

Data-driven
business
transformation

11.2020 Enfo

Ticket classification with Azure machine learning - Case Enfo

o Publicity: Open / Internal / Confidential / Secret

enfo

Enfo in general

- Enfo is a Nordic IT service company enabling its customers' data-driven business transformation
 - We both build and run digital solutions – supporting our customers in mastering the complex scene of platforms, applications and data.
- Enfo has around 900 experts working
- Offices in Finland, Sweden and Norway
- Enfo has 4 business areas
 - Applications
 - Data Platforms
 - Care
 - Information Management

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

- ServiceNow as IT Service Management (ITSM) system
- 2 employees doing daily manual ticket classification
- Service Desk receives 200 000 tickets / year
- 80 000 tickets by email / year

- There were 2 possible solutions for ticket classification automation
 - Azure Machine Learning
 - ServiceNow Predictive Intelligence
- We chose Azure Machine Learning
 - Project costs were higher but running costs much more lower

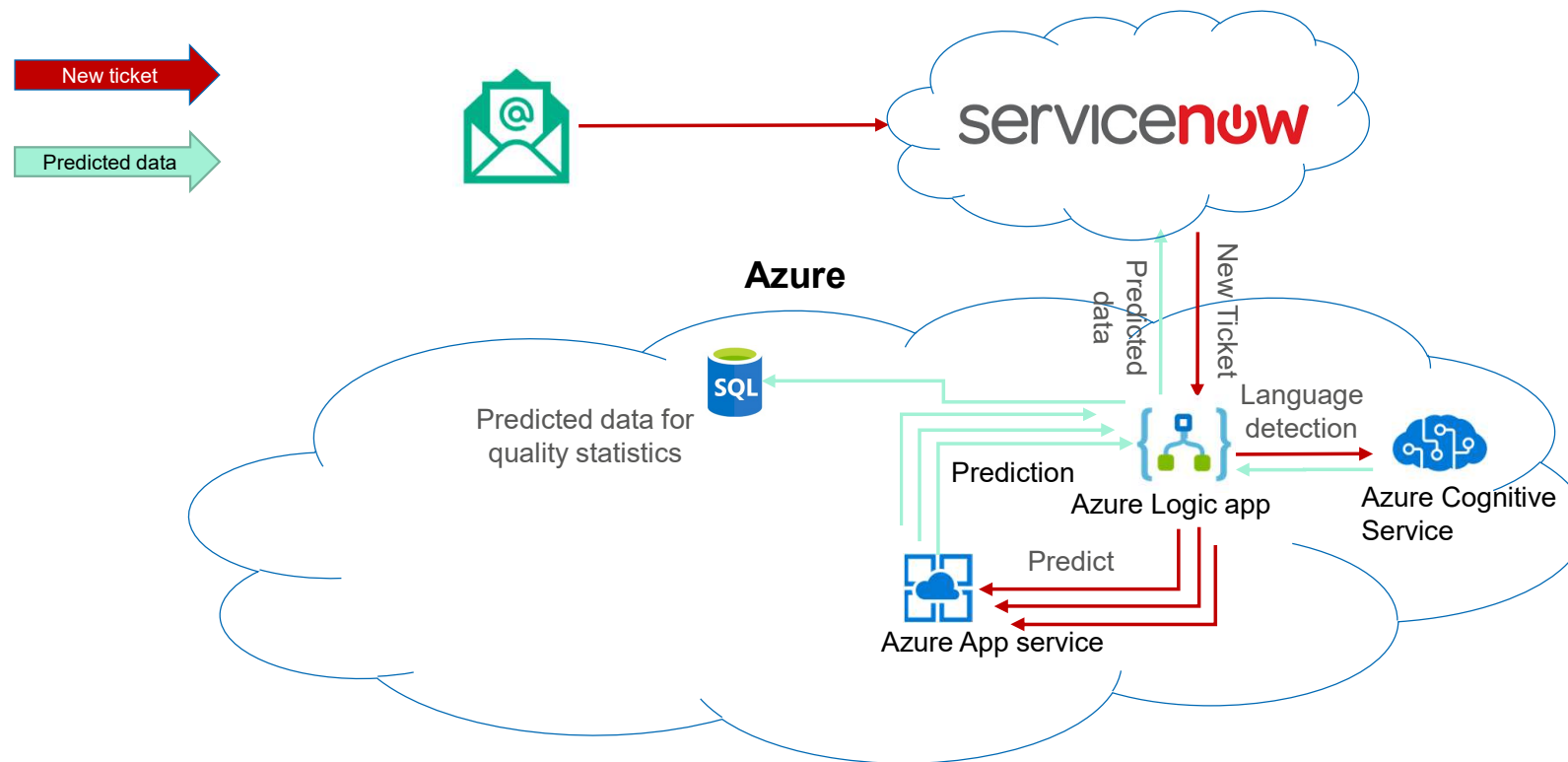
Ticket classification automation - Taica

