

**Community Technology: giving public library users access to specialist hardware and software**

**ABSTRACT**

Casey-Cardinia Library Corporation (CCLC), in its 2013 Library Plan, outlined a Community Technology Access strategy, which aimed to provide library users with access to specialist hardware and software and provide trained staff to assist in its use.

This paper will outline the reasons behind the creation of this particular strategy and the means by which the relevant technology was chosen, funded, purchased and implemented. This will include the administration of an online survey, which sought both staff and library users input into the technology the library would select.

It will report on the survey results, describe how the technology was delivered to branches, made available to users and how CCLC planned to train staff in the use of the technology and in supporting library users' engagement with it.

It will also report on the impact of new technology including increased assistance required by library users.

The paper will conclude with the progress of CCLC's roll-out and outline potential CCLC's plan moving forward with community technology.

## Introduction

Casey-Cardinia Library Corporation (CCLC) is a public library service in the outer south-eastern suburbs of Melbourne, serving a population of approximately 340,000, through seven branches and a mobile library and administered by a centralised headquarters.

Following the Council elections at the end of 2012, all public library services in Victoria were legally required to produce a new library plan. CCLC's new library plan included several new initiatives including Community Technology Access, which aimed to "Provide increased community access to specialist high quality computer technology, and specialist staff support for this equipment, service and software." (Casey-Cardinia Library Corporation 2013)

This paper will explore the outworking of the Community Technology Access Strategic Direction, but will also outline related areas that impact on this.

## Developing a new plan

The new Library Plan had to meet not only library user's needs of today, but also had to look to the future. To begin the development of the new plan a meeting was held with all Senior Managers, Department Heads, Branch Managers and Team Leaders, to discover:

- the trends that were being seen in the branches and online, regarding library use and user requirements
- discuss technology trends that were being seen both in other libraries and in the wider community
- staff ideas on what CCLC's libraries could and should be doing to meet those needs.

The trends that were identified out of these discussions were supported by the findings that came out of the Victorian Public Libraries 2030 Strategic Framework. (State Library of Victoria 2013), which recommended that libraries look to be a combination of both community and creative facilities.

Out of this meeting, eight Key Strategic Directions were set.

- Space  
*The provision of functional attractive spaces within the library branches to provide increased study, interaction and flexible technology areas.*
- Community Technology Access  
*Provide increased community access to specialist high quality computer technology, and specialist staff support for this equipment, service and software.*
- Staff Professional Development  
*Implement a program of structured staff training and instruction in technical and internet services to support library users.*
- Collections

*Undertake a staged re-allocation of the library materials budget, balancing between traditional and new e-resources, and improving downloadable and remote services to match local community needs.*

- Outreach Services

*Develop significantly improved outreach services to key strategic sections of the community including: socially isolated or housebound; retirement villages and nursing homes.*

- Community Events and Programs

*Provide additional community events and activities using external grant funding sponsorships and partnerships as a major funding source, over and above the established range of programs.*

- Lifelong Learning

*Develop the levels of educational assistance, (such as homework help, career support and informal lifelong learning) to members of the community in Casey-Cardinia at all levels of education.*

- Tomorrow's Library

*Participate in the Ministerial Advisory Council 'Tomorrow's Library' review of Victorian Public Libraries and contribute to the debate on the funding and sustainability of Victorian Public Libraries.*

## **Community Technology Access Strategic Direction**

The full strategic direction was:

Provide increased community access to specialist high quality computer technology, and specialist staff support for this equipment, service and software.

### Key Strategic Activity

#### Short Term

- Identify specific equipment and software to be provided.
- Identify branches for location of various new computer equipment and software.
- Source computer equipment and software and install as required.
- Develop equipment and software support routines for staff and public.
- Develop budget and capital replacement requirements.

#### Medium Term

- Introduce additional iMac and other specialist computers and software at library branches.
- Introduce tablets, e-book readers and other specialist technology for use in library branches.

#### Indicators

- Increased numbers of computers/items available for use.
- Increased bookings and/or use data for technology items.
- Customer satisfaction with equipment provided and support from staff.

