

Code in the cloud for the cloud

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The plan

- The App Revolution & Cloud Computing
- Platforms as a Service
- Leveraging Services on Platforms as a Service
- Software as a Service
- Bonus: DevOps

All about the workbook

- Learn this!
- Try this!
- Tweet this!
- Get creative
- Additional resources

The App Revolution & Cloud Computing

The app revolution fundamentally changes the way we interact with technology.



App development today is all about speed and choice.



Services enable developers to create apps quickly.



SaaS:
Software as a Service

PaaS:
Platform as a Service

IaaS:
Infrastructure as a Service

Services enable developers to create apps quickly.

SaaS:
Software as a Service

PaaS:
Platform as a Service

IaaS:
SoftLayer, Amazon EC2, Rackspace Managed Infrastructure, VMware, Joyent,
Google Cloud Storage

Services enable developers to create apps quickly.

SaaS:
Software as a Service

PaaS:
IBM Bluemix, Amazon Elastic Beanstalk,
Google App Engine, Microsoft Azure, webMethods
AgileApps Cloud, Rollbase, Cloud Foundry

IaaS:
SoftLayer, Amazon EC2, Rackspace Managed Infrastructure, VMware, Joyent,
Google Cloud Storage

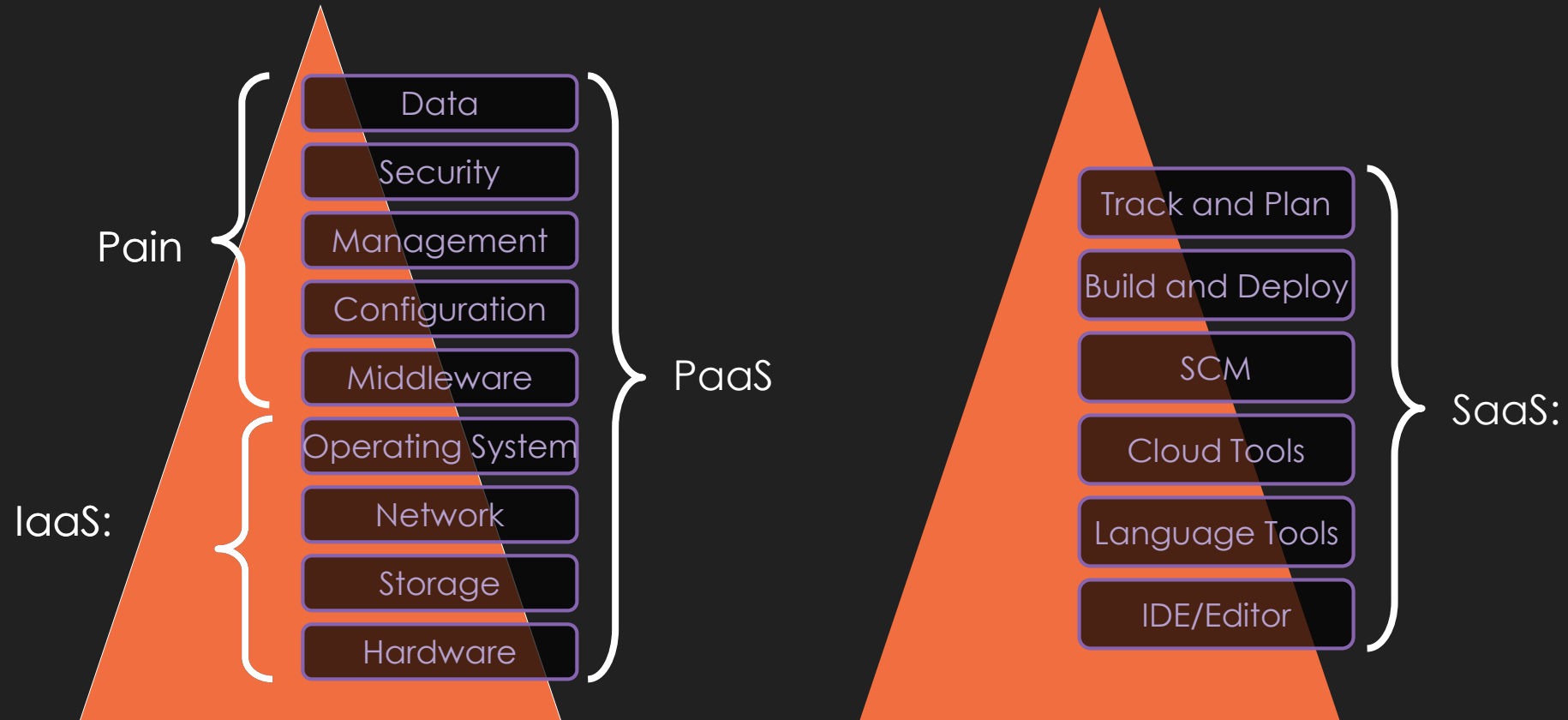
Services enable developers to create apps quickly.

