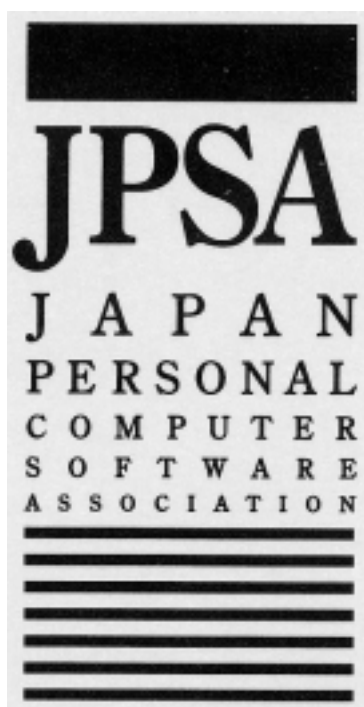


# PC SOFTWARE MARKET TREND

IN JAPAN Fiscal year 2000



December 2001

Japan PersonalComputer Software Association

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# Overall market trends of PC package software in the Japanese market in FY 2000

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The market size of packaged PC software in Japan in FY2000 increased by 9% over the previous year and amounted to 728.5 billion yen, aided by healthy growth in hardware. This increase was slightly lower than last year's growth rate of 12%.

FY2001 was said to be the year the IT bubble burst, and demand in PC hardware is in decline throughout the globe. According to the study conducted by the Japan Electronics and Information Technology Industries Association (JEITA), the hardware market in Japan is forecast to have greatly decreased from 12.1 million units in FY2000 to 10.6 million units in FY2001, or 88% of the previous year.

However, in contrast to the shrinking hardware market, the packaged software market is expected to have grown a hefty 17% over the previous year (to 855.2 billion yen). Underlying factors are as follows.

The e-Japan Priority Project promoted by the Japanese government is encouraging broadband network access for offices and homes at a very rapid pace via ADSL, CATV, and other medium. As a result, demand for high-speed Internet compatible software is expected to increase.

The corporate information system environment is making a dramatic shift from client server systems to web computing, centered around the Internet. The change in corporate information systems started with the switch to web sites of front end processing with even back-bone systems of back end processing moving towards seamless integration using Internet technologies. Expansion of systems, mainly through the Internet, is expected to increase demand for software, especially server integration software and network security-related software.

Furthermore, this switch to broadband will likely result in improved multimedia functions of packaged software, such as graphics, video, and sound. New niche industries, such as the digital contents industry, will gain attention, with growth in game software, music software, and design/graphics software also expected. Such multimedia-compatible software is seen to gain widespread popularity especially among home users. Digital cameras, MP3 players, and color printers are increasingly being equipped with advanced functions while prices are coming down. Multimedia-compatible comprehensive packaged software will likely become the core of such an environment in the home.

In addition, increase in new or upgrades of application software in connection with the shipment of Windows XP is expected in FY2001. Thus, though the IT industry as a whole is facing hard times, the market for packaged software is forecast to have grown in FY2001.

However, for future growth of the PC software market, the creation of a framework which will not be greatly affected by new upgrades of OS software or the hardware market will be vital. Development of software which can operate in a low spec environment is also one essential direction to aim for if a user environment for greater number of PC users is to be realized.

