



Linux guru John Patrick
talks about innovation
and Linux

John Patrick, president of Attitude LLC, isn't afraid to see what's around the curve.

PHOTOGRAPH BY JOHN MOWERS

It's about freedom

BY ELLIOT KING

JOHN PATRICK has been described in the media as one of the most important and intriguing individuals in information technology (IT); a person who sparks innovation and growth. Patrick authored the 2001 book, "Net Attitude," and is president of the consulting firm, Attitude LLC. When he served as vice president for Internet Technology at IBM, he led the company's initial forays into the Net. The *Linux Executive Report* (LER) talked to him recently about innovation, hot new technologies that could impact the IT world, and, of course, Linux*.

LER: Over the past decade, you've been at the forefront of some of the most important IT developments.

Patrick: Innovation is so important in our lives, so it's important to think about it and talk about it. I have no crystal ball, but I have been fortunate to see and participate in what was just around the corner—not 20 years from now or 10 years from now or even five years from now. Some of the most important things going on right now nobody talked about five years ago. Some of the most important things are right under our noses or already here, but their significance is not always appreciated.

LER: How do you determine if something will have an impact and isn't just the flavor of the day in the hype cycle?

Patrick: Not by studying it, talking to pundits or venture capitalists investing in it, or talking to the CEO of a start-up betting his future on it, but by using it, by living it and using it yourself. That's how you can determine what it's all about.

LER: So have you applied that approach to Linux?

Patrick: A lot of people have opinions about Linux. But the best way to form an opinion about Linux is by using it.

LER: So are you using Linux?

Patrick: I have a number of Linux computers in my home that are actually controlling my home. When you use it, you know it is real.

LER: Are there other tests?

Patrick: Talk to students. I used to say that if you had any doubts about Java*, go to your favorite university and talk to computer-science students. Ask them if they have heard of Java, and they'll say that of course they've heard of Java and in fact they are using it. That's true about Linux as well.

LER: How should the implementation of innovation within a company work?

Patrick: There are two things at work. One is the more generic point about business cases. How do you justify something new? Frequently, the question should be reversed. How can we justify not adopting a new technology? When it comes to trying new things and incorporating new ideas, the way to deal with that is through a skunk-works approach. I urge every corporation to have a skunk-works. If you're a small company, it may be a part-time person. If you're a big company, it may be a group of a dozen people. It's a little group of people that you don't over manage.

LER: And what do they do?

Patrick: They have their fingers in everything that's new and are using it. When there's something that's compelling, you adopt it. Do you need a business case to have telephones or a fax machine? You may have a business case to pick this telephone system or that one, but you don't need a business case to say if you need any telephones.

LER: Should that approach be applied to Linux?

Patrick: I think Linux is a bit different, although I do believe that all companies should be at least experimenting and prototyping with Linux. There's the financial side of it that needs to be dealt with the same as every other financial consideration. But the bigger issue with Linux is the freedom that it provides. It's not about free; it's about freedom.

LER: What do you mean by that?

Patrick: I don't think anybody I know in business or otherwise, downloads a free copy of Linux. People buy Red Hat or Novell's SUSE LINUX or Mandrake so they have a distribution that they know is reliable and some level of documentation and perhaps support. Linux is about the open-source model.

LER: In your view, what's important about the open-source model?

Patrick: The way it works is put into the open for everybody to see. There's no mystery. You know how it works. If you don't like the way it works—you find something that's broken or you think should work differently—you can change it. You can do that because it's open source. The way in which it works is in the public view.

LER: Linux is still pretty technical. What impact does that have on its adoption?

Patrick: Linux covers a wide spectrum of opportunities. The acceptance of Linux and its penetration across that spectrum of opportunities are different.

LER: How so?

Patrick: In the server world, in financial-services companies and large manufacturing companies, they see the benefits and are adopting it. Linux is gaining because it's reliable and it's reliable because it's open source.



LER: And in the other areas of opportunity?

Patrick: We are beginning to see Linux adopted in the mobile and handheld devices space by companies that make cell phones. The motivation there is that companies have the flexibility to mold the software platform to their phone, as opposed to molding their phone to somebody else's platform.

A third category would be supercomputing. In supercomputing, you want to pull together clusters of multiple computers and have them act as a single computer. That's grid computing. Linux is very adaptable to that. IBM has contributed to the Linux community to help Linux to become a major platform in the world of supercomputing.

LER: How about Linux on the desktop?

Patrick: It's more complicated and more controversial. People who are hobbyists and like total control of their environment love Linux. People who don't want to know much about how the software works—all they want to do is a couple of applications—they don't really care. Companies such as IBM have a client approach to Linux, with the desktop representing one of those clients.

LER: You use a Linux desktop. What's been your experience?

Patrick: It's a liberating feeling. You can sense the entrepreneurial spirit that went into developing it. But if it doesn't have something that you need and you need to add a device driver or emulate an application or make some modification,

you have to know more than some people want to know. And that's the inhibitor. One theory I do believe is that if the Linux desktop gains significant market share, it will be because of governments.

LER: Why?

Patrick: Take Brazil. There are 200 million people and only 10 million have computers. When you look at that from the top, down, there are only so many dollars to go around. If they're going to subsidize it through the school system, how much should they spend on Microsoft* Office functionality given the limited resources?

LER: What are the obstacles confronting the adoption of Linux?

Patrick: The application development companies have to make the leap. They have to make their applications available on Linux. They may not do that. There are a handful of applications that people use. There's no Quicken for Linux; there's no TurboTax for Linux. Dreamweaver is not available for Linux. For me, personally, not having them is a real inhibitor.

LER: What's the role that major technology companies, such as IBM, play in promoting Linux?

Patrick: They play an important role. They contribute technology to the open-source community. Secondly, they provide support alternatives to the customers. The skill base is lower. Many companies say they're convinced of the benefits but their staff isn't trained. It's important that vendors provide consulting and support services. Vendors also have a role in highlighting the benefits of Linux. IBM was a lone voice five years ago.

LER: Why are vendors playing such a large role?

Patrick: They see it as a business opportunity and they see that if they can level the playing field as far as the operating system goes, they can compete on a higher level. They can compete on the total solution, including the support, services, applications and middleware they can build on top of Linux.

LER: In addition to government, are there other key vertical markets for Linux?

Patrick: All of the embedded markets where Linux is behind the scenes are a very important segment. A lot of the consumer electronics devices on the market are a Linux computer under the covers.

LER: Of all the innovation taking place, what are you most excited about now?

Patrick: Voice over IP is still underestimated. Over the next couple of years, people will realize that voice over IP isn't about the price; it's about the integration of voice as another kind of data.

LER: Anything else?

Patrick: I think blogging is still underestimated. It's the tip of the iceberg of the semantic Web. It's a dramatic change in the way information is created, published and shared. It will completely change the way we find information. Web pages are documents without context. With blogging, when you write something, there's a date, there's an author, a category, a title and the content. Those five simple tags give the document somebody wrote a context. It can be found. It can be related to other things by the author or that category.

And Wi-Fi (wireless fidelity) is at the very beginning, too. It's not about coffee shops and hotel lobbies. It's about Wi-Fi being in handheld devices. Mobile will change dramatically through the incorporation of real browsers.

LER: Don't you think some of these are being over-hyped?

Patrick: I think that with many of the new technologies that we have seen over the past dozen years, the reality has been much bigger than the hype.

Elliot King is an associate professor at Loyola College in Maryland where he specializes in new communication technology. Dr. King has written five books and several hundred articles about the emergence and use of new computing and communication technology.