

MITIMITI ON THE GRID 2

Grant reference number:	#PR201500015																																																																	
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Name of organisation (if applicable)	Matihetihe marae																																																																	
Title of project/research	Mitimiti on the Grid 2																																																																	
Amount of funding received	\$25,000 (inclusive GST)																																																																	
Budget details	<table border="1" style="width: 100%; border-collapse: collapse; font-size: 0.9em;"> <thead> <tr> <th colspan="5" style="text-align: left; padding: 2px;">Mitimiti on the Grid 2</th> </tr> <tr> <th colspan="5" style="text-align: left; padding: 2px;">Spend to 31 October 2016</th> </tr> <tr> <th style="width: 60%; padding: 2px;">Description</th> <th style="width: 10%; padding: 2px;"></th> <th style="width: 15%; padding: 2px;">Total spend to date (incl gst)</th> <th style="width: 10%; padding: 2px;">Budget allocation (incl gst)</th> <th style="width: 5%; padding: 2px;">Remaining budget (incl gst)</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">Priority 1: Web and mobile portal</td> <td style="padding: 2px;">Feb</td> <td style="padding: 2px; text-align: right;">\$11,025.63</td> <td style="padding: 2px; text-align: right;">\$20,000.00</td> <td style="padding: 2px; text-align: right;">\$1,761.22</td> </tr> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;">Aug</td> <td style="padding: 2px; text-align: right;">\$2,840.50</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;">Oct</td> <td style="padding: 2px; text-align: right;">\$4,372.65</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">Priority 2: Audio-visual (live streaming, camera, tripod, mics, stands, training vids)</td> <td style="padding: 2px;">Feb</td> <td style="padding: 2px; text-align: right;">\$261.63</td> <td style="padding: 2px; text-align: right;">\$4,000.00</td> <td style="padding: 2px; text-align: right;">-\$1,214.40</td> </tr> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;">Aug</td> <td style="padding: 2px; text-align: right;">\$4,952.77</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;">Oct</td> <td style="padding: 2px; text-align: right;">\$0.00</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;">Priority 3: Training and community training videos</td> <td style="padding: 2px;">Feb</td> <td style="padding: 2px; text-align: right;">\$74.75</td> <td style="padding: 2px; text-align: right;">\$1,000.00</td> <td style="padding: 2px; text-align: right;">-\$546.83</td> </tr> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;">Aug</td> <td style="padding: 2px; text-align: right;">\$1,448.06</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;">Oct</td> <td style="padding: 2px; text-align: right;">\$24.02</td> <td style="padding: 2px;"></td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px; text-align: right;">TOTALS</td> <td style="padding: 2px;"></td> <td style="padding: 2px; text-align: right;">\$ 25,000.00</td> <td style="padding: 2px; text-align: right;">\$ 25,000.00</td> <td style="padding: 2px; text-align: right;">\$ (0.00)</td> </tr> </tbody> </table> <p style="padding: 5px;">The project has achieved its expectations but variations in costs of equipment and new technologies have meant some adjustments have been made. The variations were cushioned by reducing the web</p>	Mitimiti on the Grid 2					Spend to 31 October 2016					Description		Total spend to date (incl gst)	Budget allocation (incl gst)	Remaining budget (incl gst)	Priority 1: Web and mobile portal	Feb	\$11,025.63	\$20,000.00	\$1,761.22		Aug	\$2,840.50				Oct	\$4,372.65			Priority 2: Audio-visual (live streaming, camera, tripod, mics, stands, training vids)	Feb	\$261.63	\$4,000.00	-\$1,214.40		Aug	\$4,952.77				Oct	\$0.00			Priority 3: Training and community training videos	Feb	\$74.75	\$1,000.00	-\$546.83		Aug	\$1,448.06				Oct	\$24.02			TOTALS		\$ 25,000.00	\$ 25,000.00	\$ (0.00)
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	<p>and mobile portal in favour of shifting prices as shown in the column for “Remaining budget”. These have enhanced the overall outcomes.</p>
<p>Project/research approach and methods</p>	<p>The project was community driven and so the approach was guided by what the community could manage (particularly regarding time and workload) and desire (specifically the video and training components shifted a little around what they felt was most useful).</p> <p>The four critical elements that strengthen this project are: Equipment Maintenance Training Support</p> <p>For a community that is as remote as Mitimiti, and that has multiple power outages, no basic infrastructure and no access to technical support, these items are always paramount to ensuring other aspects such as projects can take place.</p> <p>During the project a series of power outages lasting for days damaged equipment and it was some weeks before the voluntary tech team could schedule a “fix”, purchase new equipment, train locals, strengthen the management of the equipment, etc. It was also an opportunity to stay all weekend and do some community training, help out the local school, and offer voluntary tech troubleshooting to anyone who needed help over the weekend.</p> <p>The approach while structured for delivery of outputs was also fluid with regard to constructively responding to the community needs, no matter who or what, to the best of the tech team abilities.</p>
<p>Summary of project/research outcomes</p>	<p>The key outcomes are:</p> <ul style="list-style-type: none"> - Community confidence in using technology increased (i.e. devices and online tools) - Locals ability to respond to technical issues developing (i.e. selected locals being trained to troubleshoot and fix basic technical issues) - Community trust of tech team developing (i.e. tech team visits being optimised for the most useful activities such as workshops, training, fixing) - Community use of equipment developing and potential use emerging (i.e. locals training locals in use of equipment, ideas about how to use new technologies emerging)

