Data & AI Services

We believe in the power of technology to drive the greater good.

Crayon at a Glance

19 years
of experience in software and cloud advisory

Over 800 certifications
on a wide range of technology solutions

80% global market coverage
with subsidiaries in 35 countries

2000 employees
who are experts in their field

Strong relationships
with the world's leading technology vendors and cloud partners

Publicly listed
company on the Oslo Stock Exchange

Over 10,000 customers
from SMB to enterprise across all industries

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Our Global Data & AI Practice

7 years of experience with data and AI

Delivering applied AI projects to clients across industries and sectors

Growing team of experts

80+ data scientists, data engineers, software engineers and solution architects.

Deep expertise in modern AI developments

Computer vision, NLP/NLU, deep learning, etc.

End-to-end delivery of data platform and AI powered solutions

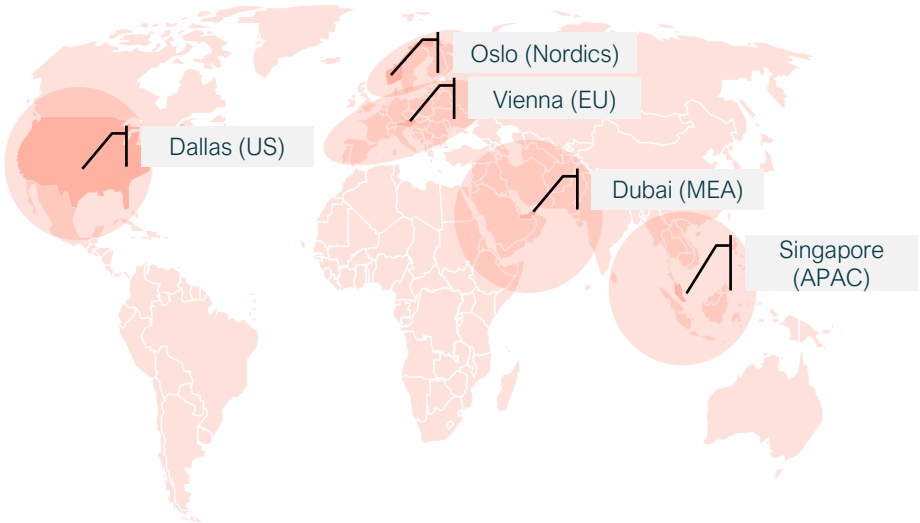
From ideation to deployment and management

Purpose- and value-driven services

Tailor services to individual customer needs to deliver business value

1 Global Data & AI Center of Excellence

Are being established to serve the increasing global demand



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Our Proven Expertise

Trusted partner of leading vendor

Microsoft

2019 Global AI and ML Partner of the Year

100+ Cross-industry applied AI projects

Satisfied customers trust our expertise and capabilities

TINE

NTE

DNV·GL

Lowell

Husqvarna

voestalpine
ONE STEP AHEAD.

