Abstract:
Kete Horowhenua is a community built digital library of arts, cultural and heritage resources. It aims to get the private collections, memories and knowledge of our community sitting alongside our public collections. Many thousands of hours of labour have been contributed to the project by our community, resulting in fully keyword searchable digital images, audio and video clips, documents, comments and web links. In late 2007 Kete Horowhenua won the 2007 3M Award for Innovation in New Zealand Libraries, and a Special Mention for North America and Oceania in the category e-inclusion at the 2007 World Summit Awards in Venice.
Introduction

7pm one Thursday night in Levin library:

**Librarian:** Sir ……. The library is closed sorry.
**Elderly gentleman:** I’ve come to give yer a hand.
**Librarian:** Oh great, on our Kete project?
**Elderly gentleman:** Yep – thought I should.

(Move to a computer)

**Elderly gentleman:** So what’s this then?
**Librarian:** It’s a computer.
**Elderly gentleman:** And this thing – how does that work?
**Librarian:** It’s called a mouse. It helps you use the computer; it controls this cursor thing; see the arrow? When it changes to a hand, you can click on something.

(Librarian leaves Elderly gentleman to get acquainted with computer)

Some minutes later...

**Elderly gentleman:** I want to make videos of old tractors and stick them on Kete. It’s all learning, aye … can’t be that hard …. I’m a builder.

........

An hour and a half after entering the library that Thursday night, Charlie was 'cataloguing' photographs taken at the 2007 API (Agriculture Produce and Industry)show, of vintage farm machinery; supplying names of people and equipment, explaining the significance of the tests and demonstrations ….. on the live Kete site.

Charlie is the human face of a project we have embarked upon in Horowhenua, and demonstrates in a nutshell what we have achieved in terms of engaging our community; our people come to help, they work alongside us, they bring us information and knowledge we don’t have, are very proud of our project and are fabulous ambassadors for the Library.

As a library we have had to change the way we connect with our community, forging new relationships and working in a collaborative manner with community groups so that we all achieve more and so that the library can remain relevant in an increasingly digital world.

Setting the Scene

Horowhenua Library Trust is a registered charitable trust established by the Horowhenua District Council in 1996. The six Trustees are movers and shakers from the community who apply for the position and are appointed by Council for a minimum term of three years. They are not Councillors but they are library lovers.
They usually include a mix of business people, professionals and citizens with relevant skills or experience.

The Trust receives 85% of its funding from Council and raises the remaining 15% from user charges, grants and fundraising projects.

While the Trust is a Council Controlled Organisation in terms of reporting, it is largely self-determining within the generous confines of its Trust Deed. Being outside the multi-layered government bureaucracy, the Trust is agile in its decision making. A result of their innovative approach to solving problems was the development of the award winning Koha, the world's first open source library management system, back in 2000. This product is now in use on every continent around the world and has been translated into many languages. Evergreen is a development branch of Koha.

Horowhenua District Libraries serves a population of 30,000 of which approximately 18,000 are in the urban boundaries of Levin. Levin Library is the central library of the system, servicing 2 smaller branch libraries. The Trust employs 14 FTEs (full time equivalent staff) and many volunteers who total about 3 FTEs.

Horowhenua region is about 1.5 hours north of Wellington. The mild climate and rich soils make market gardening, horticulture and farming the mainstays of the economy. Manufacturing, food processing, construction and service industries are also important contributors. The population of the area has remained reasonably static for several decades but is currently experiencing steady growth, which is expected to continue over the next 10 years.

Our District has higher proportions of retired and young people compared with the rest of New Zealand and is generally poorer. The people are predominantly European with about 22% Maori, 3% Asian and 3% Pacific Island. Most students leave the District for tertiary education and employment opportunities.

**The Problem**

Our Community had a problem.

The Library Trust has long worked closely with the local historical societies; we are of the mind that our role is to support the sector – not compete. We were keenly aware that these groups were struggling. With little professional expertise, little money and few members, it was a challenge trying to balance the conflicting goals of enabling access to the District’s resources while preserving and protecting them for future generations.

