

# IBM i – Halvveis til seksti



Lars Nordbryhn  
Ole Kristian Myklebust

IBM Systems



17. Februar 1988



21. Juni 1988



# IBM AS400

Running the  
Matrix Since  
1988



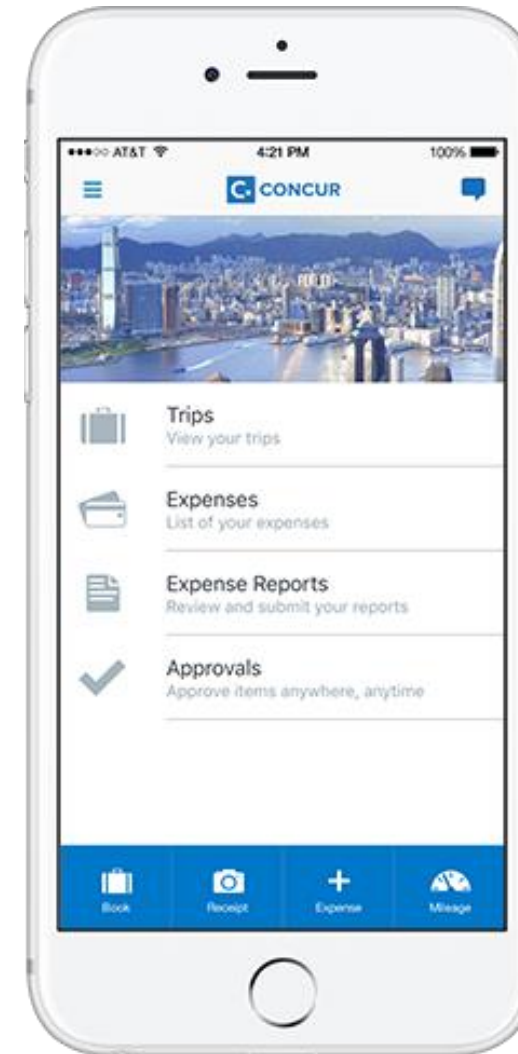
# IBM i accelerates Business Opportunities



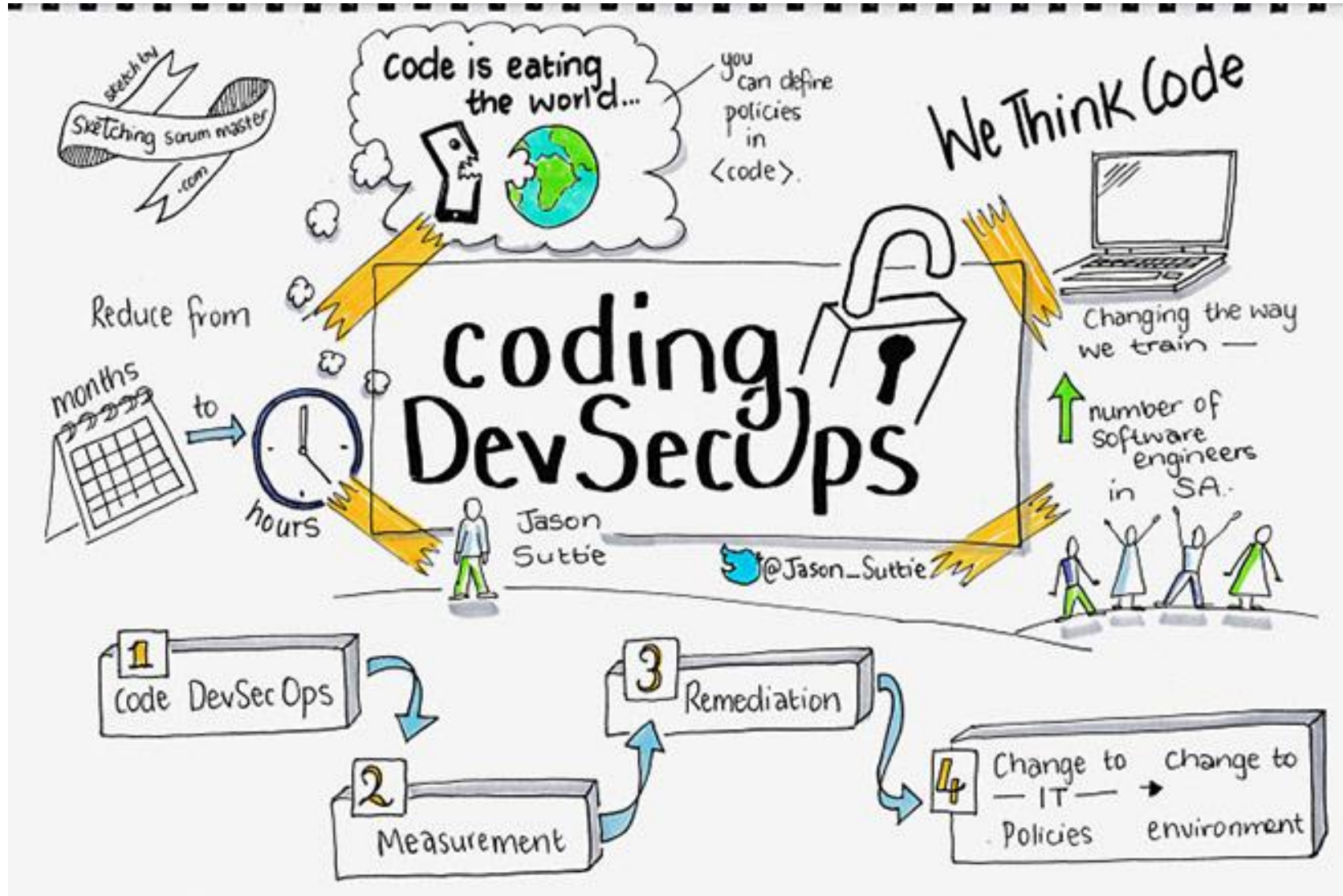
- 2-speed IT
- Cloud
- OpenSource integration
- API Economy
- MicroServices
- Infrastructure as code
- AI/DL and Data Science



