Study guide for Exam PL-900: Microsoft Power Platform Fundamentals

Purpose of this document

This study guide should help you understand what to expect on the exam and includes a summary of the topics the exam might cover and links to additional resources. The information and materials in this document should help you focus your studies as you prepare for the exam.

<table>
<thead>
<tr>
<th>Useful links</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review the skills measured as of December 27, 2022</td>
<td>This list represents the skills measured AFTER the date provided. Study this list if you plan to take the exam AFTER that date.</td>
</tr>
<tr>
<td>Review the skills measured prior to December 27, 2022</td>
<td>Study this list of skills if you take your exam PRIOR to the date provided.</td>
</tr>
<tr>
<td>Change log</td>
<td>You can go directly to the change log if you want to see the changes that will be made on the date provided.</td>
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<tr>
<td>How to earn the certification</td>
<td>Some certifications only require passing one exam, while others require passing multiple exams.</td>
</tr>
<tr>
<td>Certification renewal</td>
<td>Microsoft associate, expert, and specialty certifications expire annually. You can renew by passing a free online assessment on Microsoft Learn.</td>
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<tr>
<td>Your Microsoft Learn profile</td>
<td>Connecting your certification profile to Learn allows you to schedule and renew exams and share and print certificates.</td>
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<tr>
<td>Passing score</td>
<td>A score of 700 or greater is required to pass.</td>
</tr>
<tr>
<td>Exam sandbox</td>
<td>You can explore the exam environment by visiting our exam sandbox.</td>
</tr>
<tr>
<td>Request accommodations</td>
<td>If you use assistive devices, require extra time, or need modification to any part of the exam experience, you can request an accommodation.</td>
</tr>
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</table>
Updates to the exam

Our exams are updated periodically to reflect skills that are required to perform a role. We have included two versions of the Skills Measured objectives depending on when you are taking the exam.

We always update the English language version of the exam first. Some exams are localized into other languages, and those are updated approximately eight weeks after the English version is updated. Other available languages are listed in the Schedule Exam section of the Exam Details webpage. If the exam isn’t available in your preferred language, you can request an additional 30 minutes to complete the exam.

Note

The bullets that follow each of the skills measured are intended to illustrate how we are assessing that skill. Related topics may be covered in the exam.

Note

Most questions cover features that are general availability (GA). The exam may contain questions on Preview features if those features are commonly used.

Skills measured as of December 27, 2022

Audience profile

Candidates for this exam aspire to improve productivity by understanding the capabilities of the Microsoft Power Platform, automating basic business processes with Power Automate, performing basic data analysis with Power BI, acting more effectively by creating simple Power Apps experiences, and creating powerful chatbots by using Power Virtual Agents.

- Describe the business value of Microsoft Power Platform (20–25%)
- Identify the core components of Microsoft Power Platform (10–15%)
- Demonstrate the capabilities of Power BI (20–25%)
- Demonstrate the capabilities of Power Apps (25–30%)
- Demonstrate the capabilities of Power Automate (10–15%)
- Demonstrate the capabilities of Power Virtual Agents (1–5%)

Describe the business value of Microsoft Power Platform (20–25%)

Describe the business value of Microsoft Power Platform services

- Gain insights into data by using Power BI
• Build applications quickly by using Power Apps
• Automate processes by using Power Automate
• Use connectors to integrate services and data
• Create powerful chatbots by using the Power Virtual Agents web app and Power Virtual Agents in Microsoft Teams

**Describe the business value of extending business solutions by using Microsoft Power Platform**

• Describe how Microsoft Power Platform apps work together with Dynamics 365 apps
• Describe how Microsoft Power Platform business solutions work together with Microsoft 365 apps and services
• Describe how Microsoft Power Platform apps work together
• Describe how to use Microsoft Power Platform solutions with Microsoft Teams
• Describe how Microsoft Power Platform business solutions can consume Microsoft Azure services including Azure Cognitive Services
• Describe how Microsoft Power Platform business solutions can consume third-party apps and services
• Describe use cases for AppSource

**Describe Microsoft Power Platform administration and security**

• Describe how Microsoft Power Platform implements security including awareness of Microsoft Dataverse security roles, Azure Identity Services, and Access Management (IAM)
• Describe how to manage apps and users
• Describe environments
• Describe where to perform specific administrative tasks including Microsoft Power Platform admin center and Microsoft 365 admin center
• Describe data policies
• Describe how Microsoft Power Platform supports privacy and accessibility guidelines
• Describe Microsoft Power Platform governance capabilities
• Describe analytics and how they can be used

**Identify the core components of Microsoft Power Platform (10–15%)**

**Describe Microsoft Dataverse**

• Describe the difference between databases and Dataverse
• Describe differences between Dataverse and Dataverse for Teams
• Describe tables, columns, and relationships
• Describe how to use common standard tables to describe people, places, and things
• Describe business logic uses including business rules, real-time workflows, and actions
• Describe dataflows and their uses
• Describe solutions and their purpose
Describe Connectors

- Describe triggers including trigger types and where triggers are used
- Describe actions
- Describe licensing options for connectors including standard or premium tier
- Identify use cases for custom connectors

