

# Digital Transformation in NAV IT 2016–2020: Key Factors for the Journey of Change



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**Abstract** The directorate of Labor and Welfare Administration in Norway (NAV) is responsible for one of the most complex system portfolios in Norway. Since the establishment of the directorate in 2006, NAV has had the ambition of modernizing IT systems, but the development has been slow. In the last 4 years, however, there have been major changes in the way NAV works with digital development and modernization. The purpose of the study is to describe the changes that have taken place in the NAV IT department in the period from 2016 to 2020. The survey identifies four key changes that have had a major effect on the IT department in NAV. These key factors are changed organizational design to support *the creation of teams and product areas*, changed sourcing strategy and *insourcing* of services, changed technological direction toward a *modern application platform and a changeable application architect*, as well as changes in working method from waterfall to *agile product development*. The IT department has moved from being a management-oriented, static organization structured by function to having a flat and dynamic organizational structure with dedicated areas of expertise. NAV replaced all supplier contracts on development and management with capacity agreements, regained ownership of its solutions, recruited programmers, and developed NAV's internal competence. By developing its own application platform for deployment, NAV IT made it possible for teams to automatically deploy to production whenever they wanted. NAV IT has developed an increasingly agile organization where autonomous teams and empowered employees are a key factor.

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## 1 Introduction

During the last 4–5 years, the Directorate of Labor and Welfare Administration in Norway (NAV) has changed the way they work with modernization and development of digital solutions for users while at the same time changing and renewing working methods, technology, and framework conditions for employees.

The purpose of this case study is to describe the digital transformation in NAV, in specific IT department. The case's empirical framework is to identify changes in the period from 2016 to 2020. The case study was part of a master's thesis [1] where findings and observations about the current organizational structure (team/product areas) and working methods (agile methodology) have affected the organization's ability to solve the crisis and the extreme digital challenges for which the organizations were responsible for solving during the pandemic in 2020.

Digital transformation is often described as changes and improvements in an organization's operations and work processes by using digital tools [2, 3]. Development of new tools opens up for changes in business practices, business model, and value system [4]. By utilizing these, organizations can operate with more transparency and increase efficiency. According to Unruh and Kiron [5], this also applies to the public sector. At the organizational level, this means that business models and strategies must be adapted to the new changes [5].

There have been few relevant studies about organizational changes in NAV, considering management structure, the introduction of management tools in the form of measurements, the establishment of new NAV offices, and the introduction of new IT tools (see, e.g., Parslow [6], Thilageswaran [7], Vågen [8], and Grung et al. [9]) but no relevant research considering digital transformation so far.

NAV manages a massive portfolio of services for the Norwegian population. The Directorate's social mission is to secure work for the Norwegian population, provide good living conditions for the most disadvantaged, secure financial rights through good performance management, and offer services with good service. This requires an enormous organizational structure and a correspondingly complex system portfolio that ranges from the most hard-coded mainframe "Infotrygd" to the most easy-going microservices. A total of 1400 employees work in NAV Directorate, and about 800 of them are located at the IT Department. NAV is probably one of Norway's most complex organizations, and one of the interview objects described it as "an onion." There are layers upon layers of organizational levels, lines, and structures, and it is too extensive to use the entire NAV as a backdrop in this case. Therefore, the case is limited to primarily concerning the IT department in NAV.

The case is further limited in time to the period 2016–2020. During this period, major changes were made in the IT department, organizationally, technologically, contractually, and working methods/way of working. The time span has been chosen because it represents a period in which there has been a significantly greater breadth and speed of change initiatives than previous periods. Organizationally, the start was made at the end of 2015, with the formal start of a major organizational development project in 2016.

## 2 The Case Study

This case study presents an analysis of the changes the IT department has had in the last 4–5 years, both through the formal change of the organization and the more informal changes that have taken place. The data collection mainly consisted of interviews with relevant employees in NAV and the IT department, as well as document studies of available written documentation.

Using document analysis, available documents relating to the journey of change in the IT department have been examined. Relevant documentation has been sought that provides information on any formal changes to organizational structures, other decisions, and decisions that have had an impact on the changes that have taken place. The following written documentation is included in the study:

- A selection of organizational maps from the period 2016–2020
- Case basis for organizational change in 2017 (OU project) and 2019/2020 (IT-2020)
- Relevant strategies (including Cloud Strategy and Sourcing Strategy)
- A team overview from 2018
- Case basis for changing competence profiles 2018
- Case basis for the establishment of product area 2019
- Overview of the development in the number of employees per competence profile (2016–2020)

To enrich this data material and to gain a greater knowledge of what experiences employees in NAV have had related to changes in the organization in the last 4–5 years, the study included a series of interviews (video interview according to COVID restrictions). A total of ten informants were strategically selected so that they could express themselves in a reflective manner on the topic in question [10]. In this thesis, the main criteria were that the informants had been employed in the NAV/IT department in the period 2016–2020 and that they had worked actively with the implementation of digital transformation and/or the work with handling the Corona crisis (Table 1).

