



Just IT



Apprenticeships | Training | Recruitment

Data Technician

Name:

Course Date:

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Day 1: Task 1

Please research and complete the below questions relating to key concepts of cloud.

Be prepared to discuss the below in the group following this task.

What can cloud computing do for us in the real-world?

Cloud computing lets us store, access, and process data over the internet instead of relying on local devices or servers. In the real world, this means:

- Businesses can scale quickly without buying expensive hardware.
- People can access files, apps, and services from anywhere.
- Teams can collaborate in real time through shared tools like Google Workspace or Microsoft 365.
- Developers can build and deploy apps faster using cloud platforms.
- Organizations can back up data securely and recover it easily after failures.

How can it benefit a business?

Cloud computing helps businesses by reducing costs, improving flexibility, and boosting efficiency. It lets them scale resources up or down easily, access data from anywhere, enhance collaboration, and protect data through secure backups all without heavy investment in physical IT infrastructure.

What's the alternative to cloud computing?

The main alternative to cloud computing is **on-premises computing**, where a business runs its own servers, storage, and software locally. This gives more control and security but requires higher costs for hardware, maintenance, and IT staff.

What cloud providers can we use, what are their features and functions?

Features	AWS	Azure	GCP
Computing	EC2 for virtual servers, Lambda for serverless computing	Virtual Machines, Azure Functions	Compute Engine, Cloud Functions
Storage	S3 for scalable storage	Blob Storage	Cloud storage



	Database	RDS, DynamoDB	SQL Database, Cosmos DB	Cloud SQL, Firestore
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Day 1: Task 2

Please research the below cloud offerings, explain what they are and examples of use cases.

Cloud Offerings	Explain what it is	When / how might you use this service in the real-world?
IaaS (Infrastructure as a service)	Provides virtualized computing resources like servers, storage, and networking over the internet.	Used when a business wants full control over its systems without buying physical hardware e.g., hosting websites or running custom applications.
PaaS (Platform as a service)	Offers a platform for developers to build, test, and deploy apps without managing infrastructure.	Used by developers to quickly create apps or websites e.g., using Google App Engine or Azure App Service.
SaaS (Software as a service)	Delivers ready-to-use software over the internet via subscription.	Used for everyday business tools e.g., using Gmail, Microsoft 365, or Salesforce.



Day 1: Task 3

Please research the below terms and explain what they are, when they would be appropriate and a real-world example of where it could be implemented (i.e. what type of organisation).

Public Cloud	A public cloud is a service provided over the internet and shared by many users. It's managed by companies like AWS, Microsoft Azure, or Google Cloud. Businesses use it when they want to save costs, set up quickly, and scale easily. For example, a startup might use AWS to host its website and store data without buying servers.
Private Cloud	A private cloud is used by one organisation only and offers more control and security. It's ideal for companies handling sensitive data or working under strict regulations. For instance, a bank might use a private cloud to store and protect customer financial information.
Hybrid Cloud	A hybrid cloud combines both public and private clouds, allowing data and applications to move between them. It's useful when a business needs flexibility keeping critical data private but using the public cloud for less sensitive tasks. For example, a retailer might store payment data privately while running its website on the public cloud.
Community Cloud	A community cloud is shared by several organisations that have similar needs or goals. It helps them share resources and costs securely. For example, a group of hospitals could use a community cloud to share patient information and medical research safely.

Day 2: Task 1



Describe, with examples, the **three** major areas that the Computer Misuse Act deals with.

Area	Description	Example
Unauthorised Access to Computer Material	Accessing a computer, file, or system without permission	Hacking into someone's email or social media account.
Unauthorised Access with Intent to Commit or Facilitate Further Offences	Gaining access to commit another crime, such as fraud or theft.	Hacking into a bank system to steal customer data or money.
Unauthorised Modification of Computer Material	Changing, deleting, or corrupting data without permission.	Spreading a virus that deletes files or damages systems.

The computer misuse act 1990 is an act where an individual can be criminalised because of computer related offense. Describe three extra powers that the Police and Justice Act 2006 (Computer Misuse) has added.