Although each of the Library Plan's Strategic Directions is distinctly separate, there is much overlap between them. Of particular relation to Community Technology Access are the directions of:

- Staff Professional Development: “a program of structured staff training and instruction in technical and internet services to support library”
- Lifelong Learning: “Develop the levels of educational assistance, (such as homework help, career support and informal lifelong learning) to members of the community in Casey-Cardinia at all levels of education”.

### **Choosing technologies**

CCLC has had public internet PCs and a library website since 1996, so providing technology to our community is far from new. Since 1996, new technology introduced into the branches included:

- Office software on all and Genealogy Resources on selected public internet PCs.
- Games consoles, comprising a mix of X-box, PlayStation, Wii and Wii U consoles, with at least one console at each branch.
- iMacs with creative software, including Adobe Creative Suite at three branches.

However, the intent of this direction was to broaden the range of technology and support available for library users. To enable them to:

- create
- explore online resources
- “try before you buy”
- learn about newer technologies

in the supportive and trusted environment of the library.

The first step was to determine what CCLC users wanted. Driven by rapid changes in IT and development of technological products and supported from staff and library users feedback received over recent years, we compiled a survey aimed at discovering which of a number of options had the support of both staff and users.

It was decided to provide our users with a select set of options, so as to get focused results and so as not to raise expectations beyond what the library could provide.

The options chosen for software were:

- Computer aided design (CAD) software – with a focus on house design and the ability to do a 3D walk through
- Skype – for communications, with the option of borrowing a set of headphones with a microphone in the headset
- iTunes – for downloading content to transfer to the users device
- Typing Tutorial – to teach people how to touch type
- Acrobat – the standard version to enable users to create and edit PDF
- Resume writing – tools to assist in job seeking
- Simulator – either driving or flying, to give users experience of this form of computer use

- Statistical analysis software – for small businesses or other users to be able to get more meaningful data out of their statistics

The options chosen for hardware were:

- Stop motion facilities – creative options for users
- Device charging – more options for power for users mobile devices
- 3D printer – to enable users to explore this new technology
- A1 printer – giving users access to larger format, particularly in conjunction with the CAD software and being able to print house plans
- Touch table – another option for exploring technology as well as library resources
- Simulator – to go with the 3D software
- Gaming PC – high end machine for online gaming

The survey was run first for staff, to garner their feedback on new technologies and also to test the survey. The survey form was administered online and library staff were sent an email inviting them to participate. This survey was open for four weeks in January and February 2014 and resulted in 26 completed surveys being received.

The completed staff surveys confirmed the validity of the questions, so the survey was then made available to library users, via the library website and catalogue. This survey also ran for four weeks, in March and April 2014, with 29 completed surveys received.

The results were similar for both staff and library users and are summarised in combination below.

Software: out of a potential 55 responses

<i>CAD</i>	<i>Skype</i>	<i>iTunes</i>	<i>Typing</i>	<i>Acrobat</i>	<i>Resume</i>	<i>Simulator</i>	<i>Statistics</i>
18	29	22	19	35	26	14	7

Hardware: out of a potential 55 responses

<i>Stop motion</i>	<i>Device charging</i>	<i>3D Printer</i>	<i>A1 Printer</i>	<i>Touch table</i>	<i>Simulator</i>	<i>Gaming PC</i>
9	39	18	32	15	16	11

Once the results were in, decisions had to be made on choosing the technologies. In light of these survey results, indicative quotes were obtained, to determine how much of this could be done with the Community Technology Access budget for this financial year. In the end, financial restrictions did not play as large a part as expected in the decisions made. CCLC opted to go with:

Software:

- CAD and Statistical software to be installed on two high specification PCs and to be made available at two different branches
- iTunes to be installed on all public PCs. The concern of iTunes syncing would be managed by turning this feature off in the software on CCLC's PCs.

- Skype to be installed on all public PCs in the branches and several sets of headphones with microphones to be made available for borrowing at each branch. The concern about noise levels with the use of Skype would be managed on a case-by-case basis, as are noise issues at present.
- An online Typing Tutorial package, available from all public PCs and remotely to all library members.
- Adobe Professional to be installed on all public PCs in the branches, enabling users to create and edit PDFs
- A 3D Simulator would be reviewed again in future, High cost and low support in the survey were the main reasons for this being deferred.

