



Web Services in Industry

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Agenda

- Hotel Online Reservation
- Payment Gateway
- Global SMS
- Amazon Web Services Case Studies
- Summary


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Using Web Services in Hotel Reservation

- Advantages
 - Non shipping
 - One stop hotel booking around the world
 - Distributed hotel allotment (Supplier)
- Disadvantages
 - A lot of competitors
 - Cancellation problem


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Web Services Processes in Hotel Reservation

- Verify a user
- Search hotel and check room availability
- Hotel information
- Confirm/cancel booking
- Payment

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Web Services in Hotel Reservation

- ▣ B2B (Web Services Provider)
 - www.touricoholidays.com : Worldwide
 - www.hotelbeds.com : Worldwide
- ▣ B2C (One stop hotel booking : Client)
 - www.sunhotels.net : Worldwide
 - www.expedia.com/Hotels: Worldwide
 - www.tripadvisor.com: Worldwisde
 - www.agoda.com: Worldwide

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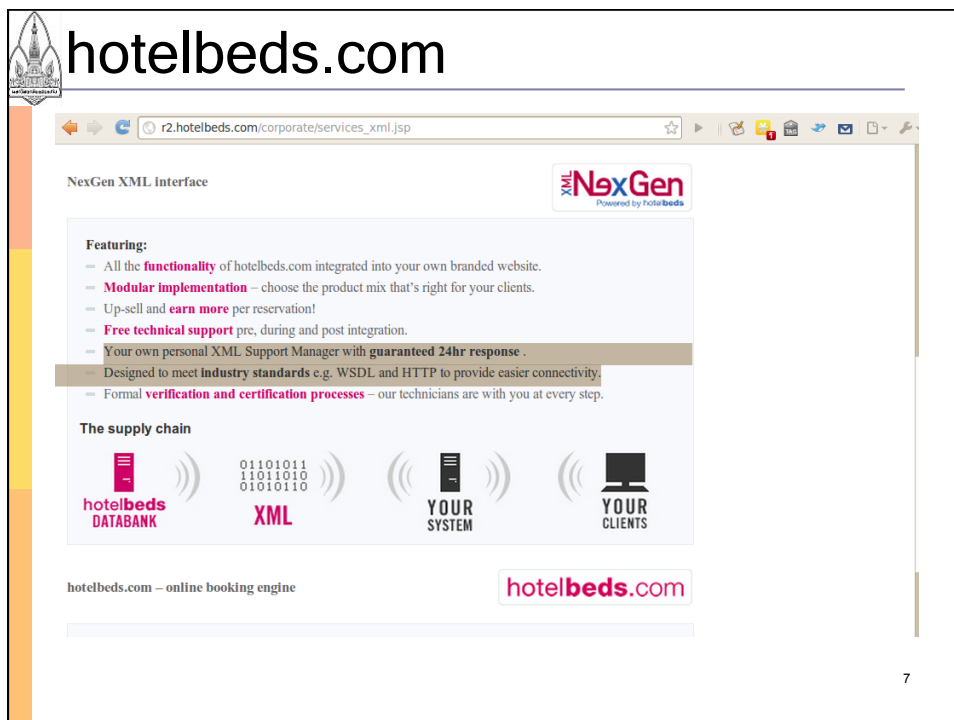
Touricoholidays.com



The screenshot shows the website interface with the following elements:

- Navigation:** home, technology services, global product, client support
- Header:** Technology Services
- Text:** Staying ahead of the Cutting Edge
- Text:** At Tourico Holidays, we have continued our worldwide technology growth resulting in dramatically improved exclusive inventory in all areas of the world. We have dramatically improved our booking tools and offer a variety of services to keep our clients ahead of the curve.
- Section:** Integrated Technology Solutions
 - Host-to-Host Connection
 - Your Site, Our Inventory
- Form:** Welcome to Tourico Holidays, Select Your Language (English, Français, Русский, Español, Deutsch, 繁體中文, 中文, Português, 日本語, Italiano, 한국어), Enter Your User Name & Password (User Name, Password, Enter button)
- Text:** A Dynamic Web Platform
- Image:** TGS Travel Global Systems logo
- Text:** Travel Global Systems (TGS), headquartered in Tel Aviv, focuses on providing innovative and affordable travel technology solutions for Travel Holdings, Inc.'s brands and its partners. TGS was established in 2003, and provides B2B and B2C software solutions for handling large volume transactions and reservations within the travel industry.
- Text:** • Fastest Travel Engine in the World: With the

