Will Its 'Chrome' Web Browser Put a Shine on Google's Long-term Strategy?

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Casual observers may have concluded that Google's introduction this week of its Chrome web browser was a direct assault on the dominance of Microsoft's Explorer. But Wharton professors David Hsu and Kevin Werbach see a longer-term strategy at work. They say Google wants the new browser to influence the development of web technology that will help draw consumers to its various web applications, making Google overall more attractive to advertisers.

A transcript of the conversation follows:

Knowledge@Wharton: Kevin, can you talk to us a little bit about the strategy involved here and whether or not the move by Google to introduce a new browser goes beyond just the browser?

Werbach: For Google, the browser market, per se, is not so important. What Google cares about is the potential of the Internet as an application platform. So I think Google's goal in introducing this new Chrome browser is not so much to take Microsoft's market share in distributing browser software, but to move the entire market further along, away from the desktop software market, where browsers exist to begin with. They want to introduce a browser that helps make it easier for people to get their applications directly through the web.

Knowledge@Wharton: And Google is actually providing a lot of those applications in direct competition with Microsoft, like the Office Suite.

Werbach: Right. Google's business is web based: Their core search business is web based, the applications they provide, like Gmail and the various other applications, are through the network. Google's big bet, strategically, is that activity will move from desktop software -- whether by Microsoft or anyone else -- to the network cloud, where the functionality is in a data center, scaled up across many users.

Knowledge@Wharton: Do you anticipate that a lot of users will flock to this new browser in order to take advantage of the cloud-based applications?

Werbach: It remains to be seen. What Google has introduced now is a beta, pre-release version of a browser. It has some nice aspects, some quality things behind the scenes, but it is a browser. Users, I think, will try it out, because they are curious, and it is Google and it sounds interesting, but it is early to tell how much of a dent it is going to make in the market. Again though, I think Google's long term play is not to control the browser market. If they can get, for example, their JavaScript code -- which is the application engine that they have built into this application -- into, say, the next version of Firefox and distributed out that way, I think they would be happy. Again, their ultimate goal is much more than getting a lot of users just for the browser.

Knowledge@Wharton: David, what does Firefox do in the face of this? Do they immediately start adapting some of the code from the new Google browser, or do they try something different?

Hsu: I think Firefox is also ahead of the curve in terms of using an open source platform for the generation of their browser. I think it is the case that one of the reasons why Google is forward integrating into a browser is because, even though they have a relationship with Firefox, they want to have ultimate control over the evolution of the components.

That is on the one hand, but, paradoxically, they are also going to make an open source product. So I think that Kevin largely has it right with respect to why they are making this move. It is a little bit of a puzzle, because in case of the browser, you have a situation where the different components are standardized: You have protocols that are standard, web addresses that are standard, etc. -- so the points of differentiation vis-à-vis the other browsers is going to be somewhat limited. You have things like download speed, maybe encryption, privacy mode and these other things, along with the application integration.

I think that it remains to be seen how much of a leap this particular product is going to be, with respect to competitors like Explorer, Firefox, or Safari, but I think it is going to be very difficult because of the standardization that is built into the product. Because it is going to be open source, there may be some convergence with Firefox with respect to the different functionality that we are going to see. I think the good news for consumers is that this is kind of opening up a new race of innovation, and it is being driven by obviously more of the advertising generation, control of the source market, etc. I think consumers are going to be the beneficiaries of this renewed competition in this realm.

Knowledge@Wharton: When you say that they have developed this as an open source product, my understanding is that it means that it has components that are available to anybody who wants to develop a product that would work on this platform.

Hsu: Yes. I think this links back with the potential adoption. This is very much like an Adobe-type of play: "We are going to give away the reader for free -- try to get a lot of adoption for our product, but then charge and make revenue off the writer." The analog [for Google] is: "We are going to make money on our advertising-based strategy." The problem here is that Internet Explorer comes bundled with Windows computers and so that is why they over 70% market share, because very few people are interested, unless there is a compelling value proposition to switch over.

