

IBM Code Day 2018

CODE. CONTENT. COMMUNITY.

**Continuously deliver cloud apps with
simplicity, flexibility and elasticity**

#IBMCCodeDay

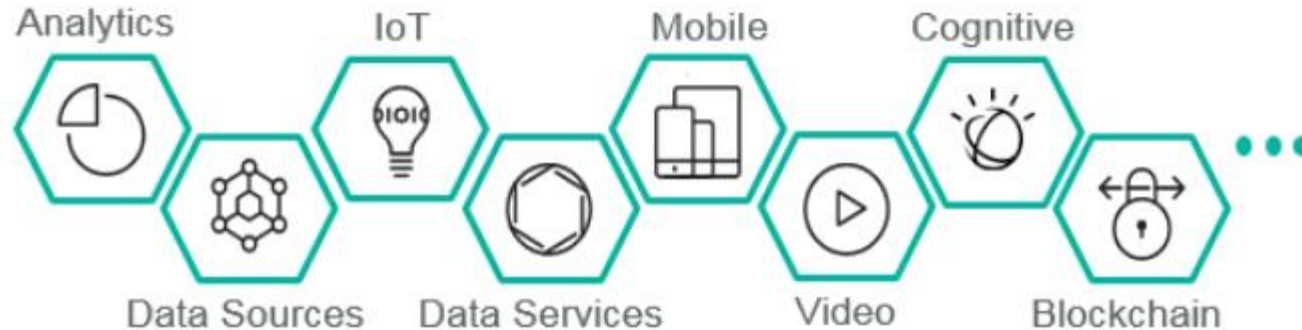
Pradeep Balachandran, IBM

Twitter: @pradeepb3

1 Focus on Innovation



Reduce time to market for innovative solutions with new technologies



2

Rapidly deliver
apps to market

ALPHA
TEST

BETA
TEST

RELEASE



Digital transformation requires speed, user experience and operational efficiency.



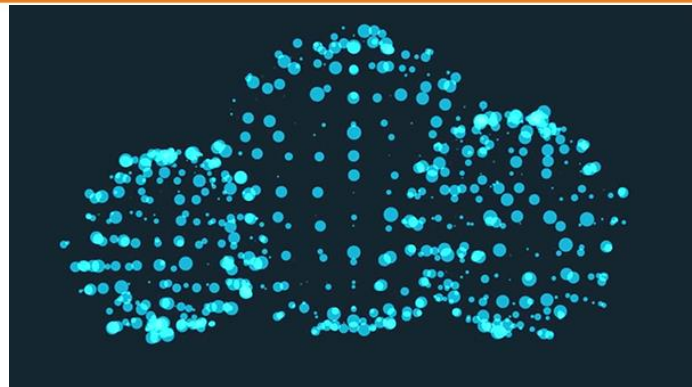
3 Enable New Capabilities



Cloud-first Approach



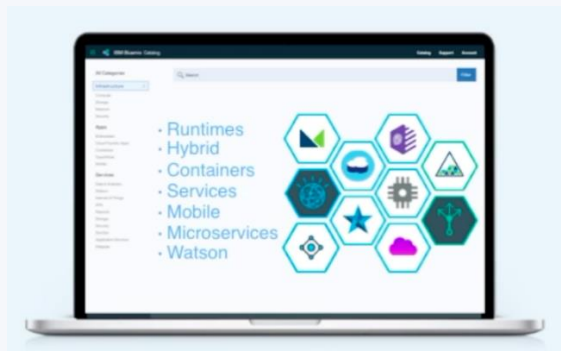
To accelerate innovation, companies are adopting a digital and cloud-first approach, enabled by DevOps



