Use Logic App with Azure Data Factory

To create email notifications in the Azure Data Factory, you would need to create a separate Logic App as your transport layer for emails and ADF web activity to call this Logic App when it's needed.

Logic App

Create a Logic App

⬇

Logic app designer to edit the app

⬇

trigger: "When a HTTP request is received"
(as we're going to use the Web Activity in ADF to start the Logic App)

⬇

Action: Send Email

```
{
    "properties": {
        "DataFactoryName": {
            "type": "string"
        },
        "EmailTo": {
            "type": "string"
        },
        "ErrorMessage": {
            "type": "string"
        },
        "PipelineName": {
            "type": "string"
        },
        "Subject": {
            "type": "string"
        }
    },
    "type": "object"
}
```

We are going to send following information in error message.
(Name of the data factory, e-mail address of the receiver, An error message, name of the pipeline, subject of the e-mail)

In the azure data factory, we would need to create a web activity that would trigger the Logic app on a successful pipeline run.

WEB Settings
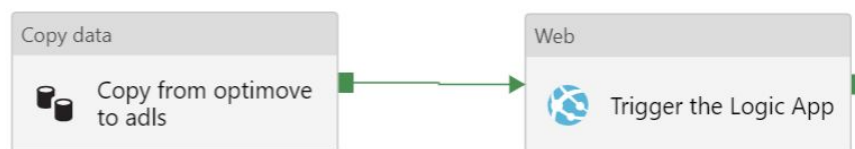
URL *	https://prod-07.eastus2.logic.azure.com:443/w
Method *	POST
Headers	+ New

Body	`{`
	`  "DataFactoryName":`
	`"@{pipeline().DataFactory}",`
	`  "PipelineName": "@{pipeline().Pipeline}",`
	`  "Subject": "Success!",`
	`  "ErrorMessage": "The ADF pipeline is`
	`successfully created! Please check the logs.",`
	`  "EmailTo": "nirali.patel@staples.com"`
	`}`

https://docs.microsoft.com/en-us/azure/data-factory/tutorial-control-flow-portal

https://www.youtube.com/watch?v=oWcIm7HCIAc

https://www.mssqltips.com/sqlservertip/5718/azure-data-factory-pipeline-email-notification--part-1/

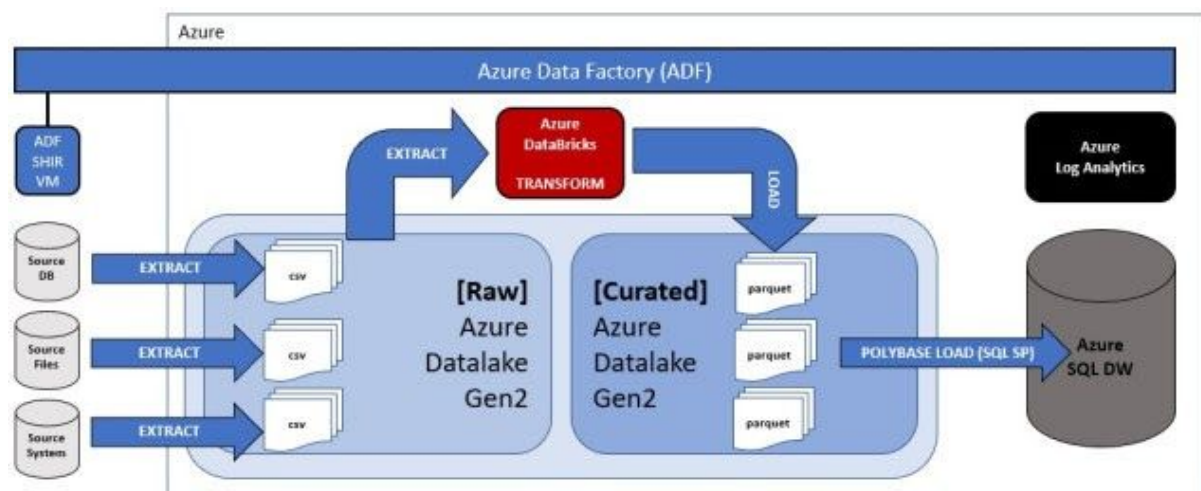https://www.mssqltips.com/sqlservertip/5962/send-notifications-from-an-azure-data-factory-pipeline--part-2/

http://microsoft-bitools.blogspot.com/2018/03/add-email-notification-in-azure-data.html

https://channel9.msdn.com/Shows/Azure-Friday/Monitor-your-Azure-Data-Factory-pipelines-proactively-with-alerts

https://azure.microsoft.com/en-us/blog/create-alerts-to-proactively-monitor-your-data-factory-pipelines/

https://docs.microsoft.com/en-us/azure/logic-apps/quickstart-create-first-logic-app-workflow

Use Azure Monitor with Azure Data Factory

For log analytics, you would need to store your ADF logs into Azure SQL Analytics first. Once we have it, we can query it using Azure log Analytics(which is a part of Azure Monitor). Next, we need to create an alert rule and we need to configure an Action Group to send an e-mail notification.

https://docs.microsoft.com/en-us/azure/sql-database/sql-database-metrics-diag-logging

https://docs.microsoft.com/en-us/azure/azure-monitor/learn/tutorial-response

https://docs.microsoft.com/en-us/azure/azure-monitor/log-query/get-started-portal

https://docs.microsoft.com/en-us/azure/azure-monitor/log-query/get-started-queries

https://www.sqlservercentral.com/blogs/azure-service-logging-in-the-modern-data-warehouse

https://docs.microsoft.com/en-us/azure/storage/common/storage-analytics-logging

https://docs.microsoft.com/en-us/azure/azure-monitor/platform/diagnostic-settings

https://docs.microsoft.com/en-us/azure/azure-monitor/platform/resource-logs-collect-workspace

https://docs.microsoft.com/en-us/azure/azure-monitor/log-query/query-language

https://docs.microsoft.com/en-us/azure/kusto/query/sqlcheatsheet

https://medium.com/@shashank.banerjea/useful-azure-data-explorer-queries-for-azure-data-factory-pipelines-60253f398c8b

https://docs.microsoft.com/en-us/azure/azure-monitor/platform/activity-log-view

https://docs.microsoft.com/en-us/azure/azure-monitor/log-query/query-language

https://docs.microsoft.com/en-us/azure/data-factory/monitor-visually#alerts

https://docs.microsoft.com/en-us/azure/data-factory/quickstart-create-data-factory-python

https://docs.microsoft.com/en-us/azure/data-factory/monitor-programmatically

https://docs.microsoft.com/en-us/azure/azure-monitor/platform/activity-log-collect → this is how you would collect log data.