**Table 1** List of informants

Informant	Male/Female	Role	Years employed	IT Dep.
A1	F	Product manager	17	No
B2	M	Developer	4	Yes
C3	M	Middle management	21	No
D4	M	Developer	3.5	Yes
E5	M	Top management	4	Yes
F6	F	Top management	9	No
G7	M	Top management	14	No
H8	M	Middle management	9	Yes
I9	F	Product manager	6	Yes
J10	F	Top management	1.5	No

### 3 The Digital Transformation Process

The objective of the case study was to identify changes that have taken place in NAV IT in the period 2016–2020. During the case study, four categories of change were observed that manifested themselves during the study period. These were changes in the organizational structures, changed sourcing strategy, changed technological direction, and changed working method.

#### 3.1 *Organizational Changes*

The following sections provide a brief account of NAV IT's organizational change journey 2016–2020. A full-fledged review of changes in organizational structure and the emergence of teams in NAV IT is available in the master's thesis [1].

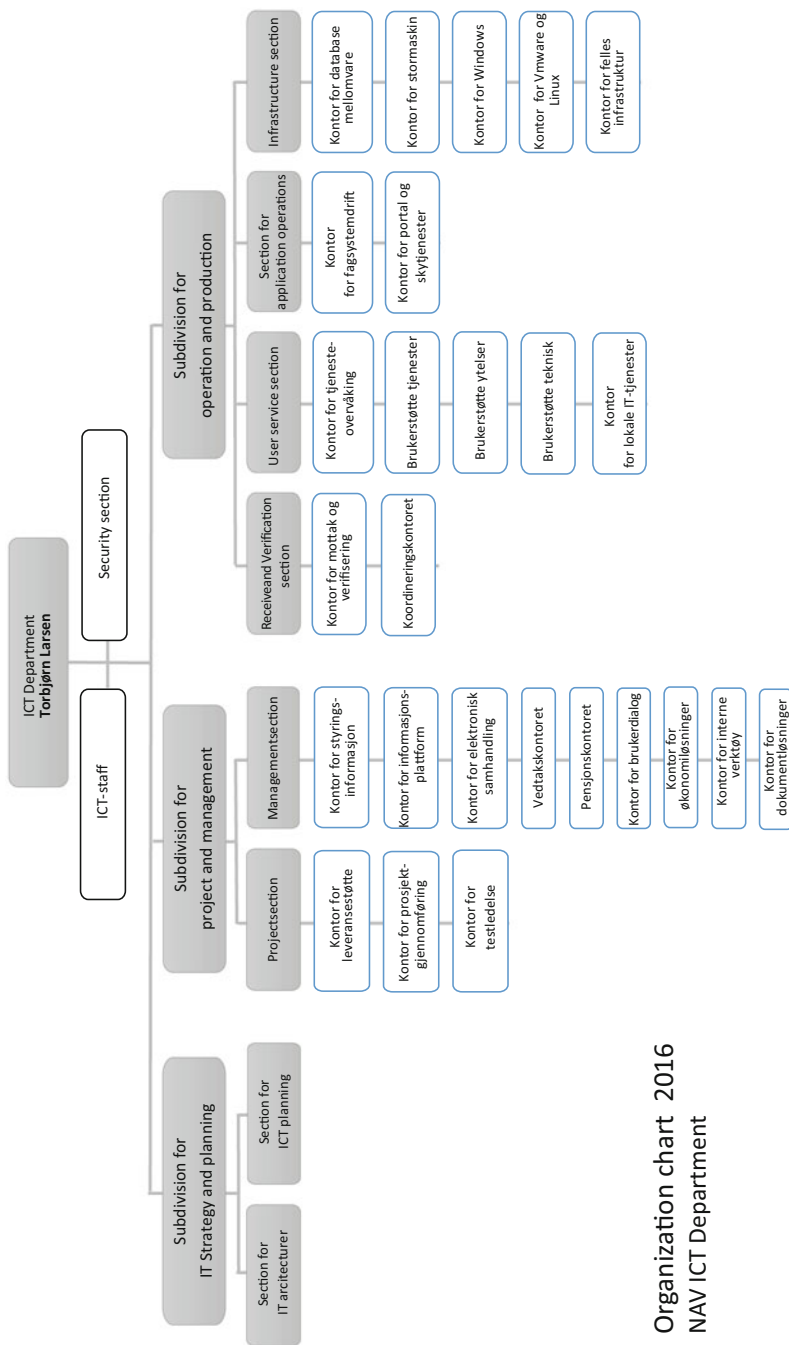
The organization of NAV's IT department has been the subject of many changes and reorganizations since its inception in 2006. Organization chart (Fig. 1) from January 2016 shows an ICT department that consisted of 3 subdivisions, 8 sections, and 26 offices, of which 9 were in the management section.

This organizational structure was designed to support massive IT projects with external suppliers, quarterly main deliveries with change assignments on the entire system portfolio, and follow-up of management agreements with external suppliers. This became particularly visible through the organization of the project section and the management section, with separate offices for follow-up of external suppliers. There were also separate offices for planning, verification, and coordination.

During 2016, a major organizational development project was initiated with the aim of redesigning the organizational structure in the IT department. An organizational model was established to create a more comprehensive dialogue and better collaboration with the professional side, provide room to establish flexible delivery teams, support different delivery models, and facilitate user orientation and business-driven development and innovation. A new organizational structure was implemented in 2017 and entailed a complete reorientation of the organization (Fig. 2). The number of subdivisions increased from three to nine, and teams now appeared in the organizational structure.

