



Tech Notes

Top Ten Software Development Predictions for 2009

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INTRODUCTION

Michael Rozlog's insight into the computer industry is always spot on. This annualized list of the Top ten things to happen in the next year is always insightful and thought provoking.

10. RIA'S WILL SHOW INCREASED SIGNS OF WEAKNESS

As more and more client-side technologies are employed to create Rich Internet Enabled applications that act like Windows applications when the Windows OS is right there to use with real applications. Users, developers, and management might start to look at using the OS for what it was for... namely supporting applications and finally move away from all the 3rd party client-side technologies and start building solid applications that use the Internet as a communication device.

Real applications that use Internet protocols but don't need a browser? Get out... check out an article I wrote on RIEA for more background information¹.

9. SSD WILL OWN 30% OF THE MARKET

Just purchased a Terabyte of storage for \$89 dollars, which is great. But SSD (Solid State Drives) are coming and I believe that in 2009 there will be a major shift towards these types of drives. They have some inherent advantages over standard hard drives; no moving parts, no heat, and extremely fast read times. SSDs are still a little expensive, but as adoption and competition increases these will be the drives of the future.

8. GROOVY WILL GAIN MORE FOLLOWERS

Want an elegant solution for Web applications with Java? Then check out Groovy. You program in Java, simple deployment, nice design pattern. Groovy should be the standard for Java Web development.

7. SPECIALIZED CHIPS (TASK-ORIENTED) WILL BECOME STANDARD ON MOTHER BOARDS IN AN EFFORT TO MOVE GREEN

We are starting to see this trend with graphics chips, where the manufacturer will put a light-weight graphics chip on the mother board and use utilize the on-board graphics chip for normal use (e-mail, browsing the web, etc.). Then when the user wants to use PhotoShop or play the latest game on the market, the real graphics boards kick in and do the work. Thus, in general use, the machine takes up much fewer resources and on-demand can increase the resource consumption to fit the task at hand. This approach will be applied to other various PC areas.

6. AGILE, SPIRAL, XP, WATERFALL ARE ALL THE SAME

I know methodologies are sacred and not supporting one or the other can be bad and they feel much like a religion to me (for comparison, check out the Programming Languages compared to religion article ²). But at the end of the day, no matter which approach you use for developing

¹ <http://blogs.codegear.com/michaelrozlog/2008/04/21/36935>

² <http://www.aegisub.net/2008/12/if-programming-languages-were-religions.html>

software, it is imperative that every member of the team buys into the approach. If everybody on the team believes and uses Waterfall for example, then the project will usually complete. Now, again that does not mean that the things about the waterfall approach are incorrect, it just means the team was able to follow a process to completion. I'm not bashing for support of any one software development methodology, I'm merely pointing out that to have success, everybody has to be onboard or they will all fail. I believe pick the best methodology for the application being created with the dependencies and constraints taken into account.

5. SPECIALIZED MAINTENANCE TEAMS WILL BE SETUP IN THE DOWN ECONOMY

New development is being put on hold during the down economy so companies are now setting up "swat" teams for doing specialized maintenance of applications. These teams are there to upgrade or update the existing application, so they are usually comprised of the top-talent because they use the latest approaches to squeeze RIO out of the existing application, thus saving companies big money.

4. GOOGLE'S ANDROID NOT SO MUCH.

Android has a lot of promise and it has some exciting technologies and approaches, but the Apple iPhone will continue to dominate in 2009. The initial phones based on Android are ok but they don't currently meet the level of the iPhone, maybe next year.

3. IT APPEARS TO BE GETTING CLOUDIER...

The cloud is exciting, and adopting the use of the cloud will continue as more companies start using the cloud, and more companies put services to be consumed on the cloud. There are still issues around cloud computing; but in this exciting hype phase of the technology, those issues look to be on the far distant horizon.

2. THE BROWSER WAR WILL NOT BE SETTLED; INTERNET EXPLORER, FIREFOX, OPERA, AND NOW CHROME. WHO WILL WIN THE HEARTS AND MINDS OF THE INTERNET USERS?

Well, it won't be decided in this year. I love the improvements that Internet Explorer has added with version 7 and the preview of 8. However, for overall speed and functionality it is hard to beat either Firefox 3 or Opera 9. Both of these browsers do a great job and I usually pick one of them for my day to day browsing activities. The new dark horse is Google's Chrome. While I do like it and some of its features, it is limited in features and it can be a resource hog if you browse like I do with many tabs open at one time. I will be excited to see where Chrome goes in the future, but for now I will stick with Firefox and Opera, and use IE when I have to. But, I will still continue to play with Chrome.

1. MICROSOFT VISTA WAS A PLOY TO GET EVERYBODY TO BUY WINDOWS 7

Okay here is my conspiracy theory of the year. I believe Microsoft wanted to introduce Vista with issues that they knew most users would not like or want. I know this sounds far-fetched, but go with me on this a little further. What was the best Windows as far as sales was concerned, from a release standpoint? It was Windows 2000. Now over the past few years, Windows XP has caught

up to Windows 2000 and surpassed it in the number of sales (due to the number of machines that XP was installed on in OEM), but from an out-and-out purchase of an OS, Windows 2000 is the winner. What made Windows 2000 a must-have upgrade? I know this goes back a while, but before Windows 2000, the biggest upgrade was Windows 98, and before that Windows 95. Does anybody remember how bad Windows ME (Millennium Edition) was? This version of Windows was despised by almost everybody and even made the list of The 25 Worst Tech Products of All Time back in 2006.³

It also introduced features that would someday become staples of users like System Restore, Automatic Updates, new version of IE to better support HTML and Media player that included other media types, but the product was extremely buggy and had problems working with existing hardware and software. This paved the way for Windows 2000 sales. The negative press on Win Me and the lack of adoption moved the Windows user community to purchase, upgrade, install and generally get their hands on Windows 2000. Isn't it odd that Vista introduced various features that someday may be an OS staple, has hardware and software issues, and is generally despised by all? Does this mean that Windows 7 (or whatever they name it by the time it comes out) will be the biggest Windows release ever? The Windows community is definitely ready for a new OS and with Vista softening them up with countless issues, Windows 7 will be a HUGE, must have, need-to-buy-a-new-computer-to-get-the-OS type of release.

ABOUT THE AUTHOR

Mike Rozlog is the Sr. Director of Java Solutions for Embarcadero Technologies. In this role, he is focused on ensuring the Java developer products being created by Embarcadero meet the expectations of developers around the world. Much of his time is dedicated to discussing and explaining the technical and business aspects of Embarcadero's products and services to analysts and other audiences worldwide. Mike was formerly with CodeGear, a developer tools group that was acquired by Embarcadero in 2008. Previously, he spent more than eight years working for Borland in a number of positions, including a primary role as Chief Technical Architect. A reputed author, Mike has been published numerous times. His latest collaboration is "Mastering JBuilder" from John Wiley & Sons, Inc. michael.rozlog@embarcadero.com.

³ http://www.pcworld.com/article/125772-2/the_25_worst_tech_products_of_all_time.html



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