

We are

MDG Team



We from here



We were here on July 2



We were here on July 28



We are here now



There are stories behind the scenes





Food supply chain

OverPopulated

Air Pollution

Clean water challenge

Environmental Pollution

Dry land

Greenhouse effect



Ice melting

Global Warming



Stop
GLOBAL
WARMING

Threatening virus and diseases



The A/H1N1 virus

An unusual cocktail
of avian, swine and human viruses



Bird flu

Human flu

Swine flu

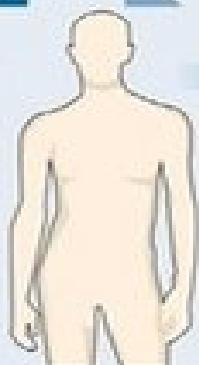
Pigs may harbour several flu
viruses simultaneously.
The pathogens may mix
to create a new viral strain



Transmission

Pig
to human

By inhaling
viral particles
(there is no risk
from eating
cooked pork)



Human
to human
By inhaling
viral particles



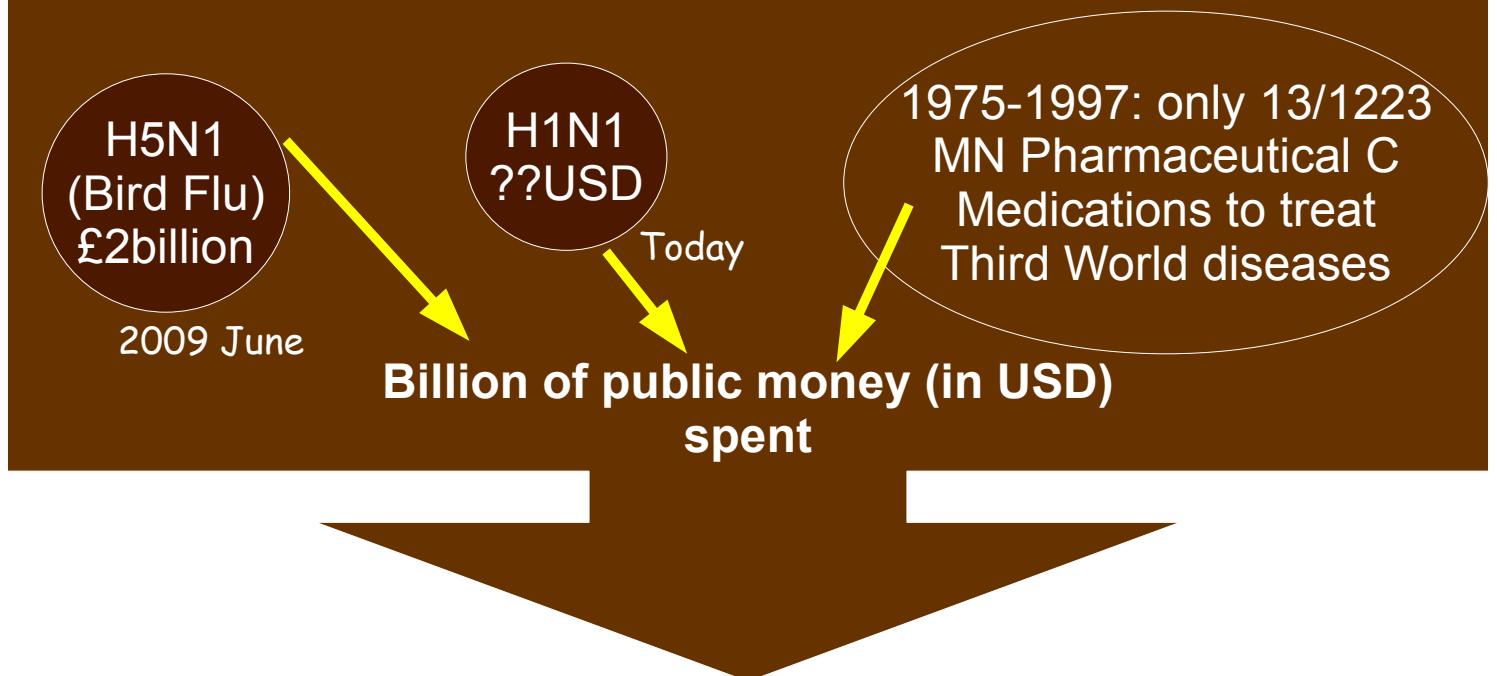




People died because the drugs to treat those illnesses are **nonexistent** or are **no longer effective**.

