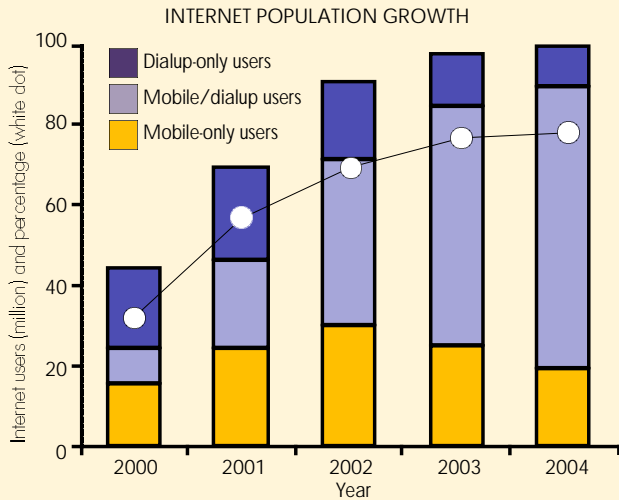
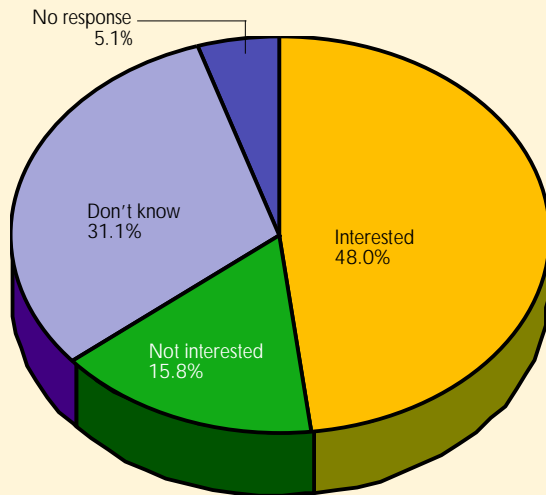


NET ACCESS IN THE FAST LANE

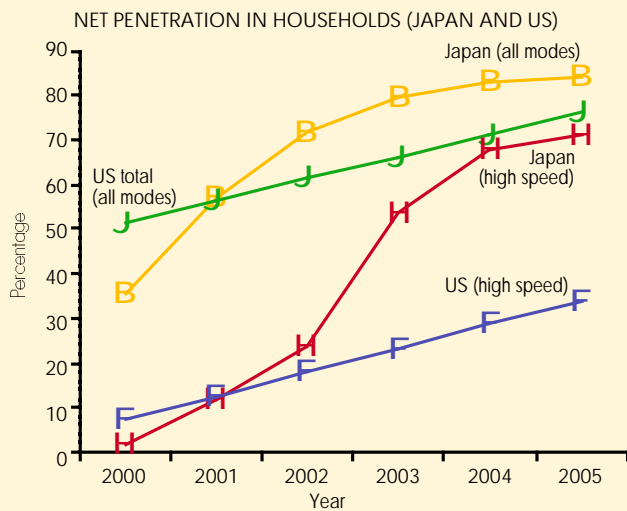
The number of Internet users in Japan is expected to reach 100 million in 2004, up from 45 million in 2000, according to an April 2001 survey by InfoCom Research (part of the NTT Group). The survey predicts the majority of surfers (72 percent in 2004, up from 20 percent in 2000) will go online using a mix of access modes (dialup, mobile, et cetera), depending on location. The number of households hooked up via broadband is projected to climb from 1.9 percent in 2000 to 71.3 percent in 2004, surpassing the expected 2004 US household Net penetration rate. We think Japan is simply leapfrogging the home PC/56-Kbps dialup-modem stage of public access (still the majority in the US) and moving straight to broadband. But the success of wireline broadband here is by no means assured. Many surfers are perfectly satisfied with their keitai, which will only improve as 3G W-CDMA and cdmaOne networks launch in the next 18 months (see "Mission Impossible," page 48, June 2001). Perhaps the sweet spot for surfing in Japan will be multi-Kbps keitai while on the run, but broadband access through 802.11(b) wireless LANs while at home or when unflipping the laptop in Starbucks.



