



Transforming Test Automation

Test automation for the
fast lane

Introduction

The high pace of change being witnessed across technology together with the widespread adoption of agile and DevOps methods presents a tangible and significant risk toward investments made in automating areas of the testing process. Failure to respond and avoid impact will inevitably lead to automation ‘shelf-ware’ and increase the toll of failed or abandoned automation initiatives. In a technology-driven world ‘quality at speed’ is mandatory and automation is critical to delivering this.

The testing tool market is not immune to the impacts of project delivery and technology evolution; it must react appropriately to both aspects simultaneously. Organisations must protect the investment made in automation and pivot the Test Automation Strategy quickly.

This paper describes how implementing a diversified test automation framework and tool portfolio will accelerate automation into the fast lane.

The Magic Quadrant for Integration Software Quality Suites and Automation Tools has dramatically rationalized in five years. Commercial tools are no longer the only option with the open-source world offering many mature solutions.

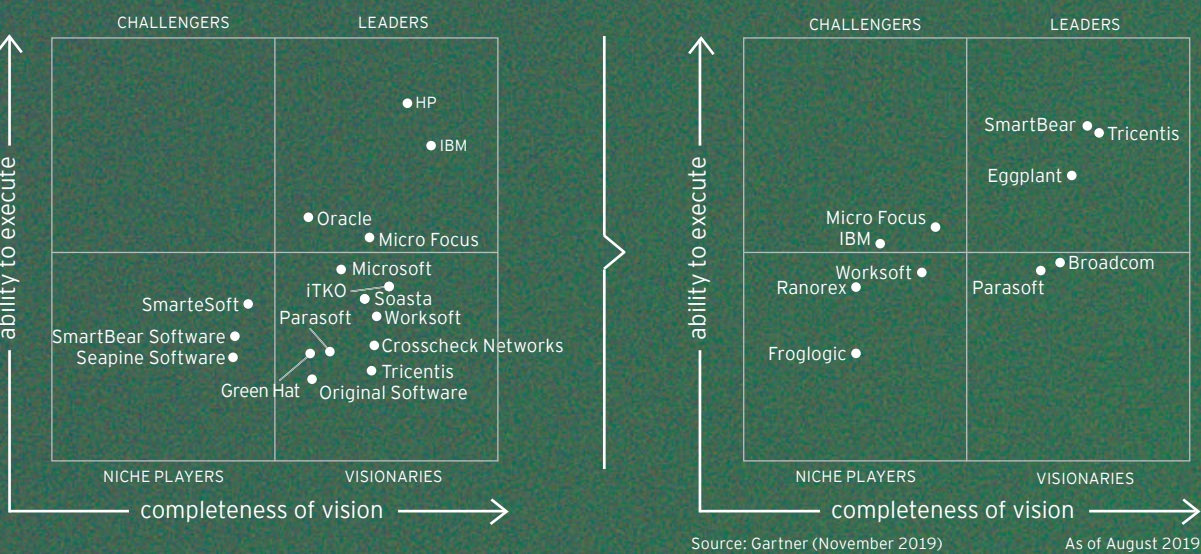
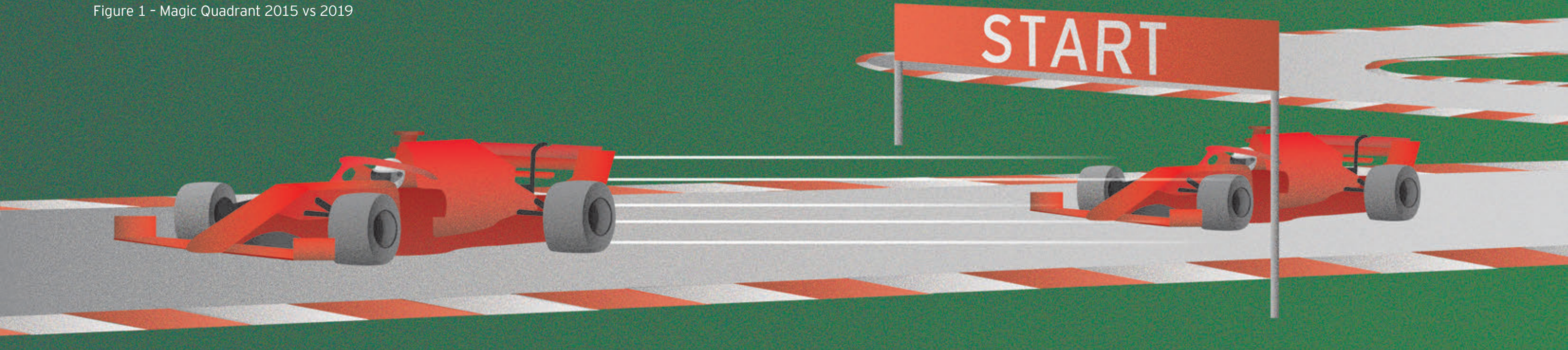


