

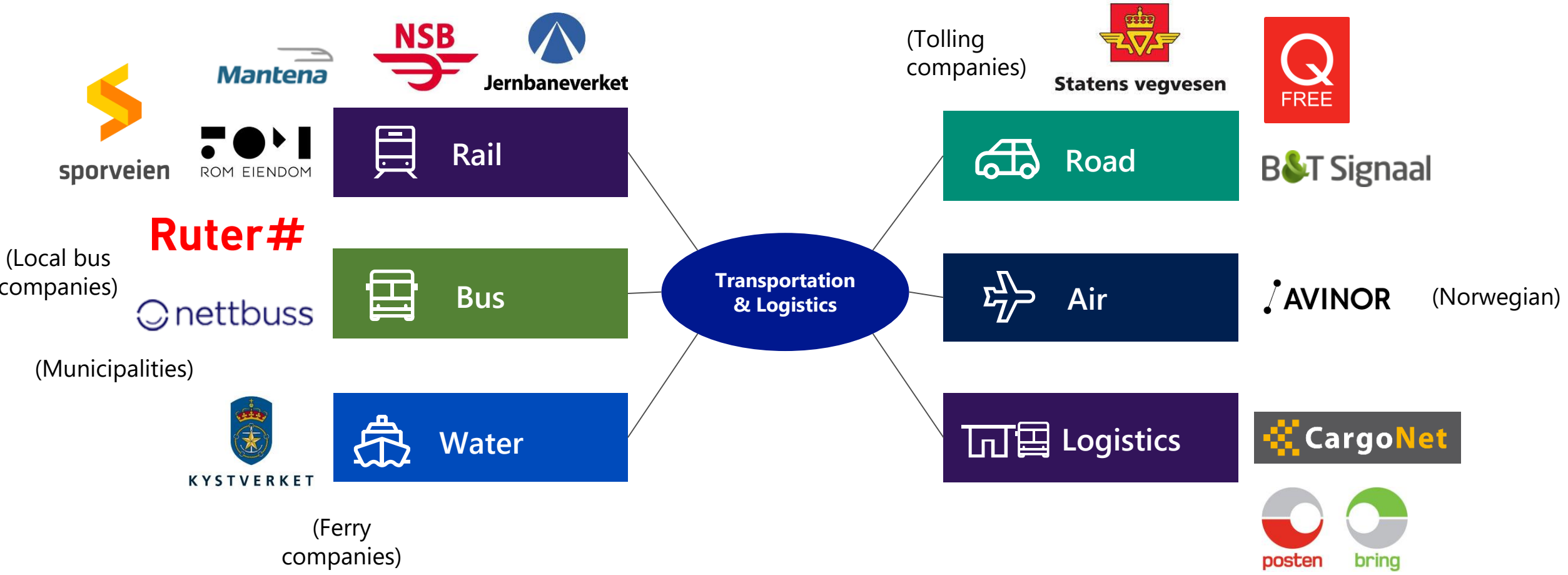


# Proximity Services Digital platform 12.09.2016

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Transportation & Logistics Industry Lead  
@powlin3

