Japan's Toy Industry

Japanese Economy Division

This report covers the toy and game industry[1] in general, as well as takes a close look at the plastic model and radio-control segment. The core of the plastic model and radio-control market is the hobby field, which is sharply defined by specific user preferences. The key customer segments of the hobby field are middle/high school students and male adults, as compared with the rest of the toy and game market, which targets mainly children.

Toys with sweets will be covered in a separate report. Although this segment is closely related to the toy and game industry, it is treated separately for reasons including the fact that it usually involves a different distribution system.

I. Toy and Game Industry

A. Market Overview

1. History and overview

The Japanese toy and game industry was designated as an export industry during the early postwar reconstruction period to help generate foreign exchange for the purchase of food and other badly needed imports. As the 1950s progressed, industry groups succeeded in preventing cheap imitation products and introduced quality-verification systems, which helped the industry to grow rapidly and establish toys as a signature Japanese export. Many major corporations were established during this period.[2]

Nintendo released the family computer in 1978, spawning an all-new TV game market, which grew at a furious rate. (The family computer was also known as the "famicom" or Nintendo Entertainment System.) Many corporations entered the market to make/sell hardware and software. Today, the TV game market is larger than the general toy and game market covered in this report. In fact, the industry is now categorized as a separate but related industry, and the equal of the general toy and game industry.[3]

Since the number of children in Japan is declining, all toy and game categories are generally shrinking. Also, since the industry is characterized by fast and dramatic changes in products that drive the market, the lack of major hit products in recent years has contributed to this shrinkage.

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[1] The toy and game industry is broadly divided into the "general toy and game" segment and the "TV game" segment (see section 2 below).

[2] Tamiya was established in 1946, Bandai in 1950, Tomy in 1953, Takara in 1955 and Epoch in 1958.

[3] See "Japan's TV Game Industry" in the May 2004 issue of Japan Economic Monthly.

Although basic items such as board games were strong in 2003, these kinds of products cannot sustain the market alone.

Japanese toys and games, especially hobby products such as plastic models, TV games and character toys, have maintained a high level of international competitiveness, and Japanese toys and games have loyal consumers around the world. Consequently, the major corporations are working to expand their revenue bases by introducing popular characters and Japanese hit products to international markets.

Future prospects include expanding the overall consumer base to include a wider range of generations, as in the case of the plastic model and radio-control industries that are targeting adult fans, as well as efforts to commercialize toys in unique new ways that go beyond established business categories and industries, such as toys sold with sweets. Adult-targeted therapeutic toys have remained comparatively strong, while other products are being sold in connection with products such as electric appliances and apparel. It is expected that products which go beyond traditional boundaries will help to drive the toy and game industry of the future.

2. Product categories and customer segments

There is a broad array of toy and game products and many ambiguously defined categories, making it possible to divide the products in a number of ways. The Yano Research Institute divides the toy and game market into eight segments, plus the TV game segment (Fig. 1). These segments can also be arranged by age (Fig. 2). Some segments, such as TV games, enjoy customers ranging from grade school students to adults.

New markets aimed at adults are being developed to counter the shrinking markets aimed at children. The model and hobby market, which includes plastic models and expensive hobby radio-controlled devices, is focused on adult males. While all eight toy and game markets are generally aimed at children, the model and hobby market is mainly aimed at hardcore hobbyists from middle school through adulthood. Radio-controlled hobby devices and other such products are

Fig. 1 Toy and Game Product Categories

Category	Products
1. Electronic toys	Electronic games, electronic stuffed animals, personal computers and karaoke for kids, etc.
2. Models and hobbies	Plastic models, hobby radio-controlled devices, model guns, other hobbies
3. Boys' characters and toys	Boys' character toys, radio-controlled toys, other boys' toys
4. Girls' characters and toys	Girls' character toys, dress-up dolls, other girls' toys
5. Games	Board games, general games, etc.
6. Stuffed animals	Stuffed animals, dolls, other stuffed toys
7. Seasonal and sundry toys	Boys' Day festival dolls, fireworks, water-related products, other toys
8. Basic toys	Educational and baby toys, blocks, vehicles, other basic toys, jigsaw puzzles
(9. TV games)	TV game hardware and software, portable game machines

Source: Compiled by the Yano Research Institute.

Fig. 2 Toy and Game Customer Segments

Segments	Main Products (General Toys and Games)	TV Games
Adults and high school students	Scale plastic models, character plastic models (for older customers), hobby radio-control devices, other models	↕
Grade and middle school students	Character toys and games, character plastic models (for younger customers), radio-controlled toys, etc.	↕
Babies and infants	Baby toys, stuffed animals, character toys, dress-up dolls, etc.	
Families	General games	
All customers	Gift products, fancy goods, party goods, etc.	

Source: Yano Research Institute.

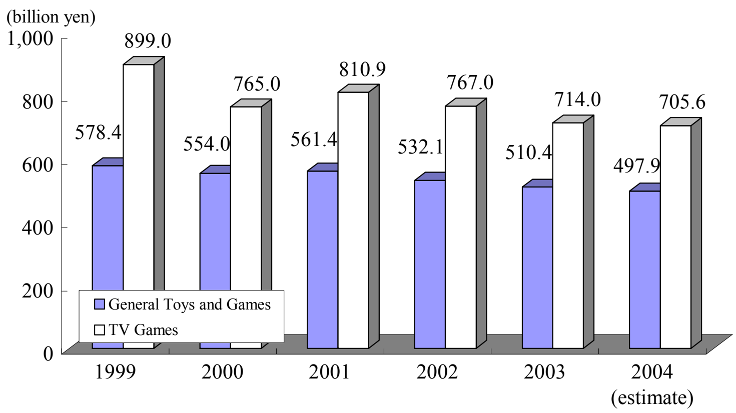
comparatively expensive and enjoy a stable level of demand, so this market is relatively strong. The plastic model market is expanding beyond its traditional base—grade and middle school customers—to include adult hobbyists. This market is discussed in section II.

