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Introduction



With nearly three million terminals already installed in more than two dozen countries, videotex and teletext are no longer dreams of the future but realities of today.

Vast public networks are emerging and private systems are becoming fundamental business tools. "There's a market out there now" (to quote a key IBM executive) and this confidence is triggering new networks, techniques and value-added applications. It is also breeding fierce competition in the computing and data communications markets. Beyond this, the explosive spread of personal computing promises to open exciting new marketing opportunities, as does developing cable TV

The whole industry faces an unprecedented range of opportunities, challenges and pitfalls, but the contributors to this volume offer their guidance through the maze. They share experiences, ideas and information from Europe, North America and the Far East.



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CAPTAIN progress & prospects in Japan

Tateki Inada

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An outline of the results of the trial CAPTAIN services as well as a description of the current CAPTAIN system are presented. This paper also describes futher plans and commercial services to be implemented.



Tateki Inada was engaged in development and promotion of the Captain trial services as Director of the Captain system R and D Center. He now is specializes in the design of the next stage of the Captain system.

1. Preface

This paper presents the results of trial services for the CAPTAIN system (Videotex) as well as future commercial services which are due to be implemented at the end of November 1984.

2. Results of trial services

The first phase service trials of the CAPTAIN system were carried out in Tokyo from December 1979 to March 1981 using 1,000 terminals and a storage capacity of 100,000 pictures.

From August 1981 to July 1984, the second phase service trials were carried out in order to double both the number of terminals and the storage capacity of the pictures, as well as to expand system functions.

During the second phase trials, 360 information providers, of which 100 had information input terminals were used. The remaining information providers utilized the terminals at the information input center.

The numbers of the pictures compiled during this period totaled 600,000.

The results of the trials carried out during 1983 are described as follows:

- (1) Current state of system utilization.
 - * The average number of times used per week

5.92 times.

* The average holding time per time used

13 min. and 17 sec.

* The average number of pictures per time used

33.34 pictures.

* The average holding time per picture

24 sec.

Changes in average holding times are shown in fig.-1.

(min./call)

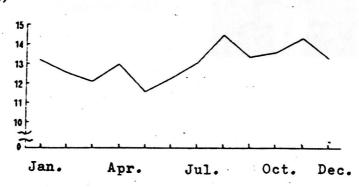


Fig.-1 Changes in average holding time (1983)

(2) The actual state of service utilization by the information field.

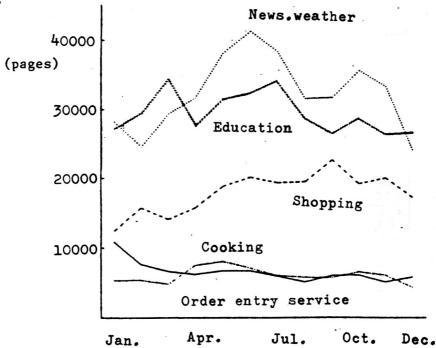


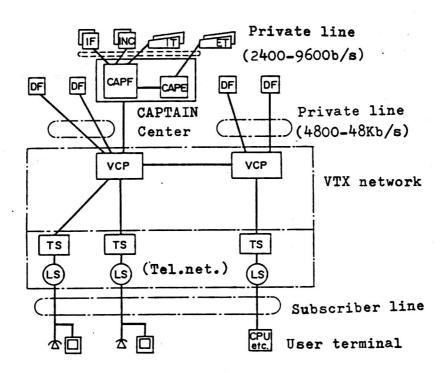
Fig.-2 Service utilization by information field (1983)

(3) Data input.

The average daily input of data received from the information center is approximately 3,100, while about 500 pictures are received from the simple type information input terminals installed at the premises of the information providers, totaling approximately 3,600 pictures.

3. Commercial videotex system

As shown in fig.-3, the communication system which is due to begin services from the end of November 1984, consists basically of a videotex network, a CAPTAIN information center jointly utilized by information providers, either an external information center owned by the information providers themselves or an input device, and a user terminal.



CAPF: CAPTAIN information processing unit

CAPE: CAPTAIN editing unit

DF : Direct access type information center VCP : Videotex communication processing unit

TS: Toll switch LS: Local switch

ET : Basic editing type user terminal

INC : Information input center

IF : Indirect access type information center

IT : Information input terminal

Fig.-3 Construction of videotex network system

3-1 The user terminal

In case of commercial services, five different classes have been established corresponding to the display function and density of the pictures used as the user terminals. Users may purchase their preference from the manufacturers. It is likely that the adapter type terminal combined with a general TV receiver, the terminal used exclusively with the CAPTAIN system, the personal computer incorporating an adapter for the CAPTAIN system, data terminal, and office computers, etc. will be marketted as the terminals.