From: Russ Arun
Sent: Tuesday, February 18, 1997 2:05 PM
To: Jing de Jong-Chen
Subject: FW: Results of VJ++/Java focus groups

PENGAD-Bayonne, N.J.
GOVERNMENT EXHIBIT
2518

Note that we are getting brutalized on ActiveX - Java stuff all over the place. Are you looking for an owner for samples in this area? There is no PM for this area at this point!

From: Hyer Bercaw
Sent: Tuesday, February 18, 1997 1:54 PM
To: Rapid Apps. Development Business Unit; Tom Button; Brad Chase; Bob Muglia; Paul Gross; Ben Slivka; John Ludwig; Cornelius Willis; Java Leads; Tod Nielsen; James Plamondon; Brad Merrill; Tom Button's Direct Reports; Jakarta Marketing Alias
Subject: Results of VJ++/Java focus groups

The VJ++ marketing team conducted six focus groups with Java developers on February 4 & 6 in NY and San Francisco. Full details of the groups, the methodology, and the moderators report can be found at: \\Suebo7\vjpublic\Research\Focus Groups\January Focus Groups\VJ++ Focus Group Overview.html

Please let me know if you would like to see one or two of the videos. If there is sufficient interest, I will set up a showing.

The key findings and my recommendations are attached.

High Level Summary

General Impressions of Java

1) Java seen as good language for creating small non-mission-critical applets for the web.
2) Java is considered "the programming language for the Internet."
3) While the outlandish claims of Sun are seen as very over-hyped, it does hold forth a vision that appeals to developers. They feel that there is sufficient momentum behind Java that most of the claims will be realized, eventually. Many feel that it is worth waiting for.
4) There are mixed beliefs on Java as a general purpose programming language. Most of them felt that Java would eventually be capable of creating most kinds of applications. Others felt that other languages would always be better for creating certain types of applications.
5) While all of them recognize shortcomings in Java, they did not like to hear strong criticism of Java. They see Java as a version 1 product and expect it to have problems.
6) Cross platform capability is the key benefit of Java. Without it, most developers doubt there is sufficient reason for them to use Java. The productivity of the language is recognized, but is secondary to the cross platform benefits. Finally, low cost of ownership was mentioned in several groups.
7) They believe the primary tradeoff for the cross-platform benefit is loss of performance (and, secondarily, having to deal with AWT).
8) Java is seen as an open standard because it runs on multiple platforms. That is the bar to be considered open. Sun is also seen as openly accepting input from others.
9) Sun and IBM are seen as the companies that will move Java forward in the future. MS is also seen as a strong driver, but they doubt our commitment. Netscape is seen as disappearing or being bought within the next 5 years (unanimous in 2 groups).
10) Database access is the most needed feature of Java. Database access is what they mean when they talk about accessing existing systems (only one S.F. group mentioned business rules).
11) Most people thought that performance degradation of Java code from platform to platform was acceptable (and to be expected - not everyone is running a Pentium Pro). They were very much against the thought of tailoring there code for any one platform. When asked what platform they would tailor to, Windows was the only OS mentioned.
12) Several groups mentioned their concern that Java performance would drop dramatically as the size of applets increased. They were addressing this by keeping their applets small or by looking into Marimba's Castanet.

AWT, IFC, and AFC

AWT is seen as extremely weak by all groups.
They are open to cross-platform class libraries from respectable vendors other than Sun. On the other hand, they believe both IFC and AFC are browser or platform specific. They also strongly doubt Microsoft's commitment to Java.

Java and ActiveX

Virtually no one knows of the benefits of integrating Java and ActiveX. There is strong resistance to using the two together because of security and X-platform reasons. The ActiveX name is received negatively. Positioning statements with ActiveX in them almost always got NO votes. "If you are going to use Java and ActiveX together, you might as well just use ActiveX."

Without the cross-platform benefit, most developers doubt that there is sufficient reason for them to use Java. They believe that there are other valid ways to integrate Java with existing systems other than ActiveX. Many believe that there will be cross-platform solutions to accessing OS specific information.

What Developers are looking for in a development tool
There was a definite split in what the various groups looked for in a Java tool. Four groups wanted a lot of Web application features (all NY and Intenders in S.F.), while two groups wanted to focus on Java programming features (Competitive and VJ++ in S.F.).

a) Among the first four groups, web features such as WYSIWIG HTML editing, site management and publishing, and debugging in the browser were considered minimum features of a good Java development tool.
b) Among the two groups that wanted a tool focused on Java programming, RAD, JDK 1.1 support, and Java Beans were the top feature picks.
c) Positioning statements that described a complete solution for Web development scored very high with the first four groups. "Complete" was the key word.
d) Positioning statements that described integrating Java with existing non-Java infrastructure were really well received in all six focus groups.

Of course, database support is critical for all groups.

Recommendations

General Java Strategy

1. We should take dramatic action to eliminate the perception that Microsoft is not committed to Java. This perception hurts everything we try to do or communicate. Because of this, a number of small signs of commitment will not have as much effect as combining them into a major statement.
2. We should get third parties to speak on Microsoft's behalf whenever possible. This will help build our credibility.
3. Don't piss on Java. Sell our added value (benefits) above what Sun provides without denigrating Java's capabilities.
4. Communicate the benefits of ActiveX and Java integration. At a minimum we should have a very strong whitepaper (with samples) that outlines the benefits of using ActiveX with Java!
5. Get killer Database support for Java ASAP
6. Look into providing Castanet type benefits to make it more feasible to create larger Java applications and applets.
7. Put a huge effort behind showing that AFC is 100% cross-platform.

Java Development Tools

1. Continue current positioning of VJ++ 1.x as "the tool that embraces current Java standards and extends it to integrate it with existing applications and languages". Use ActiveX in supporting messaging so that we are not seen as deceptive, but minimize use of the word ActiveX.
2. Get killer database support into VJ++ ASAP
3. Quantitatively determine sizes of the programmer groups that are interested in Java 1) as part of a Web application and 2) just for Java development. Determine strategic benefit of each group. Use these two pieces of info in deciding how much weight to give Web development in Vegas/VJ++ positioning. In the absence of more info, make compatibility+integration the key message with Web development features a lesser point (I believe owning developers who are integrating with existing systems is more strategic that owning people creating Web applications).
4. Do further research to determine how much ActiveX messaging we can have. We need some amount of communication that our benefits come from ActiveX integration or we will be seen as deceptive.

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