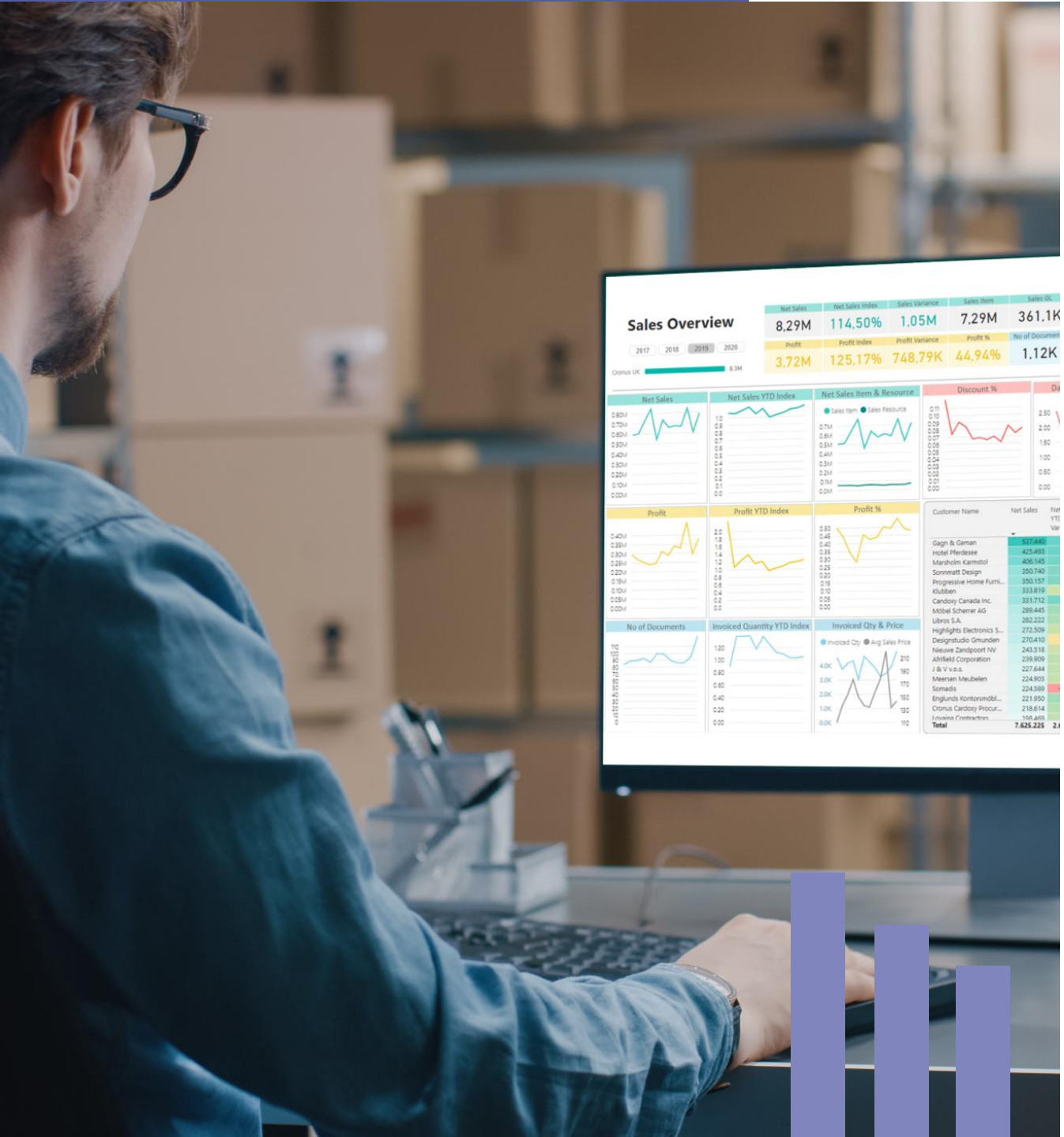


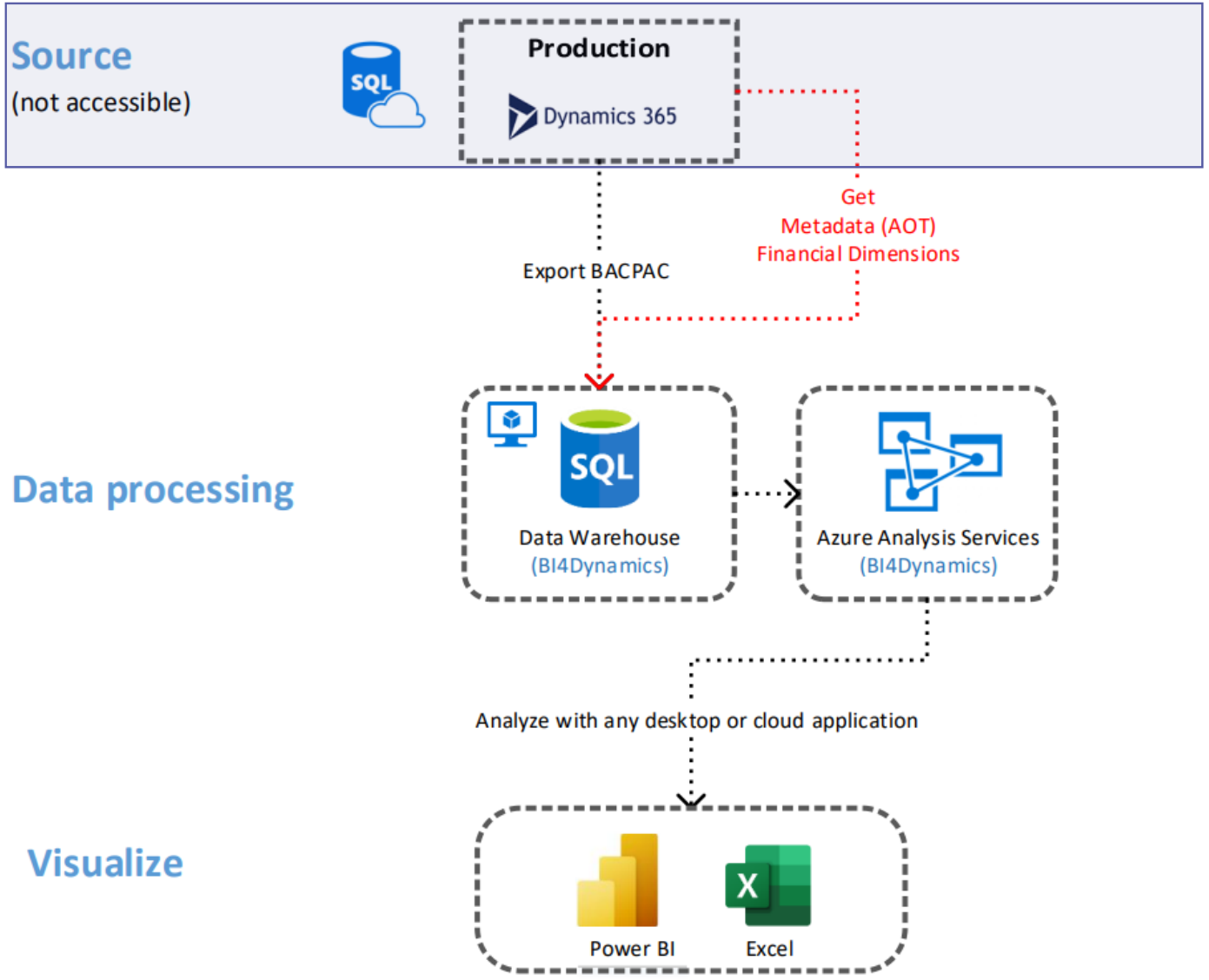
bi4dynamics

Deploying BI4Dynamics over D365 F&O Cloud

Using a BACPAC

While we're waiting for the Export to Data Lake

BI4Dynamics Temporary Architecture - BACPAC



Main challenge with F&O in the cloud is that we can't access the database directly. We can pass this with getting the data by exporting the BACPAC file of the F&O.

The BACPAC is a file of Azure SQL database, compressed by 10 times compering to F&O database size.

Decision where to set up the Analytical database

Implementation options:

- **Analytics on VM**
  Login: windows login
  User access: through RDP or set Azure VM to company domain

- **Analytics in Azure**
  Login: Azure Active Directory
  User access: from anywhere
  Setup Start & End Schedule for daily availability (to lower cost)

Firstly, we will need to define where we will set up Analytics.

