

L O L A

SYSTEMS DEVELOPMENT DIVISION

INVESTIGATION INTO TIMS

(ON-LINE HELP FACILITY FOR IMS)

1. Background

For several years now users have been asking different Project Teams if any on-line description of function/help could be given with IMS transactions. These users normally had also used other systems either on the main frame (ISPF edit) or PC based systems which had a background help facility.

2. History

TIMS was firstly investigated by ASG from the technical view-point resulting in a report by Geoff Williams dated 9.5.88. As this report was favourable it was decided to investigate the product from the development scale. (The ASG report is attached as this gives a detailed description of the product). Included in the technical evaluation was a visit to the TIMS USER Group held on 8th April 1988, since then 2 site visits have been arranged to

Rank Xerox	29.6.88
and British Airways	25.7.88

The findings of these visits are detailed below:

3. Rank Xerox

Rank Xerox run MVS/AX and IMS/DC on a 3083 and plan to replace their current DL1 databases with DB2. In-house programs are written in IEF a code generator (COBOL code).

A new system being developed for Billing adjustments was used for the TIMS evaluation at the system testing stage. A contractor was employed to give a quality assurance test on the final system and then had a month extension to this contract to develop TIMS help panels for the system and write a report on TIMS. We have a copy of that report, which recommends the purchase of TIMS by RX, (which they have now done). As this is a very full report I have attached it to this report rather than restate the points covered.

4. British Airways

BA have had TIMS in production for 2 years and it currently covers 4 of their systems.

There are running MVS/XA, IMS2.2, ACF2 on an Amdahl 5890 with approx 300K IMS transactions a day. Their help screens have been set up by the user departments who have found that they are very good at assisting in training and decoding of coded fields (of which there are a great number on BA systems).

BA have also performed monitoring tests on the effect of TIMS transactions on their system and found that they were at least as efficient as their own transactions; the TIMS data being held on 2 databases of 20 and 100 cyls (3380).

5. Advantages to LOLA

The advantages of such a system to the Lola Consortium are in the area of product presentation, user assistance and training. Most packages offer help facilities at various levels and users are accustomed to them. Lola products have few such aids as it currently involves extra development effort and increased program complexity to supply them. The products would look more professional and allow more information to be made available to the user without cluttering the screens. TMS is also used by some organisations for training and could be valuable to the Consortium in this area.

6. Installation resources

Installation of the product would seem simple, with no major system changes involved. Maintenance and administration of the system must be considered, with initial resource to implement the system and set up standards. The provision of the actual help screens will also require resource, but this could be reduced by Lola offering only basic help screens, with facilities for users to provide the detail. This will both save expensive technical resource and ensure user-friendly information on the screens.

7. Use at LOLA

TIMS could be used in all of the current LOLA applications, in particular in those subject to quick and/or statutory change or where the boroughs find there is a continuous need for training of new staff. The new Community Charge system would, I believe, find these help panels a major benefit and could save Lola resources in Borough documentation and training.

A future enhancement to TIMS which is being considered at present will enable the stored HELP information to be formatted and printed. This may provide a means of producing User Guides, and keeping them in step with the transactions.

8. Recommendation

I recommend that LOLA acquires TIMS for a trial period during which time help panels could be set up on several transactions with the help of one of the user departments. This requires that we consult with the user department to find one which would have the resources to help with the set-up and evaluation of the help screens. (This information could be found out by the Account Managers). We must have the assistance of our end users in any evaluation of this product as the benefit will be for them and I would expect that they will be setting up most of the detailed data if we purchased the system.

PEG/JF
11.8.88

I've given a copy to

Initial Technical Investigation into TIMS (an end-user HELP facility).

1. Introduction.
2. Description of the software.
3. Benefits of TIMS.
4. Disadvantages of TIMS.
5. Technical Considerations.
6. Analysis of the software and its vendor.
7. Summary of the product.

1. INTRODUCTION.

The purpose of this paper is to investigate the product Transaction Information and Messages Screening (or TIMS) and from a technical viewpoint, discuss whether it can be integrated smoothly into LOLA's existing transaction environment.

It gives a definition of the TIMS product, its possible benefits/drawbacks to LOLA, a general analysis of the software and its vendor, and finally a summary of the product.

2. DESCRIPTION OF THE SOFTWARE.

TIMS is an end-user HELP screen facility usable in any IMS transaction, i.e. at any stage during a transaction, the user can hit a FK key or any other specified key, to obtain information about, the system the transaction is being used for, the use and flow of the transaction in use (as per User Specifications), the particular screen in use and how to enter data on it, a particular field on a screen and the values it can contain.

Information can also be selected from a HELP screen that can be used to supply input information to the originating screen.

Currently at LOLA, we provide our users of IMS transactions very little in the way of HELP facilities. In the few transactions which provide HELP information the user has the ability to enter an option field as displayed on the screen or hit PA2 (to invoke IMS logical paging). The first method is time consuming to set up and gives little flexibility to the user to display information about other parts of the system, whilst logical paging is difficult for a programmer to understand and thus incorporate into programs.

Both methods require a different form of input by the user, rather than a standard key or method like the TSO-HELP facility.

Other features of TIMS consist of a diary system enabling the end-user to store any information he wants to keep in mind, and a multilingual feature allowing information to be displayed in up to three languages. TIMS can be implemented for existing transactions without having to change one line of application program code.

