

*interview*

Cyrus Shaoul, vice president, and  
Joichi Ito, president, of Eccosys

## Finding Opportunity in Chaos

### An interview with Joichi Ito and Cyrus Shaoul of Eccosys Co., Ltd.

*CJ talks with two of the founders of Eccosys about digital commerce, trends in the Japanese Internet, and the emerging opportunities for foreign companies*

**interviewed by Wm. Auckerman**

***Joichi Ito** was born in Kyoto, but moved to the US with his family at age 3. Returning to Japan some years later, Ito graduated from Tokyo's ASIJ (The American School in Japan) in 1984. He attended the University of Chicago and, following a stint as a night club disk jockey, he came back to Japan to start a disco and a computer conferencing system distribution company. Long an active member of Japan's networking community, Ito started Eccosys in April 1994 to do server installations and Web design. Ito is also president of TVI (a US-based media negotiation and coordination company), vice president of MacZone Japan, and a board member and vice president of information and technology for Energy Conversion Devices (Detroit).*

***Cyrus Shaoul** was born in Alexandria, Va. Because his father worked for a multinational bank, Shaoul lived in Hong Kong, Singapore, and West Africa before coming to Japan at age 15. He is also an ASIJ alumnus (1989), and a graduate of MIT. While at MIT Shaoul worked on Project Athena, one of the first academic technology-based networks. After working for about one year at NTT's R&D labs in Yokosuka doing virtual reality research and software development, he left to join Ito in starting Eccosys.*

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*First, tell us a bit about how you came to create Eccosys.*

Joichi Ito: About the same time that Intercon was setting up IIKK (Intercon International Japan, now PSI Japan), we set up one of Japan's

first Web servers [in the fall of 1993]. The first POP [point of presence] that IIKK set up was in my bathroom; we had a leased line into a server there.

I had some clients that I was already working with, consulting, who wanted to do some Internet-related work. They said, "Set up a company, and we'll give you a contract." So I borrowed some money to set up Eccosys; we had a contract from the first day. Once we set up, we started showing our Web page; we had one of the first Japanese pages up, so a lot of people saw it.

### ***How quickly has the company grown?***

Ito: Our first jobs were in the thousands of dollars range. Then we set up the Shima Media Network and Asahi Shimbun's Open Doors server, and that went to another scale -- the hundreds of thousands of dollars range. Now we find ourselves bidding in the millions of dollars range.

The growth that we've had in the past year has added a digit every three months. We've tried not to increase the number of people, though -- we've developed strategic alliances instead. We're setting up a joint venture with an ad production company, a new company called Digital Garage.

Eccosys is owned by its employees. I don't control the company; I have only 49%. We have no debt, and we're having a good time; we really don't want other people telling us what to do. Digital Garage will be doing the larger deals. Eccosys will continue to focus on the fun stuff, because the fun stuff always ends up being the stuff that is on the bleeding edge.

We have very little overhead; most of the equipment we have is from clients. We have strategic alliances with all of the big system integrators, and we work closely with most of the hardware manufacturers. We also try to make alliances with other companies like ourselves. There is definitely more work now in Japan than there are people to do the work; it's a seller's market.

### ***What are some of the projects you're working on now?***

Ito: Next year's online worldwide Internet Expo -- that will be a fairly substantial thing. Japanese participation seems to be the biggest of any country right now. NTT is donating 300 128K leased lines and setting up eight 45MB locations. There will be a JSAT satellite uplink to the Internet that can be used anywhere. We'll be doing events and other related work for the Expo all year next year. It's likely that I'll be the technical producer of the events, and Eccosys will be involved in coordinating the tool development and support, and trying to coordinate all the different people in Japan that want to work on the project.

It's a pretty substantial project, with participation and donations by companies like Bay Networks, Cisco, Quantum.... Most of the big companies in Japan will have some kind of presence, and it's hoped that over 5 million people will participate in some way. It's like a big *omatsuri* [festival] that starts January 1 and goes all year. It's all going to happen on the Net, primarily.

