Preface

Hēmi Whaanga, Te Taka Keegan & Mark Apperley

Nau mai ki te Whare Hangarau Māori. Kua takoto tōna tūāpapa. Ko ōna poupou nā ngā rauringa i whakatū, he mea hanga ki ngā rākau i ōhākītia ai e Tā Apirana. Whakairia ngā heke, riariakina tōna tāhuhu. Houhia te whare nei!

He kupu whakataki — Introduction

As editors we had the idea of creating a volume of this type for some time before it became a reality. Its scope is both academic and practical. Its academic relevance contributes to ongoing academic discussions and debates on relevant topics in information communication technology (ICT), and its practical relevance links to the many challenges faced by iwi, institutes, societies and communities involved in ICT initiatives on a local and global scale. The primary purpose is to collate and bring together the vast experiences of an eclectic group of innovators, scholars, industry and technology leaders who share a passion for ICT. Representing a wide range of disciplines and personal experiences, this collection of chapters provide valuable insights into the wide range of ICT initiatives, including etools, emedia and elearning, which have been used extensively across Aotearoa to support the goals and aspirations of Māori, their communities and organisations for language, cultural, social and economic sustainability. In the spirit of using new technology, we have made this publication available free on-line so that individuals, hapū, iwi, institutes, societies and communities involved in ICT initiatives can gain access to the many insights contained within these pages.

As a general guide, we asked that the contributors to this volume focus on an ICT initiative they have either worked with, developed, or implemented in their respective roles, paying particular attention to how that ICT initiative was applied in those contexts. We also asked them to consider some of its strengths, weaknesses and benefits, in addition to the area of mātauranga, tikanga or reo that it was applied to, as well as any other aspects of practice that it challenged, advanced, or explored. As the title of this volume suggests, *He Whare Hangarau Māori — Language, culture & technology*, covers three very broad areas arranged thematically covering 27 chapters. Each theme has an editor/ editors responsible for the collation, editing, and reviewing of each theme. In addition to introducing the respective authors, the theme editor/s have also provided a very brief introduction to the area of ICT in their section:

• Māori language resources & Māori initiatives for teaching & learning te reo Māori Edited by Hineitimoana Greensill, Hōri Manuirirangi and Hēmi Whaanga, this theme brings together some of the leading exponents in the development of Māori language resources and initiatives for the teaching and learning of te reo Māori. This theme includes chapters written by Te Taka Keegan (two pieces: one on *Māori Language Interfaces* and another on *Machine translation for te reo Māori*), Hōri Manuirirangi (*A translation of Moodle into te reo Māori*), Tania M. Kaʿai (*Te Whare Matihiko o Te Reo - digital tools for the revitalisation of te reo Māori*), John C. Moorfield (*Te Whanake and Te Aka digital resources*), Dean P. S. Mahuta (*Building virtual language communities through social media – because we don't live the village life anymore*), Wahineata Smith (*Te Whanake animations: Development and implementation*), and Karaitiana Taiuru (*20 years of reflections using technology to compile Māori language dictionaries*).

- Iwi, institutes, societies & community led initiatives

 Edited by Hēmi Whaanga, Naomi Simmonds and Te Taka Keegan, this theme
 highlights the breadth of engagement in ICT. This theme includes chapters
 written by Māui Hudson, Tiriana Anderson, Te Kuru Dewes, Pou Temara, Hēmi
 Whaanga and Tom Roa ("He Matapihi ki te Mana Raraunga" Conceptualising Big
 Data through a Māori lens), Hēmi Whaanga (He mahi māreikura: Reflections on
 digitising of the Pei Jones' collection), Karaitiana Taiuru (Māori domains), Michael
 W. Taiapa (FamilySearch: Māori, Mormon & whakapapa), O. Ripeka Mercier, Bruce
 McFadgen and Arama Rata (Keep teaching this! Engaging Māori Studies students
 with digital cultural mapping tools), Vincent Olsen-Reeder (Mapping linguistic
 landscapes: Where geo-tagging meets geo-linguistics), Hauiti Hakopa, Anne-Marie
 Jackson, Ngahuia Mita and Chelsea Cunningham (Te Koronga: Mapping case
 studies), Moka Apiti (The Indigenous Mapping Waananga 2017), Liliana Clarke and
 Pauline Harris (Maramataka), and Pauline Harris (Portable planetariums in the
 teaching of Māori astronomy).
- The final theme, on GLAM (an acronym for the galleries, libraries, archives and museums sector) edited by Michelle Horwood brings together a range of contributions highlighting the variety of initiatives currently being undertaken in this sector. This theme includes chapters written by Michelle Horwood (Going digital in the GLAM sector: ICT innovations & collaborations for taonga Māori), Michaela O'Donovan and Zoe Richardson (Navigating good practice image permissions for Māori collections held at Auckland War Memorial Museum Tāmaki Paenga Hira), Wayne Ngata (Kanohi ki te kanohi: Face-to-face in digital space), Paul Diamond (Kōrero kitea: Ngā hua o te whakamamatitanga. The impacts of digitised te reo Māori archival collections), Claire Hall (Mukurtu for mātauranga Māori: A case study in Indigenous archiving for reo and tikanga revitalisation), Chloe Cull (Lisa Reihana: A continuum of Māori practice), and Matariki Williams (Tusk: Emergent Culture).

As can be noted from the variety and range of topics covered in this collection, ICT has had and will continue to have a substantial impact on the fate of our Māori communities, our traditions, our lifestyle, our language and its associated customs. The contributions made by each of the authors in this volume highlight the tremendous progress that has been made so far in ICT but they also remind us that there is still a long way to go before we can achieve linguistic, cultural, social and economic sustainability.

He tuku mihi - Acknowledgements

There are a number of people we would like to acknowledge. Firstly, to each of the ICT innovators, scholars, computer scientists, programmers, historians, geographers, translators, linguists, te reo Māori experts, teachers, tohunga, industry and technology leaders of this generation, we are extremely grateful that you allowed us to share your words, personal experiences and ICT journeys with the readers of this book.

To the theme editors, Hineitimoana Greensill, Hōri Manuirirangi, Naomi Simmonds and Michelle Horwood, we would like to acknowledge your time and effort in collecting, editing and reviewing each of the themes. We were so fortunate and thankful that you all agreed to take on this important role.

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To our work colleagues in Te Pua Wānanga ki te Ao, Faculty of Māori and Indigenous Studies and the Department of Computer Science, Faculty of Computing and Mathematical Sciences as well as our institute, Te Whare Wānanga o Waikato, thank you for your collective support.

We would also like to thank David Wheadon from Wheadon Creative for designing the cover image and Dr Melanie Cheung for capturing the beautiful photo.

Finally, we would like to acknowledge our friends and whānau who have supported us during this long journey. Thank you for everything you do for us.

Mā pango mā whero ka oti ai te mahi.

Hēmi Whaanga, Te Taka Keegan & Mark Apperley (Editors)