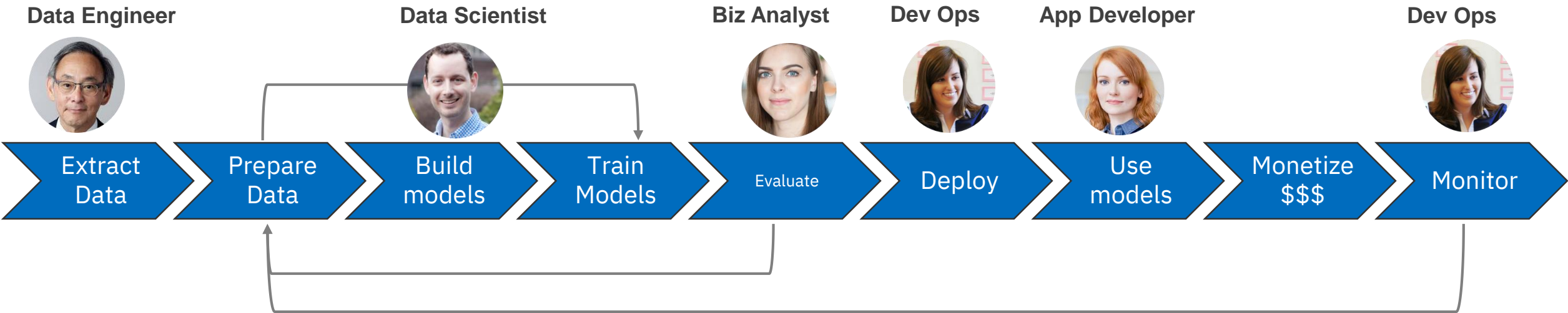
# Hybrid Cloud deployment



# Infrastructure as code



# Data Science and Artificial Intelligence



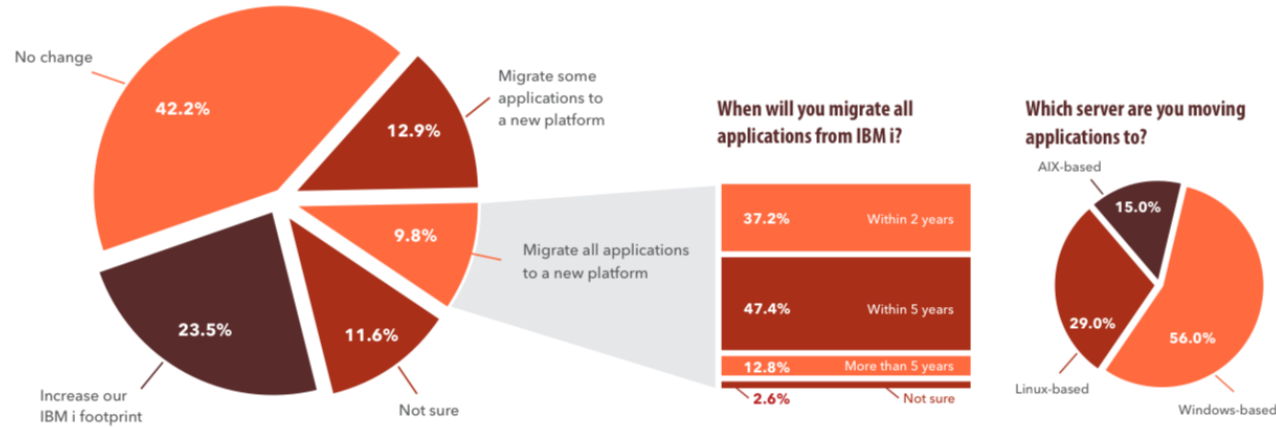




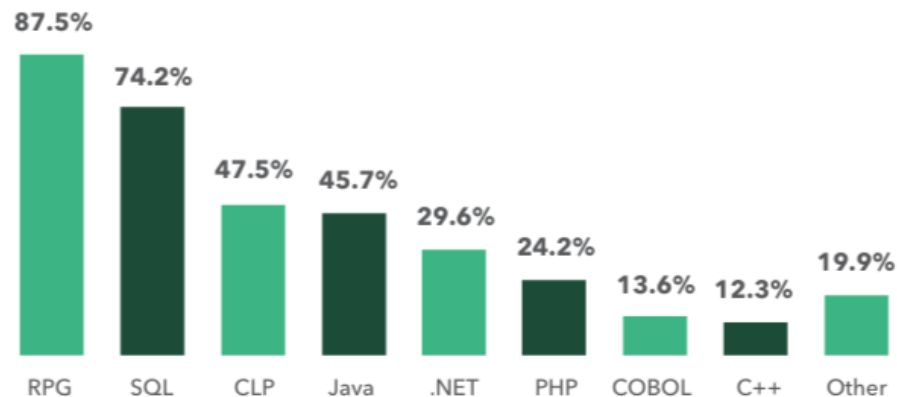
# IBM i in the marketplace

The IBM i market is highly stable with slightly more than 1.5% annual attrition.