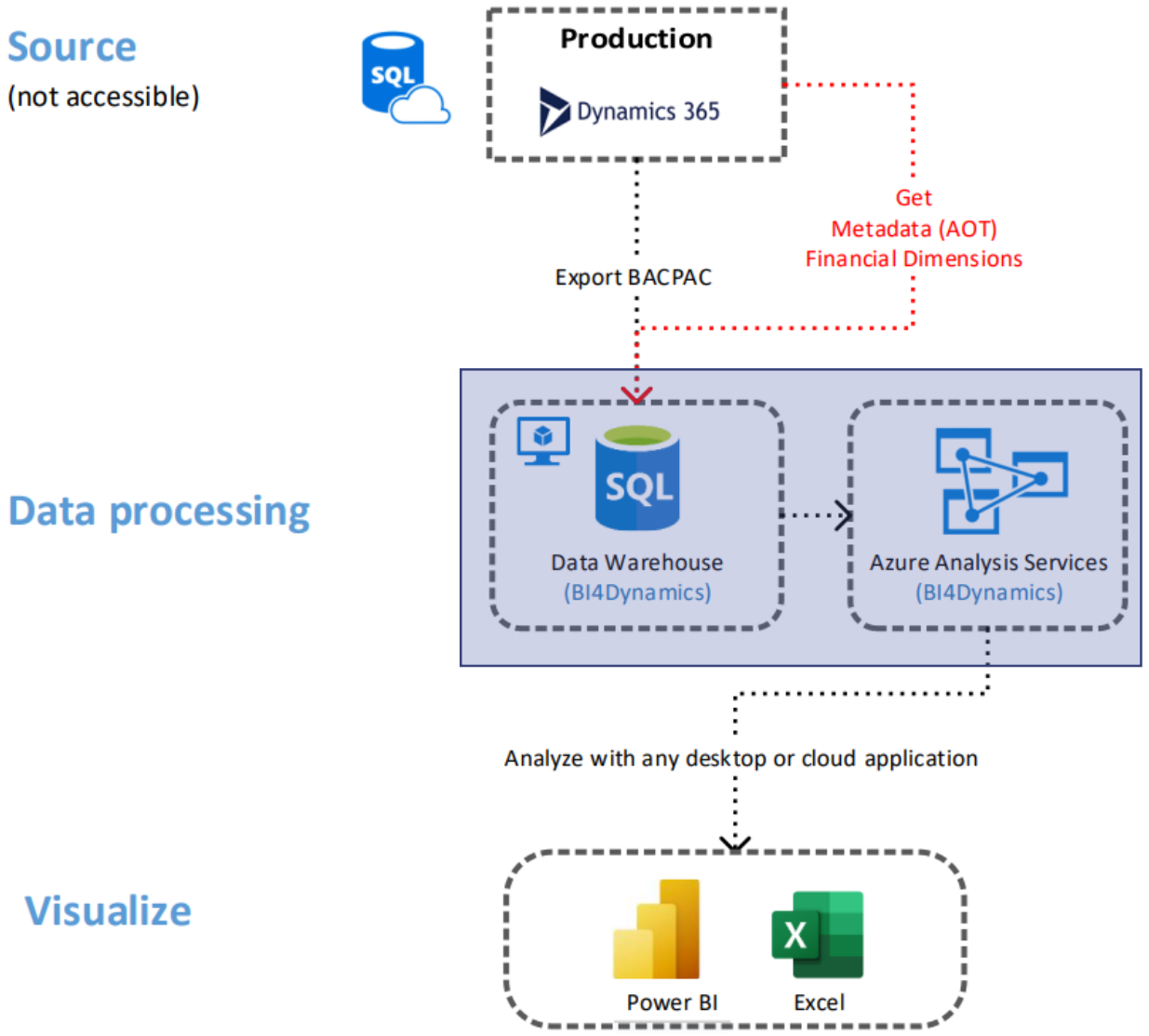
There are 2 options:

1. On Virtual Machine, which is more affordable, but users need to connect through RDP or set Azure VM to company domain.
2. On Azure where users can access reports from anywhere using the email, but it comes with a higher price tag.

Decision
Customer

More information can be provided by BI4Dynamics.

