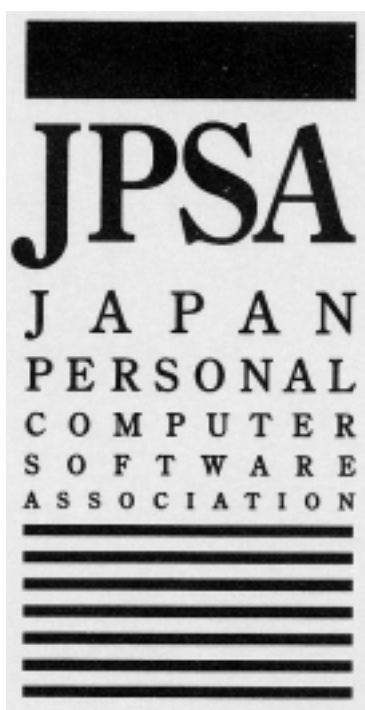

PC SOFTWARE MARKET TREND

IN JAPAN Fiscal year 2001



December 2002

Japan PersonalComputer Software Association



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. Methodology

Methodology

1. Objectives

This survey was conducted in order to understand the current Japanese (domestic) personal computer software market, its trends and its characteristics.

2. Method

Survey format: Conducted via mail following screening by telephone

Survey target: PC software vendors that ship products to the Japanese market

No. of samples: 233 samples

We screened 1,025 companies by phone and then mailed a questionnaire to 759 companies.

Recovery rate: 30.7% (telephone calls made to encourage response)

Selection of target companies: Mailed to all companies on the Japan Personal Computer Software Application (number) as well as selected vendor list.

Target Area: All of Japan

3. Survey Contents

1) Sales revenue from FY (fiscal year) 2001

2) Value of PC software shipped domestically

(Actual figures for FY 2000 and 2001, forecast for FY 2002)

3) Breakdown of PC software sales revenue

4) PC software supply method and destination

5) Value of product shipped by category

* A sample questionnaire is attached at the end of the report

4. Period

July 11, 2002 through September 9, 2002

5. Body Conducting the Survey

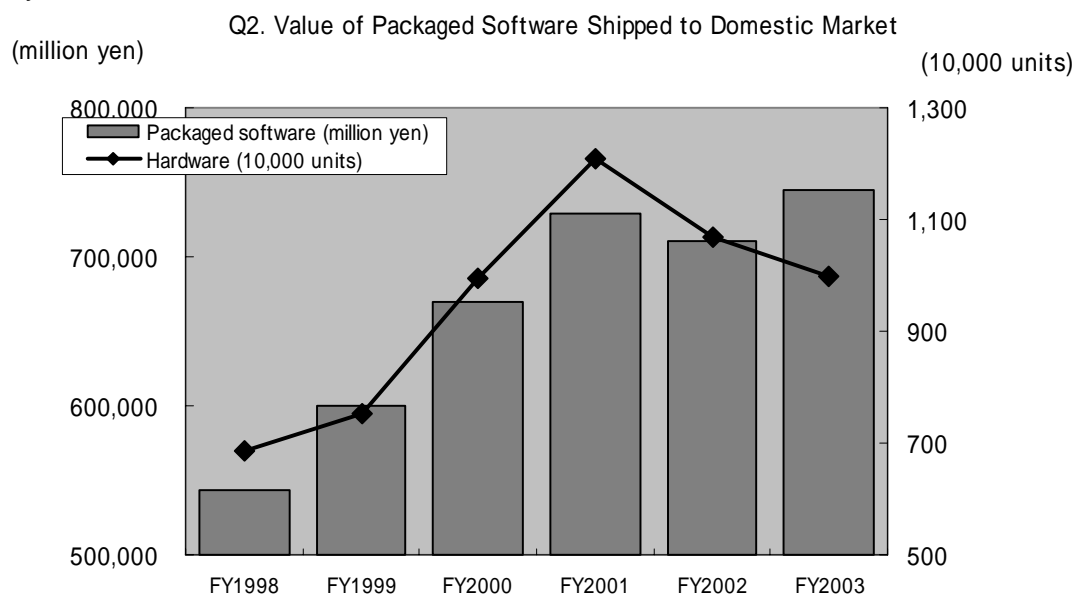
Conducted under the name of "Japan Personal Computer Software Association" ("Nikkei Research" also stated as jointly conducting the survey)