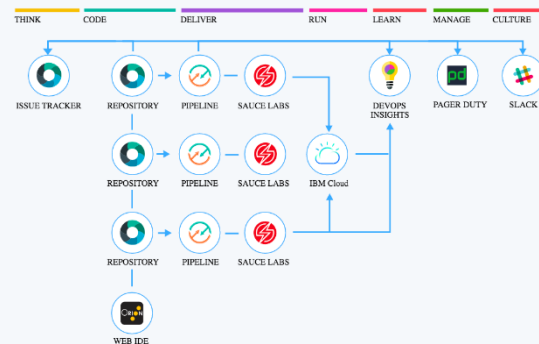
Method



Innovation Platform



Integrated Toolchain



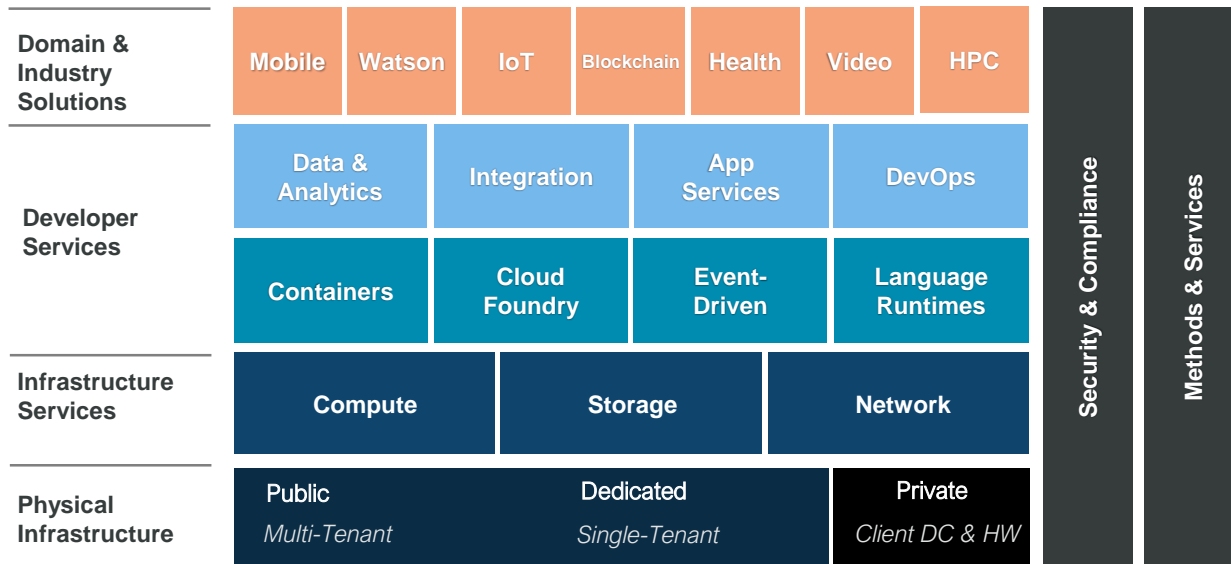
IBM Cloud – the innovation platform



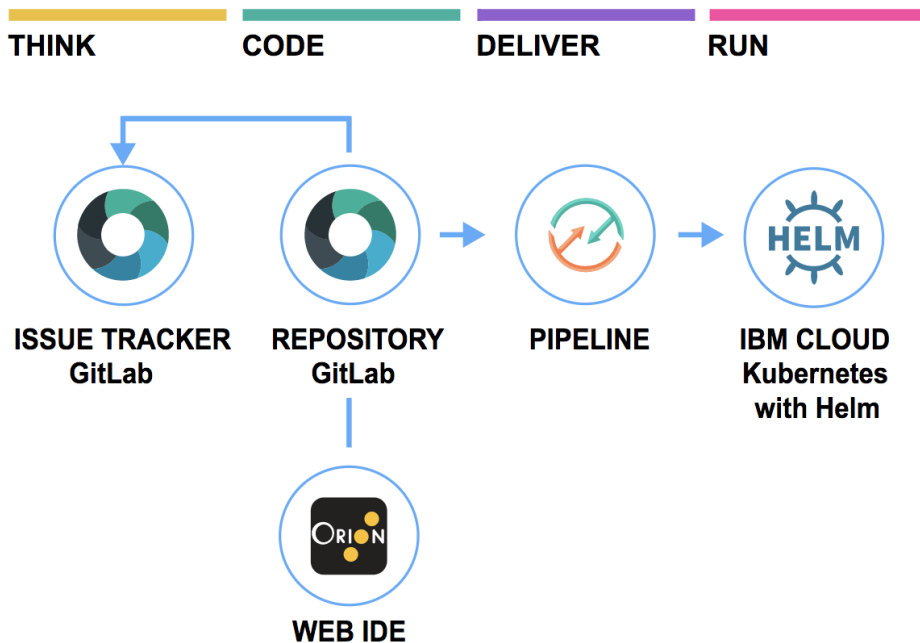
A rich ecosystem of infrastructure & platform services to solve problems and lower costs