BI4Dynamics Temporary Architecture - BACPAC



Step 1: Virtual machine setup

Our team will setup the virtual machine with SQL Server where you will export your BACPAC file, and our data warehouse will be hosted in it.

Based on your implementation decision we will also set up the Analysis services either on VM or as a Service.

Responsibility

BI4Dynamics

Customer provides permissions that are requested by BI4Dynamics.

Azure Resources (without Azure VM)

Typical installation

Azure SQL server (storing DFO database)

There is usually enough disk space (250 GB) to store DFO database

Azure SQL server size options (DTU model):

- Idle time (used as storage): Standard Tier S1 or S2
- Working time (used for loading data to DW): Premium Tier P1 to P6 (0.6$ to 5$ per hour)

Azure Analysis Services

Add Azure AD account for BI4Dynamics (no need for email) as contributor for Azure Resource Group

Size Options: B1, B2, S0, S1

Schedule access time: 20 day 10 hours daily

Azure SQL Server size and costs for storing DFO database:

	DTUs	Included storage	Price for DTUs
S0	10	250 GB	$14.7187/month
S1	20	250 GB	$29.4343/month
S2	50	250 GB	$73.6084/month
S3	100	250 GB	$147.1772/month

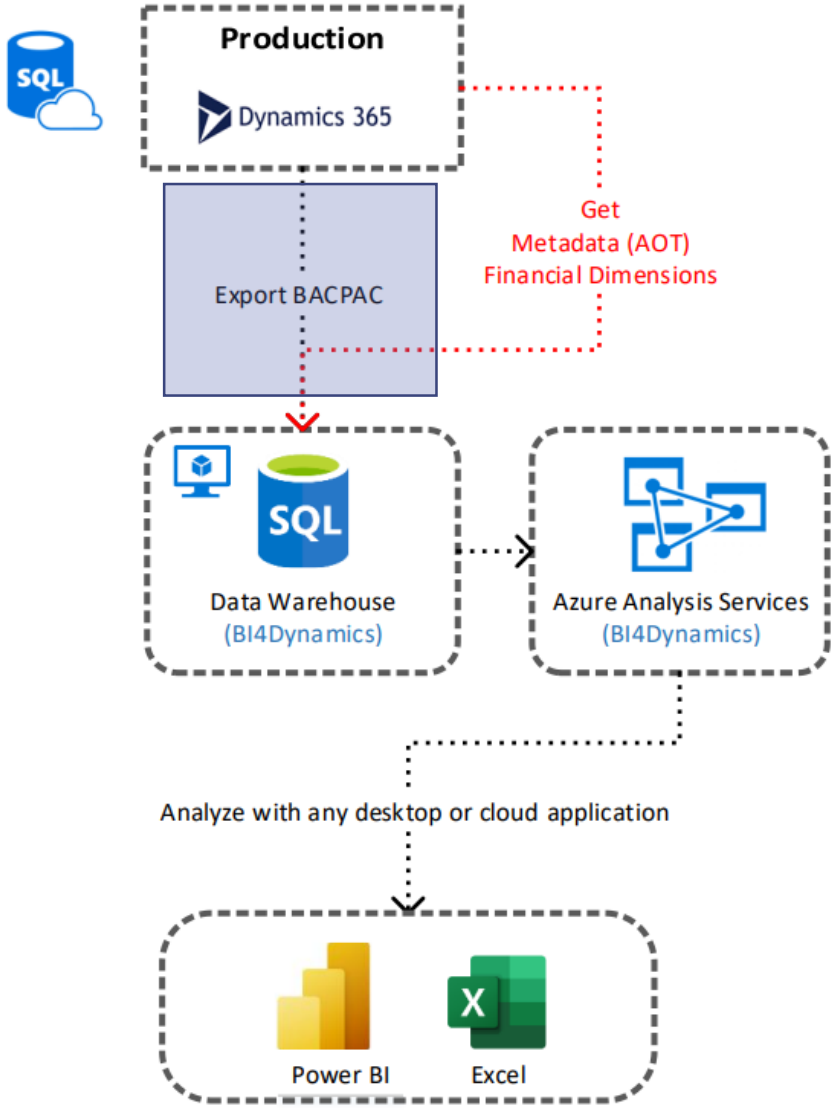
Azure Analysis services size and costs: https://azure.microsoft.com/en-us/pricing/details/analysis-services/

BI4Dynamics Temporary Architecture - BACPAC

Source
(not accessible)

Data processing

Visualize



Step 2: Export a backpack file

There is no restrictions in regards of the exporting the BACPAC file. Hence, it can be infinitely exported.