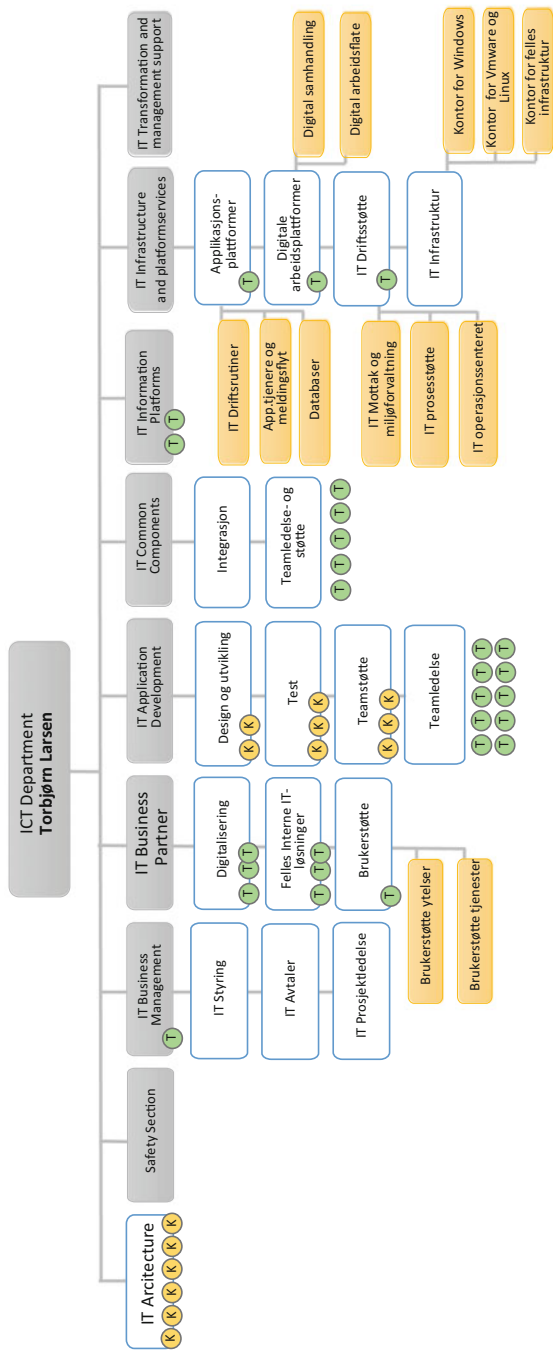
In the autumn of 2019, a major reorganization project was initiated by the IT department. The reason for this was the need to better support and adapt to the changes in the way NAV develops technological solutions and services. The goal of reorganizing the IT department was to establish a structure that maintained the operational responsibility of IT and supported the digital transformation of NAV. The new organization should support NAV's preferred way of working with product development in interdisciplinary and cross-functional teams.

An organizational model (Fig. 3) was therefore adopted that distinguished sharply between competence departments and IT delivery areas. The competence