IBM's cloud computing **platform** combines platform as a service (PaaS) with infrastructure as a service (IaaS)



<http://ibm.biz/IBMCodeDayKubeAppDemo>

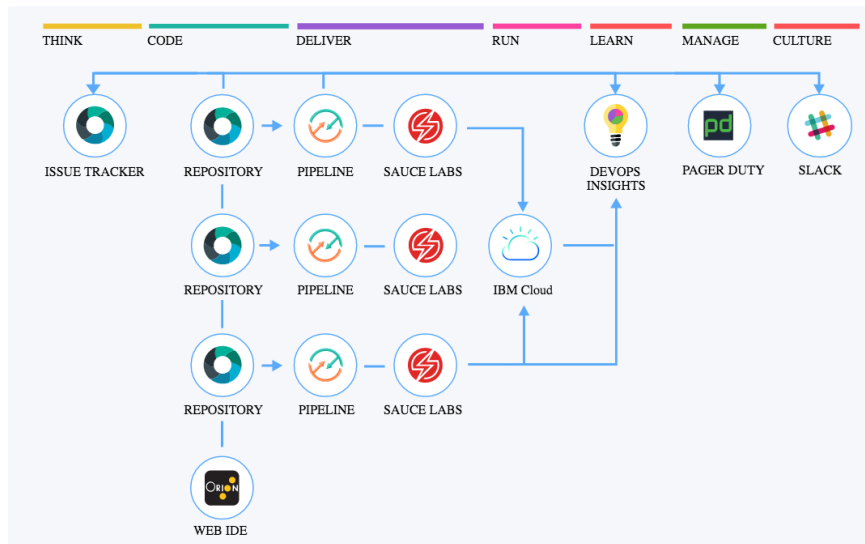


In this demo, we will:

- **Create** a DevOps toolchain to code, build, and deliver a JavaScript app
- **Build** app in a Docker image
- **Validate** container using Vulnerability Advisor
- **Deploy** app to a Kubernetes Cluster using Helm charts
- **Modify** app and redeploy

Create, automate, deploy and manage your applications across the full DevOps lifecycle

A sample open toolchain for building, and deploying and managing three microservices



Get started quickly with toolchain templates



IBM Cloud Garage Method

Search

Log in Sign up

DevOps Toolchains

Never stop deploying, learning, and iterating

A toolchain is a set of tool integrations that support development, deployment, and operations tasks. The collective power of a toolchain is greater than the sum of its individual tool integrations.

You can create a toolchain in two ways: use a template to create a toolchain or create a toolchain from an app. See which [toolchains](#) and [tool integrations](#) are available in your region and Bluemix environment.

Microservices toolchain with DevOps Insights

Quickly create an app that runs on the cloud by using microservices for maximum velocity.

Microservices toolchain with DevOps Insights (v2)

Quickly create an app that runs on the cloud by using microservices for maximum velocity.

Simple Cloud Foundry toolchain

Create a toolchain that includes the minimum tools that you need to develop and deploy a "Hello World" app to Cloud Foundry, including GitHub.

Simple Cloud Foundry toolchain (v2)

Create a toolchain that includes the minimum tools that you need to develop and deploy a "Hello World" app to Cloud Foundry, including Git Repos and Issue Tracking.

Garage Method cloud-native toolchain

Use the toolchain to apply Garage Method

Customizable templates, so you can define your own

Get your teams up and running quickly

THINK CODE DELIVER MANAGE LEARN CULTURE

Issues
ui-microservices-toolch...

✓ Configured

Git
ui-microservices-toolch...

✓ Configured

Delivery Pipeline
ui-microservices-toolch...

✓ Configured

PagerDuty
ibmdevops

✓ Configured

DevOps Insights

✓ Configured

Slack
#dave-test

✓ Configured

Git
catalog-api-microservic...