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

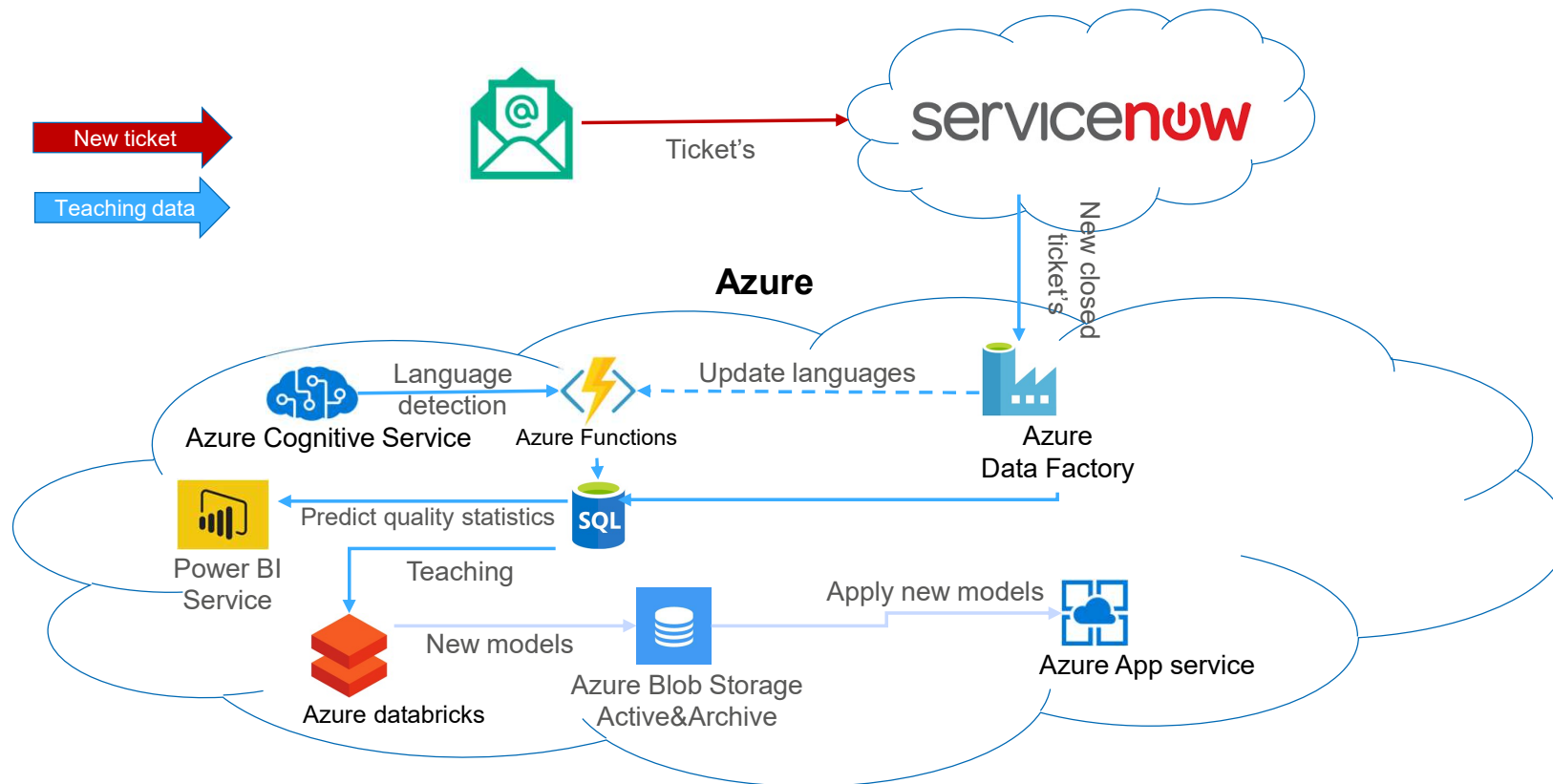
- Incident or request
- Impact
- Urgency
- Business Service (critical for SLA)
- Catalog item (critical, only request)
- Category
- Subcategory
- Configuration Item

- manual work savings 1 FTE
- target accuracy 70-80 %, depending on the items
- payback time less 1 year