. Results

1. Overall Market Trends

1) Value of Products Shipped

The market for packaged PC software in Japan in FY2002 decreased by 3% over the previous year and amounted to 710.0 billion yen. This was the first decrease since the survey started in 1985.



| | | FY1998 (Actual) | FY1999 (Actual) | FY2000 (Actual) | FY2001 (Actual) | FY2002 (Actual) | FY 2003 (forecast) |
|-------------------|-----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-----------------------|
| Packaged software | Value (million yen) | 542,916 | 599,813 | 669,660 | 728,455 | 710,081 | 745,323 |
| | Increase over previous year | - | 110.5% | 111.6% | 108.8% | 97.5% | 105.0% |
| Hardware | No. (10,000 units) | 685 | 754 | 994 | 1,210 | 1,069 | 1,000 |
| | Increase over previous year | - | 110.1% | 131.8% | 121.7% | 88.3% | 93.5% |

* Data on hardware is extracted from "Japan Electronics and Information Technology Industries Association".

* Data on 1997 is those of the calendar year.

The market of packaged PC software in FY2001 decreased by 3% over the previous year and amounted to 710.0 billion yen. This was the first decrease since the survey started in 1985, due in part to a decrease in the shipment of hardware.

FY2001 is said to be the year the IT bubble burst, and demand for PC hardware was in decline throughout the globe. According to the survey results published last January by Gartner, a research company, the volume of last year's PC shipments significantly dropped by 11% to 43.89 million units even in the United States where the PC ownership rate was high. Accordingly, the volume of PC shipments in the world dropped by 4.6% from the year before to 128.06 million units, and its first decrease since 1985 was recorded. The study conducted by the Japan Electronics and Information Technology Industries Association (JEITA) showed that similarly, in the Japanese hardware market, the volume of shipments in FY 2001 was 10.69 million units, which represents a hefty 88.3% decrease from the previous year.

Apparently, the decrease in hardware shipments had a great impact on the shipments of packaged software. The integrated office software, which has a large share of the packaged software market, in particular, drastically declined because in most cases, it was pre-installed in the hardware before shipment.

Hence, the results of the survey showed that the volume of packaged software shipped in FY2002 was 745.3 billion yen, representing a 105% increase over the previous year, while the hardware market was forecast to achieve a shipment volume of 10 million units, which is almost same as the previous year (survey conducted by the Japan Electronics and Information Technology Industries Association).

The business environment surrounding the IT industry is still unclear. In addition, it is expected that due to a deflationary spiral trend, similar to the hardware market, the software market will remain at the same level as last year.

In FY 2002, a number of companies in the finance and manufacturing industries are expected to be cautious about investing in IT, and in particular, they will be more rigorous in evaluating the effectiveness of investment. In FY 2001, some companies checked the usage of software in client PCs and canceled any unused license agreements, while other companies even discharged a maintenance service contract for systems having a lower level of importance. Now another system is emerging for ASP that bills only what is used. Thus, it is believed that companies tend to attach more weight to the effectiveness of investment or the level of importance when they make an investment decision.

The corporate information system environment is making a dramatic shift from client server systems to web computing, centered on the Internet.

In this context, forms of software management in the corporate information system are expected to change. In other words, there will be a gradual shift from software being separately installed by clients to software being managed together on the server. Promising software in the future due to system expansion of the Internet includes software with a central focus on server integration or network security.

Areas expected to invest in IT in the future include electronic government and electronic autonomous body-related fields, in which investment will be revitalized, promoted by the e-Japan Priority Project of the Japanese government. Accordingly, growth of software that supports implementation of electronic government/autonomous body is also expected.