RHI MAGNESITA

EIR

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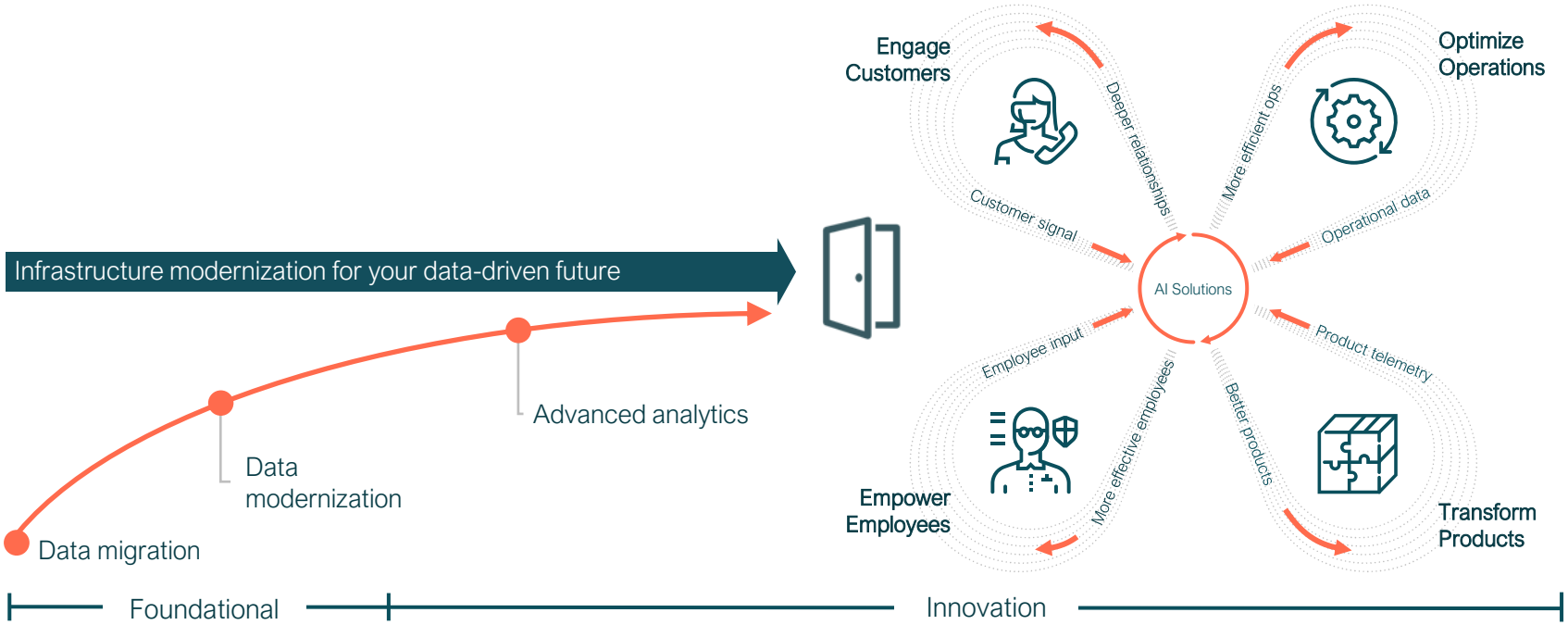
PREPARE THE DATA FOUNDATION TO UNLOCK BUSINESS VALUE THROUGH AI SOLUTIONS

Unlock Digital Innovation



Source: Microsoft & Crayon CoE

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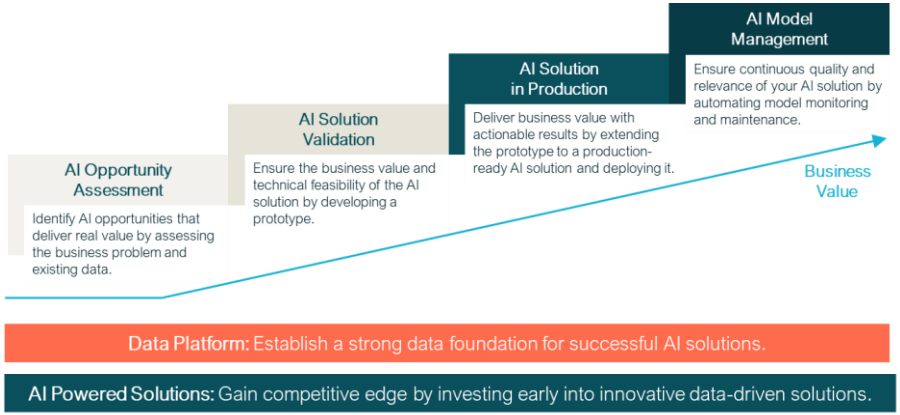
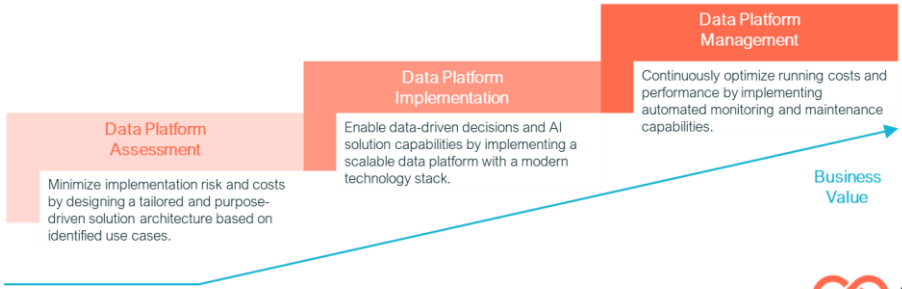
FROM IDEATION TO DEPLOYMENT AND MANAGEMENT

We offer an E2E delivery of data platform and AI Solution Services to solve the customer's problem!