Description
Denial-of-Service (DoS) attacks – It's now illegal to overload a computer or network to make it crash. <i>Example:</i> Flooding a website with traffic so it stops working.
Possession of hacking tools – Owning software or tools designed for hacking is an offence, even if you haven't used them. <i>Example:</i> Having software that can exploit computer vulnerabilities.
Unauthorised acts to impair computers – It's illegal to do anything unauthorised that can disrupt or damage a computer system. <i>Example:</i> Installing malware to interfere with a company's network.

Look at the below website to answer the questions:

<https://www.gov.uk/personal-data-my-employer-can-keep-about-me>

Write down three items of data which a company can store about an employee.

Employers can keep the following data about their employees without their permission:

name

address

date of birth

Give three more examples of data that an employer can only store if they first get the employee's permission.

Employers need their employees' permission to keep certain types of 'sensitive' data, including:

race and ethnicity

religion

political membership or opinions

Conduct further research to answer the below questions.

Question	Answer
Provide one example of: Copyright infringement	A company includes songs from a popular artist in its advertising video without getting a licence from the music rights owner.



Provide one example of: Plagiarism	A student copies whole paragraphs from a published article into their essay and does not cite the article.
What are two consequences of copyright infringement and software piracy?	Legal penalties- fines, civil lawsuits, and possibly criminal charges (even imprisonment in serious cases). Security risks- pirated software often comes bundled with malware, lacks updates and patches, and can expose users to vulnerabilities.
Give three possible consequences for individuals when using pirated software	

Listed below are some laws which we have covered today:

1. Computer Misuse Act 1990
2. Police and Justice Act 2006 (Computer Misuse)
3. Copyright, Designs and Patents Act 1988
4. Copyright (Computer Programs) Regulations 1992
5. The Health and Safety (Display Screen Equipment) Regulations 1992
6. Data Protection Act 2018
7. Consumer Rights Act 2015

- Insert a number in the first column of each row to match each of the statements with one of the above Acts.

- One of statements is incorrect and not illegal. For this statement, write 'Not illegal'.

Act number	Clause
4	With some exceptions, it is illegal to use unlicensed software
7	Any product, digital or otherwise, must be fit for the purpose it is supplied for
1	Unauthorised modification of computer material is illegal
Not illegal	It is illegal to create or use a hacking tool for penetration testing
6	Personal data may only be used for specified, explicit purposes
5	Employers must provide their computer users with adequate health and safety training for any workstation they work at
2	It is illegal to distribute hacking tools for criminal purposes
3	It is illegal to distribute an illicit recording
6	Personal data may not be kept longer than necessary
1	Gaining unauthorised access to a computer system is illegal
5	Employers must ensure that employees take regular and adequate breaks from looking at their screens
2	It is illegal to prevent or hinder access (e.g. by a denial-of-service attack) to any program or data held in any computer
6	Personal data must be accurate and where necessary kept up to date

Day 3: Task 1

Please complete the below lab (3) 'Explore relational data in Azure' and paste evidence of the completed lab in the box provided.





Explore relational data in Azure

Learning Path 02 (CSS)

Duration:	2 Hours, 15 Minutes
Lab Series:	DP-900T00-A Microsoft Azure Data Fundamentals [Cloud Slice Provided]
Virtualization Platform:	Hyper-V
RAM:	6.5GB
Cloud Platform:	Azure
Content Version:	2
Is Exam:	No
Status:	Not Running

Launch

Completed
lab

https://labclient.labondemand.com/LabClient/5bf962f2-0222-4937-83f6-ae5253aa1a52

AdventureWorks (sqlserver55357798/AdventureWorks) | ...

SQL database

Search resources, services, and docs (G+)

Home > AdventureWorks (sqlserver55357798/AdventureWorks)

AdventureWorks (User1-55357798@LO...)

Query 1

1

Showing limited object explorer here. For full capability please click here to open Azure Data Studio.

Tables

Views

Stored Procedures

Tip: The JOIN shows how to pull related data (the category name) from another table using a matching ID.

15. Close the query editor pane, discarding your edits.

Tip: If you've finished exploring Azure SQL Database, you can delete the resource group that you created in this exercise. Deleting the resource group removes all the resources in one step. It also minimizes cost.

