition at events and CQAA media resources.

Enterprise Sponsorship

Recognition of your company as a CQAA sponsor in a variety of ways including recognition at events and CQAA media resources along with discounts for all employees at a variety of QAI and CQAA events

CQAA Dinner Events Sponsorships

CQAA has two dinner events each year, one in the spring and one in the fall. The dinner event features an industry renowned keynote speaker. Sponsorships include **Speaker**, **Information Table**, and **Dinner Table**.

CQAA Contributors Program

Donations of funds of any amount are accepted as well the opportunity to provide a facility and refreshments for CQAA program events.

Certification Highlights



Professional certification does make a difference for many organizations. In addition to the actual accomplishment, those achieving this status gain valuable knowledge in the profession. The QAI Global Institute provides the certification and local chapters provide some level of support to prepare for certification.

CQAA actively supports and hosts study groups and Prep Courses in the Chicago area for the professional certifications listed below. **Study Groups** are provided at no cost to the attendee and are formed based upon the number of people interested and typically meet weekly for a period of several months. **Prep Courses** are delivered over a two day period. Location and cost of Prep Courses is shown below. Go to www.cqaa.org/certifications for more information and to register.

CQAA Job Posting Board

Are you looking for some great people to work with? Whether you are looking to add to your team or looking to join a team, you will want to explore the CQAA Job Posting Board. Since its launch, we are seeing increased use by companies looking to find software quality professionals. The cost is quite reasonable for companies to post their available positions and it makes perfect sense to connect with the CQAA to find the right talent. If you are in the market, keep checking as new postings appear on a regular basis. The link to the service is on the main page of the CQAA web site.



Industry Perspective

Industry Perspectives are offered by recognized professionals for the purpose of sharing information with our members on approaches, techniques, or information that may be useful to professional growth and development. The content is the property of the author and any reproduction of this content outside of this publication is not permitted. Anyone interested in this content or the information conveyed in this article should contact the author directly.

About the author...

Peter DuPré is chief solutions architect for Micro Focus, which has provided modernization and migration software solutions to government organizations for over 30 years. He spoke at the CQAA Fall Dinner on September 20. An article discussing his presentation appears later in this publication.

His company's website is www.microfocus.com E-mail him at peter.dupre@microfocus.com

Memo to CIOs: Try an agile approach to software development

Peter DuPre, Micro Focus, © 2011 Micro Focus Corporation

Originally published in the Federal Times on June 5, 2011



I recently heard the CEO of one of the world's largest financial institutions say, "we are a software company, masquerading as a bank."

Business is built on software. If we aren't building precisely what business users need, we're on the road to irrelevance.

Federal information technology managers have to effectively manage technologists — contractors and suppliers — to make sure they are hitting the mark every time for users.

The statistics are inexcusable: Only 32 percent of software projects are considered a success, meaning they meet the budget, schedule and features expected, according to a 2009 study by the market research firm Standish Group International. While there were slight improvements in government and health care project success, all others showed an increase in project failure. In general, some federal organizations my company has profiled have demonstrated good project cost control; however, they are still challenged in meeting schedule and functionality expectations.

Over the past 18 months, Micro Focus has profiled the software development processes of more than 150 U.S. and foreign companies and government organizations. Our data indicate that defining and managing software requirements, and the ability to rapidly respond to change, are still the principal issues plaguing IT in government.



Industry Perspective (cont.)

While government organizations had some improvements in project success and implementing repeatable processes, there is still a long way to go. For example, the federal IT Dashboard — the website that tracks and evaluates more than 7,000 federal IT projects — shows that more than 40 percent of the 800 major projects are operating below a normal standard. Considering that many of these projects involve IT modernization, it's clearly a big challenge.

The most prominent characteristics of software project failures are lack of collaboration and absence of business relevance. How will your organization improve collaboration and drive business relevance? Government organizations have been talking about software quality concepts for a long time; ask your team: "What's different now about our concepts?" Look for ideas to drive competitive advantage and business agility.

