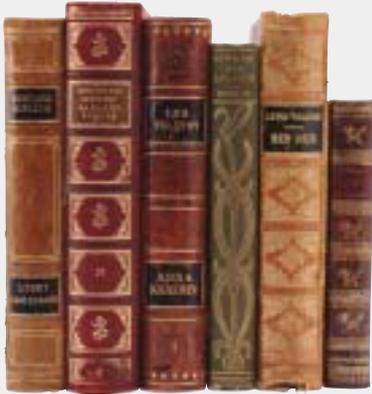


IN TOUCH

THE STATE LIBRARY OF VICTORIA IMPROVED THEIR CONTACT CENTRE MANAGEMENT AND REDUCED COSTS WITH CISCO IP TELEPHONY



BUILT AT THE INSTIGATION OF SIR REDMOND BARRY AND GOVERNOR CHARLES LA TROBE IN 1853, THE STATE LIBRARY OF VICTORIA IS ONE OF AUSTRALIA'S FIRST PUBLIC LIBRARIES.

The Library was formally opened in early 1856, housing 3800 books personally chosen by Redmond Barry.

Since that time, the library has continually expanded and acquired new buildings to house its growing collection, which now includes more than 1.6 million books, maps, manuscripts, pictures and newspapers. Today the Library's collection is housed

in over 16 buildings, a number of which are heritage listed, together with offsite storage facilities serving some 1.2 million onsite visitors and over 1 million online visitors per year.

The library is managed and administered by a staff of 391 who are located across all of the library buildings and locations.

THE CHALLENGE

IN 1999 WHEN THE STATE LIBRARY OF VICTORIA WAS CONTINUING TO UNDERGO A MAJOR BUILDING REDEVELOPMENT, IAN PATTERSON, MANAGER TECHNOLOGY SERVICES DIVISION, WAS TASKED WITH UPDATING OR REPLACING THEIR AGEING, AND SOMEWHAT UNRELIABLE, PABX SYSTEM IN ORDER TO STREAMLINE COMMUNICATIONS BETWEEN STAFF AND TO PROVIDE A CONSISTENT SERVICE FOR THE MANY CALLERS TO THE LIBRARY.

Ian Patterson explains: "At the time, there were more than 9 different handset types in use each with their unique, but not necessarily complementary range of functions and options. This made staff training and consistency across the organisation impossible. There were 81 answering machines in use with no uniformity of messaging and none with today's more sophisticated functions.

"Our annual handset, PABX and management costs were \$108,000; we also faced additional costs for any required service or support not covered by the management and rental agreement.

Patterson explains: "Relocating a member of staff was a major exercise. It meant calling our service provider to re-route the extension and possibly coordinating the installation of new phone cabling – all of which could take days. If we had a complete system failure, would have to wait until the engineer was available to repair the fault."

One of the key outcomes that Ian Patterson was seeking, in addition to cost savings and greater efficiencies, was the ability to easily access statistical data on phone usage, particularly with regard to outside callers.

"We were really concerned about our phone call drop out rate. It's important for the Library to offer its customers a faultless line of communication. It's also important that customers get answered promptly and routed to the person they want to talk to in the most efficient manner. We had no way of measuring the percentage of callers that gave up trying to ring the Library. And with our old PABX system, we couldn't install a call management system, which would have improved our ability to monitor and enhance our telecommunications services."



THIS IS THE POWER OF THE NETWORK. NOW.

Ian Patterson spent several months investigating a range of solutions to present to the State Library of Victoria's CEO and State Librarian, Frances Awcock, The Library Board of Victoria and the internal stakeholders of the State Library of Victoria.

"I looked at the existing and future telephony technologies. I also took into account the fact that efficiencies would be gained by leveraging the new data cabling that was being installed as a result of the building redevelopment.

"I approached a range of service providers and vendors and asked for both IP telephony and PABX proposals and costings. As a result, I produced a business rationale, financial costing and a payment capability analysis for five alternative solutions over a five-, seven- and ten-year period."

"These included: the modification of the existing system, a brand new PABX solution, an IP telephony solution, a hybrid IP telephony/PABX solution and persevering with the existing technology."

One of the solutions presented was a Cisco IP Telephony solution. Ian Patterson favoured the IP telephony solution but wanted to understand where the potential points of failure were and how to overcome them.

A series of diagrams, blueprints and datasheets explaining the concepts and the solutions behind IP telephony were prepared and compared with a standard PABX.

It soon became apparent that the Cisco IP Telephony solution presented the strongest business case.

Patterson explains: "Not only did the Cisco IP Telephony solution work out more cost effective than the equivalent PABX system over a five-year period, it also offered a great deal more functionality and potential. In addition, because IP telephony uses voice over Internet Protocol (VoIP), we could leverage the existing data cabling on our PC LAN, and save \$30,000 on the supply and installation costs for new phone cabling, required for a PABX solution in the building redevelopment."

After a successful demonstration of the viability of Cisco's IP Telephony solution to The Library Board of Victoria, The State Library of Victoria was given the green light to lease the Cisco IP Telephony solution over a two-year period with the option to buy at the end of the lease to help plan and manage rollout costs within their budget.