✓ Configured

Delivery Pipeline
catalog-api-microservic...

✓ Configured

Git
orders-api-microservic...

✓ Configured

Delivery Pipeline
orders-api-microservic...

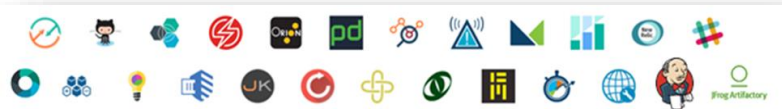
✓ Configured

Add more tools or mix and match... it's open!



Create new toolchain templates

Add a Tool +



Choose from a growing list of open source, third party, and other IBM tools

Tool Integrations



Alert Notification

Never miss critical issues.

IBM

Experimental



Cloud Event Management

Turn IT events into actionable incidents.

IBM

Experimental



Eclipse Orion Web IDE

A browser-based IDE for web and cloud development.

IBM



GitHub Enterprise Whitewater

Store and manage your code and engage in social coding, with dedicated

IBM



Nexus

Store build artifacts in your Nexus repository.

Third Party



Sauce Labs

Automate continuous integration testing for your project.

Third Party



UrbanCode Deploy

Gain insights into deployments that are done by UrbanCode Deploy.

IBM

Beta



Artifactory

Store build artifacts in your Artifactory repository.

Third Party



Delivery Pipeline

Automate your builds, deployments, and more.

IBM



Git Repos and Issue Tracking

IBM hosted repos and issue tracking based on GitLab Community Edition.

IBM



Jenkins

Build, deploy, and automate any project.

Third Party



PagerDuty

When major issues arise, send alerts and get alerts.

Third Party



Slack

Coordinate and collaborate on your project.

Third Party



Other Tool

Create a custom integration with any tool.



Availability Monitoring

Test, monitor, and improve your application as you build it.

IBM



DevOps Insights

Use analytics to determine whether to deploy.

IBM

Beta



GitHub

Store and manage code in a social way.

Third Party



JIRA

Manage projects and track issues.

Third Party



Rational Team Concert

Manage your team and resources.

IBM



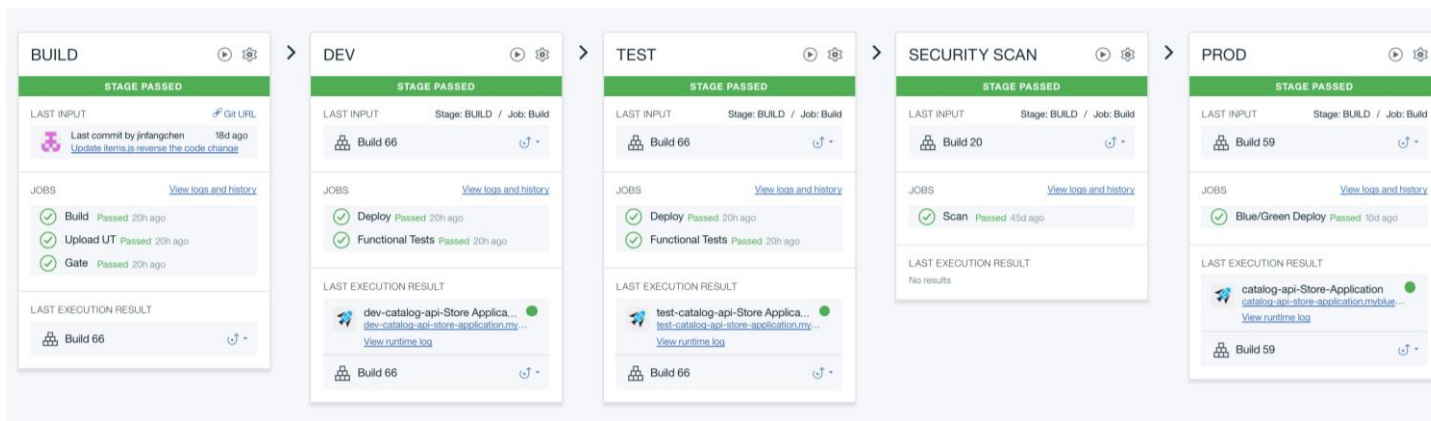
SonarQube

Inspect the quality of your code.