Our District has many small, specialised local museum and gallery-like organisations – and some not so small. Situated near our northern boundary, MAVTECH is the largest collection of audio and video technology in the southern hemisphere. Thousands and thousands of items – and none of it even catalogued! They wanted to do it but didn’t know where to start or even how.
As a trusted and known organisation in our community, trust earned through twenty years of service by individual library staff on various committees, the Library was looked to for guidance. Don’t ignore that point. For three decades the library has always had a staff member on the committee of the local historical society and helped many other groups whenever we could. This involves voluntary work on weekends and after hours, time given by individual library staff because they are committed to the Society – not because they are paid to do it. This is how trusted relationships are formed in our community.

The Library was asked by three different organisations, in as many months, to formulate a way forward for the heritage sector that would maximize precious resources: space, money, expertise and especially people. Our community is small and has to work together.

The local Council was aware of the problems too. In 2004 the Library Trust carried out an audit of Arts, Culture and Heritage resources for Horowhenua District Council, to assess the extent of the resources currently held in the District and the long-term 'safety' of these resources for future generations. The findings were not surprising:

- There is a large amount of material in private hands.
- About half may be given to public collections – but half never will.
- Most of it is available for loan or copying.
- Lots of information is in people’s heads.
- Everyone knew someone else with more material and knowledge.
- People really do care about arts, cultural and heritage resources.
- Physical space is a real issue.

A major concern was the lack of access to arts, cultural and heritage information; Levin has no museum, archive, art gallery or public exhibition space.

The Library Trust then sat down and talked with a number of focus groups to clarify and confirm the problems we thought we had identified and to envisage ideal solutions for each sector: historians, genealogists, artists, students, researchers, librarians and council staff. We knew we could not solve all the problems but felt sure we could solve some. We needed to work out which problems to address and come up with an achievable solution.

We defined the achievable:

- To get public collections accessible by getting them online.
- To get private collections online too.
- To get the stories out of people’s heads.
- To include both historical and contemporary material.
- To create a ‘virtual’ exhibition space for artists and craftspeople.
- To inspire a workforce of volunteers.
The Solution: Kete Horowhenua

The solution was to build a community-built digital library of arts, culture and heritage resources: images, video, audio, documents, web-links, encyclopedia-like articles and discussion threads, with related material clustered together. It would contain both contemporary and historical content. It had to look gorgeous but not intimidating, and it had to behave very cleverly and yet look simple and intuitive. We wanted it to be self-managing and monitoring as far as possible, with no layer of library expertise needed. ‘By the people for the people’ was our mantra. Our community would decide what content they wanted to include and would be able to upload material in any common file format and describe it with common language. It had to facilitate the building and strengthening of relationships, not just between items in Kete, but between people as well. We wanted to use Open source development tools and release it as an Open Source project, adhere to open standards and build an online community to support it.

Echoing the Maori proverb of the three baskets, or kete, of knowledge, we called our concept Kete. We really like what the kete represents. We like that they are ‘honest’, practical items, woven from found materials, and that anyone can learn to weave one. We like that they are made from flax, which springs forth from Papatuanuku, the earth mother. We like the link between the flax and the weaver – the person who caressed and shaped the flax into a beautiful or useful object. We like that kete are usually given from 1 person to another, so linking people together, and that they are usually given to mark an occasion so there are stories that surround a kete. When a kete is used and taken from one occasion to another, the stories are being told and the history preserved. The kete is an appropriate metaphor for our digital library, and the various types of material it contains.

We dreamed of our country covered with local kete, so that users could search locally or extend their search to their neighbours, or even all kete. We wanted to build something which we could give away.

We managed to source a significant grant, and this combined with donations of cash and kind from our community enabled us to get started.

We contacted our friends at Katipo Communications in Wellington, a small web development company, who had helped us develop Koha. They were keen to become involved. We have a long-standing and easy relationship with Katipo and I am sure this helped a lot with developing Kete. We could – and did – have long, loud, excited sessions around a white board or over an Indian meal, hammering out ideas and concepts and relationships and ‘what ifs’ and these resulted in a series of dataflow diagrams which described the processes and functions that we required of Kete.

The Kete team was determined to produce a quality product that did what we said it would, on time and within budget. We had to avoid feature creep as we were working to such a tight budget and timeframe.