In addition, in general households, the broadband network environment has been advancing rapidly, and PC has increased in importance as an information terminal. By now, the Internet as a means to search for information has become widespread and constitutes an essential part of everyday life. Furthermore, contents services such as the delivery of animation/music have grown.

Under these circumstances, it is now expected that the need for multimedia compatible software necessary for broadband contents or software compatible with broadband will grow in the future.

As described above, in spite of the lasting tough situation for entire IT investment, we expect that the market will remain at almost the same level as the previous year because there are still a number of positive factors.

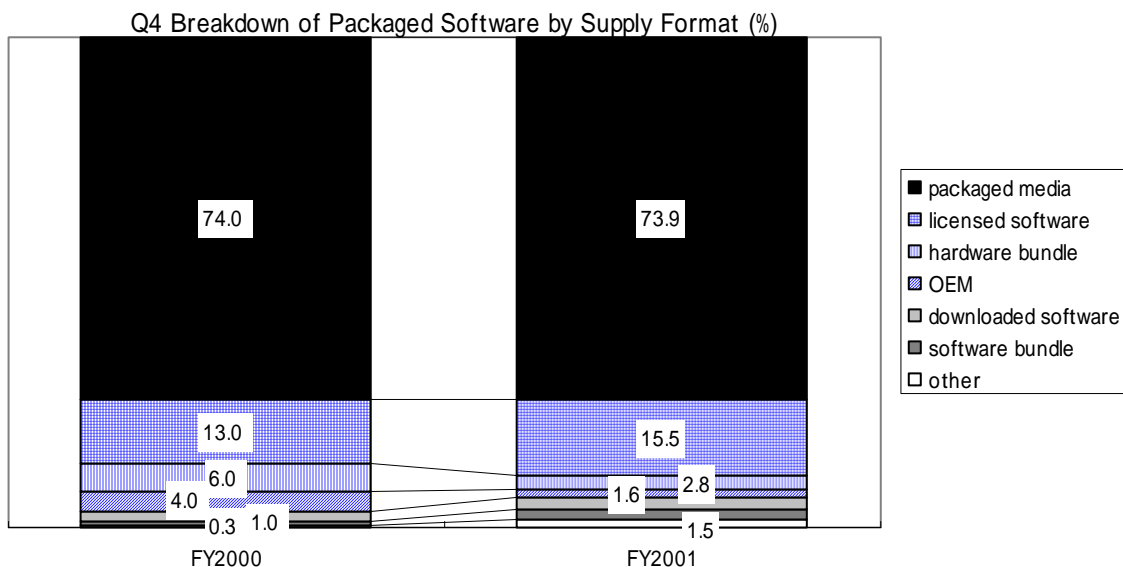
2) Trends in Supply Form

Comparing the percentage distribution of packaged software sale by supply form, it is evident that the sales of FY2001 have not largely changed from those of FY2000. Similar to FY2000, supply in the form of "Packaged Media (FD, DVD and CD-ROM)" continues to dominate, accounting for 73.9% in FY 2001.

Over the past few years, the percentage of "licensed software" has been on the rise, from 13% in FY 2000 to 15.5% in FY 2001, while that of the "Hardware bundle" and "OEM" has been decreasing. In particular, the ratio of the "Hardware bundle" sharply dropped from 6.0% in FY2000 to 2.8% in FY 2001. A fall in volume of hardware shipments must have greatly influenced this.

Although it accounted for a small 2.7% in the FY 2001 survey, the category expected to grow a great deal in the future is "Online Download/Registration through Free CD-ROM." During the past few years, the establishment of a broadband environment such as ADSL, CATV, FTTH, etc., has rapidly progressed, and, in particular, the percentage of the supply form of online download is expected to rise.

In addition, although it is still not apparent in the statistical data, individuals adopt ASP (application service provider) licensed software, and we expect the percentage of online purchased/licensed software such as download/ASP will increase in the long run.