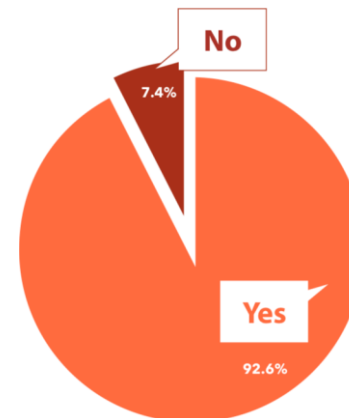
## What are your plans for the IBM i platform?



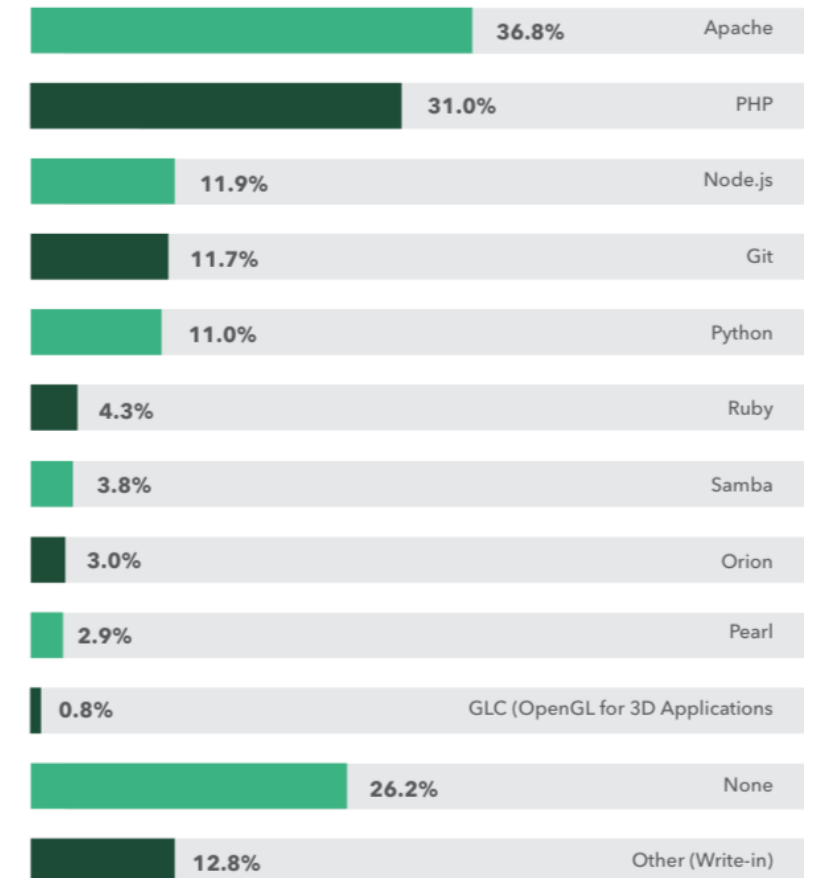
## What development languages do you use today for new development? Check all that apply.



## Do you believe your IBM i server gives you a better ROI than other servers?



## What open source development tools are you using for IBM i apps? Check all that apply.



# "i" for INTEGRATION

- Native Database Server: DB2 on i (part of the OS Kernel)
- Integrated File System : Unix File System, NTFS, NFS, CIFS, etc.
- Software Integration: Security, DB, WebSphere Liberty, Dev tools, Backup tools etc.
- Native Language : RPG (IBM Toronto Lab), a Language for Business Apps + Java, COBOL
- Open Source integration: Apache, 5733-OPS (Node.js, Ruby, Python, gcc, Orion, GIT...)
- PHP & MySQL by Zend (iAMP Stack)



- ISV Support : ERP SAP, Banking/Finance Misys, Infor M3

# Open-source : 5733-OPS

- Option 1 – Node.JS V1
- Option 2 – Python 3.4.6
- Option 3 – GCC / Chroot
- Option 4 – Python 2.7.13
- Option 5 – Node.JS 4.x
- Option 6 – Git
- Option 7 – Tools
- Option 8 – Orion
- Option 9 – Cloud-init
- Option 10 - Node.JS 6
- Option 11 - Nginx