3. Market size

According to the Yano Research Institute, the size of the general toy and game market was 510.4 billion yen in 2003, down 4.1% from the previous year (Fig. 3). The retail TV game market declined 6.9% to 714 billion yen. Together, the combined toy, game and TV game market fell 5.8% to 1.22 trillion yen.

Although the general toy and game market grew in 2001, when hit products such as Takara's "Beyblade" were introduced, the market shrunk thereafter. The TV game market also shrank in the two years following 2001. The market is estimated to have continued contracting in 2004, when no standout hit product appeared during the main course of the year. In 2005, however, the market is forecast to expand thanks to some long-awaited positive developments, such as the late-2004 release of the major hit "Dragon Quest VIII" role-play TV game and the launch of next-generation portable game systems (Nintendo DS, PlayStation Portable, etc.), as well as the

Fig. 3 Size of Retail Toy and Game Market



Source: Yano Research Institute.

scheduled release of next-generation TV game systems in 2005.

Competition from mobile telephones used as entertainment devices has been another factor behind market stagnation.[4] Increasing expenditures on mobile telephones have been centered on youths, which has led to decreased expenditures on toys and games among middle school, high school and college students who operate on relatively limited budgets.

4. Market size by product category

The largest of the eight market categories of general toys and games, excluding TV games, (Fig. 4) is boys' characters and toys, which grew continuously from 1999 and accounted for 24.1% of the entire toy and game market in 2003. Since the release of "Beyblade" in 2001, however, there have

Fig. 4 Retail Market Size by Toy and Game Category

(Units: million yen, %)

		1999	2000	2001	2002	2003	2004 (estimate)
Electronic toys		72,000	76,000	81,900	81,600	77,550	70,500
	Annual Change	5.9	5.6	7.8	-0.4	-5.0	-9.1
	Share	12.4	13.7	14.6	15.3	15.2	14.2
Models and hobbies		79,200	71,700	69,050	65,000	63,500	62,300
	Annual Change	-13.9	-9.5	-3.7	-5.9	-2.3	-1.9
	Share	13.7	12.9	12.3	12.2	12.4	12.5
Boys' characters and toys		108,000	109,500	127,050	125,000	123,000	121,600
	Annual Change	-9.2	1.4	16.0	-1.6	-1.6	-1.1
	Share	18.7	19.8	22.6	23.5	24.1	24.4
Girls' characters and toys		56,400	51,500	47,350	46,500	45,000	46,600
	Annual Change	1.4	-8.7	-8.1	-1.8	-3.2	3.6
	Share	9.8	9.3	8.4	8.7	8.8	9.4
Games		28,800	28,000	27,100	26,000	26,700	27,000
	Annual Change	-18.4	-2.8	-3.2	-4.1	2.7	1.1
	Share	5.0	5.1	4.8	4.9	5.2	5.4
Seasonal and sundry toys		73,500	73,200	70,250	64,500	56,400	52,500
	Annual Change	-2.0	-0.4	-4.0	-8.2	-12.6	-6.7
	Share	12.7	13.2	12.5	12.1	11.1	10.6
Basic toys		105,500	94,600	89,700	84,000	82,300	83,100
	Annual Change	-10.8	-10.3	-5.2	-6.4	-2.0	1.0
	Share	18.2	17.1	16.0	15.8	16.1	16.7
Stuffed animals		55,000	49,500	49,000	39,500	35,900	34,200
	Annual Change	-5.2	-10.0	-1.0	-19.4	-9.1	-4.7
	Share	9.5	8.9	8.7	7.4	7.0	6.9
Total		578,400	554,000	561,400	532,100	510,350	497,900
	Annual Change	-6.9	-4.2	1.3	-5.2	-4.1	-2.4
	Share	100.0	100.0	100.0	100.0	100.0	100.0
TV games		899,000	765,000	810,900	767,000	714,000	705,600
	Annual Change	-4.4	-14.9	6.0	-5.4	-6.9	-1.2
Total including TV games		1,477,400	1,319,000	1,372,300	1,299,100	1,224,350	1,203,500
	Annual Change	-5.4	-10.7	4.0	-5.3	-5.8	-1.7

Note: Some Japanese dolls in "Stuffed animals" are shifted to "Seasonal items" from 2002.
Source: Yano Research Institute.

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[4] The mobile content industry helps to facilitate the use of mobile phones as entertainment devices. Refer to "Japan's Mobile Content Industry" in the August 2004 issue of Japan Economic Monthly.

been no outstanding hit products and the market has shrunk. The boys' characters and toys category includes character toys and games such as Bandai's "Gundam," "Power Rangers," "Masked Rider" and others, and also radio-controlled toys, miniature toy cars and others. The market is approximately 2.7 times the size of the girls' characters and toys market.

Markets for basic toys (16.1% share of total market in 2003), electronic toys (15.2%), and models and hobbies (12.4%) are also large. Although electronic toys enjoyed hit releases in 2002, such as with pet robots and Takara's "Bowlilngual," there have been no products capable of driving this market since then, so it has shrunk. Basic toys sales grew in 2003 thanks to stronger sales of educational toys and games for babies. The idea of incorporating elements of entertainment into enjoyable education garnered attention, resulting in increased sales. This category is one of the few that has fared well in the face of the declining child population.