In thinking big first, and dreaming of how Kete could ultimately look and work, we were able to ensure that the Kete core would contain all the necessary scaffolding for future enhancements.
Volunteers

We were fortunate at that time that a Master's student of librarianship had recently inquired about an internship with Horowhenua Library Trust to research Koha. Over the course of a few email messages, we managed to convince him that Kete was a much more interesting project. So Pascal came from France, and spent three months researching Web 2.0 and Library 2.0 initiatives around the world, licensing options for contributed content, and performing a risk analysis for the Library Trust of managing a collaboratively-built, open source, digital library.

We advertised for volunteers to help create content: “Interesting work but the pay is lousy” and were overwhelmed with the response.

It was amazing the resources we found in our community when we asked people to help us. How many retired legal and medical secretaries do you have in your community? These people can read handwriting! Fourteen typists worked from home transcribing handwritten Council and Maori Land Court Minute books and typing out stories from old newspaper articles which we were having trouble scanning. We had teams of volunteers transcribing, proof reading, indexing, scanning and cataloguing. We also ran a series of Thursday night working bees over eight weeks which concentrated on digitising the Historical Societies' photograph collections. These working bees continued for twelve months; I made them take the Summer off! Since Kete is web-based, workers can easily work from home too, but the working bees do provide a social element to the work.

The shining star of our volunteers is a newly retired Master of Computing looking for something interesting to do after an early self-elected retirement. She agreed to take on the role of Content Manager and took responsibility for coordinating the creation of digital content and managing the volunteers, leaving the Project Manager free to work on development of the web application itself.

Content

We were operating to a very tight timeframe with this project, with deliverables linked to funding cheques. We could not afford to wait until Kete was 'finished' before we created content. As soon as our programmer had coded the basics of a digital content manager and input interface it was transferred to the live site – warts and all - and we started creating content. All content was saved into the main database. Upgrades and new work on the code just meant a prettier interface and increased functionality, while the content remaining unchanged.

Early on we settled on some Proof of Concept collections and items that we needed to test to make sure Kete could cope with variety. These included different formats of material and file types. The appendix describes the Kete project in detail, including the development process we followed, the proof of concept work, structure and feature list etc.
**Statistics**

The Kete database has grown steadily since March 2007 when we asked our community to help populate it.

![Database Items as at 30/10/2007](image1)

*Fig 1: Database Items as at 30/10/2007*

There are another 1000 images about to be added through a bulk import process; recent donations to the Historical Society which volunteers have been digitising at Thursday night working bees.

The site attracts a significant amount of traffic: 167,000 hits in October 2007, which was about 60% up on the previous month. Analysis of the site statistics shows that our numbers of unique visitors are climbing too; the chart below counts each IP number only once, proving that it is not just Library staff generating all that traffic!

![Unique visitors to http://horowhenua.kete.net.nz as at 30/10/2007](image2)

*Fig 2: Unique visitors to http://horowhenua.kete.net.nz as at 30/10/2007*
Why is it successful?

There are many Kete success stories besides Charlie and his vintage farm machinery. We have nearly blind, 80 year old Roz, who, though sadly unable to type any more, still contributes so much by sharing who lived where and what was there and who to ring whenever we show her a photo. There is the retired engineer, Leo, who is a whizz at photographing oversized photos and lace camisoles; Gus with the bedridden wife who indexes 50-year-old newspapers into Kete night after night and pops in for ‘fresh news’ once a fortnight; the lovely modest quilting ladies who reluctantly allowed us to photocopy their quilts which cause people to gasp when they find them on Kete; the manic, camera-mad Phil who seems to spend every weekend photographing Levin’s old buildings, street scenes and public art; and grumpy Scottish Ruth, who can’t bear Phil’s near illiterate descriptions and edits his work every Monday so we can find “that wretched man’s” photographs in a keyword search; 9 year old Connor who photographed every house in one of the town’s oldest streets – including the pregnant cat sunning herself on the footpath; and Ernie with his fabulous sepia coloured photographs taken with a Brownie camera depicting ‘farming the hard way’ in the 30s and 40s.

It is the informal content and the dedication of a community that can only ever be harnessed at a local level, yet add so much to the nation's store of digital content. Our people are not interested in building a “Kete NZ”. What they care about is Kete Horowhenua, or Kete Manawatu or Kete Kapiti.

