The app revolution

Fundamentally changing the way we interact with technology.

Apps are everywhere
The quantity and usefulness of web and mobile apps has led to an "**app revolution**" among consumers and businesses alike.

Experience matters
Customers and employees now expect a **delightful** and **seamless** experience across all interactions with a business.

Cloud makes it possible
Apps today can be stitched together quickly with pre-built assets. Cloud makes the **API economy** possible.
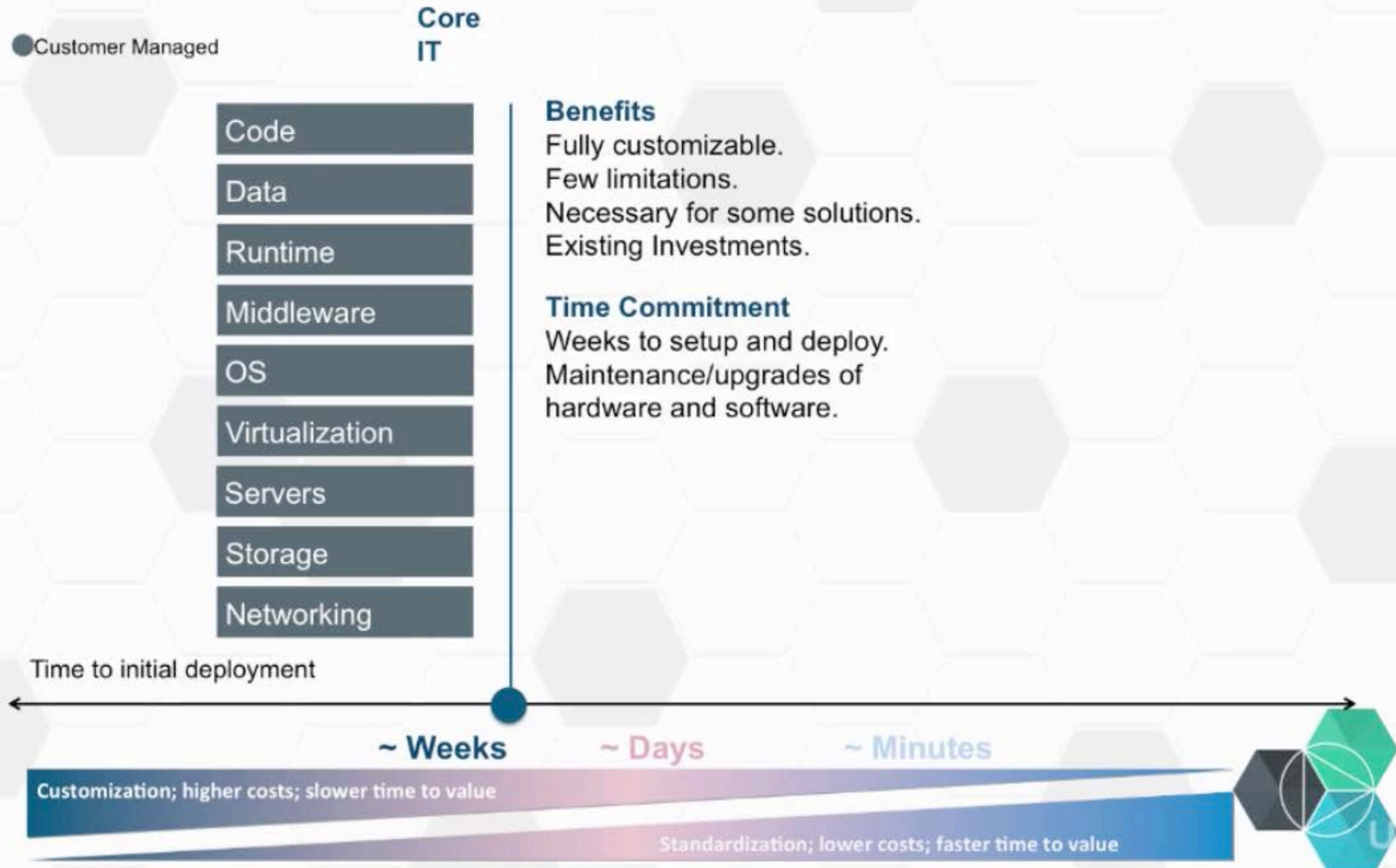
Timing is critical...