In our profiling of companies, we have seen tangible results in cost reduction, time to market and user satisfaction when the organization used new techniques in interactive software requirements simulations, allowing business users to visualize and validate.

I am a believer in agile methods — software development methodologies based on iterative development, where requirements and solutions evolve through collaboration among self-organizing, cross-functional teams and the business. Agile development accelerates delivery, in contrast to the traditional methods that most government organizations still use. The point is that the expectations of the user can change continuously and an agile process accommodates and responds to change more dynamically than traditional methods. The ability to react to change leads to better alignment with the business need and greater user satisfaction with the end product.

Historically, government organizations have worried that agile methodologies are too immature, and not well suited for large-scale enterprise development projects. In fact, the Software Engineering Institute, a federally funded research and development center based at Carnegie Mellon University, is publishing extensive information regarding the use of agile software development, demonstrating, for instance, the feasibility of having agile methods coexist with CMMI to optimize performance improvement. CMMI refers to the Capability Maturity Model Integrated, which defines software project practices that improve success. Those practices include: eliciting and managing requirements, decision-making, measuring performance, planning work and handling risks, among others.

Experiment with agile development processes — it may help you keep some of your projects off the hit lists.



Member Perspective

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About the author...

Rivka has over 10 years of experience as a Software Quality Analyst working at Anixter, a leading global supplier of communications and security products, electrical and electronic wire and cable, fasteners, and other small components. She has held her CSQA certification for 11 years, and has a B.A. in Mathematical Sciences from Loyola University in Chicago. She works on both agile and traditional waterfall software development projects. Her primary responsibilities include the creation of high-level test plans, test case matrixes, and test case development. In addition, Rivka coordinates testing efforts with other software development groups including business systems analysts, application developers, and systems software programmers. Rivka is an active member of the programs committee for the CQAA.



Communication Techniques for Successful Agile Projects

Background Information

The Anixter Software Development team needed to develop a table maintenance application. Using an agile methodology approach, the team was able to quickly deliver a solution that more than met the business requirements in a shorter time frame.

Agile Components Used

Several agile tools and components were used to develop the table maintenance application, including rapid iteration development, wiki (paperless) documentation, open and instantaneous communications amongst team members, and a clearly defined work plan and schedule of deliverables. The development methodology was a continuous process of improvements where completed iterations were reviewed, and new iterations were built that further enhanced the end product. To control the scope of work, delivery cycles were defined and approved in advance.

Quality Assurance (QA) Role

Part of the rapid development approach was to develop test cases in parallel to the programming effort. Software features and functions, as well as tasks, were prioritized by the QA and development teams. Open points and issues were brought up in an open environment where the team members could quickly discuss options and address questions. Each open point and issue, as well as the approved resolution was entered into the wiki. This joint team effort allowed both programmers and QA test analysts to work effectively together on each delivery cycle.



Member Perspective (cont.)

As initial programming of each delivery cycle was completed, testing would occur. Program defect status, including the validity of each defect, were identified and discussed with the programmers. Priorities were set on which tasks and defects to address and in what order or development iteration.

Communications Strategy

The emphasis of this development effort was face-to-face communications. The programmers and QA analysts were located in the same work area. This allowed the team to resolve open points quickly and effectively, as the goal was to have all open points addressed by end of each day. All discussions and approved resolutions were documented in the wiki. This approach helped to reduce defects and missing functionality in the later phases of the delivery cycles.

Where breakdowns in requirements and priorities occurred, and they did occur, the team resolved them quickly through the use of white board sessions and short concise meetings. As was the team standard, discussions and resolutions in these instances were documented on the wiki. This helped the team, both programmers and QA analysts to stay on the same page throughout the software development life cycle.

System Test Case Development

As coding for each iteration was completed, programmers were required to perform unit testing of their program code. The programmers reviewed the planned test cases for the appropriate delivery cycle. This information was used by the programmers to refine their unit test cases, thus catching potential code and logic problems earlier in the test cycles. This early detection facilitated the timing and quality of the final version of software that was put into production.