Figure 1 - Magic Quadrant 2015 vs 2019

Key Transformation Considerations

- 01 Large organisations have deep rooted relationships and significant investment in commercial tools
- 02 The number of players in the commercial tool industry have reduced significantly over the past five years
- 03 Commercial software vendors are evolving tools enabling open APIs and greater flexibility to integrate into a mixed application lifecycle management tool stack
- 04 Open-source, community-based software has become widely adopted and in certain cases considered ‘defacto’ standard
- 05 Test Automation is a key topic across Development, Testing and Operations/ DevOps teams as organisations aim to implement a Continuous Testing approach
- 06 Domain-specific language and methods like Behaviour Driven Development (BDD) are back in focus to enable common language between Business and IT, enabling automation at Unit, System and User-Interface (UI) levels
- 07 UI-level automation must consider future enablement of Intelligent Automation and RPA deployment to increase the business case value across Technology and Business Functions



Diversified Test Automation Portfolios

The creation of a Test Automation Strategy based upon a diverse portfolio of automation capability, framework and tools enable benefits of modern project delivery process and methods. Test Automation strategies that are adaptable, flexible and promote quality engineering follow this approach and comprise of the following key features;

- 01

VISION & GOALS

At the heart of test automation is a clearly defined strategy underpinned by a vision supported by the stakeholders of automation. The strategy is a living entity and is frequently adapted to address the impact of evolution and technology change.
- 02

DOMAIN SPECIFIC LANGUAGE (DSL)

A DSL is a collaborative and common business language for testing. This language allows both business and technically oriented people to communicate. Specifications, examples (if using BDD) and tests can be created for all levels of automation across the entire lifecycle.
- 03

PEOPLE/TALENT

Humans are fundamental to the strategy. Understanding the appropriate blend of skills, engaging the right communities and embedding a culture of the using the right tools for the right job enables the strategy to live.
- 04

FRAMEWORK

The integrated system that sets the rules of automation and integrates the function libraries, test data sources, object details and various reusable modules. The framework provides the basis of test automation.
- 05

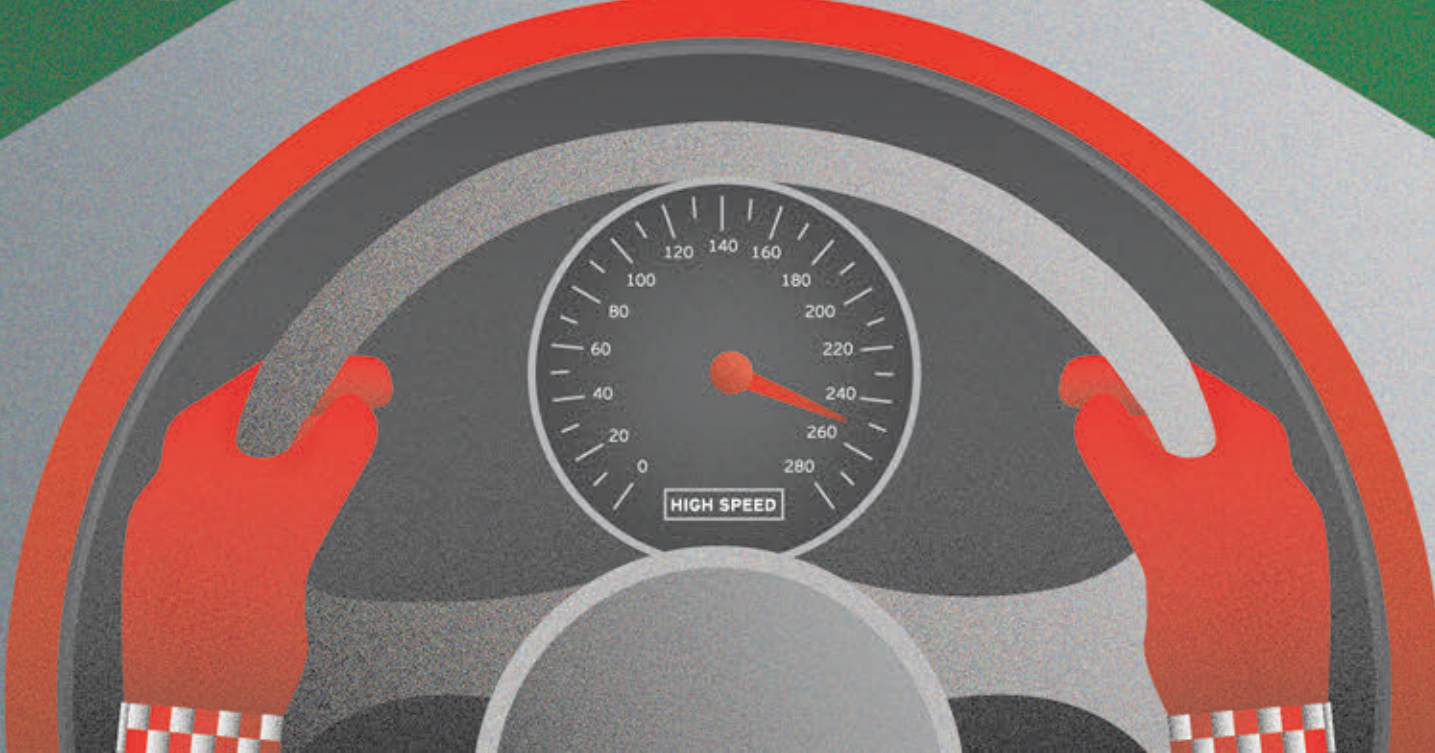
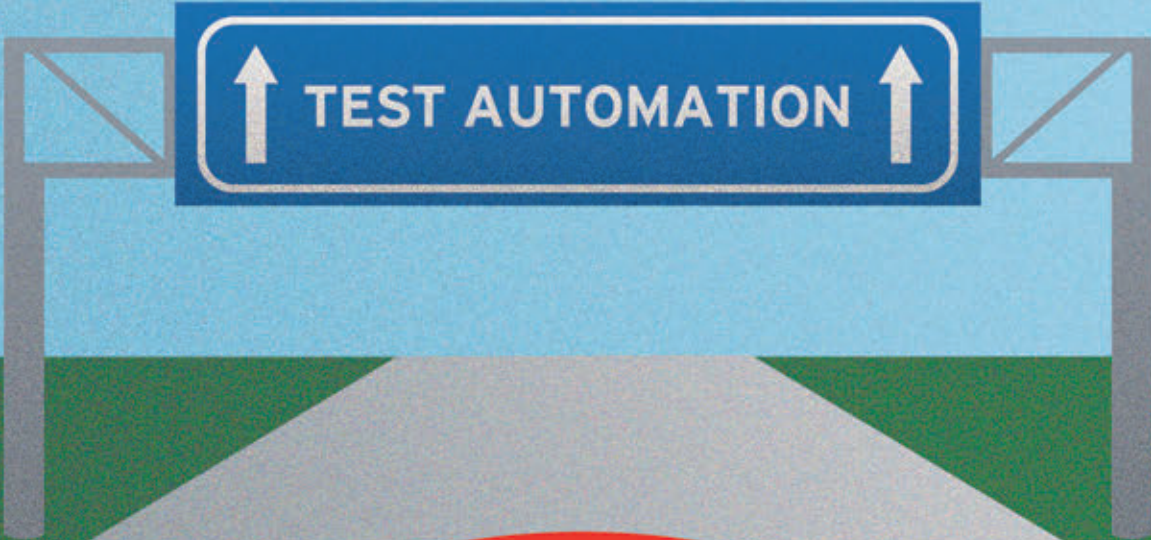
UI, SERVICE AND UNIT-LEVEL TOOLS

