

SMARTBEAR

TestComplete | White Paper

A Step-by-Step Roadmap for Moving from Manual to Automated

The 3 T's of Every Successful Transformation

After researching the benefits of automation and calculating your return on investment (ROI), you've deemed a test automation strategy necessary for your continued success. Now you might be asking yourself, "What are the first steps I need to take," or "How do I make the magic happen?"

Many teams today face the same dilemma. After understanding the needs of their team and organization and the steps that should be taken, the question of how to effectively implement the strategy pops up. There are three key factors behind every transformation, each of which needs to be addressed for you to be successful.

1. *Talent*

   When it comes to talent, you want to look for automation knowledge and for the ability to pair that with product knowledge. The two build a powerful testing combination and this all starts with having an organization that has an automation-first mindset. Not necessarily 100% automation, but everyone needs to be on board to push that initiative forward will full force.

2. *Test Approach*

   With your test approach, you want to ask yourself, "Are you quickly turning around test cases?" Are you automating regression testing? Are there other testing improvements that need to be made within your organization? If the answer is no, this will be a great place to start.

3. *Tools*

   The tools you choose are critical factors in your transformation. These need to be able to measure and track your progress – whether it's test coverage or analyzing test results. These metrics will ultimately lead to the top initiatives you'll need to focus on for a smooth transformation.

The dynamics of every organization and team are unique, and you will need to approach your transformation in a way that makes sense for you and your team. Understanding what your top initiatives are in these three areas will help you define your trajectory, which we will help you outline.

On the next couple of pages, we've provided a sample 3-year roadmap for you to explore and an initiative charter for you to fill out and outline each milestone you want to accomplish. While we've demonstrated what a 3-year roadmap might look like, yours could be shorter or longer. It will depend on the current state and needs of your organization and how long you think it will take for you to get to your desired future state.

Transformation Roadmap: Your Journey to Test Automation

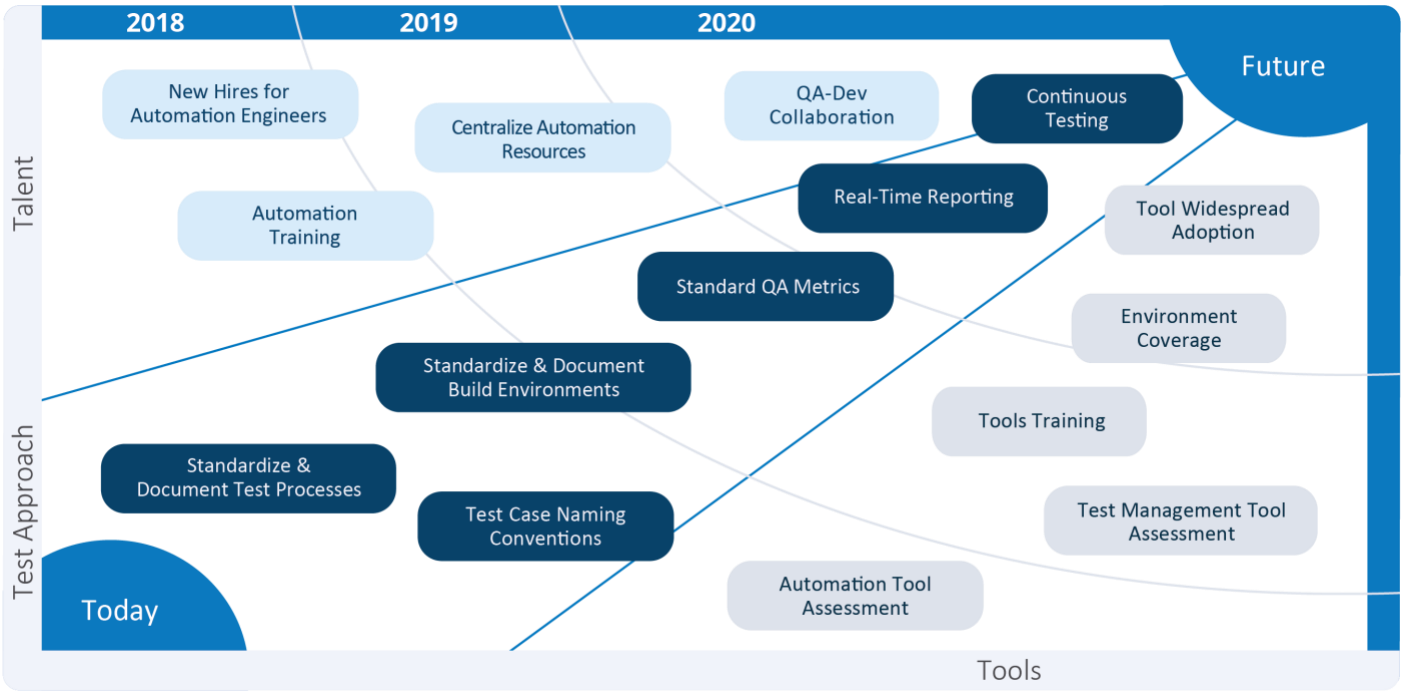
When building your roadmap, it's important to understand that the initial hurdle to get started will seem large, but the long-term investment for many initiatives will decrease over time. After year one, you may not need to spend as much on tools and the associated training. By that point, you will be paying just a maintenance fee and your team will be automation and product experts.

