


Agenda Google

- Google Overview
- Google in Africa
- Context: 21st Century Computing
- Products and Services
- Google Apps
- Google App Engine
- Q&A

• Joseph Mucheru, Country Leader, Google Kenya



Introductions Google

We are a young team and growing!

- Office Lead
- Technical Lead
- Geographic Supervisor
- Geographic Specialists
- HR and Communications Associate
- Localisation Project Manager
- Strategic Investment Principal, Google.org
- Strategic Partner Development (SPD), Local Markets
- Technical Support Associate, Google Applications






Starting at Stanford Google




1995: Google—A research project at Stanford University



The Google Story Google

Stanford Grad Student Project (1998) → World Leader in Search & Advertising (2008)



Google's Mission Google

Organize the world's information and make it universally accessible and useful




Internet Usage by World Region

Region	Millions of Users
Asia	415
Europe	318
North America	275
Latin America	115
Africa	44
Middle East	34
Australia/Oceania	19

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Why Africa has the Greatest Potential for Change


Already a significant number of 'eyeballs'. They need to be harnessed - includes the elite and expatriates (The users have 'spend-ability')

Internet Penetration by World Region

Region	Penetration Rate (%)
North America	70%
Australia/Oceania	67%
Europe	42%
Latin America	21%
Middle East	11%
Asia	7%
Africa	2%
World Avg.	20%

Africa has the greatest growth potential considering more than 50% of the population is below 20 years of age (youth) and there is increased Economic growth

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Africa

Google

Sub-Saharan Africa

More than 40% of the population of are below 15 years in most sub-Saharan countries, as well as the Sudan but with the exception of South Africa, in Uganda as many as 50% (as compared to 20% in the USA). Infant mortality is high, with as many as 190 deaths per 1,000 live births in Angola, and between 25% and 50% malnourished in Tanzania, Kenya, Sudan, Mozambique, Madagascar, Zimbabwe, Zambia, Angola and other countries. HIV/AIDS is widespread in sub-Saharan Africa, with some 11% of adult population infected and an estimated 2 million deaths caused by AIDS in 2005.

Africa

Google

Life expectancy in some Southern African countries 1958 to 2003

HIV/AIDS is widespread in sub-Saharan Africa, with some 11% of adult population infected and an estimated 2 million deaths caused by AIDS in 2005.

Africa

Google

Least Developed Countries are countries which according to the United Nations exhibit the lowest indicators of socioeconomic development, with the lowest Human Development Index ratings of all countries in the world:

three criteria [1] based on:

- **low-income** (three-year average GNI per capita of less than US \$750, which must exceed \$900 to leave the list)
- **human resource weakness** (based on indicators of nutrition, health, education and adult literacy) and
- **economic vulnerability** (based on instability of agricultural production, instability of exports of goods and services, economic importance of non-traditional activities, merchandise export concentration, and handicap of economic smallness, and the percentage of population displaced by natural disasters)

Kenya

SOME Global CONTEXT!

Google

- Computer Technology today is simply "micro processors and software" of varying sizes used to do almost anything
- Today we are in a position to put a microprocessor and software into anything (alive or dead) for anything
- We can use technology to leapfrog development

The Evolution of Computing


Google

- 1960's - Mainframe Computers
- 1970's - Mini Computers
- 1980's - Personal Computers
- 1990's - Networking, Internet & Distributed Computing


• **2000's The Fifth Wave! - Cloud Computing**


- Put's computing everywhere, offers limitless amounts of information, services and entertainment, all the time, everywhere!
- Unlike previous waves, it is not driven by a single piece of hardware or by how a corporation deploys it.

Each wave lifted some companies and dropped those that could not adapt to the new wave. Remember Lotus 123?

