

Tukaiaia: A Digital Repository for the Preservation of Ngātiwai Knowledge

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Te Ara Poutama – Faculty of Māori and Indigenous Development

Dedication

To my grandparents
David Seymour Tamaki-Tutaki
&
Regina Tamaki

Also especially to

Sharon Te Paa (Aunty Nan)
For guiding me to pursue education

Abstract

This thesis consists of a written component and a practical component involving an interactive website archive with video content. The written component focuses on the source content, being Tukaiaia, a kaitiaki (guardian) of Ngātiwai and its significance to the iwi(tribe). Furthermore, the exegesis covers the design process from concept design to the final product. The practical component concentrates on creating a digital platform to be used as an archive for preserving and presenting Ngātiwai content, which includes short video interviews and a documentary. The primary objective of the website is to provide an interactive and engaging aspect to an open access source for learning about the history of Ngātiwai, reinforcing the use of digital technology as a tool for the preservation of indigenous knowledge.

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

John Pelasio

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Chapter 1 – Introduction

1.1 Introduction

Indigenous knowledge is something that has survived the analog age, however it is something that is quickly becoming forgotten in this new age of digital technology. Māori have preserved cultural knowledge through the use of waiata (song) and haka (ceremonial dance), it is the entertainment factor that compliments these that ensure their success for future generations to lead them (Ka'ai-Mahuta, 2012). Technology is fast out-growing the previous processes and methods of archiving and retaining information, creating entertainment is where I believe the next step is, to ensuring the survival of indigenous knowledge.

This thesis focuses on the preservation and survival of indigenous knowledge, specifically, the use of web design and videography as a tool for archiving. As a case study, the content (interviews and documents) being collected will be about Tukaiaia, a divine guardian of Ngātiwai iwi (tribe). Furthermore, this thesis will include a breakdown of web design and video design in an effort to extrapolate what might be the best output for displaying content.

The practical component concentrates on creating a digital platform in the form of a website, which will act as an archive for this indigenous knowledge. The website will include edited versions of the interviews to be included in both a mini documentary and sit separately in their respective categories. The primary objective of the open access website is to provide an interactive and engaging experience for the dissemination and learning of Ngātiwai history.

This research is built on the perception that traditional knowledge needs to be nurtured and adapted through modern media. The use of Information Communication Technologies (ICTs) can be used to store traditional knowledge so that it can be preserved for future generations (Adam, 2007). This repository will be beneficial to iwi as it will be able to archive important and authentic knowledge which may otherwise be lost. I feel that pursuing this pathway will help in the survival and maintenance of not only Māori

knowledge but indigenous knowledge as well. This change needs to happen now, because if indigenous peoples do not find ways in which they can co-exist with a digital world then indigenous peoples run the risk of losing more of its precious cultural and traditional knowledge. This exegesis will endeavour to stand as an example of how indigenous knowledge can be archived, presented, and utilised in a culturally appropriate manner.

1.2 Chapter overviews

This research will be presented in nine chapters. The first chapter will provide a quick outline of the design of the research project, and will include an overview of all chapters.

Chapter Two is a literature review setting the foundation for this research. It explores the preservation of cultural knowledge using Information Communication Technologies and case studies of web design.

In Chapter Three the project methodology and research design will be discussed, focusing on kaupapa Māori.

The Fourth chapter will outline the purpose and background needed for the study. Furthermore, this chapter will establish a cultural and historical background of the Ngātiwai people.

Chapter Five will introduce the participants of the study as well as their connection to Ngātiwai. Qualitative data is analyzed through a theoretical framework by Colaizzi's (1978, as cited in Xyrichis & Lowton, 2008), discussing common themes found throughout the data analysis process.

The graphic design features of the web creation process will be shown in chapter Eight. This will include initial wireframes, sitemaps, mock-ups, and theory behind the selection of design features.

Chapter Seven will analyze the chosen style of filming video-interviews, and the inclusion of documentary style video. This discussion informs the design of the website layout.

Chapter Six contains the significance of Tukaiaia and delves a little into the content being used on the website. Critical analyses of kaitiaki particular to Ngātiwai is essential, as it shows that an understanding of the content is important in website design for archiving purposes.

Chapter Nine demonstrates the final product through screenshots. It explores the intended use and functionality in respect to placement and design features. Following this is a final browser report.

Chapter Ten concludes this research by presenting key findings and future research ideas that could be expanded regarding the use of digital technology as a platform for indigenous knowledge.

Chapter 2 - Literature Review

This literature review will set the foundation for this research. It is divided into two separate sections. The first focuses on the idea of preserving indigenous knowledge and the second explores the practice of web design and its functionality including case studies of websites to inform the outcome for the exegesis.

2.1 Indigenous knowledge

The relationship between people and the environment form the foundation for the organization of indigenous knowledge. It categorizes life experience and shapes the way people think (Durie, 2004). Indigenous world-view negates the idea that the world exists for the purpose of human domination.

While indigenous knowledge is often valued because of its traditional qualities, a creative and inventive capacity forms the core of an indigenous knowledge system. The perception of indigenous knowledge and culture as applicable only to the distant past misses the thrust for development that is part of the indigenous journey. Arising from the creative potential of indigenous knowledge is the prospect that it can be applied to modern times in parallel with other knowledge systems.

(Durie, 2004, p.1)

Traditional qualities, such as these, should be preserved for future generations.

2.2 Preserving cultural knowledge

Durie (2004) states colonization is the driving force behind the loss of culture, land, language, population, dignity, health and wellbeing. It is this loss that has forced Māori to document and preserve their cultural knowledge. According to Ka'ai-Mahuta (2012) Māori have preserved cultural knowledge through the use of waiata and haka. Ka'ai-Mahuta (2012) further adds, it is the entertainment factor around these aspects that ensure the success of future generations to learn them. The researcher has adopted this ideology in the design of a digital platform, meaning an interactive website is used as an entertainment platform that will encourage further learning.

Historically, Māori have been quick to adopt new technology and skills which they recognise can be of benefit to the advancement of their society.

This is illustrated by Māori interest in literacy during the early period of the mission schools. These ancestors were quick to put their new skills to good use for the benefit of future generations. In the nineteenth century Māori wrote prolifically, adapting the oral arts for the press.

(Ka'ai-Mahuta, 2012, p. 104)

This paragraph tells how Māori have adopted to the technology of their time. Using this as a guide, the website is on the right path to ensuring success in not only the preservation of cultural knowledge but the successful dissemination of that knowledge to future generations, it is by acknowledging new technologies and seeing what they can offer, and then adopt those aspects that help with the preservation of cultural knowledge. Oppenneer (2009) supports this by saying many indigenous communities are exploring Information Communication Technologies (ICTs) to sustain their knowledge and traditions. He adds, digital video, audio and internet related technologies are being pursued as a means of storing cultural knowledge to preserve for future generations. Ka'ai-Mahuta (2012) adds that Māori embraced new opportunities to ensure cultural continuity. In addition, "Māori should utilize new technology in order to preserve their traditions" (Ka'ai-Mahuta, 2012, pp.104- 105). The researcher aims to create content to help Māori fulfill this statement.

Nickerson (2005, as cited in Chikonzo, 2006) says that while collecting data, it is important to understand that elders retell events in a special language, a language that is rich with history and detail.

Websites can be an invaluable tool for Māori, and that they can be used in positive ways to transmit information. The following are some examples that have informed the design process of this researcher's artifact.

2.3 ICTs and preservation

Nickerson (2005, as cited in Chikonzo, 2006) states that ICTs are an important tool for future generations to grow in a culturally rich environment and understand their own identity and sense of pride. The Internet has the ability to remove physical barriers (Nickerson, 2005, as cited in Chikonzo, 2006). This is a key fact to understand because we are moving to a digital

world and kids are becoming more mobile-friendly every day. This means that we are already targeting those who will grow up with this technology and those who the content are meant for. As a tool for communication, ICTs allow those outside communities to access the content, removing the 'physical' barrier. For example, if you are to move to Australia but have a yearning to learn more about who you are, the Internet provides a solution to that distance barrier.

While ICTs can never replace the authenticity of face-to-face interaction, it may be the better option to ensure the survival of cultural knowledge, as it is a common and comfortable tool for younger generations.

2.4 Interactive websites

Graham (1998) states that successful interactive designs are those that implement simplicity, have clearly defined goals, a strong purpose, and an easily navigated user interface. This section provides a breakdown of two heavy interaction based websites; Destiny and the Cronulla riots. Both have different approaches. Destiny draws from Google technologies to create a street-like view of the world, while Cronulla riots create a non-linear documentary type interface. Both are effective in their own separate way.

2.4.1 Destiny website (<https://www.destinyplanetview.com/en/>)

Bungie, the creators of Destiny, a popular console game has recently released an interactive website that helps gain more knowledge about the game itself. 'Destiny Planet View' is a website that allows the user to tour areas from Destiny with a Google Street View framework, built with Google technologies (Pereira, 2014). To complement the street view, they have incorporated a mini map for navigational purposes in the bottom right of the screen. This map allows the user to see key features on the map and go to them. It provides a non-linear aspect of exploring the world. There are also clickable photos and videos that provide in-depth explanations of what is happening in that certain area. For example, on Venus, there are creatures called the 'Vex'. Video content titled 'Battle on Venus' displays a short montage of Vex structures and how the Vex look.

In addition to this, the website is heavily narrated to provide extra interaction. It seems as if

you are being read a story. Overall the experience of the website would seem familiar as it adopts Google technologies in street view. It is a very attractive use of the technology that is engaging for the user.

2.4.2 Cronulla riots website (<http://www.sbs.com.au/cronullariots/>)

A well-planned, well-designed interactive project, this website shows the untold stories of the Cronulla riots that shocked Australia in 2005. For the most part, it is a non-linear documentary separated into eight parts. Interactivity comes from the ability of the documentary being non-linear. It provides a menu of chapters that create an ease of interaction to pick and choose where to go too.

The theme is eminent through the entire site. For example, the first sentence of the documentary is "*tensions at the beach*". Tension is a theme that is carried throughout the website. The developer has implemented the television 'lost-signal' effect as a transition effect. This along with the application of white noise adds to the idea of tension. The typography chosen is a sans-serif text with missing paint strokes that can reinforce the idea. The theme is evident and it is something that uplifts the experience to another level.

These interactive websites are great examples of user experience and user interface as well as user navigation around an interactive website. These examples provide a good understanding of 'back tracking' and keeping familiarity between multiple webpages and sections that adds to the user experience. From my experience, the user experience is what matters most for keeping the attention of the audience from abandoning the website.

2.5 Familiarity and trust

Familiarity and trust are important factors, and are key in the success of a website. Portman (2016) says that conventional layouts seem less complex because they are familiar. She continues to list things that should be familiar which includes navigation, calls to action – buttons and links, colour codes, anything payment processing related. Familiarity is key in building successful websites.

Basically, familiarity means the user has some idea of what is happening and how it works. A

new interface means more time spent learning something new, which essentially will drive the user away. Familiarity and trust will be taken into account when designing the website for this research.

2.6 User experience and user interface (UX/UI)

User experience (UX) in this sense refers to the experience and feel of the overall website for the user. User interface (UI) refers to the navigation of the website. Both commit to the design of a website. Research has suggested that poor website design results in a loss of customers (Amato-McCoy, 1999, as cited in Tan & Tung, 2003). A successful UX must balance the objectives of the business/developer with the needs and expectations of the users (Garrett, 2006). Garrett (2006) separates UX into sections, some are of the following; scope, structure and surface.

Scope - This refers to the entire set of features that are included. It is split into two separate groups to consider both functional and informational aspects. The two groups are functional specifications and content requirements.

Functional specifications represent the set of operations for the user to perform, for example, changing menu pages on a website. These specifications described how they are used by the user, not the developer. Content requirements describe the information that will be communicated to the user.

Structure – This is where user experience begins to form. It requires attention to interaction design, more specifically ‘flow-mapping’. This is where user movements are mapped out to show movement from one task to another. It looks at the navigation pattern and the ease of movement, whilst also considering familiarity within the next page to show reference to the first. For example if the navigation bar is on the left hand side in on the main page, you want this to remain there so users don’t get lost in the website.

Information architecture and interaction design can be vital contributors to customer loyalty because both these disciplines require an intimate understanding of the psychology of the user. By understanding the flow of a task- the natural way a user goes about achieving a goal we can develop the interaction design to mirror user expectations, as well as sometimes predict what users will need before they request it.