As in any agile development process, program iterations are subject to quick changes in requirements. When this happened, there was a risk of systems testing and test case creation occurring simultaneously. To address this, the QA members created a tight delivery schedule of both test case creation and the subsequent systems tests. Smaller and more concise test plans reduced the level of effort, as well as rework.

Key Success Factors

Fast and effective communications in a team oriented environment were the critical components of our success with agile development. Resolving open points and issues quickly kept everyone productive, while also reducing defects and rework. Another success factor was addressing the hardest or most difficult delivery cycles up front vs. later in the development cycle. This approach facilitated teamwork and kept the joint team very focused from the outset of this project. A final critical success factor was documenting through the wiki. This repository of information kept all team members informed of issues and decisions made, thus keeping everyone on the same path throughout all of delivery cycles.



CQAA Events - Another Look

The CQAA Fall Dinner event was held on September 20 at the Westin Lombard. This event was designed for executives as well as practitioners. Pete DuPre', Chief Solutions Architect at Borland / Micro Focus, provided an entertaining and informative presentation entitled ***The Future of Software Projects: Innovations & Emerging Trends in Software Quality Assurance***. For those who couldn't make it to the event, we are offering a few highlights of the evening. The full presentation is available on the CQAA web site.

Pete kicked off the evening with a great anecdote regarding attending presentations and meetings and his experience in fighting to stay awake at one important event. The tone was set. In this author's opinion, Pete managed to comfortably weave industry information and his perspectives on the information along with practical anecdotes that made the evening seem shorter than it was.

We've seen the statistics. As was stated so well, the industry numbers are out there but we have to understand where WE fit with those same stats. More importantly, we have to understand and effectively communicate the real impact of those stats to our peers and executives as one means of helping all of us understand and minimize risk to the organization. Statistics must be converted to understandable terms and, ultimately, to financial impact that everyone can know and feel.

Pete helped us understand that some things have changed but the causes of project team challenges remain the same. His presentation included well-regarded industry information such as the Trends below.

Trends - Software project success – Sources:

This year's results represent the highest success rate in the history of the CHAOS Research. The reasons for the increase in success rate are:

Agile Process ↑ – 22% CAGR

Modernization ↑

Enterprise packages ↓

Waterfall ↓: "...reduction has been a major contributor to the overall success rate of projects"

Source: *The Standish Group International, Inc. 2011 CHAOS Manifesto*

A quick recap of the above data shows that increases in the use of Agile processes, the modernizing of technology, reduction in the implementation of Enterprise packages, and less use of Waterfall methodologies have helped increase project success. Many organizations are blending methodologies, some use the term *WAgile*, but those who succeed with the blended approach have a clear delineation of what processes, techniques, and artifacts are to be used on any one project.

Pete also offered an interesting financial statistic regarding waste in software delivery. For every \$1 spent in software, organizations waste \$.40 of that dollar during any one project. That statistic is astounding!! Imagine if we threw out that much food every time we ate a meal.



CQAA Events - Another Look (cont.)

Typically, that cost comes from rework which we have long considered a “cost of quality” metric. Organizations just seem to tolerate that cost but we as software quality professionals can impact that metric. We have to move out of our comfort zone as “testers” and more into the quality assurance realm.

From Gartner -

STRATEGIC PLANNING ASSUMPTION(S)

By 2012, agile development methods will be utilized in 80% of all software development projects.

The crowd in the room did not react much to the above statement so one could not tell if there was agreement or disagreement. The percentage does seem a bit high based upon some informal surveys. Pete did gather some testimonials from a few who had embraced Agile.

...comprehensive risk management is the single most compelling argument for Agile.