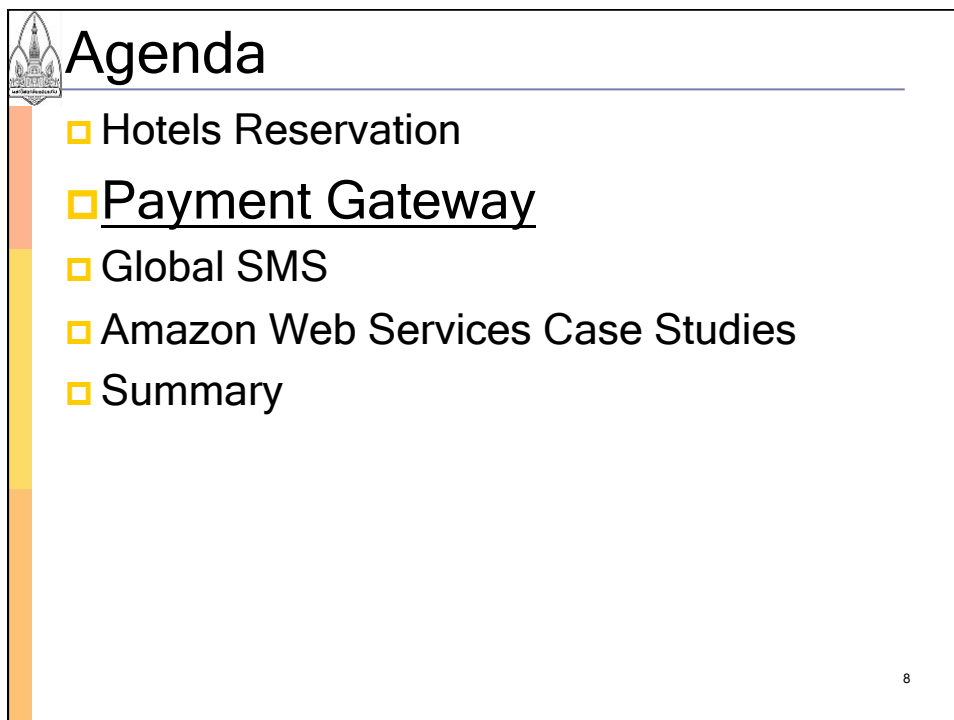
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The screenshot displays the hotelbeds.com website. At the top left is a logo for the institution. The main heading is "hotelbeds.com". Below it is a browser address bar showing "r2.hotelbeds.com/corporate/services_xml.jsp". The page content includes:

- NexGen XML Interface** logo (Powered by hotelbeds)
- Featuring:**
 - All the **functionality** of hotelbeds.com integrated into your own branded website.
 - Modular implementation** – choose the product mix that's right for your clients.
 - Up-sell and **earn more** per reservation!
 - Free technical support** pre, during and post integration.
 - Your own personal XML Support Manager with **guaranteed 24hr response**.
 - Designed to meet **industry standards** e.g. WSDL and HTTP to provide easier connectivity.
 - Formal **verification and certification processes** – our technicians are with you at every step.
- The supply chain** diagram showing the flow from **hotelbeds DATABANK** (with a server icon) to **XML** (with a binary code icon) to **YOUR SYSTEM** (with a server rack icon) to **YOUR CLIENTS** (with a monitor icon).
- Text: "hotelbeds.com – online booking engine" and the "hotelbeds.com" logo.

A small number "7" is visible in the bottom right corner of the screenshot.



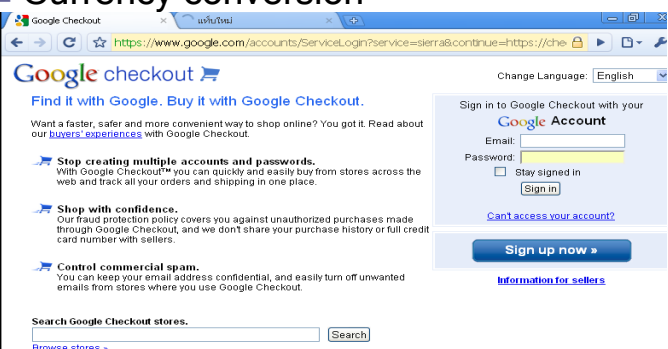
The slide features the institution logo at the top left and the heading "Agenda". The agenda items are listed as follows:

- Hotels Reservation
- Payment Gateway
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- Summary

A small number "8" is visible in the bottom right corner of the slide.

