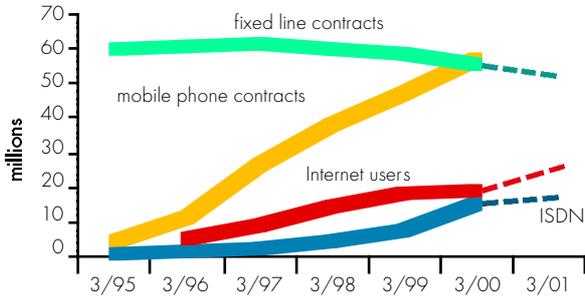


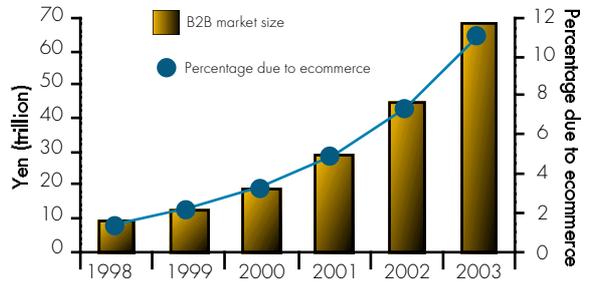
TRENDS IN JAPANESE TELECOMMUNICATIONS



The year 2000 marked the first time that the number of mobile phone contracts in Japan (both cellular and PHS) surpassed the number of fixed-line contracts (excluding ISDN). We're guessing this turning point is just the beginning and in 20 years people will have forgotten that fixed-line phones were ever in the majority. Interestingly, an interim technology by NTT East and West allows residential customers to surf the i-mode Web via a new type of fixed-line phone.

Source: Internet White Paper 2000 (Impress)

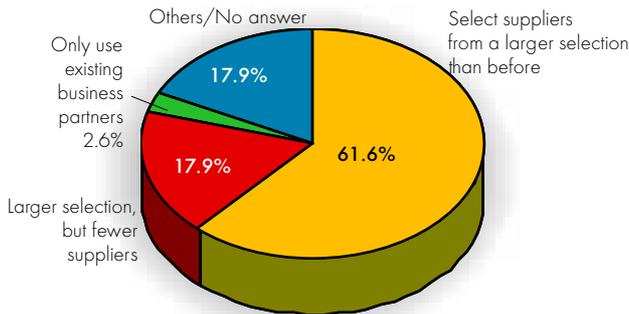
PROSPECTS FOR B2B AND ECOMMERCE IN JAPAN



According to research conducted by MITI and Andersen Consulting published in 1999, both Japan's B2B market and the percentage attributable to ecommerce should more than triple between 2000 and 2003.

Source: Internet White Paper 2000 (Impress)

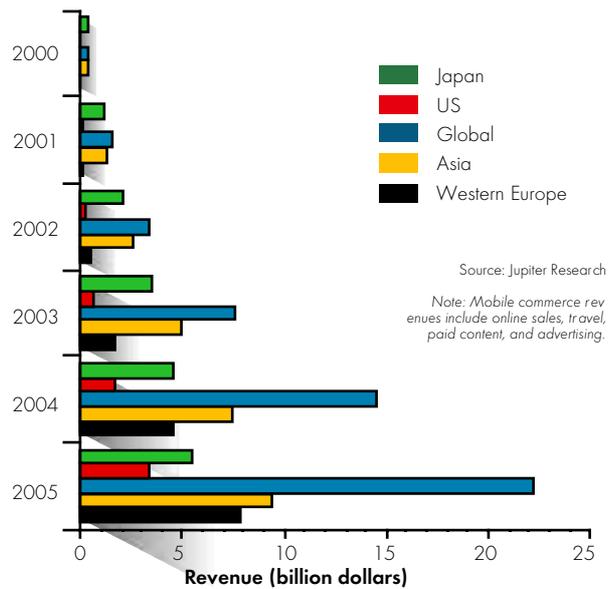
JAPANESE MANUFACTURERS OPEN UP TO A VARIETY OF SUPPLIERS



Nikkei Digital Engineering's survey suggests that manufacturers are looking for new partners outside of the keiretsu system. Until recently, manufacturers had been procuring parts and materials only from other members of their keiretsu group. Such practices are beginning to fall apart, and manufacturers are making efforts to go beyond the keiretsu to find more suitable partners, which is good news for online B2B exchanges.

Source: Nikkei Digital Engineering magazine

MARKET FORECAST: MOBILE COMMERCE

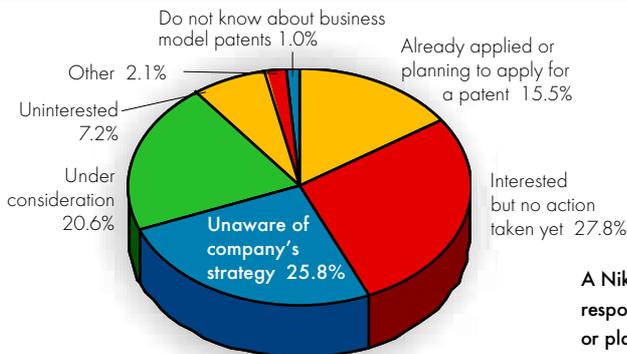


Source: Jupiter Research

Note: Mobile commerce revenues include online sales, travel, paid content, and advertising.

