

Māori Values in IT

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ABSTRACT

Throughout history, Māori culture has been influenced by many external influences, leading to the transformation and loss of many precious taonga. With the introduction of the information age, the Māori language and culture need to be carefully guarded and propagated to increase uptake among younger generations. Adoption of Māori values and support for Te Reo in IT systems has increased, after Māori and supporting organisations have taken steps to raise awareness of the issue among IT professionals.

Keywords: Māori, Information Technology, Culture, Te Tiriti o Waitangi, Te Reo, Language

1. INTRODUCTION

Māori have adapted to many changes in their environment throughout history and have repeatedly withstood challenges to their identity. Nevertheless, they have maintained their identity in the face of a myriad of influences. In Article II of Te Tiriti o Waitangi, Māori have explicitly been given the right of self-determination (Orange, 2012). In modern times, Māori face a significant challenge to preserve their heritage in an increasingly information and technology dominated world. Since Māori culture influences a very small part of the larger global information market, Māori have recognised the need to make their presence felt throughout this setting in order to preserve their culture. The values of Te Tiriti o Waitangi, Māori symbols, and the language of Te Reo must also be regarded with respect and importance in IT settings by all IT professionals.

2. BACKGROUND AND LITERATURE

In the past, as evidenced by the adoption of new technologies introduced by European settlers, Māori have quickly integrated new methods, tools, food and even fashion items into their livelihoods. This led to many changes in Māori society and economy and has had a lasting impact on Māori culture (Schaniel, 2001).

A fundamental part of Māori culture lies in the language Te Reo and its various components including pepeha and whakatauākī. These sayings of ancestors reflect on historical information and cultural practices which may have become extinct due to external influences. Therefore, they are important to the revival of Māori culture (Whakataukī - Proverbs | Te Taura Whiri i te Reo Māori, 2017).

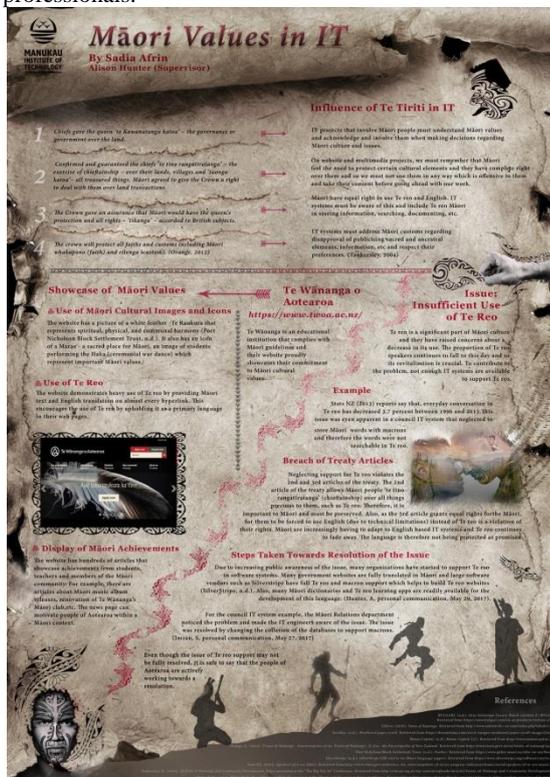
It is also important to understand that culture and language share a deep relationship and one does not exist without the other. For example, learning a language without an accompanying cultural background will not allow the learner to attach the correct meanings to the words they are learning (Leveridge, 2008). Due to this relationship, the strength of a culture is directly dependent on the ability of people to speak the associated language.

In a modern context, as technology becomes an increasingly large part of our daily lives, the design of the IT systems we use needs to reflect the values we hold. Nissenbaum (2001) states, "Scientists and engineers must expand the set of criteria they would normally use to evaluate systems to incorporate social, ethical, and political criteria". This means that IT systems must embody the attributes of certain cultural values and be culturally sensitive.

Māori have always been rapid to adopt new, beneficial technology to aid in the advancement of their society. In modern times, however, many Māori consume IT services but adoption of IT has been slower among Māori than in other ethnicities. This has led to a gap in representation of Māori voices in national and global IT systems and networks. For Māori culture to be well-represented in a globalised setting is essential if Māori identity is to be maintained in younger and future generations (Keane, 2010).

3. OBJECTIVES

The objectives of this research were to investigate and reflect upon the influence that Te Tiriti o Waitangi, Māori cultural values and Te Reo have on IT practice. An organisation, Te Wananga o Aotearoa, which integrates Māori elements throughout their website has also been highlighted. Finally, an investigation is carried out into the issue of Te Reo support in modern IT systems.



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3.1 Influence of Te Tiriti in IT

An investigation into approved regard and etiquette for Māori values, as dictated by Te Tiriti o Waitangi, is suggested for IT professionals. Māori history, faith, culture, language, symbols and values must not be disrespected when undertaking an IT project. For example, when dealing with Māori stakeholders, IT professionals need to be aware that they must ask for permission before using Māori sacred symbols (Tankersley, 2004).

