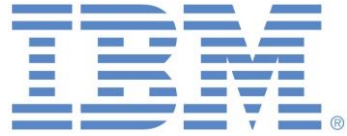


# PARTNERS



DATA-DRIVEN BUSINESS  
TRANSFORMATION

INTEGRATION DAYS 2019  
- JOURNEY TO THE CLOUD

# UTILIZING AI AND AZURE TO HANDLE TICKETS ON ITSM - SYSTEM

# CONTENT OF THE PRESENTATION

# SERVICE DESK -FUNCTION

## Service Desk function

- reception, classification and coordination of support requests
- fulfilling customers' requests and solving incidents
- customer Information Management
- escalation of requests to third parties



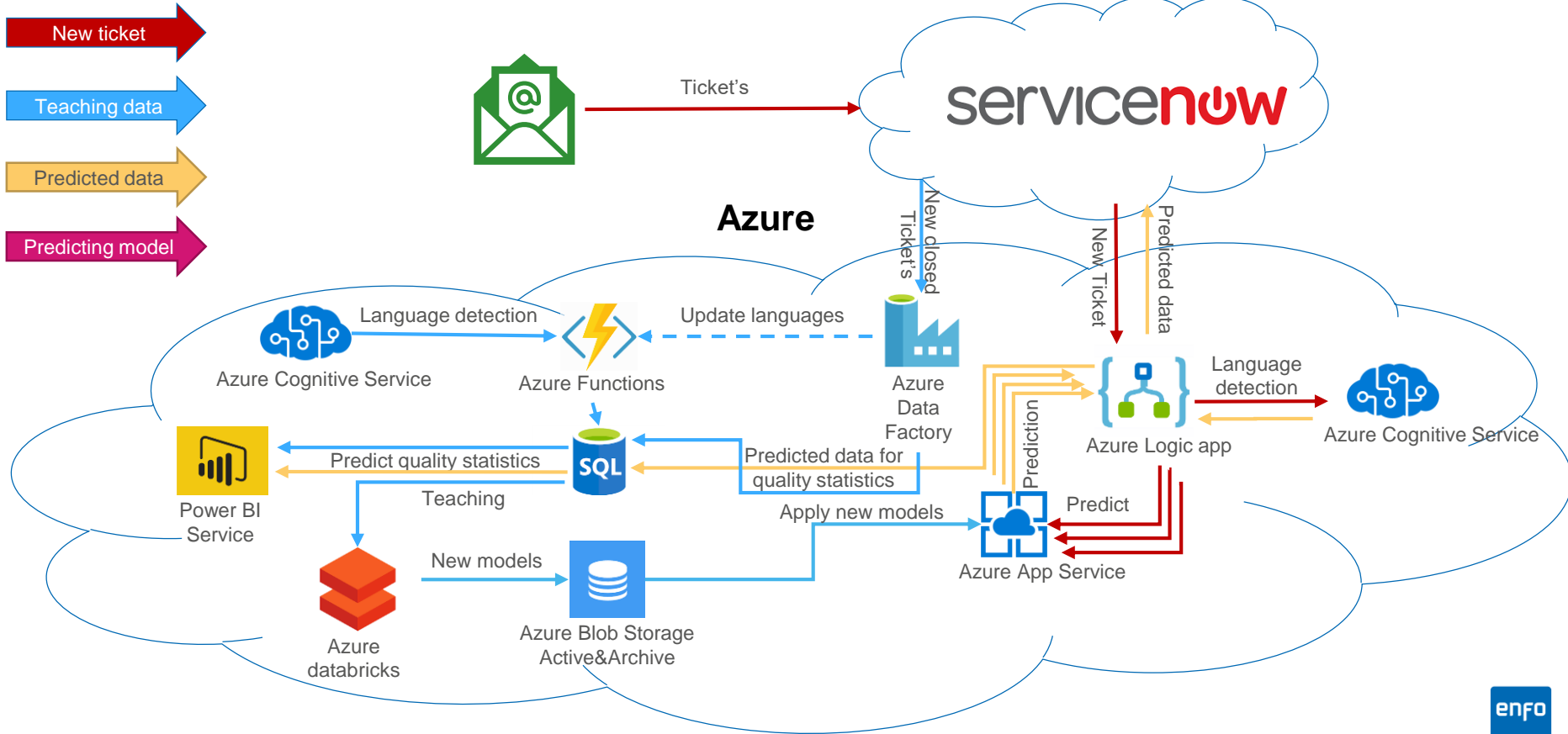
# BUSINESS CASE

**AI based ticket classification, for request and incidents which are requests by email**

- Incident or request
- Impact
- Urgency
- Business Service (critical for SLA)
- Catalog item (critical, only request)
- Category
- Subcategory
- Configuration Item

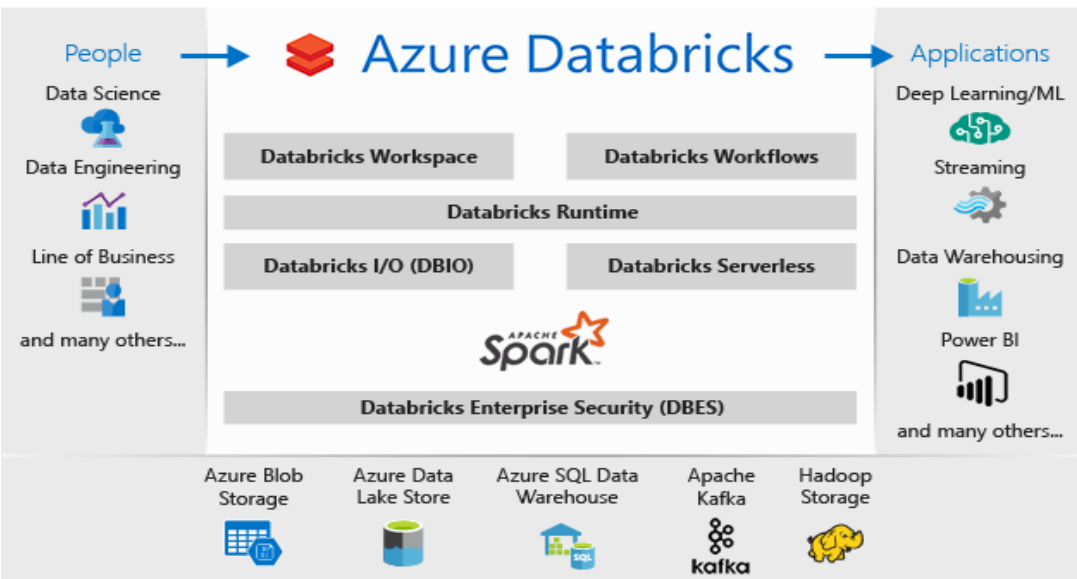
- **200 000 tickets / year**
- **80 000 by email**
- **manual work 1 FTE**
- **target accuracy 70-80 %, depending on the items**
- **payback time less 1 year**

