# MASTEROPPGAVE

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Hvorfor og hvordan interorganisatorisk framsyn feiler som kunnskapsoverføring – en casestudie fra den norske helsesektoren

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# Innholdsfortegnelse

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**Forord**

Denne masteroppgaven er et ledd i MBA-graden i strategi og ledelse ved Nord universitet. Temaet for oppgaven er kunnskapsoverføring av interorganisatorisk framsyn. I tråd med kapitel 6.2 i Veiledning for masteroppgaven for erfaringsbaserte mastergrader 2022/2023 er masteroppgaven skrevet som en vitenskapelig artikkel med en kappe. Målet er å publisere artikkelen i tidsskriftet Technological Forecasting and Social Change. Den er derfor skrevet i tråd med tidsskriftets forfatterveiledning.

Vi arbeider begge i skjæringspunktet mellom politikk, administrasjon og fag der strategier dannes og gjennomføres. Masteroppgaven vår tar opp i seg problemstillinger knyttet til hvordan man kan påvirke andre aktører i samskapingen av koordinerte velferdstjenester på strategisk nivå uten å ha instruksjonsmyndighet. For oss er interorganisatorisk framsyn en spennende tilnærming ikke bare i samskapingen av faglig gode tjenester, men også som samlende i forståelsen av framtidens utfordringer og muligheter.

Vi vil takke alle som har bidratt og hjulpet oss gjennom denne masteroppgaven. Det er vår veileder Anatoli Bourmistrov med sin konkrete veiledning og støtte gjennom oppgaven, våre informanter som tok seg tid til intervju i en travel hverdag, samt kolleger og venner for faglige diskusjoner og støtte. Vi vil takke Hege M. Larsen for gjennomlesning og hennes kommentarer. Børge M. Larsen vil også takke ledelsen i Helsedirektoratet for muligheten til dette studiet, og spesielt Morten Græsli for å ha lagt til rette for at det ble praktisk mulig og for nyttige diskusjoner og støtte underveis

Til sist en stor takk til familie som har holdt ut i tre år med studier. Dette har ikke vært mulig uten dere.

Denne oppgaven har gitt oss lærerik erfaring vi ikke ville være foruten. Vi ønsker at den kan gi inspirasjon og læring for forskning og bruk av strategisk framsyn og scenariometodikk.

God lesing!

Oslo og Bodø, 24. mai 2023

Børge M. Larsen og Nils-Are Johnsplass

**1.0 Innledning**

I dette innledningskapitlet beskriver vi først konteksten for vår oppgave ved beskrivelse av digitalisering av den norske helsesektoren, strategisk planlegging og bruk av strategisk framsyn og scenariometodikk, før vi avslutter med begrunnelser for valg av problemstilling.

Kapitel 1 og kapitel 3 i Del 1 tar utgangspunkt i og bygger videre på vår eksamensbesvarelse i Anvendt metode våren 2022.

*1.1 Digitalisering av helsesektor i Norge*

Helse prioriteres av staten. Statsbudsjettet for 2023 er 1 581,6 milliarder NOK, hvor av 260,5 milliarder NOK (16,5%) brukes til helse i form av helsetjenester og -refusjoner. Helseutgifter står for 10,1 % av landets BNP (Regjeringen, 2022). Ifølge internasjonale kåringer har Norge en av de beste helsetjenestene, men landet bruker også mest utgifter på helse (OECD, 2023).