They died because it doesn't pay to keep them alive

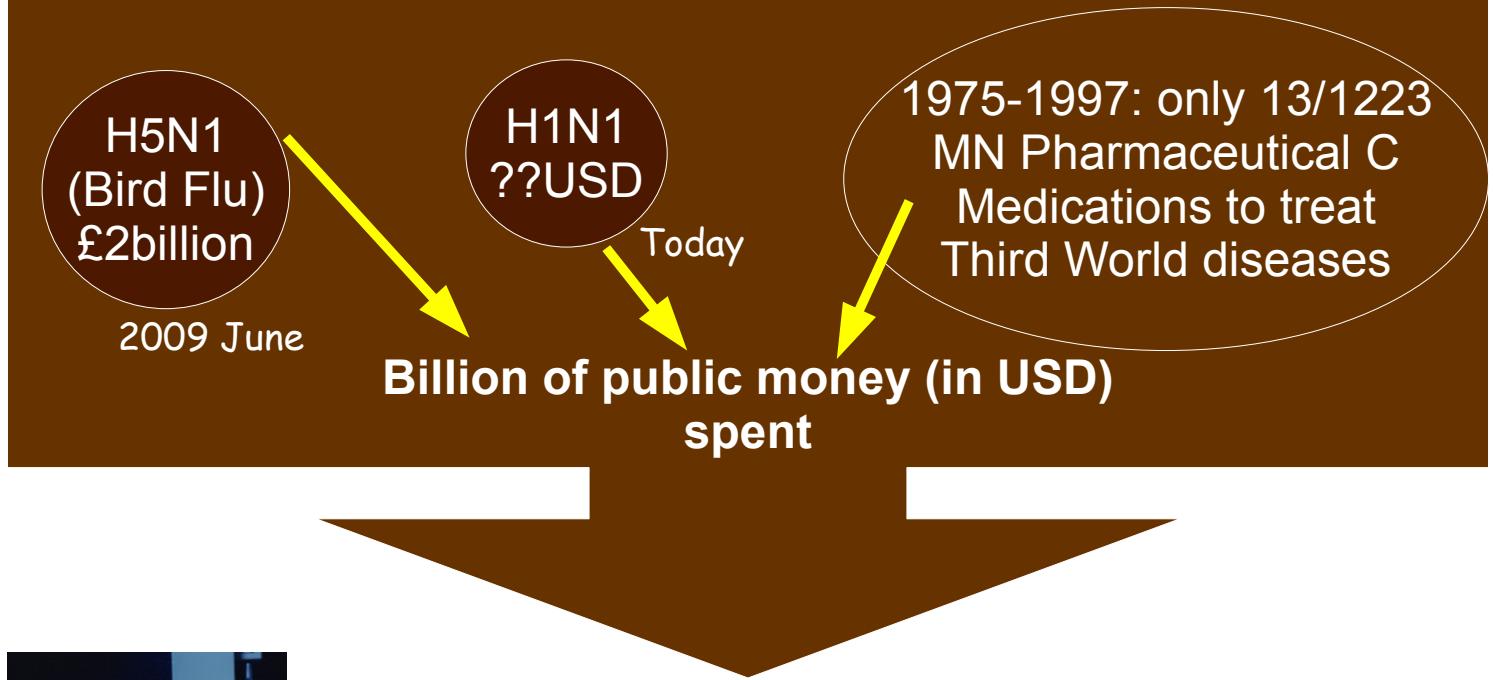
— Ken Silverstein, Millions for Viagra, Pennies for Diseases of the Poor, The Nation, July 19, 1999.



