IEEE Global Humanitarian Technology Conference

Building Capacity for the Coming Era of Connectivity: The Next Billions

21 October 2018, San Jose, CA

#GHTC2018 #InternetInclusion

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Session Description

- Internet connectivity can provide enormous economic and social value
  - Increasingly relied upon for access to education, healthcare, employment, finance, commerce, and information
- Connecting the next half of the world's population will be different and more difficult than connecting the first 4 billion
  - Typically remote, rural, or sparsely populated regions, cost of access is too high, lack of relevant content in the local language, and other challenges
- This session will explore what is needed to build the capacity and skills for sustainably connecting the next billions
  - Four speakers will briefly share some of their first-hand experiences, and what they think are some key success factors
  - All participants will then delve deeper into identifying the factors that help advance sustainable internet inclusion for all

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Agenda

Welcome *Introduction to the Session*	**Jim Wendorf**, Program Director, IEEE Internet Initiative
Opening Remarks *The impact of building local capacity and skills on achieving universal access*	**Deepak Maheshwari**, Director, Government Affairs – India, ASEAN & China, Symantec Corporation, and Chair, IEEE Internet Initiative
Case Studies *Experiences in building local capacity and skills*	Speakers: • **Meher Bnouni**, Innovation Manager, Novation City • **Divon Lan**, Managing Director, Black Paw Ventures • **Don Means**, Director, Gigabit Libraries Network, and Coordinator, Partnership for Public Access • **Maurice McNaughton**, PhD, Director, Center of Excellence for IT-enabled Innovation, Mona School of Business & Management, UWI
Interactive Discussion *Identifying the factors that help advance sustainable internet inclusion for all*	**Full Audience Participation** Moderator: **Deepak Maheshwari**
Summary & Prioritization of the Identified Factors	**Jim Wendorf**
Closing Remarks	**Deepak Maheshwari**

Deepak Maheshwari

Director, Government Affairs – India, ASEAN & China, Symantec Corporation

Chair, IEEE Internet Initiative

IEEE INTERNET INITIATIVE

Connecting the Global Technology and Policy Making Communities on Internet Governance, Cybersecurity, Privacy, and Inclusion

Leverage the expertise of IEEE's worldwide membership to:

- Inform internet related policy making, through a consensus of sound technical and scientific knowledge
- Advance sustainable internet inclusion for all, enabling everyone to benefit from a safe and trustworthy internet

https://internetinitiative.ieee.org

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Internet Inclusion: Advancing Solutions

Connectivity Coalition

Globally open, cooperative network of organizations and internet connectivity experts, dedicated to helping countries and regions advance sustainable internet inclusion for all

- Amplifies the local internet connectivity efforts of its members
- Helps build and train the requisite local technical skills and capacity
- Provides information, experience, talent, and resources to help ensure the success of the local internet inclusion projects