Organization chart 2016  
NAV ICT Department

Fig. 1 Organizational chart 2016



Organization chart 2017  
NAV ICT Department

● Competence cluster  
● Teams

Fig. 2 Organizational chart 2017

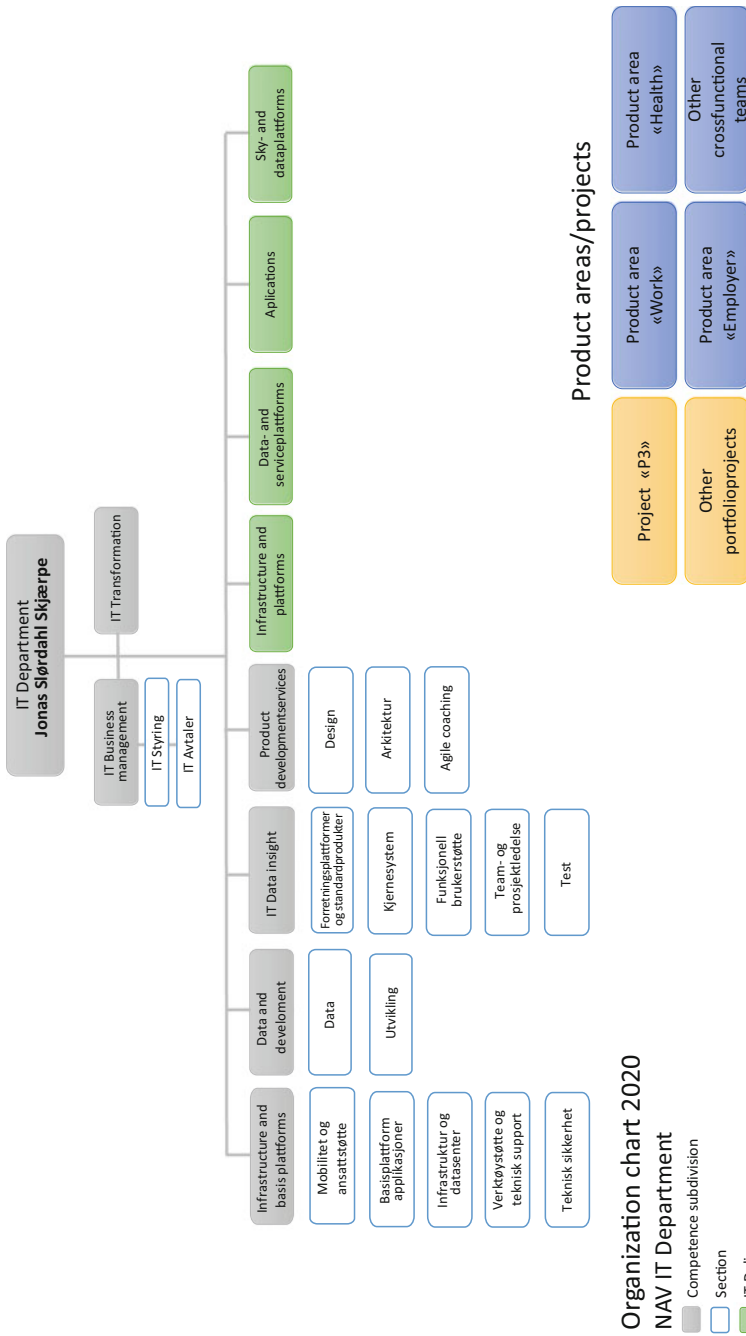


Fig. 3 Organizational chart 2020

departments combined competence and capacity and form the stable structure of the IT department. The delivery dimension was organized in IT areas and platform areas.

Overall, the IT department has changed from being a deep management-oriented and static organization structured by function to having a flat and dynamic organizational structure with dedicated areas of expertise.

### 3.1.1 Cross-Functional Teams

Working in groups consisting of different complementary competences is not new to NAV, but working with interdisciplinary teams with defined roles, agile working methods, and overall responsibility for products and deliverables was something new. This was formalized through the first major reorganization in 2017.

In the years 2015–2017, documentation of teams was good at the unit level, and the team's updated information on the team's own information pages. However, there was little aggregated information about the development and distribution of teams, and it is not possible to present a complete statistic on the prevalence of the number of teams, etc. One of the informants stated that in 2015 there were seven teams in the IT department. In excess of these seven early teams, it has not been possible to obtain documentation of the prevalence of teams before 2017. The information presented in this case is based on information about team development that has been visible in organization charts (2017 and 2018) and a static team overview from 2019. From 2020, there is data from a digital team directory/database.

In the organization chart from 2017 (Fig. 2), 42 teams are visualized. Fourteen of these are clusters of expertise, while 28 are teams. The category "team" was immature in 2017, and there was great variation in how the teams were organized, delivery models, what work processes and development methodology they used, and what sourcing strategy applied to the team. The case study shows that there has been awareness and maturation on how the organization perceives the team concept and that there is a need for a differentiation of team types in team topologies [11].

In 2019, the number of teams has increased, but they have now been removed from the organization chart. A team overview has been established, and the number of delivery teams in NAV IT has increased to 45 teams in 2019. In March 2020, a digital team catalogue was launched that gave an overview of all delivery teams in NAV and their affiliation to a product area/IT delivery area. The purpose of the Team Catalogue was to provide a reliable and up-to-date overview of all delivery teams in NAV.

As of December 1, 2020, 1167 employees were registered in 132 teams across 16 areas. Of these, 58 were product teams, 33 IT teams, 5 management teams, and 3 project teams, as well as 22 teams categorized as "other" (Fig. 4).

The development of teams in NAV has continued with a sharp increase in the number of teams even after the survey period. In August 2021, 173 teams were registered in the team directory, showing how fast this organization develops.



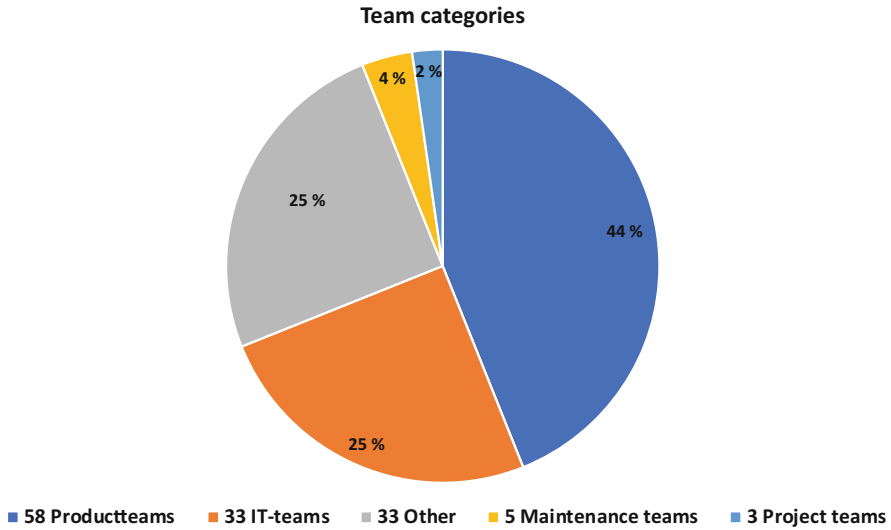


Fig. 4 Distribution of team types, from the Team Directory Dec. 2020

### 3.1.2 Product Areas

From 2016 to 2017, most of the product development was done in teams and projects, but from 2018, NAV IT started focusing on how NAV could work differently to better meet users’ needs. Until now, modernization and development initiatives had been organized through large projects, but because NAV wanted to take greater ownership of the entire process from needs, development, operation, and management to sanitation, it was decided to establish product areas to manage product development.

