

DIGITALISATION CASES FROM

DIGITALNORWAY



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About: DigitalNorway - Toppindustrisenteret AS

Is a non-profit industry-driven initiative for enabling Norwegian businesses to succeed in digitization. The initiative aims to become an arena that builds, connects and drives digitization projects across SMEs, institutes and industry giants. Digital Norway is the centre force and the hub for several expert networks. Together with Digital Norway there are 18 dedicated owners and strategic partners, as well as academia and strong regional innovation environments. These contribute to develop useful services and tools for digitization, as well as facilitate and build strong, professional networks across disciplines and industries.

Digital Norway has 18 committed owners and strategic members, as well as academia and strong regional innovation environments. These help to develop useful products, services and tools for digitization, and to facilitate the establishment of strong professional networks across disciplines and industries. It has an efficient and competent working environment with 16 full and part time employees based at the Research Park in Oslo. Digital Norway also has strong regional partners in the scaling mechanism that gives Digital Norway the power to reach out to businesses across the country. Digital Norway share expertise and experience on how digital technologies are used by SMEs and work together to provide services to this market.

Digital Norway's roles are to ensure that all Norwegian companies have access to this knowledge and the network they need to work with digitization. Digital Norway believe this should be as simple and accessible as possible, for as many people as possible. Below are details of the arena and network, products, services and ongoing projects.

Need for Digital Transformation

Digitization is already becoming of great importance to both the social and business sectors. A characteristic feature of digitalization is that it happens and develops independently of traditional industries and sectors. It intervenes regardless of the way we as a society are organized. It intersects across. One cannot solve the challenges and exploit the opportunities by operating solely in parallel within the industries or organizations that are familiar with. This means that one must think differently about organization. Digital Norway is built on this need to build cross-cutting expertise, to develop cross-functional technologies, to develop cross-border businesses, to develop cross-border regulations and to make sure that the management can operate across. Digitization is an equally revolutionary force like electricity, the car and the phone were in their time. In the next five years, a number of established industries will be challenged, and new wineries will grow. Individual companies are usually unable to change the industry alone. But by playing teams with other business actors, universities and authorities, Norway can succeed in building the future of digital society and industry.

Digital Norway 's industry transformation is based on:

- Value creation will in the future increasingly take place in interacting ecosystems and the desire, will and ability to build such teams will be business critical the next five years in most industries and industries.
- Digital Norway will provide the necessary framework to create transformation as well as support and conduct the professional and administrative processes.
- Digital Norway will draw on Norway's leading digital competence, through the Executive Forum and Expert Network.

Digital Solutions and Projects

Arena and Network

Cross-sharing and learning is one of the main reasons for the creation of Digital Norway. The company works with both physical and virtual meeting places to facilitate knowledge sharing. Work related to networks is divided into three: Digital Norway Community, Digital Norway Networks.

- ***Digital Norway Community:*** A national digital sharing and learning arena and meeting place for anyone working on digitization. This is based on one of the basic ideas behind the creation of the company: Give everyone who needs the access to the network, knowledge and discussion partners they need to succeed in digitalization. The platform is open and free to anyone who wants to participate, but we look at different ways to commercialize parts of the offer. The community platform also has a course module, where we offer short training programs.
- ***Digital Norway Network:*** Network meeting for the owner companies in selected areas of expertise. The participants vary from network to network but are usually leaders with strategic and operational responsibility for the field. The goal is to build long-term networks that can also be useful outside of the meetings and in the long run create new collaborations. All subject areas will have their own group room in our new digital platform. In the long term, we envision that these networks will be opened to more people, and that the knowledge developed here can be shared with more through our digital platform. New networks are opened at the request of the owners.

Products and Services:

The service spectrum is an essential part of the services offered to the SME sector, and aims to provide practical targeted assistance to the SME sector.

Digital Norway today offers the following:

- ***The Digitization Guide:*** a simple digital guide that guides you through the various steps of a digitization process and provides you with the knowledge and tools you need in different situations. Users are directed into the Digital Norway Community for help when they are stuck.
- ***Digital Maturity Indicator (DMI):*** an online survey where a management team answers a battery of questions and returns a report showing how they are compared to other companies and some recommended measures. Used as a discussion tool to arrive at measures for own organization. Can be taken independently and sold as a workshop or seminar for a group of companies. Also included in Competitiveness & Growth. There is also a version for entire companies, which is piloted at DNB and DNV GL. DMI will be further developed into a portfolio of data-driven diagnostic products. Digital Maturity Indicator (DMI) gives your insight into how well your business is ready to handle the changes your business faces. The service dives under the smoke from buzz words like AI, IOT, blockchain or machine learning. Instead, the service identifies the extent to which the business is able to renew expertise and business model so that it can reproduce itself in digital costume.
- ***Competitiveness & Growth:*** a two-day program for managers focusing primarily on the more formal aspects of governance, and to a limited extent provide expertise about strategic drivers in smaller companies. Participants first go through a series of mini

courses on relevant technologies, conduct a DMI and prepare a case to work with. In the first session, the training starts in innovation methodology and uses knowledge about their own company and the insights they have gained about technology to work with their case. After three weeks of self-employment, they meet again to continue their training. After the program, they receive an alumni group in the Digital Norway Community they can work on together. Such competence is important for strategy work, and to understand the need for necessary investments. Digital Norway develops a program that analyses and further develops the digital skills of the managers. The program can also be taken by members in nomination committees and in top management teams. The Digital Norway Competitiveness & Growth program focuses on how digitization affects the business, its environment, leadership requirements, and opportunities for streamlining operations. The control program acts as an optional module that can be linked to established drivers or taken as a standalone program for those who have been through other drivers. The program is suitable for all managers and offers a relevant range of modules that can be combined into a program that fits any board.