Meher Bnouni

Innovation Manager, Novation City

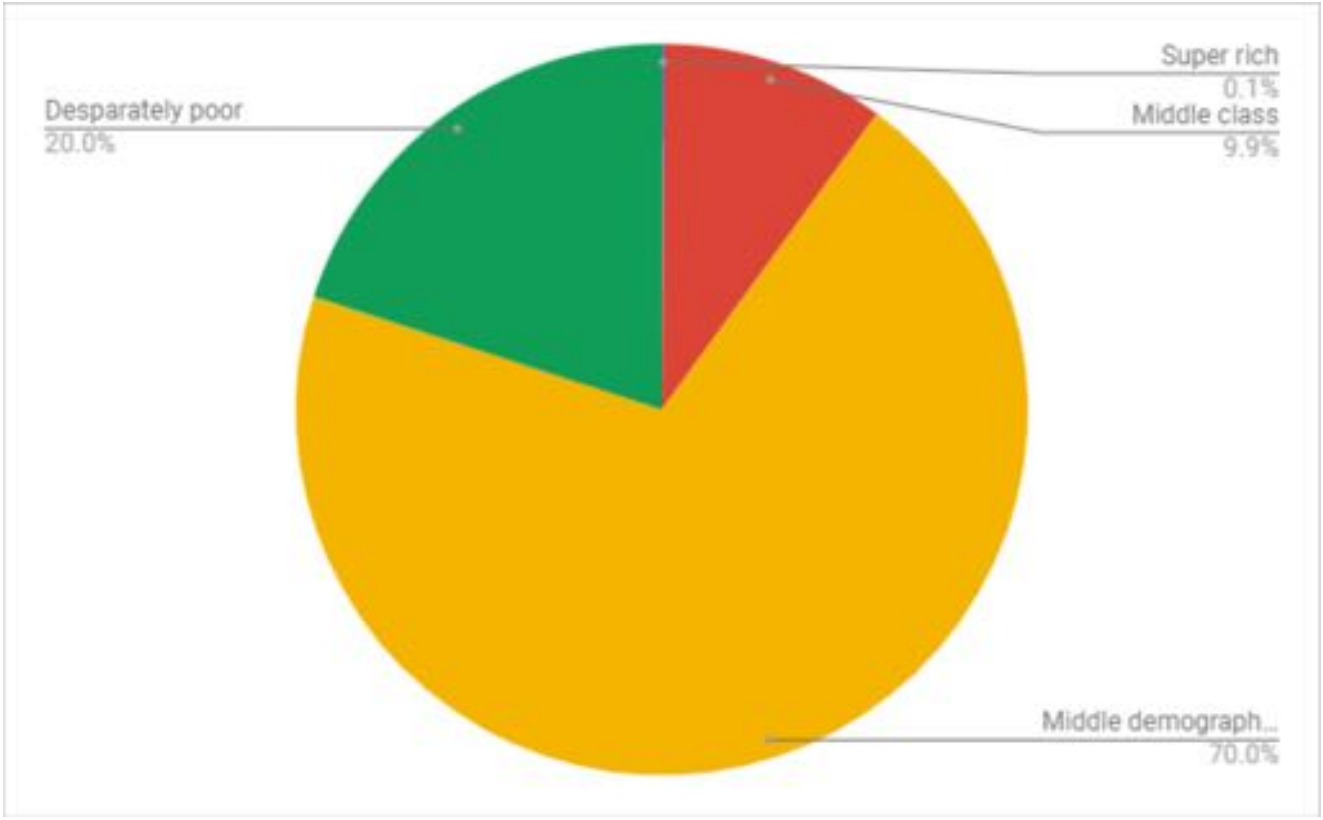
IEEE

Divon Lan

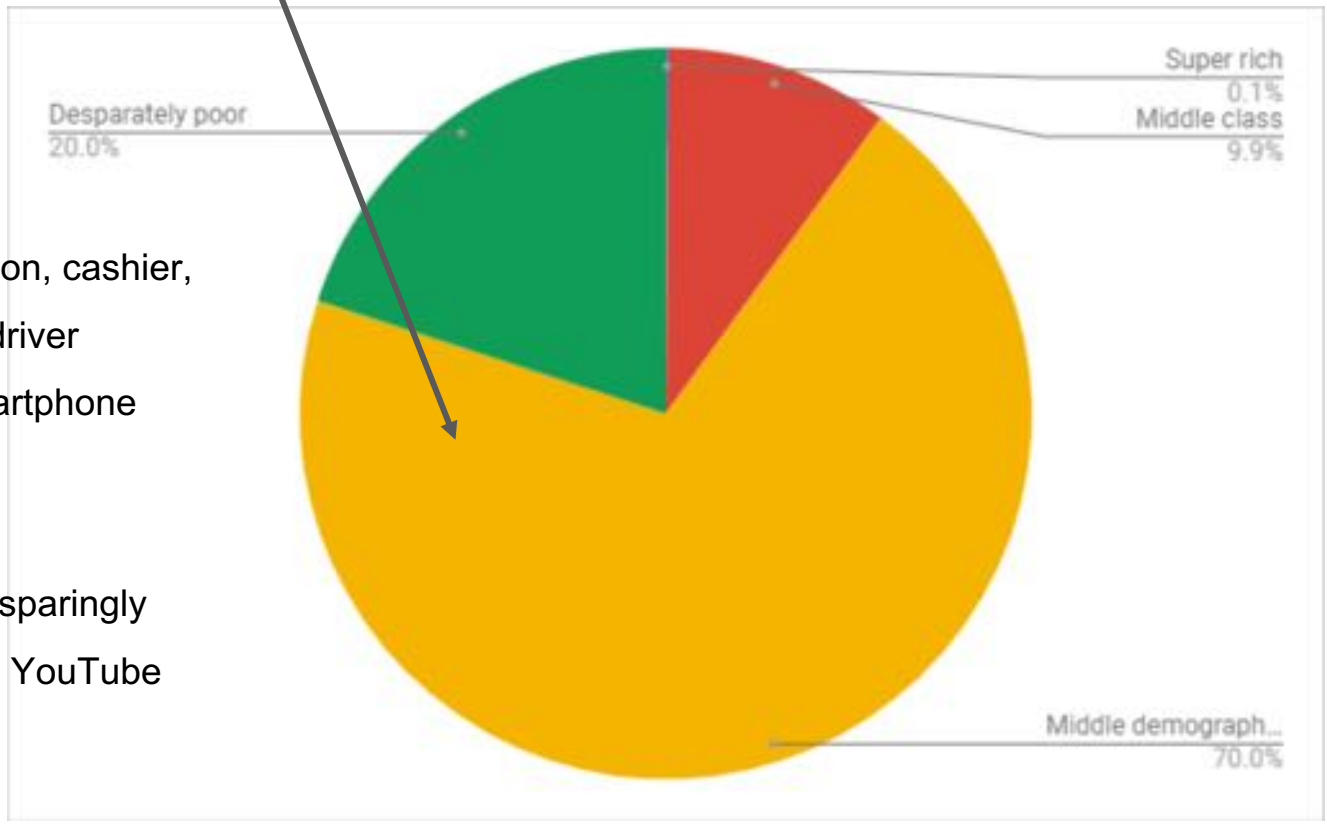
Managing Director, Black Paw Ventures

Who are these billions?

Divon Lan
divon@blackpawventures.com


Super rich
0.1%
Middle class
9.9%
Desparately poor
20.0%
Middle demograph...
70.0%

These guys!