Third Party

Ask u

Deliver continuously using an integrated pipeline



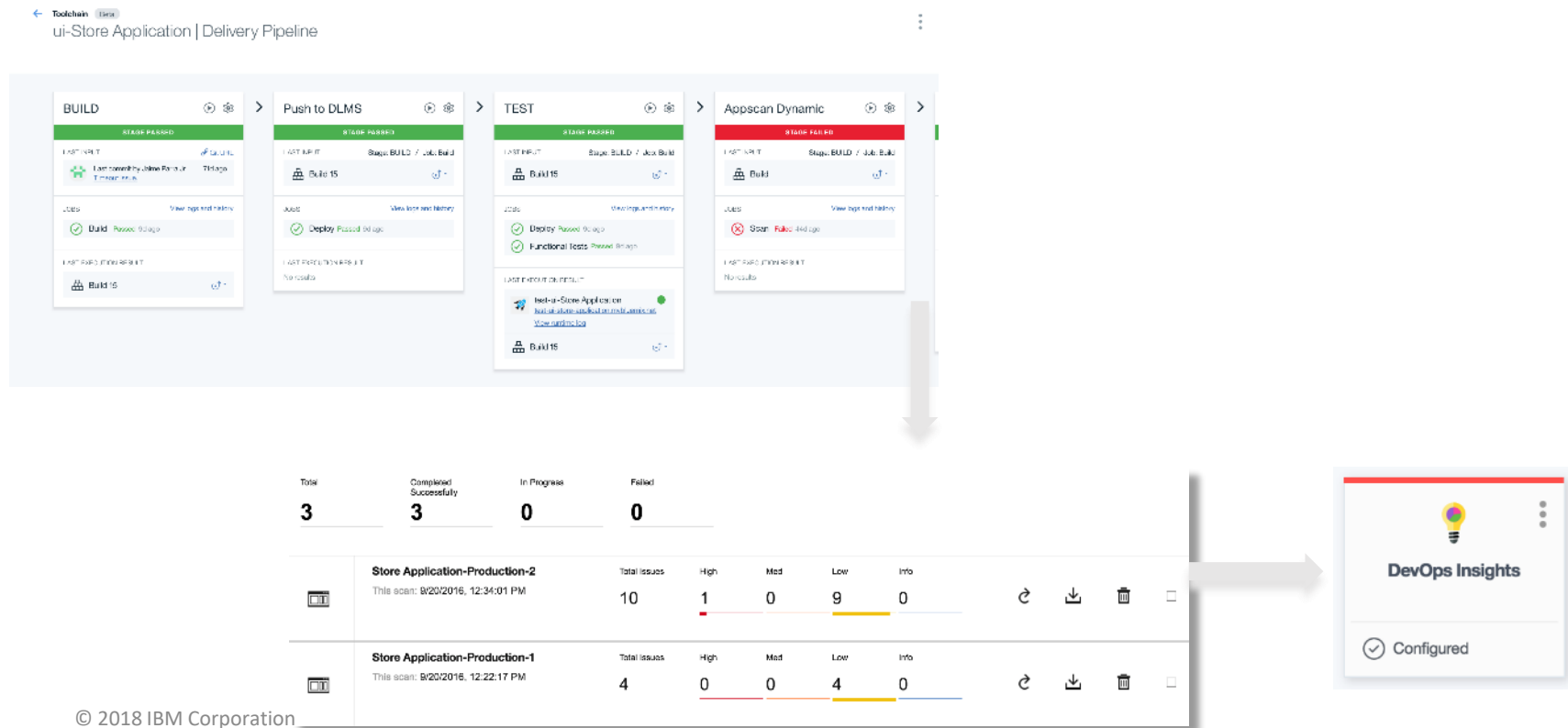
Import Code

Continuous Integration

Continuous Testing

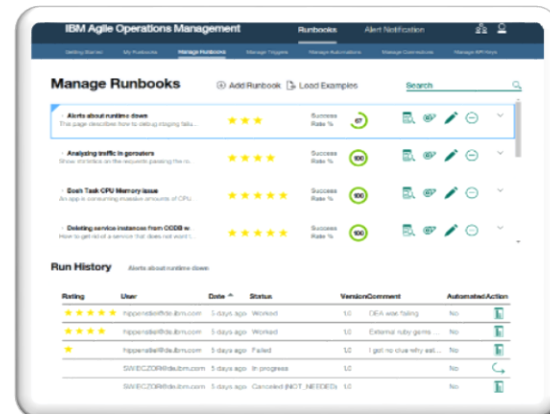
Deliver to Multiple Cloud Platforms

Integration of “Application Security on Cloud” into the Delivery Pipeline

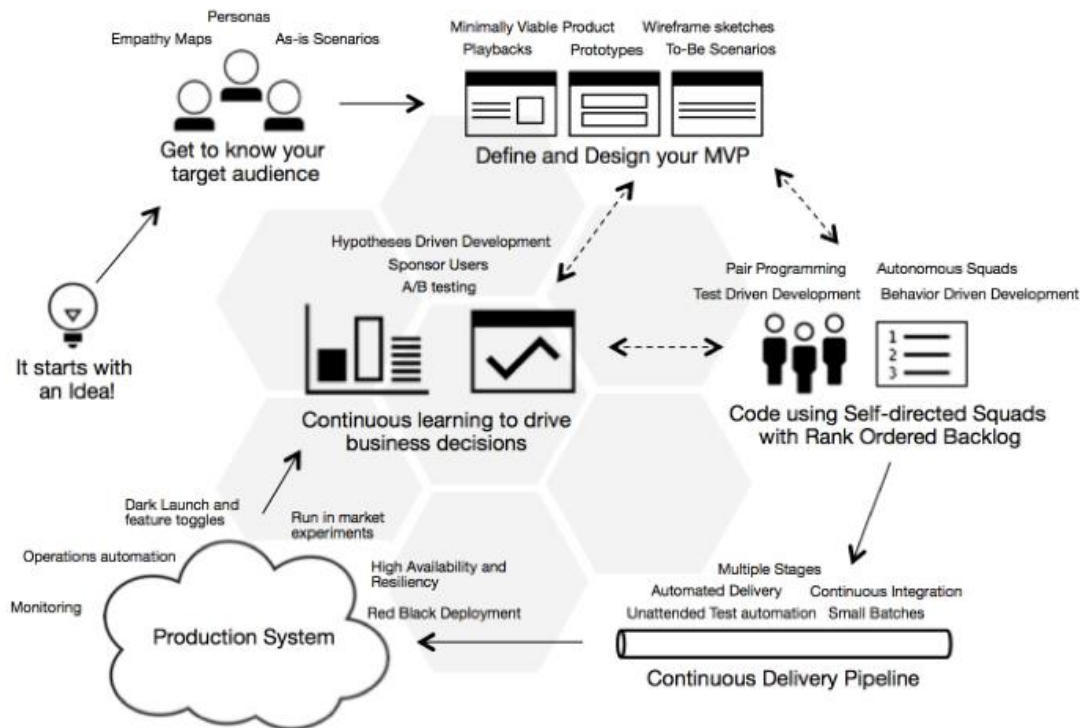


Fix problems

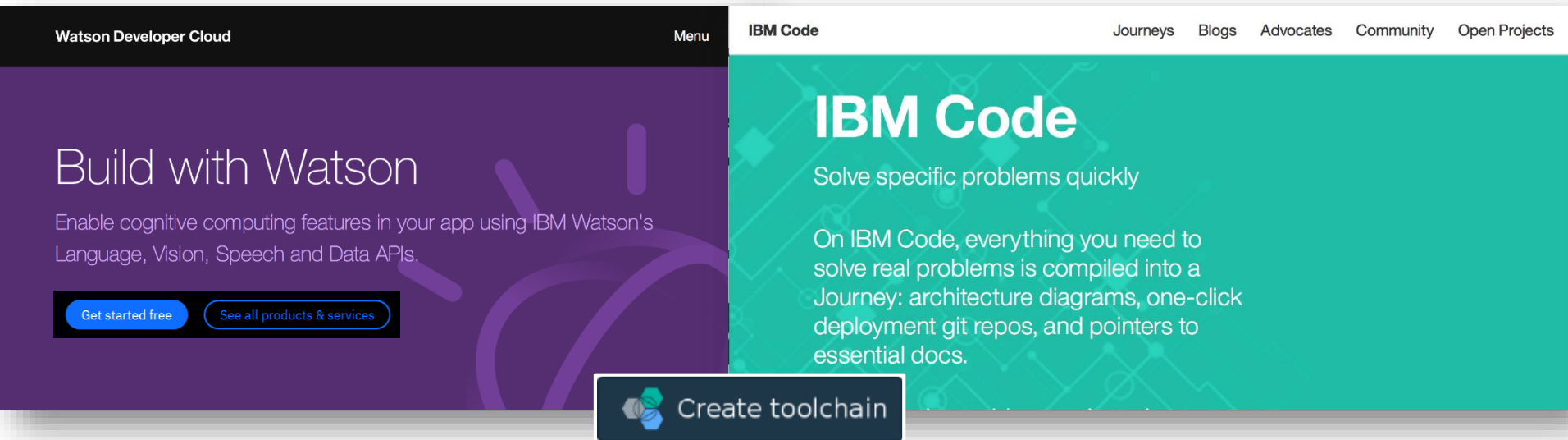
Runbook Automation



IBM Cloud Garage Method



Get started fast with Cognitive, data, mobile, and IOT services using IBM Cloud DevOps services



The image shows two side-by-side screenshots of IBM developer portals. The left screenshot is from the 'Watson Developer Cloud' website, featuring a purple background with the text 'Build with Watson' and 'Enable cognitive computing features in your app using IBM Watson's Language, Vision, Speech and Data APIs.' It includes two buttons: 'Get started free' and 'See all products & services'. The right screenshot is from the 'IBM Code' website, featuring a