In 2018, it was decided to pilot a product area “Health”; the product area itself was established in 2019. During 2019, the product area “Work” was also established. In 2020, the product areas “Employer” and “Pension” were established. In a product development idea, the IT department not only wanted to “bring people and code together” in product teams but also bring together product teams working on the same domain, life event, or user group in product areas. The tasks of the product areas are to ensure holistic service development for a better user-centric perspective.

During the period 2016–2020, there have been several major changes in NAV IT. The first major move came in 2017 and was a complete redesign of the organizational structure. This was done to facilitate the establishment of flexible delivery teams and support various delivery models, user orientation, and business-driven development and innovation. During 2017 and 2018, the IT department found that the organizational design did not contribute sufficiently to building strong competence environments and that it was not clear which deliveries the IT department was responsible for. As a result, an organizational model was launched from 2020 with a distinction between competence departments and IT delivery areas. This

is to ensure that the IT department could better support and adapt to the changes in the way NAV develops solutions. Major changes in a business model are often shown in how an organization changes its services through new digital tools [4]. When society is constantly changing, it also affects users' demands and expectations. This has an impact on business models because organizations must adapt to their customers/users to a greater extent [4, 12].

The review has shown that the organization has changed significantly from 2016 to 2020. The IT department has gone from being a deep management-oriented and static organization structured by function to having a flat and dynamic organizational structure with dedicated areas of expertise. Delivery units have been established in the IT department that develop, operate, and manage products within the same domain/category. The employees have their competence home in the departments and work in teams.

NAV IT has established a broad competence environment for development, data, and design during the period. The number of internal developers and programmers increased by almost 250 employees in the years 2017–2019. This corresponds to almost a third of the IT department's total number of employees (a total of 785 employees in 2020). By redesigning the organizational structure and building up interdisciplinary teams and product areas, NAV has facilitated an increasingly comprehensive service development. There has been an extensive process of change, which has had consequences for all parts of the organization.

### **3.2 *Insourcing***

An important choice NAV made was to take stronger responsibility and ownership for its own development processes. One of the key changes during the case period was to change the company's sourcing strategy. NAV's first sourcing practice was established in 2007. From then until 2016, NAV had an established practice of using external suppliers through service purchase agreements for detailed design and application development (new and further development, error correction, testing, and documentation) of NAV's IT systems.

Sourcing is about retrieving resources from different places and is commonly explained as producing services yourself or buy services abroad. Insourcing and outsourcing is about moving services into or out of the business. A sourcing strategy can thus be defined as a plan for which services the company is to produce itself with its own employees and which services are to be purchased from external suppliers [13].

In 2017, a comprehensive sourcing strategy was decided for the development and maintenance of NAV's IT systems. The new strategy was to take greater internal ownership in the development and management of IT solutions. Continuous development of digital solutions was no longer a side activity in NAV, but part of the core of solving the greater social mission. In practice, it was decided to establish a separate technology environment and move away from outsourcing development

and management assignments to external consulting houses. The consequence of this was that one had to build strong internal competence to ensure delivery precision from the IT department. The advantages of this were that NAV took leadership and ownership of its own solutions at the same time as they used their own employees and developed NAV's internal competence. There was an increased potential for delivering better and cheaper services to users and better direction management for the solutions.

A broad effort was therefore initiated to recruit developer capacity and exchange external consultants with their own developers in 2017. Over time, NAV has terminated almost all supplier contracts on development and management and replaced this with capacity agreements in the areas needed. In practice, NAV IT has terminated all management agreements and taken over ownership of its own solutions. One of the prerequisites for success in this has been to be able to recruit a large number of employees in developmental and programming disciplines. In this way, there has been a marked shift in the composition of competence in the IT department in the period 2016–2020 (Fig. 5). During the survey period, the number of *designers* has increased from 11 to 50 employees, and the number of *developers/programmers* has increased from 64 to 298 in-house developers (Fig. 6). Some of this is due to internal competence shifts, but mainly this is recruitment of new employees with developer expertise over the past 2–3 years.

The number of employees in roles as architects and advisors has been relatively stable, while the number of employees in roles such as technicians and support functions has decreased significantly over the period. In parallel with a reduction in support functions, there has been a marked increase in development-related roles.

Such a large shift in the composition of competence in an organization can have consequences for the organizational culture. Almklov and Antonsen [14] argue that outsourcing can lead to employees having reduced ownership of work processes, especially in a crisis [14]. In this survey, all informants refer to a deep commitment and a spirit of voluntary work throughout the organization. This is exemplified during the months after the pandemic shut Norway down; there were 650 employees working around the clock to keep all services up and make sure the wheels went around despite a massive pressure on all services. In Almklov and Antonsen's article, outsourcing creates less ownership and engagement [14], and in this survey, it appears that insourcing has created more ownership and engagement. For NAV IT, a clearly communicated trust in employees may also have contributed to increased ownership and a desire to help the organization achieve its central goals.