I think the people that are more cognizant of speed, encryption, and all these other issues of functionality, are already using Firefox -- or perhaps Safari, Opera or some other browser. I think it is like investments in our IRA or retirement funds: We basically leave it there; we do not tend to re-balance, even though economic theory suggests that we should, very frequently. It is the default, and so there is going to be a race visibility here in terms of the release of this product. But in terms of the ultimate goal of gaining market share, I am not sure that is the ultimate goal that Google has in releasing this product. If that is one of their shorter term milestones, I have a little bit of skepticism as to whether it is going to really accomplish [that] in the near term. It is a big move in the needle in terms of getting market share for this kind of inertial-type of reason.

Knowledge@Wharton: But it does give them more control over what the market looks like and what the technology looks like, does it not?

Werbach: It does, but I want to go back to something in your last question, which is about open source. David makes a couple of very good points about the nature of the browser market, but it is important to understand just what Google is doing here and what they can do because of open source software. Google took a component called the WebKit rendering engine, which was built by Apple for Apple's Safari browser. It is the code that lets the browser actually display the contents of a page. Apple made that available as open source.

There is another open source rendering engine called Gecko that is underlying Firefox. Google chose the Apple one. So Google did not have to build a rendering engine from scratch; they could take the best of breed -- one that was there in the market as Open Source, and incorporate that into Google's browser. Then Google went out and built some other pieces -- like this JavaScript engine, which is to power the running of web applications -- and then they open sourced that. So, someone else who comes along and wants to build a new browser, or an extension to Chrome, can take advantage of the innovations that Google has made.

This is a fundamental change in the way that software works. It used to be that if you wanted to build a browser, as Netscape did, and then Microsoft did, you had to go and build the whole thing from scratch. Now, you can leverage these existing code bases. That is an important development. It is a development

that Microsoft and many other companies are recognizing now. But I do not think we would have seen this kind of innovation that the Google browser represents come up, without open source being so powerful.

What that means is: Google has control, but that control is limited, because voluntarily they have made the browser open source. They cannot exercise the same control over their browser platform, as Microsoft can over Internet Explorer. But that is intentional, because there is a bigger market if they bring in all the other developers, who could come in and help improve the platform.

Knowledge@Wharton: Exactly, and I believe they hope that Microsoft would start adopting some of these technologies also.

Werbach: Yes and no. On the one hand, I really do not think that this is an offensive move against Microsoft. It is somewhat of a defensive move, in that if Microsoft tries to leverage the bundling that David talked about and really steer people to their search platform, as opposed to Google's search engine, having Firefox with about 20% market share and Chrome with some substantial market share, is a good backstop for Google as a market alternative. But that is a defensive play.

Other than that, I think this is again more about this big war of transitioning from software to the web. At that level, Microsoft can not compete with Google. They are behind, they are beholden to a business model based around selling licenses of Windows and Microsoft Office. Microsoft is doing everything they can to move to the web, to the cloud model, but they are beholden to their legacy model in a way that Google is not. So frankly, Google ultimately does not care if Microsoft adopts their browser technologies, as long as they cannot lock people into the rest of their software suite by virtue of the browser.

Knowledge@Wharton: Can Google's strategy be described as an attempt to design the playing field, so that it gets the biggest possible audience and draws the most advertisers?

Hsu: I think ultimately it is really to facilitate this big advertising model. We again think about this question: Given the relationship that Google has with Firefox, why do they need to develop this? I see this as coating the landscape and planting a flag there. Obviously, this is a first release of the product -- it is not yet final. But it is very interesting, going back to the theme of the open source, in terms of protectability of the components of what goes into the browser.