**Ruter#**

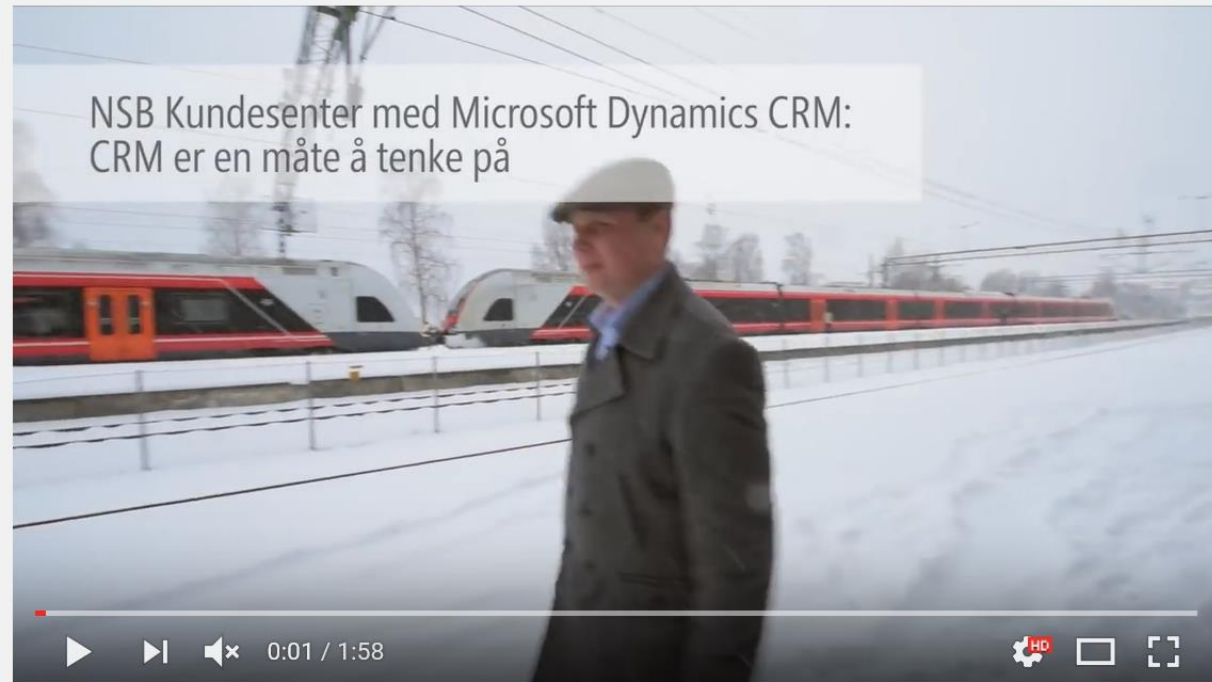
# Our customers in Norway



# Digital Transformation



NSB Kundesenter med Microsoft Dynamics CRM:  
CRM er en måte å tenke på



## Kundereferanse: NSB



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Published on Sep 18, 2015

I samarbeid med NSB Kundesenters IT-partner, Albatross IT Consultants AS, startet salgssjef Bjørn Inge Stalsberg og hans kollegaer det som i realiteten var arbeidet med en helt ny løsning. Prosesser ble analysert og designet på nytt basert på «best practice» og Microsoft Dynamics CRM ble tilpasset

26  
JUN

## Improved Uptime and On-time Schedules for Oslo's Trains with Industrial IoT and IFS

by Ralph Rio in Industrial IT and Cloud Computing

### Summary

With a cloud-based preventive maintenance solution built using IIoT data and IFS Applications, the Metro in Oslo, Norway's capital, operates more smoothly with much lower risk of unplanned downtime. This benefits the municipal-owned transit company's many Metro customers, while helping it avoid costly penalties.

The doors on rail cars can result in significant unplanned downtime. This became the focus of a pilot project for preventive maintenance using an Industrial Internet of Things (IIoT)-enabled solution built on IFS asset management software and Microsoft Azure cloud platform at a large municipal-owned transit company in Europe. The solution automatically diagnoses a variety of issues to trigger appropriate preventive maintenance to avoid train downtime and related penalties. The integrated solution includes business process automation that initiates a maintenance work order in IFS to prevent alerts being forgotten.

### Industrial IoT enables On Schedule Trains

During the recent IFS World conference and other discussions, ARC talked with IFS customer Christian Thindberg, CIO, [Sporveien](#), about its Industrial IoT application for improved on-schedule movement of its trains. Sporveien is the municipally owned public transport operator in Oslo (the capital of Norway) that operates and maintains the Oslo Metro and Oslo Tramway – the only rail transportation for the city. Established in around 1,000 AD, Oslo is now a modern city with a population of 634,000 and 1.5 million people in the wider metropolitan area.

Many of these people depend on the trains to run on schedule for their jobs and other activities. Sporveien has a demanding service level agreement (SLA) for on-time schedules with the city. Also, local laws require Sporveien to reimburse ticket holders for the cost of a taxi when late.

### Unplanned Downtime Cascades into Missed Schedules

According to Guri Melby, Transport Councilor, "The fact that Sporveien works, that trams, subway, and buses run properly, is crucial for Oslo to function as a city."

Attempting to operate the train with a door stuck open represents an obvious safety hazard. An open door prevents the train from moving. When a train cannot leave a station due to a stuck door, the next train is also delayed. As a result, a single stuck open door cascades into a delay for many trains, creating a serious issue for thousands of riders. Loss of confidence in trains being on time reduces ridership and revenues and engages penalties based on Sporveien's SLA.