Today's apps must keep up with the speed of the app revolution.

Customer Managed

Core IT

Code
Data
Runtime
Middleware
OS
Virtualization
Servers
Storage
Networking

Benefits
Fully customizable.
Few limitations.
Necessary for some solutions.
Existing Investments.

Time Commitment
Weeks to setup and deploy.
Maintenance/upgrades of hardware and software.

Time to initial deployment

~ Weeks   ~ Days   ~ Minutes

Customization; higher costs; slower time to value

Standardization; lower costs; faster time to value

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Infrastructure as a Service

⬤ Customer Managed
⬤ Service Provider Managed

Customer Managed
Code
Data
Runtime
Middleware
OS

Service Provider Managed
Virtualization
Servers
Storage
Networking

Benefits
Most control in the cloud.
Necessary for some solutions.
Infrastructure managed by SP.

Time Commitment
Minutes to provision VM.
Time to configure software
and apps varies.
Maintenance/upgrades of OS,
middleware, runtime.

IBM **SoftLayer**

Time to initial deployment

Core IT

~ **Weeks**   ~ **Days**   ~ **Minutes**

Customization; higher costs; slower time to value

Standardization; lower costs; faster time to value

Timing is critical...

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Platform as a Service

- ● Customer Managed
- ● Service Provider Managed

| Code |
| Data |
| Runtime |
| Middleware |
| OS |
| Virtualization |
| Servers |
| Storage |
| Networking |

Benefits
Setup environments and deploy apps *very* quickly. Infrastructure and platform managed by SP.

Time Commitment
Minutes to setup and deploy. Focus on your apps and their data.

IBM Bluemix

Time to initial deployment

Core IT   IaaS   ~ Minutes

~ Weeks   ~ Days   ~ Minutes

Customization; higher costs; slower time to value

Standardization; lower costs; faster time to value

...so are all of your other investments

Leverage the power of Bluemix **without abandoning** what you already use.

Core IT

IaaS

PaaS

IBM Bluemix

What is Bluemix?

Bluemix is an **open-standard**, cloud-based **platform** for **building**, **managing**, and **running applications of all types** (web, mobile, big data, new smart devices, and so on).

Go Live in Seconds
The developer can choose any language runtime or bring their own. Zero to production in one command.

APIs and Services
A catalog of IBM, third party, and open source API services allow the developer to stitch an application together in minutes.

On-Prem Integration
Build hybrid environments. Connect to on-premise assets plus other public and private clouds.

DevOps
Development, monitoring, deployment, and logging tools allow the developer to run the entire application.