INTERESTED IN MULTIPLE ACCESS MODES (WITHIN 1 YEAR)?



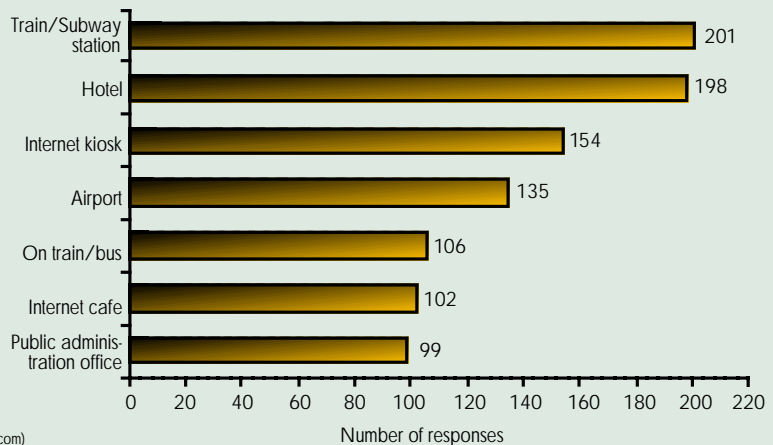
Source: InfoCom Research www.icr.co.jp (Japanese), April 2001 survey, 5,000 valid samples



WHERE JAPANESE WANT TO SURF

Japanese surfers look for Net access outside of home and work. Some want to kill time (gaming on the keitai is fine) but others want to multitask and access their mail, calendar, and contacts while away from the office - still not fun to do on the tiny screen. Keitai users in Japan are also heavy kon-bini store users, we think, and the i-mode or EZWeb handset can be seen as an extension of convenience culture. Already, accessing the Web while on foot is as natural as breathing for many here, and it only makes sense that many more will want to access more sophisticated services when on the go. japan.internet.com and INFO PLANT conducted a survey in April 2001 (300 respondents) in which two-thirds of respondents said it would be nice to have access at train and subway stations, hotels, or kiosks. Most want access for free or almost free.

WHERE DO YOU WANT TO ACCESS THE NET (OUTSIDE OF HOME OR WORKPLACE)?

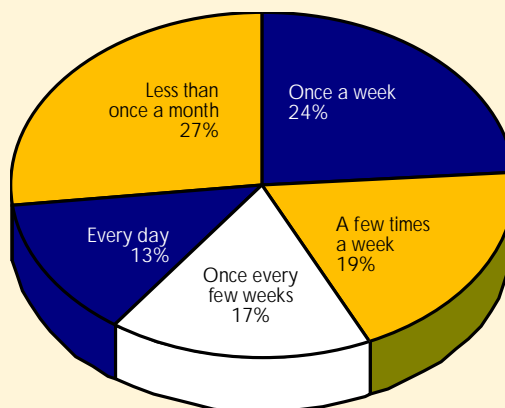


Source: japan.internet.com (http://japan.internet.com) and INFO PLANT (www.info-plant.com)

