App Innovation

Microsoft Practice Development Playbook

aka.ms/practiceplaybooks
About the Playbook

Developed by partners, for partners, as a guide to building or expanding an app innovation and modernization practice.

This playbook provides high-level guidance and valuable resources for driving new revenue opportunities, developing strategies for marketing and lead capture, selling, and building deeper and longer-term engagements with customers through potential new offerings such as managed services.

It offers guidance on the technical skills needed, the Microsoft resources available to accelerate learning, and the key opportunities for technical delivery. The intent is to help partners understand the practice opportunity and best practices, not to re-write the existing body of detailed guidance on how to perform any given recommendation. Instead, it points to the relevant resources at any given stage of building an application development practice.

Many of the resources and programs referenced in this playbook require membership in the Microsoft Partner Network (MPN) to access. There is no cost to join. Information about the program and how to register can be found on the [MPN website](https://aka.ms/MPN).

Partner Practice Development Framework

The playbook is structured into five stages that take a practice from concept to growth.

<table>
<thead>
<tr>
<th>Define strategy</th>
<th>Hire and train</th>
<th>Operationalize</th>
<th>Go to market and close deals</th>
<th>Optimize and grow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define the offer, benchmark the practice, and identify required resources</td>
<td>Hire talent, train resources, and complete certifications</td>
<td>Prepare for launch with systems, tools, and process in place</td>
<td>Execute sales and marketing strategy to find customers and close deals with winning proposals</td>
<td>Collect feedback, identify expansion opportunities, optimize the practice, grow partnerships, and refine the offer</td>
</tr>
</tbody>
</table>

[aka.ms/practiceplaybooks](https://aka.ms/practiceplaybooks)
How this playbook was made

This playbook was written by Solliance, a Microsoft partner, in conjunction with the Microsoft One Commercial Partner group, the Azure and Dynamics product groups and several successful Azure and Power Apps partners who have volunteered their time to provide input and best practices to share with the rest of the partner community.

To validate the guidance provided in these playbooks, MDC Research surveyed 472 Microsoft global partners. The results of this survey are provided in line with the guidance found within this playbook.

### CONTRIBUTING PARTNERS

<table>
<thead>
<tr>
<th>Applied IS</th>
<th>PowerObjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capgemini</td>
<td>Sogeti</td>
</tr>
<tr>
<td>Confluent</td>
<td>SpadeWorx</td>
</tr>
<tr>
<td>Hitachi Solutions</td>
<td></td>
</tr>
</tbody>
</table>
# Table of Contents

About the Playbook ........................................ 2  
Table of Contents ........................................ 4  
The Digital Transformation Opportunity ........... 5  
**Define the Strategy** .................................. 9  
Introduction ............................................. 10  
Define the Practice Focus ............................. 11  
Benefits of a PaaS Approach ......................... 12  
Understanding the Cloud Native App Development Opportunity ........................................... 13  
Understanding the Business Apps and Low-Code Opportunity ............................................ 24  
Define and Design the Solution Offer ............... 34  
Understanding Project Based Services ............. 35  
Plan a Proof of Concept ................................ 36  
Understanding Managed Services ................... 38  
Understanding Intellectual Property .............. 41  
Define Vertical Offerings .............................. 43  
Product Licensing and Strategy Options .......... 44  
Define a Pricing Strategy .............................. 49  
Identify Partnership Opportunities ................. 52  
Pre-Sales, Post-Sales, and Support ................. 53  
Sales Compensation Planning ....................... 55  
**Hire & Train** ........................................ 56  
Introduction ............................................. 57  
Hire, Build, and Train the Team ..................... 58  
Job Descriptions for the Technical Team .......... 63  
Recruiting Resources .................................. 69  
Certifications ........................................... 72  
**Operationalize** .................................... 74  
Introduction ............................................. 75  
Implement a Solution Delivery Process ............ 76  
Key Contracts and Practice Tools .................. 77  
Use CRM to Grow the Business ...................... 78  
Commercial Marketplace ............................. 79  
Implement a Customer Support Program & Process ......................................................... 81  
Support Options from Microsoft .................... 82  
Support Ticket Setup and Tracking ................ 85  
**Go to Market and Close Deals** .................... 87  
Introduction ............................................. 88  
Buyer Engagement ..................................... 89  
Consultative Selling and Technical Pre-Sales .... 91  
Microsoft Technology Centers ....................... 92  
Architecture Design Session (ADS) ................. 93  
Set Up Social Offerings ............................... 96  
Competencies .......................................... 97  
**Optimize and Grow** ................................. 98  
Introduction ............................................. 99  
Partnering with Microsoft ............................ 100  
Power Apps Project Best Practices ................ 101  
Azure Project Best Practices ......................... 102  
**Playbook Summary** ................................. 103  

aka.ms/practiceplaybooks

July 2020
The Digital Transformation Opportunity

The path to unprecedented growth goes through the cloud, helping customers connect remote teams, people, data, and processes in new ways to embrace the possibilities enabled by modern technologies.

IDC estimates $20 trillion USD in spending worldwide to create new business models, operational efficiencies, and customer experiences. Digital transformation is now an executive mandate, and partner development capabilities will take advantage of customer demand for custom and packaged software.

Four trends are helping shape this profitability opportunity:

**DIGITAL PLATFORMS AND ECOSYSTEMS**

By 2020, 60% of all enterprises will have fully articulated an organization-wide digital platform strategy and will be in the process of implementing that strategy as the new IT core for competing in the digital economy.¹

**CLOUD**

By 2021, spending on cloud services and cloud-enabling hardware, software and services will more than double to more than $530 billion, leveraging the diversifying cloud environment that is 20% at the edge, and more than 90% multi-cloud.¹

**HYPER-AGILE APPLICATIONS**

By 2021, enterprise apps will shift toward hyper-agile architectures, with 80% of application development on cloud Platform as a Service (PaaS) using microservices and cloud functions, and more than 95% of new microservices deployed in containers.¹

**LOW-CODE PLATFORMS**

By 2024, three-quarters of large enterprises will be using at least four low-code development tools for both IT application development and citizen development initiatives. By 2024, low-code application development will be responsible for more than 65% of application development activity.²

Enterprise low-code application platforms such as Power Platform offer compelling productivity gains for both professional and citizen developers, as well as ease of deployment and speed-of-development benefits. Products such as Power Apps and Power Automate allow both enterprise and citizen developers to quickly build new applications and modernize legacy business applications using rapid application development techniques.

Partners play a crucial role in helping businesses make the platform and cultural shifts needed, and such transformations are creating incredible partner multiples. In a 2018 IDC study, partners reported earning $9.64 in revenue for every $1 of Microsoft revenue generated. This is expected to continue through 2022 and includes a mix of software (45%), services (50%), and hardware (5%), that are sold in relation to Microsoft solutions.

¹ Source: The Microsoft Digital Transformation Series, an IDC eBook, Sponsored by Microsoft

² Source: Gartner Magic Quadrant for Enterprise Low-Code Application Platforms

aka.ms/practiceplaybooks
THE EVOLUTION OF DEVELOPMENT

In the beginning, there were physical machines. They were expensive, and developers loaded them with multiple applications to save costs. This caused no end of conflicts and unexpected bugs, and effective machine utilization was still low. Developers struggled to make sure changes to one application did not break an unrelated application.

Next came virtual machines. Since multiple VMs could be run on a single physical box, developers installed their applications in contained VMs, which reduced conflicts and improved utilization. The downside of this was dealing with shared memory and unpredictable performance. Furthermore, since provisioning had to be made for the largest loads, “scaling in” would not really save money.

Enter the cloud. Companies could rent the virtual machines they needed when they needed them. They could scale applications up and down on demand. They still needed to install and configure OS level patches and updates, and still had to contend with low-level networking.

Today, more businesses are increasingly evaluating PaaS (Platform as a Service) and serverless approaches to application development, moving beyond cloud hosted VMs, removing the need to manage servers and scalability challenges, and increasing the speed of the iterative development process.

FURTHER READING

➔ Microsoft Digital Transformation eBook Series
➔ Designed to Disrupt: Reimagine your apps and transform your industry
➔ Three Smart Ways to Exceed Your Customers’ Digital Expectations

aka.ms/practiceplaybooks
The Cloud Enables App Innovation and Remote Worker Productivity

Native Azure services and low-code platforms are at the center of digital transformation and the remote worker revolution. The cloud has changed more than the way IT is implemented and managed; it is changing the very fabric of business.

Azure services combined with products such as Microsoft Teams, Power Apps and Power Automate have engendered powerful new capabilities that are disrupting the solutions application development model. Competition between major cloud providers is driving a tidal wave of innovation within the cloud itself. New features and services are added on a weekly or even daily basis, providing an ever-richer platform.

Once an organization has migrated to the cloud, support for native cloud applications and low-code solutions will provide the tools required for building new cloud business applications. The impetus for building those applications is directly tied to the customers’ motivations for digitally transforming their operations, so the cloud becomes the entrée to further value. Embracing the cloud is not simply the easiest, or cheapest, or fastest way to drive digital transformation—it is the only way.

<table>
<thead>
<tr>
<th>APP INNOVATION</th>
<th>DIGITAL TRANSFORMATION VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT becomes an enabler to the business</td>
<td>Driving envisioning and agility</td>
</tr>
<tr>
<td>Security by design</td>
<td>Continuous regulatory compliance delivery expertise</td>
</tr>
<tr>
<td>Dynamic monitoring with anomaly detection</td>
<td>Proactive insight into end user experience</td>
</tr>
<tr>
<td>DevOps tools and processes, CI/CD skillsets</td>
<td>Deliver faster business value with predictable outcomes</td>
</tr>
<tr>
<td>Solution and application-based SLAs</td>
<td>Meet business outcomes and customer performance expectations</td>
</tr>
<tr>
<td>Decentralized operations and resources</td>
<td>Modernize operations</td>
</tr>
<tr>
<td>Software and cloud-based solutions</td>
<td>Automation and orchestration</td>
</tr>
<tr>
<td>Expertise consulting, designing, architecting, automating, and optimizing for the cloud</td>
<td>Increase agility and optimization</td>
</tr>
</tbody>
</table>
The Benefits of Cloud Application Development

There are four important factors that deliver real value to customers.

**COST**

Forrester finds the average cost to develop an application is 74% less with Power Apps.¹ For customer applications that are developed using these new tools and included connectors, the internal development effort, professional services fees, and/or vendor applications purchase costs are much lower. The effort to maintain code and manage applications is less, while cloud computing itself offers significant potential cost-savings over on-premises infrastructure, especially considering the full cost of the latter. The cloud enables organizations to move IT spending from capital expenditure (CapEx) to operational expenditure (OpEx), which dramatically lowers the cost of innovation, enabling a ‘fail-fast’ experimental approach to migration. Since the fixed costs associated with shared infrastructure are avoided, the cloud also provides much greater visibility into the true cost of individual applications.

**AGILITY**

Where traditional on-premises infrastructure can take weeks or even months to deploy, solutions built using Power Platform and Azure services offer near-instant provisioning of resources. This lowers innovation cost and enables a faster time-to-market. The scale, performance, reliability, and global reach of the cloud enables small development teams and citizen developers to develop global business applications for global audiences. To take full advantage of this new flexibility, organizations are accelerating the adoption of new ways of working, such as agile software development methodologies, continuous integration, and deployment (CI/CD), and modern PaaS-based application architectures.

**SERVICE QUALITY**

The Power Platform is built on top of the Azure infrastructure, which has been designed to support some of the world’s most demanding workloads. These workloads continuously raise the bar on the quality of service Azure must provide. As a result, modernizing apps with Power Apps can offer significant improvements in performance, reliability, and security over on-premises apps and infrastructure.

**NEW SCENARIOS**

Power Apps or Portals that integrate with Azure services enable new application scenarios that are simply not possible or would be prohibitively expensive to deliver using on-premises infrastructure. These modern scenarios such as big data storage and analytics, machine learning, and compliance with industry certifications such as International Organization of Standardization (ISO), Payment Card Industry Data Security Standard (PCI DSS), Health Insurance Portability and Accountability Act (HIPAA) and General Data Protection Regulation (GDPR), where customers can leverage the certifications offered by cloud providers. These technologies are enabling new application scenarios, driving innovation and competitive advantages only available in the cloud.

¹ Source: The Total Economic Impact™ Of Power Apps, Forrester, March 2020

aka.ms/practiceplaybooks
Define the Strategy

App Innovation

aka.ms/practiceplaybooks
Introduction

With a better understanding of the opportunity for building a cloud native, low-code app innovation practice, the next step is to define the strategy for building a practice.

Building a practice begins by reviewing the areas of expertise within an application development practice, the specific business opportunity for each area and the key Microsoft products and services that can be leveraged to deliver solutions that capitalize on the opportunity.

The next step is defining the offer and its value proposition, which is the description of what will be sold and why customers will want to buy it. The four cloud business models (reselling, project services, managed services, and intellectual property) will be reviewed, along with their respective profitability, and how partners can assess the profitability of their own practice.

This section also looks at how partners price an offer, including what strategy to use to drive adoption and how to minimize risk by establishing upfront fees and payment terms. The goal is to build a solid business plan that addresses the technical, marketing, sales, and financial aspects of the practice.

The next step is to define the pre-sales and post-sales engagement process and compensate sales executives. There will be a review of the programs to leverage to grow a practice, including the Microsoft Partner Network, and guidance on how to maximize program benefits and earn additional ones.

Next, there are tips on how to identify potential customers when starting a practice, as well as potential service offerings.

Finally, this section concludes with guidance on how to support customers, available Microsoft’s support offerings, and the support-related benefits available through the Microsoft Partner Network program.
Define the Practice Focus

Partners typically center an application development and modernization practice in one or more of the focus areas: cloud-native apps, business applications, and low-code development.

**CLOUD NATIVE APP DEVELOPMENT**

Help customers build, launch, modernize and reliably scale websites and applications using the Microsoft Azure application platform and supporting solutions, such as containers and microservices. Help customers innovate with new cloud-native apps, and expand with specialized capabilities for providing IoT, AI, and mixed reality applications.

**BUSINESS APPS AND LOW-CODE**

Help customers develop and deploy new line of business apps and modernize legacy business applications to meet today’s IT compliance needs and rapidly changing business needs.

Low-code platforms and products Power Apps and Power Automate enable faster and easier app development, deployment, higher productivity, reduced time to implement, and an accessible user interface for customers.

Consider the following three areas in which partners can build long-term, value-added services for cloud native and low-code apps:

<table>
<thead>
<tr>
<th>PROJECT SERVICES</th>
<th>MANAGED SERVICES</th>
<th>PACKAGED IP</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Custom App Dev</td>
<td>• Critical response support</td>
<td>• Vertical solution subscriptions</td>
</tr>
<tr>
<td>• Citizen Developer enablement</td>
<td>• Reactive help desk support (Office, Intune, CRM Online)</td>
<td>• Industry-specific mobile apps</td>
</tr>
<tr>
<td>• Low-code enablement</td>
<td>• Performance &amp; Application Troubleshooting</td>
<td>• Industry-specific workflows</td>
</tr>
<tr>
<td>• Business opportunity identification</td>
<td>• Application Lifecycle Management (design, development, testing, production, errors corrections, updates, bug fixes, new versions)</td>
<td>• Function-specific workflows (e.g. HR, Procurement)</td>
</tr>
<tr>
<td>• Solution analysis, scope, &amp; design</td>
<td></td>
<td>• Customer Self-Serve Portals</td>
</tr>
<tr>
<td>• Proof of Concept</td>
<td></td>
<td>• e-Commerce functionality</td>
</tr>
<tr>
<td>• User Experience consulting</td>
<td></td>
<td>• Automated load balancing</td>
</tr>
<tr>
<td>• Workflow creation in SharePoint</td>
<td></td>
<td>• Turnkey BI portals</td>
</tr>
<tr>
<td>• Centers of Excellence</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**INSIGHTS TO HELP INCREASE THE PROFITABILITY OF THESE OPPORTUNITIES:**

- Focus on industries that have highly mobile workforces that need coordination
- Key on application development and security for remote workers
- Create packaged IP with a subscription model for cost
- Implement solutions that enable machine learning and AI
- Integrate with Microsoft Teams
- Integrate appropriate third-party apps

aka.ms/practiceplaybooks
Benefits of a PaaS Approach

Microsoft developed a series of innovations for delivering applications using Azure services.

Building new apps or modernizing existing ones using Azure Functions, Azure App Service, Power Apps, Power Automate and other services eliminates the need for developers to maintain the underlying system software or virtual configurations. This burden is lifted from developers by shifting those responsibilities to Microsoft, freeing them to focus entirely on business value.

In separate 2020 Forrester Total Economic Impact Studies of customers using Power Apps and Power Automate, the researcher found additional value is realized with other Microsoft solutions, such as Dynamics 365 Customer Engagement apps and SharePoint, because Power Apps and Power Automate automated those solutions’ capabilities. In addition to bringing down the cost of developing applications, Power Apps allows partners to develop additional applications in-house rather than continuing to pay licensing fees for existing applications. And automating workflows and business processes with Power Automate delivers efficiency gains in key areas such as new hire onboarding, invoice sorting, and help desk ticketing.

REWARDS OF POWER APPS:

Source: The Total Economic Impact™ Of Power Apps, Forrester, March 2020

REWARDS OF POWER AUTOMATE:

Source: The Total Economic Impact™ Of Power Automate, Forrester, April 2020
Understanding the Cloud Native App Development Opportunity

Expect a fast-growing, profitable segment

Investing in app innovation, including cloud-native apps and modernization, is a growth investment, according to a recent survey of almost 500 partners.

**SURVEY DATA**

Nearly three quarters of respondents are deploying business applications and cloud migration and modernization services. Half of the respondents report an annual IT revenue below $500,000, while more than one third report the majority of their IT revenue (71% and up) is from cloud-based products and services.

![Chart](chart.png)

---

Source: Cloud Application Development and Modernization Playbook Survey, MDC Research, May 2020

aka.ms/practiceplaybooks
Apps and infrastructure are currently the most frequently offered cloud-based services, with most respondents offering these services for more than four years. Data and artificial intelligence combine to make the newest class of cloud services, opening new opportunities for businesses to differentiate their offerings and add value to their customers.

Of these three cloud service categories, business applications have been established the longest.
Application Modernization

Once a customer moves their line of business apps to the cloud, they may struggle not only with new application development but also with the ongoing maintenance and upkeep of critical legacy applications. Application modernization is a way to repackage or extend legacy applications with more agility, including some cloud-native features, and make them available to other technologies such as the Power Platform, cloud, or containers.

For maximum flexibility, focus on cloud-native apps and app modernization. Of the survey participants who provide a cloud application development offering, nearly all are working toward app modernization (71%).

Application modernization spans a range of maturity models, starting with legacy, monolithic apps, and ending with cloud-native applications. Many successful applications today are monoliths, meaning they are structured as large core applications that contain all the domain logic. However, there are some downsides to the monolithic approach, including unintended and costly side-effects due to tightly coupled components, and difficulty in establishing new technologies and frameworks. In addition, an unstable component can crash the entire system, and must be redeployed with each release. Applications have become increasingly complex with users who expect rapid responsiveness, innovative features, and zero downtime. Performance problems, recurring errors, and the inability to move fast are no longer acceptable. This is why many companies want to modernize their apps and, for their most mission-critical apps, strive for the cloud-native maturity model.
Cloud-native application development focuses on speed and agility. Business systems are evolving from enabling business capabilities to tools of strategic transformation, accelerating business velocity and growth. It is imperative to get ideas to market immediately. Achieving the cloud-native maturity level requires new development investments to drastically improve scale and agility. This is because the main pillars of cloud-native applications are based on microservices architecture approaches, which can evolve with agility and scale to limits that would be difficult to achieve in a monolithic architecture, deployed to either on-premises or a cloud environment. Achieving these goals with the cloud-native approach involves the most work, through re-platforming, re-architecting, and rewriting code.

However, a cloud-native architecture is not appropriate for all apps. Monolithic apps that are not mission-critical may be better served by a Cloud Infrastructure-Ready lift-and-shift migration. This process involves little to no code changes and moves the on-premises workload onto a cloud-based virtual machine (VM). Rehosting apps in this way is a first step toward modernization for many workloads, and it requires the least amount of effort. However, rehosting without updating the application typically excludes the app from unlocking and leveraging benefits of cloud computing.

Monolithic apps that are critical to the business often benefit from cloud-optimized modernization. This approach typically involves some minimal code changes that enable the app to access cloud computing features. Sometimes the changes do not involve updates to the core architecture, but deployment optimizations allow the application to run in key cloud services. These deployment optimizations may include deploying to PaaS services or containerizing the app and deploying to a container orchestrator such as Azure Kubernetes Service (AKS) through a combination of containers, continuous delivery, and DevOps. This cloud-optimized approach positions the app to take advantage of cloud features through minimal code changes, such as message queues, distributed caching, relational and non-relational databases, and advanced monitoring.

Some of the services that run the application in Azure can work together in a solution, while others are better suited to different purposes. The following table helps identify which application development resources and Azure services are right for the situation.
Modern Application Development resources

MICROSERVICES
Microservices is an application development and deployment approach perfectly suited to the agility, scale, and reliability requirements of modern cloud applications. In a microservices model, developers individually build and deploy small, independently executed services or “microservices,” that collaborate using published API calls across the network to deliver the overall application’s functionality. This results in a fine-grained, loosely coupled application that can easily be distributed across multiple host machines for scale and reliability.