#### Hardware:

- Mobile device chargers were deferred in favour of a large number of extra power points being installed in each of the branches. It was determined that the price would be similar to purchasing such chargers and would meet a wider range of charging needs.
- 3D printers were also deferred. Although they are exciting and innovative and had good support in the survey, it was determined that as the technology stands at present, CCLC did not have the staff to be able to support what is a time/effort intensive process.
- An A1 Printer would be purchased to be installed at our Cranbourne branch, which is co-located with CCLC's HQ. We would then investigate means by which library users could print to it from other branches and their print out(s) sent to that branch for collection.
- Two touch tables to be purchased and located at two of the larger branches, to both showcase the technology and CCLC's online resources, as well as being available for use in presentations and seminars.
- The hardware simulator, gaming PC and stop motion facilities all had lower support so it was decided not to follow through with them at this stage.

In the wake of the surveys, we were also made aware of an online resource, new to Australian libraries, called Treehouse. [Treehouse, 2014] *"Treehouse is an online interactive education platform that teaches students how to make websites or mobile applications using programming languages such as HTML, CSS, Java, PHP, Objective-C, JavaScript and Ruby among others. ... The site uses short videos, interactive code challenges, quizzes and badges located on a user's profile to teach students."* (Wikipedia 2014) Management could see real value in this resource for our community so it was decided that CCLC would subscribe to this resource out of the Community Technology budget, for the 2014-15 financial year.

Besides questions about library technology, users were also able to comment on the survey (optional). Interestingly, quite a few comments suggested the library obtain facilities that we already have on offer. These included:

- Adobe Creative Suite, which we have installed on our iMac computers,
- USB sticks for sale – which have been available to purchase for many years
- Web cams – which are built in to our existing PCs
- Ancestry (genealogy database) available at all branches (which it is)
- Computer tutorials – which is one of the subscription online resources we have available
- Computers and printers for public use – a mainstay in all our branches.

Interestingly also requested in the comments were:

- MYOB for study purposes
- Remote access to Ancestry (not possible due to licensing restrictions)
- Listening facilities for music
- Large format scanning (bigger than A3)
- Laptops to borrow and take home
- Slide convertor
- Stationery table – with scissors, stapler, hole punch, trimmers, binding and laminating facilities.

As with all public suggestions, these comments will be considered and acted on as appropriate.

### **Obtaining the technology**

Once the decisions had been made, due diligence was required so further quotes had to be obtained. This required looking at alternative options and different suppliers, in order to get both the required hardware and software and at the best price possible for CCLC's requirements.

With regards to this project, as of May 2014, both iMacs and selected mobile devices were available for use in the branches. The iMacs had been rolled out in November 2012 at two branches and one moved to a third branch in April 2014. The following mobile devices were made available for “use in the library” at all branches in the latter half of 2013, with each branch having:

- an iPad
- two Samsung Galaxy Tabs
- a Kobo e-reader

As CCLC wanted to encourage exploration and use, apps for library subscribed products were installed on the iPads and Galaxy Tabs, eg. Borrowbox (Bolinda 2014) and Axis Reader (Baker & Taylor 2014). This gave them double purpose as both a useable technology for library users and a demonstration tool for library resources. The Kobos had several e-books downloaded to them from Project Gutenberg to enable users to explore the reading experience on such a device.

The purchase and installation of the rest of the chosen technology was still ongoing, although the following had been purchased:

- △ CAD and Statistical software, which will be installed on two specialist PCs
- △ Headphones with microphones for the branches to lend for borrowers to use with Skype on CCLC's public PCs.

### **Impact on Staff**

Even without this new technology being introduced into our libraries, requests for assistance with technology had already increased substantially. A distinct jump in requests was first noticed with the introduction of free Wi-Fi at our branches, then more recently with the growth in use of mobile devices such as smart phones and tablets. This has then been further enhanced with the library introducing e-books in July 2013, as library users brought their new devices to the library to learn how to download the new books to them.

The roll-out of this new technology has had a range of impacts on staff. Some staff, who are already familiar with it, have taken to it enthusiastically. However, some staff are struggling with the new technology and finding time to learn how to use it. CCLC plans to help support staff with the changes this is bringing about by providing:

- Training to familiarise them with this new equipment and software; and documentation to help support their own exploration. This will be further enhanced by more targeted training for staff who do not have regular access to this technology, followed up by regular tasks to be completed on them thus reinforcing their knowledge and skills
- Management processes in place – each branch has fully documented and understood procedures for staff to follow on the lending and access procedures for use with CCLC's mobile devices, as well as brief instructions on their use.

