I’m a ring in. This paper was originally proposed by my colleague Dr James Smithies, before he was overseas on business for our major DH project, UC CEISMIC, which I’m pleased to say is connecting us to the world.

I decided to keep James’s title, as it is a a suitable container for what I want to say, but if you were expecting his abstract then I’m sorry, you’ve been lied to and misled, and may leave now if you wish.

My approach to this topic will begin anecdotally, with a little wander down memory lane, because when it comes to DH stuff, I’m alarmingly a veteran as I began doing it over 20 years ago. In Digital Epochs that
probably situates me somewhere in the Cretaceous. Certainly my early digital efforts are only fossils, buried deep in the virtual substrate. I’m going to draw on my experience to offer some very subjective, and probably contentious points of advice to creators of Digital Archives.

1. **Don’t limit yourselves**
2. **Successful archival creation depends on some core principles**
3. **Look Local.**
4. **Be Visible**
5. **Collaborate.**
6. **Don’t forget your core business**
7. **Make the Case for Research**
8. **Critique the Digital Age**

The graphic in my opening slide, is to remind myself that I must stay grounded. Aotearoa—our Land of the Long White Cloud—will always be a dot at the bottom right of the world map (if it is even included). For a long time smallness and distance were the prevailing factors influencing our engagement with the rest of the world. The Cultural Nationalist NZ authors with whom I am familiar from my other research into NZ Literature, made much of this distance, isolation and island identity in both poetry and fiction: this was a ‘scarred country, a cold threshold land’, ‘distance looked our way’, ‘always to islanders’ wrote Alan Curnow, ‘danger is what comes
over the sea.’

It’s easy these days to forget how powerful this sense of isolation, of distance and separateness was, particularly to New Zealand’s settler culture, which seems to have had to overcompensate for its deracination by becoming, in Jamie Belich’s thesis, ‘better Britons’, or by fleeing to the old world like Katherine Mansfield, or by remaining home and dreaming of simply migration to the never visited Northern Hemisphere ‘Home’ as Robin Hyde’s Godwits did.

It was technology, and I would argue nothing but technology, that overcame the tyranny of distance and isolation. It happened slowly at first, with propeller-driven sea travel, and the advent of refrigerated shipping that made us for a time the old world’s farm, and then with increasing rapidity with developments in international air travel, film and television, radio, telegraph, telex, and now virtually instantaneously with our membership of the world-wide web and a new type of tyranny, the remorseless filling of the email inbox.

I know this is obvious, but I mention it to emphasise the point that it wasn’t always like this. I also mention it as a sort of caveat. As a scholar of New Zealand literature I spent a lot of time in the last couple of decades, trying to make imported postcolonial theory work when applied
to our literature. It was never like trying to force a square peg in a round hole, but it was just enough of a mismatch between theory and reality to leave most argument looking shabby and frayed around the edges. It was only when I began to engage with and appreciate the approach that University of Auckland academic Alex Calder calls ‘Settlement Studies’ that I discovered what seemed to me an authentic way of thinking about our literature.

You can take what I’ve just said as a preamble to the first important point I want to make.
With not the least intention of sounding like a xenophobe, I’d suggest that when you decide to develop a DH project, set out to do it on the back of someone or something local rather than a high flying import or example from overseas. At least not before you’ve looked close to home. My own DH experience tells me that most of the important DH developments have been local and specific. In my opinion, the progress that matters tends to occur when someone from within a culture (not necessarily a NZer), who understands its quirks and idiosyncrasies, who knows how to make things, who is embedded in that society, identifies a lack, sees a need, or has an inspiration.

My colleague James Smithies is an example of what I mean—he came to us with his bags bulging with New Zealand experience. This means that when it came to sitting down and beginning the negotiations that saw us develop the UC CEISMIC Canterbury Earthquake Digital Archive, both James and I spoke the language, and had the credibility of work in Academia, private enterprise and government, that allowed us to deal with a range of groups on a variety of levels. I think we both also have that precious and quintessentially Noo Zillun quality—the number 8 wire mentality. We were confident we could build a world-class archive on a Kiwi budget. Which we did! In my recent visit to Japan to speak about CEISMIC at the National Diet Library one of the things that most impressed them was that we’d delivered on time and fully functioning a federated digital archive underwritten by a consortium of key heritage organisations for a modest $125,000.
James is a far more authentic Digital humanists than I am. In fact I feel something of an the imposter when I am introduced as any sort of expert in Digital Humanities. When it comes to surfing the web I’ve managed to miss catching most of the significant waves of digital knowledge and understanding. Partly it’s my age and era. In 1977 in the third form I joined the school computer club. It was boring! I lasted just the one tedious hour it took me to make tiny holes in a big bundle of cardboard punch cards. As a short-lived Commerce student here at Otago in 1984 I even tried to learn Cobol, only to give up after two weeks of bewilderment. I happily wrote all my undergraduate English essays long hand, and didn’t wobble onto the information super highway until 1992 when the VUW English department gave me a tiny Mac Classic 4/40, with an 8 inch black and white screen, on which I typed a 700 page PhD thesis and permanently strained my eyesight.

