

# 10 Information Flow

## 1. Nationwide Information Flow

### 1.1 Sources of Information Consumed

The volume of information consumed has surged since 1953, when TV broadcasting was inaugurated in Japan. Until about the mid 1980s, the main sources of information consumed were those media, especially the mass media, accessed by ordinary citizens; since then, in addition to those, media used by businesses, such as data transmission via leased circuit, have become another major source of information consumed (Exhibit 45).

### 1.2 Information Transmitted

The volume of information transmitted is the total amount of information sent out by all media during the course of a year (including information reproduced and transmitted, and information retransmitted). In fiscal 1998 this value amounted to  $2.49 \times 10^{16}$  words, up 17.9% year over year.

### 1.3 Selectable Information

The volume of selectable information is the total amount of information provided by all media during the course of a year in a form that allows users to select the information when it is received. In fiscal 1998 this value amounted to  $5.69 \times 10^{17}$  words, up 12.8%.

### 1.4 Information Consumed

The volume of information consumed is the amount of information that consumers actually

receive from the media and consume during the course of a year. In fiscal 1998 this value amounted to  $3.50 \times 10^{16}$  words, up 13.5%.

### 1.5 Information Stock

The volume of information stock is that amount of information out of the total volume of information distributed by the various media in the past that is stored by both senders and receivers for future retrieval. In fiscal 1998 this value amounted to  $1.36 \times 10^{15}$  words, up 5.9%.

## 2. Regional Information Flow

### 2.1 Information Transmitted

A breakdown of the share by prefecture of the volume of information transmitted in fiscal 1998 shows Tokyo prefecture with an overwhelmingly large proportion, 19.4%. Furthermore, the seven top prefectures accounted for half the total volume of information transmitted. The Gini coefficient, used to measure regional discrepancies (the larger the coefficient, the larger the discrepancy), stood at 0.504, about the same as the previous year. This value indicates that the interregional discrepancy is still large.

### 2.2 Selectable Information

Tokyo prefecture was at the top in terms of its share of selectable information, 12.9%, and the seven top prefectures accounted half the total volume of selectable information. The Gini

coefficient calculates to 0.522, virtually unchanged year over year and indicative of a large interregional discrepancy.

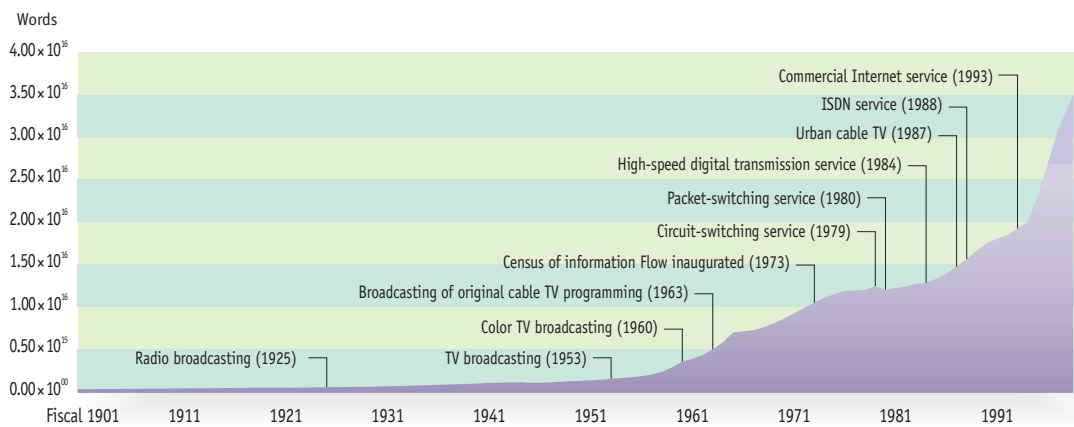
### 2.3 Information Stock

Tokyo prefecture also at the top of the ranking

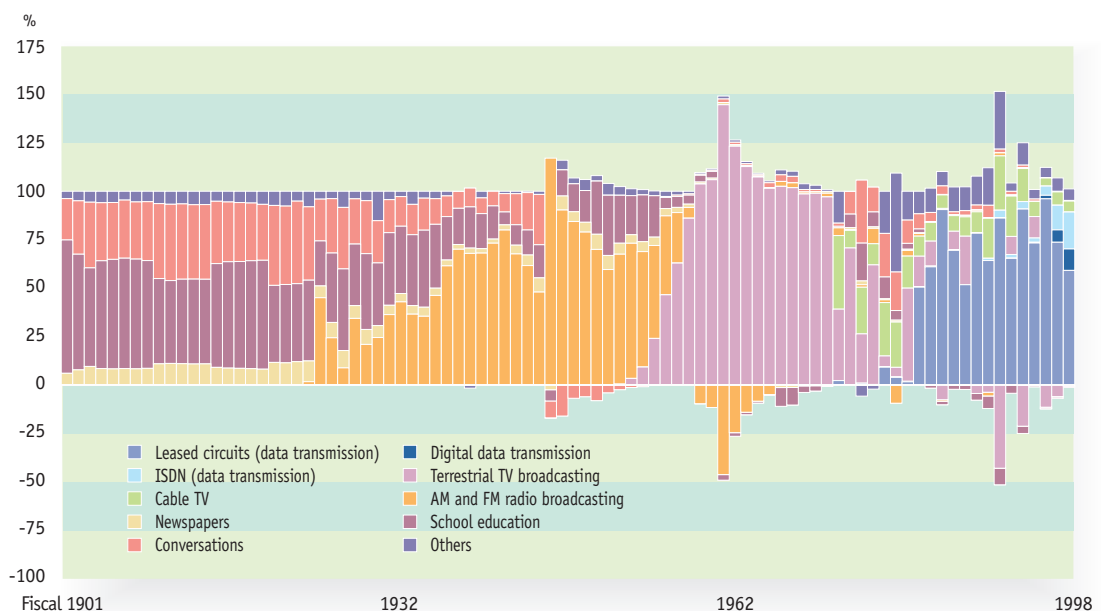
of volume of information stock, with 15.4% of the total. Again, the seven top prefectures accounted for half the total volume. The Gini coefficient, at 0.522, was virtually the same as last year's value and indicates a significant inter-regional discrepancy.

**Exhibit 45. Information Consumed in Japan in the 20th Century**

#### 1. Trends in Volume of Information Consumed



#### 2. Contribution Rates of Major Media to Growth in Volume of Information Consumed



Note: Years for which data could not be used and values sharply divergent from normal are not shown. Contribution rates for a given year total to 100%; if a certain media contributed more than 100% to the growth in volume of information consumed, this means that some other media experienced a decline in volume, which is shown by a negative value.

Source: *Census of Information Flow*.