Cyrus Shaoul: That's next year. This year, as a warm-up, we're doing another global, high-bandwidth video project called the Junior Summit. We've been asked by this nonprofit meeting, the GII Junior Summit 1995,

to set up demonstrations and real uses of Internet technology at the conference site in Tama in November. Forty kids from around the world, picked by an essay-writing test, will be flown to Japan to discuss the effects of the GII [Global Information Infrastructure] on the future of war and peace, and how communications affects that.

***How do you see the Internet developing in Japan?***

Ito: Right now, most of the money is coming from advertising. Talking about the Internet in the media is the main way that you can create impact; currently, that's about the only way for a company to get its money's worth from the Internet. We did a big project for IBM last year, for OS/2 Warp - a promotional event in Shibuya, and an Internet Cafe. They were so happy they gave us a bonus, because we got a lot of media coverage.

The next phase will be doing advertising on the Internet. Cyrus just finished hacking out the Ad-Mall for Hakuhodo, the advertising agency. They're going to be doing sales promotions on the Internet.

Eventually, it will go to financial transactions on the Internet, digital commerce and so on. But the first phase is all advertising money.

***I understand that Eccosys did some early experiments with digital commerce. What's happening in the realm of electronic cash now?***

Ito: I think a lot of people are approaching the discussion about digital cash a little bit backwards. It's not going to be a technology-driven trend. It may sometimes look like it at the beginning, but the market-driven trend is happening in a more substantial way.

All of the issues associated with digital cash -- anonymity, lower cost of transactions, security concerns, and so on -- technically, these can be cleared without much investment. Companies like DigiCash and Mondex are bringing new technology to the marketplace, but in the US, Visa and MasterCard have decided that they're going to have stored-value cards. So Mondex's value in the marketplace is not clear anymore. And while DigiCash has a blank signature anonymity patent, it's not clear overall how much advantage that gives them.

***What kind of costs are involved in doing online transactions?***

Ito: In general, transactions over networks are getting cheaper. NIFTY-Serve, for example, in some cases used to take an 80% service charge for doing the billing. That's a pretty high transaction cost. Places like the "cyber malls" that are being set up right now are taking 15% to 30%. Japanese credit card companies want 7%. But some US credit card companies want only 2%, or even 1%. So we're getting to lower and lower transaction costs.

But as information pieces get smaller, you go into super distribution and distribution of things where you don't really need credit card companies' services, like reversibility and account logs. Then you get into a competition of transaction costs that aren't in the normal realm of what a credit card can do. Eventually, you'll get to a marketplace where even keeping a record of the transaction is going to be too much cost. Then you go into anonymity as an economic necessity.

***So, do you see electronic cash as a viable option for the near future?***

Ito: Yes, I think that, economically speaking, there is going to be a necessity for electronic cash. You'll have banks and credit card companies unable to get into certain niches, and regulatory change to allow those niches to increase and become competitive globally. If you look at it from the viewpoint of regulation and the market, you'll see the timing of when these things will happen is based on the development of electronic commerce.

Sure, you'll find small markets: there'll be a casino setting up in the Bahamas, you'll have offshore banking... there will be little pieces of economies developing. But for world economies, like a brand new foreign exchange system using digital cash, or a new stock market based on digital transactions -- those are really great visions that will happen, but they will happen based on a need.

The most important thing is the timing. When you get the timing right, you can succeed. But, always, the bleeding edge has a hard time. It will be interesting to see if Mondex and other front-runner guys are doing anything more than proof of concept.

***What you suggest seems like a good scenario for market-driven economies like the US. How about Japan, with its regulatory hurdles?***

Ito: Japan has only "virtual" hurdles. For one thing, Japan doesn't have any cryptographic regulations -- doesn't have the know-how. The other thing is that there's an unused article in Japan's Constitution, one that's not in the US Constitution, which guarantees privacy of communications for all citizens. So, from the cryptographic point of view, Japan is a fairly free place right now. It will get pressure from the US to follow in the US's footsteps, though.