In September, Jupiter Research estimated that Europe and the US will take two years to reach the \$400 million in mobile commerce revenue generated in Japan today. This year, US and European mobile commerce revenues will reach \$10 million and \$15 million, respectively. By the end of 2000, wireless subscribers with Internet-enabled handsets will reach 6 million in both the US and Europe, versus 30 million in Japan. As the market reaches critical mass in 2003, wireless subscribers with Internet-enabled handsets will jump to 115 million in the US and 254 million in Europe, with mobile commerce revenues reaching \$600 million in the US, \$1.7 billion in Europe, and \$3.5 billion in Japan.

ARE JAPANESE COMPANIES INTERESTED IN BUSINESS MODEL PATENTS?

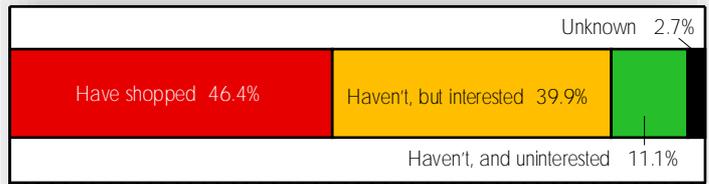


Source: Nikkei Computer magazine

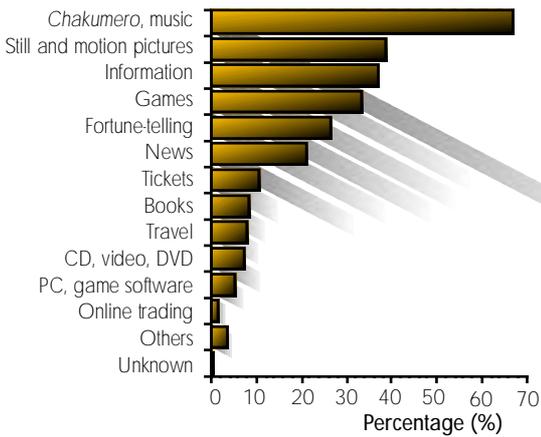
A Nikkei Computer magazine survey (300 randomly selected subscribers; 98 valid responses) found that only 15.5 percent of respondents' companies have applied for or plan to apply for a business model patent. However, 27.8 percent have taken no action, suggesting Japanese companies are still wary of this US trend.

## I-MODE MOBILE SHOPPING

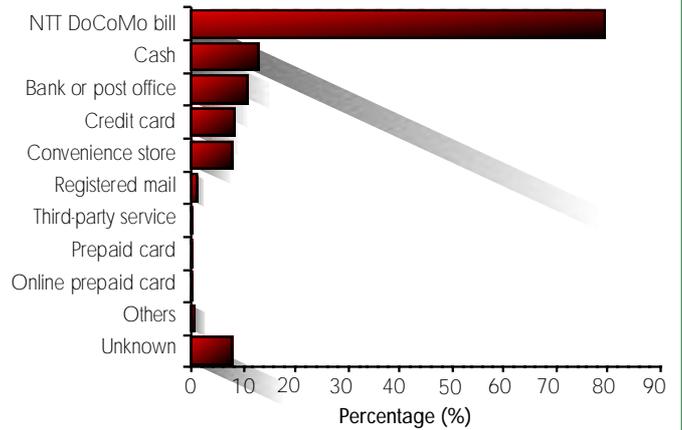
A survey of i-mode users conducted by InfoCom Research found that 48.6 percent of respondents don't access the Web via PC. Almost half have shopped using i-mode, and they spend ¥1,845 per month, on average (the most popular purchase is *chakumero*). i-mode users spend more time emailing than they do for voice communication, averaging 9.08 mail messages per day.



### PURCHASED ITEM

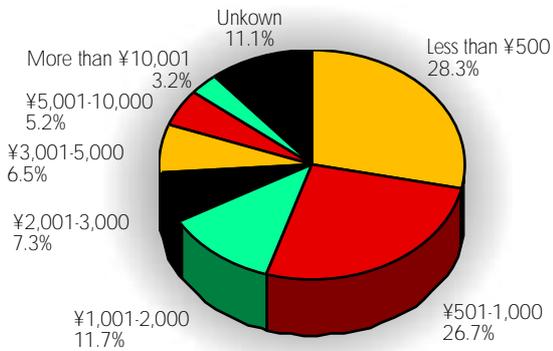


### PAYMENT METHOD



Source for this page: InfoCom Research (part of NTT group). Survey conducted via i-mode in July 2000; 3,698 responses.

### MONTHLY I-MODE SHOPPING EXPENDITURES



### TIME SPENT ON I-MODE