Our (AI powered) Solution Development Approach



Our Data Platform Approach



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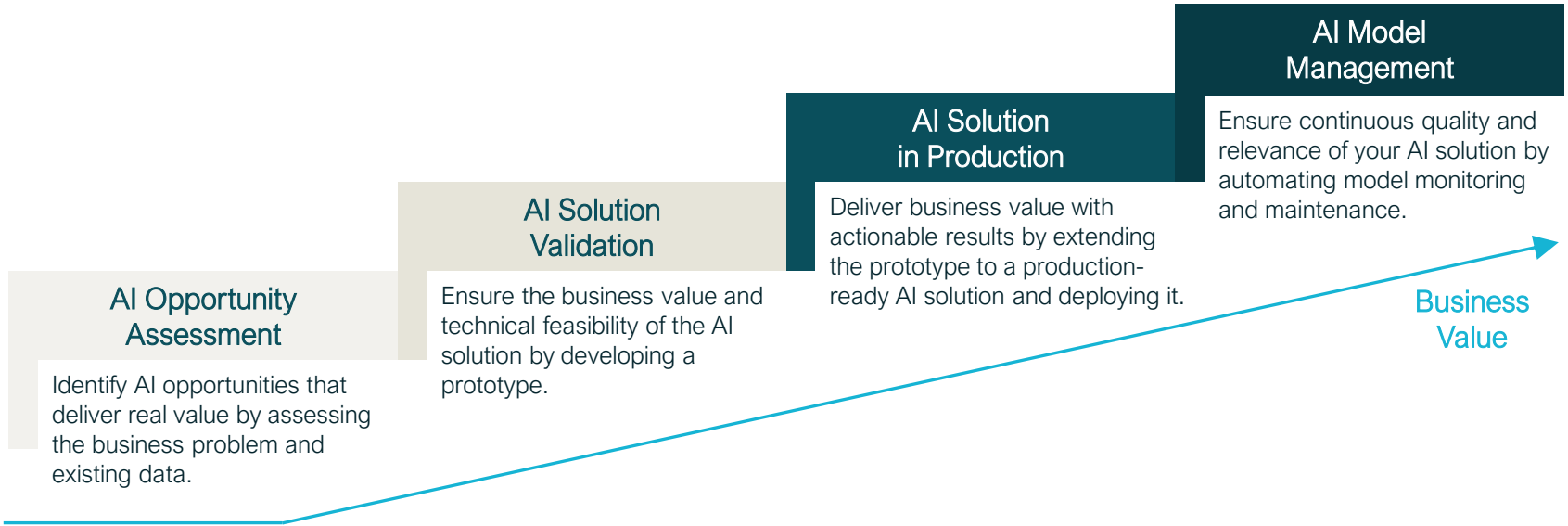
A SOLUTION TO LEVERAGE DATA AND INNOVATIVE ALGORITHMS TO GENERATE BUSINESS VALUE

Our Data & AI Powered Solution Services



Data Platform: Establish a strong data foundation for successful AI solutions.

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A SOLUTION TO LEVERAGE DATA AND INNOVATIVE ALGORITHMS TO GENERATE BUSINESS VALUE

AI Solution Services – Deliverables

AI Opportunity Assessment

The business problem is defined clearly and concisely.

The data viability is assessed to ensure feasibility of a future solution.

A concrete AI approach is defined to address the problem.

A high-level solution architecture is designed.

The solution development and delivery plan is refined.

AI Solution Validation

Relevant data is collected and prepared for analysis.

Data characteristics are analyzed and a dataset is created for modelling.

An AI model is trained, evaluated and tuned.

A prototype is developed to showcase the business value.

Business value is validated with customer domain experts.

AI Solution in Production

Deployment requirements are defined.

The deployment environment(s) are provisioned and configured.

AI model is further optimized to meet customer needs.

MLOps capabilities are implemented.

Inference endpoint is deployed to production.

MVP solution is tested and monitored.

AI Model Management

MLOps capabilities are further enhanced.

Update mechanism on training dataset is established.

AI model re-training is automated.

The promotion of new improved models to production is automated.

Model validation and continuous monitoring is further enhanced.