2014



chroot

2015



7.3 & 7.2 TR4

2016

NGINX

2017



# Develop in IBM Cloud / IBM Cloud Private , Deploy & Run on Power Systems.

|  |   |  |
|--|---|--|
| <p><b>Liberty for Java™</b></p> <p>Develop, deploy, and scale Java web apps with ease. IBM WebSphere Liberty Profile is a highly composed</p> <p>Lite IBM</p> <p>  </p> | <p><b>SDK for Node.js™</b></p> <p>Develop, deploy, and scale server-side JavaScript® apps with ease. The IBM SDK for Node.js™ provides</p> <p>Lite IBM</p> <p>  </p> | <p><b>ASP.NET Core</b></p> <p>Develop, deploy, and scale ASP.NET Core web apps with ease.</p> <p>Lite IBM</p> <p></p>   |
| <p><b>Runtime for Swift</b></p> <p>A Kitura based server application that you can use as a starting point to get your own Kitura application</p> <p>Lite IBM</p> <p></p>  | <p><b>XPages</b></p> <p>Develop, deploy and scale IBM XPages applications with ease. The IBM XPages runtime provides you</p> <p>Lite IBM</p> <p>  </p>               | <p><b>Go</b></p> <p>Develop, deploy, and scale Go web apps with ease.</p> <p>Lite Community</p> <p></p>   |
| <p><b>PHP</b></p> <p>Develop, deploy, and scale PHP web apps with ease.</p> <p>Lite Community</p> <p>  </p>   | <p><b>Python</b></p> <p>Develop, deploy, and scale Python web apps with ease.</p> <p>Lite Community</p> <p>  </p>  | <p><b>Ruby</b></p> <p>Develop, deploy, and scale Ruby web apps with ease.</p> <p>Lite Community</p> <p>  </p> |
| <p><b>Tomcat</b></p> <p>Develop, deploy, and scale Tomcat web apps with ease.</p> <p>Lite Community</p> <p>  </p>   |   |  |

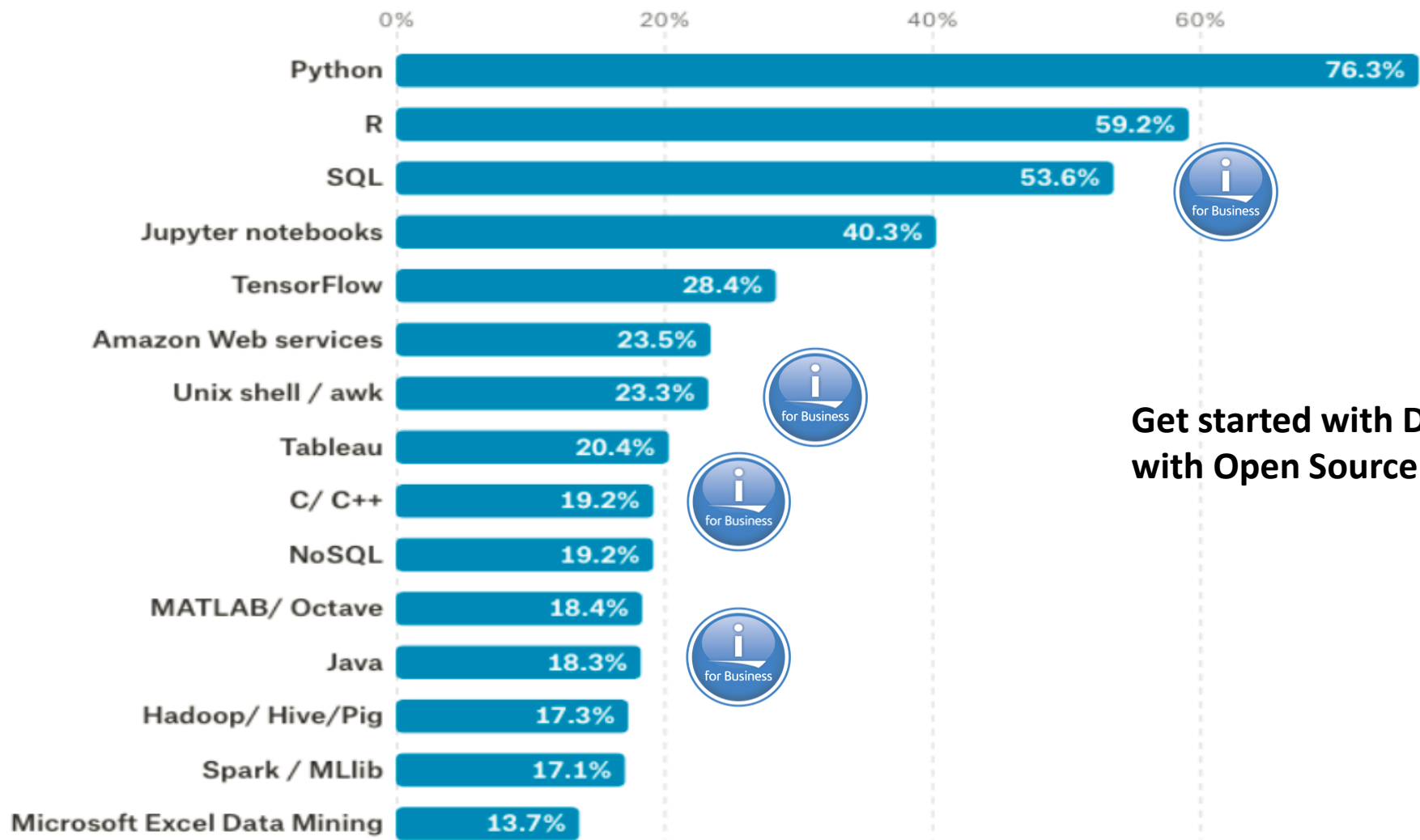
- ❑ IBM Cloud Runtimes (Cloud Foundry Build packs) are all supported on Power Systems!
- ❑ Consume IBM Cloud Services (Watson,...) from IBM i easily using REST calls.