### 3.3 *Technology and Infrastructure*

Technologically, NAV IT has made major leaps during the survey period. NAV has taken over responsibility for the management and further development of most of its solutions. The most important technological change moves have been to establish a modern application platform and a changeable application architecture. NAV IT has

Competenceshift 2016-2020

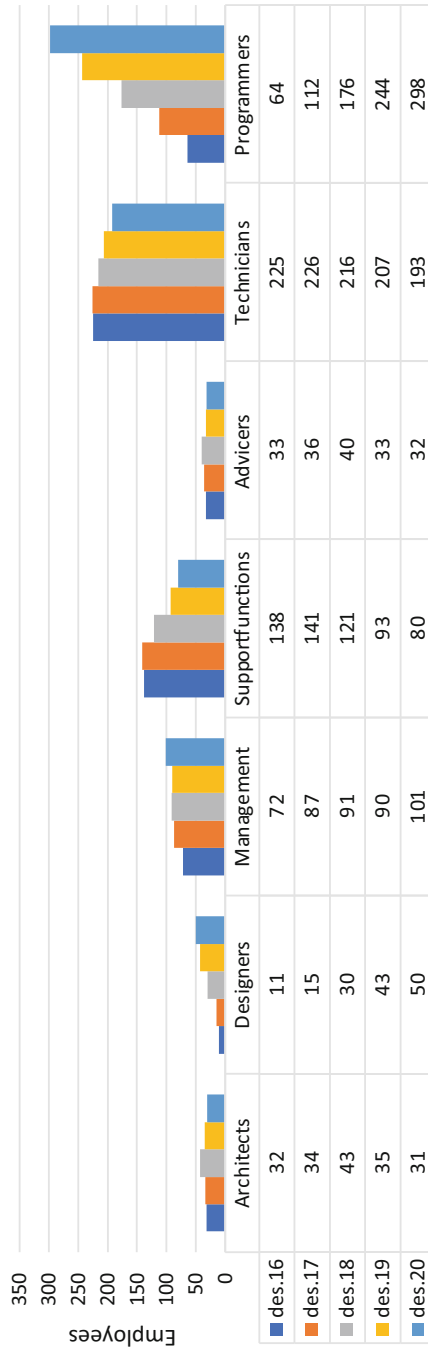
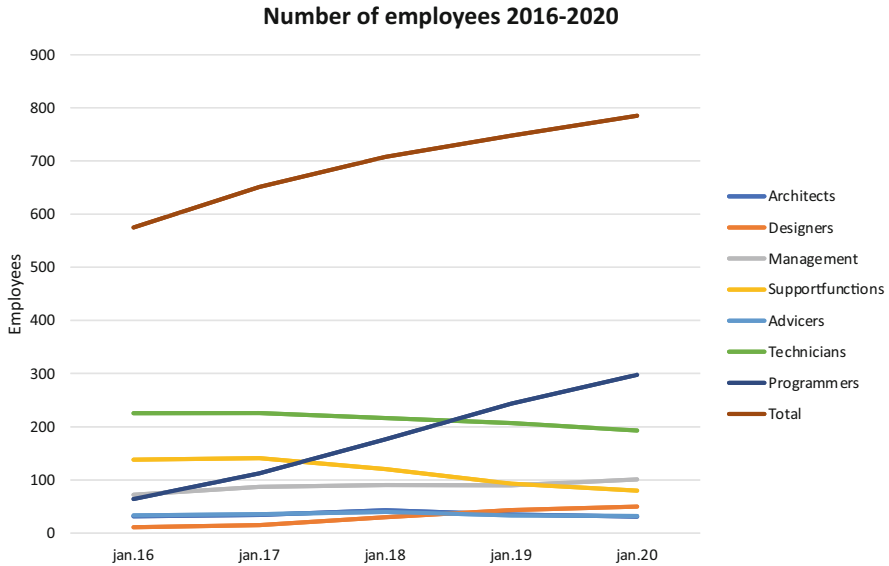


Fig. 5 Competence shift



**Fig. 6** Number of employees in the IT department 2016–2020

increasingly moved from closed source code to open code, from on premise to cloud, as well as a mobility solution that enables all employees in the IT department to interact and perform their ordinary work tasks from laptop regardless of location.

By developing its own application platform for deployment/production setting (NAIS), NAV IT gained a modern application platform that allowed teams to automatically deploy to production whenever they wanted. The average number of deploys has increased every week since 2017. In 2016, there were less than 50 deploys a week, while in 2020, there are between 750 and 1000 deploys. One consequence of this was that coordination needs were reduced and that changes could be delivered continuously—and not through huge main deliveries.

By building a changeable application architecture, teams were able to build small parts of a solution that could be quickly and easily replaced (microservices), without making major changes to their systems. In addition, a platform was built for collecting and exchanging data.

