AI and Data programme (2021 – 2024)

Nordic Council of Ministers

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19 October 2020

AI & Data

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Nordic added value

— **Strength:**

Rich in high quality government owned registry data

Highly regulated data environments based on common values and ethical standards around privacy

Combining national strongholds

Responsible use of data & ethical AI as a program starting point.

Potential

— Widespread use of AI in the economy can double the **economic growth** potential in the long term.

— AI can help solve major **societal challenges**.

— Opening and making datasets interoperable in the Nordics – raising awareness & creating the infrastructure for business opportunities and innovation

— Connecting / creating Nordic ecosystem and networks to exchange knowledge (best practices) and build collaborations

— Branding of Nordic **businesses**: leadership potential in responsible use of data and ethical AI.

Nordic AI and Data work packages

WP1 Nordic datasets

WP2 Capabilities

WP3 Nordic Smart Government

AI and Data

— The Nordics as a leading region within digitalization, ethical AI and responsible use of data.

▪ Increased collaboration around AI across the Nordics: identification of and making public datasets of high value available across the Nordic countries

▪ Better shared understanding of the needs of the Nordic business ecosystem and Nordic strongholds to build capabilities upon

▪ Implementation of Nordic Smart Government roadmap (company economic data)

Activities

— **Stakeholder dialogue** (ongoing)

— **Hackathon event** at KTH, DTU & online – fast-track activity to show visibility across the data value chain – report to be published 30th of May

— **Mapping of the AI ecosystem and strongholds in the Nordics** – report by E&Y to be published 9th of June

Hackathon at DTU, 17-18th of March 2022

Hackathon event 2022

+15 open data sources utilized

+15 solutions developed

All SDG's adressed – with range in solutions

Six finalists

Team name
Intelligent Real-time Accident Warning System (IRAWS)

Purpose
Predicting potential accidents to shorten the response time from rescue teams, and reducing deaths in accidents

Datasets
Road camera data

Team name
Samajh AI

Purpose
Reducing costs and pollution for transport companies by reducing congestion, bottlenecks and suggesting greener routes

Datasets
Weather data, road camera data, air quality data

Team name
WellTrucking

Purpose
Estimating workloads for truckers by timetable generation that takes into account weather, traffic and road type. Aims to improve driver safety

Datasets
Weather data, traffic /TMS, road camera data, road condition data

Team name
Parking for truck drivers

Purpose
Improve parking for truck drivers to address issue of driving overtime, illegal parking and time-consuming detours (e.g. creating congestions)

Datasets
Road camera data

WINNERS
Team name
Just in time

Purpose
Planning of freight transport resulting in reduced congestion by planning better routes

Datasets
Road camera data, TMS, weather data, Open street map, air quality data

Team name
RoadAid

Purpose
Prediction of roadworks and maintenance to reduce road congestions

Datasets
Road condition index including vehicle weight, traffic flow, drainage condition, pavement material and thickness and pavement renewal

Comparison of Nordic countries

The Nordic countries are largely similar in areas relevant to AI and data

Each Nordic country has developed a national AI strategy, with Finland leading the way and Iceland being the last to publish theirs'.

Each country also places a high value on data protection and they have created their own policies and national oversight entities for data.

Examples of country strongholds

Denmark
AI in the public sector

Finland
AI education and research

Iceland
Beneficial policies

Norway
Regulatory sandbox

Sweden
Private sector innovation

Nordic challenges

Data management

Transition from AI pilots to production

Regulations and ethical AI

Data management

Covers many important sub-topics with unique challenges

Has been a low priority historically

SMEs find it particularly difficult

Transition from AI pilots to production
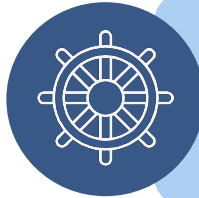
Poor leadership understanding of AI

Lack of clarity surrounding costs and development plans

Available data is not optimal for AI

Regulations and ethical AI

Regulations are complex (e.g. GDPR and Schrems II)

Missing connection between ethical requirements and developers

Large international companies get an advantage from complexity

Recommendations

1. Arrange cross-Nordic data events based on government owned data

2. Collect and showcase examples of the value of government owned data from across the Nordic countries

3. Fund projects creating an overview of which government owned datasets are highly used and demanded by companies across the Nordic countries

4. Establish Nordic working group on open data standards and formats including best practices when publishing data

5. Fund projects investigating the potential of new or known methods to publish sensitive data in accordance with GDPR

6. Fund projects to make public data more accessible for companies across the Nordic countries

7. Promote the open data portals in the Nordic countries

8. Collect good practice examples from the Nordic countries on good data governance and data management related to publishing datasets

Recommendations

The Nordics should:

1. Pursue increased sharing and utilisation of national datasets

2. Build a competitive advantage on the responsible use of data and ethical AI

3. Raise the AI and data competency level among organisational leaders

4. Support businesses and academic institutions in finding relevant partners for solving AI and data challenges

5. Share best practices, use-cases, and knowledge with each other

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