Helsesektoren er et komplekst organisasjonsfelt både når det gjelder aktørbildet, styring og bruksområder for og krav til teknologi. Sektoren består av offentlige- og private institusjoner, samt interesseorganisasjoner, hvor den statlige styringen ikke forplikter aktørene i feltet på samme måte. Man har hatt nasjonal IT-politikk innen helsesektoren siden slutten av 1990-tallet (Sosial og helsedepartementet, 1996). Staten har valgt en statlig styring av den digitale transformasjonen av helsesektoren. Direktoratet for e-helse[1] (E-helse) ble opprettet i 2016 for å realisere En innbygger – en journal og har i oppgave å samordne aktørene om felles mål. E-helse har etablert en styringsmodell som inkluderer sentrale aktører i helsetjenesten (E-helse, u.å.). Imidlertid er det de statlige regionale helseforetakene, fylkeskommunene og kommunene som har sørge-for-ansvar for de offentlige helsetjenestene. E-helse har vurdert at det er om lag 17 000 offentlige og private virksomheter i helsesektoren som i stor grad har selvstendig ansvar for digitalisering (E-helse, 2021). Mye brukte argumenter for å prioritere digitalisering av helsesektoren er en OECD-rapport fra 2019 viser at helsesektoren ligger tiår etter andre sektorer med hensyn til digital transformasjon (OECD, 2019), perspektivmeldinger om offentlige utgifter overskrider offentlige inntekter fra 2028 (Finansdepartementet, 2021)og helsepersonellkommisjonens om mangel på arbeidskraft i alle sektorer (Helsepersonellkommisjonen, 2023).

Vi kan se på digitalisering som en allmenning (Ostrom et al., 1992), ettersom det fortsatt fremstår som et uregulert område. En allmennings tragedie kan oppstå om ikke alle samarbeider. Allmenningens tragedie oppstår når mennesker som har tilgang på en

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[1] Regjeringen.no (11. mai 2023): Direktoratet for e-helse overdras til Helsedirektoratet d. 1. januar 2024

allmenning, tar sikte på å maksimere egennytten. Mennesker oppfører seg imidlertid ikke alltid slik, men har også evnen til å opptre (gjensidig) altruistisk. Her ligger derfor en av nøklene til å unngå allmenningens tragedier. En mulig mekanisme for å forhindre en allmennings tragedie er bedre samarbeid på tvers av de mange ulike aktører. Identifikasjonen av mulige endringer vil igjen kunne påvirke organisasjoners og beslutningstakeres syn på fremtid og strategier.

En kunnskapsoppsummering fra Nasjonalt senter for e-helseforskning (2021) basert på et systematisk litteratursøk fra 2011 og 2018 gir ikke utfyllende svar på kunnskapsbehov knyttet til modeller, strategier og erfaringer med samstyring, gjennomførings- og innovasjonskrav i helsesektoren (Nasjonalt senter for e-helseforskning, 2021). Videre viser E-helse (2021) behov for at bedre samarbeid med helsenæringen er avgjørende for å øke gjennomføringsevnen på e-helseområdet (E-helse, 2021). Samme rapport avdekker at det er svak tillitt mellom det offentlige og private og samtidig som at det er avdekket et planleggings gap**.**

Riksrevisjonen avdekker i 2021 svakheter ved helsemyndighetenes styring og kontroll av IT-satsningen Én innbygger – én journal (Riksrevisjonen, 2021). I en tid med uro og sviktende tillit blant aktører i sektor beslutter E-helse på vegne av sektor å utvikle ny nasjonal e-helsestrategi. I utviklingen av strategien gjennomfører E-helse en nåtidsanalyse og en scenarioanalyse for digitalisering av helsesektoren mot 2035 (E-helse, 2022). Strategien er ferdigstilt og publisert i januar 2023. Strategisk arbeid på nasjonalt nivå kan gi store konsekvenser for aktører i sektor. Det er ofte store forventninger og mobilisering hos aktører i sektor for deltakelse og påvirkning.

Det at verden utenom sektoren også er i endring er i seg selv ikke noe nytt, men endringene er i dag av mer global karakter og kommer i et økende tempo. Dette gjør det mer utfordrende å holde følge, og tiden i dag er beskrevet som "the most VUCA[2]-times in healthcare"; preget av mer kompleksitet, usikkerhet og turbulens enn noensinne (Pandit, 2021; Scoblic, 2020). Dette gjør at man bør ha tilgang til ulike strategiske verktøy og virkemidler for strategisk planlegging.