The term “microservice” emphasizes the fact that applications should be composed of services small enough to truly implement a single role. Each has well-defined API contracts for other microservices to communicate and share data with it. Microservices must also be able to version and update independently of each other. This loose coupling is key to supporting rapid and reliable evolution of an application. What would have been a single tier of a monolithic application decomposes into many discrete microservices, each independent and isolated.

DATA AND AI
Microsoft’s catalog of data and Artificial Intelligence (AI)-related Azure services is vast. The data services span from managed relational databases, such as Azure SQL Database, SQL Managed Instance, Azure Database for MySQL, to NoSQL options, such as Azure Cosmos DB and Table Storage. For solutions that require a data warehouse, coupled with advanced analytics and data movement orchestration, consider using Azure Synapse Analytics (formerly Azure SQL Data Warehouse).

Azure allows developers to add intelligence to solutions through products and services that span the AI spectrum from pre-trained models with Cognitive Services to services for building custom models, such as Azure Machine Learning.

aka.ms/practiceplaybooks
Azure Products and Services

**AZURE APP SERVICE**

*Azure App Service* allows partners to build powerful web and mobile apps for any platform and device that connects to data anywhere, in the cloud or on-premises. Built for developers, it is used to create the following app types from a single development experience:

- **Web apps** – Quickly create and deploy mission critical web apps that scale with the business.
- **Mobile apps** – Build mobile app backends with notifications, data sync, and authentication.
- **API apps** – Easily build and consume cloud APIs.
- **Logic apps** – Automate the access and use of data across clouds without writing code.
- **Web app for containers** – Easily deploy and run containerized web apps.

Azure App Service also provides an integrated set of enterprise capabilities through a single development and management experience offering the following benefits:

- **Build web and mobile apps fast** – Rapidly build, deploy, and manage web and mobile back end apps for employees or customers. Use existing language skills—.NET, Java, NodeJS, PHP, or Python. Accelerate development with access to a rich gallery of APIs, connectors, and logic available in the Azure Marketplace.
- **Connect to any service and unlock data** – Connect a web or mobile app to enterprise systems or Software-as-a-Service (SaaS) in minutes with built-in connectors. Choose from more than 50 connectors for enterprise systems such as SAP, Siebel, and Oracle to popular enterprise SaaS services such as Salesforce and Office 365 to popular internet services such as Facebook, Twitter, and Dropbox.
- **Integrate more easily** – Logic Apps can integrate data across clouds and automate business processes in minutes using a visual design experience. Easily integrate logic with any mobile or web app via standard REST APIs. Build sophisticated enterprise application integration, B2B solutions using Electronic Data Interchange (EDI) and business policies (rules engine).

- **Increase developer productivity** – Optimized for DevOps, with continuous integration support for Azure DevOps and GitHub, so developers can focus on rapidly improving their apps without worrying about infrastructure. Deploy app updates with built-in staging, roll-back, and in-production testing capabilities.
- **Rely on enterprise-grade services** – App Service has full enterprise-grade security and management. Provide delegated and role-based administration; easily secure and manage data flowing to mobile apps; and protect data assets with built-in backup and restore capability. Fully PCI-compliant with dedicated environments and the ability to deploy across public and private clouds.

As a single integrated service, Azure App Service makes it easy to compose the above app types into a single solution, to build apps that target both web and mobile clients using the same back end, and integrate with on-premises systems as well as popular SaaS services.

**SERVERLESS**

Another term that is used when discussing cloud-based solutions is “serverless” computing. This term can be confusing at first because servers are still used to execute code, but an additional layer of abstraction is added to remove the developer from any sort of server configuration. Once the code is added, the service handles all the capacity, scaling, patching, and administration of the infrastructure to run the code. Microsoft charges only for the compute time used, and scaling is automatically handled to meet load demands. Azure Functions is Microsoft’s serverless, event-driven service offering that extends the existing Azure application platform with capabilities to implement code triggered by events occurring in other Azure services, SaaS products, and on-premises systems. An alternative serverless option for orchestrating events, while taking advantage of sub-second billing are Logic Apps. This service offers a codeless approach to creating workflows and connecting to internal Azure services and third-party providers.
AZURE FUNCTIONS

Azure Functions extend Microsoft’s market leading PaaS platform, building on the existing WebJobs infrastructure to let developers easily implement code that reacts to events generated from across the breadth of Azure. Whether it’s responding to changes in Azure storage containers, events emitted in SaaS products that support Web Hooks, or calls to an HTTP endpoint, they’re all easy to set up and require minimal configuration.

Functions can be implemented in a variety of languages, including JavaScript, C#, Python, and Java. There is a choice of scripting options like Bash scripts, PowerShell scripts, or Windows batch files. Azure Functions provides an intuitive web-based code editing experience, or developers can upload and trigger pre-compiled executables built in the development tool of their choice. Quickly and easily iterate on Azure Functions with continuous deployment using Azure DevOps, GitHub, or BitBucket. Monitor and troubleshoot Azure Functions using the embedded logging environment or Application Insights.

Azure Functions v2 introduced Durable Functions, stateful functions that automatically maintain state, checkpoints, and restarts. These orchestrator functions help define stateful workflows in code, allowing developers to call other functions either synchronously or asynchronously, simplifying complex coordination problems in serverless applications. In addition, they automatically checkpoint their progress whenever the function awaits. Local state is never lost if the process recycles or the VM reboots. Common stateful orchestration patterns are function chaining, fan-out/fan-in, async HTTP APIs, monitoring, and human interaction.

AZURE API MANAGEMENT

Whether they are creating serverless microservices, APIs hosted in Azure App Services, or creating proxies to third-party services, developers can benefit from publishing, managing, securing, and analyzing their APIs in a centralized location, using API Management. Use Azure API Management as a turnkey solution for publishing APIs to external and internal customers. Quickly create consistent and modern API gateways for existing backend services hosted anywhere. Expose, publish, and manage microservices architectures as APIs and use API Management to better understand and optimize the APIs.

Choose from a dedicated usage model, with a developer portal and pre-allocated and isolated underlying resources, or a serverless consumption-based usage model, with instant provisioning, automated scaling, built-in high availability, and pay-per-action pricing.

CONTAINERS

There is discussion on cloud computing without talking about containers and the Docker toolset. Organizations across all business segments want to understand what containers are, what they mean for applications in the cloud, and how to best use them for their specific development and IT operations scenarios.

The combination of instant startup that comes from OS virtualization and reliable execution that comes from isolation and resource governance makes containers ideal for application development and testing, allowing developers to iterate quickly. Because its environment and resource usage are consistent across systems, a containerized application that works on a developer’s system will work the same way on a production system. The instant-start and small footprint also benefits cloud scenarios, since applications can scale out quickly, and many more application instances can fit onto a machine than if they were each in a virtual machine, maximizing resource utilization.

AZURE KUBERNETES SERVICE (AKS)

Azure Kubernetes Service provides a way to simplify the creation, configuration, and management of a managed Kubernetes cluster of virtual machines that are preconfigured to run containerized applications. As a hosted Kubernetes service, Azure handles critical tasks such as health monitoring and maintenance. The Kubernetes masters are managed by Azure. Only the agent nodes need to be managed and maintained. As a managed Kubernetes service, AKS is free - only the agent nodes within the clusters are paid for, not the masters. Use existing skills or draw upon a large and growing body of community expertise to deploy and manage container-based applications on Microsoft Azure.

If partners wish to use DC/OS or Docker Swarm, they may install the Mesosphere DC/OS Enterprise or Mesosphere DC/OS Open Source solution template, or the Basic or Standard/Advanced Docker Enterprise Edition for Azure solution template, respectively.
AZURE CONTAINER INSTANCES

Azure Container Instances (ACI) offers the fastest and simplest way to run a container in Azure, without having to manage any virtual machines and without having to adopt a higher-level service.

The primary benefits of ACI are fast startup times without the need to provision and manage VMs, and rapid deletion of container instances when no longer needed.

Azure Container Instances is a great solution for any scenario that can operate in isolated containers, including simple applications, task automation, and build jobs. For scenarios where full container orchestration is needed, including service discovery across multiple containers, automatic scaling, and coordinated application upgrades, the best option is Azure Kubernetes Service (AKS). It is also possible to incorporate ACI with AKS by having AKS create virtual nodes dynamically in ACI.

INTERNET OF THINGS

Quickly build and deploy secure, scalable Internet of Things (IoT) applications using the comprehensive Azure IoT portfolio of managed and platform services. Microsoft has taken decades of enterprise experience and designed the Azure IoT services to be accessible for all organizations, large or small. The core IoT service is Azure IoT Hub, which allows organizations to connect, manage, monitor, and collect telemetry from billions of IoT assets. Azure IoT Central takes a SaaS-based approach to IoT device management and control, greatly reducing the barrier of entry into the IoT space, with predicatable device-based pricing and built-in device management, telemetry collection, and reporting.

Azure IoT Edge helps extend cloud intelligence and analytics to edge devices, while Azure Sphere provides a comprehensive IoT security solution, including hardware, OS, and cloud components, to actively protect IoT solution from devices to the cloud.

TESTING MOBILE APPS AT SCALE

One service that partners can offer is cloud-scale mobile testing. Help customers prepare automated tests for their mobile applications that are developed in any programming language. With Visual Studio App Center, developers can write UI tests for native and hybrid apps, using popular test frameworks such as Appium, Calabash, Espresso, Xamarin.UITest, and XCUIEvent. These test frameworks can automate real-world user actions, such as tapping, swiping, rotating, pinching and zooming, change GPS location, pressing physical buttons, activating the device camera, etc. Prepare the test cases and test locally on emulators and simulators, then send them to App Center Test, where thousands of iOS and Android devices are ready to run the test scripts. Select devices by operating system, form factor, platform, market share, and other variables. Test are full-frame screenshots for every step of every test, performance data (memory, CPU, duration, etc.), with reports to compare against previous runs to find regressions and bottlenecks.

There is a cost that comes with using App Center Test, so make sure it makes financial sense to use the service. Always test mobile applications in every case, at a local level at minimum. Having a mobile application that is tested properly ensures that first-time customers will become long-term customers. If the app is very simple with limited features and a small number of users, App Center Test might be overkill. However, if the app is an enterprise mobile app, or a complex app with many users, App Center Test is a highly recommended, and proven way to cost-effectively test on all the potential mobile devices in an automated way that does not require a large team of testers to manually do the work. Device prices cost hundreds of dollars apiece and are constantly refreshed with new versions. It is costly and difficult to keep track of new devices, maintain old ones, and coordinate tests across all the devices. App Center Test simplifies this by maintaining a large collection of thousands of devices that can run fully automated tests at any time. Furthermore, automated testing shows how much of the code is covered by tests. Changes to tests can be made instantly and tested immediately. Couple automated mobile tests with Azure DevOps or any number of CI systems, to ensure a rock-solid mobile application that can quickly be iterated upon.
AZURE AI GALLERY

The Azure AI Gallery enables developers and data scientists to share their analytics solutions and build industry reputation and contains a variety of resources including:

- **Experiments** – The gallery contains a wide variety of experiments that have been developed in Azure Machine Learning Studio. These range from quick proof-of-concept experiments that demonstrate a specific machine learning technique, to fully developed solutions for complex machine learning problems.
- **Industries** – Explore the Microsoft and community provided experiments and solutions by industry, including retail, manufacturing, banking, and healthcare.
- **Jupyter Notebooks** – Include code, data visualizations, and documentation in a single, interactive canvas. Notebooks in the gallery provide tutorials and detailed explanations of advanced machine learning techniques and solutions.
- **Solutions** – Quickly build Azure AI Solutions from preconfigured solutions, reference architectures, and design patterns. Customize them with the included instructions or with a featured partner.
- **Tutorials** – Several tutorials are available on machine learning technologies and concepts or advanced methods for solving machine learning problems.
- **Collections** – A collection groups together experiments, APIs, and other gallery items that address a specific solution or concept.
- **Models** – Explore a growing collection of machine learning models for building projects and solutions. Search the list of models by category, algorithms used, language, services used, etc.

aka.ms/practiceplaybooks
The Benefits of Investing in Serverless Computing

The Azure Serverless platform includes the Azure Functions, Logic Apps, and container-based services that are part of the platform. There are good reasons why serverless technologies are gaining popularity at a rapid pace.

In the 2019 commissioned study, The Total Economic Impact™ of Microsoft Azure Serverless Platform, Forrester Consulting interviewed several current customers to learn how they use serverless technologies and why. In the study, Forrester reveals that before using the Azure Serverless platform, customers used a combination of on-premises infrastructure and cloud services. The cloud components usually consisted of virtual machines in their solutions. However, this type of configuration repeatedly led to issues related to scale, size, and rate of change in technology. The problems they experienced hindered their ability to remain competitive and operation efficiently. They needed to use technology that enabled rapid change that could scale with demand and support the demands of customers. After moving to a serverless approach on Azure, the companies enjoyed improvements that generated new and accelerated sources of revenue, with increased efficiency of the entire IT organization.

One of the main pillars upon which these types of applications are built is microservices. Serverless technologies are viable components of microservice-based architectures, supporting multiple languages, loosely coupled components, and simplified integration with cloud messaging services, to name a few benefits.

In addition to these benefits, Forrester reported that the 9 interviewed organizations also experienced the following benefits when using serverless technologies on Azure:

- Improved quality of digital assets for customers
- Sustained innovation from a steady stream of new serverless features from Azure
- Increased revenue due to scalable API structure
- Increased efficiency of developers and velocity of team efficiency by 50%
- Reduced cost to manage and maintain on-premises environment by 10%
- Reduced cost of regulatory and audit compliance by reducing the effort of staff by 30%
- Increased speed of launching services in new countries
Forrester’s interviews with these existing customers and subsequent financial analysis found that the interviewed organizations experienced benefits of $8 million over three years versus costs of $1.6 million, adding up to a net present value (NPV) of $6.4 million and an ROI of 414%.

Source: The Total Economic Impact™ of Microsoft Azure Serverless Platform, a commissioned study conducted by Forrester Consulting, July 2019
Understanding the Business Apps and Low-Code Opportunity

An enterprise low-code application platform supports building new applications or modernizing legacy enterprise-class applications. These require high performance, scalability, high availability, disaster recovery, security, SLAs, resource use tracking, technical support from a provider, and API access to and from local and cloud services. Gartner predicts that by 2024, low-code application development will be responsible for more than 65% of application development activity.¹

Enterprise low-code application platforms (ELCAP) such as Power Platform, offer compelling productivity gains for both professional and citizen developers, as well as ease of deployment and speed-of-development benefits. Power Apps and Power Automate allow partners to assist customers to quickly build new applications and modernize legacy applications using rapid application development techniques.

<table>
<thead>
<tr>
<th>CUSTOMER NEEDS</th>
<th>PARTNER OPPORTUNITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>To deliver the right applications for the business faster, with higher levels of quality and accountability</td>
<td>Deliver specialized end-to-end solutions on a comprehensive and enterprise-proven platform and expand offerings on a hybrid cloud platform</td>
</tr>
<tr>
<td>Integrated development tools and an approach that drive productivity and agility—across development teams, apps, and release cycles</td>
<td>Cross-sell by delivering end-to-end solutions with a comprehensive portfolio: mobile, media, M2M, big data, etc.</td>
</tr>
<tr>
<td>A flexible way to connect legacy applications with new—to interoperate, securely—to proactively support new business opportunities</td>
<td>Realize simplified app development with “build once” unified applications for cross-platform deployment</td>
</tr>
<tr>
<td>To infuse data into applications making staff more efficient</td>
<td>Profit with differentiated offerings by using Microsoft Azure services to support mobile, media services, IoT, machine learning, and Power Platform to build LoB apps and choose UX type to meet customer needs</td>
</tr>
<tr>
<td>Increase developer efficiency and reduce development backlog to keep up with evolving business needs</td>
<td>Drive longer engagements and recurring business</td>
</tr>
</tbody>
</table>

¹ Source: Gartner Magic Quadrant for Enterprise Low-Code Application Platforms

aka.ms/practiceplaybooks
Resources

In a low-code world, there are opportunities for citizen developers as well as professional developers. Citizen development is a niche and sub-category of low-code platforms.

Power Apps provides a low-code development environment and is used by both citizen and professional developers to build and extend business applications rapidly.

➔ Al Builder
➔ Center of Excellence Starter Kit
➔ Administering a Power Apps and Microsoft Flow enterprise deployment whitepaper

Enterprise Low-code Application Platform (LCAP)

An enterprise low-code application platform (LCAP) provides tools and services to assist organizations to quickly create, extend, and deploy business applications using low-code approaches such as model-driven design and ease of deployment.

Power Platform is Microsoft’s enterprise low-code platform, which can increase the professional developer’s productivity but also enables a newer sub-category of developers, the citizen developer. In the past, citizen development was limited to products such as Access or SharePoint Designer; however, today, Citizen Developers are using 4GL products such as Power Apps and Power Automate to extend or build cloud applications and automate business.

The Power Platform today is comprised of four products – Power BI, Power Apps, Power Automate, and Power Virtual Agents. It also has two add-ons: Al Builder and Power Apps Portals.

Power Platform allows professional developers to build rich, complex end to end business solutions and accelerate time to market. The platform is so powerful that Dynamics 365 is built on top of it. A professional developer could develop Line of Business applications that are as complex as Dynamics 365.
Since customers using Office 365 already have a license of Power Apps, they can extend their apps and upgrade with premium features. These seeded licenses provide an excellent opportunity for partners to assist with the development, governance, and quality of these enterprise content and communication applications.

KEY CUSTOMER CHALLENGES

- Bots and virtual assistants can be complex to deploy and manage.
- Customers want to extend or customize SharePoint list forms.
- Developers are busy learning and implementing cloud technologies, making it challenging to keep up with the demand for new or modernized business applications.
- The ability for customers to allow citizen developers to create Power Apps creates a need for governance and training.
- Legacy applications that have been migrated to the cloud using lift-and-shift need modernization.
- Lack of a centralized data model wastes time and is error prone.
- Fear and uncertainty surrounding the loss of control associated with business automation.
- Transforming and integrating business data.
- Business apps need to be accessible to all employees and follow accessibility guidelines.
- Need to build Line of Business solutions without having to build or support its underlying platform.

aka.ms/practiceplaybooks
Microsoft partners are in a unique position to help customers with issues such as governance and user adoption. Over the past years, many companies have used the lift and shift approach to migrating applications to the cloud, and many of these applications can be extended and modernized using enterprise low-code platforms. There are many opportunities to assist customers in creating new apps and modernizing legacy applications using the Power Platform.

**KEY SERVICES FOR THIS OFFERING**

- Virtual Agents
- Multi-channel app development
- Collaborative development
- Supporting Citizen Developers
- Cost management of developer resources
- Portal deployment and configuration
- Continuous deployment and Integration
- Data integration
- Governance planning
- Center of Excellence planning
- Custom component development
- Application modernization

aka.ms/practiceplaybooks
Power Platform and Low-Code Application Development

To bolster productivity, focus on Azure and enterprise low-code

Many organizations are beginning to invest in low-code platforms to speed up digital transformation and enable remote workers to be productive from home. Low-code platforms such as Power Platform allow customers to modernize existing applications quickly or build new mobile-enabled and accessible business applications that can integrate with the Azure Data Platform, AI tools, and other Azure services.

Power Platform is an enterprise low-code PaaS option with features required for accessible, sophisticated, and enterprise-capable business apps. For more information about the latest inclusive design developments, designing for inclusivity, and accessibility tools at the Microsoft Accessibility web site.

SURVEY DATA

Nearly half or more of partners currently use Power BI, Power Apps, and Power Automate, and more than a third plan to use AI Builder in the future. Few (15%) do not use any Power Platform products or features and are more likely to report lower IT revenue (22% reporting <$500,000 annually).

![Microsoft Power Platform Products/Features Currently Used](chart)

Nearly a quarter are unsure what Power Platform products and features their company will use in the future, and are more likely to be Azure users (24%).

![Microsoft Power Platform Products/Features Planning to Use](chart)

Source: Cloud Application Development and Modernization Playbook Survey, MDC Research, May 2020

aka.ms/practiceplaybooks
The Power Platform is used by Microsoft to build applications such as Dynamics 365 Sales, Service, Field Service and Marketing. These applications are built natively on the platform. Partners and enterprise customers can also develop custom business applications using this same technology. Individual users and teams within an organization also can build personal or team productivity applications with no-code or low-code capabilities.

There is a reason why the Power Apps user base grew threefold in 2019. Developers can increase the pace of app innovation from conception to production and Power Apps applications are automatically available on the web and on mobile devices and are designed to help meet accessibility guidelines. Applications can also be embedded as a tab in Microsoft Teams channels or conversations, and Power Apps applications can also be deployed as standalone apps, which are discoverable in the Teams app store. More information on sharing apps in Teams can be found in the Microsoft Teams Practice Development Playbook.
Power Platform Products and Features

By 2024, low-code application development will be responsible for more than 65% of cloud application development. The Power Platform includes several key concepts and components to be aware. Here are some of the essential ones.