Another important step has been to introduce a mobile workplace. Employees in NAV have for many years used landline and thin client in their daily work. In 2015, a pre-project was started to facilitate a more flexible mobile solution, where one primarily wanted to facilitate the use of laptops. In 2017, this was formalized and intensified, and the mobility project was established. In 2019, all NAV IT employees were on the mobility platform, computer, and mobile phone. During 2020, the rest of NAV was also moved to the mobility solution, which meant that the IT department in this field was well shod when the COVID-19 pandemic brought all employees to home office for 18 months.

### 3.4 *Way of Working*

NAV has been developing digital solutions ever since the “Central National Insurance System” was launched in 1967, and the large bedrock Infotrygd (IBMz Mainframe) has been delivering steadily for many decades. Traditionally, IT solutions have been developed through large waterfall projects, IT projects funded over the central government budget. One major challenge using project methodology was that there was traditionally a long runway from start-up to delivery in a long-term project. In the early phase, there was a lot of time spent planning, specifying, and detailing, and with an ever-increasing need for coordination when NAV was making changes. This delivered yesterday’s technology when the final solution was put into production. This plan-build-run model followed the IT department until 2017 where it was decided to adopt agile development methodology.

From 2017 to 2020, NAV has moved from project development to ongoing product development in interdisciplinary/cross-functional product teams. NAV IT works according to agile development methodology, where agile software development is central. The Agile Manifesto defines common focus areas for agile software development. This manifesto covers the essence of all agile methods regardless of whether it is software, products, or services to be developed [15].

Since the agile manifesto was published in 2001, the software development field has, according to Dybå and Dingsøy, experienced major changes [16]. As a result, new software development methods, tools, techniques, and practices have been introduced. Rajlich [17] describes agile development as a paradigm shift in software development from the traditional plan-driven methodologies.

The goal of an agile development is to be flexible and customer-focused and deliver products frequently and with the greatest possible value for the customer. Few or no requirements are set for how to achieve the goal, but most methods use teams consisting of experienced people who together can meet the expected challenges. Agile methodology is based on the philosophy that you do not know everything at the start of the project and that the framework for the assignment or project is likely to change along the way [18].

In recent years, NAV IT has developed an increasingly agile organization where autonomous teams and empowered employees are a key factor. Agility in an organization is both about the ability to quickly act on changes and new information and the ability to increase process flow and resource efficiency. According to Sherehiya and Karwowski, an agile organization is better able to adapt to changing environments: “Organization agility refers to an enterprise’s ability to quickly respond and adapt in response to continuous and unpredictable changes of competitive market environments” ([19], p. 471).

According to Cohn [20], one of the hallmarks and strengths of an agile approach is that you work in tight-knit empowered teams. Teams as a way of working have become the strategic choice for organizations when they face complex and challenging tasks [21]. The formation of a work team is usually motivated by the benefits it brings, such as increased productivity, innovation, and employee satisfaction [22].

A clear finding in this study has been the emergence of teams in the IT department. In the period from 2015 to 2020, the organization has seen a very large increase in the number of teams from 7 to 132, and in 2021 the number has increased further to 173 teams. There is a wide variation in team types and their framework conditions. An interdisciplinary team can be understood as a team that builds on principles of interdependence and responsibility in the work to achieve common goals. According to Eckstein [23], interdisciplinary teams consist of all the roles/functions needed to complete a product or complement a service.

Wageman [24] has a somewhat broader definition and believes that autonomous teams take responsibility for the result of the team's work, monitor, and seek data on the team's effectiveness and change work processes without waiting for the message from others that it needs to be done. A self-directed or autonomous team can decide for themselves how they want to organize their work to achieve their goals. They have more freedom to choose for themselves how they want to work, and they distribute tasks and responsibilities based on what is effective [25].

In the agile method, teams seek the greatest possible autonomy and want leadership based on needs and not as leadership by default [26]. Thus, through a tight-loose-tight approach, teams have a clear purpose for the work or task they are to solve—and a clear requirement for results/delivery. But managing how the team solves the task is up to the team to decide. This leadership approach gives teams room for maneuver and autonomy, and employees gain ownership and motivation to help solve the task [27].

Most NAV teams are interdisciplinary/cross-functional, and the goal is for the teams to be autonomous [28]. A team directory has been established that provides information about the team, but there is no assessment of the condition, maturity, or the extent to which the teams themselves feel that they have real autonomy [26]. The informants talk about different maturities in the teams, where some are highly empowered and autonomous, while others do not have conditions or prerequisites for becoming one. Furthermore, the informants talk about different priorities between the teams. Teams in product areas have better conditions in terms of the right expertise, funding, and agency. Teams that are in IT regions or stand-alone teams do not have the same favorable conditions. When there is a different degree of maturity in the teams, they also have different opportunities to help streamline work processes in and around their team.

### 3.4.1 Discussion

This case study has tried to describe the digital transformation in NAV. Through the framework of Unruh and Kiron [5], we learn that a digital revolution has three levels: digitization, digitalization, and digital transformation. Digital transformation requires the organization to adopt digital tools [2, 3, 29] and that this not only results in more efficient work processes but also leads to significant changes in the work processes [5]. The survey has shown that it has gradually adapted the organization to support increased digitalization.

An organization has been established to facilitate product development in teams and product areas to improve internal work processes. But this does not apply to all the other departments in the organization. Thus, IT has initiated an organizational change to support a digital transformation without the entire organization doing the same. The danger of this is that it becomes a battle site in an organization where some have progressed further in their development, while others have come shorter in their path. This asynchronous organizational development is also reflected in the establishment of product areas and creates friction.