And that leads nicely into the really exciting part of this paper.

National Digital Strategy

The New Zealand Government has done lots of thinking about our digital future as a nation, and has produced several very significant strategy documents.

The overall Digital Strategy vision is for New Zealand to be a world leader in using information and technology to realise its economic, social, environmental and cultural goals, to benefit all its people.

Kete was developed with grants from the 2005/2006 and 2006/2007 funding rounds from the National Digital Strategy: Community Partnerships Fund. This is a contestable fund established to support community projects that work:

- to realise community aspirations through using ICT
- on ICT content, connection and confidence
- in partnership with others.

These grants contribute seed funding towards initiatives that help deliver the goals of the government’s Digital Strategy: improving people’s capability and skills in using ICT, and developing digital content.

The first grant helped fund the development of the Kete Horowhenua web application. The second grant is helping fund the development of a generic Kete -
Version 1.0 - which will enable other communities to set up their own Kete easily. It will also fund the development of an online community offering support to developers and users.

New Zealand Digital Content Strategy

The New Zealand Digital Content Strategy is a sub-strategy of the National Digital Strategy. It is the government’s five-year vision for unlocking New Zealand’s stock of content and providing all New Zealanders with seamless, easy access to digital information. The Content Strategy has 3 goals with objectives and proposed actions for each; Kete slots directly into these:

Goal 1 Building digital foundations
Content important to NZ is easy to access, is protected, and kept safe for use by future generations.

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Kete</th>
</tr>
</thead>
<tbody>
<tr>
<td>• NZ’s digital content is visible, searchable and easily accessed.</td>
<td></td>
</tr>
<tr>
<td>• Digital content significant to New Zealanders is preserved and protected.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Actions</th>
<th>Open standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>• International standards for content creation, digitisation and management of rights.</td>
<td></td>
</tr>
<tr>
<td>• Content visible and easily accessible by storing it in interoperable, standards-based “digital warehouses”.</td>
<td></td>
</tr>
<tr>
<td>• NZ content visible to the world</td>
<td></td>
</tr>
<tr>
<td>• Across-sector strategy for the preservation of formal digital Federated content.</td>
<td></td>
</tr>
<tr>
<td>• Review the institutional form of organisations involved in the preservation of, and public access to, film, video and sound content.</td>
<td></td>
</tr>
<tr>
<td>• Support Creative Commons license</td>
<td></td>
</tr>
<tr>
<td>• Promote protection of intellectual and cultural property rights.</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: New Zealand Digital Content Strategy: Goal 1.
Goal 2. Unlocking Content
New Zealanders and New Zealand organisations are at the forefront of creating and sharing digital content.

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Kete</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A content rich society where the creation, use and sharing of digital</td>
<td>Kete code freely available to all.</td>
</tr>
<tr>
<td>content reflects our cultures, languages, histories and identities.</td>
<td>Online community of Kete developers and Users.</td>
</tr>
<tr>
<td>• A digitally literate and connected society, where all NZers are able to</td>
<td>Content made by the people for the people.</td>
</tr>
<tr>
<td>engage in creating, sharing and preserving digital content.</td>
<td>Federated searching across Kete.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Actions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Nationwide digitisation programme.</td>
<td></td>
</tr>
<tr>
<td>• Provide support and advice to communities on the standards and tools</td>
<td></td>
</tr>
<tr>
<td>that enable creation and sharing of content.</td>
<td></td>
</tr>
<tr>
<td>• Support the creation, sharing and preservation of digital content</td>
<td></td>
</tr>
<tr>
<td>through a people's network.</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: New Zealand Digital Content Strategy: Goal 2.

Aotearoa People's Network
The Aotearoa New Zealand People's Network is about providing free access to equipment, training and broadband internet services in public libraries so that all New Zealanders can benefit from creating, accessing and experiencing digital content.

It is funded through the Digital Strategy Community Partnership Fund and New Zealand's Digital Content Strategy, and is a collaboration between the National Library and the public libraries of New Zealand.

The topmost guiding principle for the People's Network is that:

“New Zealanders will have free and facilitated access to the internet, digital tools and services and be able to deposit content into community and national repositories”.