This morning I did a search on the patent database, to see to what extent these companies are filing for patents for these different areas. I did a search on Microsoft and the word "browser," and it came up with over 3,000 patents. Of course, I did not have time to read all those. Then I did the search on Mozilla and "browser": zero. And then I did the search on Google and "browser": about 100 patents. So I think it really does go to show the different strategies here. I think it really is a bet on future migration and whether we are going to go the more Microsoft routes -- where we are going to trust that they have a lot of talented developers who can spot different trends and functionalities that we, as consumers, want -- or do we leave it in the hands of hobbyists or other developers who want to take on extra projects at night, to add to functionality and bring [it] into the open domain as more of an open innovation model?

In terms of protectability, these are very different models. It is interesting to see that Google, in spite of its relationship with Mozilla, really does want to develop its own. By the way, it is not cutting off that relationship with Mozilla, it is pursuing it concurrently.

Knowledge@Wharton: You mentioned the possibility that consumers may not have has much control or influence over the development of these products as they might otherwise. And I am wondering how the consumer influence mechanism works in this marketplace?

Hsu: There are different ways in which companies can go about doing this -- certainly blogs, like Starbucks who, in an attempt to revitalize their brand, have opened up a website where they can take consumer suggestions. Open source is quite a different model in that if I really see the lack of functionality and I am a computer programmer, there are organized ways in which I can get involved at different levels of responsibility, to really take it in my own hands.

And there is obviously a big academic debate as to the motivations for participation. At least anecdotally,

it seems like these are the kind of people who are just quite interested personally in seeing certain functionalities come to fruition.

Knowledge@Wharton: So, it is still possible for independent technologists, hobbyists or even really serious entrepreneurs to identify consumer needs and try to meet them using the open source coding available through the Google browser.

Knowledge@Wharton: Sure, and that is not just with the Google browser, that is what open source means. Developers can, if they see a need, build to it. But, ultimately, I think this is less about consumer demand; it is more about pushing the market to where companies think that consumers are going to be.

I think most of the focus on Google's threat to Microsoft is really off base, at least as far as how Google is thinking about it. Google is an engineering-driven company. And if you look at what Google did in search, which was to solve a hard engineering problem of how to do search at a massive scale on the Internet with the kind of fuzzy things people type in, much more accurately than anyone had done before.

It is not a fully solved problem. They are innovating and lots of other people are innovating. But they focused on that in the belief that if you could build a very accurate, very scalable search engine, and just do that, people would flock to it. They did a bunch of other things around user interface, which was very clean and spare, and so forth. Partly, because they did not care about all the jazz -- that was not important to them. The result was that people did flock to it. Then they found this extraordinarily lucrative business model around it.

So look at what they are doing here: Their bet again is on applications being run over the web. Things like Gmail, their email client, and Google applications -- that is just a starting point, the idea that everything that you do now in desktop software and more will be run across the network. The technical underpinning of that being effective is good technology locally on your machine to run that program -- the piece that has to be run locally quickly, as well as good, incredibly scalable technology at the other end of the data center that is running that in the core of the network.

Google is great at the core data center piece, but they are still investing and working there, as is Microsoft, Yahoo and various other companies. I think they saw a gap at the browser [side] and even though there is Firefox, which provides some consumer choice, the Firefox development community was not fully invested in building a really fast, evolving and effective application runtime engine in the browser, because Firefox is not committed to this web cloud model as exclusively as Google is.

Honestly, I think Google saw something that needed to be in the market and that would benefit them strategically in the long term and said: "We are going to do that." Then, the benefits in terms of competition with Microsoft are things that flow along with it.

Knowledge@Wharton: Some years ago, there was talk about the browser essentially becoming the operating system on many PCs. Is this a step in that direction?

Hsu: I think it is. One question that I think there is going to be, if you consider the introduction of this product strategically: How much of a step up is it really? Maybe I can save a few seconds. I can certainly run applications on any browser of the kind that Kevin is talking about. I think that, starting from scratch -- or almost scratch, Google can build it around what they see as the vision of what computing will be.

