DAYBLINK CONSULTING

Transformation Strategy & Implementation For a Major Communications Carrier

How we optimized QE and Testing practices organizationally to deliver cost savings, decrease time to market and increase overall efficiency by reducing manual effort

Introduction

As part of a comprehensive organizational effort to reduce costs, DayBlink Consulting supported a major Communications company to enhance and optimize their Quality Engineering (QE) and testing practices. The company was grappling with several critical issues within their QE and testing teams, which were affecting overall performance. Our tailored solution addressed these challenges by focusing on streamlining the efficiency and duration of testing cycles, increasing the overall usage and effectiveness of automation tools, and enhancing the speed and precision of the development process. This strategic approach yielded significant benefits, including a marked reduction in time to market due to the optimized testing cycles, a substantial decrease in manual effort through the implementation of improved automation practices, and considerable cost savings achieved through refined development practices. The initiative not only improved operational efficiency but also positioned the company to better meet market demands with greater agility.

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Problem

Our client needed to reduce costs within the QE Space that had several inefficiencies

The organization was tasked with cutting costs and identified the QE and testing space as an area of opportunity to implement several transformational strategies as it faced significant challenges. They identified several inefficiencies due to overlapping releases that caused environment conflicts, as well as an abundance of redundant test cases that lengthened testing time. These issues resulted in late deliveries for over 50% of projects, creating bottlenecks that disrupted timelines and made it difficult to meet deadlines. Furthermore, the QE and testing space required a substantial amount of manual effort. Due to the lack of effective automation, manual processes dominated the testing and the automation tools that were in use were not configured for end-to-end testing (often requiring manual intervention). This reliance on inefficient tools and processes not only prolonged the testing cycles but also reduced the effectiveness of the QE team's efforts. Additionally, the development process itself was slow and often delivered low-quality code with a high number of defects. The time-consuming process of identifying and fixing these defects further delayed testing, compounding the organization's struggles to deliver projects on time and maintain high standards of quality.

DayBlink Consulting identified a number of challenges within the QE Testing Space that needed to be addressed:

Nonoptimal Release Structure

Releases often overlapped and which led to several issues for the QE Team.

Redundant Test Cases

Test cases were often repetitive leading to substantial wasted time.

Lack of Effective Automation

Automation was not being utilized correctly leading to a lot of manual work.

Too Many Defects

Code was often low quality which lead to high defect counts.

High Defect Resolution Times

Defects were often not resolved within agreed upon SLAs leading to extended waiting times.

Late Code Delivery

Code was often delivered late for the QE team to test, leading to missed deadlines.

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Solution

Our team identified several unique strategies to implement to optimize the QE and Testing space.

To address the challenges in the organization's QE and testing cycles, DayBlink Consulting implemented several key transformational strategies. First, we optimized the release calendar to minimize overlap and reduce the overall length of the testing cycles by 50%. This involved careful planning and scheduling to ensure that releases were better timed and did not conflict with one another. Additionally, DayBlink Consulting introduced test case optimization, which reduced the number of redundant test cases, enabling the team to complete testing more efficiently within the shortened cycles.

To further streamline the process, DayBlink Consulting increased automation coverage for some testing areas from 40% to over 85%, dramatically reducing the reliance on manual testing. By introducing automation at the start of every release cycle, the organization was able to efficiently handle basic test cases and catch bugs related to project setup early on. We also upgraded the automation tools, enhancing their capabilities and enabling multiple automation procedures to run simultaneously.

This was facilitated by expanding the number of virtual machines and developing a centralized automation portal, which made it easier to execute and monitor automation processes across the board.

In parallel, DayBlink Consulting focused on improving development practices to expedite the delivery of higher-quality code. By refining these practices, DayBlink Consulting reduced the time it took to receive code and improved its quality, resulting in a 20% reduction in the number of defects. This allowed the QE team to begin testing on time, with fewer interruptions due to defect resolution, ultimately helping the organization meet project timelines more consistently and with greater confidence.

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Outcome

Through successful execution, significant cost and time savings were achieved across the QE and Testing Space.

The implementation of these strategies led to substantial improvements in the company's QE practices, transforming the way testing and development were conducted, which resulted in over $700K per month in cost savings. By optimizing the release calendar and reducing the length of testing cycles, DayBlink Consulting enabled the organization to deliver projects more swiftly and with fewer delays. The introduction of test case optimization further streamlined the process, ensuring that only the most relevant and necessary test cases were executed, thereby reducing redundancy and freeing up resources. The significant increase in automation not only reduced manual effort but also enhanced the accuracy and speed of testing, catching issues early and minimizing the risk of late-stage defects. The centralized automation portal and upgraded tools provided greater control and visibility over the testing process, making it easier to manage and scale automation efforts. Moreover, the improvements in development practices meant that code was delivered on time and with fewer defects, allowing testing to proceed smoothly and helping reduce the length of the testing cycles. Collectively, the implementation of these strategies transformed the QE processes across the organization, leading it to be more efficient, reliable and responsive for lower costs.

$700K

Per Month of Costs Savings were delivered within the QE Space.

50%

Reduction in the length of testing cycles.

20%

Reduction in the number of defects identified during testing.

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