Drivers of the Fifth Wave of Computing 

- Cheap and ubiquitous computing devices -- from PCs to Cell phones, PDAs, iPods and shuffles -- [[commodification](#)]
- Low cost omnipresent bandwidth -- dial, gsm, adsl, wifi, gprs, WIMAX [availability of [broadband everywhere](#)]
 - Today's local area networks move data at gigabits per second. This is equivalent to a full DVD quality movie every 38 seconds
- Open Standards -- open source changes the game - anyone can add, alter or innovate on what others have done so long as they share the developments they add.
- Unlimited Processor Power and Storage! Examples: Amazon, Wikipedia, Google Maps, FaceBook, Google Apps, Google App Engine, Google Android, Open Social





Drivers of the Fifth Wave of Computing 

Communities & Audiences

- In the past;
 - communication between community and audience was largely enforced by media -- telephones were good for one-to-one conversations but bad for reaching large numbers quickly
 - TV and Radio had the inverse set of characteristics
- Today;
 - The Internet bridged the divide, by providing a single medium that could be used to address either communities or audiences.
 - e-mail can be either group conversation or broadcast
 - blogs are also adding two-way features to the web's largely one way publishing model

The beginning of "the Social Web" - Information Discovery no longer solitary, Information sharing becoming passive




Drivers of the Fifth Wave of Computing 

Digital Kids

- Today's students are different than students were 15 years ago. They learn differently and as a result feel disconnected from schools that were designed for another time.
- This digital generation takes in and responds to rapidly transmitted sights and sounds whether on television, computers, or video games.
- Digital students are hypercommunicators.
- They use many means to stay in constant touch with their peers and to access information about their world. They commonly use land phones, cell phones, beepers, iPods, handheld devices (PDAs), email, the Internet, instant messaging, and social networking.
- Digital students are multitaskers.
- They see no problem watching TV, browsing the Internet, listening to music, and communicating with their friends at the same time.
- Digital students are goal oriented.
- When multitasking, they may pursue multiple goals at the same time. Digital students are ambitious and success oriented.

These are the future consumers




Drivers of the Fifth Wave of Computing 

Summary

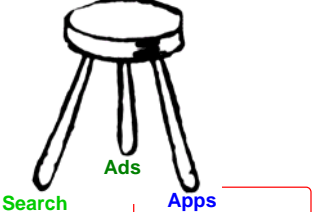

- Together these forces have created the technological infrastructure from which the fifth wave is rising
- The growth is primarily from the grass roots -- armies of mobile users discover new ways to exploit the connectivity that surrounds them
- Creates new business [opportunities & threats](#)
- The adoption of the fifth wave will lead to both personal and organisational success or failure in the 21st century.
- The fifth wave is all about dealing with the impact of knowledge and unrelenting change [caused by disruptive technologies] - For example - Google.com, Pandora.com, Hulu.com

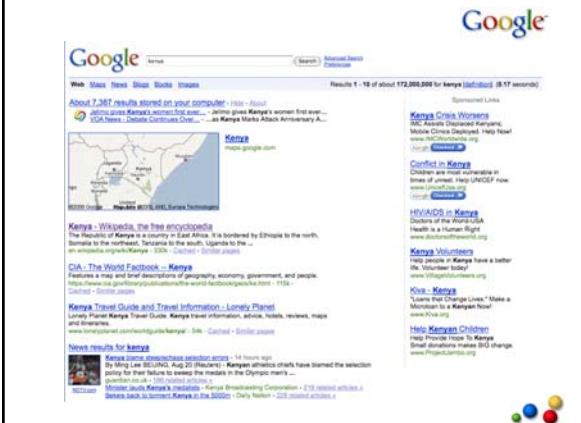
The success or failure of a business will be based on it's ability to adapt to the ever changing market conditions and it's ability to obtain and use knowledge;