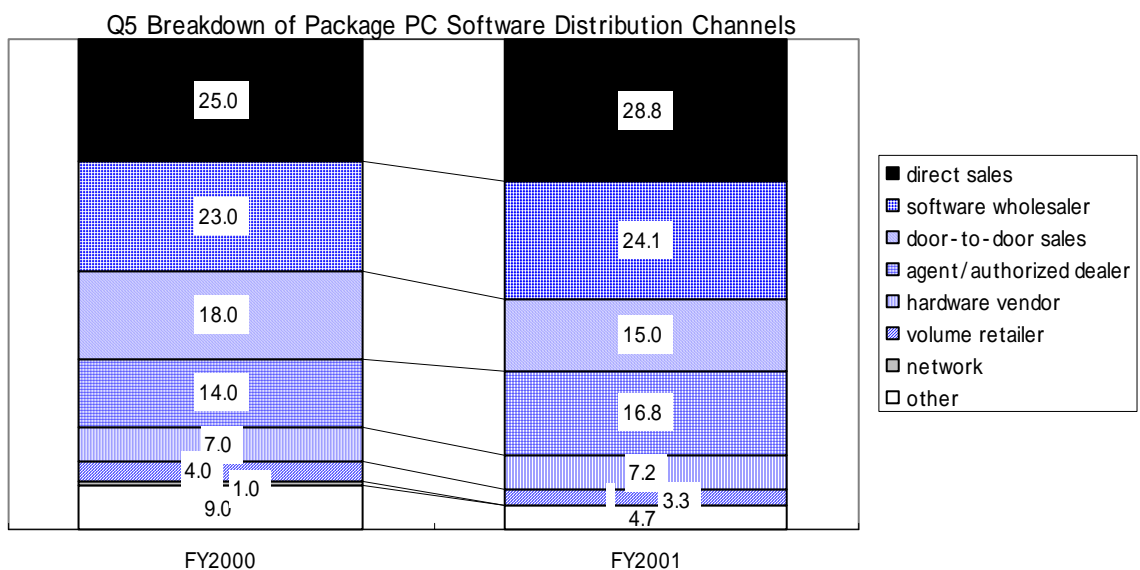
| | FY2000 | FY2001 |
|-------------------------|--------|--------|
| direct sales | 25.0 | 28.8 |
| software wholesaler | 23.0 | 24.1 |
| door-to-door sales | 18.0 | 15.0 |
| agent/authorized dealer | 14.0 | 16.8 |
| hardware vendor | 7.0 | 7.2 |
| volume retailer | 4.0 | 3.3 |
| network | 1.0 | - |
| other | 9.0 | 4.7 |

* Item "network" not included in the FY2001 survey.

3) Changes in Distribution Channels

"Direct sales" accounted for 28.8% of the distribution channels, or the largest share in FY 2001. This was followed by "software distributors (wholesalers)" at 24.1%, "agents/dealers" at 16.8%, "door-to-door sales" at 15.0%, "hardware vendors" at 7.2% and "volume retailers" at 3.3%.

"Direct sales" is a method of selling to users directly through Web sites or direct mail. Naturally, those who purchase PC hardware or software tend to use PCs or the Internet more. Thus, the percentage of direct sales of PC software (and hardware) through the Internet is higher than that of other articles.



| | FY2001 | FY2002 |
|-------------------------|--------|--------|
| direct sales | 25.0 | 28.8 |
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Recently, as for hardware products, it has also become more common for many PC manufacturers to directly receive orders from users through Web sites. Software is more suitable for direct sales through Web sites than hardware. Now users can experience a number of software programs for a limited period of time before purchasing, through trial versions that can be downloaded, which makes it easier for purchasers to compare and evaluate the articles they plan to buy online. This is also convenient because users can immediately place an order for an article online if they like it. Thus, we expect more weight will be attached to "direct sales" in the future.

On the other hand, "agents/authorized dealers" that need human support for sales have also tended to increase their share. Factors behind this are diversification/sophistication of software, mostly business-oriented application software, server management software, etc.

The reasons for this is the increasing number of occasions on which users ask for explanation by staff or for a consultation when buying an article, or shift to PCs and PC software of the center of system proposals to be made by authorized dealers.