3.2 Te Wananga o Aotearoa

A well-known and regarded educational organisation, Te Wananga o Aotearoa, maintains a website with a large showcase of Māori cultural icons and values (Port Nicholson Block Settlement Trust, n.d.). Their support of Māori cultural values in their pedagogy is highlighted through the use of numerous cultural symbols on the organisation's website. They also provide a news section to regularly highlight achievements of the Māori community, acting as a platform to instil Māori with pride. Te Wananga stands as a leading example of how an organisation may support the cause of Māori cultural preservation.

3.3 Insufficient Use of Te Reo

Concerns about a decline in the use of Te Reo among the Māori population has led to the realisation that many IT systems have not been supporting Te Reo. One example of this is the lack of support for macrons in many data-driven systems. Several organisations such as Silverstripe CMS have now made their systems support macrons as awareness of this problem has increased. Many organisations have gone as far as to provide versions of websites and web applications in Te Reo (Silverstripe).

4. METHOD

All research was carried out using secondary sources. All images used in the poster have been sourced from free image sources and modified according to rights given by the authors.

5. ETHICAL CONSIDERATIONS

This body of research does not claim to be an expert evaluation of Māori culture, but rather an attempt to understand Māori values from the perspective of an outsider. Information has been gathered only from public information sources and no ethical permissions were required.

6. DESIGN

The background of the poster is a scroll because all three objectives addressed in the poster relate to Te Tiriti o Waitangi. As Te Tiriti was written many years ago, the scroll is intended to reflect the time (1840) it was written in.

The bottom of the poster was inspired by Māori creation mythology. The Māori man on the bottom left signifies Māui, the favoured son of the Earth Mother and Sky Father. On the upper right portion of the poster, there is a hand with a fish hook that pulls out a trail of fish from the spirit of Māui, symbolising how Māui pulled up the North Island while fishing.

The four Māori men standing on top of the mountain (at the bottom of the poster) symbolises Aoraki and his brothers who became the mountains of the South Island.

The reason behind including the Māori origin story was to portray the importance Māori people give to the land their ancestors shaped and on which we now live. Therefore, the importance of preserving Māori identity and culture should be extremely valuable to all people of New Zealand.

The photo used to illustrate the problem of “Insufficient Use of Te Reo” shows the “Hongi”, double exposed with a landscape photo of New Zealand's sky, mountains, and the land. This symbolises the exchange (through the hongis) of Māori culture (Wolf, 2013). But the Māori words (a collection of whakataukāki) coming out of the photo and moving upwards symbolise how Te Reo may be fading away. Since Te Reo is such a crucial part of Māori culture, its degradation can lead to the loss of Māori identity and culture.

7. FINDINGS

Research has been undertaken by Stats NZ on the state of Māori culture and language. Analysis of census statistics reveal that the percentage of Māori who can hold a conversation in Te Reo has been declining steadily since 2001 as shown in Table 1 (Stats NZ, 2013).

Table 1: Speakers of Te Reo Māori in the Māori Ethnic Group

Year	Percent
2001	25.15
2006	23.74
2013	21.31

Another concerning fact is that within the Māori population, younger Māori are the least proficient at engaging in conversations in Te Reo. Only 18.7% of Māori under 30 years of age can hold a steady conversation in Te Reo, while 43.43% of Māori over 70 are able to do the same (Stats NZ, 2013).

Further reports from Stats New Zealand stating that everyday conversation in Te Reo has decreased 3.7% between 1996 and 2013 highlight the urgency of instilling younger Māori with cultural values.

In response to this, Māori representatives have started to promote Māori values in many areas, including in IT systems. Several organisations have started to support macrons and display Māori cultural icons as well as provide Māori translations in websites, CMS systems, etc.

8. CONCLUSION

Many statistical findings show a decrease in the use of Te Reo among younger Māori, so it is important to preserve the tenets of Māori culture for future generations. To contribute to the propagation and awareness of Māori culture and to provide a platform for Māori users, modern day IT systems need to be designed to be culturally aware of topics surrounding Māori. Te Tiriti o Waitangi gives IT professionals a set of underlying principles to consider when designing and building IT systems in order to recognise Māori values and maintain compatibility with Te Reo. With the initiative of organisations such as Te Wananga o Aotearoa and Silverstripe CMS, Māori maintain an ever-increasing presence in the global IT market. The need to protect and respect Māori cultural elements when used by electronic systems is vital and proper permissions must always be sought from the relevant Māori groups. Māori have always been aware of the importance of holding on to their heritage as demonstrated by a well-known proverb: “Ko taku reo taku ohooho, ko taku reo taku mapihi mauria” - “My language is my awakening, my language is the window to my soul (Whakataukāki - Proverbs | Te Taura Whiri i te Reo Māori, 2017).”

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