Staff training is ongoing and so far has included:

- An overview of use of the secure trolleys and the procedures to use for lending the mobile devices and booking the iMacs
- For selected staff, training at the Apple Store in how to use the key software packages of iMovie, iPhoto and Garageband
- How to download e-books from the library's two suppliers, using computers, e-readers and mobile devices.

Future training planned includes:

- More staff to complete Apple Store training
- Staff to be trained in using mobile devices
- Selected staff to be trained in the upkeep of mobile devices.
- Other training as requested by staff and/or recommended by managers

Upkeep of so many devices at so many locations is a challenge, but procedures are being developed to make this task easier and able to be handled by branch staff. CCLC is also looking at options to automate this process, through the use of a third party product.

Staff that are familiar and comfortable with the technology have had more opportunity to share their expertise. Library users can “Book a Librarian” to learn more about this new library technology or their own devices. These short, one on one sessions have given staff a chance to teach and share their knowledge with mainly older users, for whom the technology is daunting. This further entrenches staff knowledge and gives CCLC an insight into how else the library can help users, particularly in the area of technology.

### **Library user response**

There has been a lot of support for the library's provision of the new technology already available and a lot of enthusiasm for the equipment and software to come. Those who have engaged with the devices already available in the branches have ranged from parents using the devices whilst their children are engaged in study, use of the Internet or CCLC's gaming consoles to students and those people wanting to “try before they buy”.



CCLC's library users have very enthusiastically engaged with Book a Librarian sessions as well, with the number of sessions run having risen dramatically in the last year. A growing percentage of those sessions are now focused on helping library users to use their mobile devices, mainly iPads, tablets and to lesser extent e-book readers. The focus of these sessions is often not just on use of the devices, but on how to use them to access the library's e-book collections.

## **Promotion**

Promotion of the new various formats has been mainly through in-house publicity, including posters, flyers and displays, but also through online promotion on our website and social media presences and in the library's monthly newsletter.

Information has also been emailed to local secondary schools for inclusion in their newsletters. In May, CCLC did a mail-out of posters and flyers to local community centres, tertiary institutions and specialist music facilities, to publicise the iPads. As branches are already starting to see students make use of these facilities, it will be interesting to see if this publicity grows the use of CCLC's other technology.

As with many library services however, one of the best promotion tools has been library staff and word of mouth. Either library staff hear or see something that prompts them to offer the use of the technology, or a library user sees or hears from another about this. Word of mouth continues to be a valuable promotional tool, even with technology.

## **Future**

As this initiative is a long term proposal, a Community Technology Access Plan has been created in support of it. The Plan outlines:

- CCLC's recent technology acquisitions for the public
- Proposed expenditure for the coming financial year
- The process of allocating technology to branches
- Procedures for purchase and installation
- Support routines
- Capital replacement
- Staffing
- Evaluation

It is still too early in the process to have completed any level of evaluation, other than anecdotal feedback received from staff on its value. However, once all of the initiatives from the first year of the plan have been implemented and have had time to be 'bedded down' CCLC will undertake a survey of library users to more formally obtain feedback.

In the meantime, funds from the 2014-15 budget have been allocated for Community Technology Access. These funds will be spent according to the updated Library Plan 2014-2017. The short term goals outlined under Community Technology Access therein are:

- Investigate options for community technology devices for 'in-house' on Cardinia Mobile Library
- Investigate installing a simulator at one of the branches
- Investigate "class sets" of tablets for user training in the branches

- Investigate options for touch tables for children, for in-house use in selected branches
- Keep up-to-date with developments in technology and for potential library use of same

Although the project is still very young and its full potential is yet to be seen, CCLC considers it to be a success. Factors determining this include:

- More up skilled staff
- Improved user training
- Increased access to CCLC's online resources

It has also raised the library's profile throughout the community, to the point where CCLC is being recognised as a place where technology is available and understood and where people from the community can use and learn about it.

As a result and for the foreseeable future, CCLC will continue to have a Community Technology Access focus and ensure it continues to be enhanced by both direct funding and in the development of trained staff to support it.

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