My social conditioning predates social networking, and I’ve never got comfortable posting anything about myself on line. Consequently my virtual identity is sadly lacking—I’m not on Facebook, I don’t tweet, I’ve forgotten my linkedin password, I can’t code much past a little HTML and TEI, and when I’m in a CEISMIC team meeting with James and Chris Thomson I’m forever having to look up on my iPad the acronyms that define the digital world and roll off their tongues.

And yet the digital age has profoundly shaped my academic career—I’m comfortable with asserting that in a very specific and personal way I am a Digital Humanist. Moreover that I’m a Digital Humanist of a specific time and place: the 1990s and early 2000s shaped my Digital outlook, as did the fact of being a New Zealander, an island country at a vast remove from the major centres of the world.
My second point

• There is no one right type of Digital Humanist. Even those who struggle with the technology can have a vision for what is achievable utilising such technology.

So there’s my second point—there’s no one right type of Digital Humanist. Even those like me who struggle with the technology can have a vision for what is achievable as technology progresses.

I want to briefly outline how I got into Digital Humanities, because it is relevant to my concluding assertions.

At the beginning of the 1990s, I was a PhD student in the English Department up at VUW. My department had scraped enough from its meager budget to supply me with that old computer—a Mac Classic with 4 mb of memory and 40mb of storage space, and at that time, given that all I planned on doing was writing, it seemed like all I needed.

Then, in 1992, I went to a grandly named “Inter-Universities Triennial English Department Conference” there to present a paper on my research. I’m not sure if my paper produced much of a lasting impression, but two other papers presented that day are indirectly responsible for my kick of in the DH game (that’s a Mansfield reference by the way).

The first was a lecturer talking about her experiences of teaching NZ Literature in Europe. There was, she said, a huge interest in New Zealand literature in countries like Germany, but almost no resources with which to teach it. Most of our print runs
were short, in the hundreds, and when they went out of print they stayed out of print. Attempts had been made to make more material available, but there were not the resources to sustain them.

The next paper was presented by an academic who had designed some computerised teaching aids for the study of Katherine Mansfield’s short stories. His demonstration was impressively high tech for that age, and we looked on reverently as he demonstrated his little hyper text modules. But what really stuck in my mind was a passing comment, that with the invention of a new technology—writable CD Roms—it was now possible to store up to 300 novel-length texts on a single disc.

Seeing the possibilities that would open up for advancing the teaching and reading of NZ Lit internationally if NZ books could be digitised and put on CD Roms, I put in a funding application on my return to Wellington, and around 1994 the New Zealand studies Digital Library pilot Project got under way. In the course of writing this, I came across out first funding proposal, dated 12 October 1994.
It was very grand and serious, and advanced a case for protecting our patch:

It seems likely that it will only be a matter of time before there is an interest in publishing New Zealand literary texts in an electronic form. If this is to happen, we consider it important that such a database remain in New Zealand, controlled and distributed by our literary and academic communities. This would ensure the integrity of the information contained, and the retention of national electronic copyrights.

I’d like it noted, that I had just predicted Google Books. I had also, I now realise, tried in a clumsy way to make a case for doing our digital stuff our way.
Among the benefits of such a project, we listed:

- The enormous value of such a research tool to students and scholars of New Zealand Literature.
- The provision of the means whereby overseas universities can develop comprehensive courses in New Zealand Literature. Graduates of such courses may well come to New Zealand to pursue post-graduate programmes.
- The expansion of the international market for New Zealand Literature as users familiar with texts on the database seek to purchase their own bound copies of current and future publications of New Zealand writers. It is even conceivable that a demand may be created for reprints of out-of-print publications.

The university funded half of what I asked for, but enough to purchase a decent computer system with scanner and colour printer, and software. I began doing research, and also learning things like basic web design and coding html.

The problem was that although everyone thought it a good idea, no one was sure where to start. There was already lot of textual material on the internet, but no way of determining the quality of that information, a perennial problem that I’ll say more about later.

A new technology being developed by Sun Microsystems called Adobe Acrobat
seemed the way of the future. So we invested in Acrobat software, including Acrobat Capture, an OCR program that would scan a page and attempt to reproduce the look of the original document.

