

Country Focus



Computerisation in the middle of the Pacific Ocean. Rupert Bladon gives a flavour of work of the National Audit Office of Kiribati

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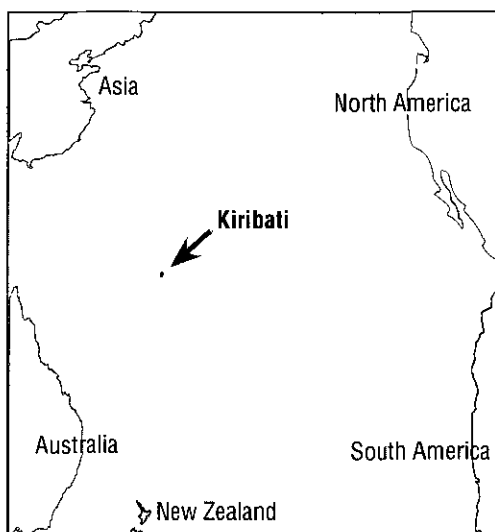


Rupert Bladon is the Principal Auditor - Training and Professional Development with the KNAO. His post is one of two funded by the British Overseas Development Organisation. He arrived in Kiribati in February 1993 after a short career in Local Government in the UK.

A brief national profile

Kiribati is just about as remote a country as you can get! Now an independent republic, Kiribati is principally made up of what were known as the Gilbert Islands, a former British colony in the Central Pacific, plus the Line and Phoenix islands. There are thirty-three islands in all, twenty of which are permanently inhabited. All but one are coral atolls meaning that the land area is small - some 886 square kilometers. The sea area, however, is vast - over 3 million square kilometers! The population is around 75 thousand, and the people are of Micronesian descent. Nearly half the population is on Tarawa, the capital island, and that results in problems associated with overcrowding.

Tarawa is in the middle of the Gilbert Islands, not far from where the dateline and the equator meet. Whereas the economy here in the capital is cash-based, in many of the outer islands it isn't, to greater or lesser degree. The country itself has few natural resources, but exports coconut and palm products and gains income from the selling of fishing licenses to foreign tuna fishing fleets. Beyond that the country receives a significant amount of foreign aid.



Computerisation in Kiribati

Computerisation is pretty well restricted to personal computers in Kiribati. There are no mainframe, mid-range or UNIX machines in Government, principally because operations are not large enough to warrant such technology. There are two mini computers in a concern part-owned by Government, the Bank of Kiribati.

Of the remaining computers in the country, nearly all are owned by government or government concerns.

The last few years has seen a significant amount of growth in computerisation in Kiribati. In January 1994 there were approximately 150 computers in the country: now there are more than 300 and the number is growing rapidly. Of these 300, approximately 200 are in ministries, 50 in statutory corporations, companies and utility boards and approximately 50 are in the private sector or being used by diplomatic missions and aid organisations.

The training needed to support these posts is handled at a tertiary educational establishment on Tarawa, the Tarawa Technical Institute. The computer training department here is supported by funds provided by the European Union, and a substantial network has recently been installed to allow large training groups to be accommodated.

Audit Office profile

The Kiribati National Audit Office (KNAO) has a permanent establishment of 44 staff. That may seem a lot to serve a population of 75 thousand but it has to be borne in mind that government activity extends into what in many other nations would be regarded as private sector concerns. What might elsewhere be in private hands is often at least part government owned in Kiribati. Examples are the Shipping Corporation, several importers, wholesalers and retailers, the only two

sizable hotels in the country, public utilities, oil importers and distributors, the only commercial Bank, and even a bakery!

So the Kiribati National Audit Office is more than just a Supreme Audit Institution - it is in effect the only substantial body of external auditors in the country.

Computerisation within the Audit Office

The nation-wide growth in computerisation is reflected within the Audit Office. When I first joined the KNAO early in 1993 the office was in possession of three computers, a laptop Everex computer for the use of one of the expatriate officers, and two desktops for general office use, a Gateway 386 25 megahertz, and an IBM PS/2 Model 30. Each desktop computer had its own dot matrix printer, and the laptop had a Canon Bubble jet.