I'm working with some study groups trying to explain to the Japanese that they're in a position of advantage right now; the only big hurdle is the cost of communication. If Japan can get beyond that, and spend some more money creating local cryptography, it could be that Japan gets ahead of everybody in terms of digital cash -- because it will be globally marketable, whereas the stuff developed in the US has this whole politics behind the cryptography export issue.

***But, as you say, Japan lacks the know-how.***

Ito: There's definitely not that much know-how here now, but that can change. Money can buy know-how. Eventually, I think that Japan could be ahead. The banks are going through a lot of restructuring, a lot of problems -- but there's opportunity when there's chaos.

MITI [the Ministry of International Trade and Industry] and the MPT [Ministry of Posts and Telecommunications] are fighting over who's going to be in charge of digital commerce. They're allocating hundreds of millions of dollars to that right now. If that money is used in a constructive way, to come up with some technology, it will be well spent.

Japan is actually OK, even though they've done some really dumb things. When Mondex came to Japan, it's rumored that the banks asked NTT to check on the security of the card, and they said, "A good hacker probably could figure out a way to crack it, so there's a risk." So the banks said, "Oh, if there's a risk, then we can't do it." As if there isn't a risk in the

current banking system!

I think there's a huge gap between perceived risk and actual risk. I can steal credit card numbers out of a dumpster easier than someone could steal them off of a Mondex card. A lot of the delay right now is that the security analysts can't figure out the cost of the risk of implementing digital cash. That's global, not just Japan.

***That's a good overview of the provider/technical side. What about the consumer?***

Ito: The mail-order trend in Japan is very behind, but it's catching on. Three years ago, 5% of people said they would use mail order; now, it's over 50%. Just like the Internet trend in Japan: it starts out slower, but ends up accelerating faster.

Mail order catalogs, like Sony and Seibu, are getting return rates in the 20% range. In the US, 5% is considered good. Once you get the consumers on the hook in Japan, they stay there.

There are a couple of hurdles, though. One is the credit card monopoly; credit card rates are up to 7%, which is ridiculous and will dampen the launch. And the cost of telecommunications is too high. These are real barriers to entry.

***Will online transactions in Japan follow the same trends as in the US?***

Ito: A trend you see in the US is that the yuppies are buying a lot of stuff: outdoor goods, wine, steaks, flowers.... Those sorts of markets, and computer parts, are finally becoming profitable. But yuppies in Japan don't have money; it's the young girls who have money.

In Japan you have a different target, a different entry rate. I think consumer electronics and goods that appeal to kids may be major markets. But at the end of all this is the fact that the basic costs of running an Internet or telecommunications operation are so high in Japan. For the providers, you're paying more for leased lines. For the consumer, you're paying more for the telephone call. In the end, it's a smaller market, so how profitable it can be is a question.

***As you mentioned, in Japan teenage girls and young working women are often targeted by vendors. Yet nearly 96% of Japanese Internet users are male, which severely limits the market potential of Internet-based businesses. What can be done to get more Japanese women online?***

Ito: It's going to be very difficult, but that is important. I think girls in Japan are able to take on new technology faster than girls in the US -- just look at the use of *denshi techo* [electronic notebooks], pocket pagers, and cellular phones. One thing is to change the interface away from a masculine-looking computer to something women are comfortable with. Another is changing the perceived image of computers in Japan.

All over the world, but particularly in Japan, cars and computers are considered "guy things." The general social image against women being in front of computers is fairly strong. Reiko Chiba, a Japanese TV talent who started using computers, was telling me that when they would do ratings on TV... when she would sit in front of a computer, the ratings would go down.

Overall, it's a feminism issue that's a very, very deep problem in Japan. But if you can change the image a bit, and change the marketing for computers.... I don't know the answer to your question, but it's a very important problem.

***Isn't one barrier a technical issue: the perceived difficulty of setting up the hardware and using the software?***

Ito: Yes, but the technical solutions are coming up very fast. I think that non-computer-based browsing will be a big deal next year, and that will really change the barrier to entry. You won't have to be a nerd anymore to get online.