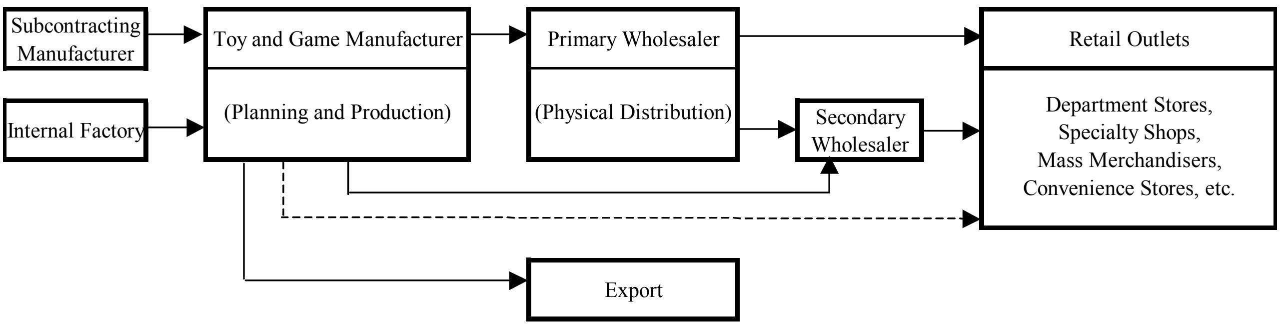
B. Industry Structure

1. Manufacturing and distribution

Fig. 5 shows the distribution structure generally used for toys and games. Toy and game manufacturers play crucial roles in the manufacture and distribution of toys and games, developing the products and then producing them either at their own factories or through subcontracted production.

Distribution is carried out by wholesalers. Given the wide variety of toy and game categories and

Fig. 5 Toy and Game Manufacturing and Distribution Structure



the many manufacturers[5], wholesalers help to consolidate products for sales channels. Since product cycles are short and most production is speculative, wholesalers also help to stabilize retail supply. Although distribution basically goes from wholesaler to retailer, some major retail chains deal directly with manufacturers without going through wholesalers. The entry of large retailers such as Toys "R" Us is causing changes in the once-rigid distribution system.

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[5] Major toy and game manufacturers used to fulfill wholesale functions, so these companies are sometimes referred to as "manufacturing wholesalers."

Major toy and game manufacturers include Bandai, Tomy, Takara, Amada Printing, Epoch, Tamiya, Kyosho and Maruka. Major wholesalers include Kawada, Happinet (Bandai Group), Ishikawa Gangu, Onda, Hattori Gangu and Mori Gangu.

The main retail channels include department stores, toy and game departments in general merchandise stores, specialized toy and game store chains, and general toy and game stores. The retail industry expanded rapidly after Toys "R" Us Japan entered the market and began quickly increasing its number of stores in 1989 (see "Industry Topics"). Toys "R" Us Japan had sales of 189.1 billion yen as of its most recent fiscal year ending January 2004, and is now the largest corporation, having outdistanced the rest of the competition.

2. Categories of toy and game manufacturers

Toy and game manufacturers that develop and sell toys and games are divided into comprehensive and specialized manufacturers (Fig. 6). Many comprehensive manufacturers are major corporations, while specialized manufacturers tend to be midsize or small corporations.

Certain corporations overlap the TV game and the general toy/game industries, but the former is basically treated as a separate industry.

Fig. 6 Toy Industry and Major Companies

Classification	Companies
Comprehensive manufacturers	Bandai, Takara, Tommy, Epoch-sha, etc.
Specialized manufacturers	Tamiya (models & hobby), Kyosho (models & hobby), CCP (models & hobby), Sun Arrow (stuffed toys), Tokyo Marui (air guns), Amada Printing Mfg. (paper products), etc.
Video game manufacturers	Nintendo, Sony Computer Entertainment, Capcom, Konami, Squire Enix, Sega, Taito, Namco, Hudson, etc.

C. Trade Trends

1. Exports

Exports of toys and games (other than TV games and software) rose 4.8% to 15.17 billion yen in 2004, marking the first increase in five years. By destination, exports to Hong Kong totaled 3.76 billion yen and those to the U.S. 2.99 billion yen, together accounting for just under half of the total (Fig. 7). Other major destinations included Germany, Taiwan, South Korea and the UK. The major categories were assembled toys at 5.47 billion yen and toys and models at 4.69 billion yen (Fig. 8). Japanese plastic models and radio-controlled toys are popular abroad and are produced in Japan to a greater extent than other types of toys, which is why their share of exports was so high.

Fig. 7 Export Destinations for Toys and Games (Excluding TV Games, Software, etc.)