That was the most valuable lesson I could ever have had in why an enterprise like the formation of an enduring electronic archive of material can not afford, EVER, to depend on proprietorial products. And it's why I'll say now, and repeat it to you whenever possible, that when you go the DH route, remember Terry Pratchett’s librarian, the Orangutan that can only say ‘Oook’, although for our purposes misspelled as OOCC
The greatest problem was

**Redundancy**: In two years Adobe went through about four versions, I can’t even show you what those first attempts look like now. My computer software and hardware has changed so dramatically that those files are inaccessible to me, as are numerous early web sites I created, including the first two versions of the New Zealand Book Council Web Site.

**File size**: Also at that time Adobe PDF files were huge. I scanned one 20 page volume of a small experimental periodical called Book. [show and describe]. It consumed over 3 megabytes of disc space (remember, I’d been using a Mac 4/40 shortly before that time) and the whole thing had to download before it was possible to begin viewing it—we’re talking half an hour on a 28k modem.

**Fidelity to the original**. Acrobat still didn’t work for academic and archiving purposes. It wasn’t identical to the original, it got as close as it could using its own font library. It was also a very inaccurate OCR program.

Still, we did our best. We developed a web site and a range of texts and presented
the results to the CEO of a major corporate in the hope that he'd come to the party. He was interested, but not enough to commit himself. His organisation had recently lost tens of thousands on a CD Rom publishing venture, and at that time it was CD Rom publication we were talking about.

That was effectively where my 1996 NZ Studies Digital Library Pilot Project ended. I was appointed to a permanent position, and life got too busy. For some time the only significant outcome seemed to be the New Zealand Book Council Web Site. Although even then I was trying to push towards my elusive digital library. I’ll show you what I mean by the fossilised traces of my early DH efforts.
SLIDE NZBC site
Here’s the front page of the site today. It’s a lot slicker than the first sites I designed, but it still includes a number of key design features, the most important of which is the ‘Writers’ button. You can see that it says ‘writer Profiles’ and ‘The Oxford Companion’. That’s because I obtained $5000 and used it to purchase some 150 (I think) of the largest author entries from the Oxford Companion to New Zealand Literature. These became the basis of the writer files, and I confess my vision was always that one day the texts referred to would become links to digital full texts themselves.
SLIDE Mansfield--discuss
Although I quite deliberately designed the writer files to serve as the front door to a NZ Studies Digital Library that never came to pass, though I guess it serves as a good reminder that there are many ways to try and achieve an objective, particularly in the digital sphere.

What did happen was that one other piece of research that seemed at the time to be of peripheral importance, turned out to be absolutely central later on.
In the process of researching Digital Libraries in about 1993-4 I kept coming across references to the TEI: The Text Encoding Initiative. I found my way to the TEI site and attempted to download the TEI Guidelines. It was a huge file, it took me half a day to transfer and then another three days to print on a dot matrix printer. I ended up with 500 pages that made very little sense to me.

What I did understand was that the TEI was about a series of descriptors or tags. If you converted a book to a plain text file, you could use these tags to tell a program displaying it which parts were chapters, paragraphs, bold, italics and so on. The TEI was incredibly detailed, too detailed for me, and I eventually abandoned it in search of a quicker way of achieving the pilot project’s outcomes.

Then in the middle of 2001 I returned from a year as a Fulbright Fellow to the University of Hawaii, to find that two doors away from me, installed in an office, was a Fulbrighter, Elizabeth Styron. Elizabeth had worked at the UVA ETC, she knew the TEI, and she had experience managing major digitisation projects. More than that, what she really wanted to do in NZ was create digital libraries. A surfer from the leading wave of humanities digitisation efforts had washed up on our doorstep! To the University’s credit, it read my proposal for more funding realised the significance of this opportunity, and before the end of 2001 the New Zealand Electronic Text Centre was in existence.
Indeed it still exists in a sadly attenuated and moribund version of what I'd hoped it would become, as the VUW Library’s ‘New Zealand Electronic Text Collection.’ It doesn’t contain digitised versions of every out of copyright NZ literary tex as I’d hoped, but it does contain some jewels that still have my fingerprints on them—all of NZ’s war histories for example; my own copies of ‘Old New Zealand’, ‘In a German Pension’ and Ellis’s ‘Polynesian Voyages’.
The journal ‘Kotare: New Zealand Notes and Queries’ which I co-edited, a pretty comprehensive collection of 19th C NZ Novels, and one I’m particularly proud of,
a digitisation of Bill Pearson’s important novel *Coal Flat* which I had done to teach from, and which I gave to my students in four versions on CD Rom in about 2004, finally achieving in a small way the vision I’d had in 1994.
When I moved to the University of Canterbury I took my interest in Text Archives with me, and set up an honours course in Electronic Scholarly editing, taking students through the process of digitising archival manuscripts by marking them up in the TEI. [Discuss Roy Bruce project]