**POWER APPS**

Power Apps is the industry-leading low-code application development platform that underpins Dynamics 365 extensibility, Office 365 customization, and standalone custom line of business applications for customers around the world. Power Apps dramatically lowers the cost, complexity, and time of software development through a range of powerful low-code development tools, and deep data platform in the Common Data Service, and hundreds of connectors to common business data sources.

**POWER AUTOMATE**

Microsoft Power Automate makes it possible to increase business productivity by automating repetitive, time-consuming tasks. Power Automate provides a better way to get things done across the organization through digital and robotic process automation. There are three major investment areas for Microsoft. First, it is easier than ever to build robust automation across the 300+ connectors in Power Automate. This includes new, intelligent experiences that build on AI Builder and integrated experiences in Microsoft Teams, Microsoft Azure, and the other services in Microsoft Power Platform. Second, UI flows, and a robotic process automation (RPA) feature, UI flows automate mundane, rules-based tasks with point-and-click simplicity—whether the app is old or new, on-premises, or in the cloud. This now includes both attended (logged in to the machine) and unattended scenarios (where the flow runs in the background on a virtual machine). Third, Power Automate enables modeling and running a human-driven business process with the modern approval and business process flow features. There are new capabilities in this area, including a more natural way to connect business process flows with automated flows.

**POWER VIRTUAL AGENTS**

Power Virtual Agents enables users to create AI-powered bots that can chat with users about specific topics. They can answer routine questions, resolve common issues, or automate tasks that take up valuable customer or employee time. Creating a bot is typically a complex and time-intensive process, requiring long content update cycles and a team of experts. Power Virtual Agents gives anyone in the organization the ability to create powerful custom bots using an easy, code-free graphical interface, without the need for AI experts, data scientists, or teams of developers. A bot can interact with users, ask for clarifying information, and ultimately answer a user’s questions. Using deep integration with Power Automate and the Microsoft Bot Framework, authors can extend their bots to integrate with API back ends, which enable the bots to handle additional topics, limited only by the author’s imagination. Bots are deployed to many channels, including websites, Microsoft Teams, and Facebook. As users interact with a bot, the author can see which topics are performing well and which need improvement.

aka.ms/practiceplaybooks
AI BUILDER

Power Apps integration in AI Builder makes it easy to use AI models in Power Automate. The newly released AI Builder connector allows users to select an AI model to easily add AI to automated workflows and apps. For example, perform form processing on PDF files attached to emails from a designated sender and then save the extracted information in a SharePoint list. Additionally, makers may embed preconfigured AI components to their apps and workflows with no need to build or train models.

PORTALS

Power Apps makers can now create external-facing websites that allow users outside their organizations to sign in with a wide variety of identities, create and view data in Common Data Service, or even browse content anonymously. The full capabilities of Dynamics 365 Portals, previously offered only as an add-on to model-driven apps in Dynamics 365, are now available completely standalone inside of Power Apps. These capabilities feature a revamped end-to-end experience for makers to quickly create a website and customize it with pages, layout, and content. Makers can reuse page designs through templates, add forms and views to display key data from Common Data Service, and publish to end users.
Power Platform and Governance

Microsoft Power Platform provides a range of governance and administration capabilities that span across Power Apps, Power Automate, and Common Data Service.

These capabilities are designed to help the administrators and IT professionals in the organization set up, secure, manage, govern, and monitor the use and adoption of the platform and its components across the enterprise.

Developing an environment governance strategy means configuring environments and other layers of data security in a way that support productive development in a customer organization, while securing and organizing resources.

A strategy to manage environment provisioning, access, and controlling resources within them is essential to:

- Secure data
- Understand how to use the default environment correctly
- Manage the correct number of environments to avoid sprawl and conserve capacity
- Facilitate proper Application Lifecycle Management
- Organize resources in logical partitions
- Support operations (and help desk) in identifying apps that are in production by having them in dedicated environments
- Ensure data is being stored and transmitted in acceptable geographic regions (for performance and compliance reasons)

A low-code or Power Apps governance assessment usually covers current state, security and more. As part of any assessment, review what environments already exist and how makers have been building apps and workflows. Many customers will require low-code governance, and there are many types of Power Platform environments used by business apps today, some include:

- Power Apps and Power Automate provide customization for Office 365 and Dynamics 365 and are included in those licenses
- Individuals can sign up to learn and test out Power Apps through the Power Apps community plan
- Power Apps and Power Automate paid licenses give users the ability to build stand-alone apps and flows
- Production and trial environments can be created by users unless disabled in the Admin center

Source: [Microsoft Business Applications Virtual Summit, May 6, 2020](https://aka.ms/practiceplaybooks)
Power Apps Center of Excellence

After a successful governance assessment, the next logical opportunity is a Center of Excellence.

Helping clients establish a Microsoft Power Platform CoE means investing in and nurturing organic growth while maintaining governance and control. A CoE is designed to drive innovation and improvement, and through its central function, can break down geographic and organizational silos to bring together teams. Customers can speed their digital transition by sharing knowledge and success, while at the same time providing standards, consistency, and governance to the organization.

A CoE can be a powerful way to help customers align around business goals rather than individual department metrics. Establishing a CoE is not a requirement to be effective with the Power Platform. However, they have been shown to have a positive effect on adoption and ease of administration at many organizations. To help support those efforts, Microsoft has created the Center of Excellence (CoE) starter kit.

The starter kit is a collection of components and tools that are designed to help get started with developing a strategy for adopting and supporting the Power Platform, with a focus on Power Apps and Power Automate.

Download the most updated assets from the GitHub repository. The kit provides some automation and tooling to help teams build monitoring and automation necessary to support a CoE. The foundation of the kit is a Common Data Service (CDS) data model and workflows to collect resource information across the environments in the tenant. The kit includes multiple Power Apps and Power BI analytics to view and interact with the data collected.

The kit also provides many assets that offer templates and suggested patterns and practices for implementing CoE efforts. Examples include onboarding new makers, provide training, and share best practices.

1 Stephen Jenner and Craig Kilford, Management of Portfolios 2011 Edition

Center of Excellence Starter Kit

While there are many opportunities for Centers of Excellence (CoE) in an organization, they work particularly well for low-code and rapidly changing environments. This is due to the coordination necessary between citizen developers, professional developers, IT professionals and those in business roles.

To be effective, a Center of Excellence must also evolve. Assisting customers is an interactive process that demands input from all functional areas and matures to support those different functional areas, and new platform features as an organization evolves.
Define and Design the Solution Offer

Understand the Cloud Business Models

With an understanding of the cloud application development opportunity in place, it is important to next understand the business models of the application development practice because not all revenue streams are equal.

**THERE ARE FOUR WAYS TO MAKE MONEY SELLING CLOUD:**

- ✓ Resale
- ✓ Project Services
- ✓ Managed Services
- ✓ Packaged IP

Partners that focus almost entirely on product revenue have the biggest barrier, and typically see margins in the range of 5–20%. This is because the margins for this revenue line are tied to vendor incentives. These partners are subject to changes in strategy and the desire to fund programs and have the least control over their own destiny.

Project services typically drive a range of approximately 35% gross margin, but this has been under pressure for some time. This is a result of little differentiation in the channel, which has caused billable price points to hold steady over the past five or more years. Concurrently, increasing salary and benefit costs of consultants and inflation have eroded profitability. As a result, aggressive and entrepreneurial members of the channel have adapted and gone after the higher margin opportunities of managed services, which generate on average 45% gross margin and packaged IP, which often exceeds 70%.

It is these partners who are setting themselves up to be rewarded. The partners who gravitated toward the recurring revenue lines and realized healthy growth are being presented with much higher valuations. This can have a dramatic increase in the cash event of the company and overall shareholder value – far higher than what a traditional partner focused on product and billable services can realize. A business plan is a critical asset to help envision and think through the details of a practice, identify gaps, and explain the fundamentals of the practice to others. Leverage the Cloud Practice – Develop a Business Plan guide for details, profitability scenario overviews, business plan templates, and financial models.

Read on to understand what types of project services, managed services, and intellectual property to consider in a cloud application development practice.
Understanding Project Based Services

Building a new practice is a daunting challenge. It is not that different from starting a business from scratch. Just like any business venture, it is important to start with a vision of what the business will do, what problems it will solve, and how it will make money.

Project based services are services to help customers design, configure, implement, or support a solution and are typically charged on a one-time or non-recurring revenue basis. In the Microsoft Cloud Practice Development Study, 791 partners identifying as having a cloud practice were asked what project services they offer within their practice. The results are below. Consider this data when designing project-based offerings.

<table>
<thead>
<tr>
<th>PROJECT SERVICES</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems Integration</td>
<td>54%</td>
</tr>
<tr>
<td>Architecture &amp; Design</td>
<td>54%</td>
</tr>
<tr>
<td>Backup &amp; Storage Deployment</td>
<td>50%</td>
</tr>
<tr>
<td>Proof of Concept</td>
<td>47%</td>
</tr>
<tr>
<td>Solution Analysis, Scope, &amp; Design</td>
<td>45%</td>
</tr>
<tr>
<td>Deployment Services</td>
<td>45%</td>
</tr>
<tr>
<td>Solution Configuration/Customization</td>
<td>44%</td>
</tr>
<tr>
<td>Solution Support &amp; Training</td>
<td>42%</td>
</tr>
<tr>
<td>Custom Application Development</td>
<td>41%</td>
</tr>
<tr>
<td>Disaster Recovery Deployment</td>
<td>39%</td>
</tr>
<tr>
<td>Cloud Readiness Assessment</td>
<td>35%</td>
</tr>
<tr>
<td>Training</td>
<td>35%</td>
</tr>
<tr>
<td>Data Architecture Design</td>
<td>34%</td>
</tr>
<tr>
<td>Health Checks and Monitoring</td>
<td>34%</td>
</tr>
<tr>
<td>Database Infrastructure Development</td>
<td>33%</td>
</tr>
<tr>
<td>Security &amp; Compliance Assessment &amp; Enablement</td>
<td>32%</td>
</tr>
<tr>
<td>Cloud Solution Costing &amp; Spend Optimization</td>
<td>31%</td>
</tr>
<tr>
<td>User Experience Consulting</td>
<td>31%</td>
</tr>
<tr>
<td>Application Modernization Development</td>
<td>30%</td>
</tr>
<tr>
<td>Network Readiness Assessment</td>
<td>28%</td>
</tr>
<tr>
<td>Bandwidth Planning</td>
<td>21%</td>
</tr>
<tr>
<td>Scalability &amp; Load Testing</td>
<td>20%</td>
</tr>
<tr>
<td>Security-Penetration Testing</td>
<td>15%</td>
</tr>
</tbody>
</table>

Plan a Proof of Concept

One of the key services in a project services arsenal is the Proof of Concept (PoC).

**PROOF OF CONCEPT HIGH LEVEL FLOW**

Why Perform a Proof of Concept?

Proofs of concept (PoC) serve several purposes. One of the primary aims is to overcome customer objections by demonstrating that the solution will solve the problem it’s being designed for. The PoC also can serve as evidence that a practice can use for future engagements with the same customer or with new customers. Many times, the output of a PoC can be added to a practice’s intellectual property list for demonstrations, or used to accelerate future solutions. Proof of concepts are one of the key tools when trying to displace the competition by rapidly showing value and hopefully a quick return on investment.

Define Scope

A proper PoC is defined with a clear and concrete scope. Conduct an architecture design session (ADS) to align business and technical requirements and set clear goals. This should include:

- Identify workloads and features to demonstrate.
- Determine what needs to be proven and which objections need to be overcome.
- Clearly demarcate responsibilities and set up organization.
- Set up subscriptions, define payment, and perform cost estimates of the PoC.
- Agree on the next step if success criteria are met.

Next Step

At the end of the PoC, create a report that explains the overall status of the PoC and any issues identified during the PoC. The report should elaborate on the pros and cons of the delivery and clearly explain the value prop of moving forward with a real implementation to the stakeholders along with expected production costs over time. Assuming the stakeholders agree to move forward, put a plan into place to deploy the PoC into production while ensuring that the PoC is designed for production usage.

POC Execution

Identify the technical resources needed for the PoC, including the technical implementation team and project management for tracking the progress of the engagement. Ensure all members of the team and the customer’s technical team (if participating) are clear on responsibilities. During the PoC it is important that the initial design follows best practices and is designed for production (scaled down) from the beginning. Ensure communication to all stakeholders on a regular basis to drive awareness of the progress of the PoC. Consider using a low-code platform like Power Platform to build prototypes quickly. Using Power Apps for rapid application development and integration with cloud services will streamline any prototyping effort. Power Apps is also available on desktop and mobile devices without additional effort.
Assessing for Readiness

Start by offering a cloud readiness assessment

One reason that organizations create PoCs is to de-risk aspects of their environment when they are unsure of their move to the cloud. Rather than committing time and resources to migrate large portions of their environment, they tackle small, but important, portions in the form of PoCs.

Whether organizations decide to create PoCs or not, they need a plan to successfully migrate to the cloud. Most customers today have already started taking cloud seriously. However, not every customer is savvy enough to build a robust cloud strategy. Many do not have granular visibility into their IT infrastructure – and are not able to quantify the benefits in cost, agility, speed, and time to market that cloud brings. Others, while aware of the benefits, do not know from where to start – and are unsure of how ready their staff, systems, tools, and processes are for public cloud. That is why most managed services engagements and significant cloud migration projects begin with a cloud assessment. A cloud assessment determines which workloads are ready to move to Azure, and in what fashion (lift-and-shift, re-platform, or replacement with a new deployment model). Customers require a partner who can provide the proper roadmap and guidance to optimizing their workloads in Microsoft Azure.

SOME OF THE KEY CUSTOMER CHALLENGES AND QUESTIONS INCLUDE THE FOLLOWING

• How to get more speed, agility, and performance for the IT assets?
• How to decide between hosted private cloud vs public cloud deployments?
• How to factor in both for the short- to medium-term IT strategy?
• How to select the first apps to take to cloud?
• Do to train the staff again after a cloud migration? What other staffing changes are needed?
• How to control ‘shadow IT’, or ‘zombie apps’ or workloads that are consuming more resources than the value they are delivering?
• How do I support low-code efforts and citizen developers?

A CLOUD READINESS ASSESSMENT USUALLY COVERS TOPICS SUCH AS

• What the estimated ROI for migrating workloads to Azure would be
• The readiness needs of the customer to support the workload in Azure
• Which applications and workloads should stay on premises
• Hybrid cloud connectivity requirements
• Low-code readiness and governance

After a successful cloud readiness assessment, the next logical opportunity is the cloud migration plan. Read the Azure migration guide for detailed information and strategies for a successful migration.
Understanding Managed Services

With managed services, partners help customers on a regular basis by offering white-glove services.

Managed service offerings can include planning, enablement, and day-to-day operations and support and can:

**HELP TO DEEPEN THE CUSTOMER RELATIONSHIP**
- Truly engage with customers, meet their needs, and solidify relationships
- Deep relationships unlock further revenue opportunities – especially with cloud migration and net new app development
- Offer managed services not just for Azure, and Power Platform but for all Microsoft cloud services products

**PROVIDE RECURRING REVENUE**
- Month in, month out billing to customers for managed services packages
- Ensures a constant revenue stream as opposed to a project-based method
- Revenue grows as customer cloud spend grows

**YIELD HIGHER MARGINS**
- Typical managed services gross margins (45%) higher than professional services (35%) and resale services (15%)
- Margins increase with scale and automation

**UNLOCK PORTFOLIO OPPORTUNITIES**
- Diversify a managed services portfolio with Azure and/or Power Platform
- Add new offers like cloud dev/test, cloud backup and data recovery, cloud native app design, etc. to a practice
- Serve global customers with Azure’s geographic presence
- Add managed services to support organizational adoption of Low-Code through Power Platform, such as Application Lifecycle Management, Support and Security

**MOST AZURE MSPS OFFER SEVEN DISCRETE AREAS OF FUNCTIONAL SUPPORT:**

1. Cloud assessment & planning
2. Cloud migrations/deployment
3. Infrastructure operations management
   - Configuration management
   - Automation/DevOps
   - Backup & Disaster Recovery
   - Identity management
4. Monitoring
5. Cost optimization
6. Security
7. Support
In the Microsoft Cloud Practice Development Study, 791 partners identifying as having a cloud practice were asked what managed services they offer within their practice. The results are below, with the top three application development and modernization managed services offered being Application Support/Help Desk and Application Lifecycle Management & Support at 41% and 25%, respectively. Consider this data when designing managed service offerings.

## MANAGED SERVICES

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Troubleshooting</td>
<td>47%</td>
</tr>
<tr>
<td>Backup and Recovery Services</td>
<td>46%</td>
</tr>
<tr>
<td>Support - Business Hours with After-Hours Coverage Options</td>
<td>45%</td>
</tr>
<tr>
<td>Update &amp; Patch Management</td>
<td>44%</td>
</tr>
<tr>
<td>Domain Management</td>
<td>43%</td>
</tr>
<tr>
<td>User Rights &amp; Account Management</td>
<td>42%</td>
</tr>
<tr>
<td>Virtual Machine Management &amp; Upgrading</td>
<td>42%</td>
</tr>
<tr>
<td>Application Support/Help Desk</td>
<td>41%</td>
</tr>
<tr>
<td>Network Monitoring</td>
<td>38%</td>
</tr>
<tr>
<td>Anti-Virus Monitoring</td>
<td>36%</td>
</tr>
<tr>
<td>Proactive Backups &amp; Anti-Virus Monitoring</td>
<td>34%</td>
</tr>
<tr>
<td>Single Sign-On Management</td>
<td>32%</td>
</tr>
<tr>
<td>Disaster Recovery Monitoring &amp; Testing</td>
<td>32%</td>
</tr>
<tr>
<td>Reporting and Analytics</td>
<td>31%</td>
</tr>
<tr>
<td>Azure Consumption Monitoring &amp; Optimization</td>
<td>31%</td>
</tr>
<tr>
<td>Identity Management</td>
<td>30%</td>
</tr>
<tr>
<td>Security Management &amp; Identity Protection</td>
<td>30%</td>
</tr>
<tr>
<td>Mobile Device Connectivity &amp; Management</td>
<td>29%</td>
</tr>
<tr>
<td>Product Support of Underlying Technologies</td>
<td>29%</td>
</tr>
<tr>
<td>PowerShell Script Automation</td>
<td>29%</td>
</tr>
<tr>
<td>Reports and Dashboard Maintenance</td>
<td>28%</td>
</tr>
<tr>
<td>Support - 24x7x365 Level 1 with Senior Staff on Call as Required</td>
<td>28%</td>
</tr>
<tr>
<td>Virtualization Support &amp; Efficiency Optimization</td>
<td>27%</td>
</tr>
<tr>
<td>Application Lifecycle Management &amp; Support</td>
<td>25%</td>
</tr>
<tr>
<td>Regulatory Compliance via O365 Infrastructure</td>
<td>25%</td>
</tr>
<tr>
<td>We do not offer any of these managed services</td>
<td>8%</td>
</tr>
</tbody>
</table>

Support as a Managed Service

It should go without saying that one of the most important functions of a managed service practice is supporting customers once their applications and data are firmly in the cloud or a hybrid deployment.

No matter how well a cloud or hybrid environment is planned, provisioned, operated, or monitored, problems will arise, and those problems will need to be remediated. It is the job of a Managed Service Provider (MSP) to offer support to customers to deal with outages, breaches, inefficiencies, and disaster scenarios. MSPs need to consider the level of support that makes sense for their practice — in terms of resources and revenue — as well as what makes sense to the customers they serve.

**KEY CUSTOMER CHALLENGES**

- They lack the expertise and resources to troubleshoot problems.
- They are unable to determine the root cause of performance issues and glitches.
- They have no knowledge of how to remediate problems when they correctly identify them.
- They do not want to spend time and resources fixing problems.

**KEY SERVICES FOR THIS OFFERING**

- **User Support:** Provide support for frequently asked questions, setup and usage, best practices, questions around billing and invoicing, break-fix support for developers, architecture design, and solution design support for architects.
- **System Support:** Provide customers with information on any service interruption, and relay expectations on when the system will be back online.
- **Product Support:** Provide support when the Microsoft product is not working as expected or the service stops working. Escalate to Microsoft when the issue cannot be resolved with existing documentation and/or training.
- **Extended Support Hours:** Many customers need the ability for 24/7 support but cannot justify the overhead internally.
- **Account Management:** Offering an account manager that is responsible for reporting service consumption and ultimately minimizing time to resolution is a service that can be offered at a premium.
- **Dedicated Support:** The value add of a dedicated support team cannot be understated. Engineering resources that already know the customers’ environment, including the business and technical reasons for how a solution was implemented can add a tremendous value over the lifetime of an agreement.

Adding managed support services to offerings increases their value and profitability. Learn more in this article: [Four ways owning the customer life cycle makes you more profitable](aka.ms/practiceplaybooks).
Understanding Intellectual Property

Intellectual property (IP) includes the proprietary elements partners develop in-house, own, maintain, and sell directly or as value added to project and managed services.