This is determined and given by Microsoft itself.

Responsibility

Customer or BI4Dynamics

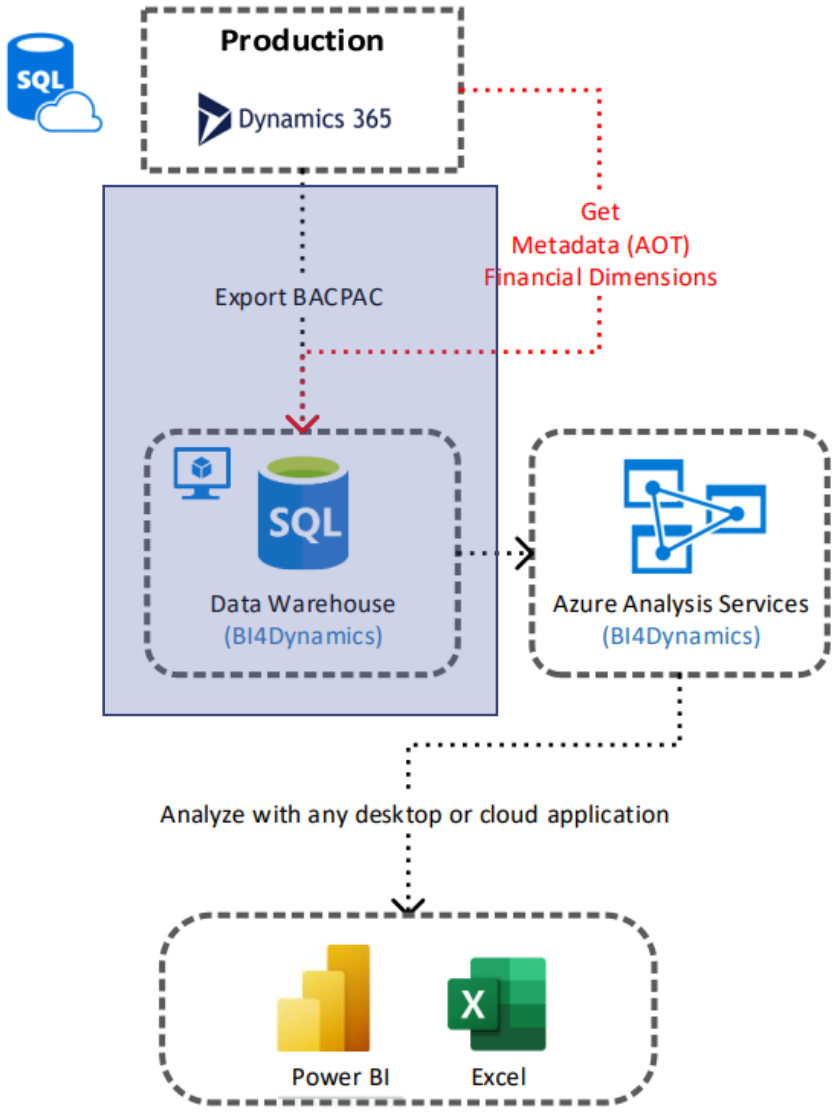
Instructions can be provided by BI4Dynamics.

BI4Dynamics Temporary Architecture - BACPAC

Source
(not accessible)

Data processing

Visualize



Step 3: Restore a backpack file

Once you have exported the file, we need to **restore** the BACPAC to virtual machine which will act as a source for the data warehouse.