SaaS:
IBM DevOps Services,
Google Apps, Salesforce, Hotmail

PaaS:
IBM Bluemix, Amazon Elastic Beanstalk,
Google App Engine, Microsoft Azure, webMethods
AgileApps Cloud, Rollbase, Cloud Foundry

IaaS:
SoftLayer, Amazon EC2, Rackspace Managed Infrastructure, VMware, Joyent,
Google Cloud Storage

The cloud changes everything for developers!



**Enterprises predict they
will increase their
spending on cloud
computing by 42% in
2015**

The Computerworld Forecast Study 2015

Try this!

- Register for Bluemix (PaaS): <https://ibm.biz/jfokus-bluemix>
- Register for DevOps Services (SaaS): <https://ibm.biz/jfokus-devops>

Platforms as a Service

“Platform as a Service (PaaS) is a category of cloud computing services that provides a computing platform and a solution stack as service...In this model, the consumer creates an application or service using tools and/or libraries from the provider.”

The all-knowing [Wikipedia](#)

Common features & advantages

Common features & advantages

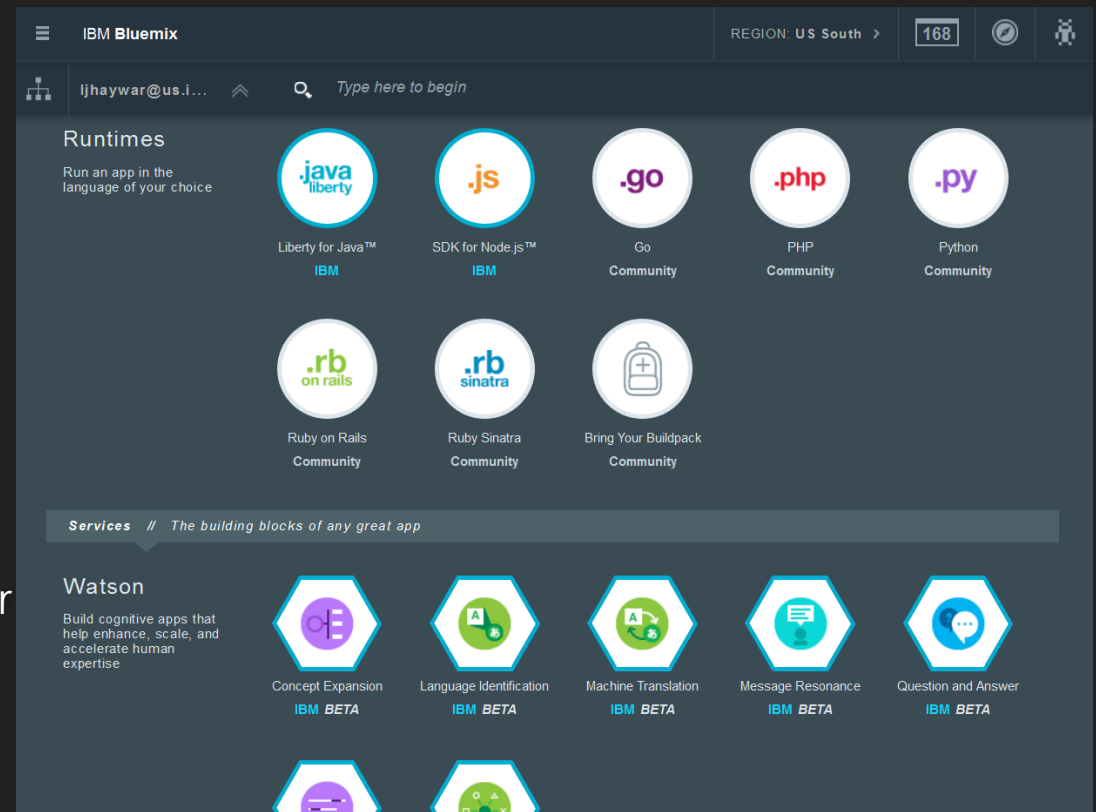
- Focus on your app—not the infrastructure behind it
 - Rapid app development!
- Dynamically scale your app based on usage
 - Pay for what you use!
- Leverage data storage and services on the platform
- Code in your favorite programming language
- Deploy in stages (test before going live)

Deploying an app to a PaaS

- Use command line client and/or user interface
- Provide instructions
 - Who?
 - What?
 - Where?
 - When?
 - Why?

