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SOFTWARE DIGEST

Computerisation Of Building Product Information Service

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In the construction of a building, besides financial considerations, there are a number of other aspects that require choice among many alternatives at each step of different activities. For proper decision on the selection of the materials for construction of buildings, with a view to economising without sacrificing the construction quality, proper information on different elements used therein is essential. CBRI has developed an infrastructure of Product Information Data Base and has computerised its storage and retrieval through Dbase III+ software. (The program can be obtained from the Director, CBRI, Roorkee 247667).

Building Product Information

There are number of elements and materials, that are needed in the construction of a building. Different types of buildings constructed in different parts of the country and for different purposes may have to be constructed with different materials and provided with different kinds of building elements. For the purpose of perfect advice on the choice of materials and elements to be selected, consultants, engineers, architects and builders need information regarding all types of products/materials available in the country. Taken in a true spectrum, the same is, however, not available as such but in piece meals only. This is so because most elements are of different shapes, sizes, colour, makes, models, etc. and are marketed under different trade names by one or different manufacturers. To know about the needed items and to select the suitable ones out of the confus-

ing heap of products available in the market on the basis of their quality and cost has been a question of serious concern before the users.

Why Product Information Services

Increasing enquiries on various aspects of different building materials/components used for constructing buildings gave rise to a plan to develop a system of collection and collation of information from different sources/entrepreneurs/organisations, engaged in the manufacture of supply of building products/components in the country.

Issues referred to by a variety of users needed proper identification and prescription of solution as per the best suitable information available at that time by taking into account:

(a) Analysis of user's query, requirements, taste, economic capabilities, place of availability to avoid long transportation etc.

(b) Matching the query with the specifications of variety of products and components marketed by different manufacturers at nearest place of work.

(c) Generally agencies supplying information regarding building products do not have latest and comprehensive list of products and their source of availability, to facilitate selection of a particular product.

(d) Keeping pace with the new developments in the field is not practicable unless a system is devised in which information can be updated rapidly.

(d) Searching for a specific piece of information, from a huge data-

base too is not so simple even at the hands of computers, if an appropriate software is not available.

Computerisation Of Product Information System At CBRI

Central Building Research Institute (CBRI), Roorkee, primarily aims at providing solutions for better, comfortable, economical and safe human settlements using innovative development of new building construction materials conforming to the national priorities. It also provides advisory services besides acting as a clearing house in information collection, storage, dissemination and retrieval through its information data bank. Over the years it has developed a sizeable data bank on different aspects of building technologies.

CBRI has collected information relating to specifications of a variety of products used in different types of buildings viz. residential, industrial recreational, health, educational, and others. To overcome the complexity of analysis, efforts have been made in casting of collected information in such a manner that it is readily available i.e. whenever required by any department/society or individual. To streamline the tedious process of selection of information, from the total data available, led to design and development of a set of computer programs that would facilitate the information supplying agencies and in turn the user in a friendly menu driven fashion. The "Product Information Profile" program has been developed using DBASE III plus software.

such slides. It started in block year 1959-63 with 450 in number and has gone up to 10945 in the present block year 1989-93. It contains black and white and coloured both. The production of coloured slides started in 1984-88 with 950 and in the next block 89-93 sprang upto 6238.

TABLE 3
PROGRESS OF SLIDES ADDED DURING 1953-93

| Period | Number of Slides Added | | Total |
|---------|------------------------|----------|-------|
| | Black | Coloured | |
| 1953-58 | - | - | - |
| 1959-63 | 450 | - | 450 |
| 1964-68 | 2265 | - | 2265 |
| 1969-73 | 4900 | - | 4900 |
| 1974-78 | 4895 | - | 4895 |
| 1979-83 | 3615 | - | 3615 |
| 1984-88 | 6640 | 950 | 7590 |
| 1989-93 | 4707 | 6238 | 10945 |

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The progress of black and white slides seems to be more or less constant. It ranges between 4900-4707 ignoring 6640 in 84-88, but at the same time the coloured slides shows a springing trend i.e. 950 in 84-89 and 6238 in 89-93. It also shows the downward trend of black and white slides during 89-93. The reason is obvious i.e. the shifting attitude of preferring coloured slides in comparison to black and white by the users.

Features Of The Software

The program has been structured in three parts:

1. Main Program Contains

1. Data addition
2. Data edition
3. Data deletion
4. Data Recall
6. Printing Set of Programmes
6. Searching Set of Programmes
7. Exit

1. Sub Set for Printing

1. Print complete data
2. Print as per given range
3. Return to main program

1. Sub Set for Searching

1. As per Product Name
2. As per Manufactures name
3. As per City of Manufacturer
4. As per any word in summary of the product
5. As per any word in application of the product
6. As per any word in specification of the product
7. Return to Main Program

Data Structure

All the necessary fields on which information can be sought have been incorporated in the database design as per the following format:

1. **Product Name:** The Brand Name of the product given by the manufacturer.

2. **Manufacturer's Name and Address**

3. **City and PIN**

4. **Summary of the product:** Special features of the product

5. **Application: Usage**

6. **Specifications:** Highlighted by the manufacturer/supplier

7. **Remarks**

8. **Tag No:** A number that links the detailed information contained in a document like brochure, list, catalogue

9. **Record No. :** Serial number of the record

The program has been designed in such a simple way that, even a novice can easily handle it conveniently—use, feed the data, rectify the data and get an output. It is menu driven and self explanatory (Fig. 1). As soon as the main programme 'PRODUCT' is invoked on dot prompt by a command: DO PRODUCT, the program shows the main menu (Fig. 1) and expects the operator to enter the option number to work. All necessary alternatives, options have been taken care of and

PRODUCT INFORMATION PROFILE C B R I ROORKEE

1. ADD NEW DATA
2. EDIT DATA
3. DELETE RECORD
4. UNDELETE RECORD
5. PRINT SUB SET
6. SEARCH SUB SET
7. EXIT

ENTER YOUR CHOICE 0

Fig. 1. Menu Driven Software

a choice is to be indicated for desired results.

Concluding Remarks

The programme has been tested on a fairly large assorted data of different variables, satisfying the desired objectives. The programme can be used safely on any IBM compatible PC where Dbase III+ is operative.

Acknowledgement

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Reference

BASIN Data Bank-Brochure Germany, 1990.