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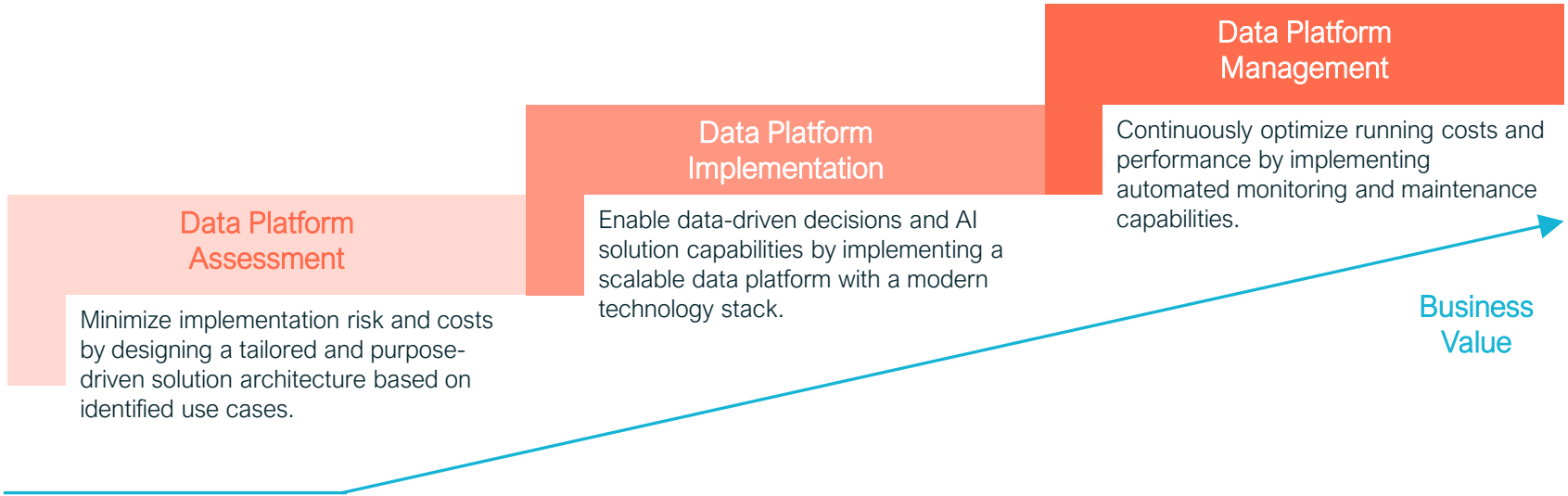
AN INTEGRATED TECHNOLOGY SOLUTION TO ACCESS, CONSOLIDATE AND DELIVER DATA TO USERS AND APPLICATIONS

Our Data Platform Services

AI Powered Solutions: Gain competitive edge by investing early into innovative data-driven solutions.



