

A Law Database Project in Ghana

A Paper by Kojo Bentsi-Enchill of Data

Introducing Solon

Established in 1992 after two-and-a-half years of development work DataCenta is a small company that is boldly pioneering a Ghanaian electronic publishing industry. DataCenta's mission is to become a computerised information bureau making available to the public legal, financial and other databases. DataCenta's immediate objective is to compile a full text law database in the next two years. In the long term, DataCenta's objective is to become an exemplary information bureau and help develop Ghana's information culture. In addition DataCenta will bring to the Ghanaian public a widening range of foreign database services.

Law Database Project

The original project concept and a demonstration database was developed by ABSC, (Accra Business Service Centre) and Bentsi-Enchill & Letsa, a law firm in Accra. 1989 ABSC identified legal database publishing as a potential area of diversification that it initially thought would involve relatively little new investment in hardware. A computer scientist was obtained through the AIESEC programme to review software options and ascertain the technical feasibility of a full text law database. There followed an extensive review of the literature, visits to international fairs such as the "Computers in Libraries" conference in London in February 1990, the Frankfurt Infobase Fair, in February 1992, and meetings with software representatives in the UK and US. A software package, Folio Views, was selected and purchased because of its powerful features and low price.

Demonstrations of the sample database that was developed never failed to elicit a favourable response from viewers from all walks of life. This preliminary marketing revealed a strong latent local and international demand for a full text law database. Thus ABSC and Bentsi-Enchill & Letsa conducted full technical and financial feasibility studies of a full text law database project.

When a page count was done it was realised (a) that some 70,000 pages of legal material was involved; (b) that it would take ABSC and Bentsi-Enchill & Letsa, given their work commitments and limited equipment, at least 10 years to complete the project; for computers bought in 1986/87 were practically obsolete in 1991, and certainly incapable of handling some of the text re-

trieval software that was reviewed; moreover scanning was not a viable option because of the poor print quality of much of Ghana's legal material; finally, (c) that an ambitious scheme involving on-line, multi-user access and eight PC-stand-alone outstations would cost \$500,000.

A number of statutory corporations were approached for equity investment and other support. The greatest interest was expressed by perhaps the three most internationally minded corporations in Ghana, Ghana National Petroleum Corporation, the Volta River Authority and the Minerals Commission. Their fulsome expressions of interest in investing in such a project (from commercial, institutional and public interest considerations) resulted in a certain relaxation about fund raising for the project. In the event little of the promised required investment materialised. In the past year, a tiny amount of private investment has been obtained largely from personal contacts. The novelty of the project, the long-term nature of return on investment in a country where Government bills can be bought at more than 25% interest per annum, have made private investment difficult to secure. The long term profitability however is not in doubt. Subject to new database projects that may be undertaken, operational costs will fall sharply once the huge tasks of data entry are accomplished and while demand will rise steadily as appreciation of the service increases. In the meantime DataCenta is just beginning to make ends meet. It is under-capitalised but beginning to make some headway. Careful fund raising and financial and operational planning is thus a key concern for any other would-be law database projects.

Ghana's Undeveloped Legal Information Culture

There is no means of conducting fast comprehensive research on Ghanaian law. The basic documents of Ghana law issue from (a) the Council for Law Reporting which produces the Ghana Law Reports, the Digest of Law Reports, the Review of Ghana Law and miscellaneous publications; (b) the Ghana Universities Press which publishes the University of Ghana Law Journal; and (c) the Ghana Publishing Corporation, which publishes statutes of Ghana, the Gazette, the Local Government Bulletin, the Commercial and Industrial Bulletin and other official publications. In addition, there is a host of insufficiently publicised adjudications, notices

and guidelines that issue from various governmental agencies; for example, the Internal Revenue Service, the Ghana Investments Centre, the Ministry of Trade and the Ministry of Finance and Economic Planning, the Customs, Excise and Preventive Service and the Bank of Ghana. This miscellaneous legal material is critical to the conduct of commerce and industry, public life, and the rule of law.

These legal materials are neither cross-referenced, nor printed in sufficient quantities. Many important statutes are out of print. The Ghana Law Reports are ten years in arrears. No local or international collections of Ghana legal materials are complete. The problem of lack of fast access to all the relevant literature on any particular point is compounded when foreign writings on Ghana law are considered. Thus, to Ghana's internal disorganisation is added an absence of organised curiosity about foreign writing on Ghana law, and the absence of a systematic programme for acquiring such literature.

The poor supply of legal materials is costly to the nation and bad for the rule of law. Some investment is lost to Ghana or acquired at extra cost through this underdeveloped information culture. Working with legal materials is a time-consuming business resting on an insecure foundation of incomplete, out-of-date libraries and ignorance of some of the relevant materials. Standards of thoroughness and expertise are thus lowered in a legal information culture that does not exact the highest precision, and is jealous or secretive about the dissemination of relevant information.

The poor state of legal materials mirrors the general national information culture. National and institutional archives are in often parlous condition. DataCenta's law database project is a strategic information project that is calculated to affect other information cultures and contribute to progress in our national information environment. The speedy and comprehensive cross referenced, search/retrieval facility of a computerised database, threatens a revolution in Ghana's legal information culture.