THE SOLUTION

CISCO WORKED CLOSELY WITH THEIR CERTIFIED SYSTEM INTEGRATION PARTNER DURING THE IMPLEMENTATION, AS IT WAS ONE OF THE FIRST VICTORIAN GOVERNMENT DEPARTMENTS TO EXPRESS AN INTEREST IN AN IP TELEPHONY SOLUTION.

Cisco's Architecture for Voice, Video and Integrated Data (AVVID) provided a fully functional IP telephony network. The roll out included over 50 Cisco 7960 IP handsets and 280 Cisco 7910 handsets attached to 15 Cisco inline powered switches located throughout the buildings. These are connected to two fully redundant Cisco CallManagers for load sharing. If one of the CallManagers has a problem, the remaining CallManager automatically carries the load and continues to route calls around the buildings.

Both of the CallManagers and the Cisco inline powered switches are connected to Uninterruptible Power Supplies so if there is a power failure, the phone system remains operational. There's also

a generator for the computer room, which provides a secondary back-up power supply.

The IP telephony system links with Performance Solutions Call Manager software that includes features such as unified messaging, IVR and voicemail that integrates with the Lotus Notes email system. Two Cisco PSTN 3640 gateway routers complete the system architecture and provide the interface between the IP telephony and the public telephone network.

The State Library of Victoria has around 50 lines open on two Telstra OnRamp 30's and uses approximately 500 of 800 reserved extensions.

The Library utilises Performance Solutions Limited (PSL) Vision Manager product for three call centres operating throughout the Library. This software solution replaced operator consuls and provides a more efficient and effective way of managing the 100,000 plus incoming calls received by the Library each year. The software also has a large number of report templates that provide access to quick and effective information on usage.

Staff have quickly utilised the many features of the system. Phones and the phone number associated with it now move with the positions. Staff are responsible for the moves, which do not require programming of a PABX. Voicemail is being managed from the computer screen and 'hunt' groups and 'call pickup' groups are set up by staff. Management reports are generated on request and these reports have provided valuable information resulting in changes being made to the system to improve services to customers.

In order to assist with the rapid uptake of the new technology, Patterson appointed one member of staff who provides first level support for the system and trains staff on how to utilise the phones, operate their voicemail and provide basic troubleshooting advice and system documentation.

“THE TOTAL COST OF OWNERSHIP INCLUDING INTERNAL MANAGEMENT OF THE SYSTEM IS FAR CHEAPER THAN THE PREVIOUS SYSTEM”

IAN PATTERSON, MANAGER TECHNOLOGY SERVICES DIVISION, STATE LIBRARY OF VICTORIA

Ian Patterson comments: “This has resulted in far greater uptake on features of the system, quicker response to any problems or additional requirements that may arise and better service to customers.”



THE RESULT

THE IP TELEPHONY SOLUTION HAS BEEN IN PLACE SINCE JANUARY 2001 AND IN THAT TIME IT HAS PROVED TO BE A STABLE, EFFECTIVE SOLUTION.

Ian Patterson comments: “The IP telephony solution is simple to maintain and administer. With minimal training my team has been able to handle over 90 per cent of any technical issues. We also have the peace of mind of knowing that if we do need to resolve an issue that we do not have expertise in, we have the security of a maintenance contract with a Certified Cisco Partner to support not only the phone system, but the entire network.

“The Total Cost of Ownership including internal management of the system is far cheaper than the previous system.”

“There are a number of key benefits to the Cisco IP Telephony solution which enticed us to invest in this solution including lower maintenance costs, reduced expenditure to the State Library of Victoria to implement over a projected five years and beyond.

“IP telephony offers much greater functionality and it's far easier to use and maintain. And it's really easy to add features and modify the system simply and cost effectively. It's also a highly scalable solution and it provides the Library with the ability to aggregate this service with other organisations in the future.”

Importantly the Cisco solution will enable the State Library to connect all other libraries across Victoria by utilising the Cisco centralised CallManager Cluster to connect up to 2,500 extensions. As a result the Cisco solution will assist in additional call cost reductions across the State, the opportunity to maximise virtual call centre/help desk bureau solutions and other savings in support, moves, changes and maintenance.

THE PARTNERSHIPS

IAN PATTERSON KNEW THAT THE SELECTION OF A RELIABLE, CISCO CERTIFIED PARTNER WAS KEY TO THE SUCCESSFUL IMPLEMENTATION OF THE IP TELEPHONY SOLUTION.

He comments: "Right from the beginning, we were impressed by the professionalism and expertise of Cisco's Certified Partner. Working with the Cisco Manager for Victorian Government, David McLeod, the approach was always professional and a true win/win partnership was formed with the State Library.

"During the implementation phase, they would send people when required, often out of business hours and at short notice. The project was completed on budget and on time, which is reasonably rare for many IT projects. Every challenge that we came up against was professionally managed."

Cisco Account Manager, David McLeod, comments: "One of the essential ingredients in the success of this project was the ability of the

State Library to seriously look at their needs for today and the future and consider how they would manage the dramatic changes in the telecommunications environment. Ian Patterson analysed all the options and then narrowed down on who could really deliver – Cisco. In partnership with Cisco and their Certified Partner, he was able to manage an extremely smooth IT & T role out of Cisco – IP Telephony."

"The State Library can now savour the benefits of the decision and look at delivering on new cost-effective applications across the whole state of Victoria by maximising the VICNET network to provide connectivity and applications using Cisco AVVID, regardless of location."



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