Practical information

The Competitiveness & Growth program consists of three modules and access to three of Digital Norway 's services.

- *iDMI* - Individual Digital Maturity Indicator to map the level of competence within digitization. This is a questionnaire based on self-assessment and can be performed as part of general board evaluation.
- *Workshop* - updates the managers of the most prominent digital technology drivers, coupled with discussion and reflection on relevant business examples. Workshop is adapted so that it can be taken as part of an extended board meeting.
- *Courses* - The course is designed as a workshop for managers. Duration is one day, and the course covers the most important digital technology drivers like digital business models, digital marketing, interaction and sales, digital platform economics and cybersecurity. The course is set up as a combination of lectures and case assignments. The main purpose of the course is to enable board members to ask the right questions to the administration in relation to digitization, as well as to understand how the technological forces affect the business.

In addition to the three above-mentioned modules, the managers will have access to experts from the Digital Norway Expert Network, as well as access to online resources through Digital Hub. The unique with Digital Norway board of directors is access to experience and case from the full width of Norwegian business, as well as access to experts in a wide range of digital technologies. The Competitiveness & Growth program is adapted to the needs of each company/individuals need.

- **Competence Network:** Digital Norway brings together Norway's leading expertise to advise on the future. Blockchain, Artificial Intelligence and the Internet of Things. Our digital technologies today challenge established processes and organizations. The expertise networks gather experts, suppliers, users, authorities and stakeholders to explore new digital technologies, platforms and business models. This creates

knowledge and competence with value both for participants in the Competence Network and for the owners, members and users of Digital Norway.

Competence networks will help to:

- Further develop insights into specific digital technologies.
- Establish best practices for procuring and using new technology.
- Build networks with experts and stakeholders across Norwegian business, academia and government.

The first competence network deals with blockchain and been launched recently¹. Through this forum, our goal is to connect organizations and people interested in Blockchain and Distributed Ledger Technologies (DLT) with experts, technology providers, technology seekers, regulators and enthusiasts, to develop an environment that fosters innovation. Our mission is to establish this forum as a place of conversation of Blockchain and DLT, and to provide relevant connections and information/updates in the field.

- **Digital courses:** an existing and growing offering of online training in digital technology and various topics related to digitalization. We do not have an ambition to follow companies closely over time, but to start them with digitalization and qualify them for greater lifting later. These promises we believe other providers, such as research communities and consulting companies, can handle. We have also piloted several other services and products, including a management program, but have so far failed to get a good enough scaling model in place.

Industry Projects:

Digital Norway is involved in projects assisting whole industries in their work to digitally transform industries. This work depends on a consortium of industry partners that lead the work, where our role is to facilitate change. Some examples of the projects.

- **National Projects:** Digital Norway's position as an independent, inter-industrial arena with no heavy commercial interests has positioned us to be able to lift major change projects. Based on banking cooperation in Norway, we have developed a methodology that is now being used to initiate and launch and then implement initiatives in the petroleum industry and the power industry. The two ongoing projects are based on how companies and ecosystems in an industry work together and to exploit the opportunities provide for an entire value chain. Digital Norway is currently involved in two such projects:
 - **DataLink** - the oil and gas industry, with Equinor, AkerBP and a number of other participants from the industry. One of the ambitions has been to look at how standardized data exchange procedures can be created - making it easier to collaborate across companies on the Norwegian continental shelf. Three sub-projects are being worked on: data sharing in partner licenses, HSMS data and common APIs. At the same time, a bit more basic work is underway among the project participants in looking at what role the initiative will have in the future.
 - **DIGIN** - in the power industry together with Statnett and Lyse, we have matured a collaboration between all the leading network companies, which is first and foremost about establishing a common information

¹ <https://www.digitalnorway.org/blockchain-forum>

model. The overall goal is to reduce the costs in the industry and through the grid rent, which benefits Norwegian business and consumers.

○ **EU Projects**

- **TRINITY** - aims to create a network of multidisciplinary and synergistic local digital innovation hubs (DIHs) composed of research centers, companies, and university groups that cover a wide range of topics that can contribute to agile production: advanced robotics as the driving force and digital tools, data privacy and cyber security technologies to support the introduction of advanced robotic systems in the production processes. The result will be a one-stop shop for methods and tools to achieve highly intelligent, agile and reconfigurable production, which will ensure Europe's welfare in the future. TRINITY network of DIHS will also offer training and consulting services, including support for business planning and access to financing. Services of participating DIHs and dissemination of information to wider public will be provided through a digital access point that will be developed in the project. Another important activity of the project will be the preparation of a business plan to sustain the network after the end of the project funding.
- **DIGI-B-CUBE** - aims to establish a cross-border and cross-sectoral ecosystem that combines digital innovations from the IT sector with three key important industries (Bioimaging, Biosensing and Biobanking) within the health sector. This project brings together clusters from various sectors & focus areas such as Biopharma, IT, Biotech, Personalized Medicine & Digital Health, ICT, IoT & Cyber-security, Analytical Instruments & Medical Devices, Medical Materials, Optics & Automation, Micro & Nanotechnology, Automotive, Cleantech, Construction, Plastics, Food and Medical Technology, with active members from research institutes, hospitals and economic development support agencies from a range of European countries, DIGI-B-CUBE has the resources and network needed to reach a wider number of relevant SMEs from all ranges of size and applications.