At this time none of the computers was running Windows. All the software was running on DOS, the main packages used being Word and Lotus 1-2-3.

Shortly after my arrival the British Overseas Development Administration (ODA), who sponsor my post, funded the purchase of a Dell Notebook. This did run Windows, but at that stage most of the packages I used were also running in DOS, to ensure file compatibility should I need to share data with colleagues.

In an ensuing review of development for the office we identified that a network was needed. The potential gains were obvious. By being able to hang a number of workstations from a fileserver the office would be able to offer computer facilities for more members of staff. This seemed important, as to a certain degree only the office typists and the Auditor General's Personal Assistant were at that stage using the computers - our audit staff remained largely unfamiliar with PCs, which meant that their capacity for developing computer audit skills was understandably very limited. Furthermore, by having a network, staff would be able to access common information on the fileserver, and not be restricted to using the same workstation session after session.

As part of an on-going development project funded by the British ODA, a network was procured and installed in November 1995. This comprised, amongst other things:

- 1 Dell Optiplex 575/XMT fileserver
- 5 Dell Optiplex Workstations
- 1 Hewlett Packard 4 GB digital Tape back-up
- 1 Hewlett Packard IV+Laserjet printer
- 1 multi-media CD ROM drive

A further notebook computer was also purchased, and the network has been configured to allow the notebooks to be hooked up from points around the office. One of our existing computers, the Gateway, has also been installed as a workstation. So in all we have eight workstations connected to the network.

The network runs on Arisoft LANtastic software, which was a preferable solution over, say Novell, due to its simplicity. And Windows is now used, our everyday solution being Microsoft Office for Windows, the standard package throughout government, which provides us with Word (for word-processing) and Excel (for spreadsheets).

We have used the training resources at the Tarawa Technical Institute greatly over the last month or so. Those staff who had not used computers before have had four full days tuition there supplemented by extensive sessions on our own network, and it is hoped that many will gain the Royal Society of Arts Computer Literacy and Information Technology certificate (RSA CLAIT).

As far as specific audit tools are concerned, the KNAO is not as yet terribly adventurous. We do use Paton & Paton Flowcharting 4 software, and some of our monetary unit sampling is performed with the aid of a package developed by the US General Accounting Office and picked up by one of our staff who was on an international fellowship in Washington a few years ago.

But all in all it is fair to say that computer audit as such is in its infancy here. Part of the reason for this is that over the nation as a whole IT is used more as an office support mechanism than a means of generating key financial data. The Ministry of Finance does have a ledger system, but it is not much more than a glorified spreadsheet, and whilst a review of controls surrounding this system has been appropriate we are not at the stage where we need to extract large amounts of data for analysis, using tools such as IDEA. That's not to say, however, that such activity will never be appropriate, and we will, as auditors, have to keep pace with the rate of technological change. There are plans, for instance, to install a

new government payroll system within the next two years, and this will need extensive audit coverage.

A more immediate development with regard to IT and the KNAO concerns how computers might control and organise our work. Firstly, we are working on putting a computer based planning and monitoring system in place. This is another initiative that is part of the British funded development project. Secondly, we are hoping to standardise our job control sheets and other audit working papers by using computer software provided by the New South Wales Audit Office of Australia, an organisation with which we have forged very close links over the past few years.

Audit involvement in IT planning and control

Whilst I have indicated that, for a variety of reasons, the KNAO does not undertake much in the way of conventional computer audit - that is, audit of system and processing controls - there is one aspect of IT which the Office is involved in which helps guarantee that certain elements concerning planning and control throughout government are as they should be.

It is obviously essential that government plans its computer development. We must assure ourselves that computer acquisitions are needed (and not made for the sake of it), and that full consideration is given to considering alternatives. In fact, this process is even more important in developing economies such as Kiribati than in a more 'developed' economy. In-country expertise is limited (meaning that the skills needed for the analysis of IT development may not be present, or may be being diverted elsewhere), and yet, perhaps paradoxically, financial resources from aid donors to purchase IT systems are often plentiful. There is a great danger that countries such as Kiribati are bombarded with the paraphernalia of emerging technologies.