# Shipment amount of packaged software for PCs by category in the domestic market in fiscal 2000

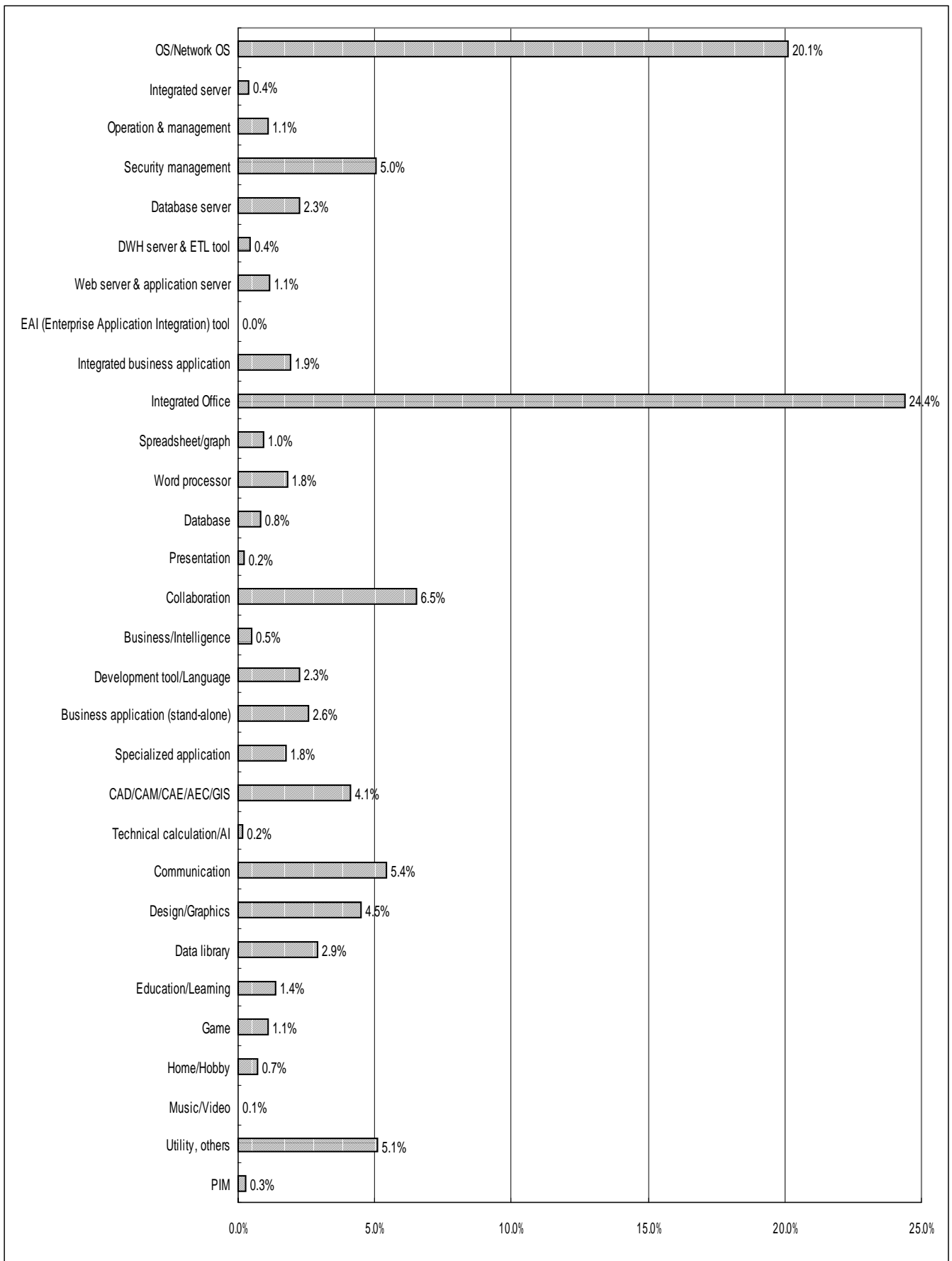
(Unit : million yen)

	1996 actual	1997 actual	FY1998 actual	FY1999 actual	Actual figures for FY2000		
					Shipped domestically	% change over previous year	previous year
OS/Network OS	114,648	116,881	115,100	123,387	146,732	20.1%	118.9%
Integrated server			2,164	2,333	2,690	0.4%	115.3%
Operation & management	25,799	48,202	23,991	35,003	8,033	1.1%	127.5%
Security management					36,596	5.0%	
Database server			15,000	18,030	16,479	2.3%	91.4%
DWH server & ETL tool			2,050	3,499	3,184	0.4%	91.0%
Web server & application server			1,800	5,508	8,279	1.1%	150.3%
EAI (Enterprise Application Integration) tool			100	198	219	0.0%	110.5%
Server-related (total)	140,447	165,083	160,205	187,958	222,213	30.5%	118.2%
Integrated business application	3,694		12,000	15,134	13,908	1.9%	91.9%
Integrated Office	3,135		6,441	142,975	177,607	24.4%	124.2%
Spreadsheet/graph	32,710	31,169	30,691	5,125	6,969	1.0%	136.0%
Word processor	63,897	61,834	60,168	13,778	13,255	1.8%	96.2%
Database	31,283	35,177	22,173	3,792	6,183	0.8%	163.1%
Presentation	24,880	25,255	24,895	1,568	1,543	0.2%	98.4%
Office-related (total)	155,905	153,436	144,368	167,239	205,557	28.2%	122.9%
Collaboration	26,675	38,271	35,618	40,675	47,555	6.5%	116.9%
Business/Intelligence			2,500	3,955	3,647	0.5%	92.2%
Development tool/Language	20,710	22,718	19,068	17,352	16,462	2.3%	94.9%
Business application (stand-alone)	26,391	27,988	17,535	19,806	18,595	2.6%	93.9%
Specialized application	3,065		9,717	11,789	12,893	1.8%	109.4%
CAD/CAM/CAE/AEC/GIS	34,266	33,991	34,186	35,998	29,770	4.1%	82.7%
Technical calculation/AI	6,447		1,424	1,268	1,178	0.2%	92.9%
Specific field (total)	43,778	33,991	45,327	49,055	43,841	6.0%	89.4%
Communication	23,435	29,164	38,611	39,731	39,532	5.4%	99.5%
Design/Graphics	23,096	23,347	24,191	27,626	32,941	4.5%	119.2%
Data library	28,946	24,922	24,057	22,976	21,301	2.9%	92.7%
Education/Learning	11,130	11,551	11,508	11,784	9,970	1.4%	84.6%
Game	13,478	12,447	12,165	12,846	7,892	1.1%	61.4%
Home/Hobby	17,813		6,007	6,187	5,128	0.7%	92.1%
Music/Video					570	0.1%	
Utility, others	17,311		44,249	45,134	37,326	5.1%	82.7%
PIM	4,852		2,405	2,203	2,017	0.3%	91.6%
Other	22,163	0	46,654	47,337	39,343	5.4%	83.1%
<b>TOTAL</b>	<b>557,661</b>	<b>542,916</b>	<b>599,813</b>	<b>669,660</b>	<b>728,455</b>	<b>100.0%</b>	<b>108.8%</b>

