Application Development Challenges

Developing cloud-native applications enables organizations to deliver value to their customers quickly with continuous integration and updates. Today, DevOps processes employ the use of microservices, application programming interfaces (APIs), and containers to compose and deploy these apps. However, organizations still face numerous challenges—ensuring that data can be shared between components regardless of format; integrating these components without writing additional code; and developing apps that can run on any cloud platform.

According to ESG research, IT decision makers are focusing primarily on implementing a formal DevOps practice to improve their app development processes.¹ When asked about areas for improving application development, ESG respondents also cited the use of platform-as-a-service (PaaS) and continuous integration/continuous delivery (CI/CD) tools to speed development of cloud-native apps.²

Most Important Areas for Improving App Development

<table>
<thead>
<tr>
<th>Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementing a formal DevOps Practice</td>
<td>31%</td>
</tr>
<tr>
<td>Using PaaS</td>
<td>24%</td>
</tr>
<tr>
<td>Implementing CI/CD tools to speed development</td>
<td>20%</td>
</tr>
</tbody>
</table>

Simplifying Integration within Cloud Native Applications

Organizations that commit to developing cloud-native apps must simplify the integration of microservices, APIs, and container technology or risk delaying delivery to customers, thus reducing time to value. TIBCO Cloud Integration – BusinessWorks is an integration PaaS (iPaaS) that developers can use to create and manage the interactions between Amazon Web Services (AWS) microservices, APIs, and infrastructure, and then leverage container technology to deploy these apps. In addition to its integration capabilities, TIBCO Cloud Integration – BusinessWorks also supports fast delivery of cloud-native apps by:

- Shifting the focus from coding to applying business logic in creating cloud-native apps. The GUI enables developers to combine microservices, APIs, data sources, and other applications (on-premises or in the cloud) into new apps, as well as to debug and test before deployment.

- Automating the application deployment process, including the code analysis, testing, building, and deployment phases.

- Leveraging AWS container services, including Amazon Elastic Container Registry (ECR), Amazon Elastic Container Registry for Kubernetes (EKS), and Amazon Fargate—a serverless container service—to facilitate deployment across multiple cloud platforms.

- Providing graphical representations of integration workflows so that other developers can re-use or edit them for their specific purposes.

- Delivering native tools for monitoring, event logging, and managing cloud-native apps, while leveraging AWS management tools—e.g., CloudWatch for instances on which apps run.

TIBCO Cloud Integration – BusinessWorks ultimately helps organizations to speed up cloud-native app deployment, focusing on how the apps will achieve business objectives instead of on coding scripts, software integration, infrastructure provisioning, deployment, and management.

¹ Source: ESG Master Survey Results, 2019 IT Spending Intentions Survey, January 2019.
² ibid.

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Why AWS Marketplace?

Choose from thousands of solutions

One-click deployment

Pay only for what you use

AWS Marketplace is a digital catalog with thousands of software listings from independent software vendors that make it easy to test, buy, and deploy software that runs on AWS. Solutions are available through a wide variety of delivery methods.

Other benefits include:

- Ready-to-run software.
- Searchable catalog.
- Detailed usage tracking.
- Free trials.
- Simple procurement, no provisioning required.

ESG First Look

- AWS Marketplace brings one-click shopping to enterprise-class IT. Developers can purchase consumption units and pay per hour of use of the TIBCO iPaaS.

- When deploying cloud-native apps via containers, organizations only pay per hour of app usage, not for the container itself.

- Developers can publish APIs that they have created in the TIBCO Cloud Mashery API Management platform for others to re-use for their own projects.

- Organizations can leverage other AWS solutions for scaling cloud-native apps, specifically the AWS LoadBalancer and Autoscaling groups.

- To ease deployment, organizations can use CloudFormation templates specifically for cloud-native app deployment, such as an ECS cluster.

Why TIBCO Cloud Integration - BusinessWorks?

GUI-based platform for cloud-native apps to create and manage interactions between microservices, APIs, data sources and other apps

Automates code analysis, testing, debugging, and deployment

Can deploy apps via a number of AWS container services.

The Bigger Truth

Organizations seeking competitive advantage realize that adopting a DevOps model for cloud app development will help in achieving that objective. While developers can easily leverage the cloud and its services—infrastructure, microservices, APIs, and container technology—for creating cloud-native apps, the key is to integrate these components without wasting time on additional coding. TIBCO Cloud Integration - BusinessWorks enables organizations to simplify integration and deployment, speeding app development and increasing time to value.

AWS Marketplace gets you to the cloud quickly and cost-effectively with preconfigured solutions that expand your capabilities without adding of or risk. ESG recommends evaluating TIBCO Cloud Integration - BusinessWorks to facilitate cloud-native app deployment while leveraging AWS infrastructure and container services to deploy and scale these apps.