Sean Cody, Process Architect, Global Markets Architecture Team

“The value provided by agile, and most especially from well-tested code, pays big dividends in terms of **reduced QA expense and faster time to market** for any significant-sized project. **We have projects developed in agile, and others that were not—we dread touching the ones that were not.**” - *Steven Smith CIO*

The Federal Health Architecture program used agile to develop the award-winning Connect solution in less than a year.

“...we delivered **productivity that was five times the industry average while defect rates were just a quarter of similar projects.**

Agile has enabled eight consecutive quarters of **on-time, on-budget product deliveries** with new functionality added quarterly...”

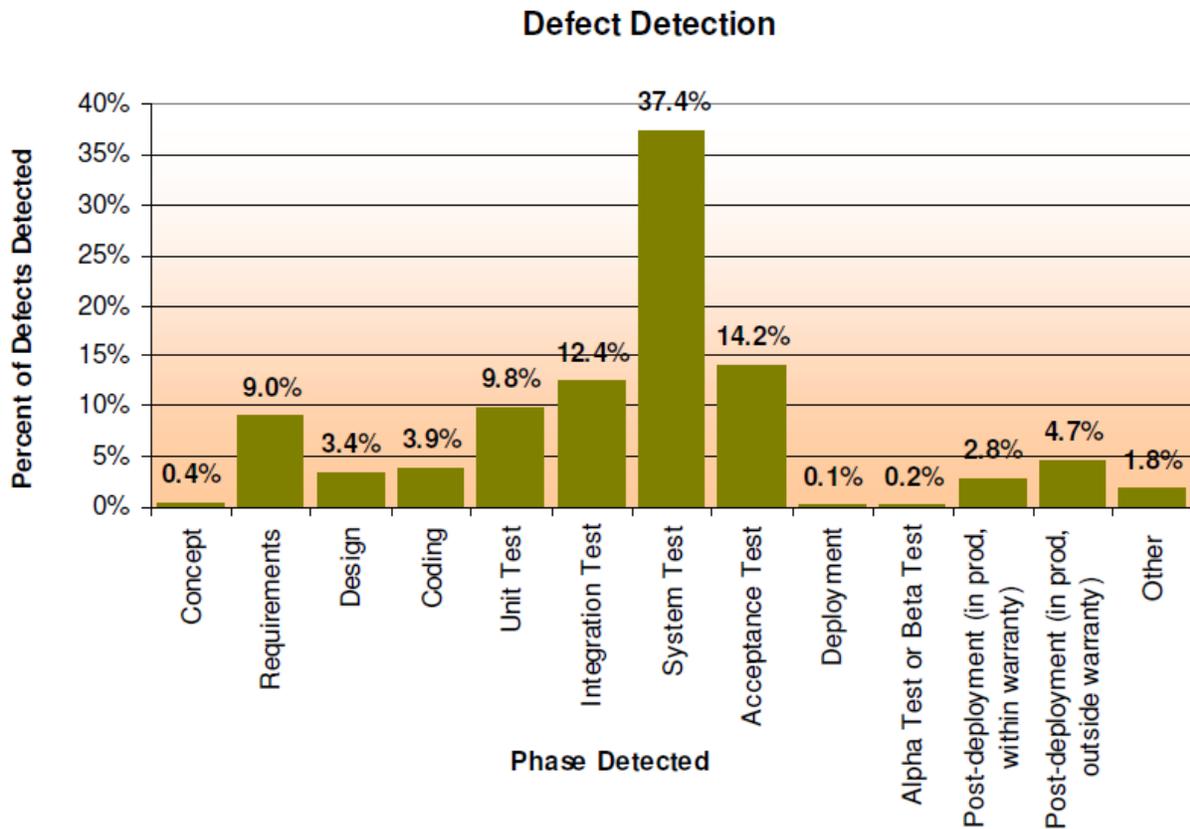
The overriding message is that Agile can work, adoption is increasing, and organizations do realize some specific benefits. Informal surveys indicate that organizations are struggling with adoption so the effort will require some specific organizational and process adjustments. Pete’s message made it clear that organizations will need to figure out how to incorporate Agile in some form to survive as technologies change and demands for “fast-to-market” delivery increases.