Shaoul: There is a lot of stuff coming. Sooner or later, people will start using their game machine, their toaster, to get on the Net.

***Overall, how is the Internet in Japan developing differently from the Internet in the US?***

Ito: The standard answer is: Japan is behind. Practically speaking, though, the technology is here. Commercial Internet has already exceeded the academic Internet. The growth curve in Japan is higher than almost anywhere else.

Even though Japan is behind, we're using all new technology here; so I think getting Japan online should be very fast. The big problem is the high cost of telecommunications.

***Who is to blame for that?***

Ito: Everybody blames NTT, but NTT is a player, a product of other things that are happening. It's a social phenomenon that everybody is responsible for, from the politicians to the bureaucrats. But breaking up NTT isn't the answer, either. Without deciding what you want to do, and then figuring out the best organization for it -- just breaking up NTT is going to cause a lot of damage.

Japan needs to get people into the seats of bureaucracy who understand the issues. Look at the way the FCC is dealing with it: they're delegating a lot of the decisions down to the ranks, because as John Barlow puts it, "God is in the details." Unless you know what the routing issues are of a specific point, you can't make the right decision on regulatory issues.

Everybody knows what the real answer is: compete, move forward -- any bozo politician can tell you that. But it's the technical guys in the field that have to know. The solutions NTT is coming up with -- in terms of how they want to do routing, or that they want to be in charge of this or that -- are really dingbat ideas.

I think that if NTT is put in charge of the higher software and routing layers, it's really going to stall. And there aren't the politicians and bureaucrats in power who understand that issue. The problem is going to be to get some smart people into the system of bureaucracy, give them longer than two-year terms so that they can learn something, and delegate the decisionmaking to them rather than making broad sweeping decisions like, "Oh, NTT seems to know what they're doing. Let's let them do it."

### ***How likely is that?***

Ito: It's going to be outside forces. If you look at the callback system -- the ITC came in and said, "It's illegal for you to force these guys out of Japan; this is a legitimate practice." What will happen is that American telecommunications companies will come in with all kinds of new technologies. And American regulators are going to tell NTT, "You're engaging in unfair trade practices." The guys that come in are going to beat up NTT in terms of technical ability, and then NTT is going to have to rearrange themselves. So, I would warn NTT not to waste its energy trying to take too much vertical space, but to focus on doing better leased lines and working with outside technical people more.

### ***Will the Internet phenomenon in Japan be sustained, or is it just a fad that will pass in another year?***

Ito: I think there's a possibility. To go back to that model of talking about the Internet in the media being the main business, what's going to happen is that media interest will die down. Soon that won't be a viable business anymore. If the market increases enough by then, so that talking about something on the Internet is enough, then I think we'll succeed. That's why we're putting so much energy into the Internet Expo next year -- trying to get the public user base, the market, to a size that's sustainable in itself, without relying on the mass media. There's a risk that it won't happen here right away, though. It may slump once.

From a publishing point of view, the United States has broken through, and electronic magazines are making money. But in Japan, you still can't get enough hits on a commercial site, considering the cost of putting that site up, to pay for it.

### ***How feasible would it be for a Japanese company to set up its Internet server site in the US?***

Shaoul: Technically, you save a lot of money. And maintenance-wise, there is software available already that will let you automatically mirror the contents of a site in Japan, daily or hourly to the States.

### ***Are there benefits for doing it all in Japan?***

Shaoul: The benefits of doing it here are many; that's why we're still in business. First of all, if there is a problem with the machine, instead of being in a dark closet somewhere in California connected to a T1 line, it's here where you can get access to it. Sure, there are service providers in the States who will charge you a lot of money to have 24-hour surveillance of your machine, but if you just want a low-budget, no-frills server in the States, you lose a lot on the security and robustness of the system.

The other thing is getting your content made. Content isn't just the text and pictures and sounds; the content is also the software that is running. Most Web servers use custom CGI scripts, or Java scripts. Trying to do software development online with the server a few hundred milliseconds away on the Net is inconvenient; you want to be able to check the server offline and back it up yourself.