teal background with the text 'Solve specific problems quickly' and 'On IBM Code, everything you need to solve real problems is compiled into a Journey: architecture diagrams, one-click deployment git repos, and pointers to essential docs.' It includes a 'Create toolchain' button with a gear icon.

Watson Developer Cloud Menu

Build with Watson

Enable cognitive computing features in your app using IBM Watson's Language, Vision, Speech and Data APIs.

[Get started free](#) [See all products & services](#)

IBM Code Journeys Blogs Advocates Community Open Projects

IBM Code

Solve specific problems quickly

On IBM Code, everything you need to solve real problems is compiled into a Journey: architecture diagrams, one-click deployment git repos, and pointers to essential docs.

[Create toolchain](#)

<https://www.ibm.com/watson/developer>

<https://developer.ibm.com/code>



<https://developer.ibm.com/code/>



Signup for IBM Cloud

<https://bluemix.net>



<https://www.ibm.com/watson/products-services/>



Code & instructions

<https://github.com/IBMDevConnect>
<https://github.com/IBM>
<https://github.com/IBM-Cloud>
<https://ibm-cloud.github.io/#/>
<http://ibm.github.io>
<https://github.com/watson-developer-cloud>
<https://github.com/ibm-blumix-mobile-services>



developerWorks

<https://developer.ibm.com/in/>
<https://developer.ibm.com/tv/>



Recipes

<https://developer.ibm.com/recipes/>

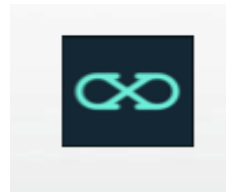


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<http://ibm.biz/slackrequest>



Data Science Experience

<https://datascience.ibm.com>



Apply for IBM Global Entrepreneur Program

<https://developer.ibm.com/startups>

Join our Meetup groups



Bangalore : <https://www.meetup.com/IBMDevConnect-Bangalore>

Delhi / Gurugram / Noida :
<https://www.meetup.com/ibmcloudecosystem/>

Mumbai / Pune : <https://www.meetup.com/Cloud-Mumbai-Meetup/>

Hyderabad / Vishakapatnam:
<https://www.meetup.com/Hyderabad-Cognitive-with-Cloud>

Thank You!

@pradeepb3

Feedback: <https://ibmcodeday.mybluemix.net/>