Faced with these problems the Government of Kiribati set up (with Cabinet approval) a body called the National Computer Committee (NCC). Headed by a senior civil servant, the committee seeks to reflect the broad spectrum of government computer users and potential computer users. The committee has been in existence nine years now, and as the awareness and extent of computerisation has changed, so too - and quite rightly - has the emphasis of the committee. Its first main function was to

issue Government Computer Standards - defining the make and model of approved equipment, from which users were not permitted to deviate. It also set out a list of Government approved suppliers; dealing with any other suppliers was not permitted. This may seem restrictive, but the committee needed to be sure that suppliers were not going to sell sub-standard equipment to a remote nation and then disappear into the night. Suppliers had to show some concern for supporting their products after selling them.

A major role of the NCC beyond the setting of these standards has been to advise on the computer aspects of any development project. I should make it clear, perhaps, that computers are not generally purchased out of recurring revenue, but are nearly always part of development projects, discussed by a Development Co-ordination Committee (a committee of senior civil servants who make sure that all development projects are consistent with the national five year development plan) before being referred to Cabinet for approval. After Cabinet approval, a project documentation is distributed amongst potential aid donors. NCC has been empowered by Cabinet to advise the Development Co-ordination Committee on any aspect of computerisation within development projects.

I feel that the NCC's role is vital. But it cannot remain static, and in the last two years it has undergone a certain amount of change. First of all, an important request of the committee has been granted. The committee identified the need for an expatriate officer to work as the country's Computer Information Officer. Such a person would convene the NCC, and assist in giving advice to all computer users in Kiribati. This advice ranges from help with the specification of computer systems, to liaising with software and hardware suppliers and aid donors. A Computer Information Officer has now been in post for nearly two years, funded by the British organisation Voluntary Service Overseas. This has been a resounding success, as it has brought a focus to computing issues, and has successfully steered the country through a dramatic period of technological change. But as far as the NCC itself is concerned, an important development that has been undertaken is one of emphasis. In one sense its role has been strengthened - the review of project documents has been formalised, quashing the suspicion that the NCC was not always party to computer issues going through the development process. In another sense the NCC has relaxed its grip, as the Government

Computer Standards have been revised and now simply specify minimum performance requirements for hardware, and advises rather than dictates makes and models. This is fully in line with the role that the Computer Information Officer and her staff are fulfilling - one of advice and constructive help rather than restrictive regulation.

Some readers may think that I have spent too much time discussing the NCC, but I do think that we have an interesting example of the way in which a developing nation tackles the challenges of computerisation. The Audit Office has a place on the NCC, and I like to think we are one of its more active members. This is not, of course, a role that every audit office would feel comfortable with. Whilst participation guarantees first-hand that planning mechanisms are working, and also serving as a good source of information, it could also be argued that the KNAO sacrifices its independence by becoming part of the planning process itself. This was hotly debated at the SPASAI (South Pacific Association of Supreme Audit Institutions) Congress in Tuvalu in 1994, where Kiribati presented a paper on the NCC and the audit office's involvement. I feel that as expertise is at a premium in the country, and that this office can make a positive contribution to offering advice in the planning process by our involvement (which is not to say we are responsible for the development decisions themselves), then the independence argument has to take second place. But this

will vary from country to country, and depends on many things, no least the personalities involved. At any rate, the resulting Tuvalu Accord agreed that auditors must - at the very least - satisfy themselves that planning processes relating to IT prevail within their governments.

Future prospects

There is little reason to believe that the rate of computerisation will slow down in Kiribati. It is vital, therefore, that the Audit Office keeps up with technological change.

As an auditor, my feeling is that the principal challenge ahead involves the fact that IT will be used increasingly to produce financial information. As the KNAO's training officer my aim in this area can be put simply: I want our staff to be confident and competent enough not to be 'freeze' if they see a computer in an auditee's office, but instead to be able to ask intelligent questions about the use of the system, and its controls. Unlike some other countries, we have neither the need nor the resources to produce full-blown computer audit specialists. But we have the potential to produce computer literate auditors who are capable of viewing computers as substitutes for manual systems, of which one nevertheless asks the same sort of questions. The training needed to bring this set of affairs about is now being planned, and I am confident of our future.



Working in the Kiribati Audit Office