There's also the routing issue. If your server is in the States, and most of your clients are on BKKoame, they have to go across the ocean. If they're going into a Japanese metropolitan area network that's going to be

upgraded next year, to say 10MB, instead, then your Japanese audience gets better performance.

Ito: The main issue is that there is a bandwidth limit to the US. When you get into higher bandwidth applications, there'll be a scale of economy where it will be cheaper to have it here.

The biggest cost of sitting up a Web site is sitting down with the technical people and figuring out what you want your scripts to do. It's a pain to try and do it with somebody in the States. If you have a Web page that you wrote in Word 6 and just want it uploaded somewhere so people can see your resume, then putting it on Netcom is fine. But if you want to do some statistical analysis on a user database, then it's not going to work.

***How will the Internet change Japanese culture and society? Will there be resistance to the technology, like the argument that word processors mean young Japanese are forgetting how to "write" kanji?***

Ito: I think that's fine. I mean, the *soroban* [abacus] and all that are nice -- and maybe if you get thrown into a jungle, you're going to need certain skills -- but we have to move forward. How necessary is *kanji*, and how much do you gain getting out of *kanji*? I doubt anybody in Japan would buy it, but I think giving up certain older sets of tools and leaving them as crafts is OK. Instead of worrying about that, people should spend their time learning new things. If you have a scientific calculator, you can solve bigger problems than you can on a *soroban*.

Shaoul: As someone who started learning Japanese at 15, I remember the difficulties. I wish that I'd had computer-based learning tools, like now. There are CD-ROMs that really do a great job, and the Internet has the ability to teach everyone everything -- including Japanese. Because 80% to 90% of the information on the Net is in English, it also can provide a knowledge base to make learning English interesting for everybody. Why can't everybody be bilingual, right?

Ito: A lot of Japanese say, "We need to protect our culture." But I say, "No, you want to distribute your culture." You want everybody to be able to learn Japanese. If you can spread it out, and find people who are really interested in keeping up with *kanji*, you don't have to force people to do it to protect it anymore. I know it's a difficult "sell," but if you look at virtual Japan rather than physical Japan, you don't see it diminishing because of the Internet.

***Do you see opportunities for foreign companies in Japan?***

Ito: Yes. Overall in Japan -- if you look at the banks falling apart, at the auto industry, at any industry in Japan -- there's going to be a shakedown. The market is there, and there will be opportunities for everybody from foreign investors to technical companies to jump into Japan and play a role. The smart Japanese and the bankers understand this, so they're going to be reaching out for help. It's not going to be a closed thing.

A lot of this is happening behind closed doors, still, but the Japanese know that they can't sustain the present situation. Even though the bubble is said to have burst, you still have one more false bottom to go.

***Do you have any closing advice for foreign companies seeking to enter the Japanese market?***

Shaoul: If you're a foreign company and you don't yet have any marketing investment, consider the Internet. I think Japanese people, when they want to know something, will go on the Net and say, for example, "I want to find companies who are selling log homes." So if you're a log home maker importing into Japan from Seattle, you should put something on the Net. People in Japan will be looking for it.

Ito: Right now, everybody is focused on the Internet, so there is a lot of value in doing Internet-based stuff in Japan. A lot of Japanese material is finally coming online, but there isn't a whole lot of content yet, so you will stick out as well.

There's also the big, big market of enterprise networking, for which the Internet can still be cheaper -- you're using the same leased lines, but more efficiently. The Swiss banks are using public networks with cryptography for their exchange now; the Internet with cryptography has become relatively safe. And the cryptography that the Swiss are using is legal in Japan, so that's something to look into.

If you want to hit certain segments of people that are on the Internet, this is a good time, because next year's Internet Expo is going to blow the hype out of proportion before it dies.

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Article 21 of the  
Constitution of Japan

*Freedom of assembly and association as well as speech, press and all other forms of expression are guaranteed. 2) No censorship shall be maintained, nor shall the secrecy of any means of communication be violated.*

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