# Data Science tools & technologies

## Kaggle 2017 Data Science Tools Survey



Get started with Data Science on IBM i with Open Source Technologies

# Platform Modernization Patterns



## ONE-OFF INTEGRATIONS

Does not address growing business requirements



## RIP AND REPLACE

Throws away decades of investment, introduces business risk



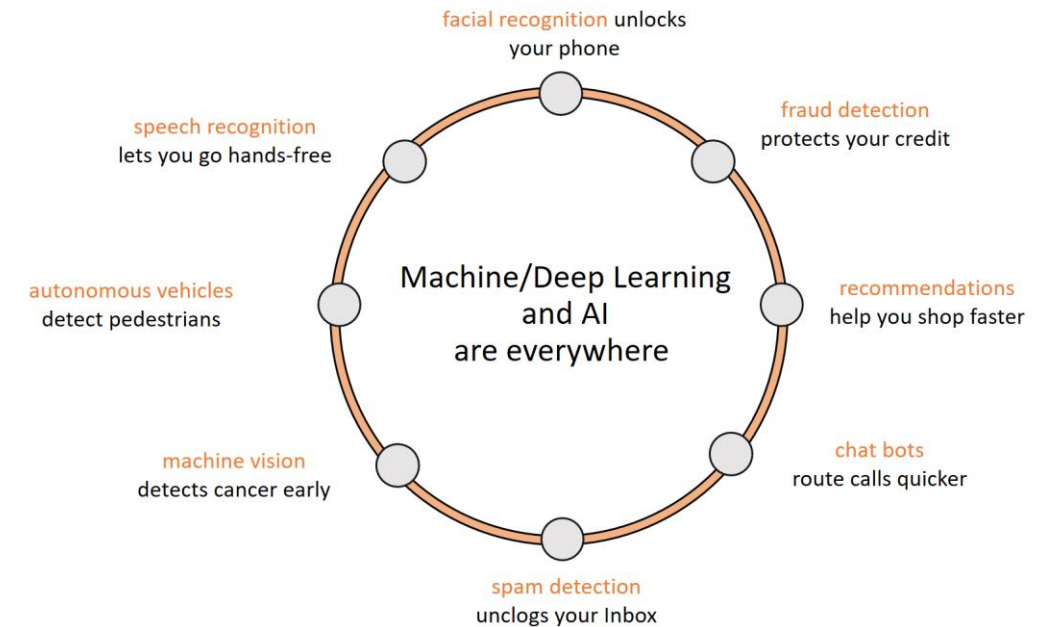
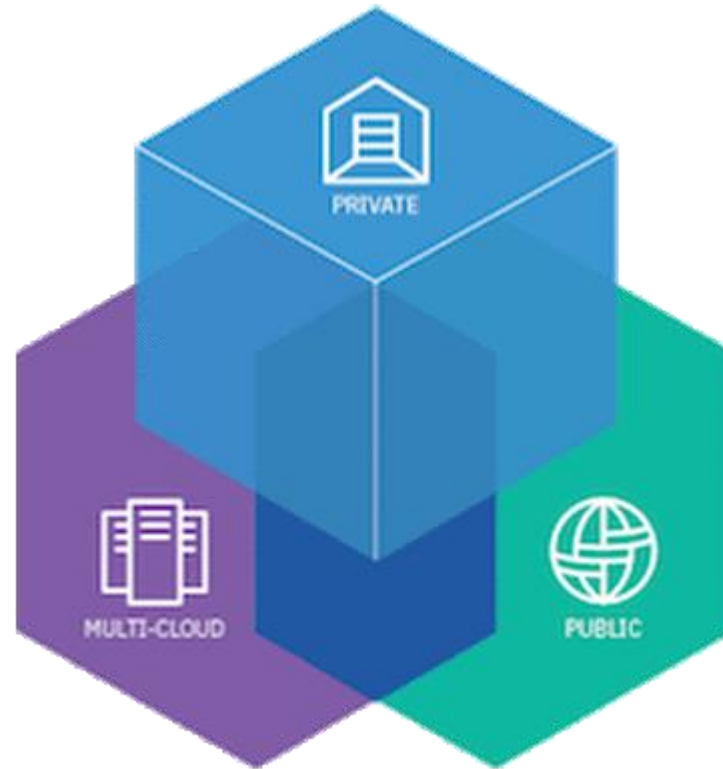
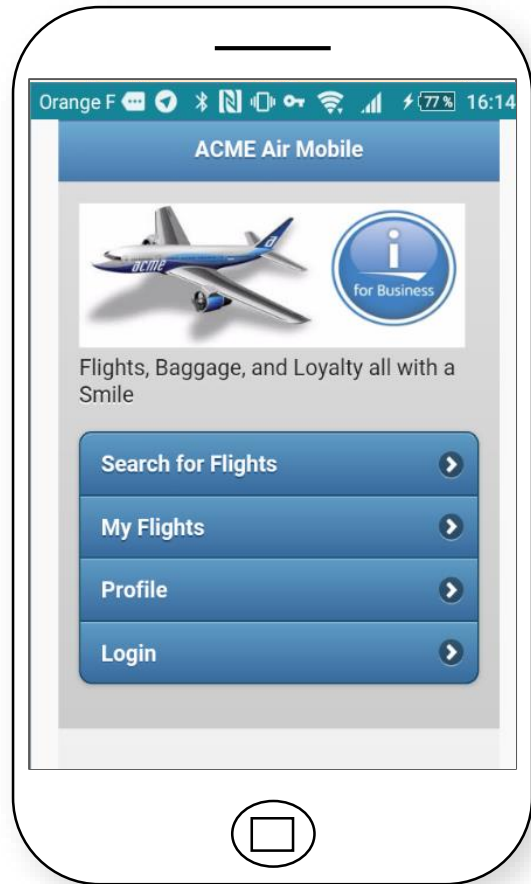
## MODERNIZE LEGACY SYSTEMS