Bluemix

- Bluemix is an open-standards, cloud-based platform for building, managing, and running applications of all types (web, mobile, big data, new smart devices, and so on).
 - Run your apps
 - Use the language of your choice
 - APIs and services
 - Deploy using command line client, Eclipse plugin, or web IDE



Lauren's Lovely Landscapes

Lauren's Lovely Landscapes

Lauren's Lovely Landscapes

Lauren's Lovely Landscapes is a collection of some of her favorite landscapes. If you would like to purchase a print, please [e-mail Lauren](#) with the name of the print.

Please check back often to see if we have sales!

[Antarctica](#)



[Alaska](#)



[Australia](#)



Lauren's Lovely Landscapes

Antarctica



About this landscape:

Lauren's husband took this spectacular photo when they visited Antarctica in December of 2012. This is one of our hot sellers, so it rarely goes on sale.

Price:

100.00

Deploying Lauren's Lovely Landscapes

```
1 ---
2 applications:
3   - name: LaurensLovelyLandscapes
4     buildpack: python_buildpack
5     memory: 256M
6     instances: 1
7     host: LaurensLovelyLandscapes- $\{\text{random-word}\}$ 
8     path: .
9     command: python wsgi.py
10
```

Try this!

- Fork Lauren's Lovely Landscapes
- Deploy it
- Explore it
- Update it
- Redeploy it
- Take a break

Leveraging Services on Platforms as a Service

Common services you can leverage

Common services you can leverage

Auto-scaling

Mobile Ready

Deploy

Database

Load balancing

Fabulous Price Finder

Fabulous Price Finder v2.0

Fabulous Price Finder

Input the item for which you would like to check its price:

Item name:

Url:

Price field id:

Submit

[View Database](#) | [Get Prices](#)

Try this!

- Fork the Fabulous Price Finder
- Deploy it
- Add the MongoLab service
- Redeploy it
- Try it

Software as a Service

“Software as a service (SaaS) is a software licensing and delivery model in which software is licensed on a subscription basis and is centrally hosted... SaaS is typically accessed by users using a thin client via a web browser.”

The all-knowing [Wikipedia](#)

DevOps Services

- DevOps Services is a DevOps solution in the cloud for building mobile and cloud applications.
 - Use your favorite tools or the web IDE
 - Host your code in a Git repo, GitHub repo or Jazz repo
 - Public and private projects
 - Integrated task tracking & agile planning
 - Auto-deploy to Bluemix

The image displays two screenshots of the IBM DevOps Services interface. The top screenshot shows a code editor for a project named "Fabulous Price Finder" with a file explorer on the left and a README file open. The bottom screenshot shows the deployment console for a project named "JavaTest47" in the "dev" space, displaying build history and deployment status.

Try this!

- Track your work in user stories and defects
- Plan your work in sprints
- Implement a text messaging feature
- Deploy your feature and test it
- Push your feature to the repository
- Mark your work as complete

