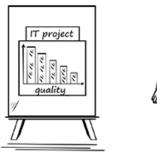
The Peritus **QA** Manifesto

The Three QA Practices we apply to eliminate 95% of the production defects, budget overruns and costly delays within your project

3 Practices to get your Project Quality from here ...





... to here



Peritus Business Consulting Strategy • People • Process • Technology

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Peritus Business Consulting: The QA Manifesto Strategy – People – Process - Technology

From the government of the United States to companies like IBM, those in charge are starting to realize a few Key Truths:

- You can't spend more.
- Production defects hurt your reputation.
- Padding timelines to accommodate testing is a bitter pill to swallow by business stakeholders.

Looking Deeper into Failure

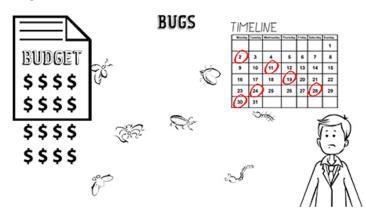
The recent launch of the Obamacare website is a perfect example to examine. Was it fit for the purpose for which it was intended? Absolutely not! It failed dismally. Even the experts have not been able to understand exactly WHY. The public was baffled by the sheer magnitude of the failure. Most citizens just shrugged and said, "Oh well ... that's government for you."

Was the Obamacare website failure a problem of the government not having enough money to build a really good website? Maybe they just weren't able to hire the best and brightest minds to build the site? The problem with many large corporations and this includes the U.S. government, is that they spend way too much time and money on impractical Quality Assurance programs.

The QA Problem

With the sheer number of methodologies and processes, along with a mountain of documentation, one would expect that the quality of IT projects would get better.

But in fact, more than 90% of all IT projects miss at least one if not all of the three major targets:



x Budgets are overrun.

x Deadlines are missed.

x Production defects are abundant.

In spite of the billions of dollars spent annually on IT quality, the results are often dismal. Companies invest in sophisticated tools, expensive training, and cumbersome processes with very poor results.

Can something be done?

After years of frustrations and disappointments, we've made it our mission to discover the reasons for these failures. And after over 10 years of practical research, we've uncovered some fascinating facts. Our findings confirm that the success of a project has little to do with how much money you spend or the type of methodology you choose to employ.

The answers are in fact quite simple. We have researched dozens of projects, both those highly successful and those deemed failures, from the quality perspective. We asked ourselves and those involved in these projects: what makes successful projects? And we were repeatedly pointed in the direction of superior processes and methodologies, better training and sophisticated tools. And that seems logical ... or, does it?

As we thoroughly examined the various elements of those projects that largely succeeded as opposed to those that failed, we arrived at some startling conclusions.

Sharing Our Secrets

Our consultants at Peritus Business Consulting have used these concepts over and over with the same excellent results. We aren't simply guessing or hoping; we know these solutions work in a wide range of business types and situations.

Many books about success are written by people who failed miserably and yet they learned some very important lessons during the course of their journey. Our business philosophy is that it's not necessary to fail at something in order to become an authority on it.

We'd like you to save dollars and years of trial and error. Our goal is to help IT managers at all levels achieve outstanding results in their QA departments on all projects each and every time.

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We believe you can eliminate many of the headaches and produce better and consistent results.

Practice Number One: Discipline

The most highly sought athletes in the world know that the secret to becoming the best is to master the fundamentals.



For instance, Michael Jordan focused on mastering the basic moves on the basketball court.

Before trying to come up with fancy, elaborate moves that nobody had ever seen, he simply became the best at all the basic moves, by doing them right

every single time.

The same applies to testing.

Practical Tip If you have a recently completed project that had quality problems, do a summary post mortem of the test plan. Have any of the real quality problems been planned for verification or have been identified as a risk in the plan? You have now a glimpse into where your quality issues have started.

But how?

In our experience, it seems that cumbersome processes can become a way to hide less than perfect execution of basic QA tasks. Examples of basic issues that are very common are:

• Test plans are just templates with names that change from one project to the next and no real

depth to them. On the contrary, very successful projects have test plans that truly show a deep understanding of the project from the quality perspective, the implications of the technical solution to testing, the risks ahead and options for mitigations, and they display detailed planned courses of action for taking the quality tasks to a successful end. Way too often, QA leaders and Project Managers turn the blind eye towards test plans that are incomplete and hope for the best during execution. Every time this happens, the project suffers.