Extends value of existing investment to meet business requirements

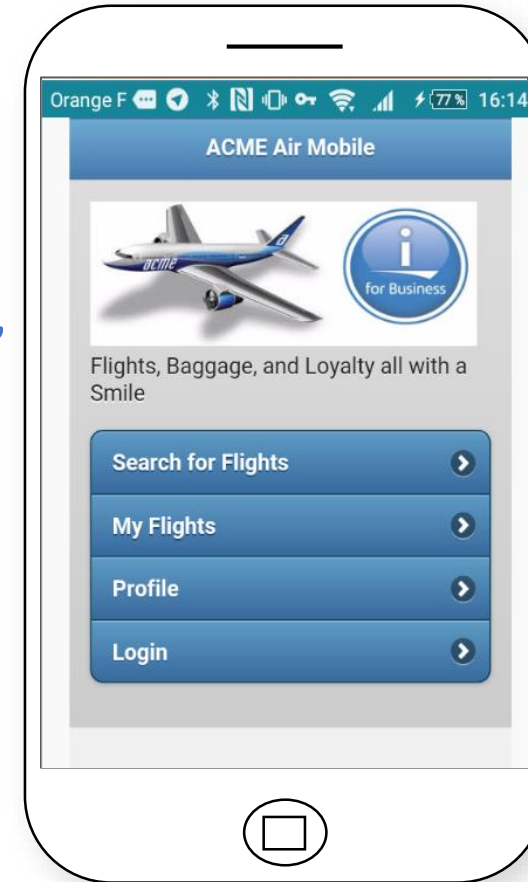


|  | CONNECTIVITY  | ORCHESTRATION  | ABSTRACTION   |
|--|---|--|---|
| PATH 1:<br>Service modernization       | Take existing web services and expose their functionality through modern data formats (e.g. JSON) | Build composite services drawing from multiple web service operations  | Expose functionality to line of business consumers through RESTful APIs |
| PATH 2:<br>Application re-architecture | Break apart application code and build smaller, decoupled services.                               | Build composite services from existing, or define more coarsely grained services encapsulating more comprehensive functionality. | Expose functionality to line of business consumers through RESTful APIs |