Google Products and Service 

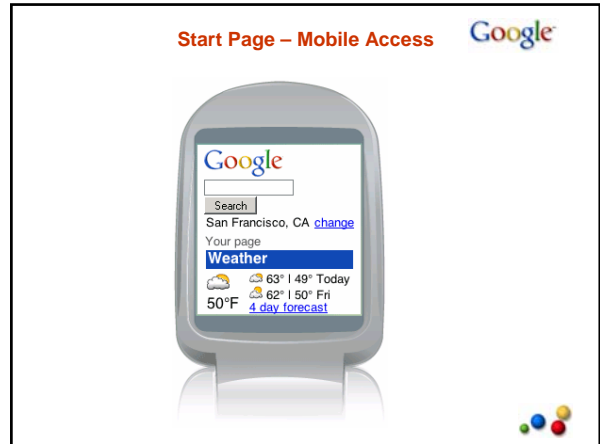
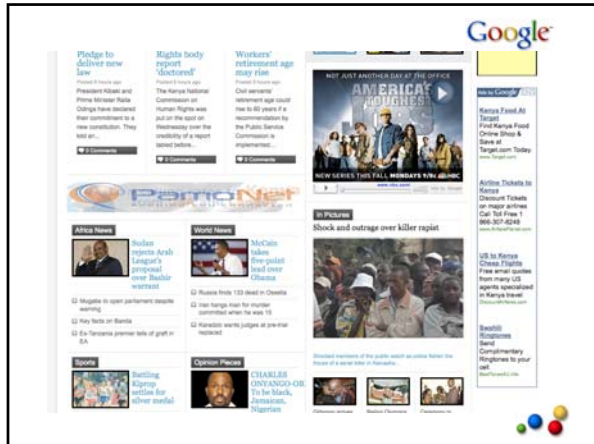
"Cloud Computing"



The screenshot shows a Google search for 'Kenya'. The search bar at the top contains 'Kenya'. Below the search bar, there are search filters for 'Web', 'Maps', 'News', 'Books', 'Images', and 'Videos'. The search results are displayed in a list format, including a map of Kenya, a Wikipedia entry for Kenya, and various news articles and links related to Kenya.





Introducing Google Apps

- Gmail**
Make e-mail a usable information tool
- Talk**
Instant communication within and outside your business
- Calendar**
Personal, shared, and public calendars
- Docs & Spreadsheets**
Simple real-time document collaboration from anywhere
- Wiki- Google Sites**
Easily created and edited group pages
- Start Page**
Your personal view of all your information
- Postini Communication Security and Compliance**
Protect your information and comply with regulatory requirements

End-User Benefits: Communicate

- Access your e-mail and attachments wherever you are.** Access all your e-mail anywhere you're at, with the same rich user experience. Get IM and e-mail in the same window.
- E-mail and IM while on the go.** Mobile e-mail. Also, chat with your contacts from your BlackBerry.
- Size matters. Really.** Don't delete or archive another important e-mail or attachment because of a full inbox. *You are currently using 1130 MB (7%) of your 15360 MB. Last account activity: 28 minutes ago on the computer.*
- Keep track of all your communications.** Search IMs just like you search e-mail. Get VoiceMails in your inbox.
- Find it all.** With great search. Who needs folders? Find e-mails, attachments and more in fractions of a second.

End-User Benefits: Share

- Share documents and information with everyone...** Easily share documents with your entire organization.
- ... or with just a few.** Restrict permissions to only a group of people.
- Keep everyone in the loop.** Publish calendars of events and meetings anyone (or just a select few) can subscribe to.
- Access critical information on the go.** Everything is available on the web, so you can always refer to that important document while on the go.
- Find it all.** Quickly find all your documents and those people share with you.

End-User Benefits: Collaborate

- Get on the same page. Literally.** Collaborate with documents and spreadsheets many people can make changes to at the same time. Get updates real-time.
- Go back in time.** See changes people made, and restore previous versions.
- Create, upload or e-mail** Start creating a document from scratch, or upload an existing document – even have it e-mailed.
- Take them offline.** Need to send your document around? Save it as HTML, RTF, Word, PDF...
- Go ahead, throw your laptop through the window.** Anyway, your documents are safe with us and saved automatically as you work.

Business & IT Benefits

Security and Privacy
Industry-leading security and privacy practices. Your data is safer with us.

Easy Integration
APIs for provisioning, archiving, routing and more.

Great value, Simple licensing
Straightforward per-user licensing.

Low Maintenance
Forget about patches, hardware maintenance. Focus on value-added IT.

The New Inbox: Converged Communications and Context

The screenshot shows a Gmail inbox with a message from Andy Ballagie. The message content includes a calendar event: "Are you free on December 9?". The interface shows the message, a reply, and a calendar integration that allows the user to click "Add to calendar" to add the event to their schedule.

The New Inbox: Rethinking the Calendar

The screenshot shows the Google Calendar interface in a weekly view. It displays a grid of days with various events scheduled throughout the week. The interface includes a sidebar with navigation options and a main calendar area with color-coded event blocks.