Using Web Services in Payment Gateway

- ▣ Advantages
 - Digital capital holder
 - Serve a lot of e-commerce web sites
- ▣ Disadvantages
 - Currency conversion




The screenshot shows the Google Checkout interface. On the left, there are promotional messages: 'Find it with Google. Buy it with Google Checkout.', 'Want a faster, safer and more convenient way to shop online? You got it. Read about our buyers' experiences with Google Checkout.', 'Stop creating multiple accounts and passwords.', 'Shop with confidence.', and 'Control commercial spam.'. On the right, there is a sign-in form for a Google Account with fields for Email and Password, and a 'Sign in' button. Below the form is a 'Sign up now' button and a link for 'Information for sellers'.

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Web Services Processes in Payment Gateway

- ▣ Verify an account/balance
- ▣ Pay
- ▣ Confirm/holding



The screenshot shows the PayPal website interface. At the top, there are navigation links for 'สมัครบัญชี', 'เข้าใช้งาน', 'ความช่วยเหลือ', and 'ศูนย์บริการลูกค้า'. Below this, there are tabs for 'หน้าหลัก', 'จำนวนคงเหลือ', 'ธุรกรรม', and 'ผลิตภัณฑ์'. The main content area features a large banner with the text 'วิธีการชำระเงินที่ง่ายและปลอดภัยยิ่งขึ้น โดยไม่ต้องเปิดเผยหมายเลขบัตรเครดิตหรือเลขที่มีบัญชีธนาคารของคุณ'. To the right of the banner, there is a 'PayPal มีอะไร?' section with three bullet points: 'เราคุ้มครองความปลอดภัยของคุณ', 'ใช้ได้อย่างใจ', and 'วิธีที่ง่ายที่สุดในการตรวจสอบใบแจ้งหนี้ให้เสร็จสิ้น'. At the bottom, there are sections for 'ส่งเงินและซื้อสินค้าบนออนไลน์' and 'ขายสินค้าออนไลน์'.


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Web Services in Payment Gateway

- B2B (Web Service Provider)
 - checkout.google.com: Google Checkout
 - www.paypal.com: Paypal
 - www.trialpay.com: TrialPay
 - aws.amazon.com/fps/: Amazon Flexible Payments Service
- B2C (E-Commerce - Client)
 - Social apps & Casual games: Restaurant city
 - Online services: Skype, Wall street journal
 - Retail: Gap, Starbucks, Sony,
 - Software: AVG, WinZip, Trend Micro

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Using Web Services in Global SMS

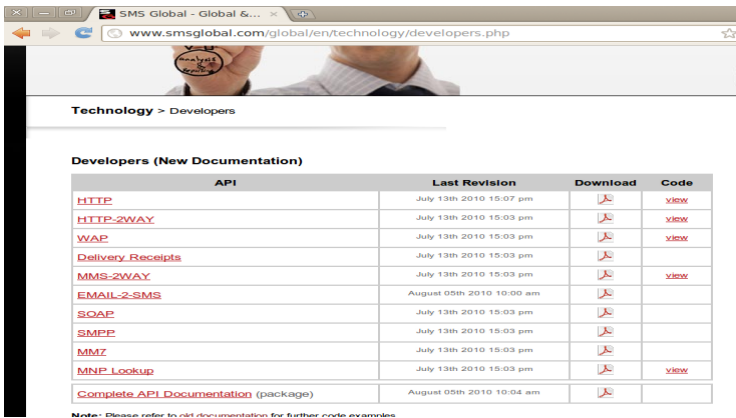
- ▣ Advantages
 - Support all mobile devices
 - Sending SMS as one stop services
 - Cheap per unit
- ▣ Disadvantages
 - Text-based
 - Short message

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Web Services Processes in Global SMS

- ▣ Verify a user
- ▣ Send a message
- ▣ Sending a status




The screenshot shows a web browser window with the URL www.smsglobal.com/global/en/technology/developers.php. The page content includes a navigation bar for "Technology > Developers" and a table titled "Developers (New Documentation)".

API	Last Revision	Download	Code
HTTP	July 13th 2010 15:07 pm		view
HTTP-2WAY	July 13th 2010 15:03 pm		view
WAP	July 13th 2010 15:03 pm		view
Delivery Receipts	July 13th 2010 15:03 pm		
MMS-2WAY	July 13th 2010 15:03 pm		view
EMAIL-2-SMS	August 05th 2010 10:00 am		
SOAP	July 13th 2010 15:03 pm		
SMPP	July 13th 2010 15:03 pm		
MMZ	July 13th 2010 15:03 pm		
MNP Lookup	July 13th 2010 15:03 pm		view
Complete API Documentation (package)	August 05th 2010 10:04 am		

Note: Please refer to old documentation for further code examples


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Web Services in Global SMS

- B2B (Web Service Provider)
 - <http://www.msglobal.com> : Global
 - <http://www.hs1sms.com/sendsms-1.html> : Strict
- B2C (Client)
 - <http://www.twitter.com> : Twitter
 - <http://calendar.google.com> : Google Calendar

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Interface for SMS



Form for applying for Wap Push SMS solution.