Productizing IP and creating repeatable processes has been a very successful strategy for many partners. Some partners are achieving gross margins more than 70% by productizing IP and selling it to their customers on a recurring revenue basis. Productizing IP helps create stickiness with customers and opens opportunities to sell solutions through the partner channel. Partners who do not want to create their own IP, can look to the partner ecosystem for incremental solutions that can be bundled with Microsoft’s offerings to round out the total solution.

There are multiple opportunities for building intellectual property that can be used to expedite engagements, or even as an entire engagement. With the ability to create fully automated solutions partners can challenge their creative side to offer up solutions that can save their customers money as well as add a striking differentiator to the offering. According to the Microsoft Cloud Practice Development Study of 791 partners identifying as having a cloud practice, the three most common application development and modernization IP services were custom portals, industry-specific workflows, and vertical-specific functionality. Consider this when prioritizing which IP services to include in an offer.

It may be a surprise to see that 23% of partners surveyed do not offer any of these IP services. In our conversations with partners this translated into one of two scenarios—they either did not have IP-based services, or they had very differentiated services from the list provided. This wide variability means there is an opportunity for partners to provide their own IP and differentiate their practice.

### INTELLECTUAL PROPERTY

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custom Portals</td>
<td>26%</td>
</tr>
<tr>
<td>Automated Backups &amp; Disaster Recovery</td>
<td>24%</td>
</tr>
<tr>
<td>PowerShell Scripts</td>
<td>24%</td>
</tr>
<tr>
<td>Virtual Machine Images</td>
<td>23%</td>
</tr>
<tr>
<td>Customer Self-Serve Portals</td>
<td>21%</td>
</tr>
<tr>
<td>Automated Monitoring, Alerting, &amp; Logging</td>
<td>21%</td>
</tr>
<tr>
<td>Office Connectivity &amp; Other Plug-Ins &amp; Add-ons</td>
<td>19%</td>
</tr>
<tr>
<td>Custom Cloud Assessments</td>
<td>18%</td>
</tr>
<tr>
<td>Customer Management Applications</td>
<td>18%</td>
</tr>
<tr>
<td>Pre-Configured Dashboards</td>
<td>17%</td>
</tr>
<tr>
<td>Industry/Function-Specific Mobile Apps</td>
<td>16%</td>
</tr>
<tr>
<td>External Portals for End Customer Information</td>
<td>15%</td>
</tr>
<tr>
<td>Additional Deployment or Configuration</td>
<td>14%</td>
</tr>
<tr>
<td>Documentation</td>
<td></td>
</tr>
<tr>
<td>Reference Architectures</td>
<td>13%</td>
</tr>
<tr>
<td>e-Commerce Functionality</td>
<td>13%</td>
</tr>
<tr>
<td>Turnkey BI Portals</td>
<td>13%</td>
</tr>
<tr>
<td>Automation Runbooks</td>
<td>12%</td>
</tr>
<tr>
<td>Batch/CLI Scripts</td>
<td>12%</td>
</tr>
<tr>
<td>Automated Load Balancing</td>
<td>12%</td>
</tr>
<tr>
<td>Online Training &amp; Self-paced Learning</td>
<td>11%</td>
</tr>
<tr>
<td>Automated Consumption Monitoring &amp; Reporting</td>
<td>11%</td>
</tr>
<tr>
<td>Vertical-Specific Functionality</td>
<td>11%</td>
</tr>
<tr>
<td>Middleware for Hybrid Synchronization</td>
<td>9%</td>
</tr>
<tr>
<td>We do not offer any of these IP services</td>
<td>23%</td>
</tr>
</tbody>
</table>


aka.ms/practiceplaybooks
The Importance of Developing Intellectual Property

Consider these tips to start productizing IP and go to market.

DEFINE THE SOLUTION
When partners were asked how they determined what IP to build, the answer was largely the same. Most of their customers were asking for the same thing or something very similar. And rather than continuing to do high-cost custom work for every customer, they decided to productize what their customers were asking for. They bring together sales, marketing, technical, and delivery teams to brainstorm and define what their solution will look like.

MAINTAIN RIGHTS TO THE IP
As partners make the transition from project or custom services to packaged IP, it is critical they revise their customer agreements to maintain the IP rights to the solutions.

ESTABLISH A RECURRING REVENUE MODEL
The beauty of deploying IP in the cloud is that partners can light up the recurring revenue model, which will have a positive impact on the valuation of their business and even help cash flows in the future. Microsoft is helping partners that build a repeatable solutions to promote their services via commercial marketplaces, such as AppSource, which makes their solution available to 100 million users worldwide.

CONSIDER A CHANNEL STRATEGY
One of the advantages of productizing IP is that it opens to sell the solution through channel partners. As a partner practice scales, it may want to set up a partner program to ensure partners are adequately supported and delivering the agreed upon quality of service.

CONSIDER A SOURCING STRATEGY
To create IP, it is not necessary for partners to have their own development organization. There are thousands of companies in the world that do software development as a service. But remember to secure rights to any IP in this case.

SELLING AND SUPPORTING IP
As with the managed service model, selling IP requires a support staff, but it is different than typical service deployment in that support becomes less costly as the IP service scales. Ensure that existing contracts can support this move and that a software licensing agreement is created and amended to contracts.
Define Vertical Offerings

Research shows that a key best practice among top performing partners is to target industries or verticals as a part of their go-to-market strategy. The following are examples of these types of specialization:

- Vertical specialization: manufacturing, banking, retail, education, healthcare, government
- Functional process specialization: accounting, human resources, marketing campaign management
- Technology specialization: systems management, analytics, enterprise resource planning

Think about it this way, if there is lack of differentiation in the market owing to approaches like verticalization, then price becomes the primary differentiator. This can erode margins and trap partners in a business they cannot afford to invest in as prices fall in order to win customers.

Once a primary vertical or set of verticals have been identified, it will be important to establish the practice as an expert in these selected areas. This can be achieved through the hiring of subject matter experts, attendance and participation in industry events and online forums, blogging about the chosen topic, sharing customers stories oriented to each vertical and creating content that speaks to the specific needs of customers in each vertical. Partners also focus on a specific technology and become known as early adopters and technology leaders. But the real value comes from IP or expertise in an industry, vertical or business process. The combination of adding IP to a vertical or business process expertise makes that advantage even more powerful. For additional ideas see the Digital Transformation Series: Transforming Products eBook.

![Worldwide Top Ten Industries for Hardware, Software, and Business/IT Services Spending, 2019 ($B)](chart)

The research with partners suggests mastering one specialization before adding additional ones. It is easy to be distracted, by saying “yes” to every request, and by diversifying into too many offerings. But in the long run, it is better to say “no” to those projects that are outside of the focus. Partners have shown benefit from having a strict focus on one key solution and growing by expanding one vertical at a time.

aka.ms/practiceplaybooks
Product Licensing and Strategy Options

Ways to Purchase Azure

**ENTERPRISE AGREEMENTS**

Another option is to purchase an Enterprise Agreement (EA). This arrangement is ideal for larger organizations that require the ability to create subscriptions for different departments, and even implement charge-back based on the department. Azure subscriptions within an EA agreement are managed through the Azure EA portal and allow for delegated administration and the ability to set quotas at the department or subscription level. For more information on how to get started with purchasing an enterprise agreement for Azure usage or adding Azure to an existing EA, visit: https://azure.microsoft.com/pricing/enterprise-agreement/.

**PAY AS YOU GO AND TRIAL ACCOUNTS**

Another option is to create a free trial with Azure and allow it to convert to a pay-as-you-go subscription. An Azure free trial is valid for 30 days and allows up to $200 in Azure credits. After the initial 30 days, any Azure usage is billed directly a credit card. Start a free trial by browsing http://azure.microsoft.com and clicking the free trial link.

**OPEN LICENSE**

Azure can also be purchased through a reseller using the Microsoft Open License Program. Open Value is the recommended program for small to midsize organizations with five or more desktop PCs who want to simplify license management, manage software costs, and get better control over their investment. It also includes Software Assurance, providing access to valuable benefits such as training, deployment planning, software upgrades, and product support to help boost the productivity of the entire organization. For more information on the Microsoft Open Licensing program, visit: https://www.microsoft.com/licensing/licensing-programs/open-license.aspx.
Calculate Azure Practice Costs

A cloud app development practice relies on Azure services to deliver customer success, so understanding the Azure-related expenses incurred in delivering a customer solution is critical.

Using the Azure Pricing Calculator to estimate Azure costs, build an estimate online and then export it to Excel for further refinement and analysis. This tool provides the retail rates (also known as the Pay-As-You-Go option) for the Azure services, so treat it like the “high end” of any consumption estimate.

Become familiar with the discounted pricing and Azure credits:

- **Graduated Pricing:** Services like Azure Blob storage have tiered pricing based upon the volume used.
- **Enterprise Agreement:** By making a three-year monetary commitment, Azure services are available at a discount off retail rates. To learn more, see Enterprise Agreements.
- **Azure Credits:** Microsoft Partners can receive Azure credits as a part of their benefit. For example, partners with the Silver Cloud Platform Competency receive $350 USD per month in Azure credits; those with Gold Cloud Platform Competency receive $600 USD per month in Azure credits.

It can be helpful to identify items that are used elastically versus items that have a fixed monthly cost. Significant savings can be achieved via elastic use of resources because they can be turned off (or paused) when they are not in use.

For example:

- **Elastic:** Azure Synapse Analytics is used only during month-end calculations. It can be paused for the rest of the month. Another example of elastic use is to leverage the auto-scale capabilities of the resource, such as auto-scaling the number of Azure App Service instances down in the evenings and back up during the workday.
- **Fixed:** Azure App Service hosting a website in a Web App. This Azure App Service needs to run 24x7 because visitors will arrive at all hours.

If it is unclear how much of a given resource will be used, consider building a scaled-down proof-of-concept to get an initial estimate.

**COST MANAGEMENT**

Manage cloud spend with transparency and accuracy.

Cost Management licensed by Cloudyn, a Microsoft subsidiary, helps make the most of Azure and other clouds by providing the tools to monitor, allocate, and optimize cloud costs an accelerate future investment with confidence.

- Monitor and visualize cloud usage and costs
- Gain rich operational and financial insights
- Improve organizational accountability
- Optimize cloud efficiency
How to Purchase Power Platform Subscriptions

Power Platform services can only be accessed by licensed users. Licensing requirements vary by product and scenario.

Licensing programs are channels for buying Power Apps, Power Automate and Power Virtual Agents. Partners can license Power Apps, Power Automate and Power Virtual Agents through Microsoft Volume Licensing (VL), Cloud Solution Provider program (CSP), and/or Web Direct (MOSP) programs.

In Volume Licensing, Power Apps and Power Automate are available through:

- Enterprise Agreement (EA)
- Enterprise Agreement Subscription (EAS)
- Service and Cloud Enrollment (SCE)
- Enrollment for Education Solutions (under the Campus and School Agreement) (EES)

Additional channels:

- Microsoft Online Government
- Microsoft Products and Services Agreement (MPSA)
- Microsoft Online Subscription Program (Web Direct/MOSP)

RESOURCES

➔ For information on Power Apps, Power Automate, and Power Virtual Agents licensing channels and segment availability, refer to the Product Terms and the Online Service Terms.

➔ For full feature descriptions, refer to the Power Apps, Power Automate and Power Virtual Agents Licensing Guide.

Participating in a Volume Licensing program typically involves signing an agreement and/or enrollment, meeting a minimum purchase requirement, and ordering licenses through a Microsoft Reseller. Visit the Microsoft Volume Licensing website to learn more about how to buy through Volume Licensing, find a reseller partner, and more helpful information.
Power Apps Licensing

Power Apps capabilities are licensed on a standalone basis. Additionally, limited Power Apps capabilities are included within various Office 365 and Dynamics 365 licenses; for more information, please see the sections titled Power Apps use rights included with Dynamics 365/Office 365 licenses later in this document. At a high level, the licensing structure offers two options:

<table>
<thead>
<tr>
<th>Licensing Scheme</th>
<th>Per user, per app</th>
<th>Per user</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Allow individual users to run applications(^1) for a specific business scenario based on the full capabilities of Power Apps</td>
<td>Equip users to run unlimited applications based on the full capabilities of Power Apps</td>
</tr>
</tbody>
</table>

\(^1\) Each license allows end user to run 2 custom apps and access 1 custom portal

Standalone Power Apps licensing customers that need general purpose and full capabilities of the platform should license Power Apps on a standalone basis. Licensing is supported on both a “per user” basis as well as a “per user, per app” basis. Both standalone licenses are fully featured:

**POWER APPS PER APP PLAN**

Power Apps per app plan allows organizations to get started with the platform at a lower entry point. Customers on the per app plan typically start with 1-2 leading use case scenarios before adopting the platform more broadly. Power Apps per app plan is also an attractive licensing option to license end users that run only a few apps. Power Apps per app plan allows individual users to run 2 custom applications (be it canvas or model or both) and access 1 custom portal based on the full capabilities of Power Apps.

**POWER APPS PER USER PLAN**

Power Apps per user plan allows organizations to go all in on their digital transformations. Customers get access to unlimited apps, scenarios, and portals.

**POWER APPS USE RIGHTS INCLUDED WITH DYNAMICS 365 LICENSES**

Limited Power Apps use rights are included within the same environment(s) as the licensed Dynamics 365 application(s) to allow users to customize & extend Dynamics 365 applications. Use of Power Apps capabilities included with Dynamics 365 licenses must be only within the context of the licensed Dynamics 365 application. Further, the specific use rights vary by Dynamics 365 license type. For a complete list of Dynamics 365 licenses that include Power Apps use rights, please see Power Apps, Power Automate and Power Virtual Agents Licensing Guide.

**POWER APPS USE RIGHTS INCLUDED WITH OFFICE 365**

Licenses Limited Power Apps use rights are included with select Office 365 licenses to allow users to customize & extend Office 365 for productivity scenarios. For a complete list of Office 365 licenses that include Power Apps use rights, please see Power Apps, Power Automate and Power Virtual Agents Licensing Guide.
POWER APPS PORTALS
Power Apps Portals deliver the capability to build standalone, external-facing portals over the Common Data Service. For more information on Power Apps Portals, please visit https://powerapps.microsoft.com/en-us/powerapps-portals/

POWER AUTOMATE SUBSCRIPTIONS
General purpose Power Automate capabilities are licensed on a standalone basis. Limited Power Automate capabilities are also included within Power Apps, Office 365 and Dynamics 365 licenses; for more information, please see the sections titled Power Automate use rights included with Dynamics 365/Office 365 licenses later in this document. High level overview of the licensing structure is provided below.

STANDALONE POWER AUTOMATE LICENSING
Customers that need full-fledged, general purpose workflow, business process automation or Robotic Process Automation (RPA) capabilities, should consider purchasing standalone Power Automate licenses. Licensing is supported on both a “per user” basis as well as a “per flow” basis. All standalone licenses include the full capabilities on Power Automate with the exception of RPA functionality which is only included in Power Automate per use with attended RPA plan.

POWER AUTOMATE PER USER PLAN
Power Automate per user plan equips individual users to create and run unlimited workflows and business processes based on their unique needs. The per user plan is intended to support the broad adoption of an automation culture in an organization.
Define a Pricing Strategy

Pricing is very dependent upon the types of solutions being offered, and standard pricing practices are still evolving. In general, both flat rate and consumption- or subscription-based pricing models are the most predominant in low-code practices.

**PROJECT SERVICES**

Project Services are often billed using the time and materials methodology and based on fixed hourly pricing of resources. For example, a partner may have a Project Manager, Developer, and Architect working on the same project and each earning a different hourly rate. Many partners are beginning to adopt a “bucket of hours” approach to pricing low-code project services. Often apps can quickly be developed, and this approach allows for continuous engagement with customers without having to create new agreements and invoices. This approach is ideal for virtuous pricing. Virtuous pricing is about using the price as a sales weapon. The goal of virtuous pricing is to create a virtuous sales cycle for customers, where each sale encourages the next sale within the customer organization. It fosters product adoption and proliferation.

**MANAGED SERVICES**

Few customers have the time, resources, or the capabilities and staff required to monitor every aspect of their solution and deployment. Customers are increasingly searching for and demanding additional strategic support services that are consumed on a subscription basis. They want to ensure their business application solutions will continue to deliver the value and performance that compelled them to implement them in the first place. Low-code managed services such as governance, CoE, and citizen developer enablement are typically priced using a flat annual price or a subscription model. Listing a managed service in Microsoft’s commercial marketplace will enable Azure Lighthouse scenarios. When a customer accepts a Managed Service offer, they are then able to onboard resources for Azure delegated resource management. Consider browsing managed services listed in the Commercial Marketplace to ensure services are competitively priced.

**INTELLECTUAL PROPERTY**

The most common approach to obtaining an income stream based on intellectual property is by providing a subscription fee service to access the benefits of a low-code app or solution. The subscription can be charged on a per-user, per-app, per-request, or some type of flat subscription fee. Proprietary Automations, Virtual Assistants, AI models, and Power Apps are great candidates for the subscription model. One downside to this is that customers are not tied to the service, and they can easily switch out to a competitor service. It is imperative to ensure customer satisfaction, quality software, and quality data. This model works well for companies that can accept not having upfront revenue and can accept a variable income. This is often the case when companies are switching from predominantly selling products to selling an equivalent service. Enhancement and supporting labor is a variable cost driven by demand for the service.

**UPFRONT FEES**

Another consideration of pricing strategy is whether to charge customers an upfront fee. Reasons for doing so, including providing some working capital to get resources going in the early days of building a practice, mitigate the risk that a customer abandons a project without any payment, and ensure the customer is invested in the project. It can also serve to minimize the financial impact on a Practice when the customer has requested longer payment terms.
PAYMENT TERMS

The final consideration for a pricing strategy is the payment terms. This is defined as the duration of time between when the customer is invoiced and when payment is received. Payment terms are measured in days; for example, 10 days, 15 days, 30 days, or 90 days. These are usually expressed as NET 10, NET 15, NET 30 or NET 90 payment terms. In addition, consider offering the customer a discount for prompt payment on the shortest payment. For example, NET 2/10/30 is used to describe terms where a 2% discount is provided for payment received within 10 days of invoicing, otherwise the full invoice amount is due in 30 days.

PRICING COMMUNICATION

Price is rarely mentioned on service provider websites. The sales copy speaks of partnerships and the price is often revealed only after speaking to a sales representative. In an offer-based strategy, this will not work. In the business of cloud, price is always disclosed up front. Because price is part of a value proposition and solution offer, pricing is something that should be shared openly.

FLAT RATING

Flat rating is one of the most powerful business pricing strategies and while it can have varying levels of sophistication (i.e.: banks and insurance firms use sophisticated versions of this based on significant work by their actuaries), the model can be described and implemented in a simple fashion. The basic idea is that Partners provide a certain quantity of value for a set cost that all customers pay. Some customers may come close to (or even exceed) using the full value of what they pay for, while the rest are nowhere close. A well-crafted model identifies the average consumption across all of customers, and creates a situation where over 80% of the customers are using less than what they are paying for (and ideally less than the average consumption) and fewer than 20% are using more.
Maintaining the Solution

In addition to providing the customer support, maintenance and on-going feature requests should become a lucrative part of the practice.

MAINTENANCE CONTRACTS

Before any effort with the customer begins, include a maintenance contract, which defines how issues discovered within the application get fixed and how the application is kept up to date.

There are two approaches a maintenance contract can take:

- **Recurring maintenance fee**: In this approach, a maintenance contract is written to provide up to a certain number of hours of maintenance for a recurring price. For example, it might cost the customer $4,000 per month for up to 40 hours of maintenance each month. This maintenance would be used to address either break/fix issues or could be applied to new feature requests.

- **Time and materials fee**: Alternately, the customer could have the option of paying for break/fix and new feature work on a time and materials basis. This creates new projects for each set of new work items which are billed accordingly.

In either situation, the goal is to keep a satisfied customer using the solution and both approaches provide additional revenue. However, a recurring fee model provides an increased likelihood that the fee is paid but not always fully consumed by maintenance efforts - thus increasing practice profits.

When maintenance contracts expire, companies face the risk of disruptions to their critical application services. Therefore, they are incented to ensure they receive timely notification of any pending contract expirations and respond to them accordingly. Ideally, this leads to timely renewals and perpetual fees for the practice.
Identify Partnership Opportunities

Partner to Partner

Facilitate growth opportunities and fill solution and talent gaps through partnerships

Learning how to develop successful partnerships with others in the Microsoft partner ecosystem can drive efficiencies, revenue, and profits. Digital transformation is changing the way partners approach their marketplaces. It requires the delivery of integrated solutions to address unique customer needs, the capacity to scale and reduce the cost of selling into new markets.

Partnering together successfully starts with defining the practice’s value as a business and its goals. That means answering questions such as: What is your mission statement regarding partnerships? How will your partners benefit from and monetize the solutions you provide? What gaps do you have in your offerings that could be filled by strategic partners? What steps do you need to take to engage with partners in a structured way?