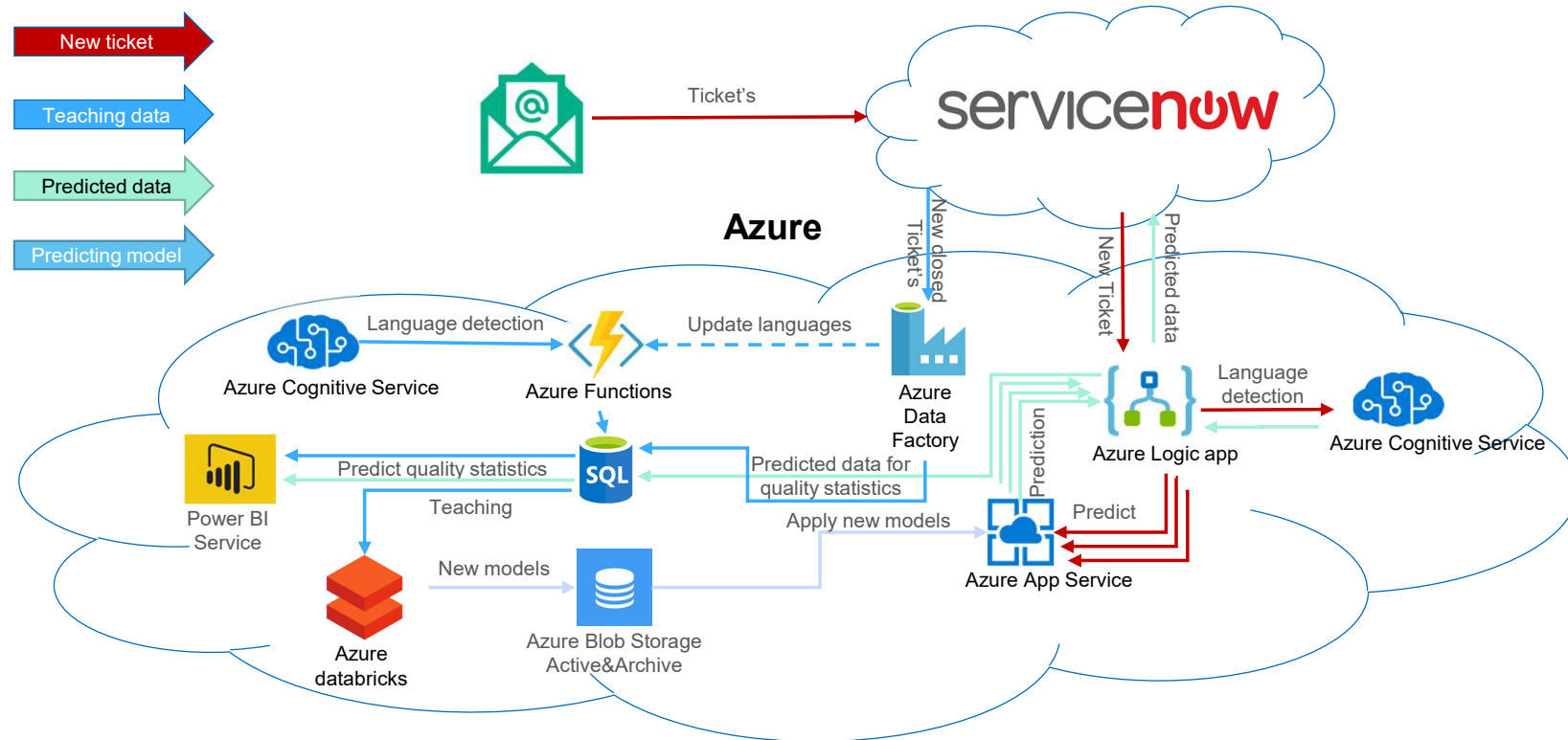
Architecture – Predict



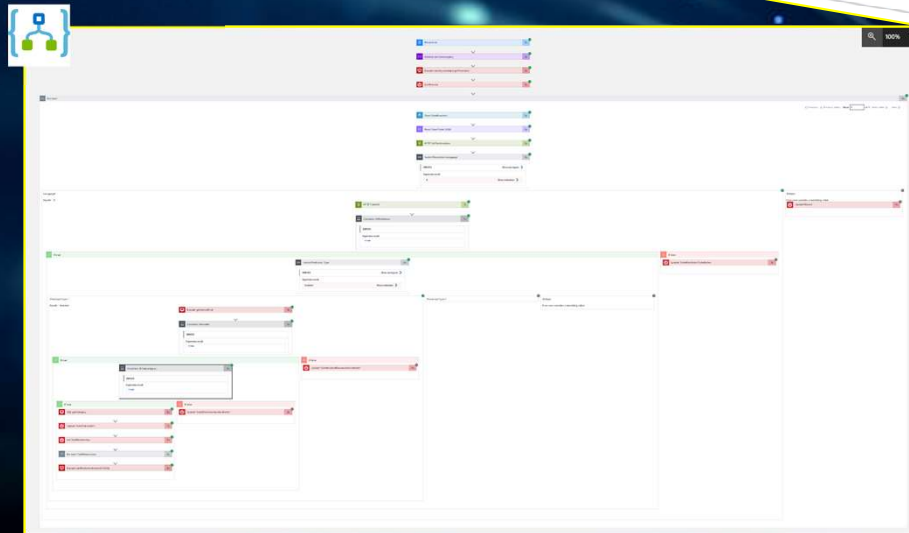