Interface Technical Specifications

- SMPP (Short Message Peer-to-Peer)
 - SMPP v3.4 Specification
 - SMPP v3.3 Specification
 - SMPP Protocol Implementation Conformance Statement (PICS)
 - SMPP v5 Specification (informational only)
- HTTP (simple)
 - HTTP Interface Specification for Sending and Receiving SMS v4
- HTTP (sophisticated)
 - GMI HTTP Interface for 2-Way Messaging v3
- Web Services
 - SOAP/XML Web Service
- SMTP (Email)
 - GMI SMTP Interface for 2-Way Messaging v7
 - SMTP Interface Specification for Sending SMS v2
- WAP PPG (PAP over HTTP)
 - WAP Push Proxy Gateway Service Guide


Articles

- HOWTO: Sending EMS Ringtones/Melodies to Mobile Telephones
- HOWTO: Sending Ringtones to Sagem Mobile Telephones
- INFO: An Introduction to the Noctor Java SMS Development Kit

Samples

- Java - Using HSL HTTP Interface
- Java - Using Noctor SMS JDK and SMPP v3.3
- HTTP - Code samples page


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Amazon Web Services Case Studies

- Learn how businesses are leveraging Amazon Web Services' scalable, reliable and cost-effective cloud technology
 - Application Hosting
 - Backup and Storage
 - Content Delivery
 - E-Commerce
 - High Performance Computing
 - Media Hosting
 - On-Demand Workforce
 - Search Engines
 - Web Hosting


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Application Hosting


Application Hosting




3scale NEW!
3scale provides Software-as-a-Service (SaaS) management infrastructure for customers' APIs, enabling them to open, control, manage, and monetize the distribution and usage of data, content, or services to multiple devices or mobile/Web applications. 3scale has used Amazon Web Services to grow its infrastructure since it was founded, including Amazon Elastic Compute Cloud (Amazon EC2), Simple Storage Service (Amazon S3), and Amazon Elastic Block Store (Amazon EBS).



6 Waves Limited
6 Waves Limited, a leading international publisher and developer of gaming applications on the Facebook platform, uses Amazon EC2 and Amazon S3 to host its social games with an audience of more than 50 million players per month.



8KMiles
8KMiles.com is a distributed development platform that blends a global talent marketplace with collaboration tools and cloud infrastructure. 8KMiles.com runs on AWS services including Amazon EC2, Amazon S3, Amazon Elastic Block Storage (EBS), Amazon Simple Queue Service (Amazon SQS), and Amazon CloudWatch.

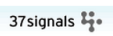


99designs
99designs' massive design marketplace has received over 3.1 Million unique design submissions from over 53,000 designers around the world and runs entirely on AWS.


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Backup and Storage


Backup and Storage




37signals
The team at 37signals saves significant time and money by selecting Amazon S3 to maintain and backup their 1 terabyte file server.




Altexa
To support their growing business, Altexa chooses Amazon S3 to replace an increasingly expensive and unreliable in-house storage system.




Amazon.com
Amazon.com's Customer Experience Analytics Team uses Amazon Relational Database Service to store and query customer simulation data.



CloudBerry Lab
CampusLIVE at the University of Massachusetts uses CloudBerry Lab solutions on Amazon Simple Storage Service and Amazon CloudFront to serve millions of static images.