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[2] VUCA; Volatility (flyktighet), Uncertainty (usikkerhet), Complexity (kompleksitet) og Ambiguity (tvetydighet)

## 1.2 Strategisk planlegging og scenariometodikk

Strategisk planlegging og styring ble inntil 1970-tallet ofte forbundet med langtidsplanlegging, både i offentlig sektor og private bedrifter. Utviklingen både innenfor strategifaget og skiftende økonomiske og sosiale rammevilkår medførte at langtidsplanlegging ble kritisert, og andre perspektiver på strategisk styring ble mer fremtredende (Mintzberg, 1994). Planlegging er imidlertid fremdeles utbredt, både i private og offentlige virksomheter og både som strategiverktøy og som styringsverktøy (Johnsen, 2014). Strategi har en begrenset verdi når visse trekk ved rammevilkårene samsvarer dårlig med forutsetningene for den lineære strategiske planleggingstankegangen. Strategi er vanskelig å bruke når omgivelsene er ustabile og uforutsigbare og at kortsiktighet preger tankegangen (Mulgan, 2009). Når styringen mangler langsiktighet er det behov for strategisk lederskap (Johnsen, 2014). Strategisk lederskap kan utøves av flere og i ulike deler av organisasjon. Strategiske ledere må se utenfor egen organisasjon for å avdekke og prøve ut og dokumentere tiltak som gir økt verdiskapning for samfunnet.

Scenariometodikk er en måte å avdekke perspektiver av mange ulike fremtider for å lette beslutninger basert på dagens kunnskap. Scenarioarbeid forsøker å kompensere for to vanlige feil i beslutningstaking – under- og overpredikering av endring (Schoemaker, 1995). Videre kan scenarioarbeid bidra til økt kapasitet til å oppdage, tolke og svare på endringer, påvirke andre og organisatorisk læring. Utvidet persepsjon er nok den viktigste verdien av scenarioer (Iden, 2017). Et annet viktig forhold med scenarioarbeid er etablering av felles virkelighetsforståelse som grunnlag for strategiutvikling (Amer et al., 2013; Bourmistrov, 2019; Bourmistrov et al., 2017; Cornelius et al., 2005; Schoemaker, 1995). Felles virkelighetsforståelse står sentralt når det skal utøves strategisk lederskap i ulike virksomheter som skal understøtte digitalisering av en sektor. Vollmar, Ostermann og Redaèlli (2015) argumenterer for at scenariometodikk vil være et godt verktøy for planlegging og strategisk beslutningstaking i helsesektor (Vollmar et al., 2015). Metoder som den intuitivt logiske strategiske metodikken for strategisk framsyn i tider med ustabilitet, usikkerhet, kompleksitet og tvetydighet har størst relevans (Bourmistrov, 2019). Scenarioarbeid kan dermed forbedre planlegging i mange sektorer, inkludert helsesektoren.

## 1.3 Problemstilling

Strategisk framsyn og scenariometodikk bidrar til å skape felles virkelighetsforståelse om utfordringene og felles mentale modeller om mulige fremtider. Gjennom slike prosesser har

man derfor muligheter til å påvirke aktører i en sektor både direkte gjennom deltakelse i prosessen og indirekte gjennom resultatet. Hvis man mislykkes med å skape slike felles forståelser kan det få ulike betydninger for de ulike aktørenes beslutninger. I det konkrete, kan det for E-helse ha betydning for tilliten de er avhengige av fra aktørene i sektor, legitimitet til deres strategi og mulighet til å samordne sektor i en felles retning. Samtidig kan ulik forståelse om nåtid og framtid hos de øvrige aktørene påvirker deres strategiske beslutninger og vilje til å foreta investeringer som bidrar til en samlet bedre og / eller mer effektiv helsetjeneste.