Previous End

1 Hr 40 Min Remaining



Day 3: Task 2

Please complete the below lab (4) '*Explore non-relational data in Azure*' and paste evidence of the completed lab in the box provided.



Explore non-relational data in Azure

Learning Path 03 (CSS)

Duration:	2 Hours, 15 Minutes
Lab Series:	DP-900T00-A Microsoft Azure Data Fundamentals [Cloud Slice Provided]
Virtualization Platform:	Hyper-V
RAM:	6.5GB
Cloud Platform:	Azure
Content Version:	2
Is Exam:	No
Status:	Not Running

Launch



Completed lab

The collage consists of three screenshots from the Microsoft Azure portal:

- Top-left:** The 'New file share' page, 'Review + create' tab. It shows the file share name 'files', access tier 'TransactionOptimized', and protocol 'SMB'. A 'Deploying...' status bar is at the top.
- Top-right:** The 'Explore non-relational data in Azure' sidebar. It includes instructions for connecting and exploring Azure Tables, a tip about Table storage, and a progress bar showing '1 Hr 34 Min Remaining'.
- Bottom:** The 'shay22 | Containers' page. It shows a list of containers with the following table:

Name	Last modified	Anonymous access
data	10/8/2025, 4:13:45 AM	Private

shay22 - Microsoft Azure

raw.githubusercontent.com/Mic...

https://portal.azure.com/#@LODSPRODMCA.on...

Microsoft Azure Search resources, services, and docs (G+)

Copilot

Home > shay22 | Storage browser

Storage account

Search

+ Add entity Refresh Delete Edit columns

Overview

Activity log

Tags

Diagnose and solve problems

Access Control (IAM)

Data migration

Events

Storage browser

Tables > products3

Authentication method: Access key (Switch to Microsoft Entra user account)

Add filter Advanced filters

Showing all 2 items

RowKey	Timestamp	Discontin...
1	2025-10-08T12:05:06.5049...	true

https://portal.azure.com/#

ENG US 5:07 AM 10/8/2025

Explore non-relational data in Azure

Instructions Resources

12. After inserting the new entity, verify that a row containing the discontinued product is shown in the table.

You have manually entered data into the table using the storage browser interface. In a real scenario, application developers can use the Azure Storage Table API to build applications that read and write values to tables, making it a cost effective and scalable solution for NoSQL storage.

Previous Next

1 Hr 2 Min Remaining

https://labclient.labondemand.com/LabClient/dc07f4a8-dd20-48f6-bf57-13f952240ba0

shay22 - Microsoft Azure

raw.githubusercontent.com/Mic...

https://portal.azure.com/#@LODSPRODMCA.on...

Microsoft Azure Search resources, services, and docs (G+)

Copilot

Home > shay22_1759921551078 | Overview > shay22

shay22 | Containers

Storage account

Search

+ Add container Upload Refresh Delete ...

Overview

Activity log

Tags

Diagnose and solve problems

Access Control (IAM)

Data migration

Events

Storage browser

Search containers by prefix Only show active containers

Showing all 1 items

Name	Last modified	Anonymous access
data	10/8/2025, 4:13:45 AM	Private

https://portal.azure.com/#

ENG US 4:31 AM 10/8/2025

Explore non-relational data in Azure

Instructions Resources

Tip: Real folders let you apply least-privilege security at folder granularity, rename safely, and speed recursive listings versus scanning thousands of prefixed blob names.

12. Use the X icon at the top right in the data page to close the page and return to the Containers page.

Explore Azure Files

Azure Files provides a way to create cloud-based file shares.

Previous Next

1 Hr 37 Min Remaining



The screenshot displays the Microsoft Azure Data Explorer web interface. The top navigation bar includes the Microsoft Azure logo and a search bar. The left sidebar lists various management tools, with 'Data Explorer' selected. The central pane shows a query editor with a CQL query: `WHERE CONTAINS(c.name, "Helmet")`. The right sidebar, titled 'Explore non-relational data in Azure', provides instructions and a tip: 'Tip: If you've finished exploring Azure Cosmos DB, you can'. The bottom of the interface shows a task bar with various application icons and a system clock indicating 5:34 AM.