The selection of appropriate tools to serve all levels and create a rich, diverse portfolio of test automation capability.

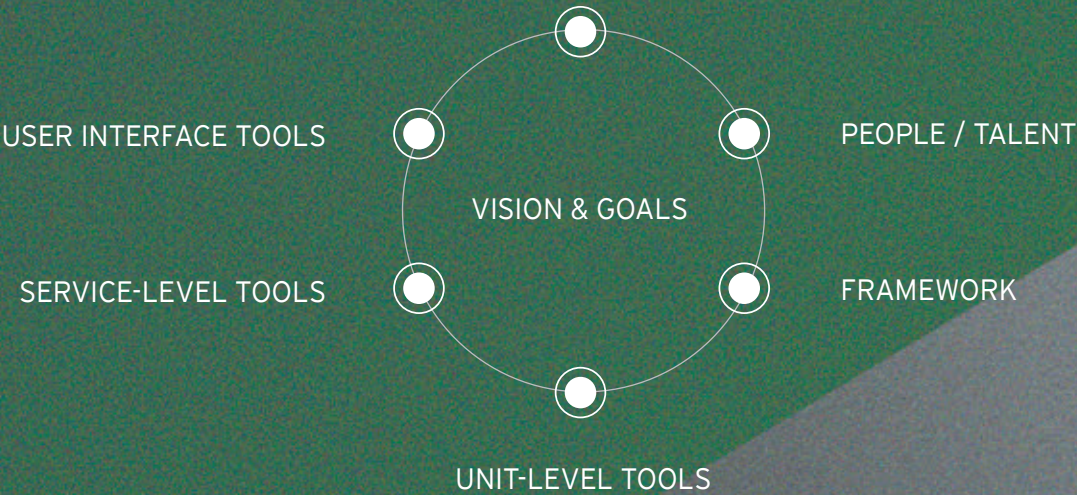
Get into the Test Automation fast lane now!

Organisations cannot deliver high quality products and services to meet the needs of their customers without adopting agile based methods that has test automation at the heart. Development and Testing teams are merging together to form Quality Engineering functions where the implementation of continuous testing from the start in a shift-left pattern is the norm.

The Test Automation Strategy is more critical than ever to address technology and agile delivery methodology demands. To achieve speed in the fast lane the strategy must be based upon a diverse portfolio of automation capability, framework and tools.



DOMAIN SPECIFIC LANGUAGE



For further details on how our Test Automation Transformation services can put you into the fast lane, please contact:



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