Let's build a case for migrating SSIS Packages to Azure data factory

With SQL Server, you have upfront infrastructure cost, that is, you purchase a physical server & acquire SQL Server licences and it doesn't lend itself naturally for on-demand consumption.

Whereas, Data Factory is a cloud service, so you could consume and pay for it on demand.

Upfront infrastructure cost means, you do not have the flexibility in managing costs whereas, if you move the SSIS packages to Data Factory, you can start and stop the underlying VMS (on which the SSIS packages are run) as per your schedule, when the packages actually run, and so Azure is very flexible in managing your cost.

In addition to that, Azure provides very low-cost data storage (which means you can store more data) and massive amounts of processing power (which means you do more analysis on that data).

With SQL Server, you need to manage your server, the SQL Server installation, OS patches, SQL Server patches, & hardware failures, whereas, with Data Factory, even though you run the packages on VMs in the backend, you don’t have to manage the day-to-day operations of these VMs and you get all the functionality of a fully-featured ETL tool without the overhead of managing a SQL Server.

When I say migrating SSIS packages to Data Factory, I mean just lift-and-shift your SSIS packages to Data Factory. You do not have to rewrite the packages and there is no need for any additional development effort.

Perhaps you already use a cloud-first approach to BI with technologies like Azure SQL Data Warehouse, but your ETL, that does the transformation and which contains your logic, is still On-premise. Maybe, you postponed this migration, due to the effort required to refactor the SSIS Packages to use cloud technologies like USQL, or native Data Factory activities, but, being able to lift-and-shift the SSIS packages with absolutely no modifications, should be an easy win.

In Data Factory, You can scale the VMs up and down or in and out which means that you can increase or decrease the capacity of a single node or add and remove nodes as needed. Probably, you would argue that you can use the scale out feature of SSIS with SQL Server 2017, but that is something that you manage and is not as convenient as the scaling offered in Data Factory.

You may want to migrate the packages to Data Factory as a majority of your data sources live in the cloud, so by moving your packages to Data Factory, you get higher data transfer rates, as Azure lives a lot closer to your existing cloud data sources than your On-premises server.