PARTNER-TO-PARTNER SUCCESS FORMULA

To help partners capture these opportunities, Microsoft has collected the strategies, best practices, and resources for successful partner-to-partner (P2P) collaboration. The partnering success formula is a three-stage framework for establishing and managing effective partnerships:

- **Ready** – This stage lays the groundwork for P2P success by defining the value that a partner would bring and the practice’s value as a strategic partner. Assess the investment, value chain, solution, talent gaps, and go-to-market partnering plan.
- **Connect** – This is where strategic partners are identified, go to market together and effectively manage the partnership. Processes more granular at this stage on how to sell and close deals, with an understanding of how the business will be reviewed.
- **Grow** – Maximizing the partner opportunity means constantly pushing for better results and seeking new and better partnerships to drive deeper penetration in the existing customer base and expand the customer base with joint offerings and investments. Joint marketing strategies expand market reach, generate leads, and increase customer loyalty and retention.

THE ISV + CHANNEL-BASED MSP COMBINATION

With a little help from a channel-based MSP, an ISV partner can earn greater reach for its IP solutions. Likewise, a partnership with an ISV can lead to an expanded partner channel for channel-based MSPs. Some partner combinations meld together well to create success. To help find the right mix, here’s a partner recipe for success that works.

ACCELERATING DIGITAL TRANSFORMATION

The pace of change impacts how to partner and add value. New business models, subscription pricing, and resource gaps make partnering essential to scale and respond to these conditions. Microsoft has linked up its network of partners, making it possible to access the greater partner ecosystem, reduce the cost of selling, increase efficiency and solution delivery, and drive profits.
Pre-Sales, Post-Sales, and Support

Define the technical effort required before the sale (pre-sales), after the sale (post-sales), and in support of the sale.

PRE-SALES

- Discuss the customer requirements and address their objections.
- Develop technical pitch decks. Leverage the Cloud Adoption Framework.
- Technical demo: This demo may be generic or may need customization to better meet the requirements of the customer. The goal of the technical demo is to inspire confidence by demonstrating that something like it has been done before.

POST SALES

- Addressing follow-on customer concerns about the technology or implementation.
- Providing training to increase awareness of the solution that will be implemented.
- Providing a technical demo more customized for the customer to better understand their needs before moving on to the next phase of the project.
- Following up with the customer to ensure implementation is on track and meeting expectations.

For guidance with sales efforts, consider the learning paths available in the Microsoft Partner Network Learning Portal.

SUPPORT

Define the customer support program and processes. This includes:

- Defining the support model
- Provisioning the support infrastructure
- Defining and implementing the escalation process
- Selecting and enabling the support options for Azure

See the section Supporting your Customers for more information on available resources and using Partner Advisory Hours.

Agile as a Presales tool

For projects in a cloud application development practice, agile methodologies are not only a means for executing project delivery, but also a pre-sales tool. Consider taking the following approach:

- Qualify the customer to ensure there is budget, interest, and involvement of the appropriate stakeholders. This is not something to offer to every lead as it incurs costs. Focus on potential customers who are further along in their purchasing evaluation.
- For qualified customers, consider performing rapid prototyping to ideate with the customer and create a vision of what the results could be like.
- Take an agile approach to developing the prototype. Leverage short sprints during the prototype development by implementing the minimal set of requirements that will help clarify the vision with the customer, collecting feedback from the customer and refining the prototype.
- The tangible outcome of a prototype or proof of concept demonstrates an understanding of their requirements.
- The ability to quickly deliver tangible results builds trust in the ability to execute. It is a great opportunity to highlight the practice’s unique capabilities and identify potential follow-on projects to assist the customer.
- The process of iterating on the prototype with the customer is a great way for the customer to experience what it would be like to work on the larger project.
- Once a customer has the sense of a tangible, working prototype in hand, it becomes more difficult for them to select competitors who have only provided written proposals.
Atea Global Services focuses 100% of our Cloud R&D efforts on Microsoft Azure. This gives us a unique in-depth expertise in all Azure technical capabilities and allows us to maximize value and efficiencies for our managed services customers.

MAREKS ZIRDZINS
CTO, Atea Global Services
Sales Compensation Planning

Compensation for sales executives is an area all partners grapple with. Our research revealed three core principles of sales compensation.

REWARDING SALES ACTION

Reward an array of sales activities, not just the final close. Sometimes this can be challenging. The reward does not have to be big, but there must be something to reward the right sales behavior that will lead to the final sale.

THE LEVEL OF INCENTIVE VERSUS REQUIRED SELLING EFFORT

Not all sales are created equal. Sometimes a renewal, for instance, can be much easier than acquiring a new customer. Consider the effort put in when setting up a compensation model. Reward the right behavior that gets the result. Do not over-compensate for routine activities that require less effort and expertise. Always consider how much of the sales process can be done by lower-level sales staff versus the sales executive. This is also a way to keep sales compensation costs manageable.

SIMPLE ENOUGH TO BE UNDERSTOOD AND DRIVE ACTIONS

Always keep it simple. Salespeople are brought on for their ability to communicate, engage and educate customers, and the always-important act of closing. Do not overly complicate the sales actions required for compensation. Drive the behavior that leads to closing business. Reward that behavior and get sales reps to see it through to the close of business.

Remember that everyone is a seller in most companies. Train all employees in appropriate sales techniques. Everyone should be on the lookout for existing customer opportunities as well as new ones. Teach them the signs and how to react. Reward everyone in the company for positive sales behavior.

SALES COMPENSATION VARIABLES

When deciding how to calculate the compensation for the sales incentives, consider the variables that help describe the magnitude of the benefit of the sale to the company and the effort required to close the sale. Examples include:

- **Expected duration**: How long is the contract for? Longer contracts are more lucrative to the company and should have higher valued incentives.
- **Expected number of units**: How much of the service is purchased? Higher quantity purchases deliver more value to the company and should have higher valued incentives.
- **Feature options**: Some features are more profitable to the company than others. Consider incentivizing the higher profit margin features with higher valued incentives to drive sales.

POSITIONING THE OFFER VIA INCENTIVES

Depending on the maturity of the practice, it may require different incentives to encourage the selling of the offer. This diagram illustrates a decision-making process to finetune incentives based on how the offer’s incentives compete with other company incentives.

© 2016 Lemon Operations for Microsoft

aka.ms/practiceplaybooks
Introduction

The previous section looked at the various services that partners can pursue as they set up or build their cloud practice. With avenues of partner success identified, the next step is building and training a team.

This section will offer role definitions and guidance on the skills needed for an application development-focused practice. It will cover the necessary technical, sales, and marketing training, which starts with an assessment of current skills, and a plan for filling the gaps, whether through new hires, contractors, partnering or training.

To start the hiring processes, there are detailed job descriptions, tips on where to look for resources, the factors to consider in a candidate’s skillset, and what to expect to pay by role and region.

A big focus of this section is ensuring all practice resources are trained and continue to receive ongoing training.

RECRUIT, HIRE, ONBOARD, AND RETAIN TALENT PLAYBOOK AND HIRE AND TRAIN GUIDE

Leverage the Microsoft resources available in the Recruit, Hire, Onboard, and Retain Talent playbook and the Hire and Train guide for comprehensive job descriptions and to learn best practices to find the right people, grow their skills, and retain talent.

ADDITIONAL RESOURCES

The Microsoft DevOps Blog is a resource for learning what the Microsoft DevOps team is building and designed around topics such as DevOps, Git and Agile. The DevOps Blog site provides:

- The latest up to data public announcements about Microsoft’s DevOps tools and features releases
- Links to other helpful Microsoft Product Engineering team blogs

aka.ms/practiceplaybooks
Hire, Build, and Train the Team

Create a Hiring Plan

Starting a new practice means evaluating existing team members (if any) and then deciding whether to hire or train the existing team.

Before hiring for an application development practice, it is a good idea to start with an assessment of current skills capability to determine where to invest in new hires versus training or hiring vendors to fill any role gaps. All partners are encouraged to take the Partner Transformation Readiness Assessment when creating a hiring plan. It is a great tool for determining current business and technical capability and which areas of the practice require attention. Upon completion, partners receive a Partner Transformation Index score that shows their current cloud maturity level, and how they ranked compared with other Microsoft partners. Partners also receive recommendations on next steps to grow their capability.

Successful practices begin with people, so it is essential to have the right people in the right roles. For an application development practice, the following roles are recommended across technical, sales, and support functions. Practices that are just getting started may not be able to fill all roles. In this situation, one person will likely be required to fulfill the duties of multiple roles.

**ENGAGEMENT RESOURCES**

- **Technical Sellers** with strong communications skills and competencies in the technology being presented to the prospective customer
- **Customer Success Managers** to be present throughout the sales process and act as a primary point of contact. This person also can serve an advisor to the Center of Excellence team
- **Solution Delivery Manager** who will help implement the solution for the customer
- **Support Technician** who assists the customer outside of solution delivery

**THE TECHNICAL TEAM**

- **App Maker** with skilled in key technical business analyst tasks such as data modeling, basic UX design, requirements analysis, and process analysis.
- **Cloud Architect** with strong customer facing skills and a broad skillset across cloud, data, app development, infrastructure, networking, and security
- **Functional Consultant** with deep on the technical aspects of Power Apps solution implementation
- **Senior Developer** with in-depth knowledge of the full cloud software development cycle, from architecture to testing
- **Developer** who designs, builds, and maintains efficient, reusable/reliable code

**SALES AND MARKETING**

- **Solution Sales Manager** who leads, develops, and manages a team of high performing sales and technical pre-sales/post-sales. Identify and fill the gaps
- **Cloud Solutions Sales Manager** who is a great sales coach and leader, and responsible for delivering sustainable new business growth across segments; providing thought-leadership; and driving solution sales across workloads and solution areas
- **Technical Sales Manager** who leads a team of solution architects and tech sales professionals to uncover and support the business and IT goals of customers
- **Product Marketing Manager** who creates the go-to-market strategy, executing on key campaigns and customer outreach creates the brand and accompanying messaging, and owns social media as well as traditional marketing vehicles such as web sites, demos, and data sheets

Comprehensive job descriptions for these and other key roles in the Recruit, Hire, Onboard, and Retain Talent Playbook or the Hire and Train Guide.

aka.ms/practiceplaybooks
Technical roles

These roles form the heart of a partner solution. Hiring the right people can turn vision into reality.

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>App Maker</td>
<td>Builds solutions to simplify, automate, and transform tasks and processes for themselves and their team where they have deep expertise in the solution domain. They are skilled in key technical business analyst tasks such as data modeling, basic UX design, requirements analysis, and process analysis.</td>
</tr>
<tr>
<td>Cloud Architect</td>
<td>Drives customer initiatives in collaboration with customers. The CA is a technical, customer-facing role that is accountable for the end-to-end customer cloud deployment experience. CAs own the technical customer engagement, including architectural design sessions, specific implementation projects and/or proofs of concepts. The ideal candidate will have experience in customer-facing roles and success leading deep technical architecture and application design discussions with senior customer executives to drive cloud deployment. A computer science or related engineering degree is required.</td>
</tr>
<tr>
<td>Functional Consultant</td>
<td>Configures and implements the system. This person is not necessarily an expert on industry processes but is deeply knowledgeable on the technical aspects of solution implementation. This role is typically trained from graduate or industry hires and experience ranges from 6 months to 10 years. The technical consultant requires deep product training and should be skilled at the subsequent lifecycle management required to ensure continued use of the service.</td>
</tr>
<tr>
<td>Developer</td>
<td>Designs and builds applications that solve business needs. Understand the aspects of the development cycle, from architecture to testing, and knowledgeable of cloud services landscape including IaaS, SaaS, and PaaS. Designs, builds, and maintains efficient, reusable, and reliable code. Experienced in projects using agile methodologies, such as the Scrum approach to agile software development. Able to effectively gather customer requirements, ask clarifying questions, and translate these requirements to actionable tasks.</td>
</tr>
<tr>
<td>DevOps Engineer</td>
<td>Responsible for the automation of development and deployment activities. They must be familiar with DevOps tools such as Jenkins, Puppet, Ansible, Redgate, Azure ARM Templates, Azure DevOps and many more. They should have the skills to implement and support development activities via Continuous Integration (CI), Continuous Deployment and Delivery (CD) methods. They are very skilled at setting up rigorous testing mechanisms to ensure high quality automated releases are delivered to customers.</td>
</tr>
</tbody>
</table>

aka.ms/practiceplaybooks
Cloud Support Engineer

Assists internal and external customers who are having technical issues with the product, or who need help realizing the full benefit of delivering their cloud-based workloads. They can help customers navigate the operational challenges of cloud computing.

Cloud Administrator

Manages cloud tenants, interfaces with the support engineers and the cloud provider support, deploys cloud applications based on deployment templates and DevOps processes and has deep technical knowledge of the various cloud technologies (Networking, IaaS, PaaS, Security). In some scenarios it may be helpful to have a Cloud Administrator on the team. While administering the Cloud is not a developer role, often Cloud environments will need to be provisioned and configured for developers.
Leadership Roles

Consider the following management positions if the development effort will involve eight or more technical staff. However, in smaller teams, senior-level employees sometimes take on management duties along with their other responsibilities, removing the need for dedicated managers.

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chief Data Officer (CDO)</strong></td>
<td>Drives the definition of balancing data governance, protection with data discovery and analytics. This role establishes the organization’s data analytics platform strategy, selection of appropriate technologies and focuses on strategic and timely talent acquisition. An important responsibility of the CDO is in creating a learning culture within the organization by providing for and fostering an environment for learning.</td>
</tr>
<tr>
<td><strong>Security Officer</strong></td>
<td>Assesses and advises across the company group for data protection and privacy matters related to security. This role is a subject matter expert in the handling of personal data and ensures there are policy and compliance processes to comply with local data protection legislation. Expert knowledge of global and national data protection law and practices, as well as the General Data Protection Regulation (GDPR) is a requirement, as well as the ability to fulfil the tasks referred to in Article 39 of the GPDR. Experience in conducting data privacy compliance, reviews, and audits is beneficial.</td>
</tr>
<tr>
<td><strong>Product Manager</strong></td>
<td>Establishes and sustains the business case for the project and plays a key role in identifying and setting priorities across the target audience. This includes ensuring that business expectations are clearly articulated and understood by the project team, and that the functional specifications respond to business priorities. Product Management owns the vision statement for the project, is responsible for high-level project communications such as business projections, project costing, and contract negotiation, and communicates the high-level milestones to the target audience and other team members.</td>
</tr>
<tr>
<td><strong>Program Manager</strong></td>
<td>Responsible for the specification for an application’s features and functionality and coordinates the day-to-day communication required to develop and deliver the application effectively and consistently within organizational standards. Provides key communication and coordination, and with input from other team leads, assists Product Management in articulating the vision for the project. Using this vision, Program Management drafts the initial version of the functional specification and is considered the keeper of the functional specification. Program Management is responsible for all activities associated with analysis, specification, and architecture. Program Management is also responsible for defining how the project will interoperate with external standards, maintaining external technical coordination and communication, and managing the master schedule.</td>
</tr>
</tbody>
</table>

aka.ms/practiceplaybooks
Support Roles

A lot of effort goes on behind the scenes, or in positions that involve post-sales customer engagement. To ensure long-term project success, consider hiring some of these support roles.

Support roles are generally similar with those for any other software solution, with one exception: monitoring model performance. In this case, a data scientist team will need to be involved to assist in crafting the dashboards that the customer support team monitors and may need to be available to assist in escalations when a non-performing model has been detected.

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Customer Success Manager</strong></td>
<td>Passionate about engaging customers and helping them expand their use cases. They have excellent relational skills and can create win/win environments for all parties they work with. In their day-to-day responsibilities, they own the overall relationship with assigned clients by increasing adoption and ensuring retention and satisfaction. They make a large impact on an enterprise security business by establishing a trusted and strategic advisor relationship with each assigned client, driving continued value of the products and services. The Customer Success Manager will help drive sales by working to identify or develop upsell opportunities. Additionally, they will advocate customer needs and issues cross-departmentally and program manage account escalations. Qualifications include prior experience in customer success or equivalent history of increasing customer satisfaction, adoption, and retention.</td>
</tr>
<tr>
<td><strong>Quality Assurance (QA) / Test Technician</strong></td>
<td>Thorough and detail-oriented and should work well with established processes. The primary goal of this role is to help avoid defects in the final product or solution. This person will be involved throughout the development process and use their intuition to problem solve and identify technical, procedural, and usability concerns. They must take meticulous notes, be organized about recording process steps, and work well with others since they will be coordinating with technical and management teams to ensure that the correct measures are put into place to align the final product with the initial goal.</td>
</tr>
<tr>
<td><strong>User Support Specialist</strong></td>
<td>Assists customers who are having technical issues with the product, or who need help realizing the full benefit of the solution in delivering their cloud-based workloads. They will likely be in position to help customers navigate the operational challenges of cloud computing, so thoroughly training them on both product and the infrastructure is paramount to their success, and ultimately, customers’ satisfaction. Qualifications include technical support experience and great communication and interpersonal skills (soft skills). Experience with cloud technologies is a major plus.</td>
</tr>
</tbody>
</table>
Job Descriptions for the Technical Team

The following tables provide detailed job descriptions to use for hiring key technical resources. All technical skills, non-technical skills, certifications, and technologies listed are potential items a candidate should have, but no candidate will have all the items listed.

**CLOUD ARCHITECT**

A Cloud Architect (CA) drives Azure-based customer initiatives in collaboration with customers and participates in both pre and post-sales (e.g., deployment) efforts. The CA is a technical, customer-facing role that is accountable for the end-to-end customer cloud deployment experience. CAs own the Azure technical customer engagement including architectural design sessions, specific implementation projects and/or proofs of concept, and deployment. The ideal candidate has experience in customer-facing roles and success leading deep technical architecture and application design discussions with senior customer executives to drive cloud deployment. Five or more years of architecture, design implementation and/or support of distributed applications designed to run in the cloud or across hybrid cloud and on-premises environments. Experience in consultative sales, design and deployment of projects strongly preferred. A computer science or related engineering degree is required.

**Technical Skills**

- Deep understanding of cloud computing technologies, business drivers, and emerging computing trends
- Solid understanding of cloud virtualization, storage, and networking
- Understanding of cloud governance technologies for cost management and control
- Understanding of common database technologies such as SQL Database/Server, Oracle, MySQL
- Deep technical experience in enterprise mobile, identity, and access control, & security solutions
- Working knowledge with AGILE development, SCRUM and Application Lifecycle Management (ALM) with one or more of the following programming languages: PowerShell, Bash, .NET, C++, Java, JSON, PHP, Perl, Python, Ruby on Rails, HTML, CSS, JavaScript, Responsive Web Design
- Solid understanding of modern DevOps practices, including automation, continuous delivery, continuous deployment, and continuous integration methodologies
- Deep understanding of cloud-based Business Continuity and Disaster Recovery practices

**Non-Technical Skills**

- Building customer/partner relationships
- Proven track record of building deep technical relationships with senior executives and growing cloud consumption share in large or highly strategic accounts
- Proven track record of driving decisions collaboratively, resolving conflicts & ensuring follow through
- Presentation skills with a high degree of comfort with both large and small audiences
- Prior work experience in a consulting/architecture position within a software & services company
- Problem-solving mentality leveraging internal and/or external resources.
- Exceptional verbal and written communication.

**Certifications**

- Azure Solutions Architect Expert
- MCSE Cloud Platform and Infrastructure
- MCSE Data Management and Analytics
- MCSA Cloud Platform
- MCSA Linux on Azure
- AWS Certified Solutions Architect – Associate and/or Professional
- AWS Certified Developer – Professional

Exam priority:
- [Microsoft Azure Architect Design Exam AZ-301](https://aka.ms/az301)
- [Microsoft Azure Architect Technologies Exam AZ-300](https://aka.ms/az300)
**Project Experience Types/Qualities**

- 3+ years of implementing and maintaining cloud monitoring systems and monitoring cloud services for errors and issues
- 5+ years of setting up and deploying large software packages to cloud systems
- 3+ years migrating on-premises environments to cloud, virtual network deployments, and cloud security implementations using best practices
- 3+ years of setting up and maintaining hybrid backup and restore systems
- 5+ years of experience with scripting and DevOps for cloud

**Technologies**

- Active Directory, Ansible, AWS, Azure, CentOS, Chef, Citrix, Confluence, Docker, Excel, firewalls, Jira, Microsoft Project, MySQL, Node.js, Office 365, PostgreSQL, Puppet, ServiceNow, SharePoint, SQL Server, Visio, VMware
- Programming/Scripting Languages: C#, Java, JavaScript, Perl, PowerShell, Python, Ruby, SQL
- Platforms: Linux, Windows

**DEVELOPER (Senior, Junior, Mobile, Full-Stack, etc.)**

A Developer enjoys the challenge of designing and building applications that solve today's business needs. This person must be willing to keep up to date with the fast-moving cloud services landscape including IaaS, SaaS, and PaaS designs to remain an effective member of the development team. A software developer should work equally well on a team or independently, given a set of project requirements or tasks. This requires the developer to possess Excellent communication and collaboration skills. The developer should understand the aspects of the software development cycle, from architecture to testing. This person designs, builds, and maintains efficient, reusable, and reliable code. This person should have experience with participating in projects using agile methodologies, such as the Scrum approach to agile software development. They should also be able to effectively gather customer requirements and ask clarifying questions when needed and translate these requirements to actionable tasks they perform, or delegate to members of the team. Five plus years of experience with deep understanding of web technologies, API consumption/development, full lifecycle application development, database development (relational and/or NoSQL), and enterprise/cloud architecture. Technical BS degree in Computer Science desirable.

