



When Deploying to the Cloud Goes Horribly Wrong

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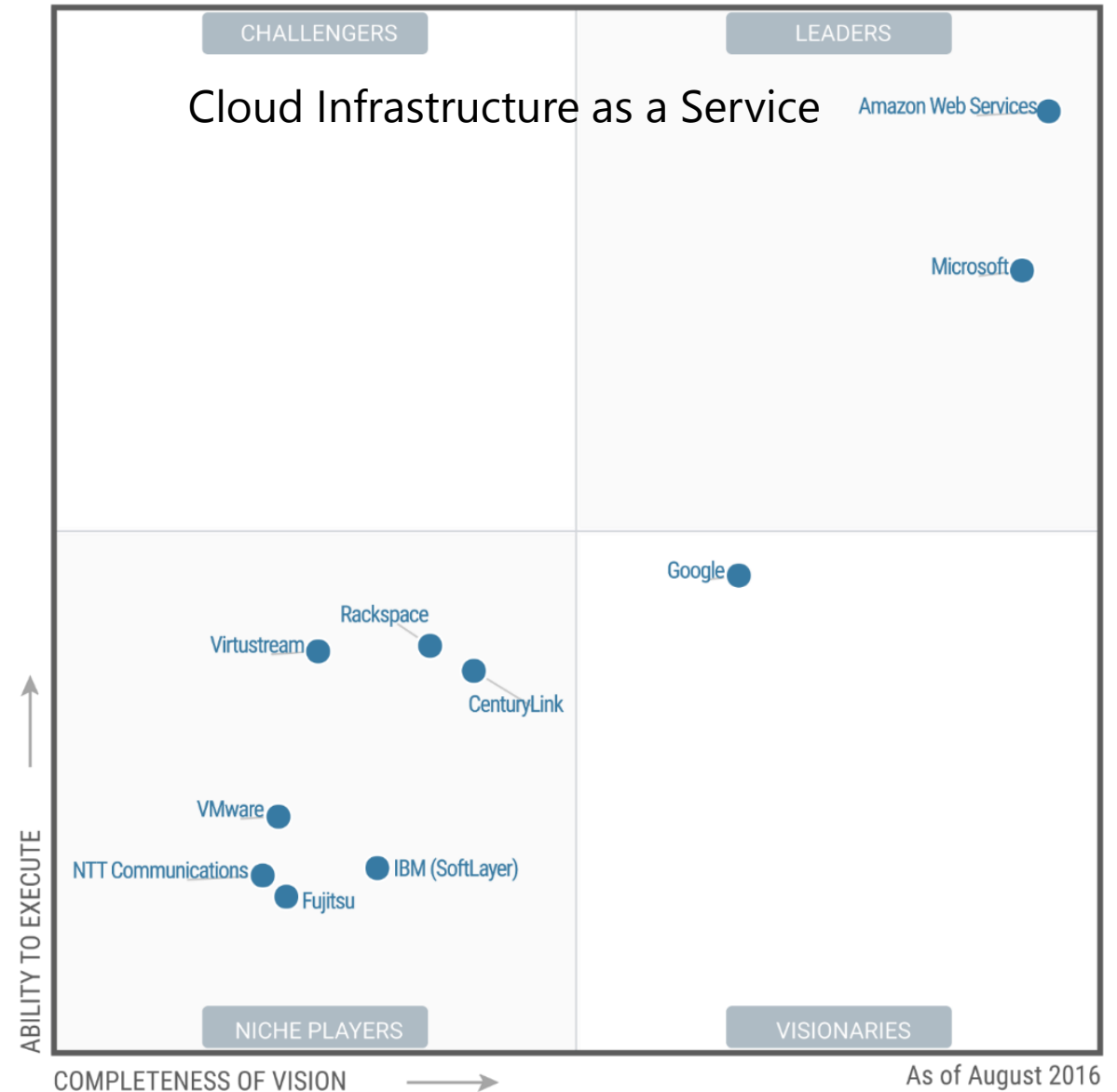
What's On Tap

- Getting to know the players
- Bad specifications/configurations
- Poor development
- Sky-high costs
- Solutions



The Cloud Players

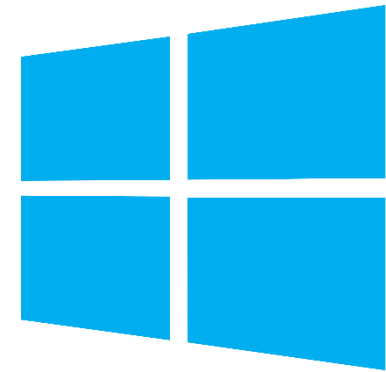
- Cloud Platforms
 - Microsoft Azure
 - Amazon
 - Others
- Offerings
 - Applications
 - Data
- How they are marketed



Azure

- IaaS, PaaS, SaaS
- Less control
- Less administration
- Deeply integrated with Microsoft stack
- 80% rule
- Strong push to Open Source

Microsoft Azure



Amazon

- Mainly IaaS and Data
- More granular
- More control
- More administration
- Always open to any code/platform