Demonstrate the capabilities of Power BI (20–25%)

Identify common Power BI components

- Identify and describe uses for visualization controls including pie, bar, donut, and scatter plots and KPIs
- Describe the Power BI Desktop Reports, Data, and Model views
- Compare and contrast Power BI Desktop and Power BI Service
- Compare and contrast dashboards, workspaces, and reports
- Describe the Power BI security model
- Describe using Power BI in mobile apps

Connect to and consume data

- Connect to and combine data from multiple sources including Microsoft Excel
- Describe how to use Power Query to clean and transform data
- Describe and implement aggregate functions
- Identify available types of data sources including Microsoft Excel
- Describe use cases for shared datasets
- Describe use cases for template apps
- Describe options for viewing Power BI reports and dashboards

Build a basic dashboard using Power BI

- Create a Power BI report
- Create a Power BI dashboard
- Publish and share reports and dashboards

Demonstrate the capabilities of Power Apps (25–30%)

Identify common Power Apps components

- Describe the differences between canvas apps and model-driven apps
- Describe use cases for formulas

Build a basic canvas app

- Describe types of data sources
- Connect to data sources by using connectors
- Create an app from data
- Use controls to design the user experience
- Publish and share an app
- Describe embedding into Microsoft Teams

**Build a basic model-driven app**
- Create a model-driven app from tables
- Modify forms
- Create and modify views and columns
- Publish and share an app

**Demonstrate the capabilities of Power Automate (10–15%)**

**Identify common Power Automate components**
- Identify flow types including cloud, desktop, and business process flows
- Describe use cases for flows and available flow templates
- Describe how Power Automate uses connector triggers and actions
- Describe loops and conditions including switch, do until, and apply to each
- Describe expressions
- Describe use cases for approvals
- Describe the Power Automate apps, including Power Automate Desktop, Power Automate mobile, and Power Automate portal

**Build a basic cloud flow**
- Create a cloud flow by using the instant, automated, or scheduled flow template
- Modify a cloud flow
- Use flow steps to perform data operations
- Run a cloud flow

**Demonstrate the capabilities of Power Virtual Agents (1–5%)**

**Describe the capabilities of Power Virtual Agents in Microsoft Teams**
- Describe use cases for Power Virtual Agents within Microsoft Teams
- Describe topics, entities, and actions
- Describe message nodes, question nodes, conditions, trigger phrases, and the authoring canvas

**Build and publish a basic chatbot**
- Create a chatbot
- Create a topic
- Call an action
- Launch a Power Automate flow from a chatbot
- Publish a chatbot to different applications including Microsoft Teams, websites, and other apps
Study resources
We recommend that you train and get hands-on experience before you take the exam. We offer self-study options and classroom training as well as links to documentation, community sites, and videos.

<table>
<thead>
<tr>
<th>Study resources</th>
<th>Links to learning and documentation</th>
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</thead>
<tbody>
<tr>
<td>Get trained</td>
<td>Choose from self-paced learning paths and modules or take an instructor led course</td>
</tr>
<tr>
<td>Find documentation</td>
<td>Microsoft Power Platform documentation</td>
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<td></td>
<td>Power BI documentation</td>
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<td></td>
<td>Microsoft Power Apps documentation</td>
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<td></td>
<td>Power Automate documentation</td>
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<td>Microsoft Power Virtual Agents documentation</td>
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<td>Ask a question</td>
<td>Microsoft Q&amp;A</td>
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<td>Get community support</td>
<td>Power Platform Community (microsoft.com)</td>
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<td>Follow Microsoft Learn</td>
<td>Microsoft Learn - Microsoft Tech Community</td>
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<tr>
<td>Find a video</td>
<td>#LessCodeMorePower</td>
</tr>
<tr>
<td></td>
<td>Browse other Microsoft Learn shows</td>
</tr>
</tbody>
</table>

Change log
Key to understanding the table: The topic groups (also known as functional groups) are in bold typeface followed by the objectives within each group. The table is a comparison between the two versions of the exam skills measured and the third column describes the extent of the changes.

<table>
<thead>
<tr>
<th>Skill area prior to December 27, 2022</th>
<th>Skill area as of December 27, 2022</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the business value of Microsoft Power Platform</td>
<td>Describe the business value of Microsoft Power Platform</td>
<td>No change</td>
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<tr>
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<td>---------------------------------------</td>
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<tr>
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<tr>
<td><strong>Demonstrate the capabilities of Power BI</strong></td>
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</tr>
<tr>
<td>Identify common Power BI components</td>
<td>Identify common Power BI components</td>
<td>Minor</td>
</tr>
<tr>
<td>Connect to and consume data</td>
<td>Connect to and consume data</td>
<td>No change</td>
</tr>
<tr>
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**Build a basic dashboard using Power BI**
• Create a Power BI report
• Create a Power BI dashboard
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### Demonstrate the capabilities of Power Apps (25–30%)

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- Describe the differences between canvas apps and model-driven apps
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#### Build a basic canvas app
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#### Build a basic model-driven app
- Create a model-driven app from tables
- Modify forms
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### Demonstrate the capabilities of Power Automate (10–15%)

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