The precondition for making significant changes in the work processes is that the organization facilitates the desired change. Several of the informants highlight a situation where the IT department has “run ahead, and we were necked behind” G7, head of department. If the organization does not pull together in the desired direction, one will not achieve the desired effect. Turning a complex organization around has not been without challenges. The informants have problematized that the teams were freed from structure and frames, and several used the phrase “the pendulum may have swung too far” about this. Dingsøy, Moe, and Seim [30] have investigated experiences with coordination of/between teams in large-scale agile organizations. They find that there is an increasing need for horizontal coordination mechanisms; the organizations they examined used many different mechanisms and that these constantly changed.

Change and journeys of change are common in all organizations and take place in all sectors and industries [31]. Based on Ven and Poole, a definition of change in organizations can be an empirical observation of the difference in shape, quality, or condition over time in an organizational unit [32]. Change is shown in different categories; among other things, this may involve changing technology that means that an organization can find new ways to perform existing tasks (ibid.). Change may vary in scope and can be divided into radical and incremental change [33]. Radical change entails a clear violation of previous practice, while incremental change occurs by improving and refining what is already decided in a step-by-step process (ibid.). The study has shown that the change in NAV is a combination of these categories of changes, where some major radical steps have been made (e.g., organizational changes), while there are regularly small incremental changes related to, for example, new ways of work and gradually competence shift.

Considering this, one might say that the journey of change described in this study does not represent a total digital transformation [5]. Rather, it is part-stage of a larger digitalization process, where it is not only used as a support tool but that IT becomes part of the company’s DNA [4]. But the next step from digitalization is digital transformation, and to this one of the informants says: “The revolution in NAV is not that we should automate case processing. It saves money, but it’s when we have automated case processing that we get a basis for creating good tools—that’s when we can create better services. Then you can call it digital transformation” (D4, developer).



## 4 Conclusion

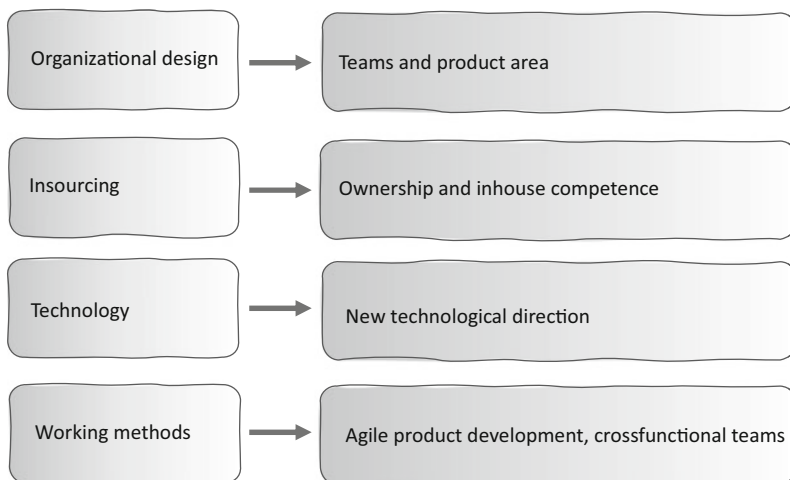
In 2016–2017, NAV IT underwent a complete organizational redesign. The organization went from being function-oriented and specialized in coordination and follow-up of external suppliers to an organizational structure that would provide better interaction with the subject side and provide room for maneuver to establish flexible delivery teams and better facilitate user orientation and business-driven development and innovation. During the period, the number of teams grew from about 7 to about 132, and 4 product areas were established. In 2020, the organization was further changed, and dedicated areas of expertise and delivery areas were separated.

During the period, NAV IT has moved from giant projects and plan-build-run to agile product development in interdisciplinary product teams. Four key changes have been identified that have had a major effect on the IT department in NAV (Fig. 7). These are:

1. Changed organizational design to support *the creation of teams and product areas*
2. Changed sourcing strategy and *insourcing* of services
3. Changed technological direction toward a *modern application platform and a changeable application architect*
4. Changed in working method from waterfall to *agile product development*

At a superior level, the key changes in NAV IT can be illustrated with this model:

These key changes have collectively contributed to increased interdisciplinarity and collaboration across the organization. It has led to an increased focus on technology and tools that promote teamwork and agile product development. IT



**Fig. 7** Major key changes at NAV IT

has led to increased ownership of own systems and solutions, a shift in competence toward developer-oriented roles, and a sharp distinction between competence and the delivery dimensions in the organization. And a small, but important step is that it has detached employees from physical infrastructure and facilitated a mobile workforce that can work anywhere.

As a real acid test of whether the changes have influenced the organization, one can in retrospect say that when the corona situation escalated in March 2020, it was teams and product areas that did the job. There were no proprietary suppliers or coordinating intermediaries. The teams had the advantage of being able to reuse modern solutions or quickly deliver newly developed solutions without downtime or fierce testing regimen. The teams had the expertise and capacity to work continuously. And they could do the job from home. From that perspective, the identified changes have had a major effect on the organization's ability to change.

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