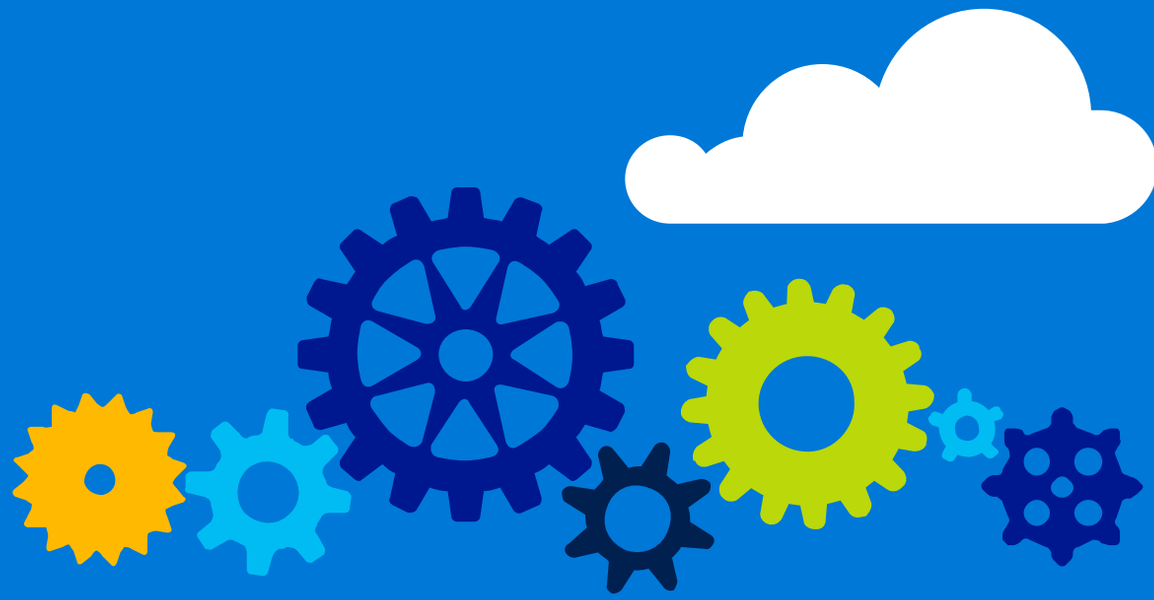
Microsoft

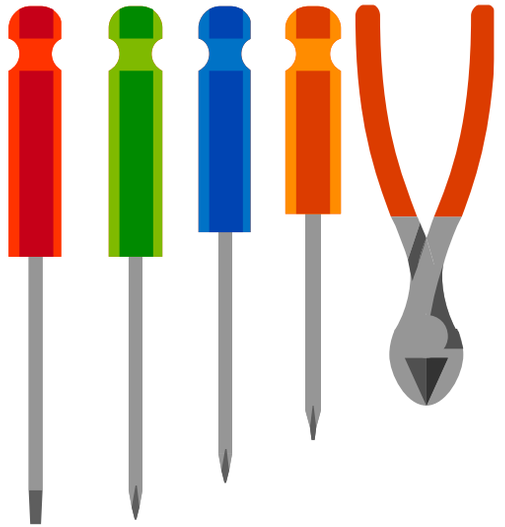
Data SQL Ninja Engineering Team

Workload Assessment Tool Overview and Guidance



Overview of Tool

- Provides suggested “best fit” target platforms, cloud readiness and application/database remediation level for a given workload based
- Calculation is based on a set of 41 questions across 12 categories
- Each of the 41 questions has a prescribed set of possible answers based on drop-down controls
- Built using Excel and VBA. Provides a simple, one-click calculation and report generation
- Greatly helps to accelerate large estate assessments by providing automated and uniform target platform decision process
- Generated report can be placed into assessment findings decks for migration assessment engagements
- Can provided structured approach and process for customer migration workshops