Day 3: Task 3

Please complete the below lab (5) 'Explore data analytics in Azure' and paste evidence of the completed lab in the box provided.



Explore data analytics in Azure

Learning Path 04 (CSS)

Duration: 3 Hours
Lab Series: DP-900T00-A Microsoft Azure Data Fundamentals [Cloud Slice Provided]
Virtualization Platform: Hyper-V
RAM: 6.5GB
Cloud Platform: Azure
Content Version: 2
Is Exam: No
Status: Not Running

Launch

Completed
lab

https://labclient.labondemand.com/LabClient/81d528f9-3f43-46c4-908b-bb94c5b33003

Microsoft Fabric free - Sign up x Fabric

https://app.fabric.microsoft.com/groups/me/list?redirectedFromSi...

Fabric Search

Home

My workspace

+ New item

Workspace settings

Filter by keyword

Filter

Choose from predefined task flows or add a task to build one

Select from one of Microsoft's predefined task flows or add a task to start building one yourself.

Select a predefined task flow Add a task

Import a task flow

Instructions Resources

1. In the bar on the left, select the icon for your workspace to view all of the items it contains.

2. In the toolbar, select **Workspace settings**.

3. In the **General** section, select **Remove this workspace**.

Congratulations!

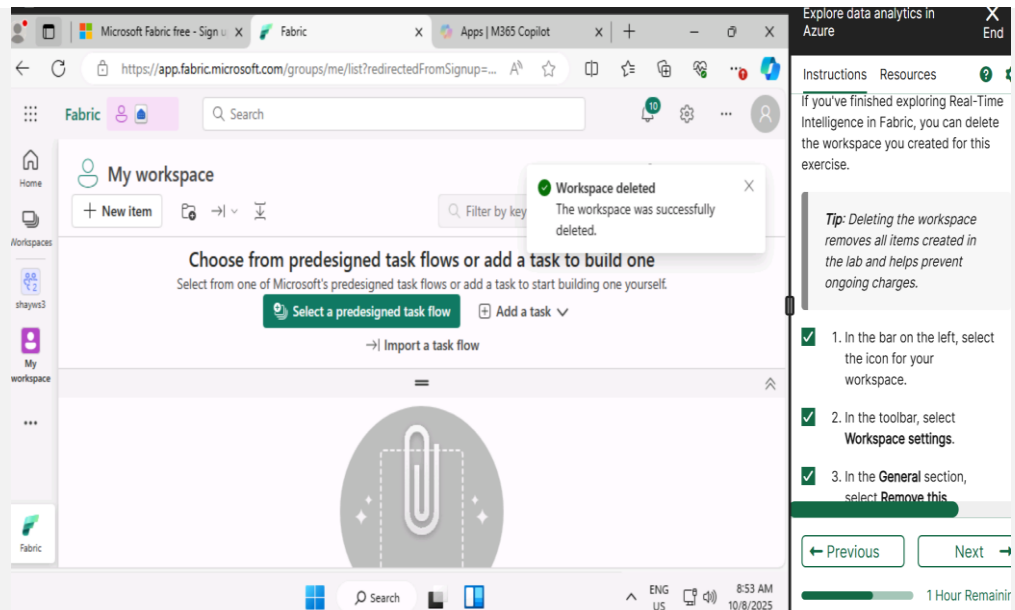
You have successfully completed this Lab. Click **Next** to advance to the next Lab.

Previous Next

2 Hr 20 Min Remaining

7:33 AM 10/8/2025





Had trouble with the final lab my laptop is too slow to run power bi app. It would not load the data into the app. It just kept crashing my laptop

Day 4: Task 1

In your teams, complete the Azure DP-900 practice exam and paste your result below – this is open book and please research and discuss your answers as a team.



6
🔗

Practice Assessment: DP-900T00-A Microsoft Azure Data Fundamentals
Practice Assessment for Microsoft Certifications for DP-900T00-A

Additional Details

Required: No
Available Instructor-Led: Yes
Available Self-Paced: Yes

Result

I got 48% I forgot to screenshot sorry.