By the end of your transformation process, you'll have effectively implemented multiple QA best practices and a testing framework, so you can focus on optimizing and facilitating better cross-team collaboration.

How To Use The Roadmap (*fig.1*):

- **Divide your roadmap** into the three T's we discussed: talent, test approach, and tools.
- **Outline the periods of time** you've deemed necessary for you to reach your end goal. This can be estimated by the number of months, quarters, or years each initiative will take.
- **Map your top initiatives** for each 'T' in order of priority – what needs to happen first, second, third, and so on. Make sure to account for any dependencies between initiatives. It may not make sense to put continuous testing before automation training.

We understand though, that getting started feels like climbing a mountain. In order to build the roadmap, you'll need to derive how much value you plan to see from each initiative and how long they will take to accomplish individually. To make it manageable, and easier for you to report on, we've included a transformation charter on the next page for you to use. Fill out a charter for each initiative you plan to accomplish.



QA Automation Initiative Charter

The initiative charter is comprised of 4 overarching areas: initiative details, business-line benefits, top-led benefits, and a timeline overview.

- **Initiative Details** are self-explanatory and consist of an initiative name, owner and description. The initiative name should tie to the name used on the roadmap and its description should describe, in more detail, what the initiative is as it relates to the three Ts: talent, test approach and tools. The owner should be the person accountable for the work being done. This is not necessarily the person who may be doing the work or account for dependencies outside of your team, but is the one person who is responsible for completing the task.
- **Business-Line Advantages** consist of the benefits directly received from the group using the stated output of the initiative. This section includes the milestone's objectives, benefits, and success metrics. Although each seem similar, there are differences among all three. Objectives describe which QA pain points are being addressed with this initiative, which benefits describe the advantages from addressing those pain points. Each benefit should be linked to a success metric to then be able to quantitively gauge the initiative's progress over time.
- **Top-Led Advantages** include deep dive sections into the how the milestone benefits top-led business plans. The two sections in this area include business strategic alignment and ROI analysis. The first is how the QA initiative is linked to top-led qualitative business plans, while the ROI analysis is linked how the milestone benefits top-led initiatives quantitatively over time. Leaders care about the bottom-line and understanding the ROI or value of your initiative is a great opportunity to highlight how your team is crucial to benefiting the entire business over time.
- **Timeline Overview** highlights the period of time the initiative will span. Including this in the charter is very important especially when you finally sit down and map your roadmap. Understanding the overall timeline will help especially when there are dependencies among your different initiatives.

Building out your roadmap and initiative charters may seem like a daunting task. We recommend breaking down the steps laid out in this e-book to be digestible and include a balance of short-term wins and long-term goals. This step-by-step guide to moving from manual to automated testing can be simplified to your exact needs. There is no reason why your journey to test automation cannot start today.

Initiative Name	Owner	Description
Automation Transformation	TBD	The implementation of tools and processes to automate our QA test cases for application 1

Objectives	Benefits
• To automate common QA testing processes • To reduce the amount of time QA spends on regression testing to redirect focus on increased coverage of new features and enhanced overall application quality	• Matured testing process and results • Maximized application test coverage • Reduced risk from test redundancy and defect leakage • Faster Execution of the tests across environments • Increased focus on new features and enhanced product quality

Business Strategic Alignment

- Serving Our End Users ☐
- Operating with Automation ☒
- Growing the Business ☐
- Developing Our People ☒

ROI Analysis

Year 1	Year 2	Year 3	Year 4	Year 5
10,000	80,000	120,000	300,000	500,000

Total: 1,010,000

Success Metrics

- Test coverage
- Defect leakage
- Employee productivity

Timeline Overview

	2018	2019	2020
Automation Transformation for Application 1			

Start building your transformation strategy.

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