# Platform Modernization Use Cases

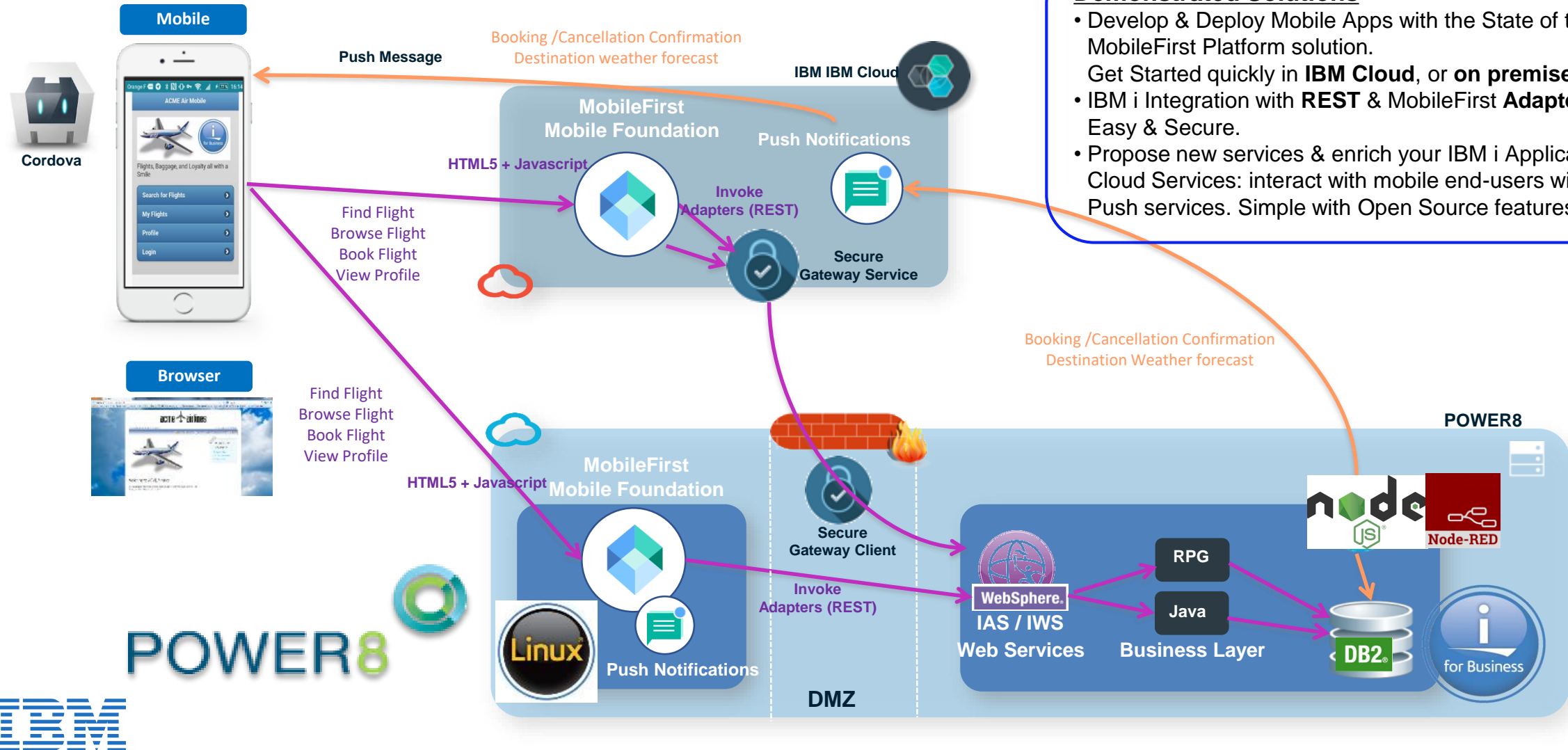


- Mobile Solution with Cordova (MobileFirst), API, Node.js & Cloud Services



# Develop Mobile Services on IBM i with MobileFirst Platform

Acme Airlines Digital Transformation



## Demonstrated Solutions

- Develop & Deploy Mobile Apps with the State of the art IBM MobileFirst Platform solution. Get Started quickly in **IBM Cloud**, or **on premise**.
- IBM i Integration with **REST** & MobileFirst **Adapters**. Easy & Secure.
- Propose new services & enrich your IBM i Applications with Cloud Services: interact with mobile end-users with Mobile Push services. Simple with Open Source features on IBM i



# IBM Cloud Automation Manager on IBM Cloud Private

Value Proposition for Enterprise Power Systems & IBM i :

→ Optimize developer's need for speed with organization's need for governance

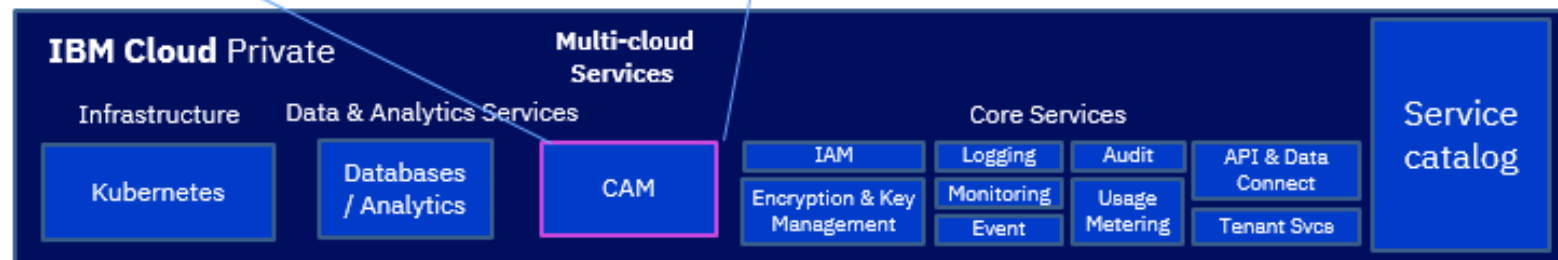
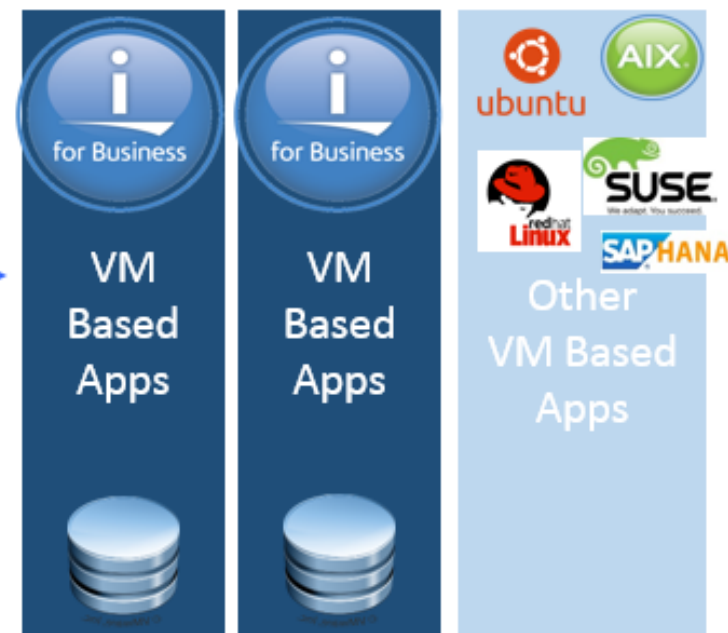
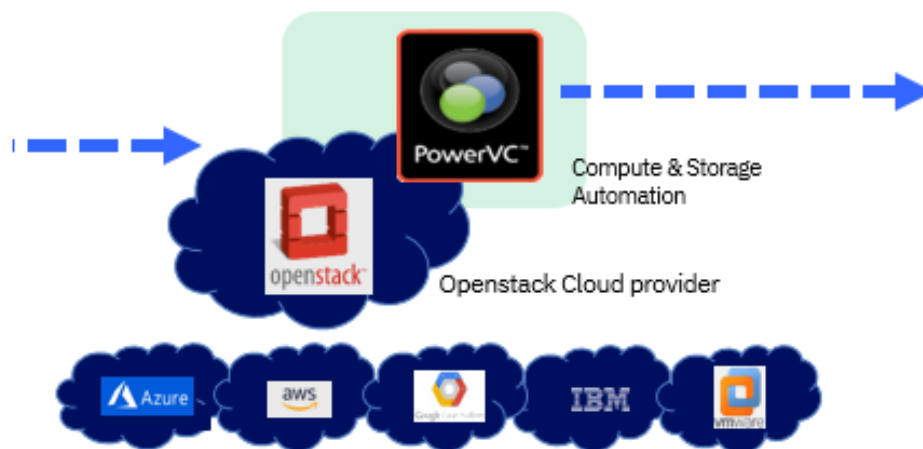
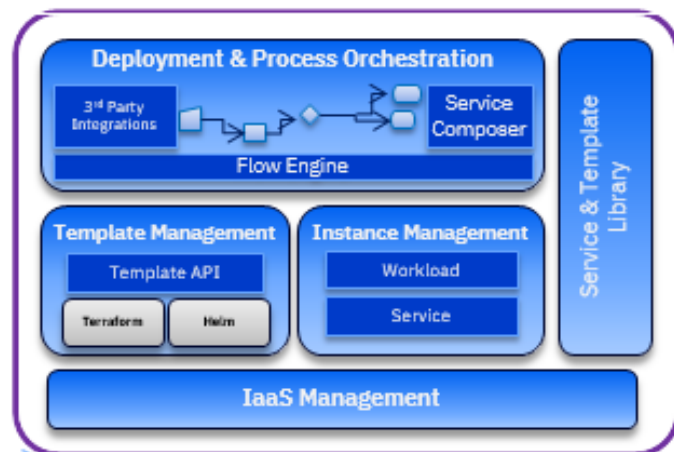