**Technical Skills**

- Deep understanding of application development practices and design patterns, application lifecycle management, and common software architectures
- Solid understanding of modern DevOps practices, including automation, continuous delivery, continuous deployment, and continuous integration methodologies
- Solid understanding of common database technologies, such as SQL Database/Server, Oracle, MySQL, PostgreSQL, MongoDB
- Strong understanding of Agile development best practices
- Understanding of software testing and optimization methodologies, including writing unit tests and executing performance and regression testing

**Non-Technical Skills**

- Proven ability to develop software using Agile methodologies
- Proven track record of creating rich documentation for software solutions
- Presentation skills with a high degree of comfort with both large and small audiences
- Proven track record of driving decisions collaboratively, resolving conflicts and ensuring follow through
- Problem-solving mentality leveraging internal and/or external resources
- Exceptional verbal and written communication
### Certifications
- Microsoft Certified Azure Developer Associate
- MCSD App Builder
- MCSE Enterprise Devices and Apps
- MCSE Business Intelligence
- MCSA Cloud Platform Solutions Associate
- MCSA Linux on Azure Solutions Associate
- MCSE Cloud Platform and Infrastructure
- AWS Certified Solution Architect
- AWS Certified Developer

### Exam priorities:
- Developing Azure Solutions 70-532 (retired)
- Microsoft Certified Azure Developer Associate

### Project Experience

<table>
<thead>
<tr>
<th>Types/Qualities</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-10+ years of experience developing applications, consuming and developing APIs, and following technical best practices and design patterns</td>
</tr>
<tr>
<td>3-5 years of experience with creating pilots, prototypes, and proof-of-concepts to provide validation of specific scenarios</td>
</tr>
<tr>
<td>4-6 years of experience developing hybrid solutions on-premises or in the cloud</td>
</tr>
<tr>
<td>3+ years of experience working in an Agile environment practicing CI/CD</td>
</tr>
<tr>
<td>3+ years of experience working with source code repository management systems, such as TFS, GitHub, and Azure DevOps</td>
</tr>
</tbody>
</table>

### Technologies
- Programming/Scripting Languages: C, C#, C++, F#, Go, Java, JavaScript, Objective C, Perl, PHP, PowerShell, Python, Ruby, Ruby on Rails, Scala, SQL, T-SQL
- Platforms: Linux (Red Hat, Ubuntu, Debian, etc.), Windows, iOS

aka.ms/practiceplaybooks
# DEVPLOY ENGINEER

A DevOps Engineer is a mix of infrastructure and developer. This individual will author automation artifacts such as templates and scripts along with working with software build pipelines that support Azure services and infrastructure deployments. They may also function as reliability engineers, working with your development and infrastructure teams to help engineer scalable, resilient, and reliable systems hosted in Azure.

| Technical Skills | • Experience with cloud-based architecture (AWS, Azure etc.)
| | • Strong networking knowledge
| | • Proven knowledge/operation track record for C#, Powershell, Python, bash technologies
| | • Familiarity with CI/CD tools, such as Azure DevOps, TeamCity, Jenkins
| | • Hyper-v, VMWare, Azure, AWS
| | • Kerberos, LDAP, NTLM, TCP/IP, SSL, DNS, HTTP

| Non-Technical Skills | • Existing experience with Azure solution design and implementation
| | • Understanding of cloud computing technologies (including Microsoft Windows and open source platforms), business drivers, and emerging computing trends
| | • Demonstrated skill building technical relationships with technical resources within customer organizations
| | • Strong communication (verbal and written) and collaboration abilities
| | • Ability to connect technology with measurable business value
| | • Demonstrate technical thought leadership in customer-facing situations

| Certifications | • DevOps Institute DevOps Foundation® Certification
| | • AWS Certified DevOps Engineer – Professional
| | • Microsoft Professional Program in DevOps
| | • Exam priorities: AZ-400 Microsoft Azure DevOps Solutions

| Project Experience Types/Qualities | • Bachelor’s Degree in Computer Science, Information Technology, or related field or equivalent work experience
| | • 3+ years experience in scripting for CI/CD processes (test, automation, build, deployment)
| | • Strong C#.Net development experience
| | • Strong PowerShell scripting experience

| Technologies | • C#, PowerShell, Python, bash, etc.
| | • Ansible, Terraform, Puppet, Chef, etc.
| | • TeamCity, Jenkins, Azure DevOps, etc.
| | • Hyper-v, VMWare, etc.
| | • Azure, AWS, etc.
| | • Kerberos, LDAP, NTLM, TCP/IP, SSL, DNS, HTTP
| | • Automated testing tools and unit testing frameworks
| | • Github, Bitbucket, etc.
CLOUD SUPPORT ENGINEER

A Cloud Support Engineer assists both your internal and external customers who are having technical issues with your product, or who need help realizing the full benefit of your solution to help them deliver their cloud-based workloads. They can help customers navigate the operational challenges of cloud computing, so thoroughly training them on both your product and the infrastructure on which it is built is paramount to their success, and ultimately, your customers’ satisfaction. Qualifications include technical support experience and great communication and interpersonal skills (soft skills). Experience with numerous cloud technologies is a major plus.

**Technical Skills**

- Deep understanding of cloud computing technologies, business drivers, and emerging computing trends.
- Experience with Windows, Linux, and OSS technologies.
- Experience with configuration management and automation technologies such as PowerShell DSC, Chef, ARM Templates, and Puppet.
- Deep understanding of access management, administration, and application support.
- Solid understanding of modern authentication protocols and cyber security principals.

**Non-Technical Skills**

- Building customer/partner relationships.
- Proven track record of driving decisions collaboratively, resolving conflicts & ensuring follow through.
- Presentation skills with a high degree of comfort with both large and small audiences.
- Problem-solving mentality leveraging internal and/or external resources.
- Exceptional verbal and written communication.

**Certifications**

- Microsoft Certified Azure Administrator Associate
- MCSA Cloud Platform
- MCSE Cloud Platform and Infrastructure
- CompTIA Security+
- AWS Certified DevOps Administrator
- Google Cloud Certified Professional Cloud Architect

Exam priorities:
- Implementing Infrastructure Solutions 70-533 (retired)
- Microsoft Certified Azure Administrator AZ-103, or AZ-102 (retired), or AZ-100 (retired) and AZ-101 (retired)

**Project Experience Types/Qualities**

- 3+ years of experience with release and change management and cloud DevOps, including continuous integration and deployment and large multi resource deployments.
- 5-7+ years of production application support, migration support, and incident response experience.
- 5+ years of experience deploying cloud monitoring solutions.

**Technologies**

- Programming/Scripting Languages: C#, Java, JavaScript, Perl, PHP, PowerShell, Python, Ruby, SQL
- Platforms: Windows, Linux
CLOUD ADMINISTRATOR

A Cloud Administrator manages cloud tenants. They should be the interface with the support engineers and the cloud provider support. They deploy cloud applications based on deployment templates and DevOps processes and have deeper technical knowledge of the various cloud technologies (Networking, IaaS, PaaS, Security) than a support engineer. Cloud Administrators also manage the license assignments for cloud users across your various SaaS applications.

Technical Skills
- Deep understanding of cloud computing technologies, business drivers, and emerging computing trends
- Strong foundation in system administration, including performing backups, upgrading and patching, performance tuning, monitoring, alerting, deployments, and disaster recovery
- Understanding of infrastructure design, including public and private cloud, networking, virtualization, identity, security and storage
- Experience deploying & managing the infrastructure for databases (e.g. SQL Server, Oracle, Maria, Cassandra)

Non-Technical Skills
- Proven track record of building deep technical relationships business leaders, creating rich technical documentation, and following industry standards
- Background in software license management
- Analytical and process oriented, with a proven track record of driving decisions collaboratively, resolving conflicts and ensuring follow through
- Problem solving mentality leveraging internal and/or external resources
- Exceptional verbal and written communication

Certifications
- Microsoft Certified: Azure Administrator Associate
- MCSA Cloud Platform
- MCSE Cloud Platform and Infrastructure
- CompTIA Security+
- AWS Certified DevOps Administrator
- Google Cloud Certified Professional Cloud Architect

Exam priorities:
- Microsoft Azure Administrator AZ-103
- Microsoft Azure Administrator AZ-104
- Implementing Infrastructure Solutions 70-533 (retired)
- Microsoft Azure Infrastructure and Deployment AZ-100 (retired)
- Microsoft Azure Integration and Security AZ-101 (retired) or Microsoft Azure Administrator Certification Transition AZ-102 (retired)

Project Experience Types/Qualities
- 3+ years of implementing and maintaining cloud monitoring systems and monitoring cloud services for errors and issues.
- 5+ years of setting up and deploying large software packages to cloud systems.
- 3+ years migrating on-premises environments to cloud, virtual network deployments, and cloud security implementations using best practices.
- 3+ years of setting up and maintaining hybrid backup and restore systems.
- 5+ years of experience with scripting and DevOps for cloud.

Technologies
- Active Directory, Ansible, AWS, Azure, CentOS, Chef, Citrix, Confluence, Docker, Excel, firewalls, Jira, Microsoft Project, MySQL, Node.js, Office 365, PostgreSQL, Puppet, ServiceNow, SharePoint, SQL Server, Visio, VMware
- Programming/Scripting Languages: C#, Java, JavaScript, Perl, PowerShell, Python, Ruby, SQL
- Platforms: Linux, Windows

aka.ms/practiceplaybooks
Recruiting Resources

Top 10 Sources to Find Skilled Labor and What to Look For

Sourcing skilled labor can be a challenge. In the Microsoft Hiring and Onboarding Playbook Study, referrals (63%), website (57%) and LinkedIn (56%) were reported as the top approaches for generating leads.

<table>
<thead>
<tr>
<th>Top Candidate Lead Sources</th>
<th>Total (n=275)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referrals from employees or partnerships</td>
<td>63%</td>
</tr>
<tr>
<td>Posting on website</td>
<td>57%</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>56%</td>
</tr>
<tr>
<td>Social media</td>
<td>42%</td>
</tr>
<tr>
<td>Former employees</td>
<td>36%</td>
</tr>
<tr>
<td>University recruiting</td>
<td>36%</td>
</tr>
<tr>
<td>Local technical communities</td>
<td>35%</td>
</tr>
<tr>
<td>Recruit from competitors</td>
<td>23%</td>
</tr>
<tr>
<td>Meetups</td>
<td>16%</td>
</tr>
<tr>
<td>Recruitment agency</td>
<td>4%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
</tr>
</tbody>
</table>

Source: Microsoft Hiring and Onboarding Playbook Study, MDC Research, June 2018

With an understanding of where to look, what are the most important factors to look for in a potential hire’s skillset? In the App Innovation Playbook Survey, work history remains the most important consideration for new hires.

<table>
<thead>
<tr>
<th></th>
<th>Total (n=472)</th>
<th>SMB (n=257)</th>
<th>Enterprise (n=206)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work history</td>
<td>71%</td>
<td>71%</td>
<td>71%</td>
</tr>
<tr>
<td>Cultural fit</td>
<td>43%</td>
<td>37%</td>
<td>49%</td>
</tr>
<tr>
<td>Years of experience</td>
<td>39%</td>
<td>41%</td>
<td>37%</td>
</tr>
<tr>
<td>Referrals</td>
<td>31%</td>
<td>30%</td>
<td>33%</td>
</tr>
<tr>
<td>Professional certifications</td>
<td>28%</td>
<td>24%</td>
<td>33%</td>
</tr>
<tr>
<td>Professional training received</td>
<td>18%</td>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>Contract to hire or other means to test skills “hands-on”</td>
<td>17%</td>
<td>22%</td>
<td>12%</td>
</tr>
<tr>
<td>Reputation through community</td>
<td>13%</td>
<td>13%</td>
<td>14%</td>
</tr>
<tr>
<td>Formal education</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Publications</td>
<td>3%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Awards received</td>
<td>2%</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
<td>4%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: Cloud Application Development and Modernization Playbook Survey, MDC Research, May 2020
In addition, nearly nine in ten have an application development role in their practice. Most also have cloud solution design/architecture and cloud solution implementation/migration/management roles.

<table>
<thead>
<tr>
<th>Role</th>
<th>Total  (n=472)</th>
<th>SMB  (n=257)</th>
<th>Enterprise (n=206)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application development</td>
<td>88%</td>
<td>84%</td>
<td>92%</td>
</tr>
<tr>
<td>Cloud solution design/architecture</td>
<td>75%</td>
<td>64%</td>
<td>88%</td>
</tr>
<tr>
<td>Cloud solution implementation/migration/management</td>
<td>66%</td>
<td>58%</td>
<td>77%</td>
</tr>
<tr>
<td>Consultative and in-person support</td>
<td>61%</td>
<td>54%</td>
<td>69%</td>
</tr>
<tr>
<td>Prototype design and development</td>
<td>58%</td>
<td>51%</td>
<td>66%</td>
</tr>
<tr>
<td>Front line support</td>
<td>50%</td>
<td>52%</td>
<td>48%</td>
</tr>
<tr>
<td>User experience or interaction design</td>
<td>48%</td>
<td>40%</td>
<td>56%</td>
</tr>
<tr>
<td>Delivering training or mentoring</td>
<td>40%</td>
<td>34%</td>
<td>48%</td>
</tr>
<tr>
<td>Low-code solutions</td>
<td>37%</td>
<td>30%</td>
<td>44%</td>
</tr>
<tr>
<td>Modeling solution costs</td>
<td>26%</td>
<td>19%</td>
<td>34%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: Cloud Application Development and Modernization Playbook Survey, MDC Research, May 2020
Preparing and Training Technical Staff

Whether filling a skills gap or are looking to improve the overall skill surface area, technical training is critical to partner success.

For technical staff to function as change agents supporting current and emerging cloud technologies, their buy-in for the use and integration of these technologies is needed. For this, staff need three things:

- An understanding of their roles and any changes to their current position.
- Time and resources to explore the technologies.
- An understanding of the business case for the technologies.

The following resources are available for new and existing staff to build and enhance their skills:

- **Microsoft Learn** offers a wide variety of official curriculum on-demand, Microsoft Azure and Power Platform certification preparation courses and helps them learn through hands-on experiences with a broad reach of Microsoft technologies.
- **The Microsoft Partner Network (MPN) Partner Training Center** provides a centralized interface with in-person, virtual and online training opportunities and certification options organized by products, competencies, certifications, and job role.
- **Microsoft Learning Partners** are available worldwide to help train partners via live instructor-led training. This can be scheduled as a dedicated delivery at a partner’s location or virtually using remote learning technologies. Many courses are scheduled as open-enrollment courses, which does not require a dedicated class.
- **Pluralsight** is a key Microsoft partner that offers Azure training. Gain the know-how and confidence the job demands through these free online courses, delivered in partnership with Pluralsight.
- **Technical Presales and Deployment** consultations offer proactive 1:1 pre-deployment guidance and developer assistance from Microsoft technical consultants to help ensure a successful implementation.
Certifications

Increase readiness and marketability with certifications

Certifications offer a professional edge by providing globally recognized, industry endorsed, evidence of skills mastery. Partners can demonstrate their cloud application development abilities and technical team members can set themselves up for career advancement. Team members can showcase their team’s technical achievements with certification badges, which are digital representations of their achievements consisting of an image and metadata uniquely linked to each team member.

There are numerous certifications to consider as motivation for advancing technical skills, creating proof points for expertise, and achieving Microsoft Partner Network Competencies. Competencies help partners highlight their expertise in several areas of cloud app development. For more on Microsoft competencies, see the Go to Market and Close Deals chapter of this playbook.

<table>
<thead>
<tr>
<th>Microsoft Certifications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MICROSOFT CERTIFIED: AZURE SOLUTIONS ARCHITECT EXPERT</strong></td>
</tr>
<tr>
<td><img src="image" alt="Azure Solutions Architect Expert" /></td>
</tr>
<tr>
<td>An Azure Solutions Architect partners with cloud administrators, cloud DBAs, and clients to implement solutions. Candidates for the Azure Solutions Architect Expert certification should have subject matter expertise in designing and implementing solutions that run on Microsoft Azure, including aspects like compute, network, storage, and security. Responsibilities for this role include advising stakeholders and translating business requirements into secure, scalable, and reliable cloud solutions.</td>
</tr>
</tbody>
</table>

| **MICROSOFT CERTIFIED: AZURE AI FUNDAMENTALS** |
| ![Azure AI Fundamentals](image) |
| Candidates for the Azure AI Fundamentals certification should have foundational knowledge of machine learning (ML) and artificial intelligence (AI) concepts and related Microsoft Azure services. This certification is an opportunity to demonstrate knowledge of common ML and AI workloads and how to implement them on Azure. This certification is intended for candidates with both technical and non-technical backgrounds. Data science and software engineering experience are not required; however, some general programming knowledge or experience would be beneficial. |

<p>| <strong>MICROSOFT CERTIFIED: AZURE DEVELOPER ASSOCIATE</strong> |
| <img src="image" alt="Azure Developer Associate" /> |
| Candidates for the Azure Developer Associate certification should have subject matter expertise designing, building, testing, and maintaining cloud applications and services on Microsoft Azure. Responsibilities for this role include participating in all phases of cloud development from requirements definition and design, to development, deployment, and maintenance. performance tuning, and monitoring. |</p>
<table>
<thead>
<tr>
<th>MICROSOFT CERTIFIED: POWER APPS + DYNAMICS 365 DEVELOPER ASSOCIATE</th>
</tr>
</thead>
</table>
Developers who work with Microsoft Power Apps and Dynamics 365 are responsible for designing, developing, securing, and extending a Dynamics 365 implementation. Candidates implement components of the solution that include application enhancements, custom user experience, system integrations, data conversions, custom process automation, and custom visualizations.

<table>
<thead>
<tr>
<th>MICROSOFT CERTIFIED: POWER PLATFORM APP MAKER ASSOCIATE</th>
</tr>
</thead>
</table>
The app maker builds solutions to simplify, automate, and transform tasks and processes for themselves and their team where they have deep expertise in the solution domain. They are skilled in key technical business analyst tasks such as data modeling, basic UX design, requirements analysis, and process analysis.

<table>
<thead>
<tr>
<th>MICROSOFT CERTIFIED: DYNAMICS 365 + POWER PLATFORM SOLUTION ARCHITECT EXPERT</th>
</tr>
</thead>
</table>
Solution Architects for Microsoft Dynamics 365 + Power Platform lead successful implementations and focus on how solutions address the broader business and technical needs of organizations.
Operationalize

App Innovation

aka.ms/practiceplaybooks
Introduction

This section covers the steps to operationalize the business plan and engage with customers. It starts with building the solution delivery process for a Teams practice, and the tools and systems to support that process, from customer relationship management to building a customer support program and processes.

Learn how to deepen relationships with customers by packaging intellectual property with custom software, creating a new revenue stream for the business.

It covers the Microsoft-provided support options, partner advisory hours, Azure Security Center, support ticket tracking, and publishing a partner offer in the Azure Marketplace.

The section concludes with checklists and templates to use to standardize the customer engagement process.

Operationalize Guide

Leverage the Microsoft resources available in the Operationalize guide, for details on preparing for launch with systems, tools, and processes in place. The guide contains the following additional sections:

LEVERAGE INTERNAL USE BENEFITS

Internal use benefits provide complimentary software licenses and subscriptions for use within a partner organization and resell it as well as part of an overall package along with custom software, creating a new revenue stream for the business.

PREPARE KEY CONTRACTS

Support your sales and marketing efforts with this guidance on how to operate your business, from how to build materials to support your sales and marketing efforts to the key contracts you will want to put in place.

SET UP YOUR SUPPORT PROCESSES AND SYSTEMS

Implement tools and systems with this guidance. Whether you're building products, providing managed services, or performing project work for customers, your success may be impacted by your ability to manage your customer records, your projects, and your support trouble tickets.

SET UP SOCIAL OFFERINGS

Increase visibility for your practice by reviewing the Microsoft marketplaces and how to get listed on them as well as provide guidance on the social offerings your practice should set up.

STANDARDIZE YOUR ENGAGEMENTS USING CHECKLISTS

Leverage checklists and templates to standardize your customer engagement process.
Implement a Solution Delivery Process

The process partners follow in delivering their solution to customers is just as important as the technologies they use to deliver it.

When a project fails, it is most often due to basics such as a lack of cloud technical skills, inadequate fit/gap analysis, poor project governance, or team churn. These issues are associated with not having the right people on the team and an underdeveloped methodology for delivery.

Many project failures are also driven by poor alignment of strategy, executive sponsors, stakeholders, or business processes. Solution delivery processes that include modern change management best practices reduce these risks and accelerate value to customers.

Investing in proper time estimation methods and delivery processes is critical for success, partner profitability, and customer satisfaction. Independent of the methodology choices, partners must always drive a short time to value, which translates to fewer customizations, better use of standardized business processes, and fast delivery of solution modules to users.

SCRUM PROCESS

The Scrum process works well if they want to track product backlog items (PBIs) and bugs on the Kanban board, or break PBIs and bugs down into tasks on a task board. This process supports the Scrum methodology as defined by the Scrum organization. Tasks in this process support tracking remaining work only.