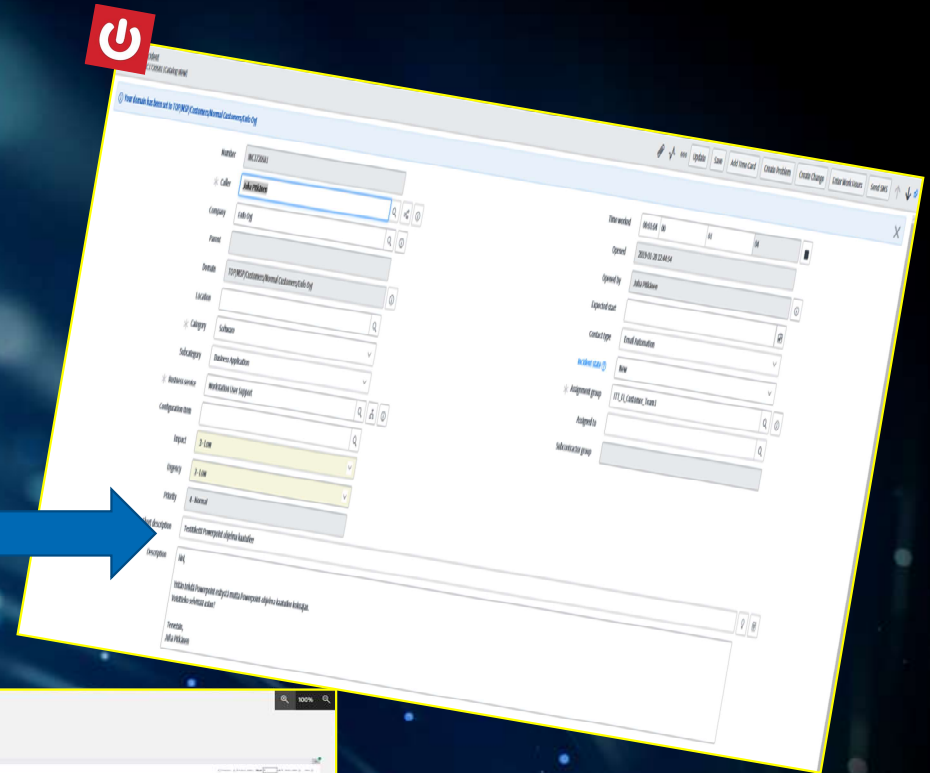
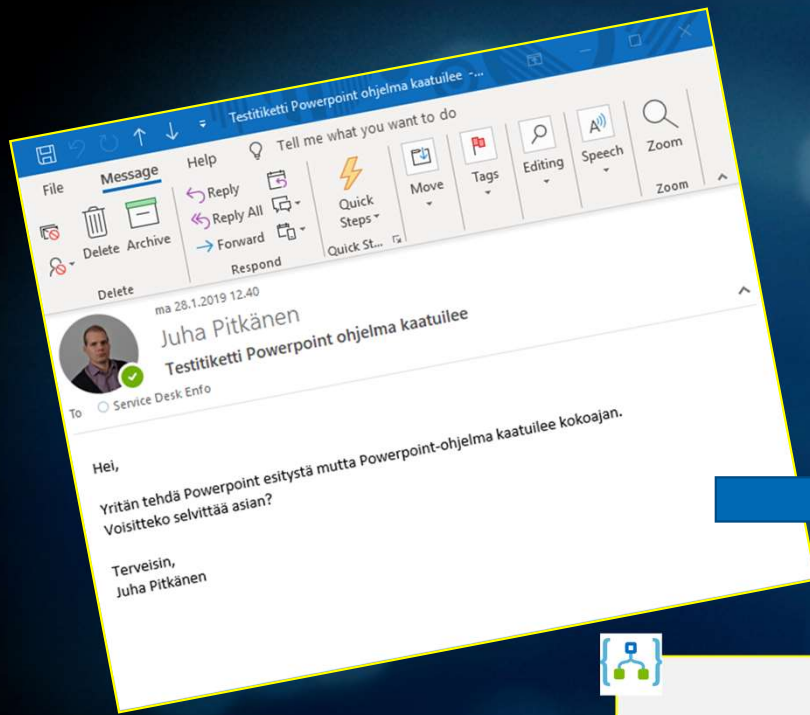
Architecture – Teach