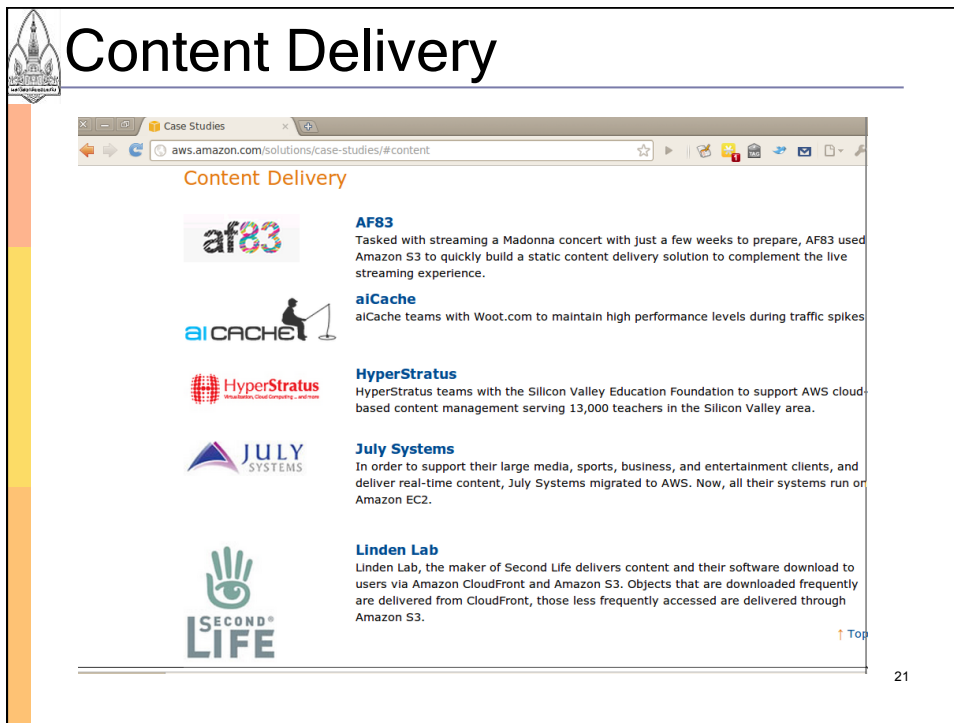


ElephantDrive
ElephantDrive turns to Amazon S3 to store client data, expanding their total amount of storage by nearly 20 percent each week while avoiding increased capital expenses.



Ipswitch
Ipswitch enhances their messaging solution for small to mid-sized businesses by partnering with Sonian to provide a hosted archiving solution built on AWS and delivered as a service.

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Content Delivery

af83
AF83
 Tasked with streaming a Madonna concert with just a few weeks to prepare, AF83 used Amazon S3 to quickly build a static content delivery solution to complement the live streaming experience.

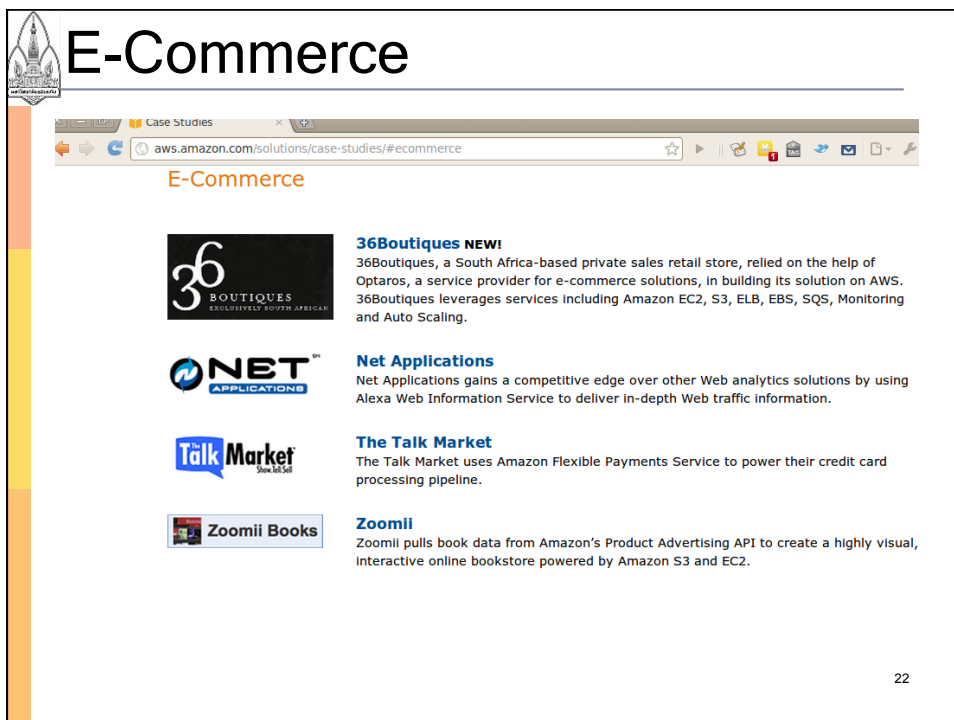
aiCache
 aiCache teams with Woot.com to maintain high performance levels during traffic spikes

HyperStratus
HyperStratus
 HyperStratus teams with the Silicon Valley Education Foundation to support AWS cloud-based content management serving 13,000 teachers in the Silicon Valley area.

JULY SYSTEMS
July Systems
 In order to support their large media, sports, business, and entertainment clients, and deliver real-time content, July Systems migrated to AWS. Now, all their systems run on Amazon EC2.