Layered Security
IBM secures the platform and infrastructure and provides you with the tools to secure your apps.
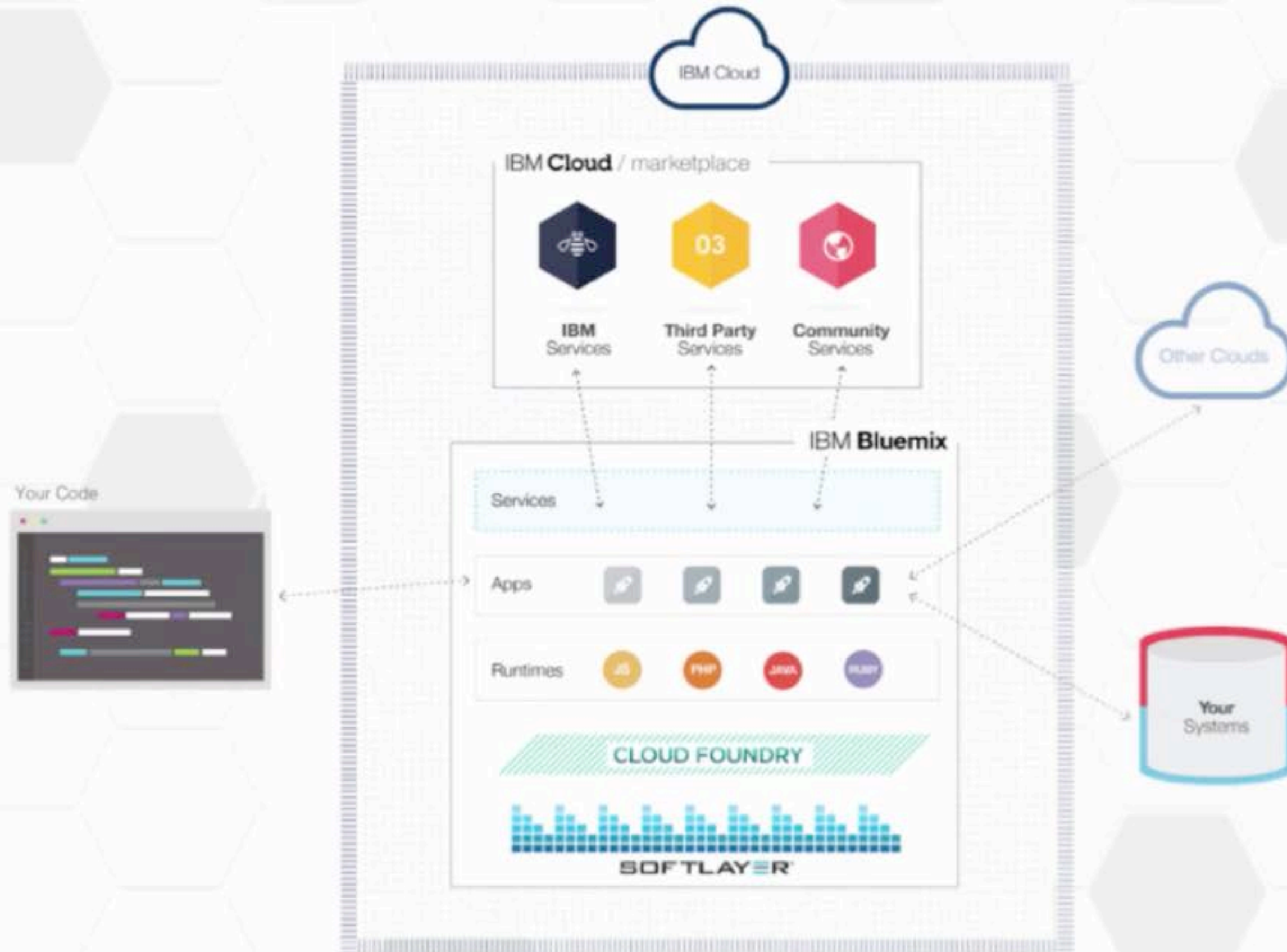
Flexible Pricing
Sign up in minutes. Pay as you go and subscription models offer choice and flexibility.

How does Bluemix work?

Bluemix **embraces** Cloud Foundry as an **open source Platform** as a Service and **extends** it with IBM, third party, and community built services.

Why are developers using Bluemix?

To **rapidly** bring products and services to market at **lower cost**

Go from zero to running code in a matter of minutes.

To **continuously deliver** new functionality to their applications

Automate the development and delivery of many applications.

To extend **existing investments** in IT infrastructure

Extend existing investments by connecting securely to on-premise infrastructure.

udemy

Core use cases

What 30,000 beta applications have told us.

Web Applications

- Enabling **online experiences in the physical store** for retail

- Leverages BlueMix for data collection APIs and dashboards

- Reduction of **infrastructure setup from days to minutes** by moving off of a pure IaaS

APIs and On-Prem Integration

- Providing APIs that are **integrated into the BlueMix experience**

- Leveraging **existing on premise databases and technologies**

- Building mobile applications that connect to on-prem data via Bluemix

Mobile Back Ends

- **Back end services replacing custom code** hosted on IaaS (e.g. Push Notification)

- Cloud Code for **offloading business logic** from the mobile client

- Integrated into iOS and Android native applications using **BlueMix SDK**

Analytics and Reporting

- Embed **IBM Cognos business intelligence** content into apps

- Use **IBM Analytics Warehouse** to store and analyze business data

- Gain immediate **visibility and control** over app **performance** and availability

Catalog - Delivering Composable Services for building an environment

Run Your Apps

The developer can chose any language runtime or bring their own. Just upload your code and go.