We are delighted that Kete has been selected as the community repository product for each of the partnering libraries. Stage 1 will see 34 libraries and 13 local authorities start filling their own Kete with local, digital content.
Penny Carnaby, New Zealand’s National Librarian describes this lovely vision she has of gorgeous local Kete popping up all over New Zealand, and all sitting within a nationwide Kete of digital content, both formal and informal.

**The World**

I think Kete can be bigger still.

For digital technologies to become pervasive in our societies, breaking through the digital divide, they need to be relevant to people at a personal and local level. They have to provide real value to people's lives and sense of being. Community and belonging are really, really important.

This concept of community is especially relevant today, in an age where families, cultures and societies are torn apart everyday for a wide variety of reasons. Kete can be a gathering point for sharing traditional knowledge and history and experiences and memories. Refugees may have nothing of their culture except what they carry in their hearts and heads.

I view history as being a cluster of points of view, a nebulous collection of differing truths. Imagine having a whole range of personal perspectives to sit beside the official authored version of the Tiananmen Square massacre, or the experiences ravaging Africa and the Middle East right now.

**Kete 1.0**

We have had lots of inquiries about the Kete Project, both within New Zealand and from overseas. We won a Special Mention for excellent e-content from our region (North America and Oceania) in the e-inclusion section of the 2007 World Summit Awards held in Venice late in 2007, and also won the 2007 3M Award for Innovation in New Zealand Libraries.

The Kete developers, Katipo Communications, have been commissioned to install 3 new Ketes: 1 in Orange County, Florida, USA, which like Kete Horowhenua is a geographical Kete. Maori in Taranaki have a Kete which they are using to manage the Maori language, specifically local dialect variations, and in Auckland the Chinese community is building another Kete which relates to this particular ethnic group. Each of these groups has paid for work to be done developing enhancements to the core Kete code or towards the configuration interface. This is the beauty of Open Source: sharing the cost of development.

The Aotearoa People’s Network will see another 34 Kete established – and yes, they too will fund development work for the benefit of us. These Kete will be hosted by Katipo Communications in Wellington. Being entirely web-based it doesn't matter where the servers are housed; the database can be accessed from any internet-enabled computer.
We have secured funding that will enable us to do the necessary work to release Kete 1.0 under the GNU General Public License (GPL) complete with:

- a configuration interface for easy download and installation.
- a skin module so each Kete installation can have a distinctive look – Kete Kapiti will look different from Kete Horowhenua.
- an import wizard to populate a new Kete with records drawn from a Past Perfect museum collection management system.

Horowhenua Library Trust is committed to supporting the spread and development of Kete. We held a very successful inaugural Kete Community day in Wellington a few months back, and have another one planned for March. We have an active online community of Kete lovers, http://kete.net.nz, which contains documentation, links to code repositories, FAQ etc.

**Conclusion**

For Horowhenua Library Trust, Kete has been a wonderful way for us to engage with our community.

Our people love that they have helped to build an award-winning product. Our people are doing work, real work, which adds value to the society they are a part of. They love working alongside library staff, learning new skills and bringing us resources and knowledge which they have hauled out from dusty shoeboxes under the bed or pulled from long forgotten recesses of their minds. These people are fabulous ambassadors for the Horowhenua Library Trust; excited, enthusiastic people who can’t wait to tell others about the work they are engaged in at the Library.

And just quietly, they are building Kete.nz at the same time …. Just don’t tell them
Appendix 1: Kete Horowhenua.

1.1 The Development Process
Our original plan was to make the most out of our current experience and build a system based on Koha (an open source library management system we developed in 2000) and Greenstone (an open source digital library programme developed by Waikato University). We had a good look at this and, very early on, could see that this was going to be difficult. The Koha/Greenstone approach would work for a more traditional type of collection, where one organisation publishes the collection to a website. But it is more problematic for a community-built collection. Weighing up the time it would take for us to build an add-on for an existing digital library or starting from scratch, we thought that building a system based on a Web Framework might be a better idea. This is where Ruby on Rails comes in.