AGILE PROCESS

Choose Agile when their team uses Agile planning methods, including Scrum, and tracks development and test activities separately. This process works well if they want to track user stories and bugs on the Kanban board, or track bugs and tasks on the task board. They can learn more about Agile methodologies at the Agile Alliance.

These two processes both work for developing modern Teams applications as well as for deployment of Teams. Both processes are also supported in Azure DevOps (formally Visual Studio Team Services) for tracking the project.

CREATE REPEATABLE PROCESSES

Repeatable processes make for profitable practices. Use the following example checklist to build their own checklist to use when executing a new engagement.

• Hold initial requirements meeting
• Identify product owner/manager(s)
• Identify executive sponsors of the project
• Ensure the project has clear strategic goals and success metrics
• Identify key business process owners/stakeholders
• Ensure that business processes are aligned with business strategy and stakeholder needs
• Bind customer’s organization and their business processes owners into the QA process
• Reduce the volume of customizations, as they have a high impact on mobile extensibility
• Follow-up meeting to clarify/establish next steps
• Discuss MVP (minimal viable product) criteria
• Establish development process (Agile, Scrum, etc.)
• Identify milestones and tasks, share with customer
• Identify Mobile usage scenarios and mobile devices requirements as early as possible
• Provide cost estimates for development, cloud services, and ongoing maintenance/support
• Address customer objections to proposed technology and services
• Acquire data (or sample of data) for initial data assessment and proof of concept development
• Host project artifacts (issues, code, etc.) to share with internal team/customer (e.g. VSTS)
• Provide customer with status/demos on a regular basis (e.g. 2-week sprint)
• Ensure customer has communications and readiness plan to address the needs of each stakeholder team
• Coordinate a final handoff to customer
• Conduct project debrief with customer
• Organize internal project post-mortem
• Customer conducts acceptance test
• Execute a progressive deployment strategy, i.e. one region, several regions, one country, two countries, several countries
• Ensure customer has a plan to track progress against success metrics and adoption targets

aka.ms/practiceplaybooks
Key Contracts and Practice Tools

Partners will require a complete set of legal documents to drive compliance, protect their IP, and produce consistent engagement deliverables. They also need a documented process to monitor project progress, in terms of both the project plan and budget.

**KEY CONTRACTS**

Leverage the [Key Contracts for Practice guide](https://aka.ms/practiceplaybooks) to learn more about developing service level agreements, master services agreements, a statement of work, and a mutual non-disclosure agreement.

**MICROSOFT TEAMS**

[Microsoft Teams](https://aka.ms/practiceplaybooks) should be used for every project for collaboration. Create a team for each project and invite the customer in as a guest user to collaborate and track the project. Build as much as possible into that team to demonstrate the value and expandability of Teams. The lifecycle of a project or duration of a managed services agreement is critical, especially when leveraging the technology and services they are selling them.

**MICROSOFT PROJECT ONLINE**

[Microsoft Project Online](https://aka.ms/practiceplaybooks) is a flexible online solution for project portfolio management (PPM) and everyday work. Project Online provides powerful project management capabilities for planning, prioritizing, and managing projects and project portfolio investments — from almost anywhere on almost any device. Project Online can be used by administrators, portfolio managers and viewers, project and resource managers, and team leads and members.

**AZURE DEVOPS**

[Azure DevOps](https://aka.ms/practiceplaybooks) provides various tools for tasks like running agile teams, providing support for Kanban boards, handling work item backlogs, scrum boards, source control, continuous integration, and release management. Source control functionality provides Git support, which enables integration with GitHub if such integration is desired. While Azure DevOps helps to manage the technical aspects of a project, cost-containment requires a different set of tools.

**GITHUB**

GitHub provides the hosted environment for the business application implementation team to version control and share their source code, notebooks and other artifacts both privately (e.g., internally to a team) and publicly (e.g., an open source project), and collaborate on development projects.

**OTHER COLLABORATION TOOLS AND FILE SHARING**

Yammer is an enterprise social network collaboration offering to help teams collaborate and share files with each other.

OneDrive for Business is an enterprise file sharing service that is designed for automatic synchronization of files between their computer and the cloud. OneDrive makes it easy to share files with their customers or partners.

Microsoft Dynamics 365 for Project Service Automation provides users with the capabilities required for setting up a project organization, engaging with customers, project scheduling and costing, managing and approving time and expenses, and closing projects. It is specially targeted to address the needs of a project services-based practice, as it is designed for professionals who manage projects and the associated customer engagement process end-to-end.

Microsoft Surface Hub is a Teams-integrated collaborations device, or “meeting room in a box.” In addition to the built-in team experiences like Teams, Microsoft Office, and Whiteboard, Microsoft Surface Hub is customizable with a wide array of applications. Universal apps built for Windows 10 shine on Microsoft Surface Hub, and scale to the large screen. They can also connect apps from their personal device and drive them from Microsoft Surface Hub.
Use CRM to Grow the Business

Streamline processes and increase profitability in the sales, marketing, and service divisions.

A strong customer relationship management (CRM) solution is a multifaceted platform where everything crucial to developing, improving, and retaining the customer relationship is stored. Without the support of an integrated CRM solution, partners may miss growth opportunities and lose revenue because they are not maximizing their business relationships. Imagine misplacing customer contact information, only to learn the delay pushed the client into the arms of a competitor. Or, picture the top two salespeople pursuing the same prospect, resulting in an annoyed potential customer and some unfriendly, in-house competition.

Without a centralized program where salespeople can log and track customer interactions, they will lose out on valuable opportunities.

THE FUNDAMENTALS OF CUSTOMER RELATIONSHIP MANAGEMENT

CRM tools make the customer-facing functions of business easier. They help:

- Centralize customer information
- Automate marketing interactions
- Provide business intelligence
- Facilitate communications
- Track sales opportunities
- Analyze data
- Enable responsive customer service

Running a successful business is no simple task. When marketing campaigns, data analysis, meetings, customer care, and more, all happen simultaneously, a powerful CRM solution can bring all these functions together in one place. Using Microsoft Dynamics 365 for Sales and Marketing, partners can seamlessly integrate all their communications with prospects and clients and their LinkedIn contacts, all in one place. Dynamics 365 can also be integrated into Teams.

THE SALES TEAM WILL WORK WITH THE FOLLOWING TYPES OF RECORDS:

- **Accounts** – Account records contain information about the companies they do business with.
- **Contacts** – Contact records contain information about the people they know and work with. Usually, multiple contacts are associated with one account. Contacts could include people responsible for making purchasing decisions or paying invoices, support technicians, or anyone they work with at the company.
- **Leads** – Leads are potential sales, and they or their company can get leads from many different sources. For example, they can generate sales leads from marketing campaigns, inquiries from their website, mailing lists, social media posts, or in person at a conference or trades convention.
- **Opportunities** – When they qualify a lead, it becomes an opportunity, or a deal that they are getting ready to close.

Microsoft Dynamics 365 can be customized, so they can also work with records relevant to their team and the way their organization does business, including sales, customer service, field service, project service, automation, and marketing.

aka.ms/practiceplaybooks
Commercial Marketplace

Connect with more than 3 million users monthly, including Microsoft’s partner ecosystem.

Microsoft’s commercial marketplace provides partners with opportunities to reach millions of customers and other partners in more than 140 countries, as well as access to joint go-to-market activities with Microsoft and helps organizations find, try, buy, and deploy partner apps or services. The commercial marketplace comprises the product catalog, offer information, Microsoft AppSource, Azure Marketplace, in-product purchase experiences, Partner Center, and Quote Center. Microsoft will determine the most effective marketplace for the app or service so that it reach the right customers. The two primary customer store fronts in the marketplace are AppSource and Azure Marketplace.

- **AppSource** provides line-of-business managers and business professionals with applications and professional services that support key workflows and maximize productivity. It is intended as a showcase for apps and services that work with Azure, Dynamics 365, Office 365, Power BI, and Power Apps.
- **Azure Marketplace** provides IT professionals and cloud developers with leading IT management, support, and development tools that work on Microsoft Azure.

Each marketplace supports three publishing options and several offer types. All publishing options provide access to lead sharing.

![Publishing Options and Offer Types](image)

Refer to the commercial marketplace guide to learn how to create an offer, manage and track offers, activate benefits and collect payment.

aka.ms/practiceplaybooks
ISV STUDIO

Once an app is listed on AppSource, partners can monitor it using ISV Studio. ISV Studio is designed to become the go-to Power Platform destination for Independent Software Vendors (ISV) to monitor and manage their applications. ISV Studio provides a consolidated cross tenant view of all the applications an ISV is distributing to customers. Using ISV studio allows partners to track installs and other valuable metrics.

Source: https://docs.microsoft.com/powerapps/developer/common-data-service/isv-app-management
Implement a Customer Support Program & Process

It has been said that an unhappy customer represents an opportunity to make a customer for life.

When it comes to support, there are two perspectives a partner should consider. First, how will they support their customers when they have engaged them for project services, are using their software, or are utilizing their intellectual property? Second, where do they go for support for a solution they are building or because they need assistance on behalf of their customer?

Partners will need to:

- Define their support model
- Provision their support infrastructure
- Define and implement their escalation process
- Select and enable their support options

**SUPPORT MODEL**

The typical options for packaging support into a service are to provide it either on a retainer basis (where the customer pays a monthly fee for up to a certain number of “use it or lose it” support hours) or per incident (where the customer pays a fee every time they utilize support). Partners should also define their support availability so customers have a realistic expectation of when they can access the service.

**ESCALATION PROCESS**

Consider implementing a tiered support offering of junior-level resources that are equipped to handle common issues. These resources should be equipped to escalate a customer support case to a more senior-level resource once common issues have been ruled out. Two to three levels of tiered support are most common. When defining the escalation process, describe how customers get in contact for support, whether it is a dedicated support line, forum or chat room, Twitter, email, etc.

Then define how to manage customer support requests and track them to closure. Many MSPs offer premium support offerings such as a Technical Account Manager who is responsible for tracking, reporting, and escalating an issue.

**LEVEL OF SUPPORT**

Determine what level of support expertise you provide in your service offerings.

- **LEVEL 1**: Customer service
- **LEVEL 2**: Advanced troubleshooting
- **LEVEL 3**: Specialized architects
Support Options from Microsoft

How do partners receive support for their implementation efforts or on behalf of their customer?

For full details of the benefits available at each Partner level, see Partner Network – Compare Offers. Also review the Microsoft Partner Benefits Usage Guide.

PARTNER ADVISORY HOURS

Engage with Microsoft technical consultants and get proactive, personalized assistance for multiple technical roles to help with presales deployment and development scenarios by utilizing the Partner advisory hours benefit offered through the Microsoft Partner Network. Organizations receive advisory hours for attaining a Microsoft competency or subscribing to Microsoft Action Pack.

<table>
<thead>
<tr>
<th>Partner Level</th>
<th>Advisory Hours Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Member</td>
<td>0 hours</td>
</tr>
<tr>
<td>Action Pack</td>
<td>5 hours (after first cloud sale)</td>
</tr>
<tr>
<td>Silver</td>
<td>20 hours</td>
</tr>
<tr>
<td>Gold</td>
<td>50 hours</td>
</tr>
</tbody>
</table>

These hours can be used for:
- 1:1 pre-deployment best practice consultation, based on their implementation scenario
- 1:1 developer consultation for ISVs

Explore the suite of consultation offerings and learn how to request a consultation on the Technical Presales and Deployment page on the Microsoft Partner Network website.

SIGNATURE CLOUD SUPPORT

Microsoft Signature Cloud Support provides partners with cloud support to help their customers’ services operating smoothly. SCS handles technical support scenarios for Microsoft Office 365, Microsoft Dynamics CRM Online, and Microsoft Azure.

MICROSOFT SUPPORT

Microsoft Advanced Support for Partners is the ideal solution for partners growing their cloud business (not quite ready for Premier Support, but need a higher level of service than the Microsoft Partner Network core benefits). The Advanced Support program delivers the right level of support to meet them in the middle while their business grows. With Advanced Support for Partners, they get cloud support at an accessible price point, which helps they be a great ally to their customers and grow their business faster. The program includes valuable proactive and reactive services delivered by experienced Services Account Managers and Partner Technical Consultants. Advanced Support for Partners enables them to provide support on behalf of their end customers, in addition to providing support on subscriptions they own directly.

Microsoft Premier Support for Partners delivers a managed support offering for them and their customers — proactive support services for developing, deploying, and supporting Microsoft technology, whether on-premises, hybrid, or in the cloud. As the only partner program with complete, end-to-end managed support across the full Microsoft platform, Premier Support for Partners also provides a powerful marketing tool to gain competitive advantage in the marketplace.

Microsoft offers a range of paid Azure support plan options for customers — from developers starting their journey in the cloud to enterprises deploying business-critical, strategic applications on Microsoft Azure. These options are available in tiers — Premier, Professional Direct, Standard and Developer Support Plans — that are available for purchase directly by those who are not Microsoft Partners. In addition to these paid plans, Azure offers core support, which is free. It provides support via forums and help with account billing or management questions.

aka.ms/practiceplaybooks
Support Resources

AZURE SECURITY CENTER

Azure Security Center provides integrated security monitoring and policy management across Azure subscriptions, helps detect threats that might otherwise go unnoticed, and works with a broad ecosystem of security solutions. It should be part of any managed service practice to assist with monitoring and support.

Some of its key capabilities are:

- Monitors the security state of Azure resources
- Defines policies for Azure subscriptions and resource groups based on security requirements, the types of applications in use, and the sensitivity of the data
- Uses policy-driven security recommendations to guide service owners through the process of implementing needed controls
- Rapidly deploys security services and appliances from Microsoft and partners
- Automatically collects and analyzes security data from Azure resources, the network, and partner solutions like antimalware programs and firewalls
- Leverage global threat intelligence from Microsoft products and services, the Microsoft Digital Crimes Unit (DCU), the Microsoft Security Response Center (MSRC), and external feeds
- Applies advanced analytics, including machine learning and behavioral analysis
- Provides prioritized security incidents/alerts
- Offers insights into the source of the attack and impacted resources
- Suggest ways to stop the current attack and help prevent future attacks

AZURE ADVISOR

Azure Advisor analyzes resource configuration and usage telemetry to detect risks and potential issues. It then draws on Azure best practices to recommend solutions that will reduce cost and improve the security, performance, and reliability of applications.

LOG ANALYTICS

Log Analytics can help collect and analyze data generated by resources in cloud and on-premises environments. It provides real-time insights using integrated search and custom dashboards to readily analyze millions of records across all workloads and servers regardless of their physical location.
DevOps at Microsoft Center

DevOps at Microsoft Center is the main Microsoft online resource center that contains the latest and greatest videos and how-to guidance for working with DevOps and Visual Studio.

THE DEVOPS AT MICROSOFT SITE PROVIDES

- How Microsoft has evolved their DevOps strategy to support a single engineering organization where development and testing are a unified part of the build process rather than separate roles
- Information of how to incorporate Agile principles in a DevOps practice
- How security (DevSecOps) is important and key part of any DevOps strategy
- Information and research knowledge on what Microsoft is doing to improve and enhance the DevOps journey
Support Ticket Setup and Tracking

Setting up tickets, tracking issue resolution, and managing customer success are fundamental to a practice

**MONITORING DEPLOYED MODELS WITH AZURE MACHINE LEARNING**

Use the model data collection feature in Azure Machine Learning to archive model inputs and predictions from a web service. For deeper insights into performance, capture model telemetry using the Azure Machine Learning SDK. The model telemetry can be used later for analyzing model performance, retraining, and gaining insights for the business.

**MICROSOFT DYNAMICS 365 FOR CUSTOMER SERVICE**

Providing support to customers from their practice is a non-trivial, omni-channel effort. Microsoft Dynamics 365 for Customer Service is designed to manage the efforts of customer support teams. It provides access to core customer service capabilities for a significantly lower price than comparable offerings from other vendors, including enterprise case management, Interactive Service Hub, Unified Service Desk, SLAs and Entitlements, and other service group management functionality.

**CREATE CONSISTENCY AND LOYALTY**

Provide the seamless service that customers expect by meeting them where they are with the information they need, every time.

- Give customers great service on their channel of choice
- Make help easy by providing relevant, personalized service
- Proactively address issues by detecting customers’ intent and social sentiment

**MAKE THE AGENTS’ JOBS EASIER**

Give support agents complete information — in a single customer service software app — to make smart decisions and provide great service.

- Reveal customers’ case histories, preferences, and feedback
- Provide guidance on entitlements and service-level agreements
- Display it all in a single interface tailored to their job and skillset

**GET AN ADAPTIVE ENGINE**

Respond quickly to customer and market changes within an agile, cloud-based environment that has digital intelligence built in.

- Adapt and customize easily using configuration, not code
- Extend functionality through a single interface
- Rely on advanced analytics and a trusted cloud platform
Troubleshooting Resources

To assist the support team, here are several resources to assist with troubleshooting:

**TROUBLESHOOTING RESOURCES**

- Troubleshoot Web App in App Service
- Troubleshoot SQL Data Warehouse
- Troubleshoot Stream Analytics
- Troubleshoot Mobile App .NET Backend
- Troubleshooting Azure Storage
- Troubleshooting Azure Redis Cache
- Troubleshooting Power BI
- End-to-End Storage Troubleshooting
- Troubleshoot Azure SQL Database
- Troubleshooting DocumentDB
- Troubleshoot IoT Hub
- Troubleshoot Mobile App Node.js Backend
- Troubleshooting Azure Data Factory
- Troubleshoot SQL Server Stretch Database
- Troubleshooting Azure Notification Hubs
- Troubleshooting Media Services Live Streaming
Go to Market and Close Deals

App Innovation

aka.ms/practiceplaybooks
Introduction

Discover strategies to compel potential customers that may be sitting on the fence to buy, from creating a good value proposition to building marketing and sales materials that tell the story.

Get started by building foundational marketing materials such as marketing personas, points of differentiation, value propositions, and customer business needs. Then learn how to put those materials to work.

Discover best practices for attracting new customers and see how successful partners put it all together? Learn why integrated marketing campaigns work the best, and the tools needed to run them, such as a CRM system and marketing automation.

Go-to-Market and Close Deals Guide

Leverage the Microsoft resources available in the Go-to-Market and Close Deals guide, for these additional sections:

MARKETING TO THE CLOUD BUYER
Technology buyers buy differently than in the past. By the time they engage with sales, they have already made some decisions.

ALIGN MARKETING GOALS WITH BUSINESS GOALS
What should the marketing efforts try to accomplish?

CREATING MARKETING FOR EVERY PHASE OF THE JOURNEY
Messaging and content should be available at each stage of the customer journey.

MARKETING TACTICS
Understand strategies for websites, SEO and SEM, social media, email, blogs, and webinars.

SALES
Find selling tips, sales training materials, best practices, sales incentives, and sales compensation advice.

CLOSING THE SALE
Write winning proposals and negotiate the offer.

aka.ms/practiceplaybooks
Buyer Engagement

With all the information on the internet, buyers tend to research and self-educate long before they engage with salespeople. By the time they do engage with sales, they have already made some decisions.

To help illustrate this, just think about the way a buyer might go about buying a new car. Before going to the car dealership, the buyer will likely read about various car models on the internet, read reviews, and make some decisions. When the buyer is ready to visit a dealership, they already know what they want and how much they are willing to pay for that car. This poses a challenge for sellers to get prospects to engage earlier in the process through marketing.

Managed services also are changing the way partners sell cloud-based solutions. Recurring revenues provide business stability and confidence, allowing partners to make business decisions that may not be as easy when revenues are irregular and lumpy. While these recurring revenues are smaller on a per-transaction basis than large capital expenditures, a higher volume of transactions can adjust for this. A higher volume of high-quality sales leads is needed to create larger sales pipelines. Clients who are buying on a recurring basis represent great opportunities to upsell and cross-sell additional products and services.

Marketing is not an option anymore. Marketing helps educate, identify, and engage with prospects earlier in the sales process. By identifying prospects who indicate interest via their behavior (website visits, clicks, downloads, etc.), marketing can deliver high-quality leads.

Inbound marketing techniques such as search engine optimization and pay-per-click advertising make it easy for prospects to find a partner. Outbound marketing techniques, such as e-mail and telemarketing, make it easier to tell prospects about a partner’s solutions.

Marketing is the toolset that addresses all these changes. Marketing today is digital and has the power to reach more people. Again, it is not to say that more traditional, non-digital marketing is ineffective. But to be found by prospective buyers with no prior relationship, employ digital marketing techniques. Modern marketing is focused on the prospects’ and clients’ views of the world.
Identify Potential Customers

Build the list of prospects that could potentially turn into customers with an awareness campaign and use past deployment success to earn additional business. Use these awareness activities to help generate new customers:

WEBINARS AND PODCASTS
A great way to transfer knowledge, establish a practice as an expert, and pique the interest of potential customers.

REFERRALS
Ask for referrals in email and phone calls when talking with existing customers, partners, and vendors who might know someone who is ready for similar services.

WHITE PAPERS
These are a great way to build credibility with decision makers with thought leadership and technical information. Technical staff often expect a white paper to help them understand underlying architecture and technology.