Bonus: DevOps

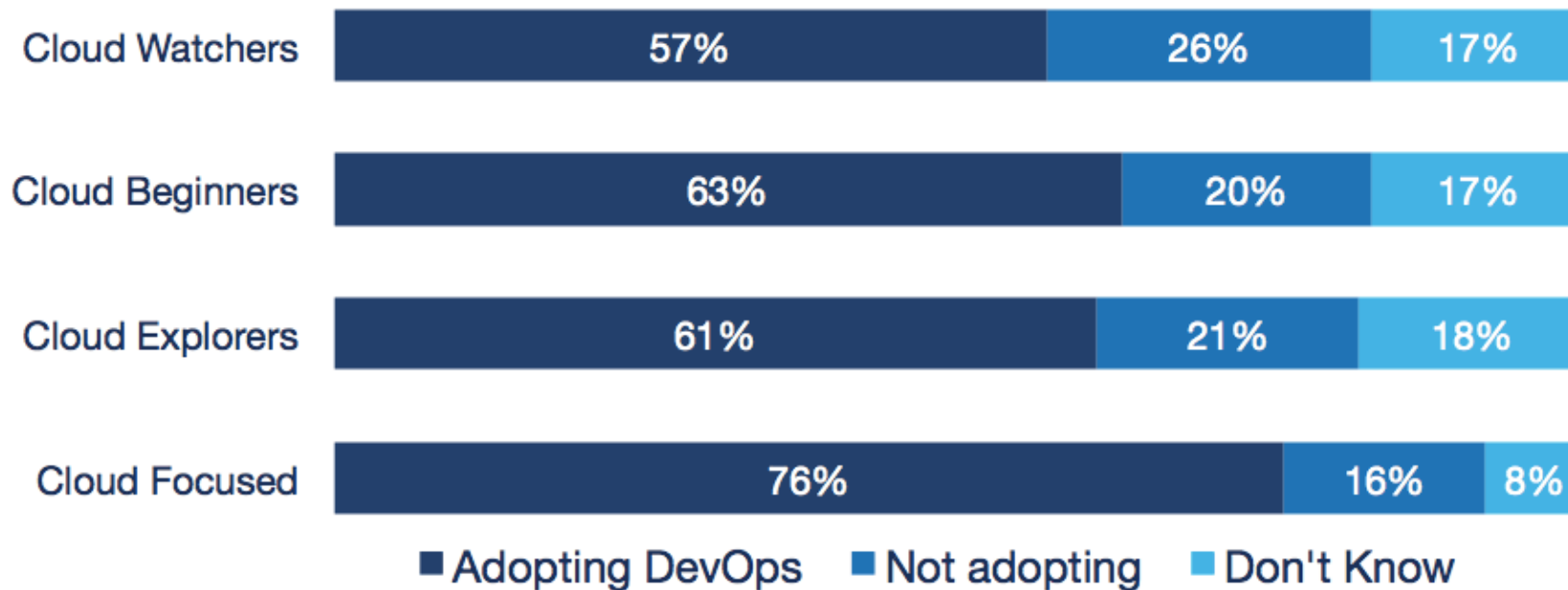
Utvecklingsverksamheten???

“DevOps (a portmanteau of ‘development’ and ‘operations’) is a software development method that stresses communication, collaboration, and integration between software developers and Information Technology (IT) professionals.”

The all-knowing [Wikipedia](#)

Don't get left behind!

DevOps Adoption Grows with Cloud Maturity



Source: RightScale 2014 State of the Cloud Report

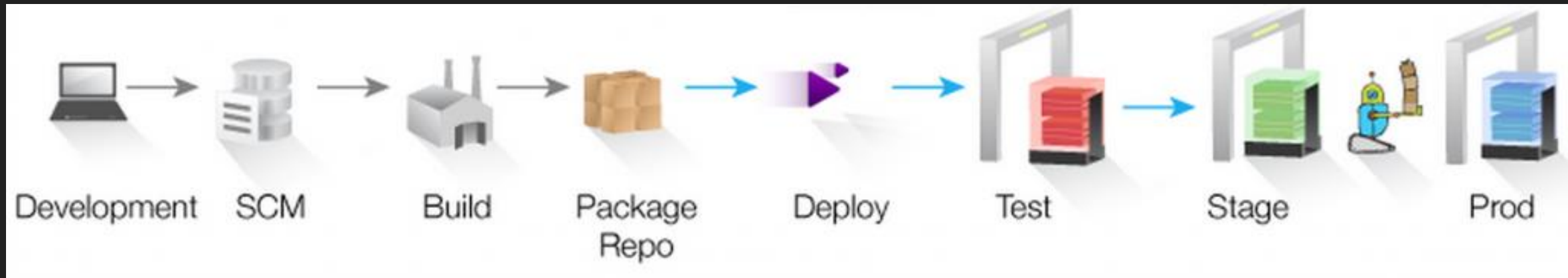
[View the report](#)

DevOps best practices

DevOps best practices

- Cross-team collaboration
- Automated testing
- Continuous integration
- Continuous deployment

Continuous delivery pipeline



Graphic taken from <https://developer.ibm.com/urancode/products/solutions-continuous-delivery/>

Try this!

- Configure automatic deployments to development and production environments

That's all for now...

- To access the resources associated with this presentation...
 - visit <http://jfokus.mybluemix.net/>
- To continue to learn more about Lauren, DevOps Services, and Bluemix, follow
 - @Lauren_Schaefer
 - @JazzHub
 - @IBMBluemix
- Presentation tomorrow