# Free/Open Source Software in Pacific Island Countries

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# Motivation

FOSS usage increasing world-wide.
Benefits derived in diverse environments.
Ranging:

- from developing to developed countries
- from poor, rural regions to rich city administrations
- from very small to very large organizations (e.g. ICBC in China: 390,000 *employees*)
- over diverse private sector corporations in e.g. IT, banking, hotel franchise, toy retailers
- from primary to tertiary education

# FOSS benefits / requirements

accessibility

adequate procurement

assistance

auditing

awareness

capacity building

community

empower

enable learning

job creation

license cost

government needs

localization

reliability

local investment

security

vendor independence

# Questions and Objectives

**Question**
"What are the obstacles for maximizing the benefits derived from FOSS for the region?"

**Objectives**
- Knowledge and awareness
  ○ heard of FOSS
  ○ understand its principles, principles of proprietary software
  ○ able to classify popular packages (Mozilla, Apache, Internet Explorer)
  ○ sources of knowledge

- …

# Questions and Objectives

**Objectives cont.**

- Usage
  - extent of usage
  - who uses it?
  - purpose of usage
  - reasons for using / not using

# Background

- participation from Fiji, Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu

- based on 434 interviews (264 organizations, 170 individuals)

- at least a degree
  42.8% organizations, 52.7% individuals
  higher degrees → larger organizations

- above age 35
  31.0% organizations, 11.7% individuals

- one third small, one third medium, one third micro + large organizations

# Awareness

- heard of FOSS
  48.9% organizations, 60.0% individuals
  varies with country, organization size

- want to know more
  59.5% organizations, 68.8% individuals

- understand basic FOSS principles
  22.0% organizations, 32.9% individuals
  better understanding in larger
  organizations

# Awareness

- understand FOSS license principles < 2%

- classify popular packages frequently misclassified: Netscape, Java, Mozilla, Real Player, MySQL / PostgreSQL, Internet Explorer, Windows Media Player

# Usage

- currently using proprietary software
  92.4% organizations, n.a. to individuals
- currently using FOSS
  25.8% organizations, 33.5% individuals
- used FOSS before, but not anymore
  0.8% organizations, 6.5% individuals
- FOSS usage varies
  13.2% organizations in Tonga –
  45.1% individuals in Fiji
- 5.1% turnover $\leq$ F\$30,000 –
  37.0% turnover F\$0.5 – 2 million
- 20.0% government and public sector –
  50.0% regional organizations

# Recommendations

**problem** lack of financial incentive due to use of unauthorized copies. High unforeseen cost when laws or enforcement changes.

**recommendations**

- small business training addresses licensing (proprietary and FOSS)
- industrial and professional organizations educate about risks and alternatives
- regional organizations inform on proprietary and FOSS licensing
- USP strengthens information and education on FOSS and proprietary and FOSS licensing

# Recommendations

**problem** general unawareness of FOSS and its characteristics hinders maximal benefit

**good sources** Internet, magazines, newspapers, work colleagues

**recommendations**

- focus on good sources to increase awareness
- IT workers form a common forum for sharing FOSS information
- authoritative FOSS personnel produce columns on FOSS in PIC newspapers

# Recommendations

**problem** stable, low-cost Internet access conducive for participation in FOSS, helps promoting and utilizing FOSS, but unavailable in PICs

**recommendations**

- regional governments strive for cheap, reliable and fast Internet access comparable to developed nations.

- PICs and ICT organizations support a regional FOSS repository distributed via DVD/CD for those without reliable Internet access

- FOSS developers are granted privileged Internet access

# Recommendations

**problem** usage in government seems sporadic, not part of strategy or vision.

**recommendations**

- government officials are educated on FOSS

- regional governments develop ICT strategy and (procurement) policies considering advantages and characteristics of FOSS

# Recommendations

**problem** difficulty migrating to FOSS due to lack of training facilities and cost of migration

**recommendations**

- promote functional comparison of proprietary and FOSS applications, e.g. MS Office and OpenOffice, to assist migration

- training of instructors to assist with migration

# Recommendations

**problem** teaching at USP is biased towards proprietary software, internally and externally distributed files use proprietary formats, and there is little awareness of FOSS in secondary education

**recommendations**

- curricula at tertiary and secondary schools include FOSS

- CS and IS curricula at USP ensure adequate treatment of FOSS

- official policy encourages use of open standards in file exchange (e.g. PDF, HTML, RTF, XML, CSV)

# Recommendations

**recommendations cont.**

- provide cheap computers installed with relevant light-weight FOSS systems and applications to PICs primary and secondary schools

- teacher training institutes, PIC Ministries of Education, and teaching associations provide training to teachers and curriculum developers on FOSS

- the USP BED program in Computer Studies and other teaching qualification programmes include FOSS education

# Thanks

- Abdul Nadeem Aziz, Fiji Islands
- Mark Dennis, Solomon Islands
- Lupeti Fihaki, Tuvalu
- Kisione Finau, Fiji Islands
- Monica Gabriel, Samoa
- Jeffrey Garae, Vanuatu
- Mesui Halaufia, Tonga
- Maki Kato, Fjii Islands
- Dohsis Lokot, Marshall Islands
- Nola Mahe, Fiji Islands
- Christina Mitini, Solomon Islands
- Grinalee Mizutani, Marshall Islands

- Christian Omlin, Fiji Islands
- Tobias Pfeil, Germany
- Philip Pukefenua, Solomon Islands
- Steven Ratuva, Fiji Islands
- Vishal Sanjeeva Reddy, Fiji Islands
- Petra Schmuck, Fiji Islands
- Taniela Sila, Tonga
- Julia Solofa, Samoa
- Mataina Solofa, Samoa
- Adrian Vatuvoi, Tonga
- Edward Williams, Vanuatu