DataCenta's Work Plan

The plan is to complete the database comprising Ghana's laws, law reports and law journals in eight quarterly instalments; starting first with statutes, then moving on to law reports and finally, law journal articles. Work on subsidiary regulations has started with *Bankline*, a compilation of Bank of Ghana Notices to the Public. The database is published on 1.44 mb high density diskettes. By the time the project is complete this will involve 180 diskettes and clearly it will be time to transfer them onto CDROM. On-line dissemination was part of the project plan, but the necessary funds have not yet been available.

Solon 1

The first product on DataCenta's agenda is out. Solon 1 (registered trade name) is full text database of the laws of the Provisional National Defence Council which ruled Ghana from 1982 to 1993. The amazing effectiveness of Solon as a research tool is apparent in this first product. Solon 1 has an alphabetical and a chronological index for easy referencing. All references to other statutes, laws or law reports are cross-referenced by hyperlinks, so the user can flit to any references at the touch of a button. Various searches are possible from simple word queries to phrase searches and combinations thereof using logical separators. The researcher can then sift through the instantaneous search results, in either full text or digest form, or both successively, and have more than ten different documents open on screen at the same time, thus saving many tedious hours of traditional hard copy research. Furthermore, Solon has a "clipboard" facility which enables the researcher to compile notes for himself simply by lifting relevant references of his choice to a computer "notebook" of his own, where he can also record his own conclusions, and thoughts - thus producing a comprehensively finished piece of research in record time.

Benefits of Solon

As a working tool for the professional, businessman or layman with special interest, Solon is unbeatable. Solon is cheaper than traditional productions. If one considers the amount of time usually required merely to locate material and assemble it, much less the time it takes to look through what is most probably an incomplete assembly of material, then Solon pays for itself over and over again. Also, by its nature Solon will enhance the user's business or practice immeasurably.

Solon saves storage space - fifty thousand pages of Ghana Law can sit on one's desk, at one's fingertips. Properly kept, the diskette is virtually indestructible, the chances of loss or mutilation minimal. Neither need one strain to keep up with new enactments and work out their implications on earlier laws - one of DataCenta's services is a continuous updating of all laws.

Solon 2

The next product in the Solon series, Solon 2, is almost complete and receiving final touches. Solon 2 is a specialised database of laws on trade, business and finance which are in force. Solon 2 is directed at the Ghanaian or international businessman of every description, legal practitioners, banks and other corporations - in fact at any person or corporation in Ghana or elsewhere interested in any form of business in Ghana. Solon 2 is comprehensive and is therefore useful of specialised businesses as well as for an overview of relevant laws on business for the new corporation or for an old one which

wants to be up-to-the-mark. A special compilation of Trade Laws being made for the Ministry of Trade, is a closely related project.

Bank of Ghana Notices

DataCenta has also finalised a product which comprises all regulatory Bank of Ghana Notices to the Public, 1966-1993. The Bank of Ghana Notices have for long been an imported species of legislation in Ghana, but have never been compiled comprehensively. Thus, many whose bread and butter would seem to include a close watch on these notices are blissfully unaware of many of them - a patently dangerous and thoroughly unsatisfactory state of affairs which DataCenta hopes to remedy by this product.

Other Services

DataCenta also offers various other services. Firstly, DataCenta offers a *RESEARCH SERVICE*: People can call in with search requests which DataCenta will execute.

Training and Consultancy Services in information storage and retrieval systems: DataCenta has had enough experience in developing its own databases to give advice and direction to other institutions that may wish to build their own. Projects have their unique characteristics inevitably, but general principles of planning, data capture procedures, accuracy and verification systems, project controls, document tracking, etc. are no doubt applicable.

Special Databases for Specific Needs: DataCenta can compile special sub-database on any subject of interest: trade, environment, industry etc.

Equipment Supply and Maintenance: DataCenta will supply computers, CD-ROM drives, hard disks and other accessories. Indeed it is becoming clear that it is in DataCenta's interest, in a society that is in informa-

tion technology infancy, to offer computers and printers at cheap rates. A leasing scheme is under consideration that will make the database more marketable SOLON.

Miscellaneous Points

Copyright and Governmental Consents: The precise holders of the copyright in legal publications must be clearly determined and a reproduction licence must be secured in advance. DataCenta had the nerve wracking experience of delayed consent long after a great deal of work and money had been invested! There was a feeling in some quarters that a law database was a project for government agencies, not private enterprise. Thankfully this was overcome.

Marketing: It is a good idea to sell a law database in small useful chunks, rather than facing potential customers with a large price tag for an as yet uncompleted database. This is something DataCenta has had to learn the hard way. In a relatively uncomputerised society, endless demonstrations and seminars, persistent follow-ups and free training after purchase are necessary techniques.

Preparation and Planning: In a disorganised legal information culture one should never underrate the difficulties of getting a full set of documents together before work starts. Time and time again, work has been held up by a missing legislative instrument, a missing law, etc. The idea of computerising all the laws is simple in essence. In practice the most painstaking labour is involved.

Cooperation: It would give the greatest pleasure to DataCenta to assist and cooperate with other database efforts around the world. Exchanges of databases, meetings, perhaps a law Database association ought to be formed. DataCenta may be reached at P O Box 1632, Accra, Ghana. Tel: 233 21 773970, 772591, 773435. Telex: 2585, Fax: 233 21 772145.