Ultimately, if there is going to be a market that is going to be significant and mobile - for example, the exciting potential for integration with Google's Android product for cell phones, I think that it could be exciting. Certainly, to make a comparison with the iPhone and the Safari browser -- that works pretty well, but, in the short run, I do not necessarily see the analog of the kind of compelling value proposition that Google is going to bring to either the desktop market or the cell phone market, that is really a 10-times improvement on what we have now.

Maybe I just have not seen far enough in my crystal ball in terms of the way these things are evolving, but as I understand it, and as I have been playing around with Chrome myself this morning, yes, there are possibly some speed improvements and I can do some shortcuts that are going to save a few seconds

vis-à-vis my other browsers. However, in my view, this is first and foremost enabling a stake in the ground saying: "We do not want to risk seating any control, even in a kind of pretty close partnership with Firefox, and since we have got a lot of money in the bank, we have to protect our 'cash cow': the advertising model".

I do not yet quite see the kind of compelling value to consumers; because there is issue of protectability. They have got the open source model and Microsoft says: "Oh, that tab browsing is really great." -- Or some other innovation that Firefox or Google might come up with. How are they going to protect that? Microsoft has got eight versions of their product so far, while Google is on their first. What is going to stop them from appropriating all those innovations and building them on to the next version of the browser, even if it is for the mobile market?

Knowledge@Wharton; But if Microsoft does that, to some extent it is good for Google because it supports, in a more direct way, the web based applications that they are trying to push, correct?

Werbach: Yes. Again, I think for Google this is a short term play and a long term play. The short term play, I think, is what I described before. The JavaScript engine -- which sounds very technical and geeky, but is an important piece that the market itself -- even with an open source, might not have delivered in the way that Google wants to see it.

The real play, though, is a push for a world where operating systems do not matter. Sergey Brin, the co-founder of Google, said something like that in his press conference yesterday. He said that operating systems are an old fashioned concept. I think that makes sense, if you look at this from a long term perspective. David is absolutely right in terms of mentioning mobile.

There are 3.5 billion mobile phones in use in the world, less than a billion PCs and about a billion television sets -- and that is where all the growth is, especially in the developing world. Those platforms do not need a legacy operating system. They need some sort of software that provides the link that pulls together applications and content, and connects with the network connection. And PCs are going to move in that direction over a period of time, as well. Google does not need to fight against Microsoft's revenue today. It is fighting for a bigger share of the much bigger pie, 10, 15 or 20 years from now.

I think this is one of many moves that they are making in that direction and, whether Microsoft fights them for browser market share or not, I do not think that changes that fundamental dynamic.

Hsu: These are the insurance policies that are being taken out. Clearly, even though Microsoft has 70% of the browser market, people are still going to Google or Google's allies for their search. As I see it -- and I see the overall strategy of Google -- they are really getting into lots of different software products, and this one does seem like quite an important initiative from a strategic standpoint, so that they cannot be locked out at the arm's length relationship with a third party that they cannot wholly control.

Should the world change on some other innovations through some other entrepreneurial company or some existing incumbent player that is going to disrupt their revenue model, they want to be able to take action in a very quick way. I see lots of these initiatives that Google has, simultaneously enabling both defensive and offensive goals for the company that can really protect, once it becomes very clear that the strength of the company is online advertising marketplace.

Werbach: We keep talking Microsoft, Microsoft, Microsoft. There are other companies here. Apple is taking iTunes and making it into a sort of entertainment browser. They want to dominate the market as much as Google and Microsoft do. If you look at where their market cap has been going, investors seem to think that they are on their way there as well. The cable and telephone companies, like Comcast, Verizon and AT&T, want to dominate this converged market as well.

There is a big game being played here and Google is taking a whole series of steps to try to structure the marketplace in a way that is favorable to their strength, which is this web based cloud computing model.

Knowledge@Wharton: It will be interesting to watch it unfold. Kevin, David, thank you so much for joining us today.