(Units: million yen, %)

	2001	2002		2003		2004		
			YoY		YoY		YoY	Share
Total	17,808.8	17,177.5	-3.5	14,473.2	-15.7	15,167.6	4.8	100.0
Hong Kong	3,949.4	3,726.3	-5.6	3,286.8	-11.8	3,763.2	14.5	24.8
USA	5,931.2	4,733.3	-20.2	3,508.1	-25.9	2,987.1	-14.9	19.7
Germany	1,313.1	1,251.0	-4.7	1,219.8	-2.5	1,309.4	7.3	8.6
Taiwan	906.3	1,052.6	16.2	897.8	-14.7	944.0	5.1	6.2
South Korea	942.3	1,187.2	26.0	764.5	-35.6	839.5	9.8	5.5
UK	1,057.3	998.9	-5.5	788.2	-21.1	785.9	-0.3	5.2
Belgium	165.0	326.2	97.7	407.7	25.0	547.1	34.2	3.6
Philippines	123.4	243.9	97.7	240.4	-1.5	496.6	106.6	3.3
Macao	89.9	91.3	1.6	166.7	82.5	331.7	99.0	2.2
Singapore	656.1	580.5	-11.5	467.2	-19.5	331.5	-29.0	2.2
Others	2,674.8	2,986.2	11.6	2,725.9	-8.7	2,831.6	3.9	18.7

Note: Based on HS code 9503.
Source: Ministry of Finance.

Fig. 8 Exports of Toys and Games (Excluding TV Games, Software, etc.), by Product

(Units: million yen, %)

Category	HS Codes	2001	2002		2003		2004		
				YoY		YoY		YoY	Share
Total		17808.8	17177.5	-3.5	14473.2	-15.7	15167.6	4.8	100.0
Electric toy railway cars	950310	759.5	828.4	9.1	713.9	-13.8	728.7	2.1	4.8
Assembled toys	950320 to 30	8460.0	7360.8	-13.0	5363.7	-27.1	5466.8	1.9	36.0
Toys (model animals and other living things, excl. humans)	950341 to 49	1511.4	876.4	-42.0	664.7	-24.2	832.9	25.3	5.5
Toy musical instruments	950350	28.5	39.8	40.0	18.7	-53.1	22.5	20.5	0.1
Puzzles	950360	265.2	213.3	-19.6	267.3	25.3	228.5	-14.5	1.5
Toy sets	950370	31.3	29.4	-6.1	30.7	4.6	16.0	-47.8	0.1
Toys and models (with self-contained motors)	950380	4106.4	4328.7	5.4	4733.2	9.3	4685.3	-1.0	30.9
Others	950390	2646.5	3500.7	32.3	2681.0	-23.4	3186.8	18.9	21.0

Source: Ministry of Finance.

2. Imports

a. Overview

Imports of toys, games and amusement goods rose 10.3% to 264.33 billion yen in 2004. Shipments from China amounted to 226.62 billion yen, or 85.7% of total imports in this field (Fig. 9). Other major suppliers included the U.S., Taiwan, Thailand and South Korea, but none accounted for more than several percentage points, giving way to China by very wide margins. Many products imported from China were the result of offshore production by Japanese corporations. The largest import categories were toys and models and goods for indoor recreation (bowling, billiards, etc.), table games (mahjong, etc.), and game centers (Fig. 10).

Fig. 9 Imports of Toys and Game Equipment by Source

(Units: million yen, %)

	2001	2002		2003		2004		
			YoY		YoY		YoY	Share
Total	222,130.1	229,842.4	3.5	239,667.3	4.3	264,326.6	10.3	100.0
China	179649.8	188879.2	5.1	204232.8	8.1	226619.8	11.0	85.7
USA	8652.7	9501.6	9.8	7524.4	-20.8	7884.1	4.8	3.0
Taiwan	5647.9	5323.6	-5.7	5162.3	-3.0	5729.6	11.0	2.2
Thailand	5176.6	5435.1	5.0	5613.3	3.3	5097.6	-9.2	1.9
South Korea	5762.0	5240.2	-9.1	4151.4	-20.8	4010.5	-3.4	1.5
Germany	1954.2	2413.3	23.5	2408.4	-0.2	2574.7	6.9	1.0
Philippines	1843.8	1573.5	-14.7	1380.6	-12.3	1957.8	41.8	0.7
Denmark	2287.0	2850.3	24.6	1905.4	-33.2	1788.2	-6.1	0.7
Italy	727.7	796.5	9.5	854.5	7.3	1044.3	22.2	0.4
Spain	471.3	647.5	37.4	550.5	-15.0	984.2	78.8	0.4
Others	9957.1	7181.5	-27.9	5883.7	-18.1	6636.0	12.8	2.5

Note: HS codes 940530 and 9501 to 9505 tabulated.
Source: Ministry of Finance

Fig. 10 Imports of Toy and Games by Category

(Units: million yen, %)

Category	HS Codes	2001	2002		2003		2004		
				YoY		YoY		YoY	Share
Total		222,130.1	229,842.4	3.5	239,667.3	4.3	264,326.6	10.3	100.0
Christmas tree lights	940530	1853.4	1318.8	-28.8	1136.2	-13.8	1500.1	32.0	0.6
Wheeled toys	9501	3823.0	3825.2	0.1	3921.1	2.5	3686.7	-6.0	1.4
Dolls	9502	13135.4	15452.4	17.6	14913.2	-3.5	15771.1	5.8	6.0
Toys and models	9503	134447.4	148117.7	10.2	149946.8	1.2	151321.5	0.9	57.2
Indoor recreation, table games and game centers	9504	62743.4	55457.1	-11.6	64813.4	16.9	87058.5	34.3	32.9
Festival goods, carnival goods, and other amusement goods	9505	6.1	5.7	-7.4	4.9	-13.0	5.0	1.1	0.0

Source: Ministry of Finance

b. Current state of toy and game imports

Certain foreign brand toys and games enjoy large markets in Japan. For instance, Lego plastic blocks from Denmark (Lego Japan) have been a notable success, having enjoyed a solid market since their introduction in 1962. Mattel, the largest toy manufacturer in the world and known for hits such as Barbie dolls and Hot Wheel miniature cars, first entered the market in the 1960s.[6] Mattel renewed its efforts in the Japanese market in the second half of the 1990s and began selling through Bandai in 1999. Mattel dissolved this agreement in December 2003 and set up Mattel International

[6] Barbie dolls were released in Japan in 1963 via Kokusai Boeki. After Hot Wheels were released in the U.S. in 1968, Mattel International (a joint venture between Kokusai Boeki and Mattel founded in 1969) began official importation into Japan.

as a direct-sales subsidiary in January 2004.