(Garrett, 2010, p. 6)

Surface – This is often the first stage of thought when we think of the design process. It includes sensory design visual choices such as color schemes, typography, sound elements, texture and functionality. The ‘surface’ section is decided on by aesthetics but should consider the ‘scope’ and ‘structure’ before finalizing an outcome. It should reinforce the ideas that have concluded from the first two sections. Sensory design has a powerful effect on customer loyalty, if used correctly.

2.7 Summary

From the review of similar paths, I will use this to benefit my own research through the creation of new technology such as an interactive website. Research (Ka'ai-Mahuta, 2012) shows that history supports the success of this method as Māori have adapted to previous uses of technology for preservation and this framework provides the next step for the encouragement of future preservation. However, to help encourage success, there are a few guidelines and methods to follow to; a) Make a functioning website; and b) Create an engaging experience where users will seek to learn. This will be achieved by the careful placement and structure of user experience and user interface to instill familiarity and trust to create ‘loyal’ consumers. Preservation of indigenous knowledge is something we must adopt through the use of ICTs as they are the ‘norm’ of today's society. It will never replace the authenticity of traditional ways of transferring cultural knowledge, but it is a necessity in ensuring the survival of this knowledge. In a world so digitally connected, is a link that allows our people who live overseas to connect home.

Chapter 3 - Methodologies and Research design

This chapter outlines the methodologies and research design used to guide this research. It incorporates the model used to simplify the overall design of the research.

3.1 Methodology

This thesis research will be conducted in a kaupapa Māori ideological framework as the content fits within this approach. It will incorporate kaupapa Māori tikanga in the collection of Māori content. The thesis also considers heuristics as a framework for the development of the artifact component of the research.

3.1.1 Kaupapa Māori

Kaupapa Māori will form the main approach of this research as it looks at framing everything from a Māori perspective or a Māori worldview. As the topic of research is around Māori taonga (treasure), the researcher feels that this is the appropriate way of research to follow with regards to the collection of Māori knowledge. Kaupapa Māori is framework based on key principals (Smith, 1999). The researcher has chosen this framework because the principles include the following:

- Aroha ki te tangata (a respect for people)
- Kanohi kitea (face-to- face)
- Titiro, whakarongo ...korero (look, listen ... speak)
- Manaaki ki te tangata (share and be generous)
- Kaua e takahia te mana o te tangata (do not trample over the mana of the people)
- Kaua e mahaki (do not flaunt your knowledge)

(Smith, 1999).

It is a common formality for a pōwhiri or mihi whakatau to be held prior to the meeting as part of tikanga Māori. These guidelines will be used to help remind and guide the researcher when performing this process, as well as conducting interviews with participants.

3.1.2 Heuristics

Heuristic research allows for personal experience as a valid research method. Moustakas

(1990, as cited in Guinibert, 2011) describes it as a process of ‘internal search’ where experience forms methods for further investigation and analysis. This approach supports the validity for the design and development of the website.

Tacit knowledge is a central component of heuristic research (Guinibert, 2011). This is important to website design where concepts such as the “feel for web design” and a critical eye are key factors in a successful website. Therefore, this study will include the my tacit knowledge on web design to guide my decisions. This also compliments the kaupapa Māori framework as it draws on personal experience and I grew up around the surrounding of the kaupapa Māori methodology.

3.1.3 Interview Selection Process

A set criteria will guide the selection process of participants. This criteria will be based on participants involvement with Ngātiwai iwi. The target participants will be kaumātua (elders) and/or community leaders with mana (status) of Ngātiwai iwi.

The selection process is used for guidance through the research process as well as a method to seek knowledge. As there are a lot of kaumātua of Ngātiwai, and the researcher has limited time, priority will be guided with the help of whānau, as well as time and availability of those selected. This approach also comes in line with the above principles of kaupapa Māori, which includes the understanding of Māori relationships, and mana of each person you are interacting with.

3.1.4 Interviews

The purpose of this method is to gather information from a wide range of different people in the hopes of forming a pattern (Tremblay, 1957). When developing interview questions, it is useful to start with the least threatening questions then move to the ‘more-probing’ questions (Barbour, 2013). The advantages of using the interview method, is that it can provide rich detail of the topic.

It is important to note that all interviews will consider and be guided by the principles described by Smith (1999).

Interviews will be used as a data-collection method. They will be semi-structured interviews as this is more comfortable, according to a kaupapa Māori methodology (Smith, 1999). By using a semi-structured approach, the researcher is able to engage more in a conversationalist type interview that can express more in-depth knowledge from the participant (Barbour, 2013). Other benefits of a semi-structured interview include asking the same questions to all participants.

3.1.5 Interview Analysis Procedure

Colaizzi's (1978, as cited in Xyrichis & Lowton, 2008) methods for analyzing data will be used to help guide and analyze the data found in these qualitative interviews. I have adopted four steps of Colaizzi's seven-stage process as well as implemented my own to mold the analysis for my research. I chose this method because it is a familiar process that I have been sub-consciously unaware of using in other work.

1. Transcribe and understand interview
2. Translate
3. Extract significant statements
4. Formulate meanings
5. Organize meanings into themes

All interviews were transcribed, two in Māori and one in English. The two in Māori were then translated by the researcher and overlooked by the supervisor, an expert in Māori language translation, and if need, modified to better translate the meaning.

Key statements were extracted and grouped to find common themes between all participants. If statements were found to be conflicting, the researcher would go back to using the text 'Te timatanga mai o Ngātiwai' as the base for all korero. Following this, meanings were formulated and grouped into themes.

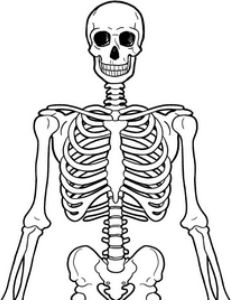
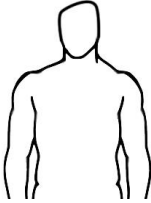
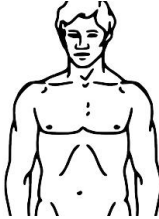
3.2 He tangata model

He aha te mea nui o te ao? He tangata, he tangata, he tangata.

This whakataukī (proverb) was the inspiration behind creating and using this as a model.

The model takes into account the most simplistic aspect of the makeup of a human being; bones, skin and features. Where bones refer to the skeleton and the 'inside', skin refers to the 'outside' of the human body. Features in this sense are used in its most basic form and refer to the eyes, nose, mouth, arms and legs.

Table 1: He tangata model

Model Design	Explanation
<p>Bones</p> 	<p>The bones represent the structure. It is where all content is based. It provides the first step in a finished product.</p> <p>Content includes</p> <ul style="list-style-type: none"> - Waiata - Photo - Video - Audio - Whakataukī - Interview - Additional written content <p>The bones are where the bulk of research content is. Without a solid foundation, the rest will fall.</p> <p>For web, this part is mainly concerned with HTML (Hyper Text Markup Language) that is used for all content you see on a web page.</p>
<p>Skin</p> 	<p>The skin symbolises the style of the website. It is where we coat the structure and where design is implemented. However, good design is driven by good structure.</p> <p>For web, this section is concerned with CSS (Cascading Style Sheets) that is the driving language behind making the web page look aesthetically pleasing.</p>
<p>Features</p> 	<p>Features include eyes, ears, mouth, hand and leg movements. Without the use of these things, functionality would be minimal. Therefore this section represents functionality.</p> <p>This is concerned with the 'flashy' development of the website and Javascript language. This implements the use of buttons and drop-down menu bars to name a few.</p>

3.3 Summary

As outlined in this chapter, kaupapa Māori framework was chosen as the primary methodology to drive this research for its relativity to the project as a whole. I have adopted features from this throughout all aspects of the project. Particular principles I have drawn from are kanohi kitea and aroha ki te tangata while conducting interviews. Kaua e takahia te mana o te tangata will also inform decisions regarding certain content of the website, for example acknowledging the mana of the participants in a section on the website. Heuristics supports this methodology as it draws on tacit knowledge and personal experience, both of which apply me as the researcher as I grew up around Māori surroundings.

Chapter 4 - Purpose and background

This chapter will provide a brief background on the cultural and traditional knowledge of Ngātiwai, particularly around kaitiaki. The goal of this chapter is to set the case study that will inform the content of the artifact, and provide some insight into the purpose of such an artifact in the digital preservation of Māori knowledge.

4.1 Statement of the Problem.

Māori have been forced to preserve their cultural knowledge as a result of colonization (Durie, 2004). In a world that is constantly evolving and technology is rapidly advancing, the researcher feels that moving towards digital preservation is the most efficient way to ensure the survival of this knowledge for the future. There is a common saying, “once it’s on the Internet, it is there forever”, something that books and paper text cannot guarantee.

4.2 Background and Need

4.2.1 Ngātiwai History

Many believe that Ngātiwai is a hapū of the much larger iwi Ngāpuhi, however, research proves this to be incorrect according to traditional knowledge from within Ngātiwai itself. As Piripi (1966) states, Ngātiwai heritage dates back to before the time of Rāhiri, which pre-dates the rise of Ngāpuhi. He continues to explain that Ngātiwai is a descendant of Ngāti-Manaia who travelled here on their waka (canoe) Māhūhū-ki-te-rangi from Ngāti-Manaia. It is through the traditional concept of inter-tribal marriage that brought the two iwi, Ngāpuhi and Ngātiwai, together. Ngātiwai translates to people of the sea, which is where most of their power was drawn from (Piripi, 1966). Today, Ngātiwai claims the region of the north that extends from Rakaumangamanga to Mahurangi (Ngātiwai Trust Board, 2014).

Further to the origins of the name Ngātiwai, there is a sacred place off the coast of Tūparehuia, called Manawahuna. Piripi (1966) explains that elders used the phrase ‘Kaua e whakakorikoria ngā kirikiri o Manawahuna, kei ngaro koutou i te moana, kei mate’. *‘Do not disturb the sands of Manawahuna, lest you be lost at sea, lest you die’* (p. 18) Ngātiwai would gather here before battle or war to see their fate. If they were to be covered in

water, this means they would be victorious in battle, however if they remained dry, it would mean certain defeat.

4.2.2 Ngātiwai Interpretation of Kaitiaki

According to Charles (2012) a kaitiaki is a being that acts as a caregiver, guardian, protector and conservationist. He continues to say that the original kaitiaki were the gods of the natural world, and all other kaitiaki emulate the originals (Charles, 2012). For example, Tāne, god of the forest was the kaitiaki of the forest, therefore birds are from the realm of Tāne, therefore they are also kaitiaki.

To look at an example from Te Whānau-a-Apanui people, who inhabit the East Cape region of New Zealand, and also have a similar relationship with the ocean that Ngātiwai have, there is the stingray or *whai*. The *whai* is considered to be a kaitiaki that protects the areas where shellfish can be harvested. It was a belief of Te Whānau-a-Apanui that if the right tikanga (cultural protocols) were followed, the whai would provide plenty of shellfish to those who seek it (Charles, 2012).

According to Ngātiwai oral history, kaitiaki are many things, they can be people, creatures, plants, mountains, mist, rain, etc (Piripi, personal communication, August 6, 2015a). Barlow (1991) says that kaitiaki spirits are formed by deceased ancestors to protect their descendants and wāhi tapu (sacred places). Barlow (1991) continues to state that most common kaitiaki appear in the form of animals, birds, insects and fish.

Ngātiwai believe there are many kaitiaki that look over the environment and its inhabitants (Piripi, personal communication, August 6, 2015a), however these kaitiaki are more commonly known within Ngātiwai as *mana* (Hetaraka, 2015, Schwimmer, 1963). This use of the cultural concept of mana to mean kaitiaki derives from the term *mana atua* (Hetaraka, 2015). Mana atua is the sacred power of the gods given to those who conform to sacred ritual and principles (Barlow, 1991). Furthermore, as Hetaraka (2015) explains it, mana or kaitiaki is a symbol of the atua. As seen in the previous example regarding Tāne, atua inhabit the many domains of a Māori environment, therefore kaitiaki are symbols of the mana of those atua.

However, to prevent confusion between the two throughout this thesis, kaitiaki will be the term used to describe 'divine beings' and mana will be used to describe the status or power of the subject, unless otherwise specified.

In its base form the cultural concept of mana means to have prestige, authority and power (Barlow, 1991). Barlow continues to say that a modern interpretation of mana has various meanings including the power of the gods, ancestors, land, and even individuals. Thus, these qualities are said to be inherent in kaitiaki. Schwimmers research supports this idea and relates mana to a class of divine beings. These divine beings of Ngātiwai fall into two categories separated by sex (Schwimmer, 1963), the male forms being shark, stingray, and dog, and the female form being Hineruru.