- Test documentation walkthroughs and reviews are treated as a formality. Top QA teams ensure that all the stakeholders that can provide valuable input into test planning and execution are consulted. And they do this in a very efficient manner, in short meetings that are well planned and organized and where important issues are discussed. They always end with clear agreements and action items.
- Execution tasks are unclear, illogical or poorly planned. This confuses testers and deeply affects productivity. Successful projects are disciplined in holding short meetings every morning to clarify the goals of the day, establish targets, get commitment from the team and provide chances for feedback, questions and

clarifications. They have longer term execution plans and the team knows at any given time how their current tasks contribute to the completion of the plan.

We stop here with the examples, but top teams are very disciplined about several more basic items we have identified.

Discipline is free but it pays off!

We repeatedly tested this principle on many projects for various clients. We did not change the existing methodology the client had been using. Instead, we applied it rigorously, with attention to executing the fundamentals well, and ensured that everyone on the project applied them with unwavering discipline.

The results were astounding. Quality improved immensely and production defects were reduced by a staggering 95%. The theory has been tested in a number of programs and situations with the same exciting results. It has become a foundation principle for our approach.

Discipline is absolutely free, it doesn't cost any money and it saves the most valuable resource: time. This factor alone can hugely improve your quality. And if you feel that your organization is already disciplined, go back to the drawing board and see how you can do it even better. Become the Michael Jordan of QA!

Practice Number Two: Detailed Measurements

You wouldn't fly in an airplane that doesn't have accurate dashboard instruments that show the state of the plane every second. What would happen if you did? In the best case



scenario, you'd just arrive late or in the wrong place.

Yet we find many IT projects crash and burn because QA doesn't use all the possible and historical detailed measurements that can be collected and used.

The vast majority of projects rely on a mere handful of weekly or monthly statistics, and mostly snapshots in time.

They also apply only to the project

in progress and there is a wealth of valuable information lost because data isn't analyzed properly and for longer periods of time.



Roll up your sleeves

The very successful projects we found have provided us with a much more effective method. Because of the lesson we learned from them, we now dive deep into the historical data available from the past several years and examine it closely. This process reveals surprising and valuable details.

Our research has uncovered that the Pareto principle applies well to QA and at least 80% of



the troubling quality problems on most IT projects result from about 20% of the same identical issues over and over. In fact, the ratio is closer to 90-10.

This is the Pareto principle at work and it holds very true with QA challenges.

This gives you transparency into persistent issues, and once you have clear visibility into the trends of key quality metrics over a longer period time, the picture comes into full view. In our experience, that leads naturally into unobstructed understanding of the top two-three quality problems are and how to solve them.

Complete turnaround through the mastery of measurements

Not only that but through firsthand experience, we have learned that once we uncover the sources, the issues can be fully corrected within a year.

This equates to a smoother running organization in the years to come; one which operates more efficiently and accomplishes its goals on time and within budget.

Practical tip

The simplest and most effective way to implement detailed measurements with the least amount of effort is to graph the number of defects identified weekly over the life of the past 3-5 projects, from the initial stages to post-implementation. Analyze the resulting graphs and show them in your next team meeting. Ask the team for input into the meaning of the graphs. You will have some startling but very positive learnings.

Imagine being able to crank out IT projects without all the snags and snafus from now on. This type of efficiency produces stronger profitability and productivity in an area of your business that is key to the project's success.

Practice Number Three: Empower Your QA Practitioners

Good QA work requires not just discipline but also creativity and initiative. It has been our experience that the QA teams generally don't empower their staff to be creative, their function is very repetitive - test code over and over to find bugs and stick to test scripts and get them done quickly without much individual thinking.

Our research has proven that when a QA team is trusted, they take ownership of the work. And nothing beats an employee who cares about their work.

Plain and simple, anytime you can empower employees and allow them the freedom of taking initiative, you can count on getting better work. Employees who take pride in their job produce better work consistently across the board.

Bring Out the Best in Your Employees

People can be extremely creative and history has proven this time and again. Experience



empower the QA team

shows us that under the right circumstances, people can produce brilliant work and this includes your QA employees.

In his book, "Drive: the Surprising Truth About What Motivates Us", author Daniel Pink reveals many important facts about what inspires a human being to work harder and do a better job.