3. BENEFITS OF TIMS.

TIMS could play an important role in the future development of application systems. It can be used to prototype a system, allowing the users to define their own descriptions of the information they are analysing, provide an easier means of introducing new systems to the users, eliminating the need for user specification manuals and allowing the users to train themselves, and ensuring a more user-friendly, professional-looking system is produced for the user.

It will provide a standardised method of obtaining HELP information, so that all users can turn to HELP by the pressing of a standard PF, or any other predetermined, key.

Where the user has already input some information prior to requesting HELP, on return from TIMS the original screen's contents will be returned.

The HELP information can be incorporated within IMS transactions without the need for programmers to amend programs. Analysts in conjunction with the end-users can build up the descriptive HELP information via an IMS transaction provided by TIMS, or they can extract the descriptive text from the data dictionary and transpose it onto HELP screens.

Information initially set up for end-users can be easily maintained and kept up-to-date, rather than analysts having to remember to update manuals.

All HELP information built can be tailored to the experience level of individual users - experience levels can be defined for each user and can be changed.

TIMS can provide a HELP-facility similar to the TSO HELP facility.

4. DISADVANTAGES OF TIMS.

Like any new product, TIMS will have to be overseen and maintained. I would envisage that it will involve a half-year of man days to co-ordinate the implementation and standardisation of the facilities TIMS offers.

5. TECHNICAL CONSIDERATIONS.

All information displayed on the HELP screens will be stored on IMS variable-length databases.

TIMS provides two means of adding, replacing and retrieving information from these databases.

An IMS transaction is the basis for managing TIMS information, such as setting up system parameters, identifying end-user access to the system, setting up TIMS HELP information, etc.

The other method is an ISPF based feature which enables batch job submission to update the information databases.

A control blocks generation is a prerequisite for the IMS method.

There are two ways of connecting transactions to TIMS : the PROGRAMMED connection and the LINKED connection.

To use a PROGRAMMED connection the programmer will be required to code a call after the GN call of the input message. For programs using the Standard Interface it would be efficient to include this call as part of Standard Interface.

A LINKED connection requires TIMS modules to be linked with the application program and requires no source code changes. This way TIMS will be invoked after every DL/1 call to check if it is a GN message call. The overhead in performing this extra checking is minimal.

LINKED connection is the easier method of implementing TIMS as smoothly as possible.

The TIMS modules can be preloaded and called each time the transaction is running, or the modules can be linked with each transaction that uses them. Whenever TIMS is invoked, it acquires a small amount of CSA (approx. 48 bytes).

TIMS has the capability to return the contents of the original screen, that TIMS was invoked from, including error messages and partly edited input fields.

To achieve this most desirable effect, LOLA will have to add physical terminal edit routines to the IMS system which will involve IMS group effort. A slight drawback will be that transactions cannot be tested using BTS if they invoke TIMS.

Transactions that invoke TIMS, will program switch to the TIMS modules to perform TIMS processing.

Where existing transactions are amended to invoke TIMS, and do not already contain an alternate PCB for switching to TIMS, a fix to TIMS can be applied to forsake the need to make program source code changes.

TIMS provide EXITS that allow user-written programs to handle TIMS information in a more flexible manner, e.g. to access descriptive text from another database.

6. ANALYSIS OF THE SOFTWARE AND ITS VENDOR.

TIMS is marketed by INFOREM Ltd. a company whose aim is to provide computing solutions in three business areas :- consultancy services, software products and computer systems.

TIMS was written by 4.ST Services Systems Software Support Technologies Belgium and all source code is located at this company. From their offices in Weybridge, INFOREM offer first level support for TIMS, and if need be, will contact 4.ST to further resolve problems/queries.

The cost of the product is £24,000 for IMS or £20000 for a CICS version plus a 15% maintenance fee.

They offer a free 30-day trial which they say will not be extended.

A TIMS User Guide group has been operating within the UK for some time, participators including British Airways, Royal Insurance, Rank Xerox, Standard Life, Royal Life. Their is also active use of this product on the continent.

LOLA attended the last User Guide meeting and reactions were that TIMS appeared to be a strategic product of INFOREM's, who were putting in a lot of effort to develop and improve TIMS's capabilities.

INFOREM has just announced a new release (1.3.1) of TIMS in the UK which has addressed some of the UK user's requirements.

The next release of TIMS is scheduled for early 89 and its main feature will be to allow TIMS to be transported across CICS/IMS environments. It will also resolve further outstanding requirements.

7) SUMMARY OF THE PRODUCT.

From a technical viewpoint, TIMS looks to be a sound package to implement and maintain. System overheads will be very slight in transaction execution and should not have any influence on transaction development.

The difficulty will be in establishing standards of use of the system across the end-user and application development areas. A lot of work will be required to fully establish TIMS as a benefit to end-users in their day to day work.

Confidence in the use of TIMS could be gained from experimenting with it during the initial design stages of the poll tax system. Ideally it can eradicate written end-user specifications and reduce end-user training considerably and it will provide a standard means of retrieving and screening help information in any transaction.

I feel TIMS is a strategic product in the IMS transaction environment and is starting to be used widely by software houses marketing application packages that we have developed or are planning to develop.

GW 9.5.88