SECOND LIFE
Linden Lab
 Linden Lab, the maker of Second Life delivers content and their software download to users via Amazon CloudFront and Amazon S3. Objects that are downloaded frequently are delivered from CloudFront, those less frequently accessed are delivered through Amazon S3.

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E-Commerce

36 BOUTIQUES
36Boutiques NEW!
 36Boutiques, a South Africa-based private sales retail store, relied on the help of Optaros, a service provider for e-commerce solutions, in building its solution on AWS. 36Boutiques leverages services including Amazon EC2, S3, ELB, EBS, SQS, Monitoring and Auto Scaling.

NET APPLICATIONS
Net Applications
 Net Applications gains a competitive edge over other Web analytics solutions by using Alexa Web Information Service to deliver in-depth Web traffic information.

Talk Market
The Talk Market
 The Talk Market uses Amazon Flexible Payments Service to power their credit card processing pipeline.

Zoomii Books
Zoomii
 Zoomii pulls book data from Amazon's Product Advertising API to create a highly visual, interactive online bookstore powered by Amazon S3 and EC2.

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The slide is titled "High Performance Computing" and features a list of companies and their AWS-based solutions. The browser window at the top shows "iForge", "Lab 10: Content Pro...", and "XMLWSProjects2010".

High Performance Computing

- Atbrox**
 After creating software that helps individuals with dyslexia, Lingit turned to Atbrox, a Norwegian-based company focusing on data mining/data analysis and cloud-based solutions, to assist with up to terabyte-sized structured sets of texts.
- Bankinter NEW!**
 Bankinter, one of Spain's major banks, uses Amazon EC2 as an integral part of its credit-risk simulation application. With its application, developed in Java and utilizing the Amazon SDK, Bankinter brought its average simulation time-to-solution down from 23 hours to 20 minutes.
- Bioproximity NEW!**
 Bioproximity provides proteomic analytical services for pharmaceutical companies and academic organizations. The company uses Cluster Compute Instances for Amazon Elastic Compute Cloud (Amazon EC2), Amazon Elastic Block Store (Amazon EBS), and Amazon Simple Storage Service (Amazon S3) to run its complex analysis processes and search algorithms.
- Cycle Computing**
 Cycle Computing supports Varian's use of hundreds of cores on AWS in building scientific instruments.
- Etsy NEW!**

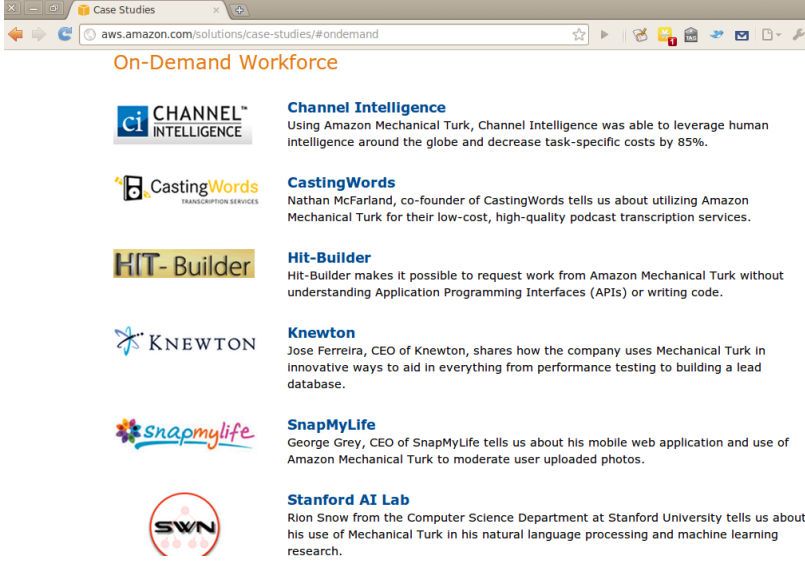
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The slide is titled "Media Hosting" and features a list of companies and their AWS-based solutions. The browser window at the top shows "iForge", "Lab 10: Content Pro...", and "XMLWSProjects2010".