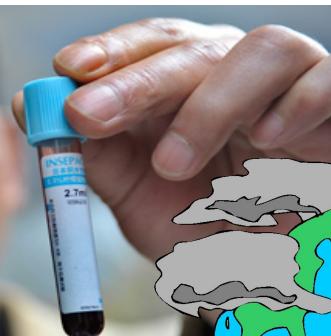
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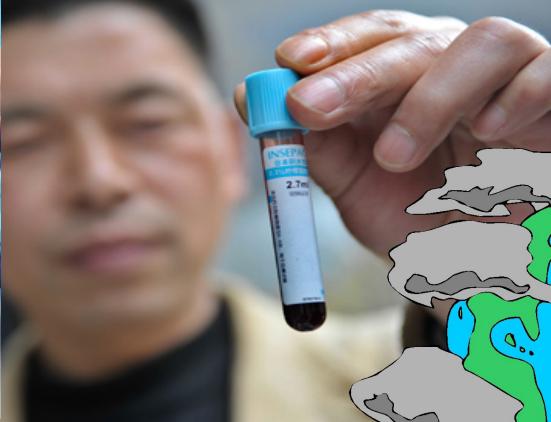


World wide researchers
team up to address
Global Issues





World wide researchers team up to address Global Issues



They do
simulation modeling,
matching protein sequences,
calculating the statistical
significance of matches,

...

using in computer and server.



World wide researchers
team up to address
Global Issues



AND

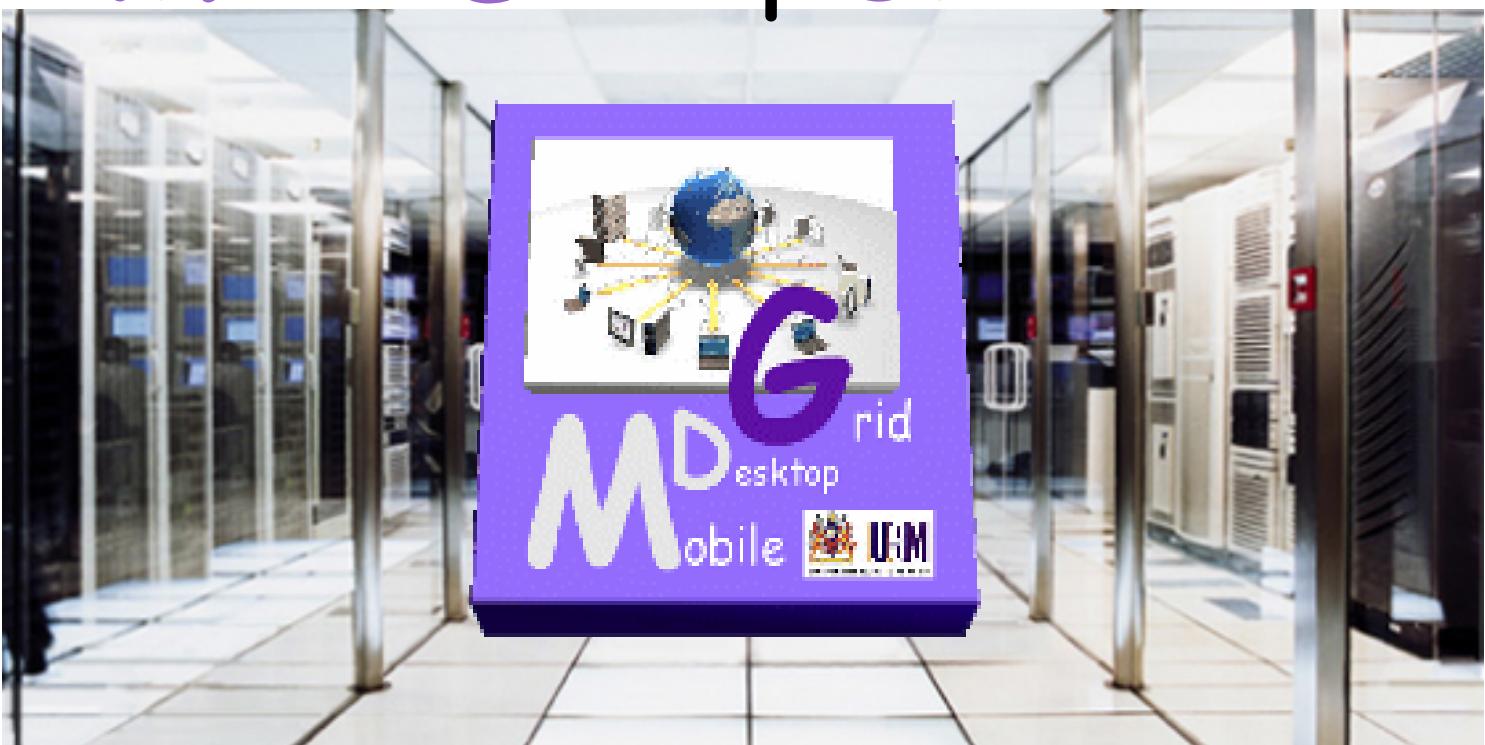
they require a lot
server computational resources
to address Global Issues