And then we have some classic metrics:

As many as 70% of defects are injected during requirements and design, and 60% of defects are not found until user acceptance testing, according to the National Institute of Standards and Technology (NIST). The chart provided by Pete tells us that we still struggle with identifying defects early on in the project.



CQAA Events - Another Look (cont.)



Some classic solutions were offered that still apply today.

“...Business unit managers should be engaged and accountable from initial requirements gathering to the end of the project’s life cycle.”

- White House Forum on Modernizing Government

What was important before is important today. Requirements Management was an important focus of CMM in 1992; it was a key component of CMMi in 2001; it remains a critical success factor today.

Overall, a great evening. Thanks to Pete DuPre” for an engaging presentation. He offered other insights regarding Mobile Technology and Performance Testing. Be sure to view his entire presentation on the CQAA website.



Hot Topics

Software Quality and Testing Professionals face a number of issues as they attempt to provide value to their project teams and organizations. This section will present some issues shared with the CQAA Newsletter Editors. We have gathered a few questions/issues to start and will continue gathering ideas in the future. These topics will be addressed in future issues with a recap, as shown below, or perhaps a full article.

How do I combine Waterfall and Agile methodologies to effectively deliver software quality in my projects?

Should QA have the authority to stop a project from going live?

How do I know I am using the right methodology? Why does it matter?

Who decides “best practice?”

What is “just enough” testing?

Help us help each other. Have you solved one of the questions above or are you facing a similar issue? Please share what worked for you.

Send us topics you would like addressed in future issues or let us know if you wish to contribute to the article through an interview or by providing some content. Contact us at Editor@cqaa.org

CQAA LinkedIn Topic of the Month

A recent topic presented to the CQAA Linked-In community asked **“What changes have you and your organization made to maximize productivity of offsite individuals and teams?”** Listed below is a recap of the discussion.

- Allow for flexible work hours allowing for overlap with the hours of the key project team members of the organization.
- Utilize IM, Video Chats, or Conference Calls for discussions and meetings.
- Provide Remote Connectivity between the offsite team and the rest of the project team.
- Establish and communicate the communication processes and update those through periodic discussions.

Overall, provide a variety of communication methods to ensure frequent and effective communication.



CQAA Mission

The Chicago Quality Assurance Association, the Chicago Chapter of the QAI Global Institute is a nonprofit professional organization that was established in 1984 to promote quality principles and practices within Chicago-area companies. CQAA provides a forum for information professionals to present and discuss quality and process management within information systems, technology, and services.

Objectives

- Provide a variety of educational opportunities in the Chicago area for quality professionals and other advocates of quality.
- Facilitate networking and the exchange of ideas among quality, process management and information technology professionals.
- Sponsor presentations on quality and related topics by experts and by members.
- Foster professional certifications through access to examinations held in the Chicago area.
- Provide an opportunity to earn recertification credits towards professional certifications through membership and attendance at educational programs.
- Maintain lines of communication with other professional associations and foster cooperative activities of common interest.

Chapter Leadership

CQAA is served by a self-perpetuating Board of Directors that meets to plan, implement and review programs and functions. To ensure that the CQAA Board remains strong, the directors have adopted a succession plan. All board positions have detailed descriptions that identify the responsibilities of the Board Members. Board positions that become vacant will be posted on the CQAA website and applications will be accepted at that time.

Board Members

- Cindy Glaser, Membership
- Nancy Kastl, President
- Mike Lawler, Secretary and Journal Editor
- Kim MacDonald, Certifications
- Fabrizio Stortoni, Programs
- Sara Thomas, Treasurer

Upcoming CQAA Events

Date	Title
October 26	Functional Testing and Automation
November 15	Successful Strategies for QA-Based Security Testing
April 30-May 4, 2012	QUEST Conference