Day 4: Task 2

1. Scenario Background

"Paws & Whiskers" is a growing pet shop that aims to improve its business by analysing sales, customer information, and inventory data. Currently, the data is collected manually or stored in spreadsheets. Management is interested in transitioning to Microsoft Azure to



streamline data storage, analysis, and reporting, enabling them to make data-driven decisions.

2. Data Laws and Regulations

Identify and explain the data laws and regulations relevant to handling customer data within the proposal. Ensure you cover the following points:

- **GDPR Compliance:** Highlight the importance of adhering to the General Data Protection Regulation (GDPR), particularly as it relates to storing and processing customer information.
- **Data Protection Act (DPA) 2018:** Outline how the DPA 2018 may affect the way "Paws & Whiskers" collects and stores data, ensuring compliance with UK laws on data privacy.
- **Other Industry Standards:** Research any additional data protection standards or regulations that may apply to pet shop data, particularly if they involve sensitive or payment information.

3. Azure Service Recommendations

Recommend Microsoft Azure services that would suit the company's data analysis needs and explain why these services are suitable. Your recommendations should include:

- **Data Storage:** Identify suitable storage options, such as **Azure Blob Storage** or **Azure SQL Database**, and discuss the benefits of each for storing large datasets, including inventory, sales transactions, and customer details.
- **Data Analysis Tools:** Recommend tools such as **Azure Machine Learning** for customer behaviour analysis or **Azure Synapse Analytics** for analysing sales trends.
- **Data Integration and Automation:** Explain how services like **Azure Data Factory** could automate data collection and integration processes, improving efficiency.

4. Data Types and Data Modelling

Define the types of data "Paws & Whiskers" will need to work with and describe your approach to data modelling:

- **Data Categories:** Identify key data types, such as customer demographics, transaction history, pet inventory, and product categories.
- **Data Modelling Approach:** Outline how you would structure this data using a relational model or a data warehouse approach, considering factors like tables, entities, relationships, and primary keys.

5. Data Storage Formats and Structures in Azure

Discuss how you would store data within Azure and the formats you would recommend:



- **Data Formats:** Specify recommended formats (e.g., CSV for raw data imports, JSON for structured data, Parquet for analytics) and explain why these formats are suitable for specific data types.
- **Data Security and Encryption:** Include recommendations for securing data using Azure's built-in encryption features and access controls to ensure compliance with data privacy regulations.

6. Additional Considerations

Provide any other considerations that might enhance data handling and efficiency in Azure, such as:

- **Backup and Disaster Recovery:** Outline a backup plan using **Azure Backup** or **Azure Site Recovery** to safeguard against data loss.
- **Data Visualisation:** Discuss potential use of **Power BI** within Azure for creating dashboards that provide management with real-time insights into sales and customer trends.
- **Future Scalability:** Comment on how Azure services can scale as the business grows, accommodating larger datasets and more complex analyses.

Submission Guidelines:

1. **Structure:** Ensure your report is well-organised, with sections for each task (e.g., Data Laws, Azure Services, Data Types, etc.).
2. **Formatting:** Include headings, bullet points where appropriate, and any visuals or diagrams that support your explanations.
3. **References:** Cite any resources or regulations referenced in the report.
4. **Length:** Aim for 1500-2000 words.

Data Laws and Regulations

As Paws & Whiskers transitions to Microsoft Azure to modernise its data storage and reporting systems, compliance with UK data protection laws becomes essential. These regulations govern how customer information is collected, processed, and stored, directly influencing how the business operates day to day. The key frameworks are the General Data Protection Regulation (GDPR), the Data Protection Act (DPA) 2018, and additional standards such as the Payment Card Industry Data Security Standard (PCI DSS) and Privacy and Electronic Communications Regulations (PECR).

The GDPR, implemented in the UK as the UK GDPR, establishes strict principles for managing personal data. For Paws & Whiskers, this means all customer information such as names, addresses, purchase history, and contact details must be collected lawfully, fairly, and for a specific purpose. The company must gain consent for marketing, only retain data for as long as necessary, and protect it through secure systems like Microsoft Azure's encryption and restricted access controls. These requirements affect how

employees handle customer records, conduct marketing, and store data within the cloud. Adhering to GDPR ensures that customers' rights are protected, helping to maintain trust and loyalty.