DevOps

Development, monitoring, deployment and logging tools allow the developer to run the entire application

APIs and Services

A catalog of open source, IBM and third party APIs services allow a developer to stitch together an application in minutes.
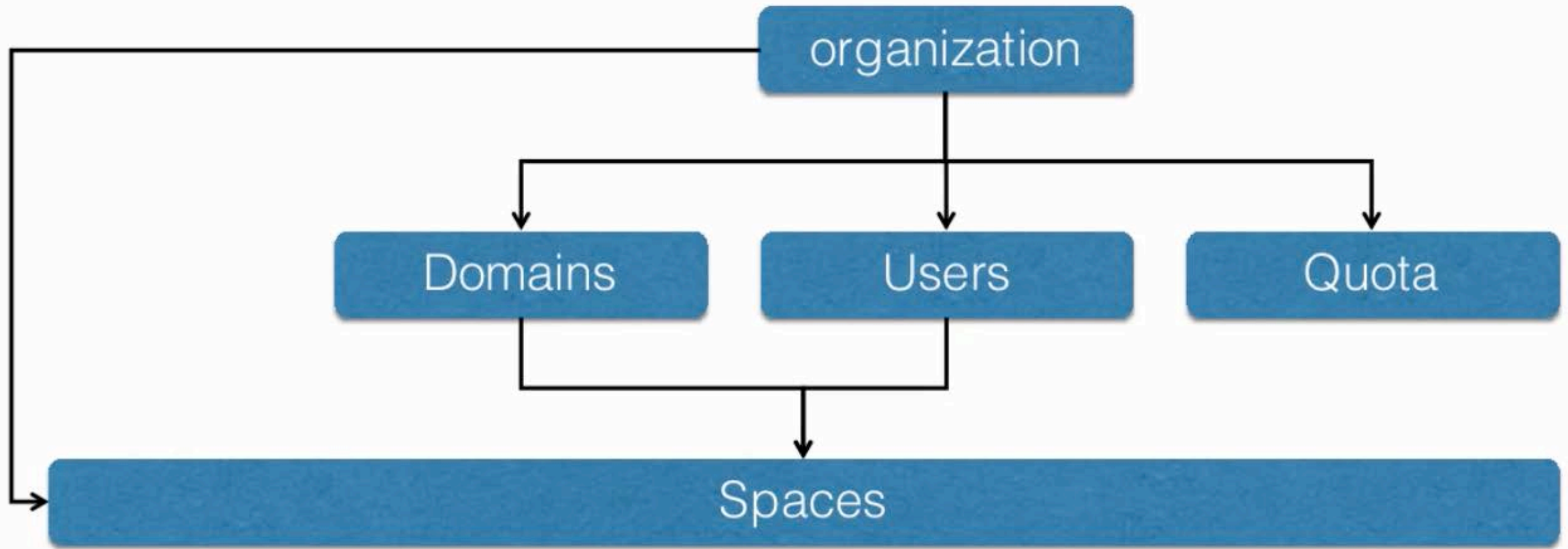
Cloud Integration

Build hybrid environments. Connect to on-premises systems of record plus other public and private clouds. Expose your own APIs to your developers.

Extend SaaS Apps

Drop in SaaS App SDKs and extend to new use cases (e.g,. Mobile, Analytics, Web)

Organizations, Spaces, Users and Domains

Organizations

An organization is defined by the following items:

Spaces -

Spaces provide a mechanism to collect related applications, services, and the users that can collaborate on the resources. An organization can contain multiple spaces. All application and service creation within Bluemix™ must be associated with a space.

Users -

A user must be assigned to an organization to be granted permission to the spaces within the organization.

Domains -

Domains provide the route on the Internet that is allocated to the organization. A route has a sub-domain and a domain. A sub-domain is typically the application name. A domain might be a system domain, or a custom domain that is the personally registered for your application.

Quota -

Quota represents the resource limits for the organization. Quota defines the number of services and the amount of memory that can be allocated for use by the organization. Any application or service in a space of the organization contributes to the usage of the quota. The quota is assigned when organizations are created.