Some educational toys and game products imported from the West have carved out unique but somewhat small niche markets.

D. Industry Topics

1. Reasons for the growth of Toys “R” Us Japan

Toys “R” Us Japan grew rapidly in the 1990s (Fig. 11), due to the factors described below.

a. Overwhelming price competitiveness

Specialty toy stores are mainly local operations run by individuals. Traditionally, these stores did not sell on discount, but discounting began to take root in 1985 when Chiyoda (Hello Mac) and the shoe store chain Kutsu No Marutomi (now bankrupt) launched toy stores as a separate business. Toys “R” Us, based on its ability to reduce costs by purchasing directly from manufacturers, was able to offer deep discounts and succeeded in acquiring a huge market share in one fell swoop based on its overwhelming competitiveness.

Fig. 11 Toys "R" Us Japan Stores and Sales Volume

Year	Stores	Sales (Billion Yen)	YoY (%)
1994	24	36.1	
1995	37	57.6	59.6
1996	51	77.9	35.2
1997	54	98.5	26.4
1998	76	115.3	17.1
1999	91	134.5	16.7
2000	111	154.6	14.9
2001	123	175.2	13.3
2002	134	179.7	2.6
2003	146	189.0	5.2

Source: Toys "R" Us Japan.

b. Large stores exhibit power to draw customers

Toys “R” Us stores, which average sales floor space of 2,000 to 3,000 square meters, are much larger than traditional Japanese toy stores which, for example, average 300 square meters among Chiyoda and Kutsu No Marutomi stores. Toys “R” Us stores have a powerful ability to draw customers thanks to their wide selections of goods, from general toys and games to baby goods, TV games and sporting goods.

Toys “R” Us Japan has opened many large stores, thereby gaining shares in regional markets. As a true “category killer,” it has had a lasting effect on Japan’s old, traditional toy and game retail market, which focused on individually operated stores.

As the toy and game market began shrinking in recent years, even Toys “R” Us Japan experienced negative growth among its existing stores in 2003, although the addition of newly opened stores helped to push up total sales.

2. Internet sales

Internet sales in the toy and game industry may be divided into sales via : 1) specialized online retailers' sites, 2) manufacturers' sites and 3) collaborations between online retailers and actual stores.

Category 1) includes "e Deji!! Mall" (enet-japan), which handles products such as games and DVDs, and "eS!Toys" (e-Shopping !Toys), which handles toys, games, TV games and DVDs. From October 2004, Amazon Japan began selling toys and games, in addition to existing lines of books and other products. Amazon Japan now handles 20,000 toys and games.

Category 2) mainly includes major toy and game manufacturers. Although none of these companies enjoy large online sales, they are using their websites effectively to introduce consumers to products.

Category 3) is represented by Toys "R" Us Dot Com Japan, which operates Toys "R" Us Dot Com. This subsidiary of Toys "R" Us Japan specializes in selling toys and games online via "click-and-mortar" links to Toys "R" Us brick-and-mortar stores. In addition, large electronic appliance retailers such as Yodobashi Camera and others sell toys and games via their own online sales pages.

Internet sales generally use credit cards for payment, so customers are mainly adults. For this reason, lineups include products that are popular with adults, such as collectables, crossover products that are not pure toys/games and products that are unrelated to the buyer's age.

II. Plastic Model and Radio-Controlled Device Industry

The plastic and radio-controlled device industry is part of the general toy and game industry. It is currently garnering attention as it occupies a significant share of the toy and game market, amounting to more than 10% (Fig. 4), and because has a stable consumer base of men in their 20s and 30s.

This section covers plastic models and radio-controlled devices only. Within this market is the model and hobby segment, which includes plastic models, radio-controlled hobby devices, railroad models, model guns, etc., but not radio-controlled toys according to some classification systems. In this report, however, radio-controlled toys are included in the plastic model and radio-controlled device market.

Fig. 12 Plastic Model and Radio-Controlled Device Categories

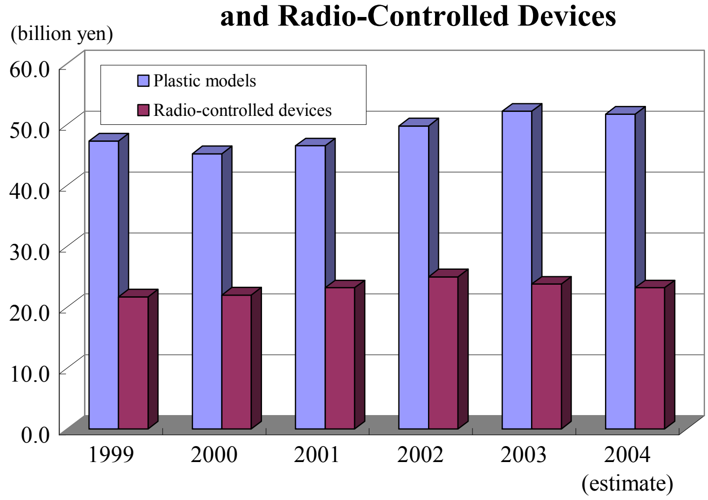
Category	Sub-Categories	Products
Plastic models	Scale plastic models	Scale models of cars, boats, airplanes, etc.
	Character plastic models	Models of animated characters, etc.
	Others (miniature 4-wheel-drive vehicles, etc.)	Simple assembled racing toys for children that do not require glue
Radio-controlled devices	Hobby radio-controlled devices	Expensive radio-controlled vehicles used in races, etc.
	Radio-controlled toys	Low-priced radio-controlled toys manufactured by toy manufacturers