Samarbeid om framsyn der flere parter og aktører fra ulike organisasjoner søker å forutse mulige framtidsscenarioer og utfordringer er en gryende aktivitet både i praksis og som forskningsfelt (Gattringer et al., 2017; Rohrbeck et al., 2015). Dette gjelder både offentlige og private organisasjoner (Gattringer et al., 2017; Janzwood & Piereder, 2019). Denne forskningen er imidlertid især knyttet til oppstartsbedrifter, små og mellomstore bedrifters innovasjonsprosesser og ikke til direktoraters styring av komplekse samfunnssektorer.

Scenarioprosesser kan være svært tidkrevende og krever nøye utvelgelse av deltakere og eksperter samt dyp forståelse og kunnskap om organisasjonsfeltet som er under utforsking (Mietzner & Reger, 2005). Det er derfor ikke praktisk mulig eller formålstjenlig at alle interessenter gjør eller deltar i scenarioanalyser.

Vi mangler kunnskap om interorganisatorisk framsyn ledet av en organisasjon i et komplekst organisasjonsfelt hvor ikke alle deltar i beslutning og gjennomføring. Videre mangler vi kunnskap om og hvorfor det ikke skjer en kunnskapsoverføring mellom enheter og organisasjoner i forbindelse ved et slikt interorganisatorisk framsyn. For praksisfeltet vil denne type kunnskap ha betydning for hvordan slike organisasjoner som E-helse foretar strategisk planlegging og planlegger prosesser for å samordne aktører i en kompleks sektor rundt felles mål.

Vi har valgt å utforme følgende problemstilling for oppgaven:

*Hvorfor og hvordan interorganisatorisk framsyn feiler som kunnskapsoverføring mellom enheter og organisasjoner?*

I de neste kapitlene vil vi gjøre rede for tidligere internasjonal forskning og metode for å gi bakgrunn for del 2 – vitenskapelig artikkel.

**2.0 Tidligere forskning**

I det følgende er en gjennomgang av internasjonal forskning fra de siste 5 til 10 år innen interorganisatorisk samarbeid innen framsyn og som vil lede frem til en begrunnelse for vårt forskningsbidrag. Det finnes ulike strategier på hvordan man kan fremskaffe seg en oversikt over et forskningsfelt. Idealet er å gjøre en systematisk kunnskapsoppsummering på en konkret problemstilling. Gitt begrenset tid og ressurser til studiet har vi prioritert systematisk søk etter oversiktsartikler som oppsummerer forskingsbidragene, og med dette som grunnlag funnet frem til relevant kunnskap på området. De systematiske oversiktsartiklene på dette feltet er Burt og Nair (2020), Fergnani et al (2022), , Gordon et al (2020), Iden et al (2017) og Marinkovic et al (2022).

Videre presenterer vi i kapittel 2.1 forståelse om framsyn, kapittel 2.2 forskningsfeltets modenhet, kapittel 2.3 merverdien av framsyn, kapittel 2.4 interorganisatorisk framsyn, så presenteres i kapitel 2.5 og kapitel 2.6 henholdsvis forklaringsteoriene organisasjonslæring og translasjonsteori, før vi avslutter med kapittel 2.7 om vårt teoretisk bidrag.

*2.1 Forståelse av framsyn*

*2.1.1 Begreper*

Det brukes ulike begreper om framsyn i forskningsfeltet. Organisatorisk framsyn (Engelsk: "Corporate foresight" og Strategisk framsyn (Engelsk: "strategic foresight"). Definisjon av "Corporate foresight": "*CF involves the application of future and foresight practices (e.g., technological forecast, strategic anticipation) "by an organization to advance itself; that is, to fulfill its purpose and achieve success on whatever terms it defines such success"* (Gordon et al. 2020, p. 1). Eksempel på "Strategic foresight*": "Strategic foresight involves understanding the future and applying future oriented insights to an organization's strategic activities and decision making* (Rohrbeck et al, 2015). Begge begrepene refererer til evner til å forutse fremtidige hendelser som kan påvirke en organisasjon. Strengt tatt er den eneste forskjellen at "strategic foresight" refererer til innsikt om fremtiden som informerer organisasjonenes strategi, mens "corporate foresight" refererer til innsikt som hjelper organisasjonen på noen måte og kan derfor forstås som et bredere begrep.