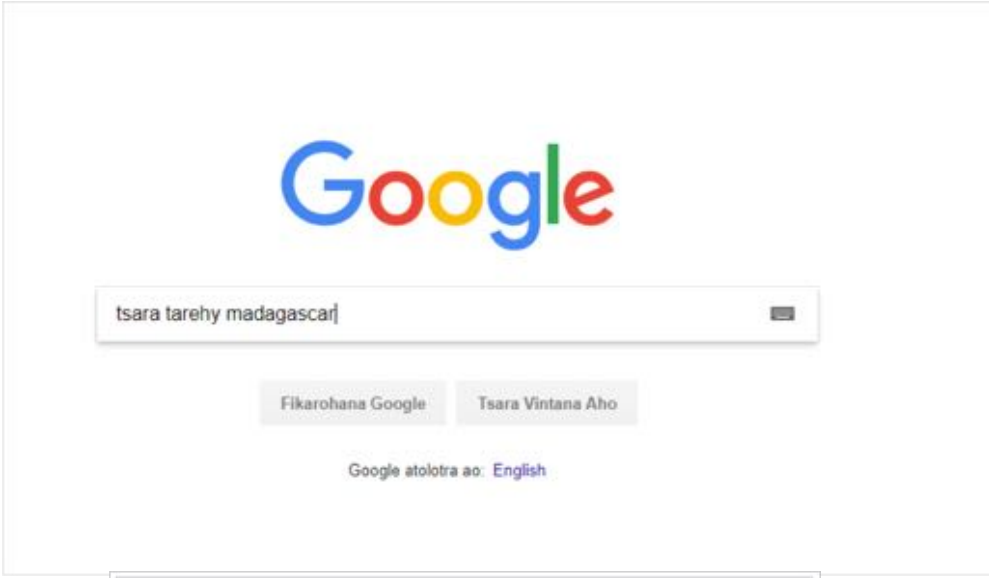


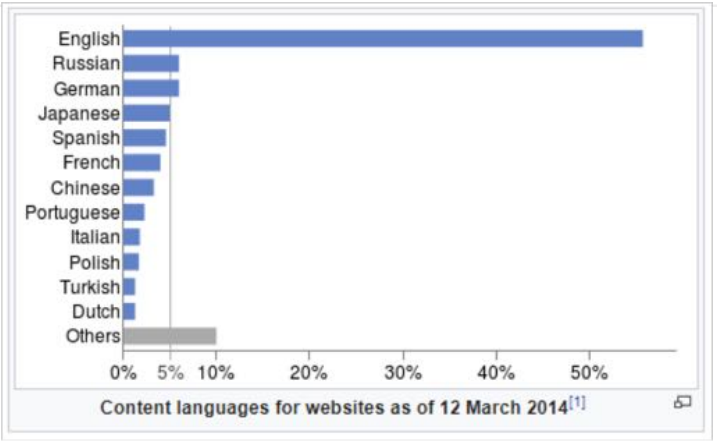
- 5-12 years education
- Earn $100-300 / month
- Jobs: factory, construction, cashier, nanny, security guard, driver
- Increasingly have a smartphone
- Never used a computer
- Don’t use the web
- Connect to the Internet sparingly
- Use *only* Facebook, IM, YouTube
- Live in local language
- VERY cost conscious

Language & Tri-linguality

Language & Tri-linguality

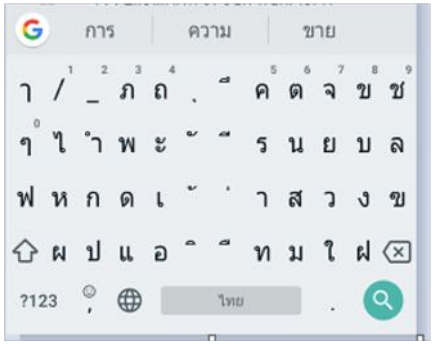
- The Internet is in English
- In many developing countries English is the 3rd language:
  - Mother language
  - National language
  - English
- Most people don’t speak 3 languages





(wikipedia)

Metaphors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ความ
ขาย
?123
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What is your favorite color?
Red
Orange
Blue
Other
Purple
CANCEL
OK

?

NOKIA
NOKIA

Don Means

Director, Gigabit Libraries Network

Coordinator, Partnership for Public Access

GLN

GIGABIT LIBRARIES NETWORK

supporting library reinvention worldwide

Partnership for Public Access

IEEE Global Humanitarian Technology Conference

18-21 October 2018

Universal Internet Inclusion through Public Access

— Public Access Centers/Libraries

— Community Networks

— Offline Internet

Three overlapping, compatible approaches to

Connecting and Enabling the Remaining Billions

IFLA, IEEE, EIFL, ISOC, A4AI, BSF, PCI, GLN, MSFT & OLI

— Any credible strategy to meaningfully connect the remaining next billions must have a public access component.

— Most economical, equitable way to reach greatest number soonest while providing training and support.

Supports Greatest Number of SDG's:

- Gender Equality
- Innovation, Infrastructure
- Education

Key Enabling Policies:

- Universal Service Programs
- More Unlicensed Spectrum

Maurice McNaughton, PhD

Director, Center of Excellence for IT-enabled Innovation,
Mona School of Business & Management, UWI

Ayitic goes global

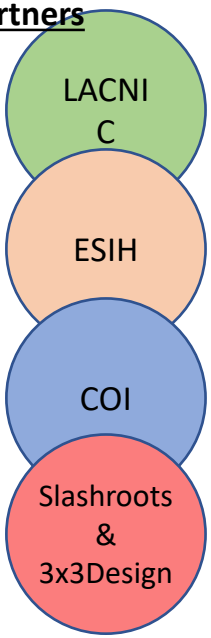
Empowering Women through Digital Markets

Objective

Create the enabling conditions for young Haitians, with a special focus on women, to find employment in the digital economy in Haiti through addressing skills and infrastructure deficits.