Containerized cloud native application

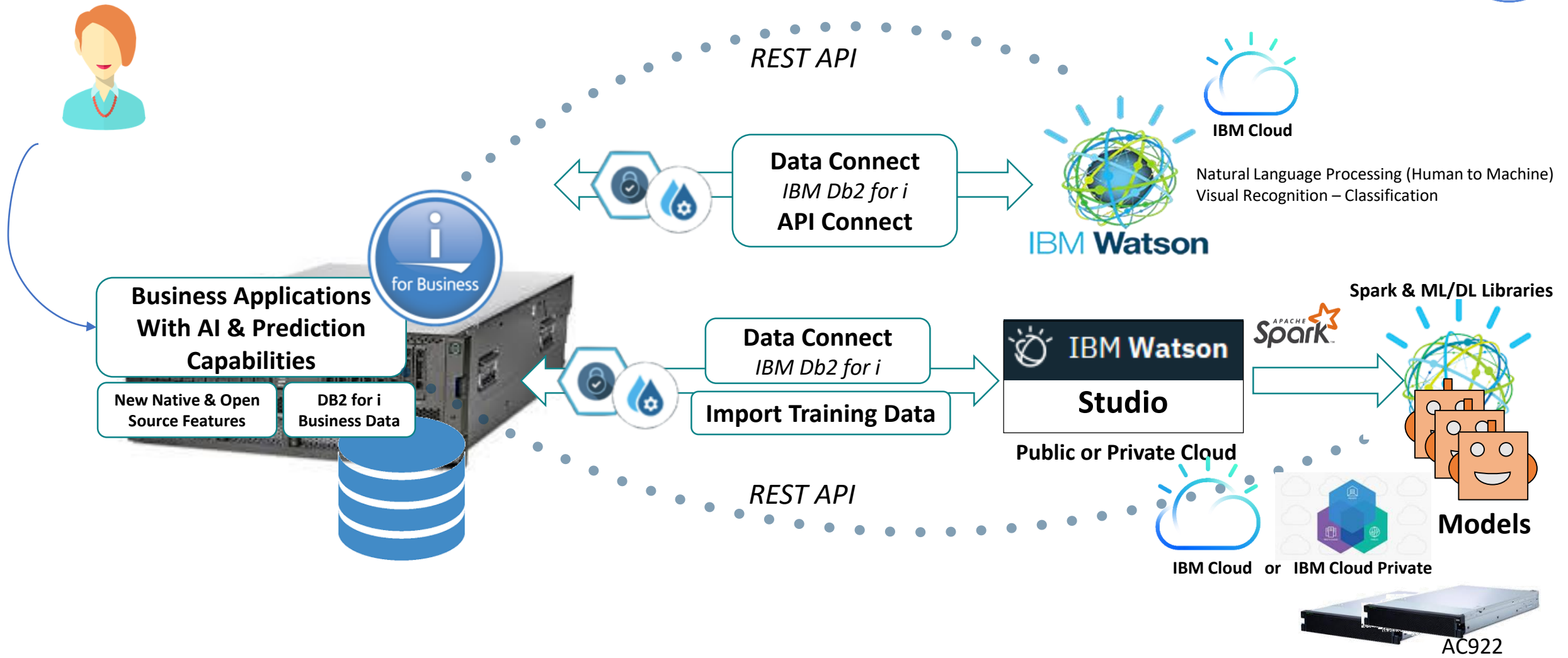
CAM is installed into an IBM Cloud Private worker node with a Helm chart

Leverages IBM Cloud Private services for enterprise capabilities

## IBM Cloud Automation Manager



# IBM i & Artificial Intelligence









Take for oss