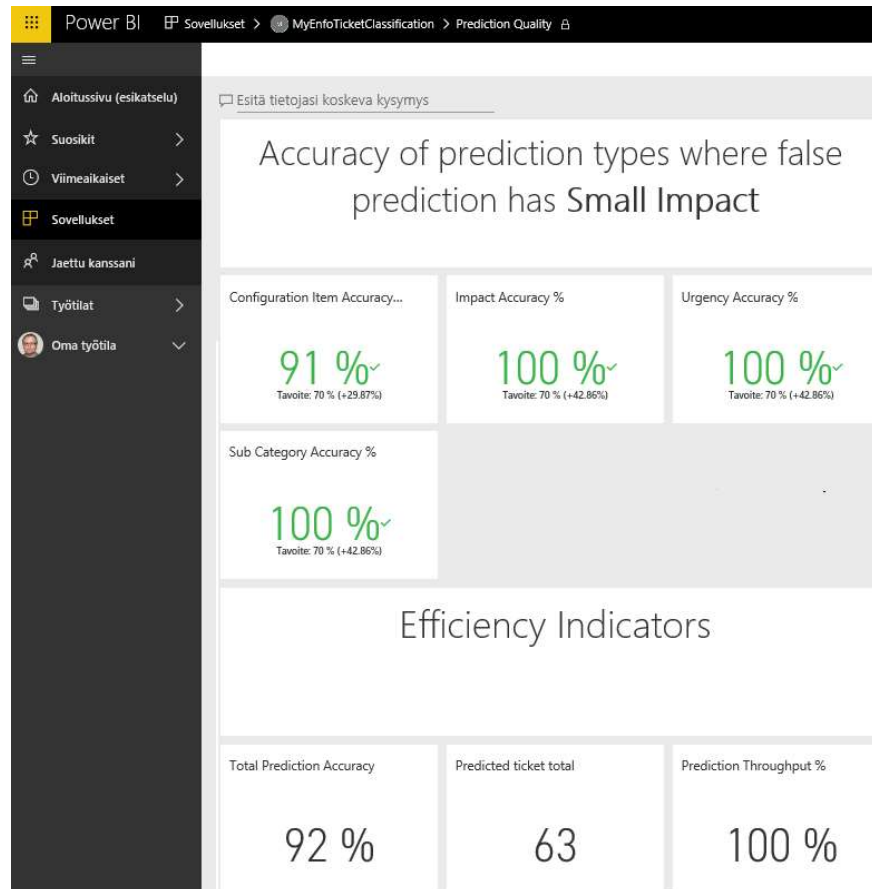
Architecture – AI



DEMO



Statistics - POWER BI



Statistics - POWER BI

PredictionModel	Predicted Value	ActualValue	Count	Model Version	Model Teach Version	False Prediction Impact
		User				
RITM_Catalog_Item_model_FI.sav	Request for Service	Mobile device PUK code delivery to User	2	2.1.0	15.12.2019_01:31:16	Medium
RITM_Catalog_Item_model_FI.sav	Request for Service	Mobile Device Return	2	2.1.0	06.06.2019_10:25:49	Medium
RITM_Catalog_Item_model_FI.sav	Request for Service	Mobile Device Return	2	2.1.0	15.12.2019_01:31:16	Medium
RITM_Catalog_Item_model_FI.sav	Request for Service	Mobile device User account change	2	2.1.0	06.06.2019_10:25:49	Medium
RITM_Catalog_Item_model_FI.sav	Request for Service	Mobile device User account change	2	2.1.0	15.12.2019_01:31:16	Medium
RITM_Catalog_Item_model_FI.sav	Password reset (AD)	Password reset (other)	2	2.1.0	06.06.2019_10:25:49	Medium
RITM_Catalog_Item_model_FI.sav	Password reset (AD)	Password reset (other)	2	2.1.0	15.12.2019_01:31:16	Medium
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Challenges & Lesson learned

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

- Identify essential data and complexity
- Compromise, if need
- Set realistic target
- Understand business processes

Thank you

Headed in the same direction
– walk there together?

Henri Suojoki

Director, Development, Tooling & Processes
+358 50 4446814
henri.suojoki@enfo.fi



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