En dypere forståelse av framsyn gir Fergnani (2022) i sin oppsummering av forskningsfeltet, hvor han viser til at organisatorisk framsyn er epistemologisk forankret i fremtidsstudier eller fremtidsforskning. Forskningsfeltet består av systematisk undersøkelse rettet mot å oppdage, finne opp, undersøke og evaluere mulige, sannsynlige og foretrukket fremtider. En

grunnleggende antakelse for fremtidsstudier er at fremtiden ikke er forhåndsbestemt, så det er ingen fremtid å forutsi. Snarere er flere fremtider mulige og kan studeres. Dette gjøres ved å samle inn "bilder av fremtiden" i nåtiden fra en rekke kilder for å gagne nåværende handlinger og beslutningstaking (Fergnani, 2022).

### 2.1.2 Som prosess og resultat

Framsyn fungerer ofte som et kunnskapsgrunnlag for innovasjons og strategiarbeid i private virksomheter samt som grunnlag for policy og lovutforming i offentlig sektor (Andersen & Andersen, 2017). Framsyn er sett på som en prosess som skaper ny innsikt (Andersen & Andersen, 2017), og kan også skape et konkret resultat (Burt & Nair, 2020). Det at det foreligger en teoretisk forståelse for at framsynsanalyser både er en prosess og et resultat, gjør at vi har to variabler å kunne modellere hvorfor og hvordan interorganisatorisk framsyn feiler som kunnskapsoverføring mellom organisasjoner.

### 2.2 Forskningsfeltet om framsyn er umodent

Fergnani et al (2022) , Gordon et al (2020), Iden et al (2017) og Marinkovic et al (2022) er systematiske oversiktsartikler som gir en utfyllende beskrivelse av den historiske utviklingen av framsyn som forskningsfelt fra 1960-tallet og frem til i dag.

Gordon et al (2020) og Marinkovic et al (2022) vurderer at forskningsfeltet i stort etter 50 år fortsatt er umodent og fragmentert (Gordon et al., 2020; Marinković et al., 2022). Gordon et al (2020) og Iden et al (2017) peker på at dette forskningsfeltet nå domineres av eksplorativ forskning. Det er fortsatt epistemologisk pluralisme i forskningen hvor hvert perspektiv eller skole bidrar med innsikt som er nyttig i ulike kontekster. De har ikke funnet evaluering av egnethet og nytte av framsynsmetoder i strategisk beslutningstaking. Gordon et al (2020) har funnet en rekke casestudier som tyder på at framsynspraksis har positive virkninger i form av informere og fremme næringsutvikling, innovasjon, teknologi, ledelse og strategisk reposisjonering.

Dette betyr at man fortsatt ikke har helhetlig forståelse av framsyn og scenarioanalyser som fenomen. For å få slik helhetlig forståelse må forskningen suppleres med kvantitative metoder og longitudinelle studier. Basert på tidligere kunnskapsoppsummering fra E-helse og manglende casestudier fra helsesektor i Norge, forstår vi ut fra litteraturen at det fortsatt er behov for casestudier fra forskjellige sektorer for å forstå i framsyn.

I perioden 2010 til 2018 har forskningen, ifølge Gordon et al (2020), om framsyn utviklet seg til å handle om organisatorisk integrasjon av framsyn. Iden et al (2017) og Gordon et al

(2020) konkluderer med at metode, organisering og erfaringer har vært de dominerende forskningsfokusene i feltet. Oversiktene viser videre at det er begrenset forskning på framsyn og strategiske planleggingsprosesser, motivasjon, verdibidrag og innovasjon (Iden et al, 2017; Gordon et al, 2020). Den pågående hoveddiskusjonen kretser om hvorvidt resultatet fra framsyn kan sies å skape en strategisk fordel for virksomheter. Videre drøftes framsyns betydning for innovasjonsferdigheter (Sarpong & Meissner, 2018) og usikkerhetens rolle i beslutningstaking, samt dynamikk i strategisk styring (Amer et al., 2013).