# ARCHITECTURE – ALL



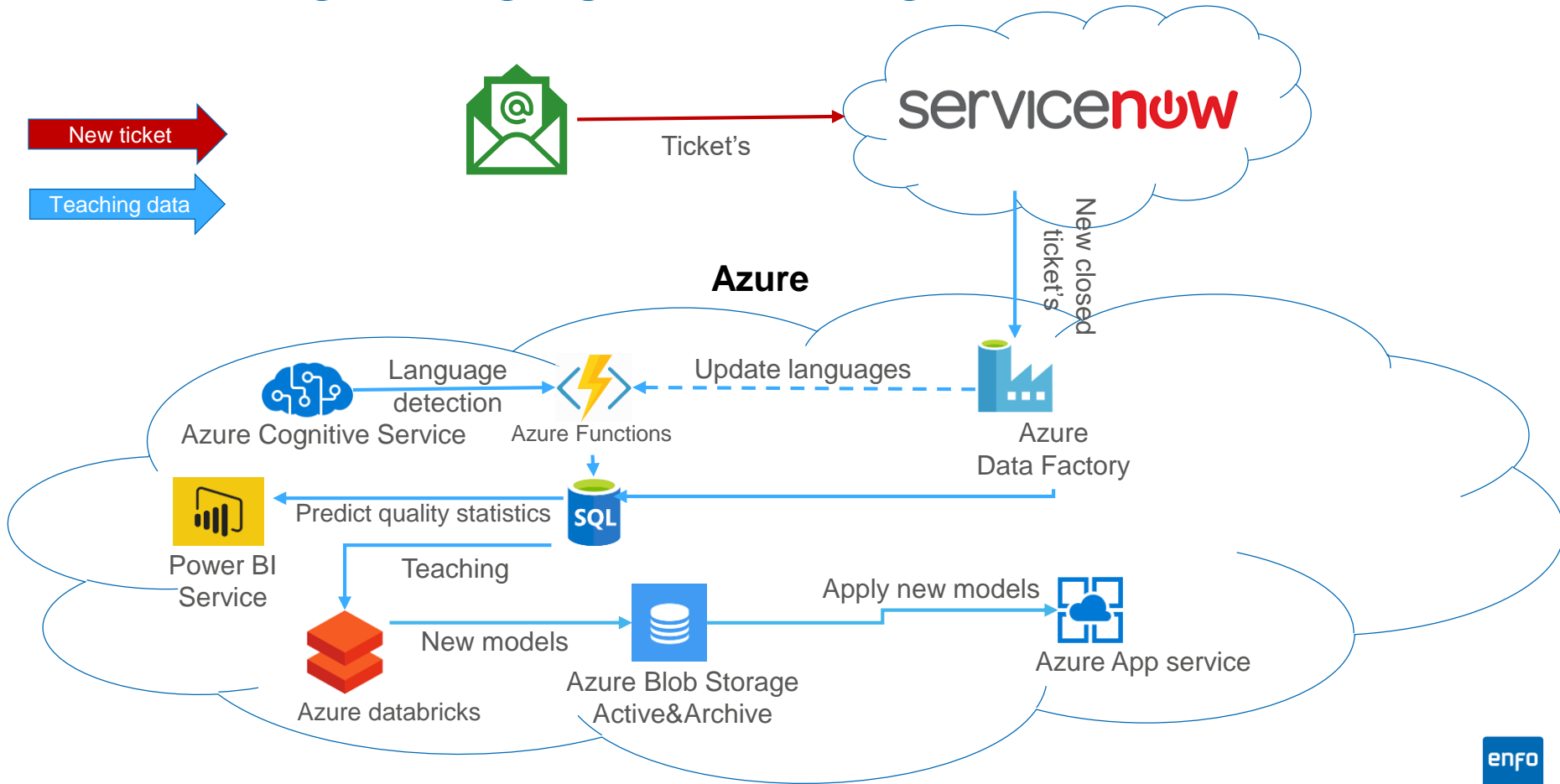


# AZURE DATABRICKS



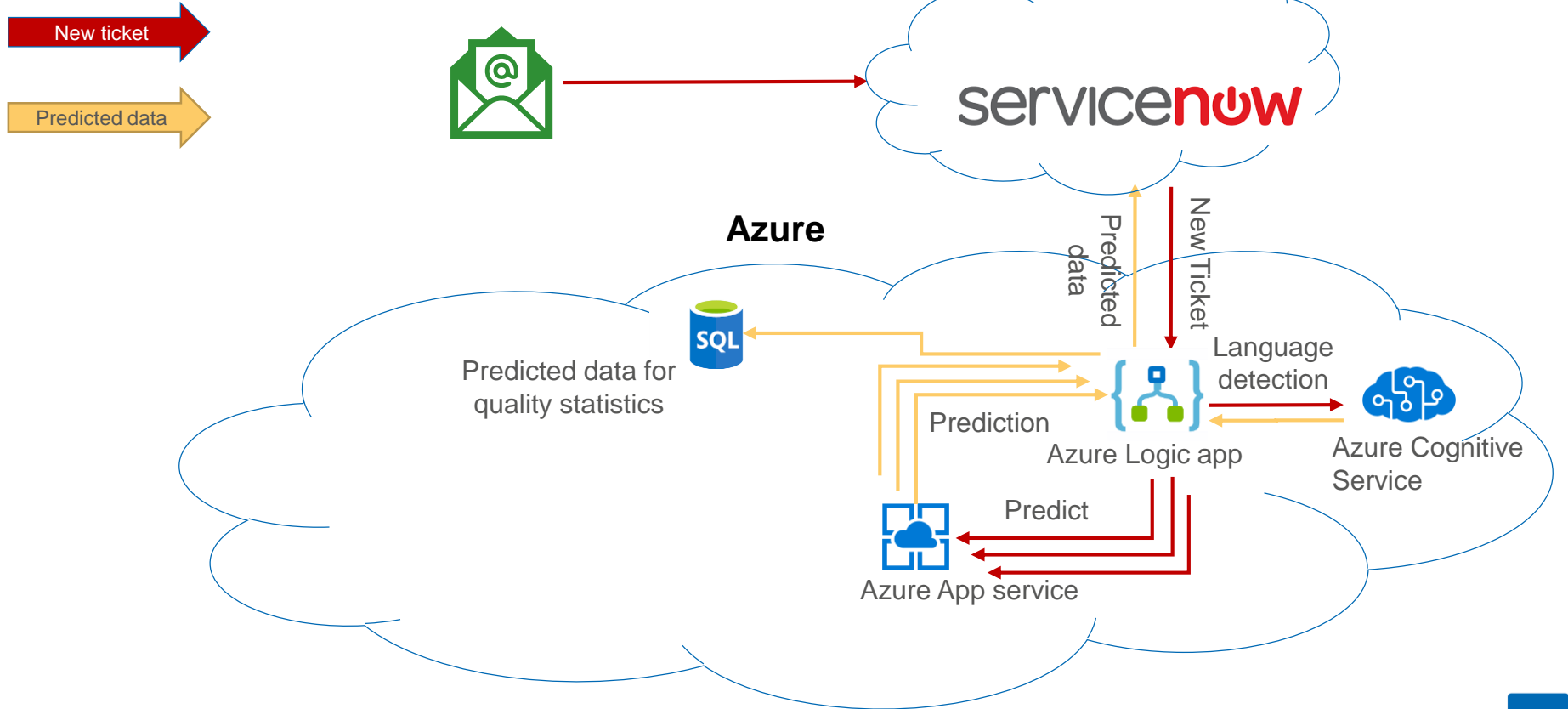
- Azure Databricks is an Apache Spark-based analytics platform optimized for the Microsoft Azure cloud services platform.
- Databricks is integrated with Azure to provide one-click setup, streamlined workflows, and an interactive workspace.
- Collaborative and integrated environment
- Azure Databricks provides enterprise-grade security, including Active Directory integration, role-based controls, and SLAs that protect your data and your business.
- Native integration with Azure services (Power BI, Azure Storage, Azure SQL..)