Others

- Niche offerings
- Integrations
- Private Cloud sector



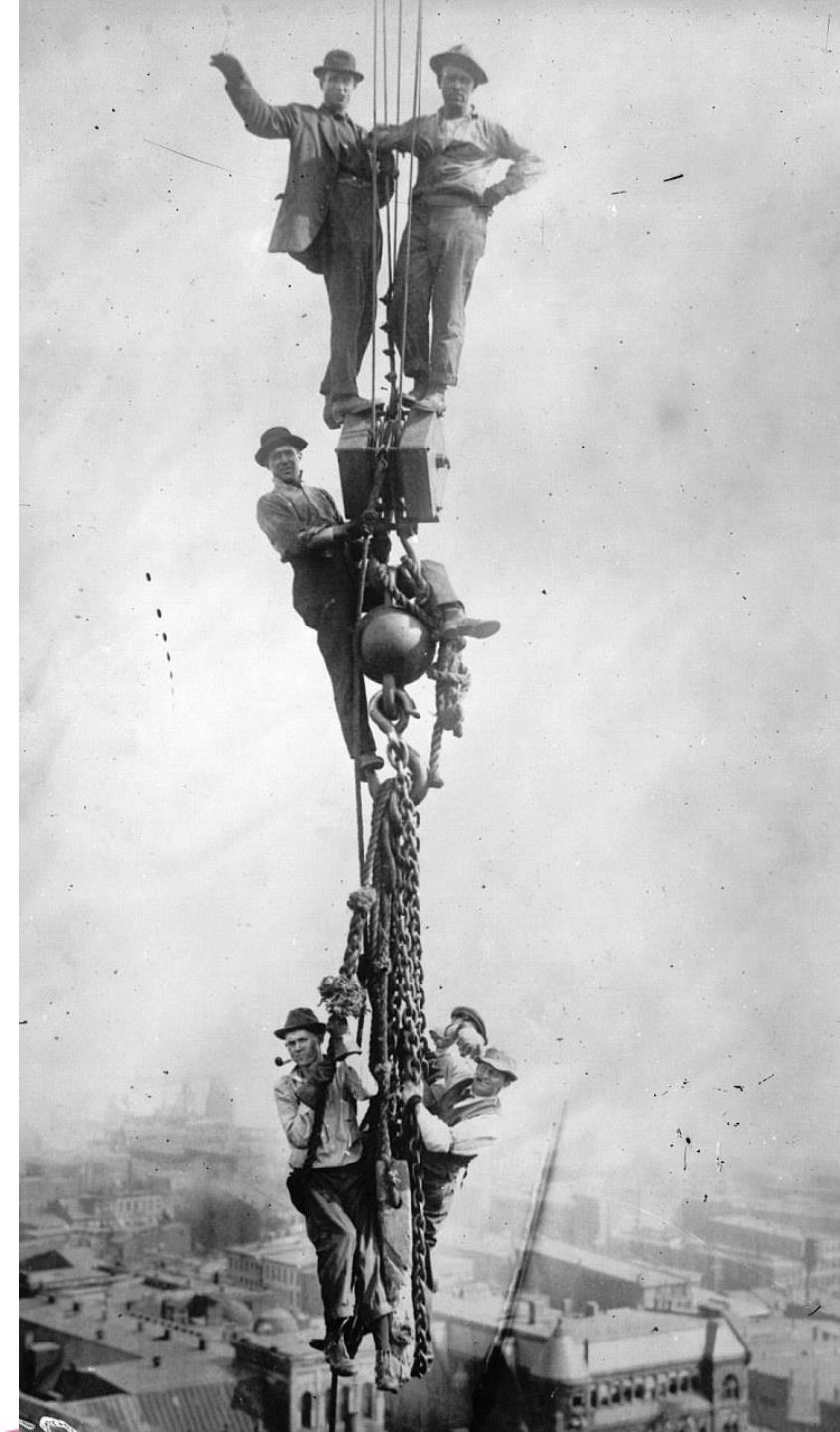
Google Cloud Platform





Development

- Lack of skills/knowledge
 - Wasted time
 - Cutting bread with a chainsaw
- Project delays
 - Longer development/deployment
 - Inefficient code
- Not selecting the right solution
 - Not understanding the differences
- Not leveraging the platform



Specifications/Configurations

- Improper provisioning
 - Under-powering
 - Over-powering
 - Not leveraging the right systems
- Caching
 - Session
 - Content
- PaaS vs. IaaS
 - Not evaluating cost savings
- CDN
 - Good for CSS, Bad for JS
 - Not setting TTLs
- Security
 - Not leveraging VPNs
- Email
 - Not thinking about SMTP
- Backups
 - Not enabling

Oh, look! A demo...

Costs

- Forgotten deployments
- Backups
- Staging deployments
- Test environments
- Overkill



Overkill estimate

Service type	Custom name	Region	Description	Estimated Cost
App Service	App Service	West US	1 instance(s), 744 hours, size: p3, premium tier , 1000000 connection(s), 0 IP connection(s)	\$892480
Storage	Storage	West US	100 GB storage Block blob type. Basic tier, LRS redundancy, 100 x100,000 transactions	\$2.76
SQL Database	SQL Database	East US	1 premium database(s) x 744 hours, size: p4	\$1,86900
Visual Studio Application Insights	Visual Studio Application Insights	West US	1 application(s), 0 million(s) additional data points, standard tier	\$29.50
Redis Cache	Redis Cache	West US	premium tier , 1 instance(s) x 744 hours, size: p3	\$1656794
Support			Support	\$300000
Monthly Total				\$5,50620
Annual Total				\$66,07895



Solutions

- Learn the tools!
 - Boot camps
 - Videos/Webinars
 - Conferences
- Specifications
 - Load test your stuff!
 - Leverage the cloud for horsepower
- Configurations
 - Define/use best practices
- Development
 - Fit the project, not the tool
 - Leverage Source Control integrations
- Costs
 - ALM
 - Good housekeeping
 - Weekly/monthly reviews



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