World wide researchers
team up to address
Global Issues

OVER HERE
We bring them

Mobile Desktop Grid



Our target users **may or may not know**
about cluster **BUT** still able to perform
highly computational tasks
using **unlimited resources** in MDG



MD Grid
Mobile





Scenario 1

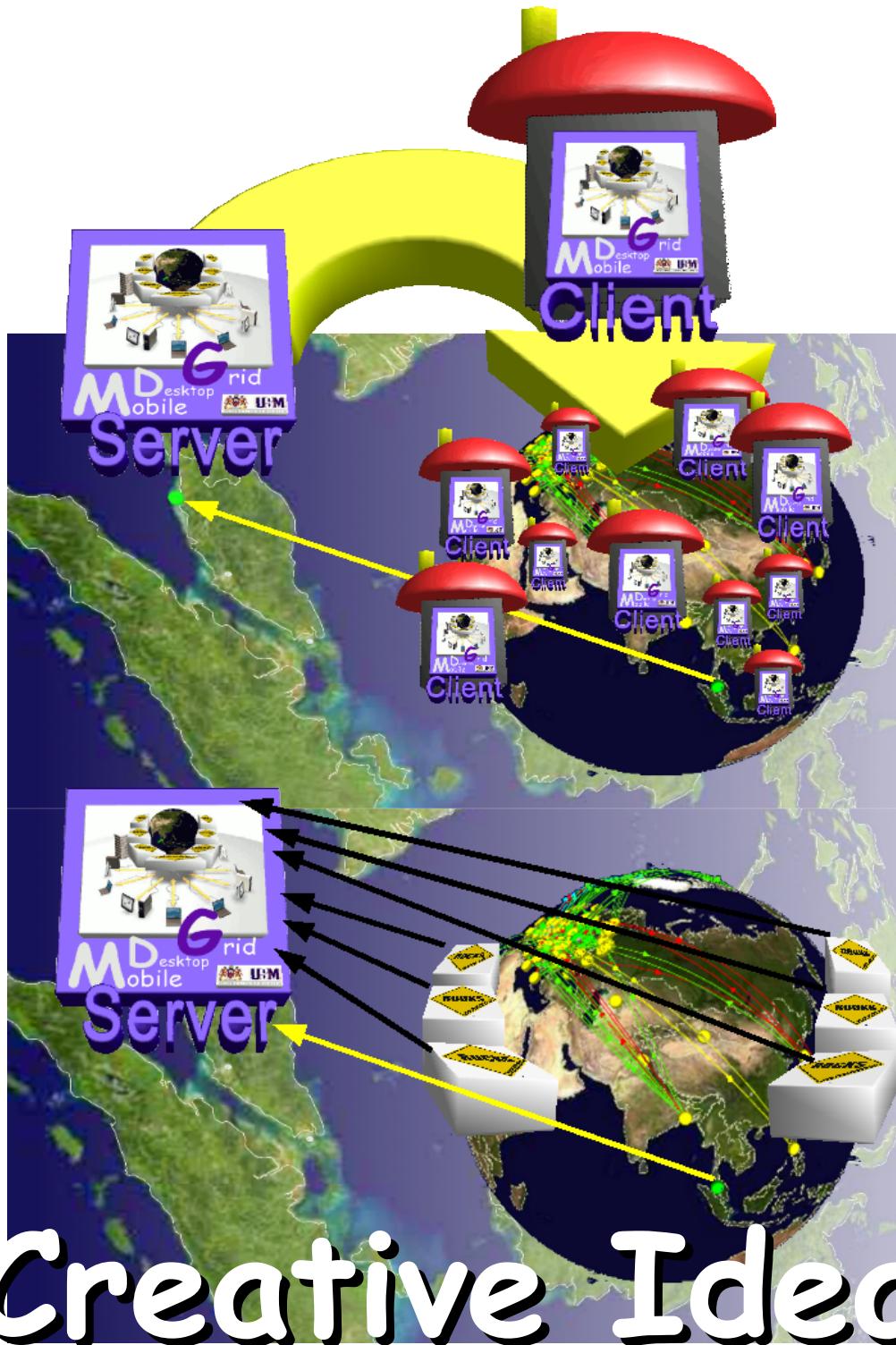
Innovative Idea
World wide resource contributors share
their idle-use cluster resources