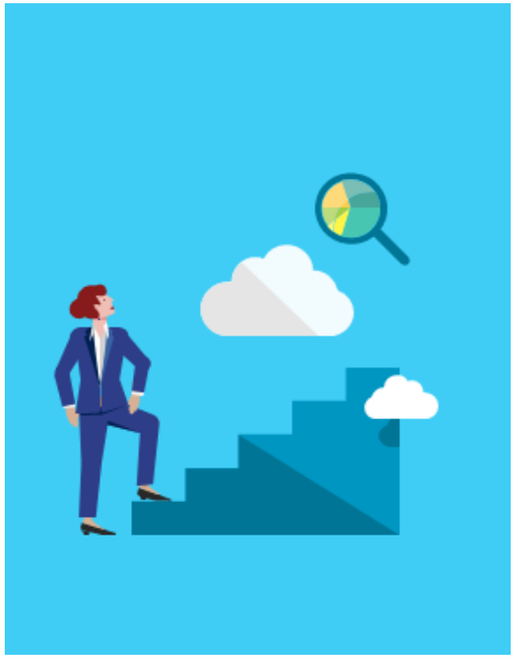


Report Considerations

Target platforms considered include:

On-Premises
- SQL Server
- SQL Server On Linux

Azure
- SQL Server IaaS
- SQL Server On Linux IaaS
- Azure SQL DB
- Azure SQL DB – Elastic Pools
- Azure SQL Managed Instance
- Azure SQL Data Warehouse

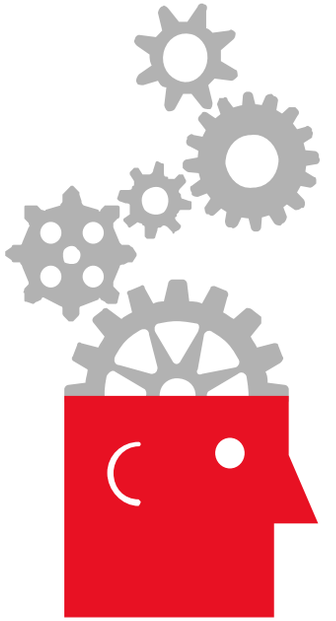


Application and Database Level of Remediation Levels include:

- **Very Simple:** App and database can be moved into target workload with minimal translation and re-write
- **Simple:** Some application code updates and database object conversion
- **Moderate:** Data Access Layer re-work on application, non-trivial database object conversion
- **Extensive:** Substantial application code re-writing and data access layer code updates. Plus substantial database object conversion and translation.