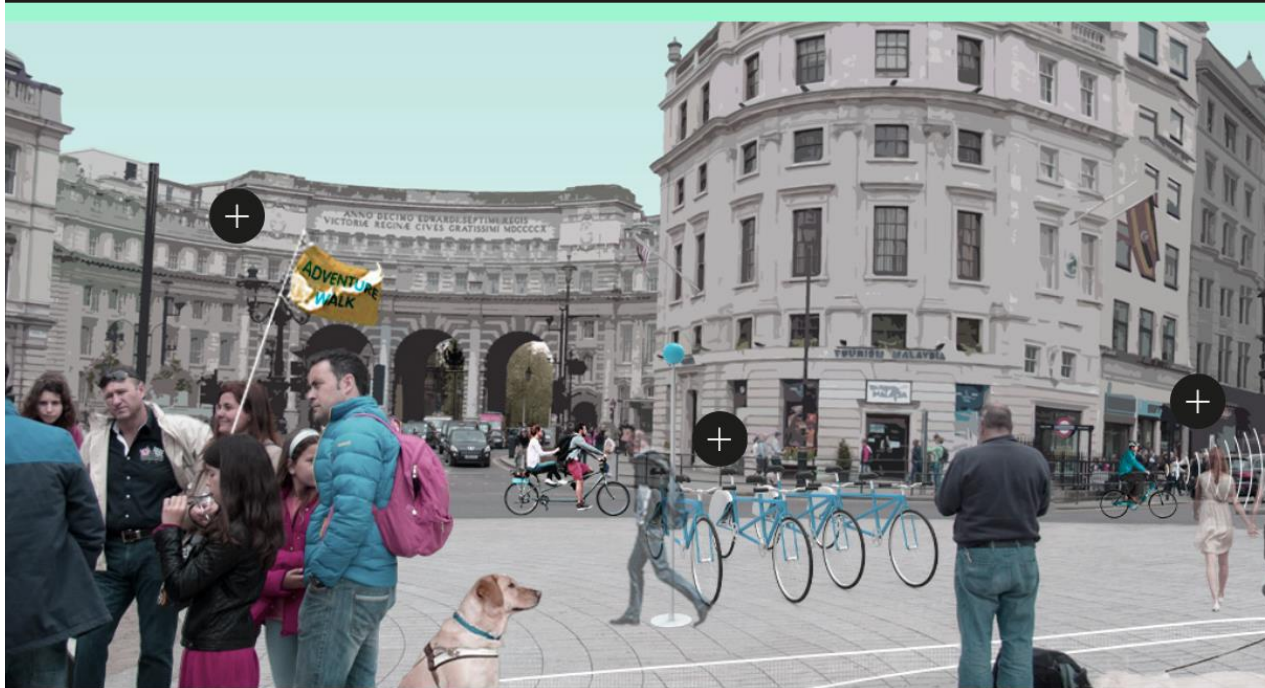
# Digital Transformation



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Independence Day



<https://www.youtube.com/watch?v=BEzncMLLOxE>

# Broad partner ecosystem



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CUBIC™  
Global. Innovative. Trusted.