World wide resources users enjoy
unlimited computational resources in MDG



Innovative Idea
World wide resource contributors share
their idle-use cluster resources

Rendezvous of OpenSource + Web Services + Cluster + OpenMessagingSystem



Module 1

Nation-borderless resources allocation

Speed up global issue addressing

Module 2a

NCBI Blast Job Submission

The distributed processing engin

Module 2b

MPICH Job Submission

The parallel processing engin



Module 3

Knowledge sharing platform

Avoidance of duplication research efforts
in research collaborative

Module 4

Real-time notification platform

Secure research progress achieving and
Reduce unexpected execution plan halting

Module 5

Collaborative file sharing platform

Share research finding universally via
http/https protocol



Recommended

Tested deployment in :



MDG use open source

www.cogkit.org



Sun

Sun Java3D



Sun Open Message Queue

DAV Explorer

MPICH

Apache Derby



RSSLib4J



Cylindrical BLAST Viewer



Mobile Desktop Grid Industry Relevance



Open opportunities for enhancements

Freely Open Source
Or Commercialize it

Facilitate current
hunger-computational
research works,
e.g.

Learning &
development
platform



As researcher
daily research
tools

Explore cluster
resource handling
research
(Master Degree)

Mobile Desktop Grid

Commercial Value



Open opportunities for enhancements

Freely Open Source
Or Commercialize it



Grid Service Provider
Internet Service Provider

Adopt charges on
resources use

Integrate with
3rd party
vendor cluster

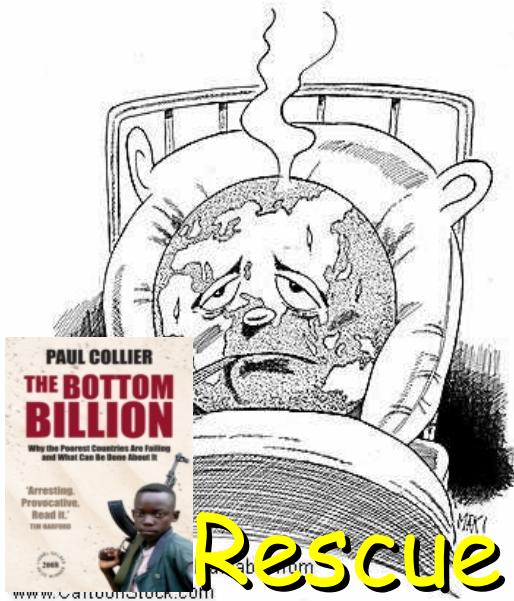
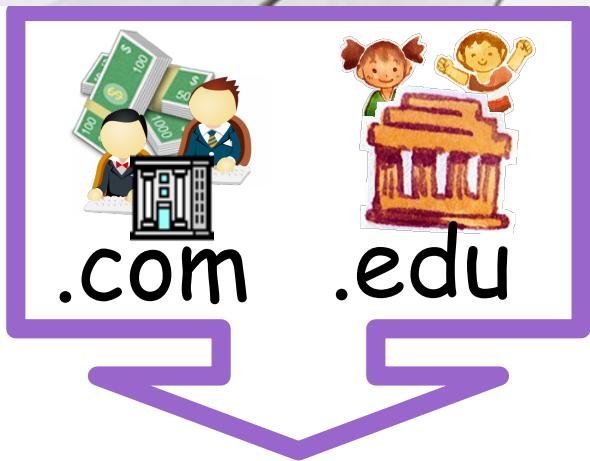