Engage Existing Customers
As always, the best potential customers are existing customers. When relationships are good, customers are more open to ideas for helping improve their business processes. To start, dig deep into their needs, challenges, business objectives, and priorities. Then work with them to create a vision that combines tactical projects with strategic initiatives that include a clear definition of customer experience goals.

Partners that have done this recommend starting this conversation with a planning engagement that builds confidence that there is a way forward and what it might look like. Ask big picture questions. For example, ask the customer “If one of your staff wanted to go into competition with you, what could they do to disrupt your business?” Help executive-level leadership realize the vision and its potential, and how it can help fill their technical and business gaps.

NEWS ARTICLES
Leverage public relation efforts to drive publicity around the technology, market activities, and other topics of current interest.

SOCIAL MEDIA
Social media such as Twitter, LinkedIn, etc., is a place to build awareness, reputation, and customer satisfaction — and gain new customers.

REVISIT EXISTING CUSTOMERS
When offering a new practice within a existing business, the easiest way to acquire new customers is to introduce the practice to existing customers.

PROVIDE CUSTOMER LIFETIME VALUE
Lifetime value does not happen without a plan. Map out the cloud journey in collaboration with the customer. What should they do first? Where will they be in two, three or five years? With a plan in hand, work with the customer to make potential business benefits a reality. Everything does not need to happen at once, but it does need to happen in a thoughtful and logical way. Always be thinking about what is next. Would complementary or incremental functionality be a good fit at the customer’s stage in cloud maturity?

The digital partner of record on the customer’s Microsoft subscriptions has access to their cloud solution usage and consumption data via the Cloud Services Partner Dashboard. Use it to identify where to encourage deeper and wider usage, as well as areas where the customer may benefit from incremental project or advisory services. For example, if SharePoint usage is low, try launching an outreach campaign about best practices in organizing projects and teams.

aka.ms/practiceplaybooks
Consultative Selling and Technical Pre-Sales

Discovering the art of the possible

More than ever before, technical staff are a part of the decision-making process as they help envision a solution to solve a customer need.

The technical pre-sales staff should be very experienced users of the products and services. For that reason, former support employees often make good technical pre-sales staff. The technical pre-sales staff is in place to explain technology, how it works, how it meets a business need and to answer any other questions. They should excel at the more complex issues that come from prospects, and be focused on pre-sales, working together with sales and marketing, who address the business benefits. One without the other cannot be effective.

Examples of technical probing questions to ask during pre-sales conversations supporting an IoT practice:

- What are the challenges the customer is looking to solve?
- Are they looking to improve communication, learn from their data (such as predicting future events)?
- Is the data generated and captured in their system or is it external and provided by 3rd parties?
- What application development and technologies are within the existing team’s comfort zone? Are any data scientists needed on the team?
- What application platforms would they like to target? Web, mobile, desktop, IoT, etc.
- Do they have any compliance or regulatory requirements that pertain to the handling of their data?
- Can they describe where data enters their system and how it is ultimately consumed?

BEST PRACTICES – CONSULTATIVE SELLING:

Combine solution selling with insights. To gain credibility in the eyes of the buyer, the solutions sales rep must introduce content and data that adds value to the sales call.

Ask good questions. The successful solutions seller remains sensitive to the buyer’s needs and asks important questions at the right moment.

Listen actively. Solution selling requires considerable understanding of the buyer’s needs, which will only come from listening attentively. Solution sellers should actively listen as the buyer details their organizational needs, taking notes and asking considerate questions in the process.

Offer guidance. Solution sellers must guide the buyer towards the solution being offered. This guidance comes as the solution seller adopts something of a teaching role, helping the buyer to overcome business challenges by utilizing their deep knowledge of industry pain points and trends.
Microsoft Technology Centers

With more than 40 locations around the globe, The Microsoft Technology Center (MTC) bring together the right resources to help accelerate a customer’s digital transformation.

- **People:** The MTC staff is comprised of experts in Microsoft solutions. Their tenure in the industry ensures they will effectively guide partners in finding solutions.
- **Partners:** The MTCs have formed alliances with industry leaders who provide comprehensive resources, including hardware, software, and services.
- **Place:** The MTC environment provides rich interactive and immersive experiences to learn first-hand Microsoft and partner technologies.

The MTC can help close sales with these engagement offerings:

- **Strategy Briefing:** This one-day briefing starts by examining the current IT environment and business objectives. Then it moves into the Envisioning Center, showcasing Microsoft solutions in action through powerful demos and customized scenarios. The day includes mutual discovery, tailored product and technology drill-downs, and expert presentations. It culminates with the delivery of a clear and actionable picture of how Microsoft and partner technologies can help reach business goals.

- **Architecture Design Session:** This custom session aligns business objectives with specific applications of Microsoft software. It provides architectural guidance, consultation on preferred practices, and risk analysis to chief technology officers, architects, and senior members of the development team.

- **Workshops:** If seeing is believing, then imagine what a hands-on immersive experience can do. Attend a custom briefing that includes a facilitated, hands-on environment to experience the vision of Microsoft’s platform and solutions firsthand.
Architecture Design Session (ADS)

An architecture design session is a working session that follows the envisioning session and builds on the customer’s already established vision.

This intensive, one to two-day session delivers in-depth technical information on integrating data from across a customer’s entire organization and delivering it in an analysis-ready form. Presentations, demonstrations, and whiteboard discussions are customized to address the customer’s needs. In many cases, the design session is used to identify candidate proofs of concept.

Here are some potential topics that are covered during an architecture design session:

- **Server topology**: To plan and deploy a customer’s business productivity solution, it is necessary to understand the required server topology.
- **Integration platform**: The Azure services work seamlessly together and can also be integrated with third party and LOB applications. The ADS will endeavor to fit diverse systems together.
- **Social computing**: Companies need to leverage their employees’ ability to make business connections and create, share, and evaluate content in a natural way.
- **Secure framework**: Companies can create experiences that are both user-based and role-based. Choose from a range of options for restricting sensitive information and deliver the most relevant experience while meeting industry standards and enterprise security requirements.
- **Virtualization and cloud computing**: Extending a customer’s enterprise by leveraging cloud resources or virtualization reduces the cost of hardware and additional resources.

**PRIMARY AUDIENCE**

- Architects
- Developers
- Test and quality assurance (QA) engineers
- Technical staff

**Please note** that an architecture design session is not always an appropriate engagement with the customer. They may have very little to no knowledge about Azure or cloud technologies in general. If this is the case, then they are not ready for an ADS. A technical briefing or hands-on-labs may be needed to build the customer’s confidence in cloud technologies.

**Phases of a successful ADS**

**BEFORE THE ARCHITECTURE DESIGN SESSION**

Before performing the architecture design session, it is important to conduct a simple session with the customer to establish the scenario. This session is oftentimes referred to as ideation or opportunity definition. The goal is to establish the five Ws (who, what, when, where, and why) of their needs, which can be used as a guide for the ADS, streamlining the brainstorming process, and informing the agenda and milestone goals.

- **Schedule a time for the design session**: normally 1-2 days
- **Schedule a location**: ensure there are whiteboards and a projector
- **Schedule resources**: experts from the team, and a cross-cutting panel of technical and business stakeholders from the customer
- **Build an agenda**: establish milestone goals in advance so that the ADS does not get consumed discussing a single topic
- **Prepare preliminary documentation and architectural diagrams**: Even with only the basic building blocks, it is good to come prepared with something to modify during or after the session

**DURING THE ARCHITECTURE DESIGN SESSION**

Begin by reviewing requirements with the customer. Whiteboard the requirements, proposed solutions, and arrive at a consensus for each major topic. Be sure to capture photos of the whiteboard.

There are typically the following phases during an architecture design session: Discovery, Envisioning, and Planning.
DISCOVERY

- Review the customer background and business technology strategy
- Project background and its drivers/aims
- Functional and non-functional requirements
- Usage scenarios
- Technology landscape

ENVISIONING

- Key functions and capabilities
- Components of the solution
- External connections and integration points
- Security considerations
- Abilities considerations
- Map requirements and scenarios to components

PLANNING

- Establish proof points
- Exclusions, risks, and issues
- Pre-requisites
- Deliverables
- Resources
- Escalation, communication, and long-term plans

AFTER THE ARCHITECTURE DESIGN SESSION

In addition to a summary of the engagement, deliver information about:

- Special areas of concern to the customer’s organization, such as security, compliance, and compatibility
- Deployment scenarios that map to established deployment and practices and that cite specific examples where applicable
- Familiarity with the Microsoft technologies proposed for the solution, in addition to any trade-offs among the differing technology options
- The capabilities to deliver business performance on premises or in the cloud

The outcome should be polished architecture diagrams that can be reviewed and signed off on by the customer. If one or more proof of concepts is desired, provide a plan and a timeline to deliver.
Implement a Cloud App Proof of Concept (PoC)

If one of the outcomes of the ADS is a PoC, there are some basic guidelines to keep in mind.

The key to developing a successful PoC is to avoid common traps, such as premature optimization, and spending too much time hardening the application for rock solid performance and stability. The proof of concept is a level of complexity and usability below a minimum viable product (MVP), as it is used to validate the customer requirements and the proposed solution. Try to start a PoC from an available template, such as a Visual Studio project template, or from pre-existing code from other projects. This is a great way to jump start a development process. Bear in mind that the PoC lacks a lot of the functionality of the final delivered software. User interface elements, for instance, may be there just for illustrative purposes and lack functionality. APIs may have desired endpoints stubbed out that define the methods and functionality that it will provide, but the implementations are missing. Resist the urge to develop the final product atop the PoC, as it could alter the use of technology and the requirements could change. Start from a more stable development foundation.

The benefits of developing the PoC are twofold: it helps the development team fully understand the customer requirements, instead of just reading through the documents, and it also helps the customer truly understand what they want. Oftentimes, customers will have a concept in mind of what they want, but they are not aware of what they do not know, that can influence their concept later in the development process. The PoC helps identify these issues early on. Having a PoC on hand provides the opportunity to communicate to the user the look and feel of the final product much more vividly than using design documents and design reviews. Seeing the PoC allows the customer to adjust their requirements to match exactly what they want, and to better define their expectations for the final deliverable.
Set Up Social Offerings

Contributing to the technical community can help increase credibility and strengthen the technical acumen of the delivery team. Here are some suggested options:

**BLOGGING**

Technical blogging is a great way to grow stature in the community at large. Blog posts should be well thought out and simple to digest. Visual aids such as diagrams or nicely formatted source code snippets go a long way towards readability.

**MEETUPS, USER GROUPS & ASSOCIATIONS**

Speaking at user groups and association events is another valuable tool to increase the skills and recognition. Similar to blog posts, its great practice for honing vital communication skills and a great opportunity to dig deeper into a specific subject.

**GLOBAL AZURE BOOTCAMP**

Each user group will organize their own one-day deep dive class on Azure the way they see fit. The result is that thousands of people get to learn about Azure and join online under the social hashtag #GlobalAzure! This is a great opportunity to attend, participate as a speaker (reach out to the local organizer to help) or learn how to host a bootcamp. For more information, visit http://global.azurebootcamp.net/.

**POWER PLATFORM COMMUNITIES**

Learning and events are available in communities. Event content is now available on-demand, so partners can view session recordings, download presentations, ask questions, and collaborate with the speakers and experts. https://powerusers.microsoft.com/

**WEBINARS**

Webinars are another resource to extend a team’s skills. Similar in scope to speaking at a meetup or user group, the webinar allows a much broader reach as attendees from all over the globe can attend.

**MICROSOFT MVP COMMUNITY**

For more than two decades, the Microsoft MVP Award is our way of saying thanks to outstanding community leaders. The contributions MVPs make to the community, ranging from speaking engagements and social media posts to writing books and helping others in online communities, have incredible impact. Among other benefits, MVPs get early access to Microsoft products and direct communication channels with product teams, and are invited to the Global MVP Summit, an exclusive annual event hosted in Microsoft’s global HQ in Redmond. They also have a very close relationship with the local Microsoft teams in their area, who are there to support and empower MVPs to address needs and opportunities in the local ecosystem.

Contributing to the Azure community not only helps build reputation of the practice, it can also hone much-needed skills for the delivery team.
Competencies

Build and verify technical expertise

A Microsoft Partner Network competency demonstrates to customers a company’s expertise with a specific product or a platform. Among the first steps to achieving a competency is to meet technical skill requirements and pass any associated exams. One of the next steps is to align the technical team to the MPN competency for the practice.

The competencies most applicable to Cloud Native application development and low-code practice are:

<table>
<thead>
<tr>
<th>Competency</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Development</td>
<td>Highlight expertise in providing development services on an enterprise-proven platform.</td>
</tr>
<tr>
<td>Application Integration</td>
<td>Seamlessly integrate applications and data and automate business processes across the enterprise.</td>
</tr>
<tr>
<td>Cloud Business Applications</td>
<td>Demonstrate expertise as a Dynamics 365 partner and leader in delivering business-ready apps and services.</td>
</tr>
<tr>
<td>Data Analytics</td>
<td>Deliver customers actionable business insights they can use to transform their businesses.</td>
</tr>
<tr>
<td>Data Platform</td>
<td>Enable customers to harness big data and analytics on-premises, in the cloud, and in hybrid environments.</td>
</tr>
</tbody>
</table>

Advanced Specializations

An advanced specialization is a validation of a partner’s capability to deliver high-fidelity services in a specific solution area. Advanced specializations are customer-facing labels displayed on a partner’s business profile in the Partner Directory, enabling partners to showcase their differentiated skills.

Partners who attain an advanced specialization receive a customer-facing label that communicates their in-depth knowledge in a specific area and verifies their extensive experience and proven success in implementing Microsoft services or solutions. Advanced specializations are for partners who already have an active and relevant gold competency.
Optimize and Grow

App Innovation

aka.ms/practiceplaybooks
Introduction

This section will focus on how to optimize a app innovation partner practice, strengthen the relationship with customers, and evaluate performance to continue to delight prospects and customers.

One of the first steps is to partner with Microsoft and join the Microsoft Partner Network. Partners gain access to resources like the training, whitepapers, and marketing materials.

Then browse the detailed list of best practice resources for growing Azure and Power Apps-focused projects.

Optimize and Grow Guide

Leverage the Microsoft resources available in the Optimize and Grow guide, for details on optimization strategies, engaging customers for life, and monitoring and measuring results. The guide contains the following additional sections:

Optimize through Bottom-Line Efficiencies
Optimize for operational excellence, using bottom-line levers.

Measure Results
Benchmark and create scorecard to measure improvement against key performance indicators.

Understanding Customer Lifetime Value
A lifelong customer is of far greater value than any one-off transaction. And not all customers are equal in value.

Customer Experience and Satisfaction
Continually improve the customer experience by establishing CX related metrics.

Collect Feedback
Solicit feedback from customers on a regular basis and act on that feedback.

Perform a Post-Mortem
Establish a formal process for evaluating a project.

Growth through Top-Line Strategies
Without a strategic plan for growth and revenue generation, the impact will be felt on the bottom line.

Post-Sale Activities
Building and nurturing positive customer outcomes post-deployment is critical to secure recurring and renewal-based revenue.

Grow Partnerships
Identify partnership opportunities, assess readiness, and grow relationships to differentiate offers, expand markets, or enter verticals.

aka.ms/practiceplaybooks
Partnering with Microsoft

One of the first steps to partnering with Microsoft is to join the Microsoft Partner Network. Partners gain access to resources like the training, whitepapers, and marketing material described in this playbook. It is also where partners set up their users to gain Microsoft Partner competencies and access to other partner benefits.

TO BECOME A MICROSOFT PARTNER

The Microsoft Partner Network provides three types of memberships. Partners can participate in the program at the level that suits their unique needs.

- **Network Member**: Receive a set of no-cost introductory benefits to help save time and money. Use our resources to help build business and discover the next steps.
- **Microsoft Action Pack (MAP)**: This affordable yearly subscription is for businesses looking to begin, build, and grow their Microsoft practice in the cloud-first, mobile-first world through a wide range of software and benefits.
- **Competency**: Demonstrate your capability with a specific product or solutions and receive increased support, software, and training.

aka.ms/practiceplaybooks
# Power Apps Project Best Practices

Ensure that the team is aware of and takes advantage of established best practices from Microsoft where possible. Here is a list of best practice resources as it relates to developing Power App solutions.

<table>
<thead>
<tr>
<th>DOCUMENT</th>
<th>OVERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning a Power Apps Project</td>
<td>Learn about the steps to convert ideas into a fully working solution by using Power Apps.</td>
</tr>
<tr>
<td>Create Apps in Power Apps</td>
<td>Power Apps has four major components: Canvas apps, model-driven apps, portals, Common Data Service.</td>
</tr>
<tr>
<td>What are Canvas Apps?</td>
<td>Design and build a business app from a canvas in Microsoft Power Apps without writing code in a traditional programming language such as C#.</td>
</tr>
<tr>
<td>What are Model-Driven Apps?</td>
<td>A component-focused approach to app development. It does not require code and allows for the creation of simple or complex apps.</td>
</tr>
<tr>
<td>Power Platform Center of Excellence (CoE) kit</td>
<td>A collection of components and tools to get started with developing a strategy for adopting and supporting Microsoft Power Platform.</td>
</tr>
<tr>
<td>Power Platform ALM Guide</td>
<td>Learn how to implement application lifecycle management (ALM) using Microsoft Power Platform.</td>
</tr>
<tr>
<td>Power Apps Licensing FAQ</td>
<td>Common questions and answers on licensing and plan options for Microsoft Power Apps and Microsoft Power Automate licensing.</td>
</tr>
<tr>
<td>Power Apps US Government Plans</td>
<td>An overview of features that are specific to Power Apps US Government, designed to serve as an overlay to the general Power Apps service description.</td>
</tr>
<tr>
<td>Power Apps Support</td>
<td>Find documentation, common support issues, ask the community, report an issue.</td>
</tr>
</tbody>
</table>

aka.ms/practiceplaybooks
Azure Project Best Practices

Deploying or creating a solution in Azure can cover a broad surface area of technologies and services that are used. A common problem for customers implementing solutions on their own is not following established best practices and existing reference architectures. Ensure that the team is aware of and takes advantage of established best practices from Microsoft where possible. Here is a list of best practice resources as it relates to deploying infrastructure in Azure or for hybrid deployments.

<table>
<thead>
<tr>
<th>DOCUMENT</th>
<th>OVERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Azure Guidance from Patterns and Practices</strong></td>
<td>Checklists for availability, scalability, security for a broad list of topics and services in Azure.</td>
</tr>
<tr>
<td><strong>Azure Reference Architectures</strong></td>
<td>A collection of documented best practices for deploying virtual machines and VPN connectivity in Azure.</td>
</tr>
<tr>
<td><strong>Performance Best Practices for SQL Server Running in Azure</strong></td>
<td>Performance tuning SQL Server in Azure Virtual Machines.</td>
</tr>
<tr>
<td><strong>Azure Resiliency Technical Guidance</strong></td>
<td>Best practices for building resilient solutions in Azure.</td>
</tr>
<tr>
<td><strong>Azure Security Best Practices and Patterns</strong></td>
<td>Best practices and patterns.</td>
</tr>
<tr>
<td><strong>Data Partitioning Guidance</strong></td>
<td>Strategies for partitioning data to improve scalability, reduce contention, and optimize performance.</td>
</tr>
<tr>
<td><strong>Patterns for Designing ARM Templates</strong></td>
<td>Best practices with template design and deployment.</td>
</tr>
<tr>
<td><strong>Developing Big Data Solutions</strong></td>
<td>This guide explores the use of HDInsight for scenarios such as iterative exploration, as a data warehouse, for ETL processes, and integration into existing BI systems. It also includes guidance on understanding the concepts of big data, planning, and designing big data solutions, and implementing these solutions.</td>
</tr>
<tr>
<td><strong>Best Practices for Azure App Services</strong></td>
<td>Best practices for deploying, monitoring, and troubleshooting Azure App Service deployments.</td>
</tr>
<tr>
<td><strong>Instrumenting Applications Using Application Insights</strong></td>
<td>Using Application Insights to instrument applications for troubleshooting, monitoring and telemetry capture.</td>
</tr>
</tbody>
</table>

aka.ms/practiceplaybooks
Playbook Summary

Thanks for taking the time to review this playbook. The research, guidance, and best practices outlined in this playbook provide insights from successful partners on how to build an app innovation practice.

The goal was to organize resources and provide insight on business strategies and technical topics to capitalize on the cloud application development opportunity.

- The first section, Define the Strategy, helped partners define the practice strategy by identifying the unique value proposition and building a business plan.

- The second section, Hire & Train, focused on the importance of hiring the right team, and providing appropriate and ongoing training.

- The third section, Operationalize, detailed the solution delivery process, the Microsoft-provided support options, and tips for implementing IP in a security offering. It ended with a customer engagement checklist to use for creating repeatable processes.

- The fourth section, Go to Market & Close Deals, covered the sales and marketing process, finding new customers, and then nurturing and investing in them to build lasting relationships.

- The final section, Optimize & Grow the practice, stressed the importance of building customer lifetime value and the key elements of a customer adoption approach.

FEEDBACK

Share feedback on how to improve this and other playbooks by emailing playbookfeedback@microsoft.com