The New Inbox: Document Collaboration

The screenshot shows the "Google Apps for Education" page. It features a section titled "Get your campus talking (more)" which lists several services:

- Google Talk**: Keep students in contact even when not on campus with instant messaging and voice calling over the web.
- Google Calendar**: Help students stay on top of their schedules, share plans with others and keep up-to-date on campus events.

 The page also includes a "Round interesting" section and a "Check out" button.

The New Inbox: Shared Spreadsheets

Customer	Organization	Purchasing Dept	Deployment	Timeline	Notes	Contact
LA Area Community College	Marketing	Public Web Site	PLANNED - 1st week in Jan		Tom O'Brien, Director of Marketing and Communications, 408.964.8172, tomobrien@glbu.edu	
Shawn Publishers	Law Firm	Marketing	Internet, Public Web Site	12/09/08	Julian Mastary, Director of Marketing, 817.696.6235, jhm@jms.com	
Deacon University	Small Business	IT	Internet	PLANNED - 1st week in Jan	12/02/08	Jackie Harrell, Director of Information Technology, JHS, 405.322.3744, jharrell@deacon.edu
Good Technology	Software Company	Sales & Marketing	Internet	12/09/08	Julian Mastary, Director of Product Marketing, 408.327.8141, jmastary@good.com	
The Nation Magazine	Weekly news magazine	IT	Public Web Site	12/10/04	12/10/04	Scott Hahn, Director of IT, 212.205.6462, scott@thenation.com

Google App Engine

Run your web applications on Google's infrastructure.

- No assembly required.** Google App Engine provides a fully-integrated application environment.
- It's easy to scale.** Google App Engine makes it easy to build scalable applications that grow from one user to millions of users without infrastructure headaches.
- It's free to get started.** Every Google App Engine application can use up to 500MB of persistent storage and enough bandwidth and CPU for 5 million monthly page views.

Google

More Google Products

Search

- Alerts**
Get email updates on the topics of your choice
- Blog Search**
Find blogs on your favorite topics
- Book Search**
Search the full text of books
- Checkout**
Complete online purchases more quickly and securely
- Desktop**
Search and personalize your computer
- Earth**
Explore the world from your computer
- Finance**
Business info, news, and interactive charts
- Gmail**
Find and connect with businesses from your phone, for free
- Google Health**
Organize your medical records online
- Google**
Add news, games and more to the Google homepage
- Images**
Search for images on the web
- Maps**
View maps and directions
- News** - Now with **Advanced Search**
Search thousands of news stories
- Network**
Clip and collect information as you surf the web

Explore and Innovate

- Code**
Download APIs and open source code
- Custom Search**
Create a customized search experience for your community
- Lab**
Explore Google's technology playground

Communicate, show & share

- Blogger**
Share your life online with a blog -- it's fast, easy, and free
- Calendar**
Organize your schedule and share events with friends
- Docs**
Create and share your online documents, presentations, and spreadsheets
- Gmail**
Fast, searchable email with less spam
- Groups**
Create mailing lists and discussion groups
- Kiss**
Share what you know
- Orkut**
Meet new people and stay in touch with friends
- Picasa**
Find, edit and share your photos
- Reader**
Get all your blogs and news feeds fast
- Sites**
Create websites and secure group sites

Google

- Patent Search**
Search the full text of US Patents
- Product Search**
Search for stuff to buy
- Scholar**
Search scholarly papers
- Special Searches**
Search within specific topics
- Toolbar**
Add a search box to your browser
- Video**
Search for videos on Google Video and YouTube
- Web Search**
Search over billions of web pages
- Web Search Features**
Find movies, music, stocks, books, and more

- Desktop**
Build 3D models quickly and easily
- Talk**
IM and call your friends through your computer
- Translate**
View web pages in other languages
- YouTube**
Watch, upload and share videos

Go mobile

- Maps for mobile**
View maps and get directions on your phone
- Mobile**
Use Google on your mobile phone
- SMS**
Use text messaging for quick info

Make your computer work better

- Pack**
A free collection of essential software
- Web Accelerator**
Speed up the web