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Computerisation In The News Room - BERNAMA's Experience

By

Ahmad Rejal Arbee
It is hardly four months since we installed our computers but our staff are already beginning to wonder how we managed under the old manual system. The results of the computerisation of BERNAMA have been amazing and dramatic.

BERNAMA had always recognised that speed was of the essence in news agency operations. The editorial computer has enabled us to expeditiously and efficiently handle all our news traffic amounting to close to a million words a day with the greatest possible ease. And to imagine we had trouble handling only about 70,000 words or so under the old system—where news stories were typed and handed to an operator for punching into the perforated tapes so that it can be transmitted by teleprinters.

We had thought about computerisation for quite some years but we only began to seriously consider it last year following the Malaysian government’s decision to give us the added responsibility of being the sole distributor of news from the wire agencies. We thought that there was no way for us to be an efficient distributor of foreign news without computerisation. We were then already having problems in coping with the speedy and efficient distribution of our services to our subscribers.

BERNAMA then had the services of about 15 or 16 teleprinter operators in Kuala Lumpur whose duties were to punch stories to be moved over our wires into the perforated tapes and also to transmit the tapes over the various transmitters. This often resulted in delays at two points: (1) During peak hours the operators could not cope with the pile of copies to be punched into tapes, and (2) There were delays in the handling of the tapes from one teleprinter transmitter to another.

We initially thought of having an automatic distributor (message switcher) to overcome this problem of manual handling of the tapes, but when the government announced its decision over the distribution of foreign news in the country, there was no
longer any doubt in our minds that we needed to computerise our operations. Otherwise, our subs at the foreign desk and the teleprinter operators would be overwhelmed by the sheer number of words they would have to handle.

In a news agency operation, the computer has two basic functions: editing and transmission. In so far as editing is concerned, it eliminates some typing operations, e.g. at the subbing desk and the teleprinter operators' end.

The other great advantage is that copy meant for different destinations can now be sent simultaneously at the push of a button. For instance, the Domestic News Service is sent to all our newspaper subscribers in the Peninsula. The more important stories from this service is also sent to East Malaysia, foreign wire services and Singapore. With computerisation, we can send all this at one go instead of having to send it four times through four different transmitters.

The computer system that we have, thus, serves both as an editing system and a message switcher.

And because of this, there is a more efficient use of our teleprinter wire network. And because of computerisation, we were also able to use our existing teleprinter network to also distribute the BERNAMA foreign news without having to have a separate teleprinter network and still ensure speedy delivery.

Let me now give you a few details of the system which was supplied by IMOS of London. We chose this system since it is a proven news agency system used by most agencies including the Press Association of Britain, AP-Dow Jones, ANSA of Italy, NZPA, and AFE of Spain. In all, IMOS has supplied 55 systems to over a dozen news agencies.

We also opted for this system because it is designed to run without the need to have programmes and a technical department. We were provided with the software. We have trained three of our staff to manage the system and they are doing it quite well.

The system is fully duplicated for reliability. There are two systems which run simulataneously but only one system is active in the sense that only the active system is connected to our distribution network for transmission of copy to the subscribers.

The central computers are DEC PDP 11/44 with one megabyte (MB) capacity. It has a maximum of 128 input/output channels. We are at present using only 112 communication channels.

Any of these channels can be used for any purpose as a VDT channel, for in-house printers, for an outgoing news service or for an incoming reporting wire.
The disk memory is in two parts:

(a) **The System Disk** holds the Directory entries of all the news items in the system, all the tables describing how each channel is to function, the queue tables for each outgoing news wire, the traffic statistics and other internal tables. The storage capacity is 10 million characters or 10 MB.

(b) **The Text Memory** holds the text of all the current news items and this has a capacity of 28 MB or four million words. If necessary, this can be increased any time as the system is designed for modular expansion.

The video terminals are Delta Data terminals. It is a powerful computer in its own right. It carries out all the text processing. It has its own internal memory with a capacity of 21 kilobytes or about 3,500 words.

We have a total of 51 VDTs with five spares. We have provided enough terminals so that no one need to wait for a terminal to file copy.

**Editorial Operation**

All news stories entering the system are written into the Text Memory and a brief extract of each story--the first two or three lines--is also sent to an Index Printer located on each of the main editorial desks.

The chief sub-editors and copytasters will scan these Index Printers and select, one by one, the stories which are of interest to them. Using the video editing terminal, the editor will retrieve the story from the Text Memory and display the story on his screen.

If the story requires no further editing, he will direct the story electronically to the slot man who is responsible for checking the copy and for the transmission of the item to the outgoing news service.

If the story requires only minor editing, the chief sub or the copytaster will make the necessary alterations on his screen using the keyboard of his video terminal before sending the story to the slot man.

If the story requires extensive subbing or needs translation, the sub-editor will re-write or translate the story on his video terminal and will then direct the story to the slot man for inclusion in the news service.

Using the story reference number, which appears on the Index Printer, the slot man will call up each story from the Text
Memory to the screen of his video terminal. After he has checked it for style and content, he will assign a priority to the story and will address it to the appropriate outgoing news wires.

The story then passes automatically from the slot man's screen to the subscriber's teleprinter.

There is also a traffic clerk's desk which is equipped with a video terminal, a message printer and various other printers to monitor the general state of the system as a whole. This position is staffed by our former teleprinter operators who have been trained for this new job function.

The traffic clerk is responsible for dealing with any faults which may occur on incoming or outgoing lines. He has facilities to automatically open and close lines, to send continuous test messages for the benefit of the TELECOMS Department and to change message numbering sequences when necessary.