A. Market Overview

1. Market overview

The history of plastic models in Japan started with the manufacture of model airplanes by wooden model manufacturers in 1935. After this, these companies began manufacturing battleships and other war-themed models and educational woodworking materials. Plastic was introduced as a model-construction material around 1950, marking a new stage in the plastic model industry.

Fig. 13 Size of Retail Markets for Plastic Models and Radio-Controlled Devices



(Unit: billion yen)

Year	1999	2000	2001	2002	2003	2004 (estimate)
Plastic models	47.3	45.2	46.5	49.8	52.2	51.7
Radio-controlled devices	21.7	22.0	23.2	25.0	23.8	23.2

Source: Yano Research Institute.

The market has gradually expanded in the 50 years since then, giving birth to a number of hits, including slot racing cars, character products, Supercar, Gundam, and miniature 4-wheel-drive vehicles. Tamiya's 4-wheel drive models were major hits in 1995 and 1996, prompting rapid growth of the market, but things cooled off after this and the market shrunk to the more stable level that exists today.

2. Customer segments

Although the market has traditionally been supported by two customer segments, grade-to-middle-school students and male adults in their twenties through forties, children have been losing interest in plastic models, so the center of consumption is shifting to adult males. But there are still many child-oriented products, such as low-priced radio-controlled toys for around 1,000 yen, and plastic character models such as Gundam, which are beloved by parents and children alike.

3. Market size

The market remained stable at around 50 billion yen in retail sales for plastic models and just under 23 billion yen for radio-controlled devices in recent years (Fig. 13). Although demand for hobby-related plastic models was sluggish, Gundam character plastic models (known by the nickname “Gunpla”) established a niche market among consumers in their twenties and thirties and propped up the entire market. Although sales of radio-controlled devices was comparatively stable thanks to steady sales of radio-controlled hobby products, the demand for radio-controlled toys was somewhat weak in2003.

Although new products are launched with hopes of creating new markets, ever since the miniature 4-wheel drive boom around 1996 there have been no smash hits, leaving companies to fight over a stagnant market. Factors such as stagnant consumption and increased expenditures on mobile telephones have also impeded market growth and further development of the youth market. If such conditions do not change, dramatic expansion is unlikely.

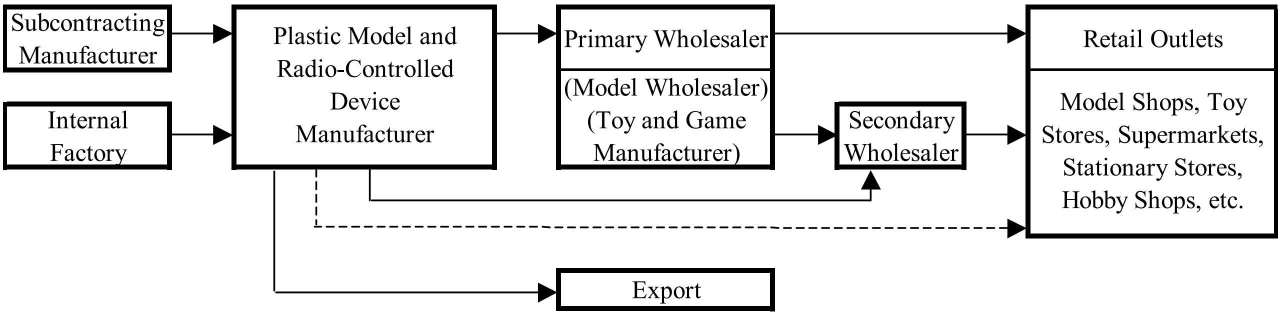
B. Industry Structure

1. Manufacturing and distribution

The distribution structure for plastic models is basically the same as that for general toys and games (Fig. 14). Plastic model and radio-controlled device manufacturers handle much of the distribution, as well as the manufacturing. After developing a product, they either handle production themselves or consign it to an affiliated or subcontracted manufacturer.

Wholesalers with physical distribution capabilities handle distribution. Hobby plastic models and hobby radio-controlled devices generally move from manufacturer to wholesaler to shop or toy store, while toy plastic models and radio-controlled toys usually go from manufacturer to wholesaler to toy store. Hobby and toy models usually pass through wholesalers, but some major retail outlets deal directly with manufacturers.

Fig. 14 Plastic Model and Radio-Controlled Device Manufacturing and Distribution Structures



The main plastic model manufacturers include Tamiya, Bandai, Aoshima Bunka Kyouzaisha, Fujimi and Hasegawa. The biggest radio-controlled device manufacturers include Tamiya, Kyosho, CCP, Taiyo-Toy and Nikko Company. Model wholesalers include Bunka, Irisawa and Miyazawa.