New product
development
platform

SMI low affordable
Virtual cluster
option

Mobile Desktop Grid

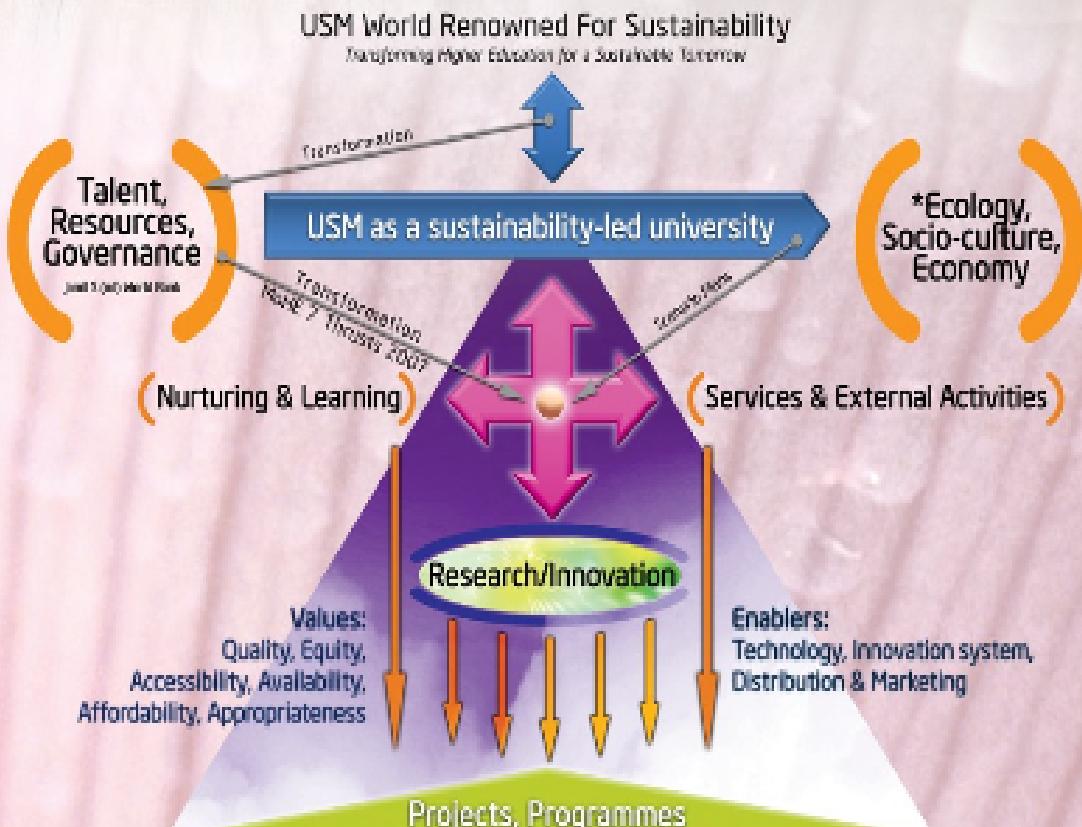
Change Tomorrow



Rescue the Earth
HELP the Bottom Billion



USM World Renowned For Sustainability

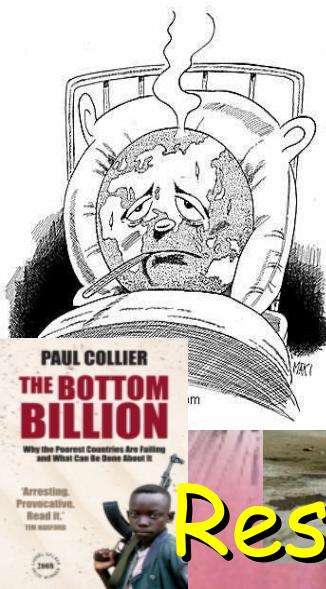


Bottom of the Pyramid

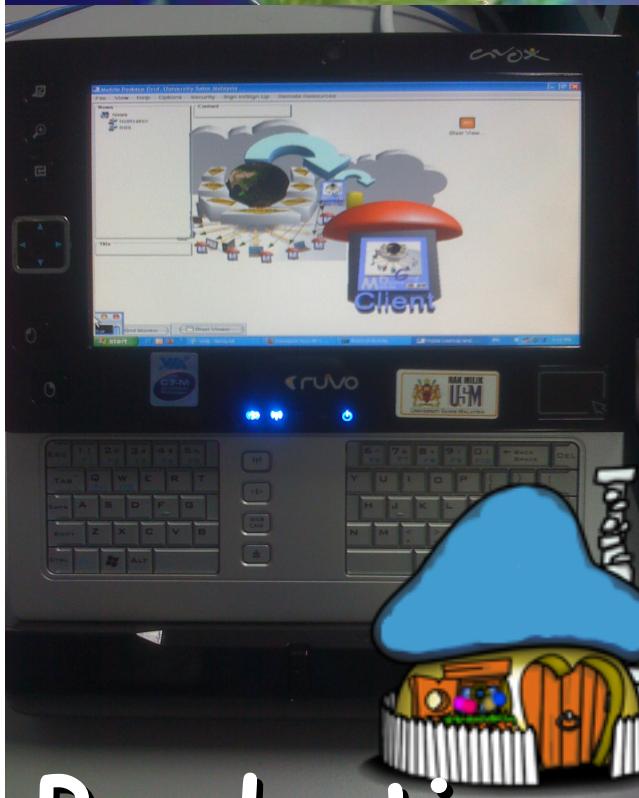
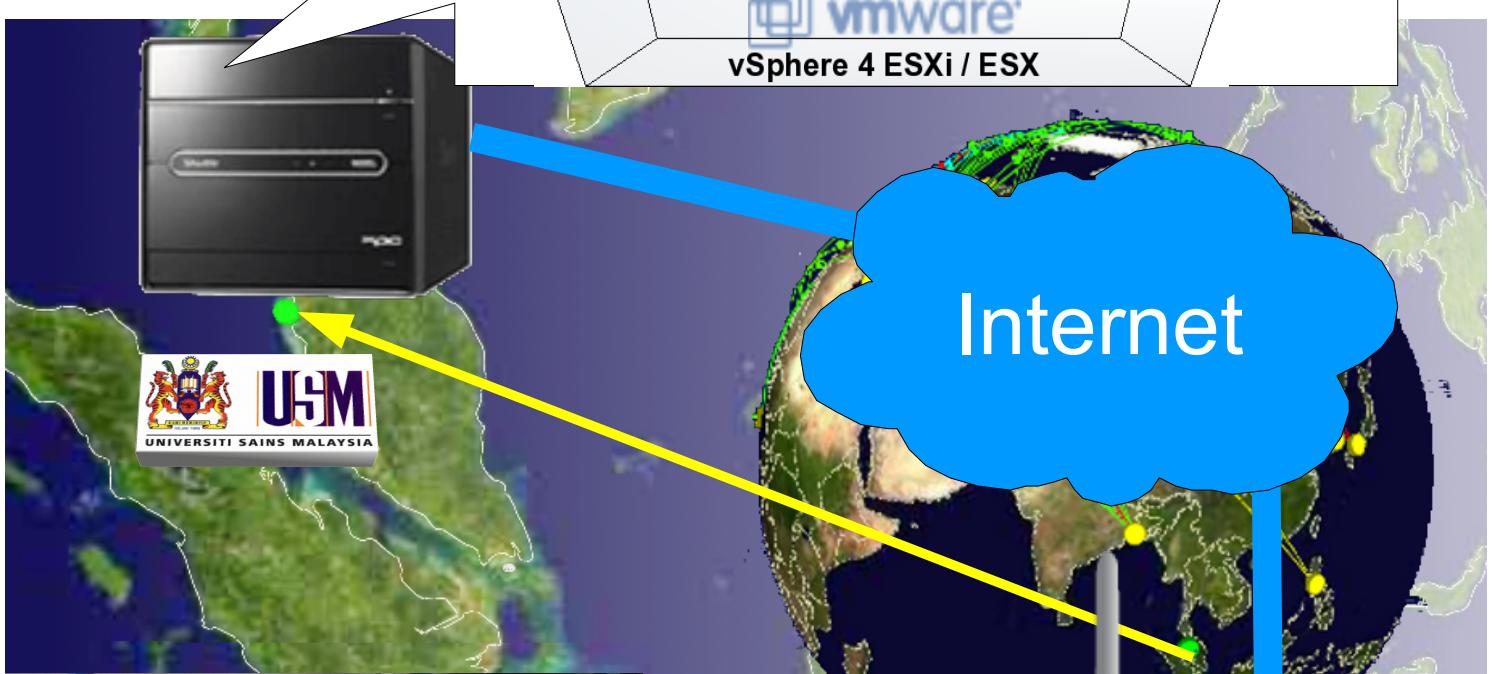
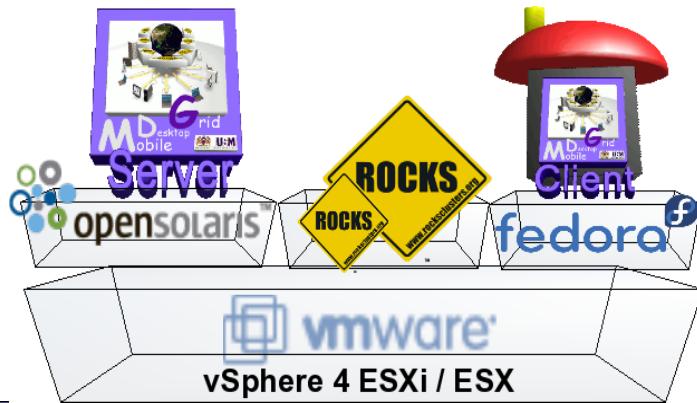
Endpoints: Quality of Life - MDD* (2015); EFA* (2015); EfSD* (2014)



Mobile Desktop Grid Change Tomorrow



Mobile Desktop Grid Solution Box



Production ready in a Box

Mobile Desktop Grid

Setup & demo video clips & source code available at kenai.com/projects/oj9mdg



MDG Team
Change Tomorrow
We Lead



Malaysia Final @ Bukit Jalil Golf & Country Club Kuala Lumpur

Over 16 finalist
Malaysia university teams

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We Lead



Malaysia Final @ Bukit Jalil Golf & Country Club Kuala Lumpur



Code Quality Challenge



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We Lead



Regional Grand Final @ Raffles City Convention Centre Singapore

**Over one hundred project
Submissions from
five participating countries
(Indonesia, Malaysia, Philippines,
Thailand and Singapore)**

**MDG Team
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We Lead**



Regional Grand Final @ Raffles City Convention Centre Singapore



Sun Technology Award



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We Lead



Regional Grand Final @ Raffles City Convention Centre Singapore



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Regional Grand Final @ Raffles City Convention Centre Singapore



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Regional Grand Final @ Raffles City Convention Centre Singapore

Thank You
CS + USM



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We Lead