





Hacking out, Testing in

Over the past couple of years, we have witnessed a paradigm shift in attitude and attention to how organizations can improve software quality, particularly around testing applications and products. One sterling example of this trend is Facebook. This social networking giant announced earlier this year that its beloved hacker culture needed to be reconsidered, and has taken considerable business steps to change the way they build and deploy software.

Much of Facebook's early success and growth can be traced to the way it rapidly developed and deployed new site features and back office enhancements. Their "Hacker Way" operated on the adage to "move fast and break things." While not a bad way to build start-up technology, it leaves much to be desired for a maturing, multi-billion dollar corporation. Senior management quickly discovered that users and advertisers were rebelling against shoddy quality and execution. They did not hesitate to punish the brand and share price by publicly voicing their displeasure and leaving the service. Going forward, the Hacker Way is no way to add features and functionality when your user base is approaching 1 billion members, thousands of advertisers and tens of millions of dollars of revenues at risk.

Facebook's new approach to quality assurance (QA) has not come at the expense of time to market or new features. Since going public in 2012, the company has launched many features including a variety of apps & news feeds, a search engine and a mobile "operating system." More upgrades are in the works as the firm looks to maintain its market edge and enhance its functionality, particularly in the area of mobile computing. What's different now is that Facebook has adopted QA best practices.

Overall, Facebook has become more patient between its releases and more methodical in its testing. Consider a news feed upgrade introduced earlier this year. The alpha release was first tested on Facebook employees. Then, the feature was tested on 1 percent of the Facebook users (seven million people) who visit their news feeds every day. Final testing was then undertaken on another subset of users for a couple of weeks before being fully launched. To maintain a feedback loop post-launch, the Company introduced a special news feed blog where users can provide user experience and performance feedback.

Facebook further demonstrated its commitment to high QA standards when it introduced Graph Search. At the launch of this new service, Mark Zuckerberg articulated testing's new strategic focus: "We're going to start rolling it very slowly and we're going to incorporate data from how people use it; we're going to make the product better before we roll it out widely." This new functionality spent two years as



an internal project subject to a battery of quality initiatives including employee testing and extensive user testing behind one-way glass. After being publicly announced in January 2013, the service was also subject to a variety of 'out of the box' tests and code refinements to reduce business and technical risks arising from unexpected user behavior such as entering misleading information. The functionality was released to all U.S. users in August 2013.

The new embrace of testing is going beyond new site features to include important revenue-generating advertising products. Facebook Exchange, a new product that shows users ads based on what websites they've recently visited, was in beta testing for three months before being officially launched in September 2013. Clearly,

We are not surprised at Facebook's change in mindset and the tangible business steps they are taking. With over 5000 projects behind us, we have seen the cost of poor quality in terms of poor customer and supplier experiences, expensive and time-consuming rework and burned out employees. We have also seen the upside of more and better testing in terms of improved product time to value, higher quality and reduced risk. Facebook clearly understands this business case and has taken many of the necessary process and organizational steps to build their QA and testing capabilities and culture. These steps include maintaining higher standards and supporting metrics, adopting an end-to-end approach to designing in software quality, and securing senior management support and ongoing engagement. A little patience through a rigorous process as well as 'out of box' testing goes a long way as well in building strong QA competencies.

Time will tell if the new focus on testing will in fact lead to superior services, an enhanced user experience and higher revenues. However, if the revitalized stock price is any indication then Facebook is already reaping many financial and brand image rewards from improved quality assurance. No doubt many other fast moving technology companies will be watching Facebook's new approach closely and will change their development strategies accordingly.

For further information please contact:

Harry France Sr. VP Sales (519) 575-0314 hfrance@gaconsultants.ca