4.2.3 Different kaitiaki of Ngātiwai

Although the primary focus of kaitiaki in this thesis is Tukaiaia, it is important to note other kaitiaki throughout Ngātiwai to understand the importance of each individual and the role they have for the iwi.

Shark – Tautahi

According to Schwimmer (1963), Tautahi has two different versions of description. The first being a shark with a ring on its side similar to a John Dory, and the second being a shark with seaweed on its back. He states that Tautahi evolved from a still-born child of the same name who was thrown into sea. The teachings of Ngātiwai state that when at sea, Tautahi guides its descendants to safety.

Stingray – Te Whenua

Schwimmer (1963) states that his main role is a guardian of a cemetery at one of the beaches. He possesses anyone that violates the cemetery. It is also important to mention that Hetaraka (2015) also describes another stingray mana of Ngātiwai, known as Whairepo.

Dogs

Hetaraka (2015) states that Manaia, a chief, had two dogs, one white, and one red which is supported by Piripi (personal communication, August 6, 2015a). Piripi (2015a) continues to

say that the two had contrasting meanings. Without clearly indicating which was which, he described that one should be taken as a good sign, and the other a bad omen which you should be careful around. Schwimmer (1963) believes a dog by the name of Poiha who belonged to a tohunga, Te Hoterene Tawatawa, was also a kaitiaki. He became a kaitiaki by eating the leftovers of his tohunga who himself was a man of great spiritual power. Poiha is said to protect his master's descendants by guiding them to safety if lost in the bush.

Bird – Hineruru

Another manu of Ngātiwai, Hineruru, Schwimmer (1963) describes her as 'the bird' of Ngātiwai. Hineruru is recognized as being grey of colour with white under wings and the teachings state that if Hineruru is seen walking along the road in front of you, you are to be cautious as danger is around the corner. Piripi (2015a) describes a personal experience, where he saw Hineruru whilst travelling along a rural road, later through his journey he came across an accident on the corner of the road. Furthermore, Schwimmer (1963) states, "Usually the kaitiaki is seen when someone from the tribe passes on" (p. 6).

4.3 Summary

Kaitiaki range through a variety of beings, however they all have the same purpose, being a protector and/or caregiver. This research acknowledges that the two words, mana and kaitiaki are intertwined with the same meaning, however for simplicity and understanding they will be later defined and separated. This is a brief example of the wide variety of cultural knowledge that has limited written text. This is the content that needs to be preserved to ensure its survival so that future generations can learn of these stories. Earlier I mentioned whairepo as another stingray kaitiaki, but because there is little known or recorded, it is information that may not survive. Therefore by conducting more research, more recording, more documentation, and adding it to a digital archive like this website, we will be able to ensure the safety and survival of all cultural and indigenous knowledge and it will be forever available.

Chapter 5 - Interviews and participants

This chapter expands on the outline of the interviewees in Chapter Four, and looks at their connection to Ngātiwai. It uses Colaizzi's process of analyzing to explore the interview data and identify key themes. Following this is a set of limitations based on the collection and analysis of the data.

5.1 Interviews

Using a semi-structured approach, the researcher is able to engage more in a conversational type interview that can garner more in-depth knowledge from the participant (Barbour, 2013). Other benefits of a semi-structured interview include asking the same questions to all participants.

5.2 Participants

5.2.1 Morore and Mahikitai Piripi

I travelled to Whangaruru to interview the two participants about their knowledge and experiences with Ngātiwai and Tukaiaia. After initial formal introductions, the participants and myself continued on to what is known as a *mihi whakatau* or *pōwhiri* to be welcomed in to their home. This is important to note as *pōwhiri* is an integral Māori cultural protocol that establishes and formalises the relationship between the researcher and the participants. A modern interpretation of *pōwhiri* can be used to include every aspect of welcoming visitors. Any interaction between both parties can not continue until this protocol has been completed (Barlow, 1991).

With protocol complete, the research began where we spent a couple of hours researching old texts and *kōrero* (narrative) that has been passed down to them. Aroha ki te tangata should be noted here as this is *kōrero* that has been within their *whānau* for decades and understanding that this is a sacred topic is important. This archival material would go on to drive the conversation on camera. With Mahikitai being the older brother, Morore felt it would be better for him to go first as he was the one who should be sharing his *kōrero* first. Following the interviews, we sat to have kai before a brief *poroporoaki* (formal acknowledges before parting ways) where I would return from Whangaruru to Auckland.

Mororekai Piripi

“Ko Mororekai Piripi ahau, i whānau mai au i te rā whānau o tōku tupuna, ko Mōrore anō, koinā te take ka tukuna taua ingoa ki runga i ahau. Mai i konā, he hū nui rawa atu ki te whakakī, ēngari ka kawē au i te ingoa o tōku tūpuna, ka hīkoi ahau i raro i te whakaiti, i te humārie, ki te whai i wāna wawata, i ngā wawata o ōku mātua, nō reira, koinā tōku ingoa. Ko Houpeke tōku matua, nāna i mārena ki a Mere, nō Te Whānau-ā-Ruataupere tōku whaea, he kāwai rangatira ki taua taha anō, ēngari nō Whangaruru ahau, nō Punaruku i tipu ake au, i kuraina au i roto i tōku wā tamariki, rangatahi hoki”.

My name is Mororekai Piripi and I was born on the same day as my grandfather, and namesake, Morore. Since then I have had big shoes to fill, however, I carry his name, and so I walk with humility, and pursue his dreams, and the aspirations of my forebears, therefore, this name. My father is Houpeke, he married Mere from Te Whānau-a-Ruataupare, my mother is of that noble line, but I am from Whangaruru, and grew up in Punaruku, where I also went to school.

Mahikitai Piripi

“Ko taku ingoa ko Mahikitai Piripi, nō Ngātiwai. Tō mātou nei hapū ko Te Uri o Hikihiki, nā i tipu atu au i konei, i Whangaruru. I whānau mai au i konei, i haere au ki te kura o konei, nā reira, na to mātou pāpā i mauria atu mātou ki ngā wāhi katoa o te moana, ki te hī ika, ki te ruku kina, ki te kohikohi pipi, ā, ki te mahi i ngā whēua kei te wāhi urupā ki Mōkau”.

My name is Mahikitai Piripi, and I am from Ngātiwai, our sub-tribe is Te Uri o Hikihiki. I was born here in Whangaruru, I grew up here, I went to school here, our father took us to the sea to learn about fishing, diving for kina, gathering pipi, and to work with bones in the sacred burial ground at Mōkau. These were all the things our father taught us whilst growing up here.

5.2.2 Carmen Hetaraka

The interview was conducted at his workplace in Wiri. Before we began, Carmen asked if we could perform a karakia (prayer) before moving forward. He explained that as a subject so sacred to Ngātiwai he felt it was important to acknowledge all those who have passed on especially to those of whom he learnt from. Karakia, like mihi whakatau and powhiri, act as a cultural protocol that prepares a sacred space that will soon be interacted with by people. Karakia also act as a ritual of making connection between parties involved in the purpose of the meeting. Karakia provide comfort, guidance, directions and blessings (Barlow, 1991). These protocols were familiar to the researcher who grew up within this environment. However, these protocols often seem very foreign to an English-only media team that is derived from western notions of social engagement.

Carmen Hetaraka

“Taku tūpuna a Turehua I moetahi ki a Mihi-Terina, ka puta ki waho a Hēni Kohiahi, Ka moe a Hēni Kohiahi ki a Himiona, ka puta ko Ripeka. Nā ka moe a Ripeka ki a Te Moro Rīwhi-Hāri ka puta a Mihi-Terina, ka moe ia I a Huruiki Iehu-Hetaraka ka puta ki waho a Wiki Te Pirihi Hetaraka, ka moe a Wiki Te Pirihi Hetaraka I a Raiha Heta Te Kauwhata ka puta ki waho ko taku pāpā Te Moro Wiki Hetaraka, ka moe ia ki a Laurel Kereopa, ka puta ko au. Koina taku whakapapa ki a Ngāti Manaia, ara a Ngātiwai. Nā te mea I te taha o taku māmā ki Patuharakeke, me taku pāpā ki Whangaruru”.

My ancestor Turehua joined Mihi-Terina, then came Hēni Kohiahi. Hēni Kohiahi joined Himiona, then came Ripeka. Ripeka joined Te Moro Rīwhi-Hāri then came Mihi-Terina. She joined Huruiki Iehu-Hetaraka then came Wiki Te Pirihi Hetaraka. He and Laurel Kereopa are my parents. That’s my link back to Ngāti Manaia, thus Ngātiwai. On my mothers side I link to Patuharakeke and my Whangaruru on my fathers.

5.4 Analysis of Interviews

Five common themes were extracted from the three qualitative interviews.

5.4.1 Themes

- Form
- Mana of Ngātiwai
- Manawahuna
- Karakia and Waiata
- Te Houpeke Piripi

5.4.1.1 Form

This was the most diverse theme. This theme refers to the form that Tukaiaia presents itself as. Piripi (personal communication, August 6, 2015b) describes Tukaiaia as a kind of soul that exists within other creatures, “only in my thoughts, and experiences would I see my forms of this bird, be they seagull, fantail, sparrow, or hawk, to me, those are the different forms of Tukaiaia”. Piripi (personal communication, August 6, 2015a) recalls his father mimicking the sounds of a bird thought to be Tukaiaia and once he saw the feathers drop from this bird making the sound his father made, he realised it was a black back gull. Hetaraka (2015) says that these forms (black back gull and mollyhawk) are only representations of Tukaiaia. He believes Tukaiaia is more of a divine being, one that can’t simply be seen in our world, but we use representations of birds we know that can best describe it. “So thats why you’ll hear kōrero that will say its a big black back gull or what they call a molly hawk and then because our kāhu here, that one you see eating the road kill, thats a bird of high distinction for us because its like an eagle ... but it’s been diminished because it’s eating Possum off the road..., that’s not even an animal from here, you see. So its status has been diminished. But they (molly hawk and kāhu) are actually symbols and metaphors for high-born people” (Hetaraka, 2015).

As all three descriptions about the form of Tukaiaia vary, we can ascertain that they still have one common trait in that they agree it is a large hawk-like bird. All participants have their own interpretation and the researcher supports this idea that it is the representation of Tukaiaia’s many forms that is most important.

5.4.1.2 Kaitiaki of Ngātiwai

All participants spoke of other Ngātiwai kaitiaki, more commonly referred to as mana. Piripi (personal communication, August 6, 2015a) says that “there are also other kaitiaki, Tautahi, is a shark, and there’s also a stingray, and dad had two dogs he talked about”. These are supported by Hetaraka (2015) who says “ko te tuatara, ko te whairepo, ko te kāhu, ko Tukaiaia, and we also have a mako, or mango, Tautahi. So those are the mana of Ngātiwai. Even dogs, the dogs of Manaia”. Piripi (personal communication, August 6, 2015b) adds “What we, as man, need to do is to open our minds, our faces, our ears, our skin, everything that makes us human, to these kaitiaki”.

These kaitiaki were explained to the researcher as a way to understand the different types of atua in Ngātiwai. This helps us to understand the importance of each divine being.

5.4.1.3 Manawahuna

Manawahuna was mentioned by all participants and all told the same story. Manawahuna is a special place where Ngātiwai would gather before war to determine their fate in battle. This lead to how wai (water) was the power of Ngātiwai and reinforces the name of the people. “Ngā mana katoa o Ngātiwai kei te wai” (Sadler, personal communication, 2006).

5.4.1.4 Karakia and Waiata

All participants were asked if they knew of any story, karakia (prayer), waiata (song) and *tauparapara* (incantation) about or inclusive of Tukaiaia. We listed four examples.

- Takina ake ra (Karakia)
- Tukaiaia (Waiata)
- Ka tangi a Tukaiaia (Tauparapara)
- Tauparapara 2

The karakia “Tākina ake rā” was the first example given by all participants. It is also noted and translated in Piripi (1969). This will be discussed further in the research.

The waiata talks about the journey of Tukaiaia and the border of Ngātiwai from the perspective as if you were travelling next to it.

A tauparapara that speaks directly about the signs of Tukaiaia, stating if you see this being, Ngātiwai would soon follow.