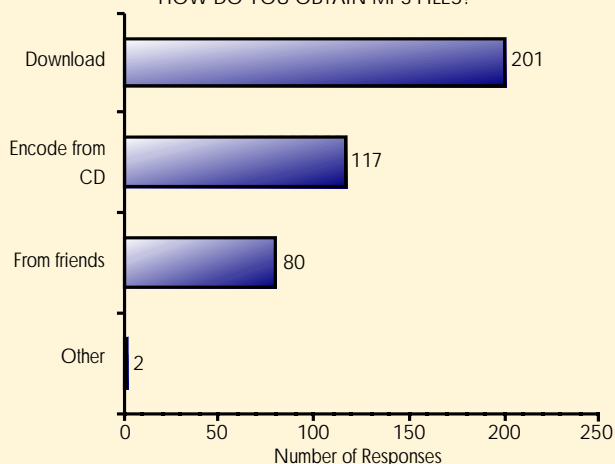
## MP3: RIP, ROCK, AND ROLL

Convergence has taken off (see "Convergence Emergence," page 36, May 2001), and the combination MP3 player-watch, -phone, and -PDA are already a reality. MP3s are also, needless to say, on desktops and laptops, and having a multigigabyte hard drive stuffed with hundreds (or thousands) of MP3 files means never having to say, "Honey, hand me the CD cartridge, will you?" According to an April 2001 japan.internet.com and INFO PLANT survey (300 respondents), many MP3 aficionados play back their music files via PC precisely because they don't have to mess with a changer or keep track of physical disks. As a result, some 40% of respondents said they're using their AV equipment (stereo, tape, cassette, CD player) less and less. We suspect their turntables are even dustier. Any MP3 fan worth her shio will be sure to have playback software (customizable with multiple "skins" for individualization), encoder software for copying song tracks from audio CDs and saving them in MP3 format (a process referred to as "ripping"), and a playlist manager to create and store customized playlists of favorite tunes.

### HOW OFTEN DO YOU PLAY MP3s?

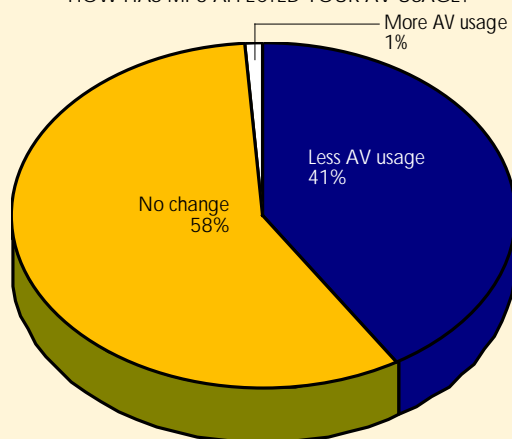


### HOW DO YOU OBTAIN MP3 FILES?

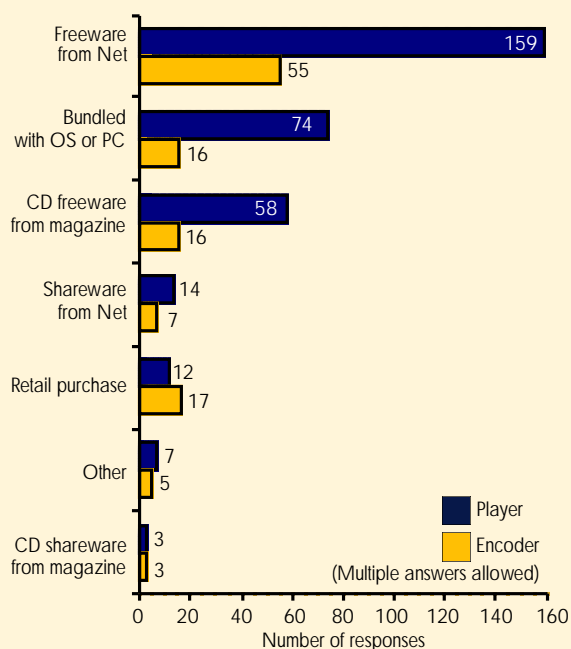


Source: japan.internet.com (<http://japan.internet.com>) and INFO PLANT ([www.info-plant.com](http://www.info-plant.com))

### HOW HAS MP3 AFFECTED YOUR AV USAGE?



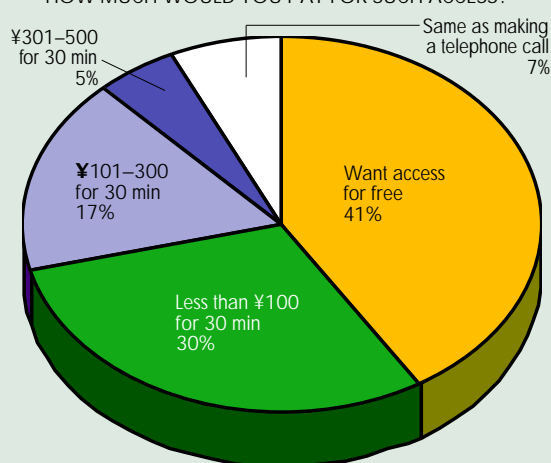
### WHERE DID YOU GET YOUR MP3 SOFTWARE?