Media Hosting

- Enlighten Designs**
 Enlighten Designs uses AWS to stream live sporting events (e.g., Winter Olympics Vancouver 2010) by deploying instances on Amazon EC2 to power the underlying infrastructure for streaming live footage of these events.
- Fotopedia**
 Fotopedia hosts 500,000 photos using Amazon EC2, Elastic IPs, and Elastic Load Balancing for hosting and Amazon S3 and CloudFront for media hosting and for internal log and data storage.
- GigaVox Media**
 GigaVox uses Amazon Web Services to build and maintain a redundant, scalable, and highly available infrastructure that cost less than \$100 to launch.
- Hitachi Systems**
 Hitachi Systems & Services, a member of the Hitachi Group, has turned to Amazon Simple Storage Service (S3) to address their growing storage demands for their new, first of its kind in Japan, mobile service "Mobile Broadcast Solution."
- Hungama Digital Media Entertainment**
 The world's largest aggregator, developer and publisher of Bollywood and Indian Entertainment content. Hungama Digital Media experienced cost savings of nearly 50% by

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On-Demand Workforce

CHANNEL INTELLIGENCE
Channel Intelligence
 Using Amazon Mechanical Turk, Channel Intelligence was able to leverage human intelligence around the globe and decrease task-specific costs by 85%.

CastingWords
CastingWords
 Nathan McFarland, co-founder of CastingWords tells us about utilizing Amazon Mechanical Turk for their low-cost, high-quality podcast transcription services.

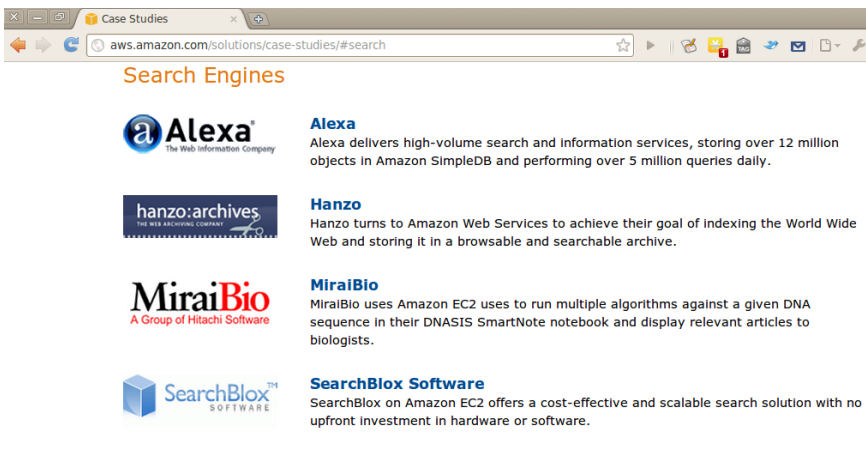
HIT-Builder
Hit-Builder
 Hit-Builder makes it possible to request work from Amazon Mechanical Turk without understanding Application Programming Interfaces (APIs) or writing code.

KNEWTON
Knewton
 Jose Ferreira, CEO of Knewton, shares how the company uses Mechanical Turk in innovative ways to aid in everything from performance testing to building a lead database.

snapmylife
SnapMyLife
 George Grey, CEO of SnapMyLife tells us about his mobile web application and use of Amazon Mechanical Turk to moderate user uploaded photos.

SWN
Stanford AI Lab
 Rion Snow from the Computer Science Department at Stanford University tells us about his use of Mechanical Turk in his natural language processing and machine learning research.

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Search Engines

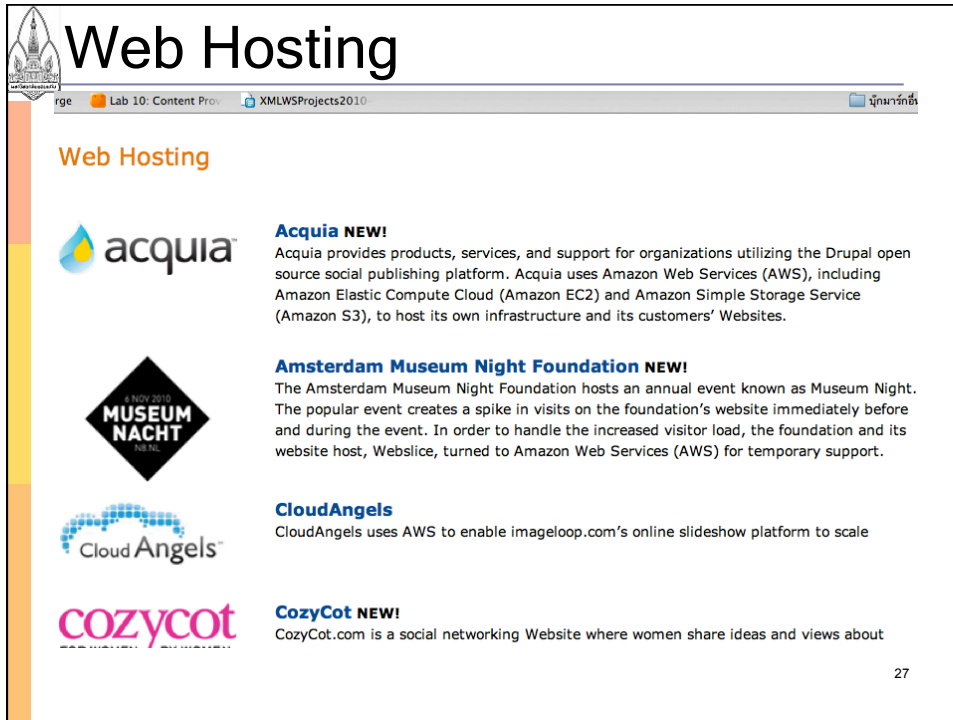
Alexa
Alexa
 Alexa delivers high-volume search and information services, storing over 12 million objects in Amazon SimpleDB and performing over 5 million queries daily.