Regarding the last tauparapara, although mentioned, it is uncertain if it is indeed a direct link to Tukaiaia or whether it is a general mention to manu. “He rūrū ano te rūrū, he kaiaia ano te kaiaia, tēna ko au, ko mau tikitiki o te rangi. Taki wai whiti, taki wai tai. He tu whaipō he tu whaiao. He tapu tau ake i whanakenake ki te papa o Wāhiaroa” (Hetaraka, 2015).

These examples provide an understanding of how cultural knowledge was passed down orally. It’s something that Māori adapted to ensure the survival of this knowledge, and further supports the documentation of this traditional knowledge.

5.4.1.5 Te Houpeke Piripi

All participants reference Te Houpeke Piripi throughout their interviews. From the data collected, Te Houpeke Piripi was a tohunga (prophet) of Ngātiwai knowledge and traditions and is one of the main educators of this knowledge. All participants have learnt korero from him at one time or another. He is a kaitiaki of our knowledge for preserving these korero.

5.5 Limitations

Improvements can always be made to research, however with the constructs of time and other factors, certain limitations have lead to compromise and small sample size. For example, condensing the sample size of participants to only three. With more time we can see an increase in sample size, producing more data that would expand themes and ideas, thus leading to an increase of cultural knowledge that can be digitally stored. This is a subject that cannot be covered in full over a year-long study, instead multiple years would create a round understanding. Therefore this research set the foundation for a wider project that perhaps Ngātiwai iwi can continue into the future.

5.6 Summary

These participants will help guide the research, as they are respected people within Ngātiwai for oral knowledge. From the qualitative data collected, themes have been created to separate video content in the exegesis. It is important to note that there are many more respected people in Ngātiwai that have invaluable korero of Tukaiaia, however due to limitations this was not a possibility. To improve on this qualitative data collection, the sample size could be increased to produce more effective data. This would allow for a larger research scope and would increase the amount of knowledge gathered, therefore creating a positive impact on this research. It could delve in to the origins of kaitiaki and perhaps a detailed illustration of their description. However, this could not be done in the amount of time provided. It would also require a team to conduct such complex and intense research and data collection.

Chapter 6 - Tukaiaia

This chapter aims to answer the question “what is the significance of Tukaiaia to Ngātiwai”. It re-introduces data collected from the qualitative interviews briefly discussed earlier in this research, and analyzes its meaning.

6.1 Statement

It is worth reinforcing that I am what (Adler & Adler, 1994) refer to as an insider researcher. The general sense of the term is that the researcher is part of the group being researched (Adler & Adler, 1994). In this example, I have geneological links (whānau, whakapapa) to the topic of research. Within this environment, as a child, I was always taught that Tukaiaia was one of my kaitiaki being a descendant of Ngātiwai. I was taught that if this kaitiaki came to me in a dream, I was to take it as a sign of comfort, and to remember it is always there to watch over me.

6.2 Name

Hetaraka (2015) explains the name Tukaiaia, which derives from the phrase ‘Tukai i aia’. The large bird that would chase and attack other seabirds forcing them to spit their food they were holding in their throat. Piripi (personal communication, August 6, 2015a) talks about how his father, Te Houpeke Piripi, would mimic the sound of Tukaiaia and realized it was similar to that of a black back gull. Hetaraka (2015) re-enforces this notion as he thinks we have adopted these ideas as representations of Tukaiaia. He continues, Ngātiwai have had to use representations of Tukaiaia or metaphors to explain it. It’s a bird of high distinction, being such; the closest representation that will suffice is that of a black back gull, or a molly hawk.

6.3 Form and representation

Form is discussed earlier in this research and we found that it varied between the three participants. What we could identify in each interpretation however is that all agree that it resembles a bird-like figure. This is also true of the base research, where Piripi (1966) describes Tutemahurangi as a great albatross.

What is important is what the form represents. Piripi (personal communication, August 6, 2015b) says “our job is to teach these traditions to younger generations, that is your kaitiaki, if you see them, its alright, should you see this particular thing, be careful, should you see this, you should run, leave, go back to a safe place. That is our job, to pass on the teachings and history to our children and grandchildren”.

All participants may have varying forms of Tukaiaia however there were commonalities amongst all of the participants that lead to a single representation of Tukaiaia, that is, a messenger bird. A kaitiaki that would warn or notify the arrival of a purpose.

6.4 Manawahuna

Manawahuna is another constant mentioned by all participants. According to Piripi (1966), Manawahuna is a cave that contains sacred water. Ngātiwai would gather here before battle and karakia. They would stand in the cave and one of two things would decide their fate in battle. The first, if they become wet, this would be treated as a positive sign that they would be victorious in battle. If they remained dry, it would be taken as a bad omen and that they would either fall ill or not survive in battle.

Though a direct link to Tukaiaia is not formally established, it remains an important factor in learning about Tukaiaia. It was reference by all participants in the qualitative study

6.5 Karakia and Waiata

Tukaiaia has also been known to have an alternate name ‘Tutemahurangi’. In the tauparapara (a type of karakia that identifies a visiting group through incantation to begin a speech (Te Aka, 2016), ‘Takina ake ra’ there is a section where the bird is identified. “Whakataha ia ra te tikitiki o Tutemahurangi, he manu kawē ngā kii ki roto o Pou-e-rua” (Piripi,1966). This tauparapara depicts Tukaiaia as a messenger bird. It states it travelled inland to a pā in Kaikohe to carry word about war (Piripi, 2015a). This idea can be found in another tauparapara “Ki te tangi a Tukaiaia ki te moana, ko Ngātiwai kei te moana e haere ana. Ki te tangi a Tukaiaia ki tuawhenua, ko Ngātiwai kei tuawhenua e haere ana”. Piripi (2015a) shares a story that his father, Te Houpeke, would share with him, that in past tense, when Ngātiwai would go to war, Tukaiaia would present itself to their allies to let them

know Ngātiwai is coming, a sign to prepare for visitors. A modern interpretation by Piripi (personal communication, August 6, 2015b), states that for him, Tukaiaia can represent itself in many forms of manu, as it is the embodiment of the spirit that he sees. The message of visitors to the area still remain as they were, however are no longer related to war. Because of the ability for modern interpretation, it is still relevant today.

Takina ake ra te tai tara ki Motukokako,
Whakatahahia ra te tikitiki o Tu-te-mahurangi,
He manu kawē I nga kii ki roto o Pou-e-rua
Nga kohu e tatao I runga o Rakaumangamanga
Kei tahuna kia tapu te riri e
Whai mai ra ki au

Tena ra pea, koe e Pa e te Apatunga!
Te korero a Wharena
Kia houhia te rongo
Ka whakarauika a Ngapuhi.
Ka tu Taiharuru te moana
I hoea ai e Ngatiwai
Ki raro ki Putawiri
Ka mate ki reira ko te Wehenga,
Ka ora ki reira ko te au Kumeroa.
Nga tai e to na ki waho o Morunga
He au here toroa,
Whai mai ra ki au

In the song 'Tukaiaia Ngatiwai' composed by Tommy Taurima and Te Houpeke Piripi, we see the travels of Tukaiaia. The song was designed to describe the travels of Tukaiaia through the kaitiaki's own eyes, this was to show children what it would be like if they could fly with Tukaiaia 'parirau pakipaki, parirau tukituki, korikori taua' (Hetaraka, 2015). The song tells the boundary of Ngātiwai through the journey of Tukaiaia, from the highest mountains to the seas. Significance can be found in defining the boundary to educate the iwi on its borders and journeys of Tukaiaia.

Porotiti titaha e rere e manu
Korikori taua kokiri taua
Parirau pakipaki
Parirau tukituki e

Hinganga ki uta
Hinganga ki tai e, aue

Ngatiwai

E rere runga rawa e,
Ki runga o *maungatapua*
Ko Tukaiaia
Ki raro whakaatata
To tinana manu tipua
Ko Tukaiaia

Ka tū ngā maunga teitei
Parimata, Ngaioletonga, ko Huruiki ē
Ki roto Whangaruru kei Ngatiwai
E rere ki te hauauru
Ki te poko rua ana

Rakaumangamanga e
Taku manu tipua
Kia paripari korikori parirau e
E rere ara ki te kauariki e
Ki tuparehuia
Nga mokopuna Ngatiwai

Whakarongo ki te tangi
Aku manu tipua
Ko Ngatiwai, Whangaruru
Tu mai Tukaiaia
Nga manu tipua,
Ngatiwai e.

6.6 Summary

There is an abundance of beautiful korero about this divine manu that sit within our Ngātiwai community. The significance of Tukaiaia to Ngātiwai iwi is for each to interpret their own conclusion. I have learnt that Tukaiaia's representation throughout history as a mana of Ngātiwai is still as relevant as it was then, now. Through song we are able to identify journeys of this mana. Through tauparapara and karakia we hear significant korero about its life. It can act as an intriguing story to excite children as well as provide a clearer understanding for who we are. I believe its significance today is continuing to educate our people through these korero, a kaitiaki in the sense of not only a protector and caregiver of people, but a protector and caregiver of tikanga and history.

Chapter 7 - Documentary

This chapter explores documentary styles to decide which one is better fitted for this project. It separates the observational style apart from the expository style, as the natural fit to the project as it also appeals to kaupapa Māori and tikanga Māori. The two seem to have a seamless cohesion, that compliment each other for this project. Following this, we identify the vast equipment kit that was used to conduct the video aspect of the practical component. The researcher produced this without a budget and the help of videographers to engage in production. The equipment is what was used over the entirety of the project, meaning some was used at 'x' and others at 'y'. There was no point in time where all was used on the same shoot.

7.1 Documentary Style

According to Nichols (2010) there are two main types of documentary styles.

The first, *expository* shows that the relationship between subject and filmmaker can be distancing, it generally uses a narrator or an authorial voice over. The second, and the type I have chosen to use is the *observational* style. Nichols (2010) describes this as a shift in the relationship of the filmmaker and subject whereby the filmmaker becomes an observer to the scene, more commonly known as the 'fly on the wall' approach. Cohesion can be made between the observational style and a tikanga Māori approach. Nichols continues to state that common traits include participants becoming social actors, questions grown into interviews and further conversations between filmmaker and subject and the absence of intervention from filmmaker in capturing the action. The cohesion can be made by this and the principles; Aroha ki te tangata, kanohi kitea and manaaki ki te tangata, which are previously mentioned in chapter four. This cohesion of style essentially creates a more realistic type of documentary because there is no 'staging' of events.

7.2 Equipment

The following equipment was used to capture all video related data. Not all pieces of equipment were used at the same time, but at least once throughout the documentation process.

- Camera

- Canon C100
- Canon 5D Mark III
- Canon 650D
- Lenses
 - Canon 85mm f/1.2
 - Canon 50mm f/1.8
 - Canon 24 – 105mm f/4L
 - Tamron 10 – 24mm f/3.5
- Sound
 - Rode Videomic
 - NTG4 Shotgun Microphone
 - Sennheiser Wireless Lapel
- Accessories
 - Manfrotto Tripod
 - Manfrotto Monopod
 - E-Image Tripod
 - Aputure AL-H160 LED Lighting Kit

7.3 The process

The participants were asked a set of questions to initiate conversation. If the researcher sensed the conversation was heading in a different direction, straying from the question line, the researcher used probing questions to subtly encourage participants back to the topic of discussion. This technique helped to create a sense of conversation rather than an interview. However, topics that were not discussed but were part of the original set of core questions were marked as further topics of discussion to be initiated when the participant was able, also abiding by the principle of titiro, whakarongo, and kōrero - look, listen, and speak.

7.4 B-Roll

“B-Roll is the extra footage captured to enrich the story you’re telling and to have greater flexibility when editing. Instead of featuring only talking heads on video, you want to have other images you can cut away to that will add dimension to your story. B-roll can include additional video footage, still photographs, animation or other graphic elements”

(Jellinek, 2011)

B-Roll was taken on multiple occasions. This was a result of many factors, different weather types, multiple locations, re-shoots. B-Roll is also known as ‘cutaways’ so having a lot of these gives more options in post-production to cut away from the head shot and can give more depth to the story.

7.5 Summary

Every step throughout this video recording and documenting process was carried out through kaupapa Māori theory. It's an indigenous transfer of knowledge experienced with indigenous traditions. For post-production work on the practical component of this research, the expository style will drive the style of documentary. It will act as a guideline for editing.