He also deals with all the requests from subscribers or bureaus for repetition of news items. He also assists editors in in-putting to the system any long news items which might be delivered to the news room by hand from outside sources.

Seven traffic clerks handle this desk on a 24-hour basis. The rest of the operators are now doing the work of copy typists on video terminals.

Right through the project, we had a journalist assigned as project editor to ensure that all BERNAMA's editorial requirements were met.

We also have maintenance companies to maintain the computers, terminals, printers and in-house wiring. At a later stage, especially as we gain experience, we may decide to take over the maintenance ourselves.

Our system has been programmed to receive copy on international formats like ANPA and IPTC at both five and eight levels—meaning that it can transmit news using the upper and lower cases.

We have provided many special channels in our computer system in line with our plans to have as many new services as possible and to facilitate filing copy. Some of these special channels are:

(a) Video news channel—we have this channel so that we can provide a news service to hotels and banks.

(b) Embassy channel—this will help carry news to Malaysian missions all over the world.
(c) KLCE channel--this channel will bring in the commodity prices from the Kuala Lumpur Commodity Exchange.

(d) Datel channel--this will allow us to send news to those who have computers or to enable our reporters to file copy into the system using portable computers.

To start many of these services, we are also upgrading our communications network from the present teleprinter circuit to voice grade circuits so that we can carry financial data services on a real time basis and other services at a faster pace.

When we used the manual system, our outgoing traffic was about 70,000 to 80,000 words a day. Now on a single service to East Malaysia, we send 100,000 words a day. We send 65,000 words on our foreign service, 40,000 words on our domestic wire and 40,000 words on our economic service. To the ASEAN news exchange, we move about 10,000 words daily.

We had a number of teething problems in the initial stage, the main one being the power supply. We have provided for a standby generator which activates in 15 to 60 second. However, if breakdowns take place often, it corrupts the programme which has then to be recopied. Recently, for some mysterious reason, we had nine breakdowns in a week. We are, therefore, installing an Uninterruptible Power Supply (UPS) system to ensure a stable and continuous power supply.

By and large, the system is working well and our staff have taken to it extremely well. Part of the success was due to a well-organised training programme. Reporters received four hours of formal instructions; sub-editors, eight hours and traffic clerks, ten hours. Ample self-practice sessions were also provided. They were all provided with a user manual to assist them in learning how to operate the video editing terminals. The manual also tells them how to communicate with the main computer and what facilities are available in it. We have also made available video cassettes on the use of the system. Most of the staff were able to use the terminal comfortably and confidently within a week.

We were also very fortunate that our journalists and teleprinter staff gave us full backing for the introduction of the new system. In many news agencies in the West, such projects had to be delayed or implemented only partially due to strong union opposition. But we had kept our staff informed of developments and took note of their constructive suggestions. Arising from these discussions, we provided for regular eye-tests, anti-glare screens and new furniture to avoid back strain. We encouraged both the union and staff to give us regular feedback on the use of video screens. Our editors and other senior editorial staff were actively involved in all stages of
the project, including the layout of the editorial floor and in the flow of copy and the editing commands in the new system.

Although the computers and terminals cost us M$1.7 million, the total cost came up to M$2.5 million. We had to provide for a false floor for the entire editorial floor, computer wiring, a mini-exchange, special airconditioning for the computer room and special fire fighting and completely new sets of tables and chairs.

Western news agencies which entered the age of technology 10 to 15 years ago are now reaping rich dividends. Reuters and AP are classic examples. Even domestic agencies, like the Australian Associated Press, are enjoying profitable operations. With the four months of experience behind us, we are now beginning to ask ourselves why we did not enter into this new technological era much earlier. We are also beginning to ask ourselves why we did not introduce more sophisticated facilities so that we can introduce a wider and a more specialised range of services that will enable us to bring in higher returns.

Our editorial computer has opened up exciting new possibilities which were simply not there before. A whole range of news services will be made possible without much difficulty. This, we hope, will result in new sources of revenue and the opening up of non-media sources as potential subscribers to BERNAMA's news services.

When we were planning BERNAMA's computerisation, we wanted to be cautious and so we took small steps forward. However, we are now emboldened and we want to enter more sophisticated fields such as the introduction of real-time financial reporting —where the big money is. We have teamed up with AP-Dow Jones Telerate to introduce international real-time financial data services into Malaysia. All the central site technical equipment are housed in BERNAMA and we handle all the marketing of this particular service.

We will also be introducing another real-time data/information retrieval service which is commodity-based by next year. This is Uniquote II, again under an arrangement in which BERNAMA will have complete control of marketing and technical operations in Malaysia. More important, we are also in the process of introducing a real-time Malaysian financial news service and a number of other specialised services. These, we hope, will generate enough revenues to enable BERNAMA to be self-sufficient. At present we are heavily subsidised by the government since the fees from our subscribers can meet only 17 percent of our budget.

Many national news agencies are suffering from a lack of funds and it is in their interest to look at the new developments around them. This is where this meeting can be of help. We should
organise more seminars and training courses on the new communications technologies that are now available. The sooner media organisations are exposed to these new ideas and the sooner they introduce them, the better for them.

In terms of training provided by mass media organisations, I would like to suggest that the curriculum should now include computer studies and communications technology.

Journalists will continue to need training to sharpen their skills. Training programmes in various fields of journalism for cadet and mid-career journalists would have to continue. There will also be a great demand for the specialist writers, especially in the various economic and financial fields. We at BERNAMA will continue to play an active part in sharing the little we know about the new communication technologies. It is for this reason that we can include a lecture or two on new communication technologies and the use of computers in all our regional courses. We will also be happy to receive staff from other news agencies for attachment with BERNAMA to study our computer system.