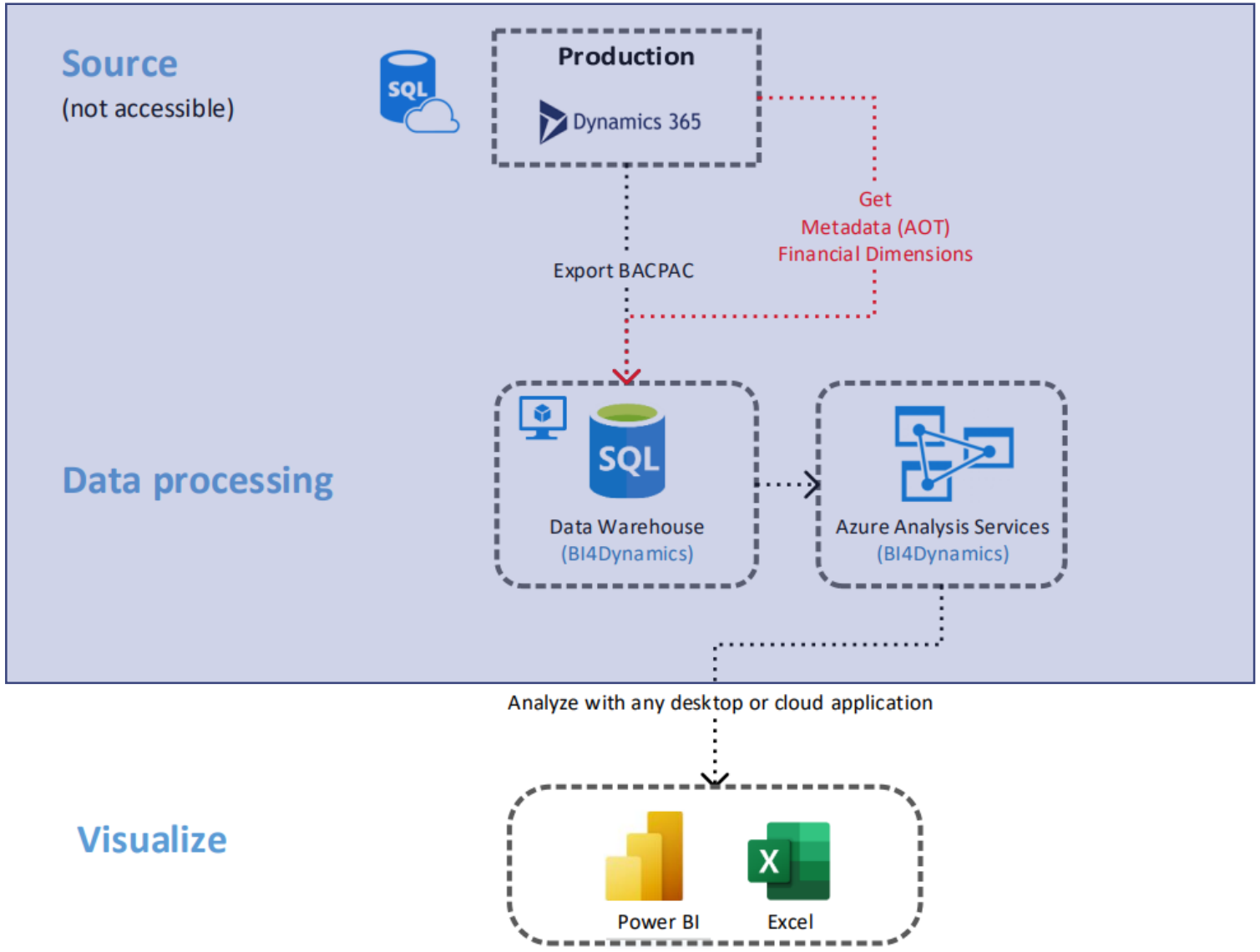
The **backup and restore** process includes a couple of clicks and it requires at most 2 hours of waiting.

Responsibility

Customer or BI4Dynamics

Instructions can be provided by BI4Dynamics.

