Comparative study of Deployment and Performance of Cloud Platforms

18210820 - Anup Bolli

18210227 - Ashish Lakamale

18210416 - Arun Ramakrishna

Objective

- Build Web Application
- Deployment on different Cloud Platforms
  - Heroku
  - AWS
  - Microsoft Azure
  - Google Cloud
- Comparison
  - Ease of Deployment
  - User Friendly Environment
  - Stats of PSR testing

Steak House

WE HAVE SPECIAL MENUS

Breakfast

$24

Grilled tomato, Black & White pudding, Baked Beans, Potato Bread, Hash Brown, Sauté Mushrooms, French Fries.

Seafood

$32

Fresh fillet of cod in a crisp golden batter. Complemented with mushy peas, tartar sauce and French fries.

New Pizza

$36

Roasted garlic, roasted red peppers, artichoke hearts,fresh rosemary, tomato sauce, mozzarella cheese, fresh ground pepper

Spicy Beef

$64

Tender strips of prime Irish Sirloin beef stir fried with our crunchy stir fried vegetables and Linished in oyster sauce, served with steamed rice or egg noodles.

Mushroom

$24

Fresh Irish mushrooms stuffed with garlic infused cream cheese coated in beer batter fried golden brown, served with dressed seasonal leaves and garlic mayonnaise

Dinner

$45

Rosettes of smoked salmon surrounding marie rose sauce, dressed with a lemon twist, sliced red onion on a dressed garden salad.

- Heroku Features
  - Polyglot Platform
  - Elasticity
- Deployment Details
  - Git init, add, push
  - Heroku Toolbelt CLI
- Merits
  - Very few steps to deploy
  - Cheapest option for low traffic website
  - Offer number of Upgrade/Downgrade option
- Drawbacks
  - Can't login to server via SSH
  - Manually scaling of application on high traffic

- Amazon Web Services (AWS) is a comprehensive, evolving cloud computing platform provided by Amazon.

- Use cases:

  - Content storage and distribution, Storage for Data Analysis, Backup achieving and disaster recovery, Static webhosting.

- Benefits:

  - Easy to use, No capacity limits, Provides speed and agility, Secure and Reliable, Inexpensive.

- Disadvantages:

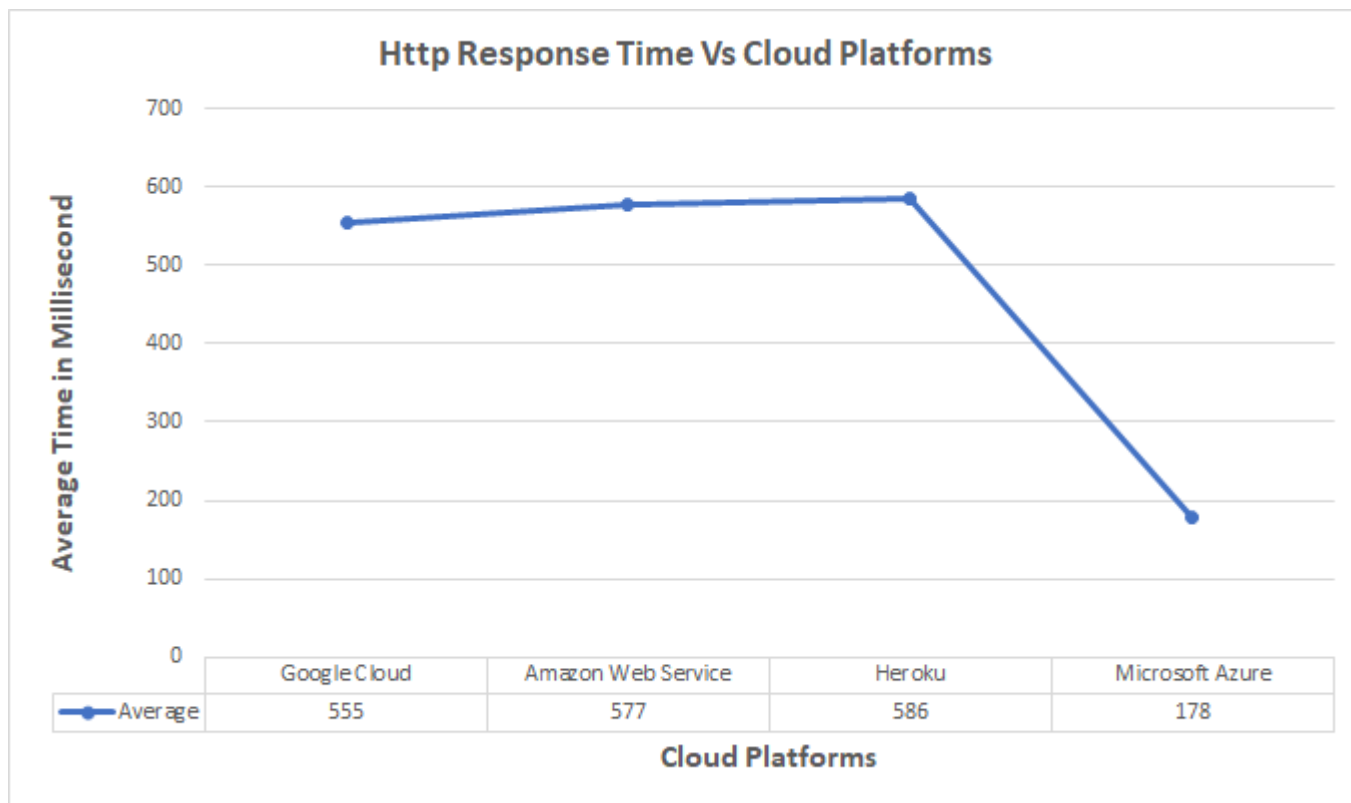 - Security limitations, Technical support fee.