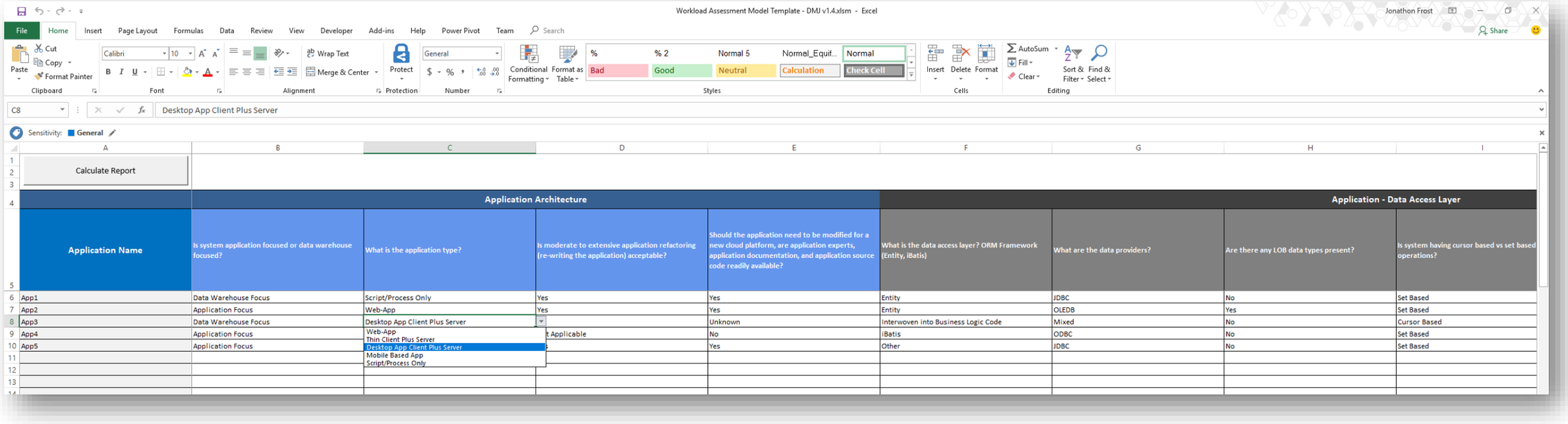
Calculation Methodology

- For each workload, at the start of the calculation process, it is assumed any platform is possible
- Each question will impact the predicted feasibility of each target platform and update the overall feasibility of a given target platform for a given workload
- The same logic is used for remediation as well. The tool assumes at the start that the workload will be a lift and shift, then as it runs through the question analysis, the overall remediation will be increased based on the answers to certain questions.
- The lower the number, the more feasible that platform is
- Calculated numbers range from 0 (most feasible) to 3 (least feasible)