We had a good look around, and compared to the likes of Catalyst (Perl-based framework) and the PHP-based frameworks, Ruby on Rails (RoR) appeared to have the most effort being put in and the most dynamic community around it. We are attracted to the idea of using a framework, rather than building everything from scratch. It is also new and shiny!

Kete uses Zebra, a full-text indexing engine built by IndexData. This facilitates very fast and very powerful searching over a text based database. It can also handle anything from a few records to many millions. The Koha project has tested the Zebra engine with databases of up to 10 million records. We knew Kete could go live with 10,000 images, and that we were likely to have 20,000 images 6 months post launch, and this was just one item type; there are also documents, audio, video and topics. Zebra is supported natively with Koha Version 3.0 and Koha version 2.4 includes Zebra support via a plugin. This means it should be easier to do a powerful federated search across Koha and Kete – something important to Horowhenua Library Trust, and to Koha libraries around the world.

The development method we are using means that testing has occurred throughout development and it is unlikely we will ever say: “It's finished”. We use volunteers from our community to ‘test’ the software: school children but more usefully senior citizens who have only a little experience with web applications.

Three instances of the Kete software are operational on the server at any one time: a development site, a test site and a stable, live site. This means that development has been very fast, and that Library staff and volunteers are intrinsically involved in the development process, testing each new bit while the next bit was being written. We concentrated on core functions and proof of concept before writing the next bit, i.e. making a process work for one item type then moving on to the next process.
### 1.2 Proof of concept collections.

Early on we settled on a list of Proof of Concept collections and items that we needed to test to make sure Kete could cope with this variety. These included:

<table>
<thead>
<tr>
<th>Arts</th>
<th>Quilters Kete</th>
<th>Kete to include photographs of the prize winning quilts and quilters from annual exhibitions, including video clips of the opening and award ceremonies.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levin Art Society</td>
<td>As a millennium project, the Arts Society had gathered together a collection of paintings by local artists, along with interviews and photographs of the artists. Nothing had ever been done with this collection and it sits in a glory box. We wanted this content in Kete.</td>
<td></td>
</tr>
<tr>
<td>Culture</td>
<td>Growers Association</td>
<td>The development of the Growers Association, and specifically, Chinese market gardening, in Horowhenua over the past century can be followed in the association’s archives. Material is all loose leaf, and includes minutes, reports etc.</td>
</tr>
<tr>
<td></td>
<td>Te Kokiri</td>
<td>Te Kokiri is a school and gallery teaching flax weaving. Photographs of the weavers, and their work needed to be included, along with their ‘stories’.</td>
</tr>
<tr>
<td>Heritage</td>
<td>Adopt an Anzac</td>
<td>Volunteers were researching individuals listed on war memorials in the towns of Horowhenua and finding out the stories behind the names. They were eager to publish their findings on Kete. Because the material is all based on primary resource material it needed to be safe from unauthorised editing. This was our ‘locked basket’ Proof of Concept.</td>
</tr>
<tr>
<td></td>
<td>Corrie Swanwick</td>
<td>Corrie was a local identity, and the town’s unofficial historian, who died recently. He wrote many stories which were published in the local newspaper, and which his daughter has authorised for use on Kete.</td>
</tr>
<tr>
<td></td>
<td>Horowhenua and Foxton Historical Societies.</td>
<td>Huge collection to draw from: 2500 digitised photographs plus another 9000 waiting to be digitised, 300 digitised museum objects, 2000 minutes of audio cassettes and film reels, clippings, posters and maps, archives, diaries, ephemera. This would provide our audio and image Proof of Concept.</td>
</tr>
<tr>
<td></td>
<td>Minutes of the Otaki sitting of the Maori Land Court.</td>
<td>National Archives have given permission for us to digitise the first 12 volumes of the Otaki sitting of the Maori Land Court. This would involve transcribing handwritten script into fully keyword searchable text, scanned pdfs as original source material to compare with the typed text, and extensive use of tags to document variations on names, as the minute takers often misspelled names.</td>
</tr>
</tbody>
</table>

*Table 3: Proof of Concept Collections.*
1.3 What you can do

Kete utilises a range of Web 2.0 technologies. In a nutshell, Web 2.0 is about active participation with a website rather than being a passive observer.

