CHAPTER - 5

COMPARISON BETWEEN
CDS/ISIS-SOUL-FOXPRO
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The usefulness, importance of FoxPro are highlighted in this heading. Further, FoxPro is compared with two other software packages CDS/ISIS and SOUL to understand its merits and demerits.

CDS/ISIS: (Computerised Documentation Services/Intergrated set of Information systems) which is related by a micro computer based software package UNESCO in 1985 for managing storage and retrieval system

The minimum hardware requirements for running CDS/ISIS is a PCXT, with 512 KB of RAM, a floppy drive, a hard disk, a monitor and a printer. It is being continuously developed to match the functional capabilities.

It is a generalised information storage and retrieval system, designed specifically for the computerised management of structured non-numerical databases.

Although it deals with text and words and offers many of the features normally found in word-processing, because the text that CDS/ISIS process is structured into data elements.

One of the major advantages offered by the generalised design of the system is that the same set of computer programs is able to manipulate in unlimited number of databases each of which may consists of completely different data elements.

CDS/ISIS users are therefore freed from the expensive task of designing and writing computer programs. Although some features of
CDS/ISIS requires some knowledge of and experience with computerised information systems, once an application has been designed the system may be used by any person having little or no prior computer experience.

**Advantages of CDS/ISIS**

CDS/ISIS allows

1. To define databases containing the required data elements.
2. To enter new records into a given database
3. To modify, correct or delete existing records.
4. Build and maintain fast access file to each database.
5. Retrieve records through a sophisticated search languages.
6. Sort the records in any sequence desired
7. Display the records or portion thereof according to requirements
8. Print partial or full catalogues and/or indexes from any given database

**Limitations of CDS/ISIS:**

CDS/ISIS comes with its own limitations and also certain problems as experience in its practical use. The limitations include

1. Maximum number of records in the database 16 million
2. Maximum record size 8000 characters.
3. Maximum number of fields 200
4. Maximum number of fields in a worksheet page 20
5. Maximum field size 8000 Characters.
6. Maximum size of a display format 400 Characters.
7. Maximum number of stop words 799.
SOUL (Software University Libraries)

University libraries are complex entities, having large collections and serving a huge clientele. To carry out various operations in a library effectively, there is a need for automation. Computer and communication technologies have brought revolutionary changes in the information acquisition, processing, storage, retrieval and dissemination. Keeping in view the latest trends in Information Technology, INFLIBNET Centre has developed a windows based Library Management Software “SOUL” is designed using client – Server architecture which imparts extra strength to storage capacity multiple access to single database, various levels of security, back up and storage facilities. This software has been designed after a comprehensive study of different library related functions, practised in university libraries related functions, practised in University Libraries. This user-friendly software is quite easy to work with. The software comprises following modules

1. Acquisition
2. Cataloging
3. Circulation
4. OPAC
5. Serial Control
6. Administration

The in-built network feature of the software will allow multiple
libraries of the same University to functions together as well as access to the distributed databases installed at various University Libraries and union catalogue mounted at INFLIBNET using VSAL networks.

Advantages:

1. Available at nominal cost to University libraries
2. Software designed and developed exclusively to work under University environment
3. Network feature of the software will allow multiple libraries of University to functions together.
4. Exhaustive training at INFLIBNET supported by comprehensive manual.
5. On-site training
6. Free updation/modification
7. Free technical assistance
8. Follows INFLIBNET recommended standards and formats such as CCF (Common Communication Format), AACR-2, LCSH (Library of Congress Subject Headings). (Anglo American Cataloging Rules-2)(3)

Limitations:

1. It is very much useful and suitable for University Libraries.

FOXPRO:

FoxPro is a very powerful database management system.

Features of FOXPRO:

1. FoxPro is the most advanced and fully featured relational DBMS package for microcomputer users. The relational DBMS are command driven and programmable and user friendly.
2. FoxPro combines a completely redesigned intuitive user interface called the control centre with the built him automatic compilers that performs 10 times the speed of its earlier versions (i.e dBase III+)
3. A single file can be related to more than one file simultaneously.
4. Database can have up to 25 fields.
5. FoxPro permits arithmetical manipulation of data.
6. FoxPro normally has the facility called Report Generator which allows the user to specify the precise layout of a printed version, changing the position of fields, and
7. FoxPro supports three types of user definable menu systems — Bar, Pop up, pull down menus etc.,

Using this system we can be many things without programming.

However, it is the Application Development Language which allows the creation of application and makes this a very powerful and versatile system. (4)

**Limitations: (Capabilities)**

1. Maximum fields per record 255
2. Maximum character per record 4000
3. Maximum records per database 1 Billion.
4. Maximum Characters per character field 254.
5. Digest of precision in numeric computations 16

**CONCLUSION:**

When compared to CDS/ISIS, FoxPro, has higher capacity of maximum no. of records in the database i.e., FoxPro can permit 1 Billion records in the database, but CDS/ISIS permits only 16 million records.

For Engineering College Library requires the high record capable database. So FoxPro is very much useful and suitable for Engineering College library automation.
SOUL is also a very good software package, but it is very much suitable for University Libraries. But the present study is confined to Intell Engineering College.

REFERENCES:
2. Dr. B.R. Ambedkar Open University, Information Technology practical Manual (Hyderabad: Dr. B.R. Ambedkar Open University, 2004)
3. Ibid.