Chapter 8 - Practical Design

This chapter outlines the creative process behind the graphic design and website features of the practical component to this research. It discusses a creative framework by Do and Caballer (2014) to help guide the thought process. It displays graphic design work showing wireframes, sitemaps and mockups to provide an understanding of how the researcher arrived to the final output for the practical component. Some key words that will be used in this chapter are user interface and user experience (UX/UI). This refers to the interface of the website and its simplicity to navigate the site, if successful, it should be able to be easily navigational for its users and should not make browsing the site an effortless act.

8.1 Creative Process

The creative process is a guide that varies from designer to designer. There is no right or wrong creative process as it is solely a personal preference. Many designers influence my style, however I feel for this project I have communicated a lot of this work from the inspiration of Chris Do and Jose Caballer of The Skool Networks creative process. I have found that there is a balanced mix of logically structured and creative unstructured thought. I have drawn heavily from Do and Caballers'(2014) framework of creative process and modified it to better suit my workflow.

8.2 Gather ingredients

- *Create Attributes*
- *Research*

8.3 Tell A Story

- *Create directions*

8.4 Make it Artful

- *Styleescapes*

8.5 Design

- *Wireframes*
- *Mockups*

8.6 Create

8.2 Gather Ingredients

8.2.1 Create Attributes

Arguably the longest process of design, these are the attributes that will direct the style and art of the site. This framework has been sourced from the **CORE** kit of The Skool Network (<https://the-skool.myshopify.com/>) and modified.

These are used to help identify a certain direction. Usually, they are asked to the client, but as this is an exegesis, I have put myself in both the role of the client and developer; therefore I have answered them to how I would like the attributes to be. The bold red words are the strongest attributes that will heavily influence design.

Figure 1: Attributes

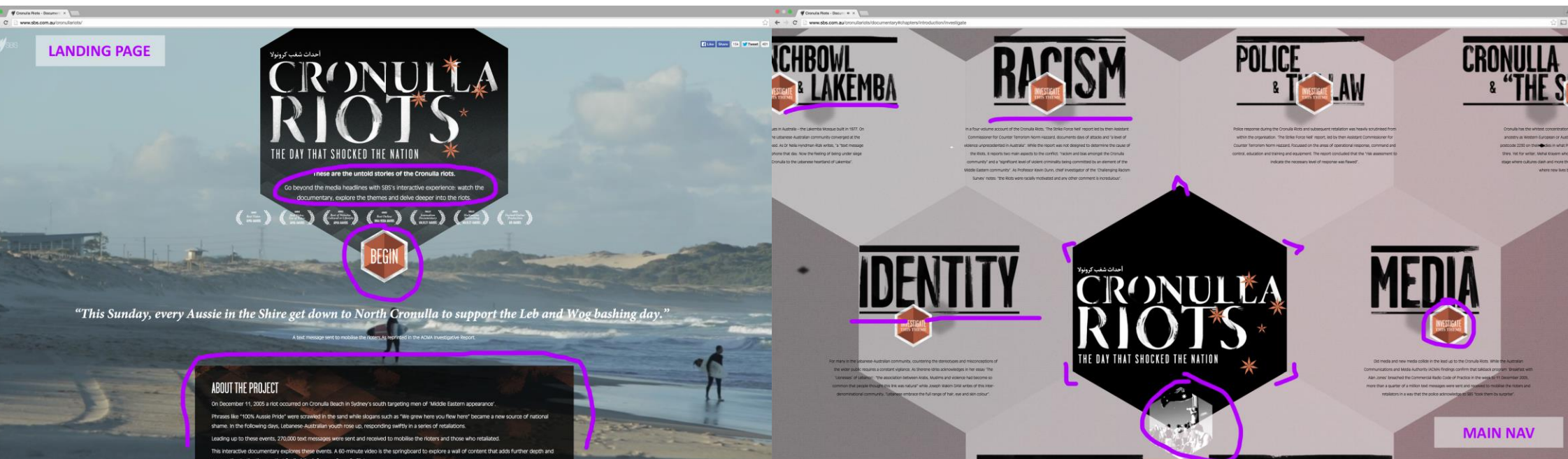
CULTURE	CUSTOMER	VOICE	FEELING	IMPACT	XFACTOR
<i>How would the user describe the brand</i>	<i>How would you describe your ideal user</i>	<i>How would you sound to others</i>	<i>How a user feels after using the product</i>	<i>What we tangibly deliver</i>	<i>What makes us special</i>
Traditional Homegrown Authentic Māori Modern Simple	Families Suburban Teenager Student Driven	Knowledgeable Wise Bold Nurturing	Calm Energized Taught Country	Community Education	Exciting Legend Fun Interactive Our own

8.2.2 Research

The most important step in my creative process is always to research websites of similar nature. The thought behind this is to find common UX/UI features and design features to best display my own work. By doing this, you can break down and analyze sites and implement these in to your own design. It's a process of understanding what works and what does not. This is more efficient than creating a final product from a blank canvas without inspiration.

Following this thought process, I have included two of the case studies of website breakdowns that contain features I have drawn inspiration from and summarized what is efficient and how I could apply them in my own design. This is integral to help direct the path of design I choose to follow.

Figure 2: Case Study 1 - Cronulla Riots



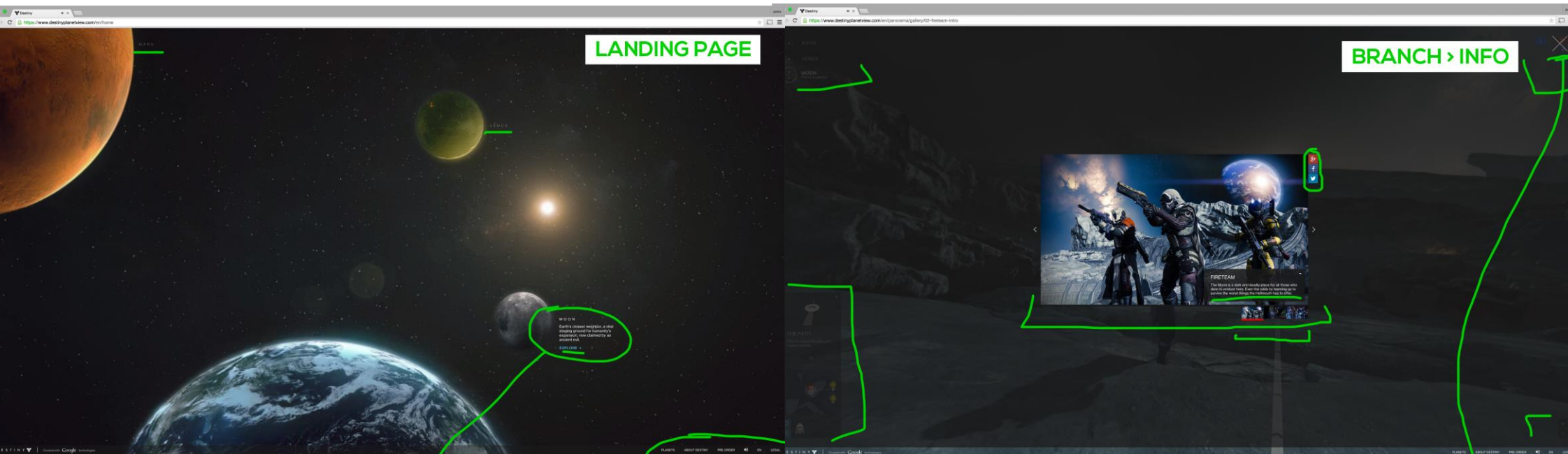
Noted features

- Video loop in background
- Graphic overlay
- Brief overview in main graphic
- 'About' on scroll, own BG, moves on scroll function
- Hexagon pattern evident throughout design
- Navigation menu separated by themes of documentary
- 3D Space feel

My design is heavily influenced from this website. The way of navigation and the 3D space is something I explored as a feature to include. I have analyzed these features to see if they could work effectively in my own design and why. The constant use of the hexagon pattern is a

subtle 'marker' of repetition to create a certain feel of the site. Repetition leads to a sense of unity and has the ability to improve readability, without it, design lacks continuity and the user can lose interest (Shutterstock, 2015).

Figure 3: Case Study 2 - Destiny



Noted features

- Landing page has open UI
- 3D Space feel
- *Green underline = submenu
- Brief description appears on hover
- Bottom right = constant navigation repetition
- Opens separate window on click
- Exit button clear and evident
- Social media buttons easily accessible

Again I have drawn inspiration from the features in this website. More specifically, the pop-up window to display media content, the efficient use of repetition in the bottom right navigation and the UX feel to navigate the site. Both case studies have a similar open navigation system and 3D space to move around. This is a feature that I strongly use in my own design. Intuitive design is how we give the user new superpowers (Spool, 1999).

8.3 Tell A Story

8.3.1 Create Directions

Using the attributes from above, I separated them into two directions to eventually create two stylescapes. Do & Caballer (2014) says it's useful to draw from other attributes in the chart however using a guideline of 80% direction attributes and 20% other attributes generally creates good stylescapes.

Figure 4: Directions

Direction 1	Direction 2	Direction 3
Simple Suburban Bold Energized Education Exciting	Homegrown Driven Wise Country Community Our Own	Simple Homegrown Suburban Bold Calm Legend

By using these directions, a story can be developed through design, which leads to step three, make it artful.

8.4 Make It Artful

8.4.1 Stylescape

I have created 2 stylescapes. "Stylescapes are a design deliverable that helps present the visual language direction of a project. They consist of fonts, colour, logo, form, images and interface or physical elements" (Do & Caballer, 2014). The idea of stylescapes is to generate different feels for the same project to decide on which direction to move forward with. It is an integral step before producing mock-ups. Because I am also the 'client', I know the style I'm looking for, but as a designer, "the hardest thing for a designer is to accept that the first design isn't good enough" (Do, 2014). Keeping to this thought structure, I created different stylescapes with similar attributes and differentiated them.

Assuming the logo is created and going to be used, the first step to creating stylescapes is finding a **colour palette**. I find the website 'Adobe Kuler' is best for this. Adobe Kuler is a website that creates colour schemes and generates thousands of colour combinations from the uploads of the Kuler community. Having an Adobe Creative Cloud account allows it to integrate seamlessly with Adobe software so that you can access these colour palettes in software's such as Adobe Illustrator and Adobe Photoshop.

Typeface. More commonly known as font (the two are arguably interchangeable now (Frere-Jones, cited in Brownlee, 2014) can be found through the mass of websites, but it can be hard to separate the good from the bad. Personal choices are *fontfabric.com* and *fontspring.com*. Between these two websites, there are a variety of well-made and free fonts with accurate tracking and kerning unlike the fonts commonly found on *dafont.com*.

There are three main types and each have their own purpose.

Serif font Aa - Serif

Sans font Aa - Sans

Slab font Aa - Slab

(Lupton, 2014)

Written text, both printed and on screen, fall in to two categories; body and head. Heads are used mainly for eye-catching sections and subsections while body is the main reading matter (Lupton, 2014). There are many factors that lead to a type selection and I have expanded these below.

Images are a strong component that adds to the overall theme and feel of the design. These can be originals or taken from *Shutterstock* and various image sites. Because my stylescapes are not-for-profit I have used Google images.

An optional step for websites is to integrate part of the intended layout in to the stylescape

A general guideline to creating stylescapes can be found later in this chapter.

Stylescape 1 Breakdown

Step one – Finding a colour palette

I used the keywords 'energy' and 'suburban' in Adobe Kuler to draw from those colour palettes and create my own.

Figure 5: Colour Palette 1



Step two – Font selection

I used 'Bebas Neue Bold' as a bold font and 'Sanchez' as a contrasting style choice.

Step three – Source images

I decided to only use shapes and bold colours as a 'simple' approach to design. The absence of images emphasizes this idea.

Step four – Layout

This is a feature which I am certain will be in the final output somehow, which is why I have included it here.

Stylescape 2 Breakdown

Step one – Finding a colour palette

I used the keywords 'homegrown' and 'country' in Adobe Kuler to draw from those colour palettes and again create my own. These have cultural appropriation as they are natural earth colours. Browns, greens and blues represent earth, sky and sea and are general colours, in my opinion, when you think of Papatuanuku and Ranginui, the earth mother and sky father.

Figure 6: Colour Palette 2



Step two – Font selection

I used two different weights, bold and regular, of the '**Sucrose**' font family. It also has extra styles '**Sucrose** one and Sucrose four' which decreases its full-ness by subtracting some of its boldness. Eg.