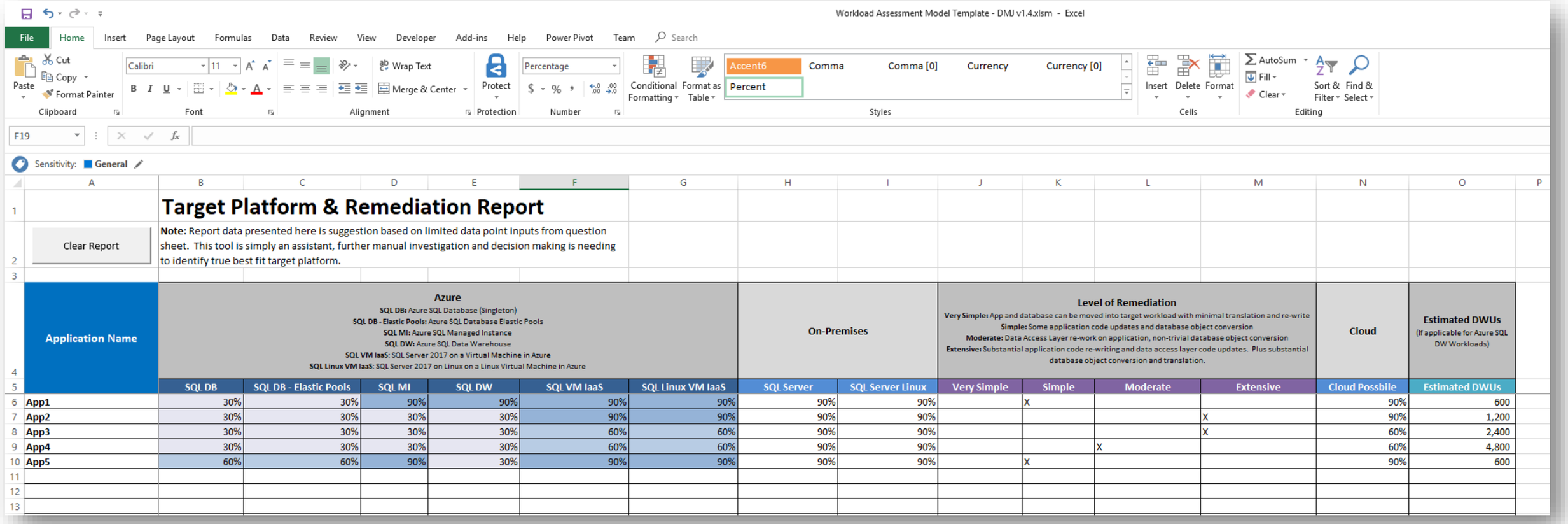
Question Sheet

Example Screen Shot



Automated Findings Report Dashboard

Example Screen Shot

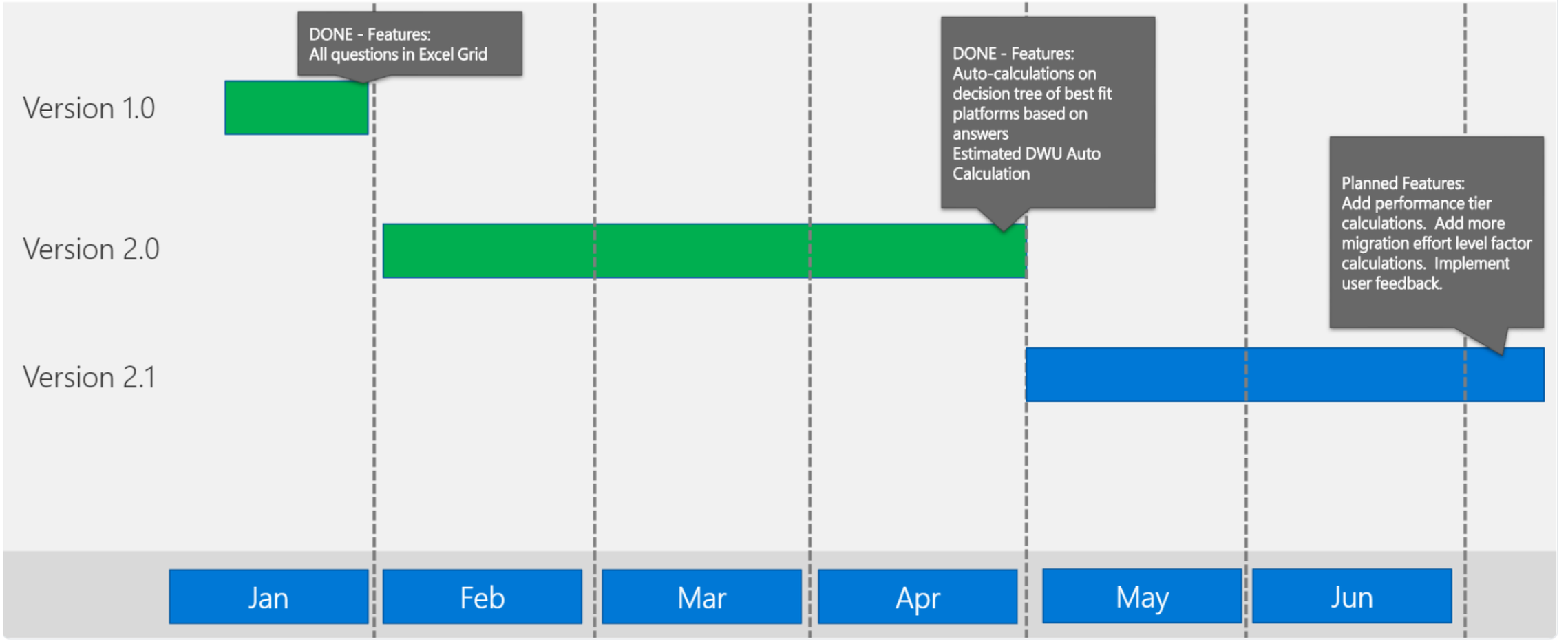


Target Platform & Remediation Report

Clear Report

Note: Report data presented here is suggestion based on limited data point inputs from question sheet. This tool is simply an assistant, further manual investigation and decision making is needing to identify true best fit target platform.

Application Name	Azure **SQL DB:** Azure SQL Database (Singleton) **SQL DB - Elastic Pools:** Azure SQL Database Elastic Pools **SQL MI:** Azure SQL Managed Instance **SQL DW:** Azure SQL Data Warehouse **SQL VM IaaS:** SQL Server 2017 on a Virtual Machine in Azure **SQL Linux VM IaaS:** SQL Server 2017 on Linux on a Linux Virtual Machine in Azure						On-Premises		Level of Remediation **Very Simple:** App and database can be moved into target workload with minimal translation and re-write **Simple:** Some application code updates and database object conversion **Moderate:** Data Access Layer re-work on application, non-trivial database object conversion **Extensive:** Substantial application code re-writing and data access layer code updates. Plus substantial database object conversion and translation.				Cloud	Estimated DWUs (If applicable for Azure SQL DW Workloads)
	SQL DB	SQL DB - Elastic Pools	SQL MI	SQL DW	SQL VM IaaS	SQL Linux VM IaaS	SQL Server	SQL Server Linux	Very Simple	Simple	Moderate	Extensive	Cloud Possbile	Estimated DWUs
App1	30%	30%	90%	90%	90%	90%	90%	90%		X			90%	600
App2	30%	30%	30%	30%	90%	90%	90%	90%				X	90%	1,200
App3	30%	30%	30%	30%	60%	60%	90%	90%				X	60%	2,400
App4	30%	30%	30%	30%	60%	60%	90%	90%			X		60%	4,800
App5	60%	60%	90%	30%	90%	90%	90%	90%		X			90%	600

Project Plan Schedule

(Note: dates are estimates only)