Employment in Digital Economy	Enable access to digital Jobs for young women
Skills deficits	a. Develop digital skills among young women b. Strengthen technical skills among local ICT professionals
Infrastructure deficits	Promote Internet Development in Haiti
Sustainability	Incorporate new project partners and develop scale-up strategy

Regional Partners

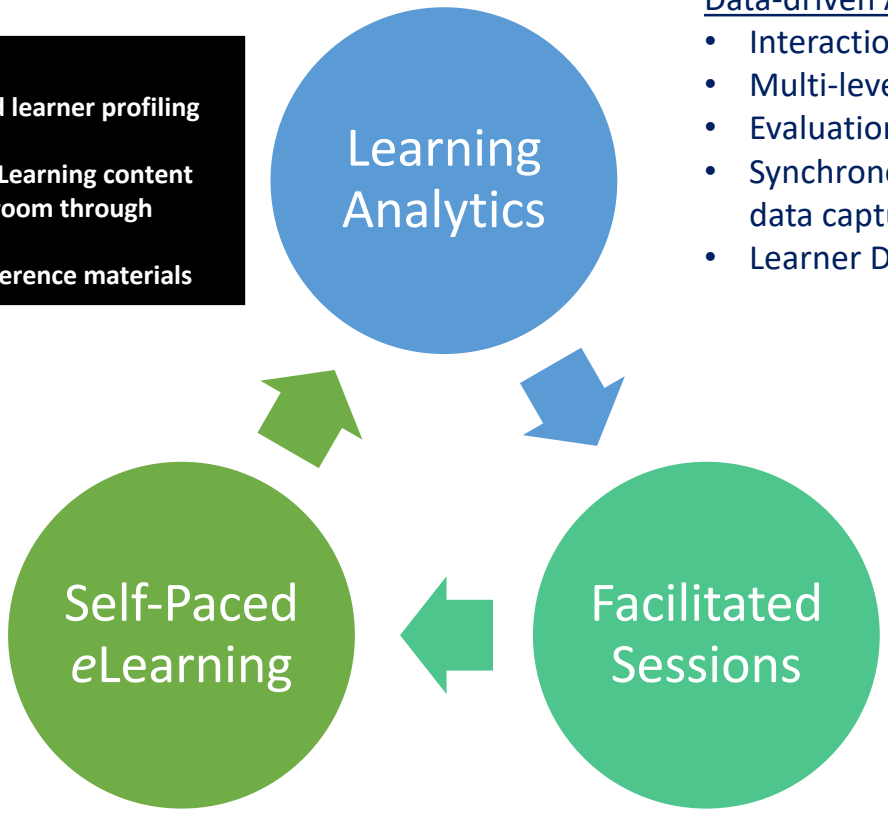


Blended Learning Model

seamless integration of online and offline learning methods

Key principles:

- **Research-based needs analysis and learner profiling**
- **Flip the classroom model**
- **Mobile-enabled, device-agnostic eLearning content**
- **Engage experts in the virtual classroom through online community**
- **Easy access to *context-relevant* reference materials**



Data-driven Assessment

- Interaction Data (SCORM)
- Multi-level Assessment
- Evaluation survey data
- Synchronous, Asynchronous data capture
- Learner Dashboards

Mobile-enabled *e*Learning

- Progressive, Self-paced, directed modular courses
- Deployed as Stand-alone mobile Apps
- Built-in quizzes and repetitive learner assessment
- Interactive Community support (Slack)

Tutor-led sessions

- Weekly / Fortnightly Cycle
- Progress Review
- Proactive Interventions
- Technology facilitation
- In-house Quizzes
- Data Collection

Beyond Haiti, A Caribbean School of Data

1

Problem?

How to deploy *scalable* digital capacity building in resource-constrained environments

2

Solution?

Data-driven blended pedagogical models that minimize transactional distance barriers of *e*-learning

3

Humanitarian Considerations?

Digital Literacy as a Universal Human Right and a means towards Empowerment and Employability

4

Sustainability?

Still evaluating business models, but will involve:

- Local partnerships
- Public-private funding models
- Digitally-enabled solutions