The Data Protection Act (DPA) 2018 builds on GDPR principles, embedding them into UK law. It requires businesses to demonstrate accountability and transparency in their data practices. For Paws & Whiskers, this means implementing clear data management policies, regularly reviewing stored data, and ensuring secure disposal of outdated records. Any data breach must be reported to the Information Commissioner's Office (ICO), with failure to do so potentially resulting in severe financial penalties and reputational damage.

In addition, compliance with PCI DSS is required if the store processes card payments, ensuring that payment details are encrypted and secure. The PECR also governs how the business sends marketing emails or uses website cookies, requiring explicit consent from customers.

If Paws & Whiskers fails to comply with these regulations or manages data poorly, the consequences could be significant. Data breaches may lead to hefty fines, loss of customer confidence, and long-term damage to the brand's reputation. Poor data management could also lead to inaccurate sales reporting and misguided business decisions. By prioritising compliance and adopting Azure's secure and scalable infrastructure, Paws & Whiskers can protect its customers, strengthen its reputation, and ensure sustainable growth.

Azure Service Recommendations

As Paws & Whiskers continues to grow, relying on spreadsheets such as Microsoft Excel to manage sales, inventory, and customer data has become increasingly inefficient. While Excel is useful for small-scale record-keeping, it is not designed for handling large or constantly changing datasets. Manual data entry increases the risk of errors, inconsistencies, and duplication, while collaboration between multiple employees can lead to version control issues. Furthermore, Excel lacks the automation, security, and analytical power needed to support informed, data-driven decision-making. For a business seeking to expand its customer base and optimise operations, these limitations could hinder growth.

Transitioning to **Microsoft Azure** offers a more secure, scalable, and cost-effective approach to managing business data. For structured information such as sales transactions, customer records, and stock levels Azure SQL Database is an ideal solution. It is a cloud-based, fully managed relational database that automates updates, backups, and security monitoring. This reduces the need for in-house IT support while ensuring data reliability. The pay-as-you-go model allows Paws & Whiskers to manage costs effectively, paying only for the resources used rather than maintaining costly on-premises servers.

For unstructured data, such as product images, supplier documents, and marketing materials, Azure Blob Storage provides a flexible and low-cost storage solution. It can store vast amounts of data and easily scale as the business grows. This ensures that the company's data remains accessible and secure without requiring significant investment in physical storage infrastructure.

To enhance data insights, Azure Synapse Analytics can be used to combine sales, customer, and inventory data for detailed reporting and trend analysis. This would allow Paws & Whiskers to identify best-selling products, monitor seasonal trends, and make evidence-based business decisions. For understanding customer behaviour, Azure Machine Learning could also be introduced to predict buying patterns and recommend targeted marketing strategies.

Finally, Azure Data Factory would help automate the collection and integration of data from multiple sources such as point-of-sale systems, online sales platforms, and supplier databases into a single, centralised location. This automation saves time, reduces human error, and ensures real-time updates across all business areas.

Overall, while Excel may suffice for basic record-keeping, transitioning to Azure provides Paws & Whiskers with a future-proof, secure, and efficient system for managing and analysing data allowing the business to make smarter decisions and grow sustainably.

Data Types and Data Modelling

As Paws & Whiskers continues to grow, the business must manage and analyse a wide range of data to improve operations and make informed decisions. Handling this data efficiently will help the company understand customer behaviour, optimise stock levels, and track sales performance. Moving away from manual spreadsheets to a structured data model within Microsoft Azure will ensure better accuracy, security, and long-term scalability.

The main data categories required by the business include customer data, transaction data, inventory data, and product and supplier data. Customer data would include names, contact details, and information about the pets they own. This information can be used to create loyalty programmes and personalised marketing campaigns. Transaction data would record each sale, including product details, quantities, prices, and payment methods, providing insights into sales patterns and seasonal demand. Inventory data would track product stock levels, categories, and reorder dates, ensuring the store maintains an efficient supply chain. Finally, supplier data would record supplier names, contact information, and order histories, helping the business manage relationships and deliveries more effectively.