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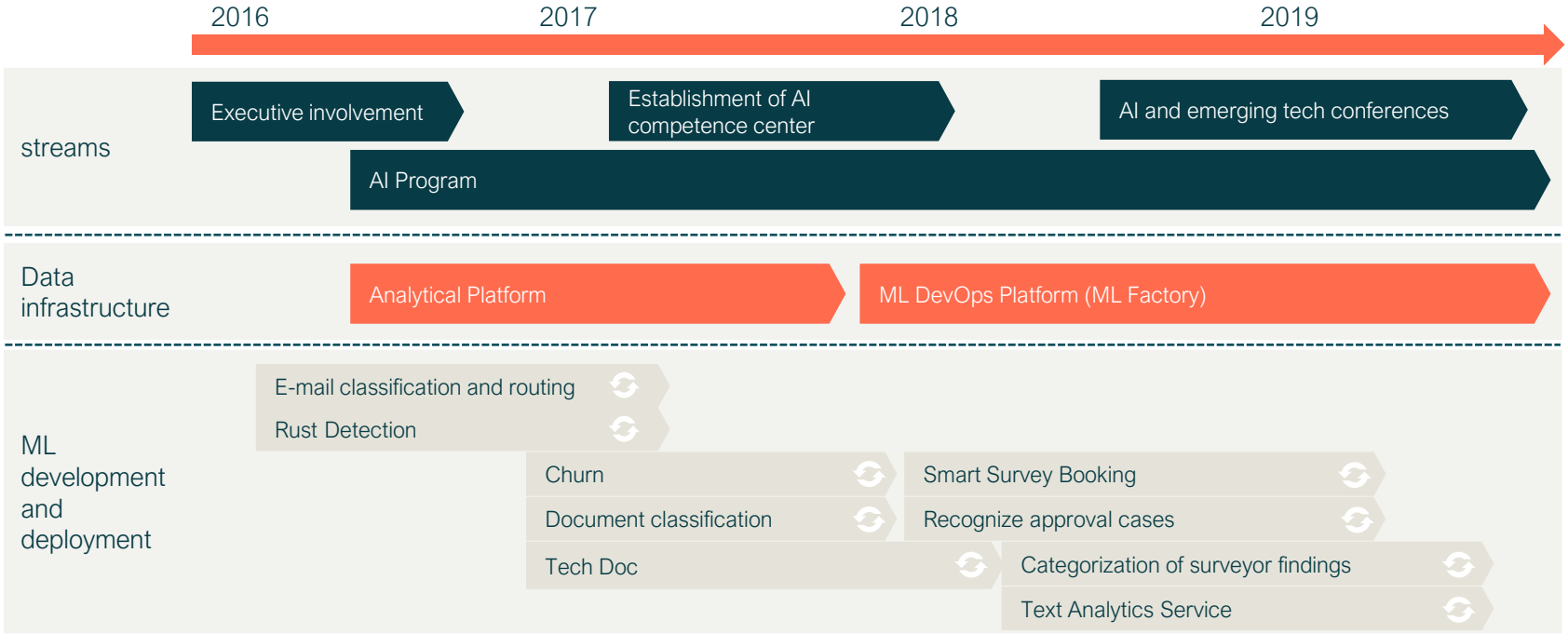
USE CASES

We have done it before!

A Typical Transformation Roadmap



THE WORLD'S LARGEST CLASSIFICATION SOCIETY NEEDED TO IMPROVE EFFICIENCY OF EMAIL ROUTING

DATE (Digital Access to Experts)

BUSINESS PROBLEM

- Manual helpdesk process of sorting and routing emails to correct person among 400 experts.
- Manual routing of 40,000-75,000 emails/ year received for inquiries regarding vessel surveys and inspections, etc.

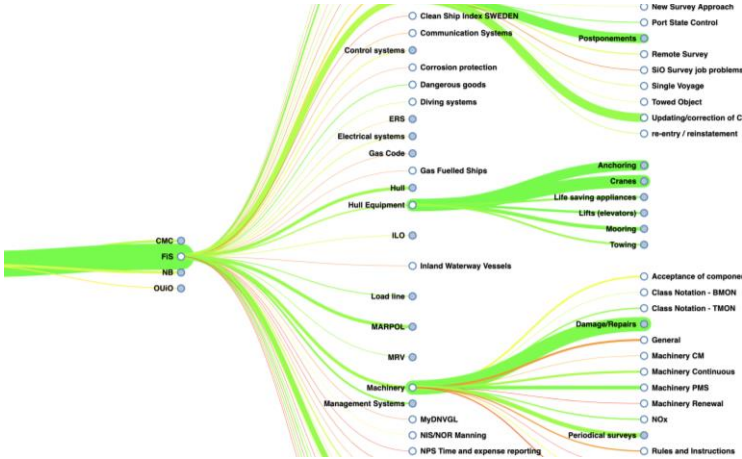
SOLUTION

- Text/ NLP classification model, trained on 200,000 emails with 650 classes/categories (i.e., responsibility areas of experts).
- Model uses relevant keywords extracted from the emails, weighted using TF-IDF.
- Deployed and operationalized: guaranteed 4 hours client response time.

OUTCOME

- 82% automated routing
- Significantly reduced handling time, increase in efficiency; improved customer service.
- Direct annual savings of ~USD $200k due to reduced manual workload.