Most of the main plastic model manufacturers, including Tamiya, Aoshima Bunka Kyouzaisha, Fujimi and Hasegawa, have their headquarters in Shizuoka Prefecture. In fact, this is one of the representative industries of the prefecture. According to the Ministry of Economy, Trade and Industry's "Industrial Statistic Chart, Item Version" (2002), Shizuoka led all prefectures in plastic model kit shipments with an overwhelming 88.5% share (Fig. 15).

Fig. 15 Plastic Model Kit Shipments by Prefecture (2002)

Prefecture	Shipments (million yen)	Share (%)	No. of Factories
Total	18,442	100.0	38
Shizuoka	16,323	88.5	21
Tokyo	784	4.3	4
Tochigi	606	3.3	3
Chiba	248	1.3	4
Others	481	2.6	6

Source: Ministry of Economy, Trade and Industry.

2. Industry structure

Tamiya leads the hobby plastic model and radio-controlled device market in terms of both sales and brand power. Although its sales have dropped due to the miniature 4-wheel-drive boom, it remains the top hobby manufacturer and its brand power has not declined.

Bandai dominates the character plastic model market with its Gundam plastic models. Since 2001, plastic model sales alone have been in excess of 10 billion yen, driven by Bandai's domination of the character model market.

All of the major players are facing the fact that domestic demand has peaked or is shrinking, while international demand has been increasing. Nikko heads the list of companies making a strong international showing, followed by Kyosho with its fast-selling die-cast radio-controlled miniature cars. Both companies enjoy international sales ratios of greater than 50%. Tamiya, Nikko and Kyosho have also built solid brands in Western markets. In fact, companies in the plastic model and radio-controlled device industries are more orientated towards exporting than other toy and game companies.

Fig. 16 Major Plastic Model and Radio-Controlled Device Manufacturers

Manufacturer	Headquarters	Business	Comments
Tamiya	Shizuoka City, Shizuoka Prefecture	Hobby plastic model and radio-controlled device manufacturer	The leading Japanese hobby model manufacturer. Also focusing efforts on international sales, with bases in four nations including the USA.
Aoshima Bunka Kyouzaisha	Shizuoka City, Shizuoka Prefecture	Hobby plastic model and radio-controlled device manufacturer	A comprehensive hobby manufacturer that sells everything from plastic models to radio-controlled devices, die-cast models and figures.
Bandai	Taito Ward, Tokyo	Comprehensive toy and game manufacturer	Drives the character plastic model market with its "Gunpla" products, having sold 360 million units domestically (cumulative, as of March 2004).
Kyosho	Chiyoda Ward, Tokyo	Hobby radio-controlled device manufacturer	A major hobby radio-controlled device manufacturer competing on an even par with Tamiya. In addition to sophisticated hobby radio-controlled devices, also manufactures elaborate die-cast miniature cars and other products.
CCP	Kawaguchi City, Saitama Prefecture	Radio-controlled toy manufacturer	Major radio-controlled toy manufacturer. Strong in car-related products, markets products with value-added functions and level of sophistication not normally expected in a radio-controlled toy.
Taiyo-Toy	Katsushika Ward, Tokyo	Radio-controlled toy manufacturer	Now focusing on flying radio-controlled devices. Introduced radio-controlled toy helicopter in 2004, first hit in many years.
Nikko	Katsushika Ward, Tokyo	Radio-controlled toy manufacturer	Lineup focuses on radio-controlled toys, but also includes expensive radio-controlled devices with retail prices in excess of 20,000 yen. Strong in international sales.

C. Trends by Product

1. Scale plastic models

Scale models are made for automobiles, tanks, airplanes, boats, buildings and more, but the first three are perennial favorites. Products retail well in the price range of 2,000 to 3,000 yen. Recently, children have increasingly come to see the process of assembling models while reading a manual as bothersome, while adults tend to prefer plastic models that they can assemble easily and in a short period of time. As a result, the ratio of completed and partially completed models has been gradually increasing. Market leader Tamiya, in an effort to expand its overall lineup, entered the market for completed and partially completed models in full force in 2003.

2. Character plastic models

Bandai's "Gundam" models have accounted for some 90% of the character model market, or almost 40% of the entire plastic model market for more than a decade. Cumulative domestic sales had reached 360 million units as of the end of March 2004. The core fan base is men in their twenties and thirties. The TV program "Mobile Suit Gundam SEED," which debuted in October 2002 as the ninth in a series, was created to market products that appealed to parents as well as their children. This series has succeeded in gaining new fans among youths and females.

3. Miniature 4-wheel-drive models and others

The boom in this market peaked in 1996 and has been losing steam ever since. Although there are still hardcore fans, there are no signs of a resurgence. Bandai released its “Bakuseed” models in the “race toy” market in2004 in an attempt to ignite a boom involving the entire industry.

4. Radio-controlled hobby devices

Although hardcore fans still support this market, as in the case of plastic models, the number of fans that prefer convenience is gradually increasing. The more popular products sell in the 10,000-yen retail range, and less expensive products are comparatively more popular than in the case of other hobby markets.

5. Radio-controlled toys

In the case of military toys, products that realistically replicate actual vehicles are popular. Vehicles such as CCP’s “Real Drive” series that actually compete in races, such as Japan’s GT championship and the WRC, are popular. Among airplane-related products, Taiyo-Toy released the first radio-controlled toy helicopter and scored a hit, prompting other companies to develop their airplane product lineups. This segment may become second only to cars.

D. Trade Trends

1. Exports

Total exports of plastic models and other toys for assembly came to 5.47 billion yen in 2004, up 1.9% (Fig. 17). Net exports of toys for assembly, after reaching the 8 to 9 billion yen range in 2000

Fig. 17 Export Destinations for Assembled Toys (Plastic Models, Etc.)

