ICTs in Health and Education
Office of the Government Chief Information Officer (OGCIO)
Fred Samuel, Chief Information Officer
Agenda:

- Situation in Health & Education
- Benefits of ICTs in these Areas
- Recommended Actions & Budget
Situation in Health & Education
Non-communicable diseases (NCDs) are killing Ni-Vans in Vila, towns and villages

† 70% of all adult Ni-Van deaths are from NCDs (diabetes, heart + lung disease, stroke)

† Causes: poor diet, smoking, lack of exercise

† Number of diabetes cases is rising fast:

Forecast diabetes cases in Vanuatu, WHO
Vanuatu’s patients are isolated from world-class medicine

† Lack of access to specialized medical expertise
† Inadequate medical records
† Inadequate medical information system
Personnel and HR MIS issues have affected morale

Wanem taem bae DG Santos bae hemi honest wetem ol contract nurses?

Dear Editor,

Ministry blong Health hemi stop wetem wan bigialo financial difficulty ma administrative setback status nosea ofa we Dr Santos Wai emi stop metem take promise long ol woman biling hemi (oi contract nurses) long Friday nof 28/03/2014 Oi contract nurses ali no karen salary yet obsem we bigialo boss la ibin tolengoa.

3 gov’t ministries tackling outstanding teachers’ salary issue

By Jana Joshua

The Office of the Prime Minister and Ministry of Finance are collaborating with the Ministry of Education to address the much debated issue of outstanding salaries of teachers in Vanuatu.
Only 6% of schools have Internet access

- About 6% of Vanuatu schools have Internet access
- 5% of students have Internet access at school
- 14th percentile of 48 countries reporting to ITU

Chart 2.4: Proportion of schools with Internet access (for ISCED levels 1-3), 2008-09**

Median: 77%
205 school students compete for each computer

 porém

Vanuatu students to computer ratio: 205 students per computer; only about 300 computers for 70,000 students

mediocre

4th percentile of countries reporting

mediocre

Thus 96% of countries are doing better
Only 1% of Vanuatu schools have broadband access...

...3rd percentile in world 😞
Information flow up and down many Ministries is poor, and across Ministries is often non-existent…

Poor info for decision making? Data quality? Timeliness? HR data flow? Loss of data? Shipping costs?

Poor info flow down the chain?

…and communication with the public is very limited
Benefits of ICTs in Health & Education
ICT-based public awareness campaigns can reduce NCDs...

...result: a healthy life style
Telemedicine can bridge many gaps
Student digital literacy is low but there is a plan:

Sad face: est. of computer literacy in schools: only 4%, almost all secondary students

Smiley face: Good news: schools w/ computer labs have a 71% computer literacy rate, compared to almost zero w/ no lab
ICTs improve information flow and transparency

- Good info for better decision making
- High data quality
- Timely reports
- Better HR info flow
- Complete data
- Shipping: free!
- Good info flow on common issues across Ministries
- Good info flow down the chain
- Good public service info flow out to the public & clients:
ICTs improve health, education and employment, with good effects in the village, province and nation

- Better services to clients
- Better ed = better jobs for youth
- Better jobs = less crime
- Better results for tens of thousands of Ni-Vans
- Impacts at village level for ordinary people
Recommended Actions & Budget
Recommended action items:

- “Vision” + action plan
- Business case
- Old & new $$: Aus, NZ, WB, ADB, Middle East, BRICS
# Action Requires Funds

<table>
<thead>
<tr>
<th><strong>HEALTH</strong></th>
<th><strong>USD</strong></th>
<th><strong>VATU (millions)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadband Connectivity, ALL Hospitals, Clinics, Dispensaries, Provincial Centers</td>
<td>$6.0M</td>
<td>600 M</td>
</tr>
<tr>
<td>Health Information System + Training</td>
<td>$6.5M</td>
<td>650 M</td>
</tr>
<tr>
<td>Public Health Promotion – Website, SMS, Radio</td>
<td>$5.0 M</td>
<td>500 M</td>
</tr>
<tr>
<td>Telemedicine systems</td>
<td>$5.0 M</td>
<td>500 M</td>
</tr>
<tr>
<td><strong>TOTAL HEALTH</strong></td>
<td><strong>$22.5M</strong></td>
<td><strong>2.250 Billion VT</strong></td>
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<table>
<thead>
<tr>
<th><strong>EDUCATION</strong></th>
<th><strong>USD</strong></th>
<th><strong>VATU (millions)</strong></th>
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</thead>
<tbody>
<tr>
<td>Broadband Connectivity – All Schools, Provincial Centers</td>
<td>$9.0 M</td>
<td>900 M</td>
</tr>
<tr>
<td>Education Information System, Teacher Training</td>
<td>$5.5M</td>
<td>550 M</td>
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<tr>
<td>Digital Content – Curriculum, Distance Learning, Non-English content</td>
<td>$4.0 M</td>
<td>400 M</td>
</tr>
<tr>
<td>ICTs in Education Training Institute</td>
<td>$3.0M</td>
<td>300 M</td>
</tr>
<tr>
<td>Village/Community Internet Access via Local Schools</td>
<td>$2.0M</td>
<td>200 M</td>
</tr>
<tr>
<td><strong>TOTAL EDUCATION</strong></td>
<td><strong>$23.5 M</strong></td>
<td><strong>2.350 Billion VT</strong></td>
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Let’s remember who we are working for:
Tank yu tumas!!!
Fast smart phone rollout will have an impact
## Main obstacles to ICTs:

<table>
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<tr>
<th>Response by Ed Officers on Obstacles</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical power</td>
<td>76</td>
</tr>
<tr>
<td>HR, training, IT capacity</td>
<td>71</td>
</tr>
<tr>
<td>Internet access/coverage</td>
<td>48</td>
</tr>
<tr>
<td>Finances, sustainability</td>
<td>48</td>
</tr>
<tr>
<td>Maintenance</td>
<td>29</td>
</tr>
<tr>
<td>Remoteness</td>
<td>24</td>
</tr>
<tr>
<td>No computers</td>
<td>19</td>
</tr>
</tbody>
</table>
Three types of schools:

1. A working computer lab for students, w/ average of 10 desktops, all secondary schools (about 20+ of these)

2. No lab for students, but a few computers for teachers/admin

3. No computers or ICTs (the vast majority)

No schools had tablets, 1 had computers in the normal classroom