hanzo:archives
Hanzo
 Hanzo turns to Amazon Web Services to achieve their goal of indexing the World Wide Web and storing it in a browsable and searchable archive.

MiraiBio
MiraiBio
 MiraiBio uses Amazon EC2 to run multiple algorithms against a given DNA sequence in their DNASIS SmartNote notebook and display relevant articles to biologists.

SearchBlox
SearchBlox Software
 SearchBlox on Amazon EC2 offers a cost-effective and scalable search solution with no upfront investment in hardware or software.

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Web Hosting

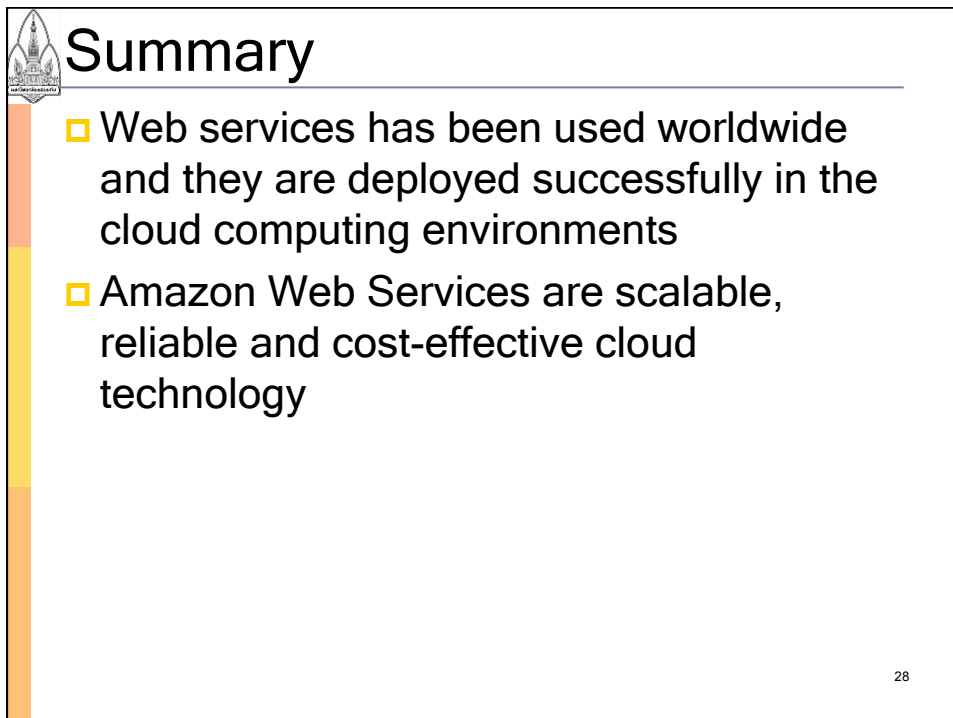
acquia **Acquia NEW!**
Acquia provides products, services, and support for organizations utilizing the Drupal open source social publishing platform. Acquia uses Amazon Web Services (AWS), including Amazon Elastic Compute Cloud (Amazon EC2) and Amazon Simple Storage Service (Amazon S3), to host its own infrastructure and its customers' Websites.

MUSEUM NACHT **Amsterdam Museum Night Foundation NEW!**
The Amsterdam Museum Night Foundation hosts an annual event known as Museum Night. The popular event creates a spike in visits on the foundation's website immediately before and during the event. In order to handle the increased visitor load, the foundation and its website host, Webslice, turned to Amazon Web Services (AWS) for temporary support.

CloudAngels
CloudAngels uses AWS to enable imageloop.com's online slideshow platform to scale

COZYCOT **CozyCot NEW!**
CozyCot.com is a social networking Website where women share ideas and views about

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Summary

- Web services has been used worldwide and they are deployed successfully in the cloud computing environments
- Amazon Web Services are scalable, reliable and cost-effective cloud technology

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