For a business of this size, adopting a relational data model within Azure SQL Database would be the most practical and cost-effective solution. This approach stores data in structured tables that are linked through key relationships. For example, a **Customer** Table could include a unique CustomerID as the primary key, which connects to a Transaction Table through a foreign key relationship. Similarly, a **Product Table** would

link to transactions and supplier records. This structure ensures data consistency, prevents duplication, and allows for efficient reporting and analysis. Over time, as data volume increases, Azure Synapse Analytics could be introduced to perform more advanced analysis. However, starting with a relational database keeps costs low and management simple while laying the foundation for future data expansion. This approach provides Paws & Whiskers with an affordable, reliable, and scalable data management solution aligned with its long-term growth goals.

Data Storage Formats and Structures in Azure

For a growing small business like **Paws & Whiskers**, effective data storage is crucial to ensure smooth operations, accurate reporting, and sustainable growth. Given the company's size and resource constraints, it is important to adopt a storage strategy in **Microsoft Azure** that balances cost, scalability, and security. Proper planning is essential because poor data management could result in operational errors, lost sales, and reputational damage if customer or transaction data is mishandled.

To manage different types of business data, it is important to select appropriate **data** formats. For raw data imports, such as CSV files exported from spreadsheets or point-of-sale systems, CSV is ideal due to its simplicity and broad compatibility. Structured data, like customer profiles or inventory records, is best stored in JSON format, as it allows nested data structures and seamless integration with Azure SQL Database or NoSQL systems. For analytics and reporting purposes, Parquet files are highly efficient, particularly for large datasets such as sales transactions over time. Parquet's columnar storage reduces storage costs and improves query performance when performing trend analysis in tools like Azure Synapse Analytics.

Given the sensitivity of customer and financial data, data security and encryption are critical. Azure provides built-in encryption both at rest and in transit, which should be enabled for all storage accounts. Access should be controlled through Azure Role-Based Access Control (RBAC), ensuring that only authorised personnel can view or modify sensitive information. Implementing regular backups and retention policies will protect against accidental deletion or data corruption, which could otherwise disrupt operations and erode customer trust.

For a small business, the most cost-efficient approach is to combine Azure SQL Database for structured operational data with Azure Blob Storage for unstructured files. This hybrid structure is scalable, reduces the need for costly on-premises hardware, and allows the business to expand data capabilities as it grows. By selecting suitable formats, implementing robust security measures, and using Azure's scalable storage services, Paws & Whiskers can ensure data integrity, regulatory compliance, and sustainable growth while avoiding the risks associated with poor data management.

Additional Considerations



To ensure long-term success with Microsoft Azure, Paws & Whiskers must consider additional strategies that enhance data handling, protection, and overall efficiency. As the business grows, reliable backup, data visualisation, and scalability will be essential to maintaining smooth operations and supporting data-driven decisions.

A key priority is implementing a robust backup and disaster recovery plan. Using Azure Backup, the company can automatically back up critical data such as sales records, customer information, and inventory lists to the cloud. This ensures that, in the event of accidental deletion, hardware failure, or a cyberattack, data can be restored quickly with minimal disruption. For added protection, Azure Site Recovery can replicate essential business systems to a secondary location, enabling operations to continue during unexpected outages. This approach reduces downtime and safeguards the company's reputation.

For better decision-making, Power BI, which integrates seamlessly with Azure, can be used to create interactive dashboards and visual reports. These dashboards can provide real-time insights into sales performance, customer purchasing patterns, and stock availability. Management can then make informed, timely decisions, improving efficiency and profitability.

Finally, future scalability is a major advantage of Azure. As Paws & Whiskers expands potentially adding new branches or an online sales platform Azure services can easily scale to handle larger datasets and more complex analytics without significant upfront investment. The business pays only for what it uses, keeping costs predictable while maintaining flexibility.

Course Notes

It is recommended to take notes from the course, use the space below to do so, or use the revision guide shared with the class:



We have included a range of additional links to further resources and information that you may find useful, these can be found within your revision guide.

END OF WORKBOOK

Please check through your work thoroughly before submitting and update the table of contents if required.

Please send your completed work booklet to your trainer.