As a bold font, these fonts have good contrast between their different weights. Sucrose four also feels more towards country and homegrown because of its decreased boldness. It makes it seem more authentic. Lupton (2014) says that websites need a hierarchal system and that this can be delivered through scale, weight, colour, complimentary fonts and styles. It should show structure and direction. By using this bold serif font I aim to attract attention to the subheadings.

SUCROSE VS **SUCROSE**

Step three – Source images

A Google search of 'Oakura Beach' (The beach where I plan to go take original photos) and 'green forest' re-enforced the proposed homegrown theme.

Step four – Layout

Again, I have integrated the same layout feature as I have in stylescape one because I am adamant that this will be in the final output. It has an effective User Experience and User Interface (UX/UI) design.

Stylescape 3 Breakdown

Step one – Finding a colour palette

Using Adobe Kuler again, I explored the keyword legend to generate a colour palette. This was inspired by the use of colours in animation. I tend to be drawn towards the earth tones as it represents the colours I think about when I hear Ngātiwai. Earth tones remind of an image of 'the mill', a local swimming hole in Whangaruru, so automatically I am drawn to these colours.

Figure 7: Colour Palette 3



Step two – Font selection

I decided to keep 'Roboto' as the main font and using a variety of its weights to show contrast between text.

Step three – Source images

By now I had already gathered some source images, so I used these to implement in the design

Step four – layout

A new layout formed from a late inspiration that perhaps changed my mind most on the final output.

8.5 Design

This section focuses on wireframes and mockups. Figures are separated into two parts; initial and subsequent designs. After creating the initial design, it was advised that the project might be too large to execute in the time frame. Also the level of web development skills might also be outside my personal skills range to follow through with functionality. It was recommended that the initial design would need a small team to complete the build for the initial design approach. However I have included the initial design as an original concept as a reference to the intended design only. The subsequent only contains a wireframe as I decided to start building before I completed mockups for this part.

8.5.1 Wireframes

Wireframes are used to display conceptual models of a design. They can have varying levels of detail, known as low-fidelity to high-fidelity (Bertelsen, 2014). They

represent the skeletal structure of a website and uses simplified elements to create a general understanding of design concepts (Lupton, 2014).

Low-fidelity wireframes have little detail but provide a good understanding of the layout of the design. It shows initial placement for design features and helps the 'client' understand a layout without being distracted by a full coloured style design. High-fidelity improves on low-fidelity by adding more of a visual overview to show a closer-to-end-product where the client can vividly picture a direction or style of where the site is heading.

Refer to wireframe figures later in the chapter.

Wireframe 1 – Initial Concept

Wireframe 2 – Subsequent Concept

8.5.2 Mockups

Mockups provide a final look to begin production. Figure 9 (p. 46) shows a mockup of where the majority of the site is controlled. This composition is 3072 x 756pixels. 3072 is 3 x 1024 (A website at full size) so imagine the composition has three sections, horizontally split into thirds. Each third represents the size of a web browser screen at full size (1024 x 756pixels). This is how the website will be viewed through a browser. This is not typical of your traditional website, it leans more towards a gaming interface which I have chosen to use as a better interactive feature for the target audience.

8.6 Summary

Designing for websites are a long process to follow through with. Using a creative process to guide thought and provide structure is a key part in moving forward and completing each step along the way. As a designer, knowing when to stop editing is a concept I struggle with as you always think you could improve on some aspect. Because so much time was used to create the initial design, it left less time than expected to implement this in to a build. Therefore I had to create mockups and

build simultaneously to execute the subsequent design. Fortunately, I was able to use the stylescapes as a way to style the design. After experimenting with html, css and the stylescapes, I decided to use stylescape 3 as it was the most appealing throughout this 'testing' phase. Creating a wireframe was the most essential step of this design to guide the placement and layout of the final build.

Figure 8: Stylescape template (Recreated from The Skool Network stylescape template, 2014)