# ARCHITECTURE – TEACH



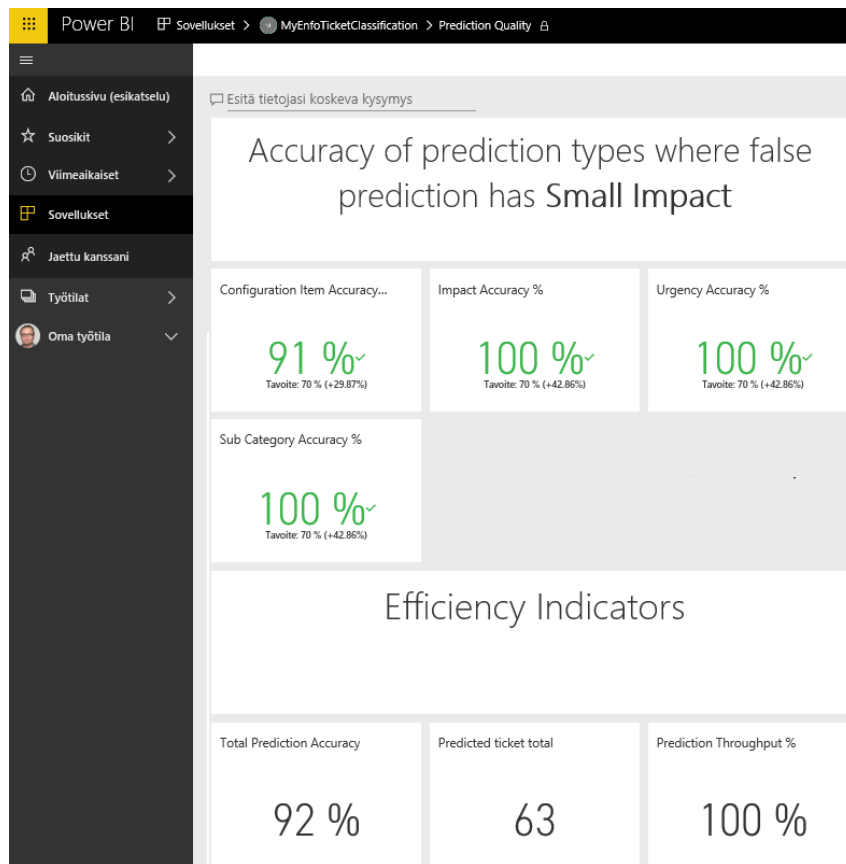


# ARCHITECTURE - PREDICT








# STATISTICS - POWER BI



# STATISTICS - POWER BI

Muokkaa raporttia  Tutustu  Päivitä

PredictionModel	Predicted Value	ActualValue	Count	Model Version	Model Teach Version	False Prediction Impact
RITM_Catalog_Item_model_FI_Ticket.sav	User right creation	8d38ae2edba34f0016577a65ae96192e	7	1.0.0	14.12.2018_11:50:30	Medium
RITM_Configuration_Item_model_FI.sav	Directory Service	b77a4a0fdb6997c016577a65ae961980	2	1.0.0	14.12.2018_11:50:30	Small
RITM_Catalog_Item_model_FI_Ticket.sav	Password reset (AD)	c86d229edbe38b0016577a65ae961990	2	1.0.0	14.12.2018_11:50:30	Medium
RITM_Catalog_Item_model_FI_Ticket.sav	User account change	c60ea212db278b0016577a65ae96197f	2	1.0.0	14.12.2018_11:50:30	Medium
RITM_Configuration_Item_model_FI.sav	Server	440094c94fe9560016c42c518110c77e	1	1.0.0	14.12.2018_11:50:30	Small
RITM_Configuration_Item_model_FI.sav	Software	b77a4a0fdb6997c016577a65ae961980	1	1.0.0	14.12.2018_11:50:30	Small
RITM_Catalog_Item_model_FI_Ticket.sav	Software installation for single WS	7ca1708adbef830016577a65ae961984	1	1.0.0	14.12.2018_11:50:30	Medium
INC_Business_Service_model_FI_Ticket.sav	Workstation User Support	5e330de3db97a6c016577a65ae96195a	1	1.0.0	14.12.2018_11:50:30	Medium
<b>Yhteensä</b>			<b>17</b>			

ShortDescription  Description

# CHALLENGES & LESSON LEARNED

- Understand the complexity of structure, process and operating models at different times.
  - e.g. business Service field contains 150 item, but 10 item covers 90 % cases
- Both topics and body fields are needed
- 80 % accuracy is satisfied level
- Business need and process understanding

**Identify essential data and complexity**

**Compromise, if need**

**Set realistic target**

**Understand business processes**

# TOPICS TO COVER UTILIZING AI ON INTEGRATION

## Business cases

- Electronic invoicing
- Purchase order

## Communication architectures

- An Enterprise Service Bus (ESB)
- API's

### Cases, in which

- repeated for many time
- have large volumes

# THANK YOU

Headed in the same direction  
– walk there together?

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# ADDITIONAL MATERIALS - LINKS

Text Analytics

<https://azure.microsoft.com/en-us/services/cognitive-services/text-analytics/>

Azure Logic App

<https://azure.microsoft.com/en-us/services/logic-apps/>

Azure Functions

<https://azure.microsoft.com/en-us/services/functions/>

Azure Data Factory

<https://azure.microsoft.com/en-us/services/data-factory/>

Azure Databricks

<https://azure.microsoft.com/en-us/services/databricks/>