## 2.3 Usikker merverdi av framsyn

Selv med begrenset forskning om merverdi av framsyn er det en rekke forskere, for eksempel Hines og Bishop (2007), som argumenterer for at scenariometodikk ikke er til å unngå. Langsiktige perspektiver vil kunne sammen med aktive handlinger hjelpe organisasjoner til å håndtere risiko, ta bedre beslutninger med ett bedre beslutningsgrunnlag. Enkelte forskere som Gavetti og Porac (2018) har fattet interesse for å forstå hvordan unike og kreative strategier dannes og mener at forskningsfeltet har gitt positive bidrag til praksisfeltet. Imidlertid mangler det ifølge Gavetti og Porac (2018) fortsatt longitudinale studier på at framsyn har fremmet "gode strategier" som er unike og kreative eller radikalt forskjellig fra de etablerte (Gordon et al, 2020).

I følge Tecce et al (1997) innebærer det å vedta slike strategier også at en organisasjon har dynamiske evner, gjennom hvilke organisasjon innlemmer, bygger og rekonfigurerer intern og ekstern kompetanse for å håndtere raskt skiftende miljøer (Gordon et al, 2020). Schwarz (2020) har funnet bevis som støtter forventningen om at framsyn er et mikrofundament for dynamiske evner (Gordon et al, 2020). Ramírez et al. (2013) og Schoemaker (2018) peker på at man bør søke etter flere faktorer som kan formidle forholdet mellom framsynspraksis og organisasjonens ytelse. En slik mulig medierende faktor kan være organisatorisk oppmerksomhet på fremtid, noe som kan forhindre eller muliggjøre organisasjonens resultater (Gordon et al, 2020).

Vi har funnet få kritiske røster til framsyn som metode, og forskningen i stort rettes i stor grad om å videreutvikle eksisterende teoretiske forståelse av framsyn. Mietzner og Reger (2005) peker imidlertid på noen utfordringer ved framsyn som metode som at metoden kan fort være tidkrevende og at kvalitative prosesser krever nøye utvelgelse av deltakere og eksperter samt dyp forståelse og kunnskap om organisasjonsfeltet som er under utforsking (Mietzner &

Reger, 2005). Videre peker Bourmistrov (2019) på refleksivitetsfeller som en mulig fallgruve ved bruk av denne type metodikk (Bourmistrov, 2019).

Forskningen så langt viser at merverdien av framsyn er usikker, imidlertid utdyper Rohrbeck og Schwartz (2013) mulige bidrag strategisk framsynsarbeid kan ha (Rohrbeck & Schwarz, 2013): bidra til innsikt om endringer i virksomhetens omgivelser; bidra til å redusere usikkerhet; legge til rette for en dialog eller samtale om den overordnede strategien i en virksomhet; støtte endringer og justeringer av virksomhetens kurs og valg, spesielt under usikkerhet; forbedre koordinering av målsettinger; skape muligheter for å tilpasse eller å adoptere alternative perspektiver og løsninger; redusere usikkerhet i utviklingsprosjekter; forbedre og øke forståelsens av behov til kunder og brukere; øke og forbedre forståelsen av markedet; identifisere muligheter og trusler i tilknytning og forbindelse med produkter og teknologiske løsninger; legge til rette for organisatorisk læring; påvirke og skape framtiden gjennom påvirkning av andre aktører, utforming av politikk og andre selskaper. Her er det flere mulige bidrag av framsyn som motiverer for bruk av framsyn og som kan være mulige teoretiske perspektiver som kan bidra til å forstå hvorfor scenarioanalysen innlemmes eller ikke. Det gjelder spesielt at framsyn kan forbedre koordineringer av målsettinger og legge til rette for organisatorisk læring. Vi vil gi en nærmere beskrivelse av forskningen på interorganisatorisk framsyn og organisasjonslæring i kapitel 2.5.