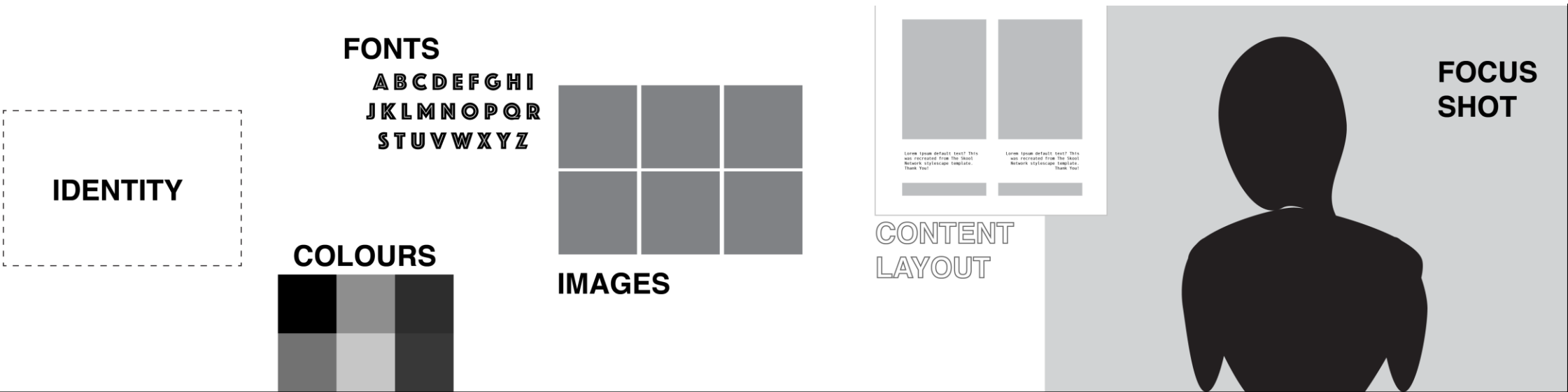


Figure 9: Stylescape 1

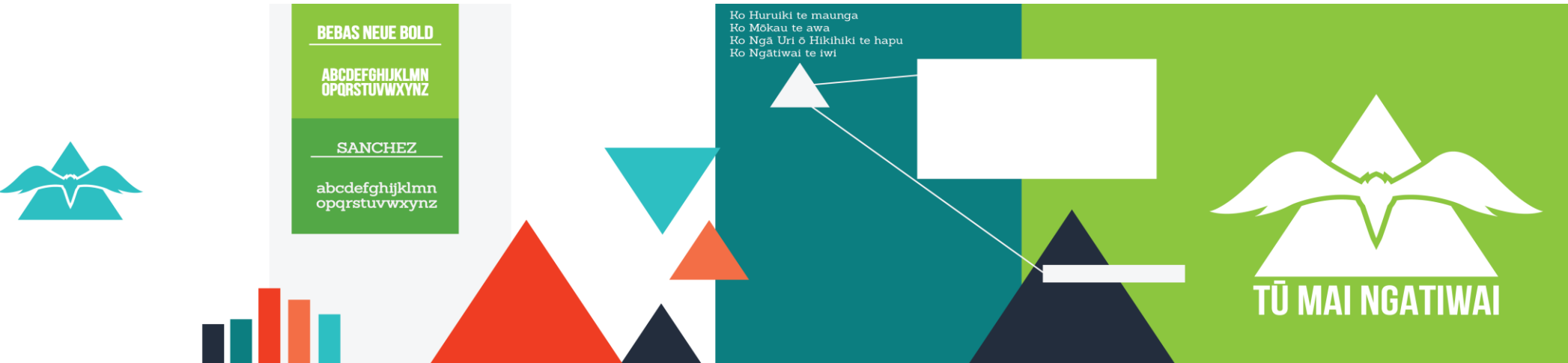


Figure 10: Stylescape 2



Figure 11: Stylescape 3

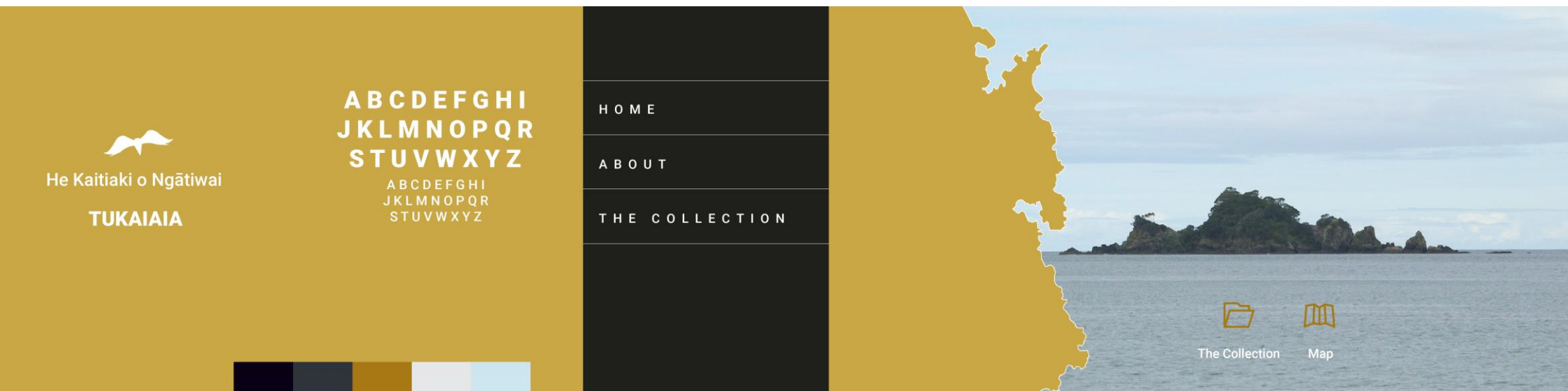


Figure 12: Sitemap

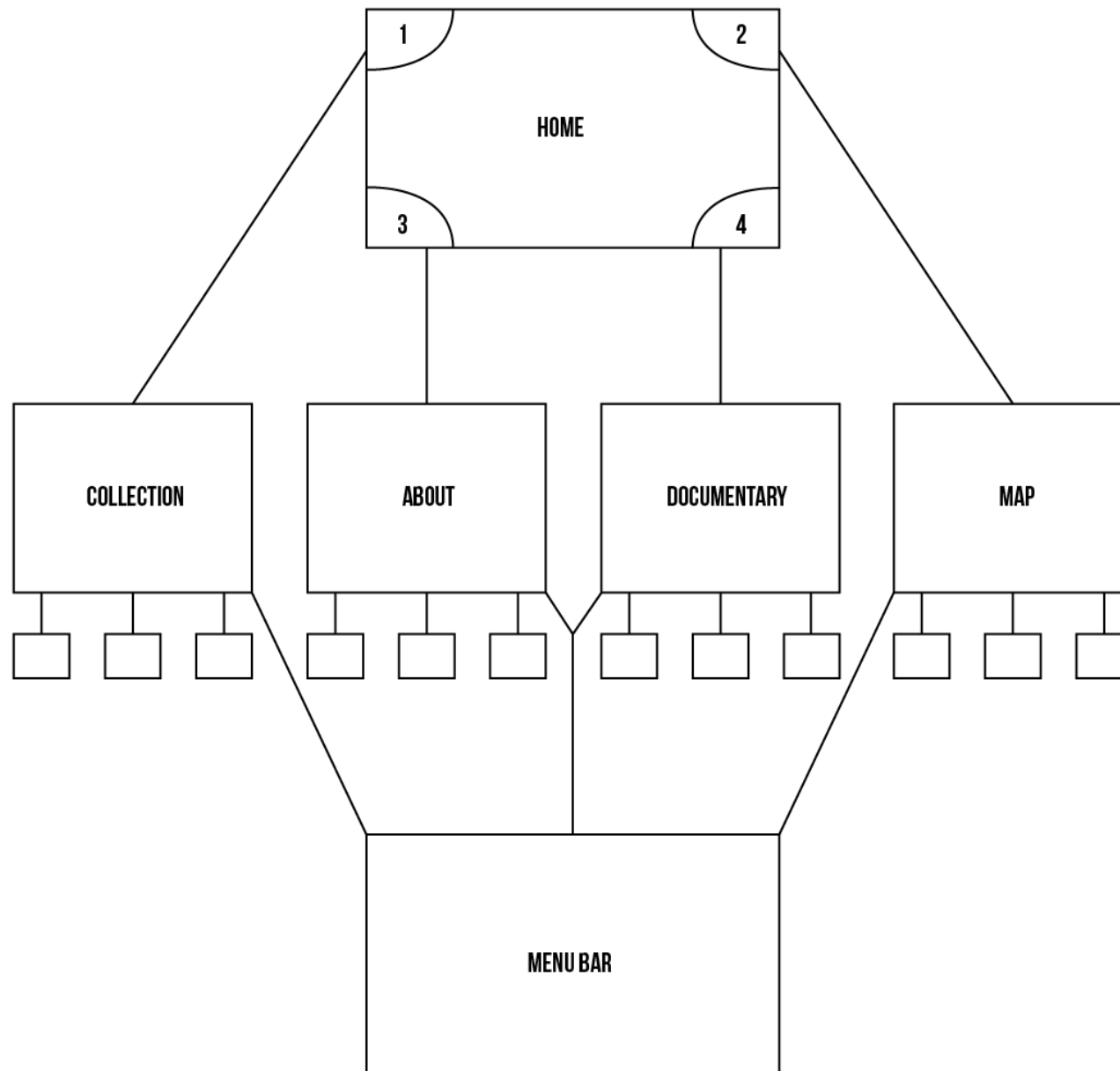


Figure 13: Initial wireframe

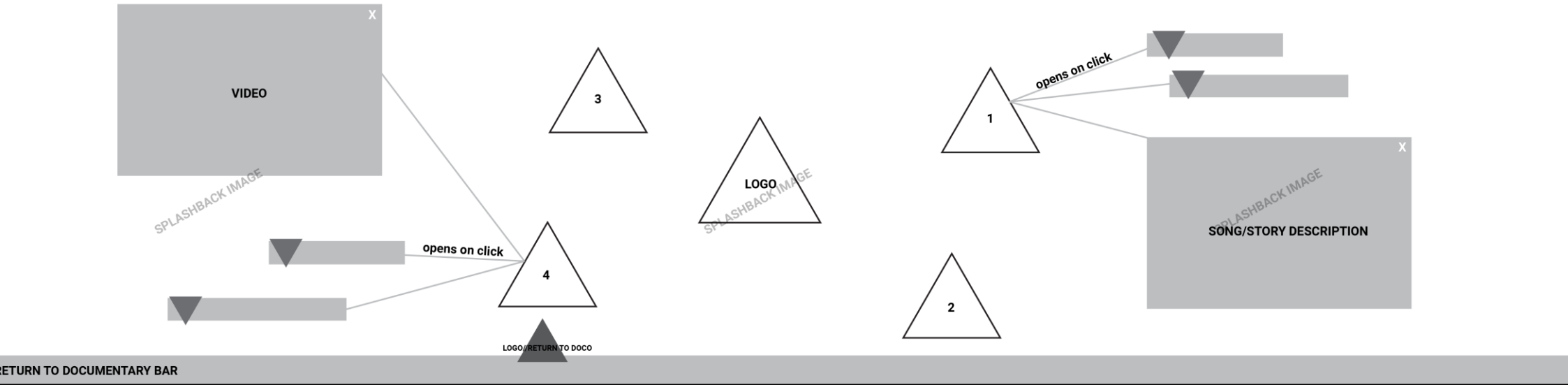


Figure 14: Subsequent wireframe

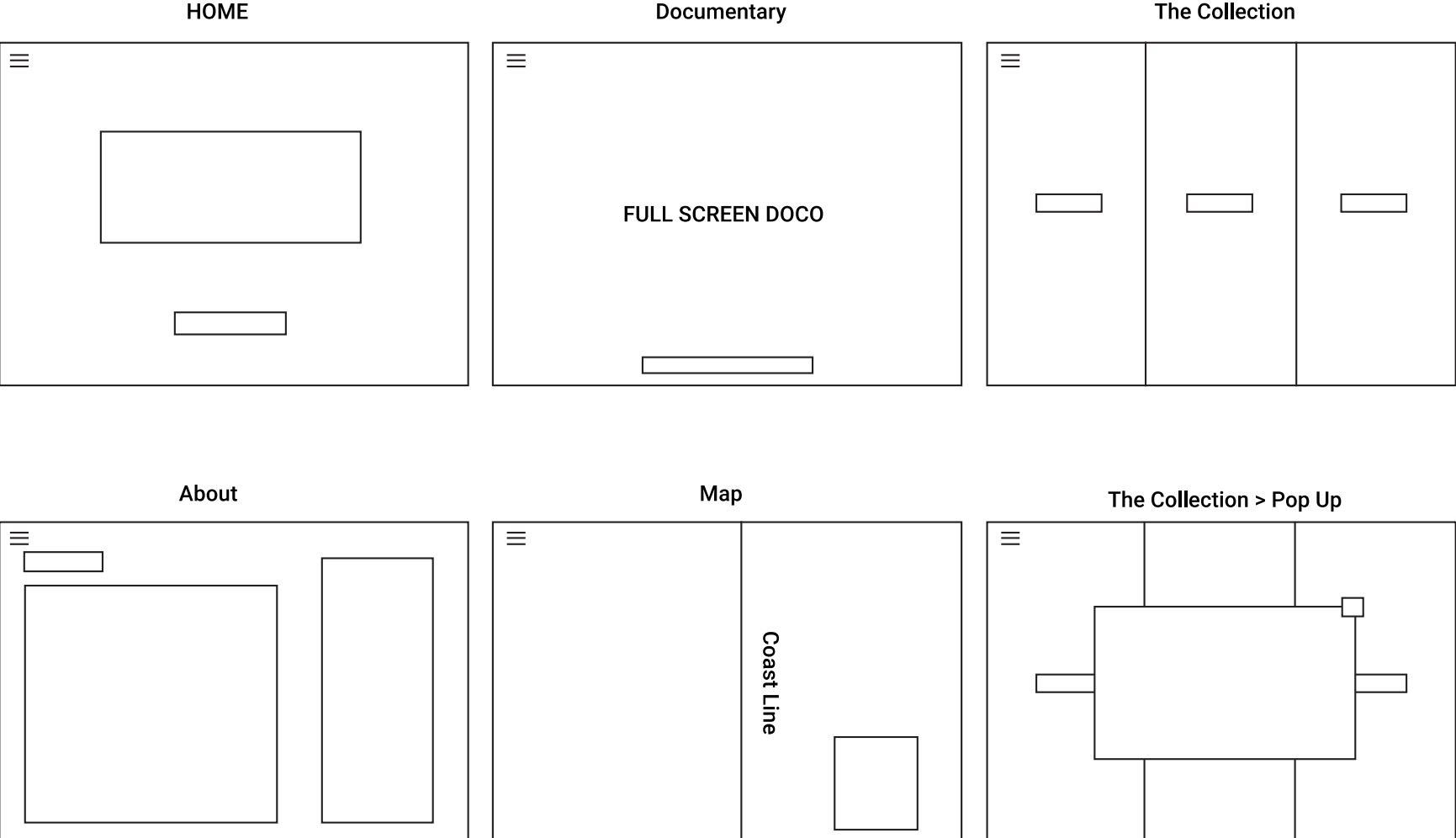


Figure 15: Initial mockup



Chapter 9 - Final Product

This chapter outlines the final products screenshots and explores the thought process behind features and content as well as the intended use of the website. It will be separated by page and can be found on the USB provided.

9.1 Instructions

For examination purposes, the final product will be provided via a USB drive.

1. Insert USB in to computer via USB port
2. Open folder 'jpelasio'
3. Open file 'Home.html'

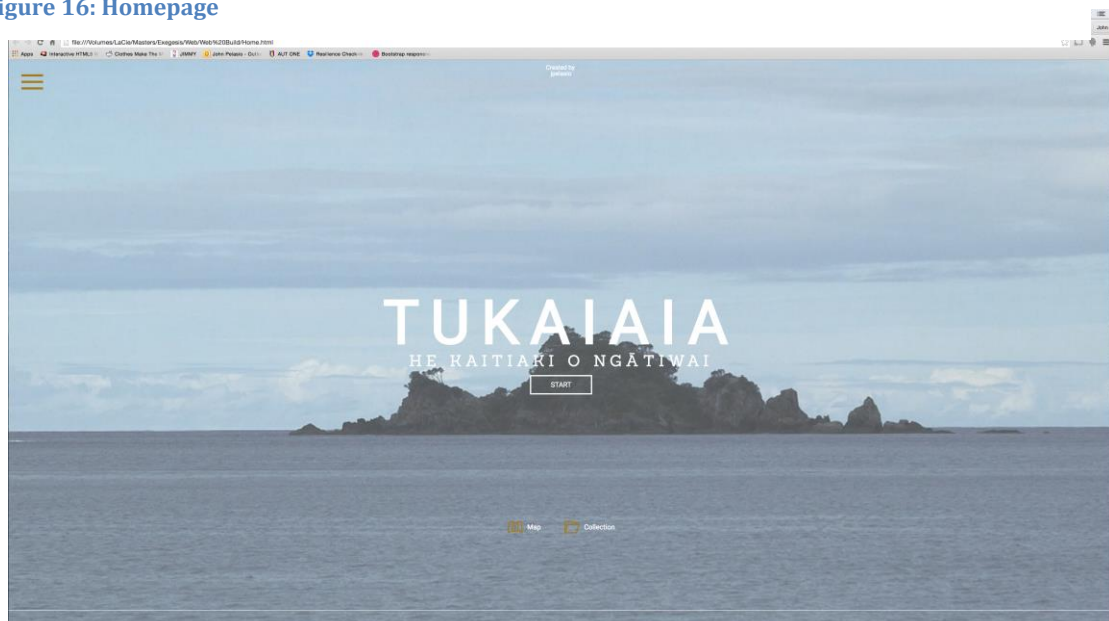
For best performance, right click 'Home.html' select open with > Google Chrome

4. The website will open in a browser and you will be able to navigate the site as if it were live.

The website is due to be uploaded live after examination.

9.2 Home page

Figure 16: Homepage



The homepage is the landing page for the site, it is the first thing you see when you enter the websites url. The background is a video loop of Oakura in Whangarū, which is an image used to represent Ngātiwai. It emphasizes the meaning of the phrase 'our mana comes from our wai'.

The colour scheme is used from stylescape 3, mentioned earlier in chapter 8. I chose to use a menu icon, situated in the top left, instead of a generic navigational menu for simplicity. Furthermore, because of the contrasting colour it is still caught by the eye, however remains subtle enough as to not distract the user from the main title text and key image. The same thought is applied to the bottom two buttons, *map* and *collection*, which lead to the most content heavy sections of the website.

There is a hidden feature loop of the song *Under Water* by Silent Partner. The song is downloaded from the free to use Youtube Audio Library. This song creates a sense of calmness and clarity and I thought it was the perfect fit to be the anchor to the website. The intended end goal for the use of the website is for our people to understand more about the history of Ngātiwai and be able to use this as a foundation for an online learning tool.

9.3 The Documentary and Menu

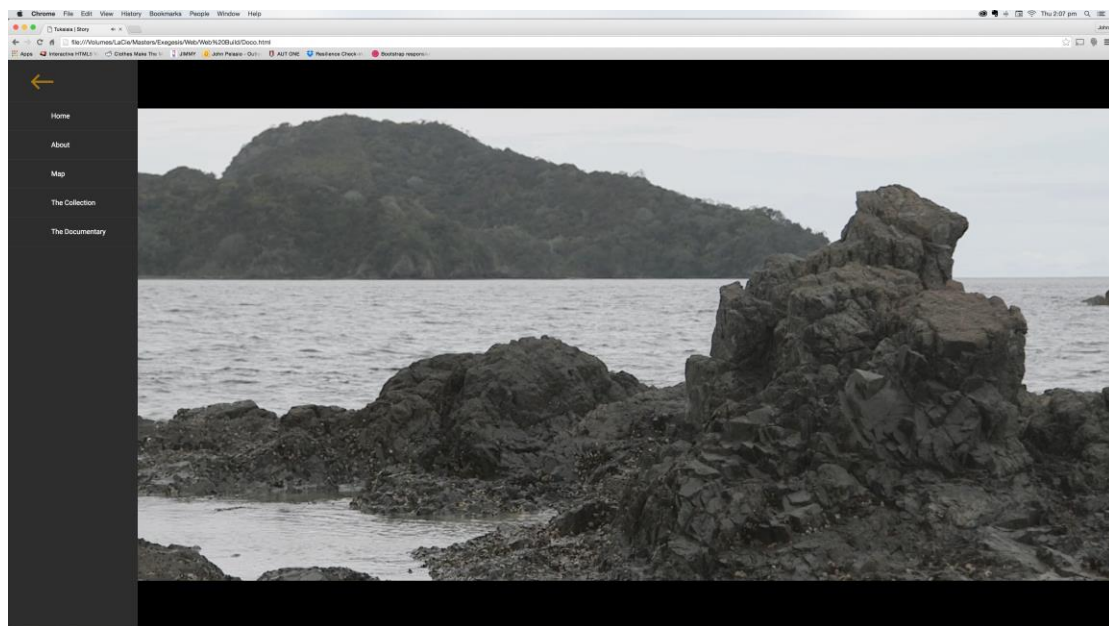
9.3.1 The Documentary

The documentary is presented as a full screen view of the browser, which has been done for two reasons; 1) to provide the best user experience; and 2) to highlight this particular piece of content as the focus of the website. There is no other reason to navigate to this page but to watch the documentary

9.3.2 Menu

Continuing the idea around simplicity, the menu is displayed in a very minimalist form. The arrow is a contrasting gold colour to show that it is a button. The items on the menu have a hover function which turns them gold to show that they are buttons that the user can interact with. This in turn provides a more responsive user experience.

