

FSOSS 2014 Moments

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**This article is based on the Webmaker's Technology presentation by Kieran Sedgewick and the Twitter presentation by Chris Aniszczyk*

Summary

The Webmaker's Technology presentation focussed on new technologies being utilized by Mozilla in their projects. Several technologies were discussed such as HTML5, Redis, JavaScript libraries, etc. with a keen focus on Node.js. The one thing they all had in common was that they were open source. Kieran demonstrated the utility of JavaScript and its libraries while showing the power of Node.js for creating, running and managing servers. He showed how simple it is to utilize a tool like Node.js to create workable apps and how significant it's 'openness' was. Similarly, he showcased the immense versatility of HTML5 by demonstrating the use of audio, video, images in the browser without the use of any other language such as Photoshop, Flash, etc. to build/render these forms of data. Finally, he discussed how software and platforms (Firefox OS) are becoming web-based which might create a standardized way to building software.

Chris Aniszczyk's presentation explored the functioning of Twitter as well as their core value system. He talks about how Twitter has turned into the giant that it is today by analyzing continuous feedback from customers, acting on metrics that show the effectiveness of their service and not only permitting but encouraging users of Twitter to contribute to the project. In keeping with the theme of open source, he stressed on how Twitter utilizes several open source software such as Node.js, OpenJDK, Jenkins, etc. while making parts of Twitter open source as well. Corollary to showing the openness of Twitter, he states that Twitter believes in keeping its 'secret sauce' secret. This meant keeping its core pieces of code completely closed so as to maintain its business edge in the market. Chris goes on to talk about Twitter's ideology on code maintenance. Twitter uses GitHub to version the open parts of their software while using permissive licences whenever they can. He concludes by stating that the Twitter has embraced open source significantly and has learnt that the most effective way to enhance code is to either use code already existing that is open or to create a community that will work together to build it.

Analysis

Both talks significantly demonstrate the strength of open source. Comparing the perspectives of two industry leaders like Mozilla and Twitter provides a valuable outlook on open source and its utility.

Kieran's presentation displayed the use of different open source projects and their advantages in terms of simplicity and effectiveness. Similarly, Chris talked about how integrating open source

projects such as Node.js into their framework contributed to Twitter becoming more efficient, scalable and effective.

The significance of user contribution was also stressed upon in both presentations. Kieran talked about how Node.js is still worked on by several people who weren't necessarily a part of the core team. Although, the talk seemed to imply that it was better to be completely open source. Twitter however, although releasing a large portion of their code under the Apache License, finds it important to keep certain parts of their source code completely closed.

Collaborative software research and innovation was also a common theme in both presentations. JavaScript was shown as a prime example of research in the Webmaker presentation. Kieran talked about how Mozilla now manages the specifications for JavaScript and how it continues to evolve through continuous research and innovation. Chris shares a real-world anecdote to demonstrate the significance of software research. He talks about how research at UoC Berkeley helped Twitter find a solution for their scalability issues and manage their data for efficiently. Hence, the immense utility of research firms for solving several software problems in businesses was clearly showcased.

Therefore, there was clearly a parallel between both talks in terms of open source practices. Kieran's talk showed how Mozilla embraces open source and utilizes it to create effective software. He clearly demonstrates how the web as a platform is gaining relevance and how open source will impact the success of this movement. Likewise, Chris emphasizes how open source is a community culture that is being embraced by big companies to solve real-world problems. He shows how the integration of the open source culture into Twitter's ideology has manifested as its success.

Reflection

It was certainly fruitful to hear the extent to which open source is beneficial. Furthermore, listening to industry people certainly adds depth to why the open source methodology should be adopted.

The one caveat of open source for me is using it as a means to make money. I have always found it puzzling as to how open source companies become billion dollar businesses. Chris Aniszczuk provided a good insight into how this is made possible. Twitter's idea of the 'secret sauce' is the key to making businesses that implement the concept of open source successful. The analogy of solving a puzzle with a community while holding on to the final center piece strikes parallel to the idea of the secret sauce. The puzzle remains incomplete and useless until the center piece, held covertly, is attached to the rest of the puzzle.

The idea of reusing code also struck a chord with me. Dealing with issues such as concurrency in projects that I am working on, it is helpful to know that there are other projects such as Twitter dealing with similar issues and that their solutions are available to reuse.