“Music/Video” became a separate category from “Home/Hobby” and “Security” from “Operation & management” from FY2000. Growth rates were calculated from total figures.

Data for 1996 and 1997 are for the calendar year. Blank boxes indicate that there was no appropriate category that year.

# Percentage shares of packaged software for PCs in the domestic market in fiscal 2000



# From the Questionnaire of Market Trend Research --- Category List

Category		Definition
Servers	OS/Network OS	Operating system, network operating system
	Integrated Server	
	Operation & Management	Comprehensive employment management, job management, a system management and surveillance, network management, help desk relation
	Security Management	Certification, encryption, firewall
	Database Server	For servers Database Server (Server)
	Data Warehouse (DWH) Server, ETL Tool	For Data Warehouse Server, ETL(Data extraction and conversion) Tool
	Web/Application Server	Web Server, Application Server, It contains Commerce Server
	EAI (Enterprise Application Integration) Tool	
Integrated Business Application		ERP, CRM/SFA, SCM, CTI, Call center, It is the software package which can exchange data between the applications of the field from which plurality is different.
Office	Integrated Office	
	Spreadsheet, Graph	Spreadsheet software, add-on software affiliated to spreadsheet
	Word processing	Word processor software, add-on software affiliated to the word processor, front end processor (Japanese language input conversion software), DTP, Homepage creation software (HTML), editor
	Database	Relational database, card type database management software, object oriented DBMS, DB access
	Presentation	Software with the primary purpose to create and display presentation materials
Collaboration		E mail, group work support software utilizing the network function of e-mail, internet e mail, web application server software, commerce server software included
Business Intelligence		Data Mining, OLAP, DSS
Development Tool/Language		Screen editor, software for text editing and for debugging and debug itself, design tool, screen image and form design tool, CASE, authoring, computer application languages such as C++ and Basic, 4GL, AI language and library, Java language specialized development tool for www, OLAP/data warehouse related tools
Business Application (stand-alone)		Finance and accounting management, tax payment management, human resource/salary, Sales/purchase/stock/customer management and marketing management, business translation support software, decision making software, integrated business software/electronic form software, ERP
Specific field software	Specified Business Application	Retail and wholesale software for public services (government offices, local government, school, hospital, library, agriculture and fishery, gas, water, electricity, banking, etc.), software for service industries (restaurant, hotel/lodge, sports, rental/leasing, publication, printing, transportation, real-estate, etc.) (production plan/management, process planning/management, costmanagement, quality management, measurement control, NC related software, including general purpose project management software)
	CAD/CAM/CAE/AEC/GIS	General purpose CAD, CAD for machine manufacturing, CAD for electrical application and electronics, CAD for construction and civil engineering
	Technical Calculation/AI	Science and chemical technical calculations, specialized technical Calculations such as fluid calculations, statistics/analysis, image processing software, expert system development tools, expert system, etc.
Communication		PC communication, fax communication, terminal emulator, software for communication procedure and remote access, web browser, image/voice processing, automatic circulation software, internet phone, CTI related software
Design/Graphics		Drawing, painting photo image editing, animation creation, 2D, 3D graphic software
Data Library		Clip art, font, form, text sample, dictionary, dictionary data library, encyclopedia, zip code related, mapping software, image storage software (including Enhanced CD), photo/image, sound data library, Timetable software
Education/Learning		Educational/learning software for school/cram school, education/ training software for companies/ specialized college, instruction software for software application, Computer Based Training
Game		Simulation, action, adventure, shooting, role playing games, go play, Japanese chess, table games such as mahjong, puzzles
Home & Hobby		Software for hobbies such as cooking, dieting, keeping an account book for home, postcards, stickers, making albums, horse race predictions, fortune telling, music and image related editorial and creation software, edutainment software, home education/learning software, Home banking, Typing software, Cellular phone memory, ring-tone editing
Music & Video		MP3, replaying DVD/Video/CD, Video editing/compilation
Others	Utility, Other	The software which is not applied to the category of all above, a file converter, a print utility, a screen saver, hardware memory managed software, disk managed software, an anti virus, the Internet reference, Web page management, Voice recognition, OCR
	PIM(excludes collaboration)	