- Azure VMs are one of several types of on-demand, scalable computing resources that Azure offers.

- Can be deployed using Azure dashboard GUI or Powershell CLI.

- The Windows VM architecture deploys the following:

  - A virtual network with a single subnet used to host the VM.

  - An NSG with incoming rules to control traffic to the VM.

  - A VM running the latest version of Windows Server 2016 Datacentre Edition.

- Internet Information Services (IIS).

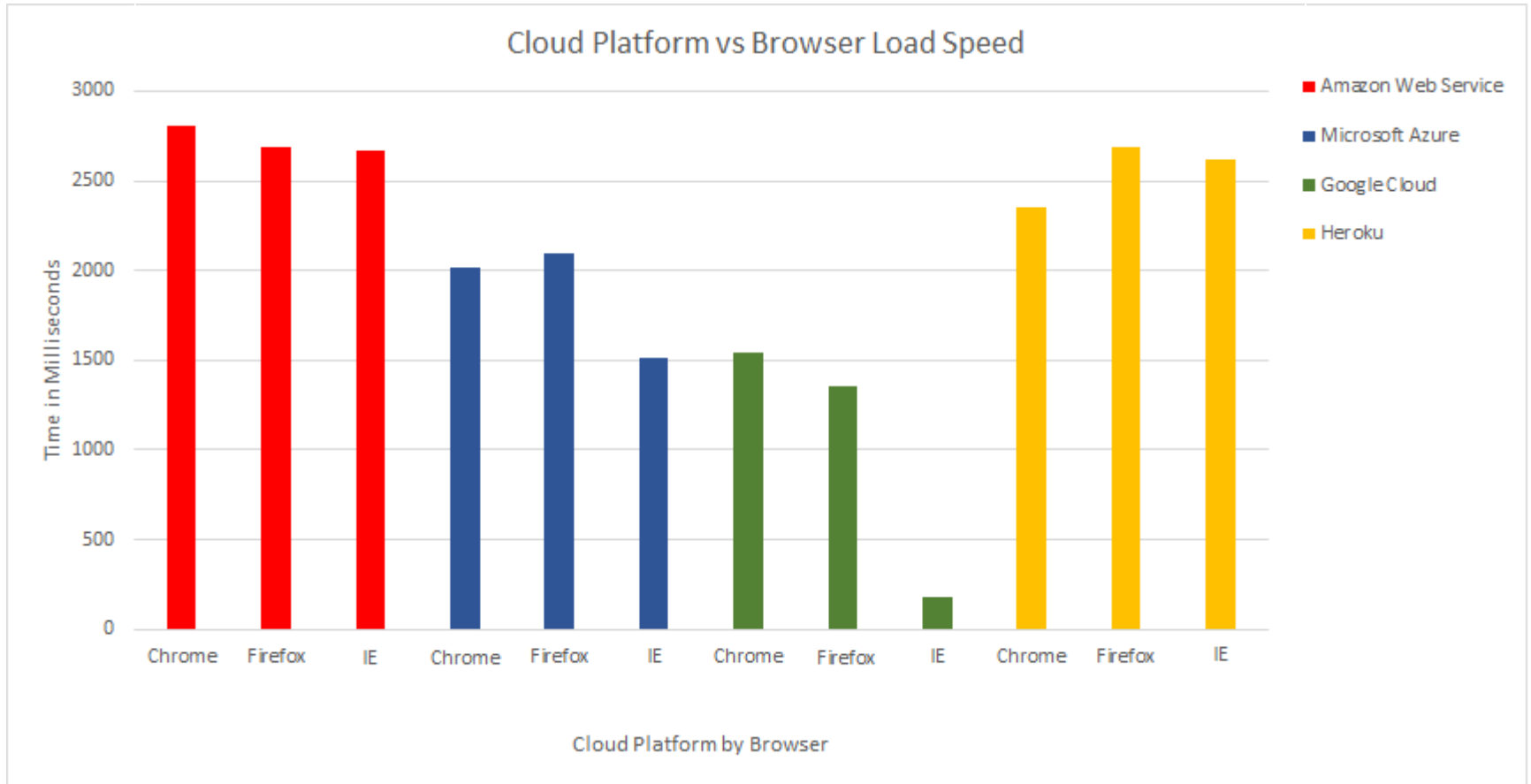- Benefits: Open Source, Pay per minute,Inegration with Microsoft tools

- Google Cloud App Engine
  - Platform, Dynamic web server , Scaling and load.

- Deployment Details

  - Fully featured SDK, Web Based Admin Console

- Disadvantages

  - Setting up account

- Ease of Use

  - User friendly,documentation

Application HTTP Response Time

Http Response Time Vs Cloud Platforms

	Google Cloud	Amazon Web Service	Heroku	Microsoft Azure
Average	555	577	586	178

Cloud Platforms

Y-axis: Average Time in Millisecond (0, 100, 200, 300, 400, 500, 600, 700)

App Load Time – Browser Compatibility

Cloud Platform vs Browser Load Speed

Thank You