Figure 17: Menu



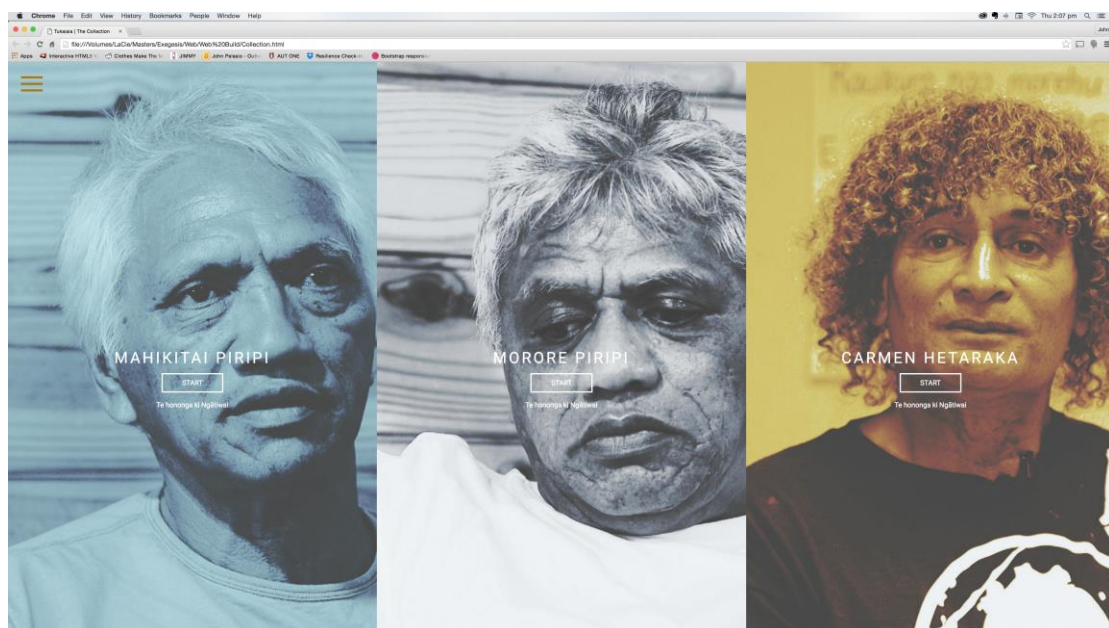
9.4 The Collection

This page portrays the three interviewees that participated in the study. A dropdown provides the user with an explanation in their own words of who they are and where they are from. I thought this was an important step to include so users can see these stories have been gathered from our own people. It is an insiders view of research that aligns with my research design, and provides further authenticity for the user by seeing where the interview participants came from and their connection to Ngātiwai. This is important for establishing a connection between the user and the content.

By clicking on the start button, you can view individual videos of their stories and experiences relating to Tukaiaia. The documentary is a collection, or summarised version of these interviews, therefore this content can be seen as appendices, or an extended version of the main documentary. It was created this way to give users a choice, should they choose to explore more and learn more beyond the scope of the documentary, then they could.

This feature provides an example of how extended pieces of knowledge can be presented on a digital platform like a website. The documentary being a general snapshot of cultural knowledge, provides users with a foundation of what is available, which is then supported by additional content particular to key themes. Much like pou whakairo in a traditional meeting house acting as sentries to doorways which lead to expanded traditional knowledge.

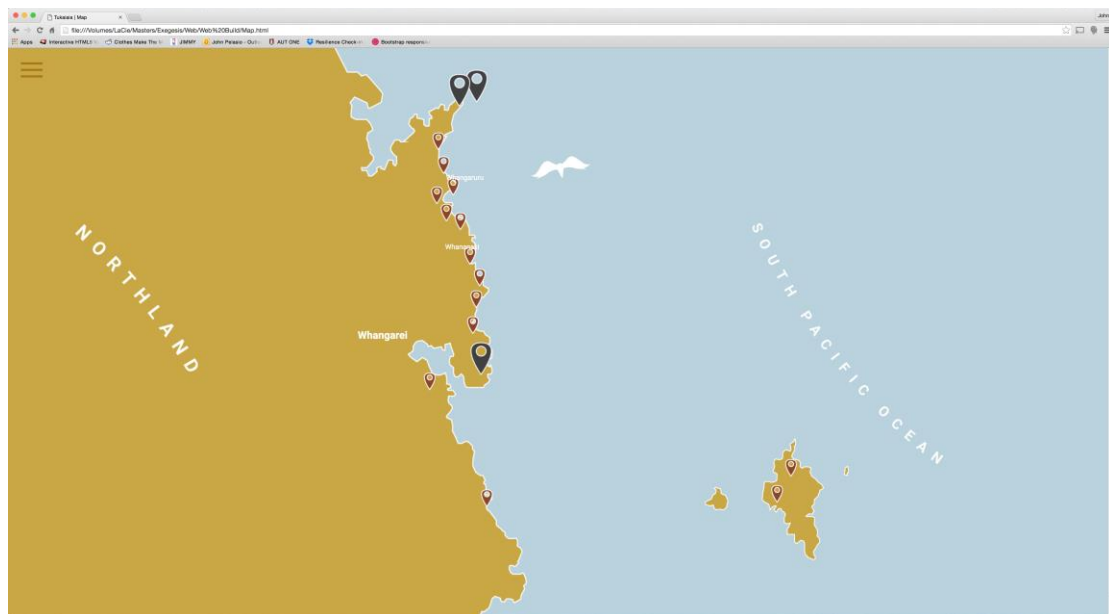
Figure 18: The Collection



9.5 The map

This page shows a map of the rohe of Ngātiwai. Marae (traditional places of gathering) are pinned in brown and significant features are pinned in dark grey. Marae pins indicate what that marae is while significant pins tell a story about what happened in that area, relating to Tukaiaia. The use of this map gives users the physical location that is connected with many of the places and events in the content found on this website. By placing pins on the map, users can identify in reality where these places are, which is an attempt to connect the users to the information they are seeing. The intended and hopeful outcome would be for the user to physically visit this area and learn more about what happened there.

Figure 19: Map



9.6 Browser Report

A browser report is used to show what it was tested on and a testing phase to show it was working. Last tested

Google Chrome

Version 49.0.2623.112 (64-bit)

Operating System

Mac OSX Version 10.10.5

9.7 Summary

This website intends to do two main things; The first is to provide a learning resource for descendants of Ngātiwai to learn about tribal history, specifically Tukaiaia, with the added bonus of reaching Ngātiwai descendants who no longer live inside the tribal boundary of Ngātiwai. For example, many who live overseas can use this as their connection to home, as well as having access to tribal knowledge.

The second intention of this website aligns with the notion of digital preservation of information. As mentioned in earlier chapters, it is the focus of this research to consider digital technology as a viable pathway to the continued preservation and protection of indigenous knowledge. It is the opinion of the researcher that Māori must use digital technology to help with not only the preservation of traditional Māori knowledge, but also its dissemination. A digital platform, like this website, acts as an example of a good, entertaining medium of presenting indigenous knowledge to the next generation of Ngātiwai descendants who will be fluent in digital language.

All design features were created with these two intentions in mind, guiding the product to reach the best outcome and user experience for the audience.

Chapter 10 - Conclusion

This chapter will summarise the research and content of this project. Furthermore, the following will provide an in-depth exploration of the limitations and suggestions for further research on expanding the project in terms of both web and content.

10.1 Research Summary

The research aim was to explore the idea of using ICTs to archive and preserve traditional cultural knowledge. More specifically, it was the foundation for the practical component to preserve the history of Ngātiwai, focusing on cultural knowledge regarding Tukaiaia.

Qualitative interviews with kaumātua of Ngātiwai iwi were used as the main method of gathering information about Tukaiaia. From this, five common themes were identified; form, mana of Ngātiwai, Manawahuna, karakia and waiata, and Te Houpeke Piripi. The commonality of the themes across the three participants increases the accuracy, enabling the research to form a well-guided story. For example, all participants re-iterated almost the exact story of Manawahuna. This reinforces accuracy of the information, as all were able to explain the same story with almost full detail.

To continue to pass down cultural knowledge, ICTs are the current future-proof resource to preserving this. History shows that Māori adapted to the entertainment system of its time, waiata and haka, to continue the tradition of passing cultural knowledge. We need to adapt to the current means of entertainment, ICTs, to continue this tradition. Today, we are spoiled with mass amounts of digital entertainment systems. Websites are only one aspect of the current entertainment system, we see that other ICTs are being used to help sustain and distribute knowledge, for example, smartphone app 'Te Whanake', the online Māori dictionary 'Te Aka'. ICTs are the natural progression forward to ensuring the sustainability and preservation of our cultural knowledge.

10.2 Limitations and resolutions

This project has many aspects to it, which is probably the underlying factor in its limitations. As I produced the entirety of the project, I may have under-estimated the amount of work and time I had to complete the project. To manage completing the overall project, I feel I haven't been able to commit 100% to each aspect as I have been juggling three different forms of research; written, video and web. This is perhaps the biggest limitation that confined the output.

10.2.1 Video

With a low-budget production, it is always difficult to produce the ideas the way the imagination sees it. Expenses quickly add up, so finding skilled free help with productions is a huge help. For two of the three interviews, I had a two-man crew (myself and one other). Because of the two-man, two-camera setup I was unable to fully-engage with the participant as I had to man the camera as well. An ideal minimum setup to this is to have dedicated cameraman working each camera while the researcher is free to interview the participant. This way, all jobs have full focus and the quality of output is instantly increased.

10.2.2 Website

My personal skills as a web designer and developer are still at a beginners skill level. What I had initially envisioned had to go through numerous rounds of testing as I researched what I could code and what I couldn't. Because of this, I tried to use HTML and CSS as much as I could, with the exception of using Javascript and JQuery for features not possible with the former two languages.

10.2.3 Content for thesis

Gathering content proved difficult, navigating times and access to potential participants. Because of this, I was only able to secure three qualitative interviews. To increase the knowledge base it would be preferable (in my opinion) to have a sample size of 6-8 participants to generate common themes and perhaps different stories. However this will be discussed further in section for further research.

10.3 Recommendations for further research

With the vast amount of knowledge there is and so little of it being made future-proof, an expansion on this project or something similar is the obvious recommendation for further research. The project aims to preserve a small part of Ngātiwai using ICTs, but it is only a starting point. The end goal is to document all indigenous cultural knowledge so that it can never be lost or forgotten, and can be passed down to future generations for the next 20 years.

Branching off the topic of Tukaiaia presented more questions than I was able to answer. Pursuing other avenues like origin stories, such as Manaia and the origins of Ngātiwai, to stories of Manawahuna is something that this project would have benefitted from. To increase the knowledge base regarding Ngātiwai cultural knowledge, and to understand the factors that lead us to what is known as Tukaiaia today. I know there are many more stories out there to be gathered, so expanding the scope of research and documenting essentially 'Te Ao Māori' would be a huge step forward not only for Ngātiwai iwi, but for Māoridom.

Glossary

Haka	ceremonial dance
Iwi	tribe, nation, people
Kaitiaki	guardian
Karakia	prayer
Kaumātua	elders
Kaupapa	subject
Kōrero	story/speak
Mana	status (Ngātiwai term for guardian)
Marae	meeting house
Mihi Whakatau	official welcome speech
Powhiri	welcome ritual
Rohe	region
Taonga	treasure
Tauparapara	type of karakia
Tikanga	custom, procedure
Titiro	look
Tohunga	prophet
Waiata	song
Whakarongo	listen
Whakataukī	proverb
Whānau	family

(Te Aka, 2016)

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