(Units: million yen, %)

	2001	2002		2003		2004		
	Value	Value	YoY	Value	YoY	Value	YoY	Share
Total	8,460.0	7,360.8	-13.0	5,363.7	-27.1	5,466.8	1.9	100.0
Hong Kong	1,849.7	1,429.1	-22.7	1,104.0	-22.8	1,284.4	16.3	23.5
USA	2,662.1	1,992.4	-25.2	1,368.3	-31.3	993.4	-27.4	18.2
Germany	819.4	755.9	-7.8	606.1	-19.8	609.6	0.6	11.2
Philippines	63.3	109.4	72.9	216.9	98.3	489.6	125.8	9.0
Korea	452.5	551.6	21.9	330.1	-40.2	476.0	44.2	8.7
Taiwan	539.9	439.0	-18.7	331.4	-24.5	393.9	18.9	7.2
UK	591.5	479.1	-19.0	336.5	-29.8	244.3	-27.4	4.5
Singapore	275.9	191.4	-30.6	158.1	-17.4	137.7	-12.9	2.5
Australia	186.8	221.9	18.8	119.5	-46.1	113.0	-5.5	2.1
Netherlands	62.2	104.1	67.4	117.3	12.7	112.0	-4.5	2.0
Other Countries	956.8	1,086.9	13.6	675.4	-37.9	612.8	-9.3	11.2

Note: Based on HS codes 950320 to 950330.
Source: Ministry of Finance.

and 2001 and then decreasing sharply in both 2002 and 2003, increased slightly in 2004 but still haven't recovered to the 2001 level. Hong Kong and the U.S. were the top destinations, accounting for more than 40% of all exports combined. Other major markets were Germany, the Philippines, South Korea and Taiwan. Exports to the Philippines grew particularly rapidly.

2. Imports

Total import of plastic models and other toys for assembly came to 10.32 billion yen in 2004, up 4.9% (Fig. 18). This was the first time in two years that imports had exceeded 10 billion yen. China was the major supplier at 3.91 billion yen, which accounted for approximately 38% of total imports. A large portion of the imports from China were the result of offshore production by Japanese manufacturers. The next biggest supplier was Denmark at 1.56 billion yen, or approximately 15% of the total. Much of this was due to imports of Lego products, which are quite popular in Japan. Toys for assembly accounted for more than 80% of toy and game imports from Denmark. Imports from South Korea tumbled roughly 50% in 2004, which enabled the Philippines to become Japan's third biggest supplier.[7] Approximately 70% of all imports come from China, Denmark, the Philippines and South Korea.

Fig. 18 Imports of Assembled Toys (Plastic Models Etc.) by Source

(Units: million yen, %)

	2001	2002		2003		2004		
	Value	Value	YoY	Value	YoY	Value	YoY	Share
Total	8842.1	10970.4	24.1	9837.9	-10.3	10316.0	4.9	100.0
China	2652.8	3652.3	37.7	3523.1	-3.5	3914.6	11.1	37.9
Denmark	2050.0	2502.9	22.1	1636.7	-34.6	1556.2	-4.9	15.1
Philippines	634.1	580.6	-8.4	566.8	-2.4	965.7	70.4	9.4
Korea	653.7	1414.7	116.4	1428.5	1.0	765.6	-46.4	7.4
Thailand	1001.0	491.6	-50.9	591.7	20.4	556.9	-5.9	5.4
Switzerland	545.6	881.4	61.5	558.9	-36.6	437.5	-21.7	4.2
Spain	8.0	73.8	823.8	43.5	-41.1	403.3	827.1	3.9
Italy	152.1	230.3	51.4	318.9	38.5	386.9	21.3	3.8
USA	337.0	279.3	-17.1	280.8	0.5	273.8	-2.5	2.7
Germany	167.2	182.4	9.0	267.7	46.8	229.4	-14.3	2.2
Others	640.6	681.1	6.3	621.1	-8.8	826.3	33.0	8.0

Note: HS codes 950320 to 950330 tabulated.
Source: Ministry of Finance

E. Industry Topics

1. Bandai enters sports car toy market

Toy and game giant Bandai entered the toy sports car market in November 2004 with its release of the "Web Grand Prix Bakuseed," which races on special courses that Bandai sets up in hobby shops

[7] Tamiya Inc., which established a factory in the Philippines in 1994, provides a significant share of these imports.

and other locations so children can compete in racing. Other hobby manufacturers have been authorized to manufacture compatible parts and completed cars, so Bandai is expanding its business by involving the entire industry.

2. New Gundam series broadcast started

The tenth Gundam series, “Mobile Suit Gundam SEED DESTINY,” which debuted in October 2004, features a simple story that targets grade school students. The previous series, “Mobile Suit Gundam SEED,” which was designed to help market products to both parents and children, succeeded in gaining new fans among youths and females. The new series is aimed at taking the marketing strategy one step further by locking in a base of young fans. A new line of plastic models introduced with the start of the broadcast is expected to become another hit, like the previous line that sold more than 10 million units.

3. Tamiya’s full-scale entry into completed model market

Tamiya, the largest plastic model manufacturer, began full-scale participation in the completed and partially completed model market in the summer of 2003. After starting off with completed and partially completed tank and sports car models, Tamiya began selling models of two-wheeled bikes and other items this season. The move is an attempt to find a new market, since most kids now find the process of building plastic models to be bothersome.

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