"The secret to high performance and satisfaction—at work, at school, and at home—is the deeply human need to direct

our own lives, to learn and create new things, and to do better by ourselves and our world."¹

¹ <u>http://www.danpink.com/books/drive/</u>

Empower Your People

An organization that trusts its employees to do good work and allows them more freedom can expect a pleasant, stable office environment and much higher quality results from each employee. We've worked with a client where the front line and middle management empowered the QA team, and as a result they owned their work and took pride in what they did. Specifically:

- Front line testers were actively involved by their managers in planning the testing. They felt listened to and that their opinion mattered. This is extremely motivating for test teams.
- During test execution there was at least 10%, but ideally 25% of time dedicated to ad-hoc testing, where the testers creativity and initiative is exercised. In our experience, some of the most interesting (and potentially most damaging) defects are found by testers during ad-hoc test sessions.
- *"No battle plan survives contact with the enemy." Colin Powell.* Let the test person understand what the application is doing and allocate test cycles to let them creatively behave like the end user. Let them experiment a little – it's ok to stray off the test plan during the battle!
- Recognition was offered based on results not hours of work or seniority. While results-only compensation models are difficult to implement, not the same can be said about Recognition.

Practical tip

Towards the end of a test cycle, organize 'wild bug hunting days' where testers are allowed to freely explore their own ideas for breaking the code. These are fun for the team and highly effective at identifying lethal defects, especially when you offer the appropriate moral incentives. You may feel the urge to just stick to the planned test execution to adhere to timelines, but the overall effect of ad-hoc testing on quality is paramount.

Congratulate testers and offer symbolic prizes for the most defects found or for the most potentially damaging defects identified.

This project was a wild success with zero production defects.

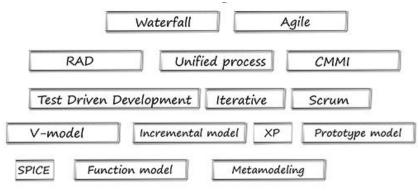
Ironically, at the same client, for the next project, the management changed and the new style of testing imposed was rigid and uninspiring. "Discipline" was implemented in the wrong way. Testers were given a number of pre-scripted test cases to execute every day, with no room for creativity and no trust in their intelligence. They were not involved in planning. They were lead to believe that their opinion didn't matter. And the quality of that project was the worst the company had ever seen! We find this a particularly good example because the members of the team haven't changed, only the management style did.

By applying the ideas suggested (and we have identified many others) you can greatly improve your company's productivity and the quality of work that gets done each day.

These practices work every time. They energize teams to take pride in a bug free application, and the results we have seen have been phenomenal.

"But you haven't covered everything"

You may now be wondering about your different types of testing or methodologies. These overarching principles we have covered in this short paper apply to any of your test types including functional, performance, test automation etc.



They apply to any methodologies, from Waterfall to any flavor of Agile and from Iterative to CMM.

You don't have to change them, just execute them better, empower your people, measure the key

indicators and continuously adjust your approach based on them.

1<u>-DISCIPLIN</u>E

2-DETAILED MEASUREMENTS

3-EMPOWER YOUR QA PRACTITIONERS

Quality is not just an outcome, it is a never-ending progression.

Three Simple Cures that Work!

We enjoy our work! By applying these three important principles to our clients' projects, we have been able to save companies valuable time and millions of dollars as we helped them correct some critical problems that they have been dealing with for many years.

These principles bring out the value of existing methodologies so that you don't have to invest more money. It brings to light the immense value of your company's QA team so effectively that you will be able to save countless millions of dollars over the years. Plus, it improves the production quality of IT projects and eliminates costly errors.

Contact us for a complementary evaluation of your project's quality assurance

If you have some particularly challenging situations that you wish to discuss contact us on our website or by phone. We understand that every business is unique and requires unique strategies and our suggestions in this paper need to be adjusted to your situation. We'll be glad to discuss these strategies and others, within the specific context of your business.

Contact us now: 1.416.915.4133 (ask for Advisory Services) Advisory.Services@peritusbc.com www.peritusbc.com

About Peritus Business Consulting

Peritus Business Consulting is a Toronto-based management and technology firm focused on Project / Risk / Quality Management with extensive experience and unparalleled reputation in the space of testing and quality assurance. We work side by side with our clients to facilitate better testing processes, more effective and productive QA organizations, and superior application quality.

Watch the video version of the manifesto here (5 mins video):

http://www.peritusbc.com/video.php

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