Malthe Winje

iconics

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SYSTEMS

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helo

fluxLoop.com

CGI

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TATA

IFS

Affecto

# Achieve global scale, in local regions



34

regions

# Build and run open source solutions



## Any tool, application, framework

Applications



DevOps



Frameworks



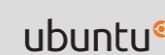
Databases & middleware



Containers



Infrastructure



# Build and run open source solutions



## GETTING IT RIGHT

The 'future proof' IT platform  
built on open source technologies



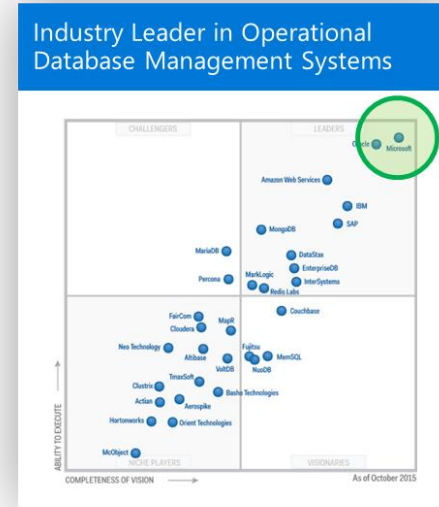
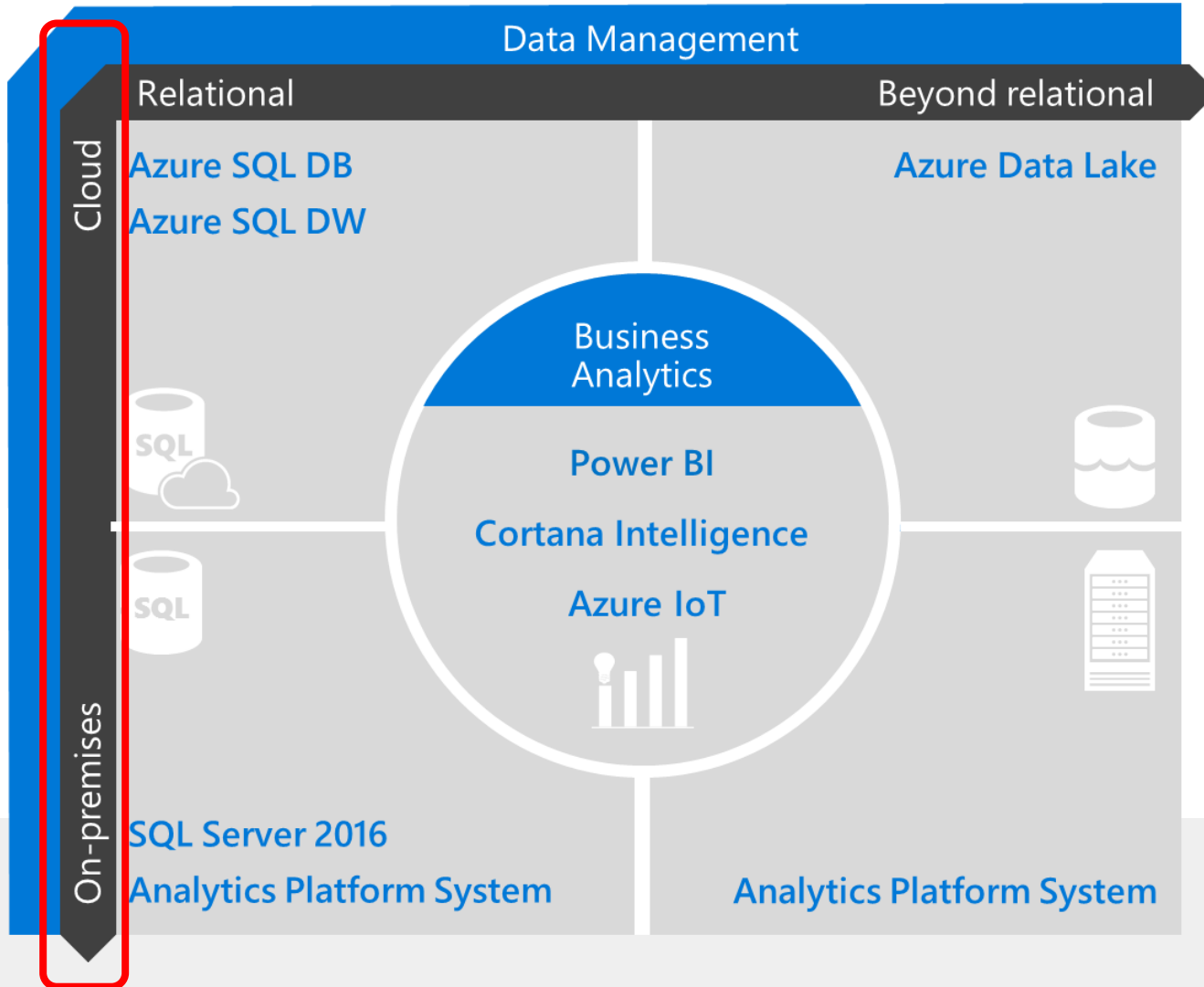
September 27<sup>th</sup> – Microsoft Norway, Lysaker Torg 45, 1366 Lysaker, Norge



[You are invited!](#)



# Leading Business Analytics and Data Management Platform



# Benefit from relentless business commitment



ISO 27001



SOC 1 Type 2



SOC 2 Type 2



PCI DSS Level 1



Cloud Controls Matrix



ISO 27018



Content Delivery and Security Association



Shared Assessments



FedRAMP  
JAB P-ATO



HIPAA/  
HITECH



FIPS 140-2



21 CFR  
Part 11



FERPA



DISA Level 2



CJIS



IRS 1075



ITAR-ready



Section  
508 VPAT



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Union Model  
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Scheme



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[Del/tips](#) [Skriv ut](#)

## Our search warrant case: An

### Skytjenester i det offentlige ikke lenger i det blå

Tale/innlegg | Dato: 09.06.2016

Av: [Statssekretær Paul Chaffey](#)

I næringslivet er skytjenester på god vei fra "hype" til "business as usual". Noen vil kanskje si at vi kommer litt sent til festen når vi nå har lagt fram Nasjonal strategi for bruk av skytjenester, skriver statssekretær Paul Chaffey i Computerworld.

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Kommunal- og moderniseringsdepartementet



TEMA

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RELATERT

[> Nasjonal strategi for bruk av skytenester](#)

case brought people's on a lower

is for the ople's privacy ie legal e way for

better solutions to address both privacy and law enforcement needs.

# Let's continue the dialogue!

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