9.24	manufacturer	10.45	vessel	15.1	yard	18.11	fpso
8.99	aoss	7.1	superintendent	11.23	nb	16.72	rig
8.53	med	5.74	psc	10.15	shipyard	14.47	modu
8.45	cmc	-5.28	unit	9.71	delivery	9.91	mou
7.36	certification	-5.32	shipyard	8.52	newbuilding	9.81	drilling
7.29	tac	-5.39	drilling	7.82	project	9.41	offshore
7.16	customer	-5.85	design	6.9	docreq	9.04	transocean
7.15	aom	-5.96	med	5.89	building	8.71	unit
6.12	ta	-6.78	delivery	-5.88	annual	8.29	subject unit
-5.93	management	-7.03	nb	-5.91	existing	8.11	fso
-5.97	superintendent	-7.29	project	-6.22	good	7.86	the unit
-6.07	flag	-7.47	fpso	-7.44	psc	7.76	os
-6.07	survey	-7.61	modu	-7.82	superintendent	7.74	bop
-7.5	owner	-8.67	rig	-8.11	renewal	-8.4	vessels
-11.6	vessel	-9.11	yard	-8.37	survey	-11.5	vessel



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THE WORLD'S LARGEST CLASSIFICATION SOCIETY WANTED TO REDUCE COSTS ON SURVEY PLANNING

Survey Planning and Duration Prediction

BUSINESS PROBLEM

- Surveys are business critical for vessel owners as vessels are not allowed to operate without the right classifications.
- Process is carried out locally through e-mail and phone interaction with client and limited systems support.
- Manual scheduling of physical inspections globally is a very complex process and results in 4.3 job splits.

SOLUTION

- Implemented customer portal for survey booking and planning.
- Precise estimation of survey duration is key to ensure customer satisfaction and reduce survey costs.
- ML model for estimating the duration of a survey was trained using 55.000 past surveys and over 300 features.

OUTCOME

- Estimated annual savings of 10M USD
- Reduction in avg. job split from 4.3 to 1.9
- Reduction in administrative work related to manual scheduling
- Improved ability to optimize location and resource capacity

THE WORLD'S LARGEST CLASSIFICATION SOCIETY WANTED TO ENHANCE DISCOVERABILITY OF TECHNICAL DOCUMENTS

Approval of Technical Documents

BUSINESS PROBLEM

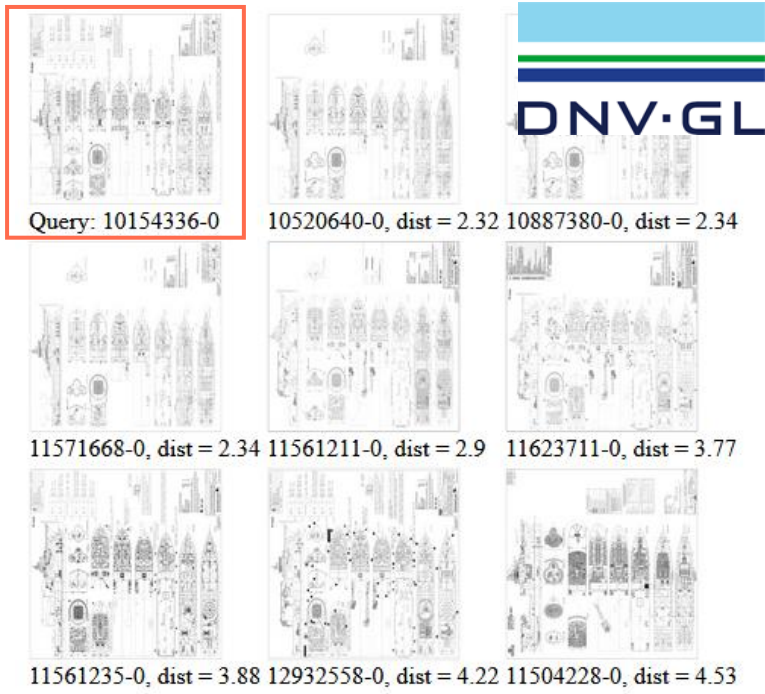
- Approval engineers receive thousands of technical document-pages every day as part of the certification process.
- For continued vessel operation/ construction, documents need to be approved, which is challenging and time-consuming.
- Engineers must search a large database consisting of about 15 million technical drawings.

SOLUTION

- Trained a deep neural network to “compress” the visual document to 512 features that “describe” the document.
- Document “descriptions” were indexed in a fast similarity search service (MRPT).

OUTCOME

- Similarity search enables a more efficient and effective work process for approval engineers.
- The question “have I seen this before” is answered in an instant
- ~15 million documents are checked in ~400ms.
- Higher consistency in the approval process



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