### 2.4 Interorganisatorisk framsynsamarbeid

Framsyn og forskning knyttet til metoden er fortsatt i stor grad rettet mot organisasjonsinterne prosesser. Et unntak er forskning på interorganisatorisk framsyn (Gordon et al., 2020; Marinković et al., 2022). I 2000 publiserte Roubelat (2000) en artikkel som presenterer scenarioplanlegging som en nettverksprosess hvor funksjonen er meningsdannelse for å utfordre strategiske paradigmer i organisasjoner og tenke på nytt rundt deres interne og eksterne grenser, samt skape nettverk som ikke er begrenset i tid og rom. Han peker også på at informasjonsteknologi kan være med å understøtte slike prosesser (Roubelat, 2000). Det er også gjort noe forskning på hvordan nyere informasjonsteknologi som maskinlæring og kunstig intelligens kan forbedre organisatorisk framsyn (Marinković et al., 2022), slike teknologier er en mulig "game changer" for at både organisatorisk framsyn og interorganisatorisk framsyn blir "mainstream" i nær fremtid.

I de siste ti årene er det enkelte forskningsgrupper som har interessert seg for interorganisatorisk samarbeid i gjennomføreringen av framsyn både i praksis- og

forskningsfelt (Gattringer et al., 2017; Rohrbeck et al., 2015), se ytterligere eksempler (Gattringer & Wiener, 2020; Janzwood & Piereder, 2019; Lehoux et al., 2020; Wiener et al., 2018). Gitt kompleksiteten og den økende graden av usikkerhet og tvetydighet i organisasjoners omgivelser, praksisfeltet, gjør det vanskelig for aktørene å gjenkjenne utviklingstrekk på egen hånd og samhandling med andre blir derfor viktig også innenfor framsyn (Gattringer & Wiener, 2020). Dette kan gi teoretisk forståelse for problemstillingen og betydningen for deltakelse i slike framsynsprosesser for kunnskapsoverføring. Det er som tidligere poengtert ikke praktisk mulig eller hensiktsmessig at alle aktører i et komplekst organisasjonsfelt som helsefeltet kan delta i interorganisatoriske framsynsarbeid.

Et annet forskningsspor som motiverer forskning på interorganisatorisk framsyn er ifølge Gordon et al (2020) behovet for mer kunnskap om hvordan man utvikler samhandlingsplattformer for framsynsanalyser og hvordan man gjennomfører og fatter interesse for interorganisatorisk framsynsarbeid (Gordon et al, 2020).

Videre i kapitlet vil gi en beskrivelse av ulike typer interorganisatorisk framsyn, beskrivelser av åpent og deltakende framsyn og merverdien av metoden.

### 2.4.1 Ulike typer interorganisatorisk framsyn

Det er flere tilnærminger til forskning på interorganisatorisk framsyn. De mest brukte tilnærmingene er hva Wiener definerer som "åpent framsyn" (engelsk: "open foresight") (Wiener, 2017; Wiener et al., 2018), Samarbeidende framsynsarbeid (Gattringer & Wiener, 2020) og Deltakende framsyn (Engelsk: "anticipatory governance") (Heo & Seo, 2021; Lehoux et al., 2020). Vi forstår dermed at heller ikke forskningslitteraturen for interorganisatorisk framsyn har entydig definert hva interorganisatorisk framsyn er ment å være. Vi forstår imidlertid interorganisatorisk framsyn som planlegging, gjennomføring og gevinstrealisering gjennom framsynsaktiviteter, og som skjer gjennom samarbeid av flere organisasjoner. Det innebærer å engasjere ulike interessenter for å utforske og forstå utviklingstrekk, utfordringer og muligheter som påvirker deres felles omgivelser. Det foreligger ikke et premiss om at alle må delta i beslutning om iverksetting av interorganisatorisk framsyn for at det skal kalles et interorganisatorisk framsyn.