Compiled by Chiaki Kitada ([chiaki@japaninc.net](mailto:chiaki@japaninc.net))

Note: All statistics apply to Japan unless otherwise noted.

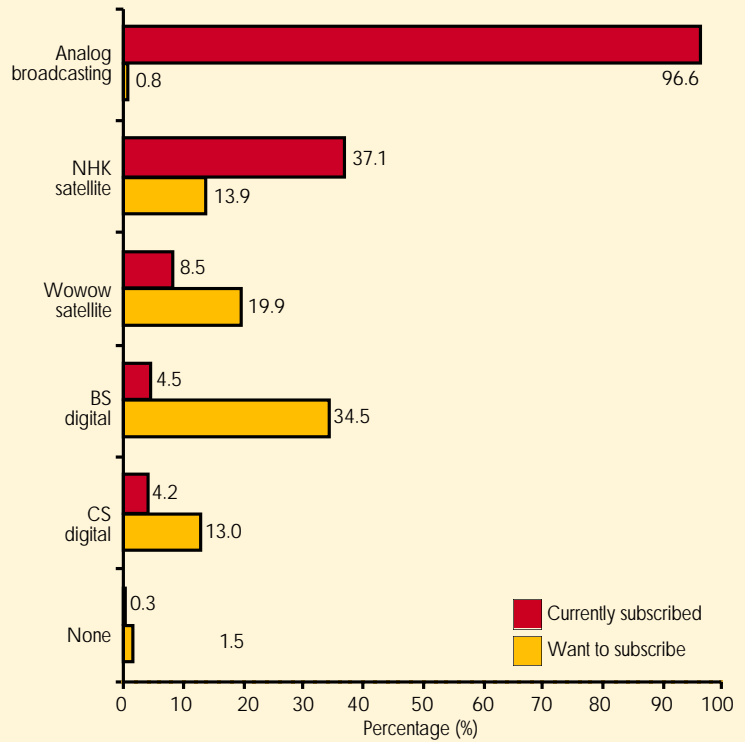
### HOW MUCH WOULD YOU PAY FOR SUCH ACCESS?



I WANT MY DIGITAL SATELLITE BROADCASTING

The Nippon Research Center conducted a survey in January to see how widely BS digital broadcasting was being viewed in comparison with other kinds of broadcasting services. The survey revealed that, a month after its start, only 4.5 percent of respondents had subscribed to BS digital. That probably doesn't matter now, as the survey is a bit dated. But here's what's interesting: 34.3 percent of those surveyed said they wanted to subscribe to BS digital at home, beating out all the other categories. That's quite interesting considering that 1) all you get with BS digital is basically a better picture and slow-uplink interactivity, 2) the new sets are way expensive, and 3) there's not much compatible content yet. But if, as this survey suggests, there's strong interest in BS digital already, that's a good indication that the technology will be finding its way into a large number of Japanese homes. For cable companies hoping to get rich off interactive TV offerings, this could spell trouble. The CATV industry in this country is highly fragmented, and penetration rates are still low. If digital broadcasting is widely adopted, it instead of cable could become the platform on which the interactive TV dream is made a reality.

One big obstacle for digital broadcasting is the slow uplink: While digital compression of the broadcast signals allows for plenty of data to be sent to the user, using a phone as the dialup response channel means a sloooow kind of interactivity guaranteed to drive fickle channel surfers bananas. The solution is wirelessly transmitting user responses; NTT investee Nihon MediaArk is working on that now.



Source: Nippon Research Center (www.nrc.co.jp) January 2001 survey (Japanese); 1,442 valid samples