	<ul style="list-style-type: none"> - Potential to host events and hui using technology as a useful and enhancing tool increased (e.g. livestreaming, recording events, providing a good internet connection during hui)
Achievements	<p>Website and mobile portal live AV equipment bought and on site Video and livestream techniques learned and in use CCTV surfcam and security cam online</p>
Difficulties	<p>Similar to the previous report: Power outages are cause for concern with the potential to damaging equipment high. We will be seeking funds for a solar powered backup for critical equipment.</p> <p>The new and expensive equipment is causing some concern regarding security and we are seeking funds for CCTV and other security aspects to be strengthened.</p> <p>Technical support is difficult as the nearest town is a 3 hour return trip and the technical approach to Mitimiti on the Grid is unique. The community and tech team are very clear that no technical support people should touch the equipment aside from the original tech team and sponsors who built the unique network as the setup is unique, complicated and technically challenging (includes Chorus, Vodafone and MyRepublic and the volunteer Tech Team).</p> <p>In all, it means that the Mitimiti on the Grid “Tech Team” is becoming a critical resource that has developed the project around those challenges. However, no other technical companies or individuals will be given access to the equipment and management of the network due to the specific technical approaches and workarounds. Work towards supporting the technical support is ongoing.</p> <p>The RBI and other infrastructure decisions at government level made this project technically challenging (as mentioned above) but also allows us to identify areas that the government should be addressing as part of their larger strategy regarding rural broadband access.</p>
Findings/learnings	<p>Priorities of a community like this have emerged as:</p> <p>The 1st priority has not been economic growth as such, but rather connection, whakawhanaungatanga, which may lead to an economic focus going forward. This is important to the community to sustain and grow its economic base. The connection and reconnection of whanau around the world has brought a lot of attention and opportunity to the community.</p>

	<p>In addition:</p> <ol style="list-style-type: none"> 1. Whanau are learning, self-learning, teaching each other, participating well in workshops, using multiple means to access technical support, and more. Confidence levels have noticeably risen. 2. Reconnecting disparate whanau around the world has become possible and locals are live streaming events and participating more actively with the tools to make it more possible for people to re-engage. This impacts the transparency of hui and decisions, and potential for participation, to a wider audience. 3. The impact on economic growth will be measured next year by measuring electricity consumption (data) using UN model. 4. The videos elements of this project took an interesting turn. Whanau who attended workshops opted to show the results of their training rather than build how to videos as they felt their confidence was still developing. So, four videos were published on youtube and provided some unexpected responses from whanau outside the area who were “watching” the day's proceedings online and sending messages of encouragement throughout. Relationship and reconnection is paramount to the whanau and marae and the videos provided a fantastic contribution to the re-engagement of whanau in the world. <p>In addition, two cctv cameras were installed with the help of volunteer tech team members and Vodafone who were already in the area and who sent their team and a cherry picker to place a CCTV camera on a pole for the marae “surfcam”. This is now “live”.</p> <p>Selected marae members were given extra workshops on managing the CCTV feeds and equipment. There is a technical and protocols aspect to managing the CCTV cameras and they have a rare opportunity to learn these new skills. One of the cameras (surfcam) points out to sea so that whanau who are away can “see what Mitimiti is like today”.</p>
<p>Do you anticipate their being anything media-worthy in your project/research*</p>	<p>Absolutely. The overall project has already had a few articles written, has been presented at meetings and conferences in the IT sector and has sparked interest from government agencies (MBIE, TPK, others). http://thedownload.co.nz/our-stories/catching-up-with-the-rest-of-the-world-at-high-speed/</p> <p>Local Council (Far North District Council is also interested in the outcomes from this project with a view to how it might impact on the wider far north region.</p> <p>A number of marae who are interested in how a technology project such as this might change their engagement and economic opportunity, have approached the project manager.</p>