The first seminar for this course for 2011 was on the morning of the 22 of February. An hour after we’d finished teaching the earthquake struck. UC was closed for some weeks, and my class was scattered the length of NZ and around the world. And out of that experience, and thanks to the digital projects I’d been involved with prior to this, and with some useful prompting from James Smithies, the UC CEISMIC Canterbury Earthquakes Digital Archive was born.
That’s another story, however, and not on topic for today. Rather I want to offer a few opinions developed over the course of my DH ‘career’. These are only opinions, they’re pretty subjective, and I offer them up for critique and debate.
Don't limit yourselves There is no right or wrong way of doing digital Humanities. I’m a textual scholar—I’m interested in digitsation, creating archives, using and training in the humanities text encoding initiative—half a dozen other D hers would do half a dozen equally valuable and valid things.

Successful DH depends on some core principles As I’ve already said I believe there should be a set of core principles: perhaps OOCC open access, open source, creative commons and collaboration, but it’s a list up for debate.

Look Local If DH is to succeed it will be on the backs of quality local people who can create learning programmes, resources and applications that are of value to your students and staff.

Be Visible DH projects can be great tools for community outreach and online visibility. Very useful these days when Humanities getting such a bad rap. Mention Hard/Soft Skills—Flexible and Specific?

Collaborate Develop relationships with organisations doing similar things, or that share your vision and values.

Don’t forget your core business Your DH strategy needs to support and augment your core areas of strength. Make sure you have people who can, for example, provide high quality digital support to a History postgrad who wants to develop a challenging digital history project. One of the things James is regularly asked to do is provide digital support to principle supervisors across a range of disciplines (and also to a number of Marsden proposals).

Make the Case for Research This is one of the most difficult areas for DHers. Many of
the things we do fall outside the traditional criteria for valid research outputs. Make no mistake, UC CEISMIC is as much as anything a research project. It evolved from a server under a desk to a federated archive underpinned by a high level consortium of heritage agencies. To arrive at that outcome took many hundreds of hours of thought, analysis, argument, conversation, and trial and error. CEISMIC has been more taxing intellectually and creatively than any of my other research outputs and yet its status for PBRF purposes is probably one line in Contribution to the Research Environment. If you are serious about DH, you have to be serious about lobbying to have this sort of research appropriately acknowledged and value.

Critique the Digital Age Legislation requires universities to play a role as critic and conscience of society. My question to Humanities scholars is, if much of society now operates in a virtual environment, how can we critique it meaningfully if we don’t understand how that environment operates? I think this is the area where Humanities in particular have missed the wave. How do we comment on our society and culture or interact meaningfully with our students if we don’t understand the virtual world so many people inhabit? A colleague said to me recently, “I get irritated when people talk about eLearning—surely now its just learning”. Similar things are being said about Digital Humanities—“won’t what DHers do become so ubiquitous that we’ll just call it Humanities?” Perhaps…but I don’t consider a scholar who uses an occasional digital tool a digital humanist. That scholar needs to understand how such tools work, recognise their limitations, understand the decisions made by their creators, know what they can and can’t deliver, perhaps even recognise the assumptions about such things as class, gender and modes of power that may be encoded within the code. These are the things Digital Humanists will need to understand, allow for and explain. Technology continues to evolve so swiftly that we can’t really predict what Digital Humanities will look like a decade from now, or whether we’ll even still call it that. But I do think we’ll be able to rely upon the fact that technology will still be with us, it will still be evolving and developing rapidly, and it will be even more ubiquitous. For Humanities scholars to remain relevant at least some of us will need to be able to adapt to, employ and understand technology at a high level.

One thing Digital Humanists should always be able to do is to critique the digital age from a Humanistic perspective. Creating things is great, building digital tools and digital archives is truly rewarding, and yet there’s an area in which we’re failing to fully perform our function. There aren’t too many developed humanistic critiques of the digital. For a long time it seemed that many in not most of us, as humanities scholars, stood back and said, “sorry that’s not our thing”. Even as digital technology was making whole areas of scholarship redundant (who compiles concordances anymore or carries certain types of textual analysis?) we were drawing back from it and leaving it to others. Even as the digital was transforming our world more rapidly
and radically than the printing press, we were saying things like “The library is our laboratory” or “We don’t need much more than a word processor”. Google recognised very early on, when they decided to develop Google books, that the great currency of the digital age is content—books, videos, blogs, tweets, social media posts, news sources, opinions—or for our purposes texts, of every type and variety. Leaving critique of the digital to computer scientists, software and hardware engineers, governments and business, seems to me tantamount to Shakespeare leaving the products of the printing press to printers.

And that is another way at coming at the topic of digital archives—when creating one, do you have all these issues in mind? Do you ever think that what you are doing is a political act? That you might enshrine or break down power structures, give or withhold a voice etc. etc.