In Kete, users can:
- Search by keywords, or just browse
- View linked items and topics
- Start or join a discussion around a record
- Register for RSS feeds to keep abreast of changes to records you are interested in.
- Contact other people with similar interests by email.
- Edit records by fixing errors, adding more information
- ‘Tag’ records by typing in keywords to help other people find an item or topic.
- Upload new items
- Add relevant websites.
- Write new topics or stories
- Link items together into meaningful subject clusters

1.4 Organisation and vocabulary

Kete Horowhenua is a digital library comprising of range of different records, including ITEMS and TOPICs. ITEMS are files uploaded and ‘catalogued’ in common language by Kete users. They may be in any common file format:
- images
- documents
- audio
- video
- web-links
- discussion comments

Items may be standalone, or LINKED together into meaningful clusters with a TOPIC. A Topic is like an encyclopedia entry about any subject, person, place, event or thing that someone wants to write about. Items may be linked to any number of Topics.

Topics are built by selecting a template:
  general
  person
    artist
    genealogy
    serviceman
  place
  event
  structure
  organisation
    school
  collection
Each Topic Template has a number of suggested fields which help guide the writer of the topic, but very few are mandatory. The Topic Templates are hierarchical in nature meaning that each sub topic inherits the fields of its predecessor.

All material contributed to Kete is contributed under the NZ Creative Commons license, and on condition that it may be edited or added to by another Kete User, except for those in a Locked Basket.

Locked baskets are special ‘Kete within a Kete”. These are administered by their Owners, have their own ‘homepage’ and Items and Topics are protected from being edited by unauthorised users, although general Kete users can view the contents, start or contribute to a discussion thread, or send an email to the Owner. Locked baskets are set up on application, and in special instances only. We have three Locked baskets in Kete Horowhenua: Te Kokiri, Adopt an Anzac Project and Trevor Heath Photography.

Te Kokiri is open to all of its students and tutors, who are able to build online portfolios of their work. The Adopt an Anzac Project has verified all of its content against primary sources, and requires any alterations and additions to be similarly verified before uploading changes to the site. Trevor Heath is a professional photographer who has an online portfolio of images from throughout the Horowhenua District. These are grouped together in his Kete by event and are uploaded as low resolution files; he is happy for anyone to look at them online and use them for school projects etc, but they are no use for reproduction purposes.

1.5 Kete Text editor

The description field for Topics and Items can be extensively formatted with the Kete text editor. This allows for the inclusion of tables, hot links and images. This Topic shows how tables have been used to clarify relationships between individuals and generations. Where related Topics exist in Kete they are shown as hotlinks.

![Fig 3: Topic detail showing the use of tables, hotlinks and topic-templates.](image-url)
1.6 Homepage
The Kete Horowhenua homepage provides a number of access points to the digital library to enhance discoverability. We discovered early on that the simple keyword search box on a near empty screen paralysed searchers who did not know what was in Kete or what to search for. A comprehensive help manual is also available from the homepage.

Browse
By clicking on the browse button, you can see the entire contents of the database with each item type displaying on a separate tab. You can vary how many records display per page, which makes it a pretty quick task to scan a few hundred items in a few minutes. This is an easy way to track new additions to the database; the lists are sorted with the newest or edited ones displaying first. You can also access this list from the Contents on Type list on the homepage sidebar.

Featured Topics
These are a changing selection of topics displaying on the homepage. These may be chosen for a number of reasons: they might be new, or interesting, or demonstrate an excellent use of the Kete Text editor.

Slideshow
The homepage also has a continuous slideshow of random images from the database. They change every 20 seconds but a Kete user can click on the image to go to the detailed screen.

Latest 5 Topics
We have a dynamic list of the newest five topics to be added to the Kete database displaying on the homepage. This promotes the range of material being added.

Keyword Searching
Kete is searched by keywords. The search engine accommodates truncations and simple Boolean operators to define relationships between search terms and phrases. Kete uses fuzzy searching.

1.7 Search Results
Search results are sorted by item or file type, with each item type on its own ‘tab’ displaying the item count. Tabs in Kete work like tabbed divider pages in a ringbinder, separating items into different categories. You can view specific Item types by clicking on the appropriate tab.
Bibliography