BI4Dynamics Temporary Architecture - BACPAC



Step 4: Install BI4Dynamics

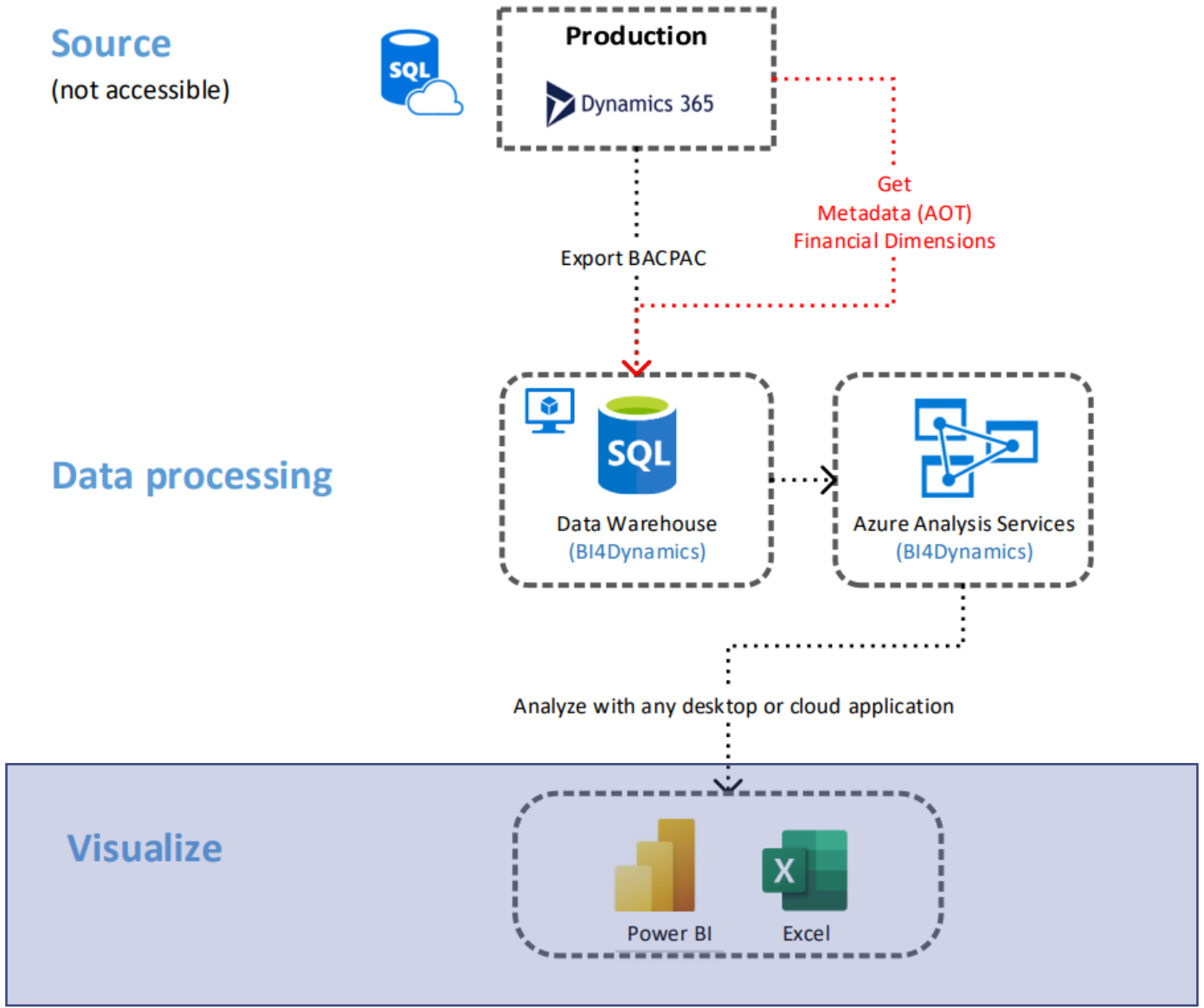
The installation and the setting up of BI4Dynamics is done by us.
Our app automatically will copy the data needed for BI from a BACPAC file and will create BI Dashboards with more than 1 million lines of codes.

During the installation, if needed, we can setup additional companies and tenants.
Also, up to 15 financial dimensions are offered, additional currency for reporting, fiscal date, and many other features.

Responsibility

BI4Dynamics

BI4Dynamics Temporary Architecture - BACPAC



Step 5: Power BI & Excel reports

The result is an **analytical model with 2100+ BI fields** (dimensions, measures) that can be accessed by Power BI or Excel.

On top of that you will be impressed by the time and rich business intelligence that covers all our application areas, including manufacturing and retail out of the box.

Responsibility

BI4Dynamics

bi4dynamics

The Plan

When Microsoft releases a feature in F&O that will enable us to export data to lake, which can happen very soon. Then the data will not be transformed through this backpack copy as it is now, but it will be automatically synchronized within the Data Lake.

This process will be done automatically on the Azure platform, without any need of pushing or pulling.

From end-user perspective nothing will change. Users will be still accessing the same Power BI and Excel reports as they did before.