Gattringer og Wiener (2020) gjør en inndeling av ulike typer "Åpent framsyn" 1) Samarbeidende framsyn 2) Nettverksbasert framsyn, 3) Deltakende framsyn 4) Inkluderende framsyn og 5) "Crowd sourcing" (Gattringer & Wiener, 2020). Forskjellene mellom de ulike typer samhandling baserer seg i hovedsak på antall organisasjoner og deltakere, interne og

eksterne interessenter, aktiv og passiv inkludering av aktører og om prosessen er et enkelt tilfelle eller gjentakende (Marinković et al., 2022). Kjennetegn ved 1) Samarbeidende framsyn er få organisasjoner og deltakere; 2) Nettverksbasert framsyn er et definert antall organisasjoner og aktører i nettverk; 3) Deltakende framsyn er interne og eksterne interessenter; 4) Inkluderende framsyn er aktiv inkludering av mange aktører; 5) Aktiv og passiv inkludering av mange aktører.

Vi vil i kapittel 2.4.2 og 2.4.3 presentere nærmere forskning om henholdsvis "Åpent framsyn" og "Deltakende framsyn".

### 2.4.2 "Åpent framsyn"

"Åpent framsyn" er brukt for å beskrive framsynsøvelser som ulike organisasjoner engasjerer seg i for kollektiv meningsskaping, med mål om å drive innovasjon og forretningsmuligheter i en åpen transparent prosess (Gordon et al, 2022). Åpenheten er ikke begrenset til selve samarbeidet. Prosessen søker i tillegg å være åpen i forhold til tema, perspektiver og omgivelsene ut over bransjene virksomhetene operer innenfor (Wiener, 2017). Det eksisterer ikke en klar og entydig definisjon av "åpent framsyn" (Ehls et al., 2016). Begrepet "åpent framsyn" har sitt utspring i teorier om åpne innovasjonsprosesser (Daheim & Uerz, 2008; Wiener, 2017). Som følge av at produktene, verdinettverk og utfordringer blir mer komplekse, kan bruk av framsyn i et samarbeid på tvers av organisasjoner være avgjørende for å skaffe seg en fordel. Nyere litteratur som (van der Duin et al., 2014; Wiener et al., 2020; Yoon et al., 2019) understreker imidlertid det faktum at utviklingen av innovasjonsledelse og framsyn følger en lignende utvikling og sameksistensen kan gagne begge forskningsområdene (Gordon et al., 2020).

"Åpent framsyn" er ulikt andre typer samarbeidsformer (Gattringer & Wiener, 2020). For det første søker ikke de samarbeidene partene å finne en felles løsning på framtidens utfordringer. Arbeidet er rettet mot å skape nye perspektiver og ideer samt å få fram ny kunnskap om framtidig utvikling på et bredere grunnlag gjennom et interorganisatorisk samarbeid (Gattringer & Wiener, 2020). Kunnskapen tar i bruk av den enkelte deltakende organisasjon uavhengig av de andre organisasjonene i samarbeidet. For det andre er det en fordel når nye deltakere møtes og utveksler nye perspektiver (Gattringer & Wiener, 2020).

### 2.4.3 Deltakende framsyn

Deltakende framsyn er en annen tilnærming til interorganisatorisk framsynsarbeid enn "Åpent framsyn" (Heo & Seo, 2021; Könnölä et al., 2011), som kan bringe inn forståelse av denne

type arbeid i løst koplede organisasjonsfelt som helsesektoren. "Anticipatory governance" defineres av Heo og Seo (2021, s.2) som " *a sustainable decision-making process based on consensus on a desirable future or vision through the participation of various stakeholders including government, market, the public, and academics*.". Lehoux et.al (2020) kopler scenarioanalyser og "anticipatory governance" sammen. Bruk av metoden i scenarioanalyser gjør at man kan inkludere langt flere deltakere i utarbeidelsen av scenarioanalysen (Boenink et al., 2018). Stahl et.al (2014) hevder at en gjennom å øke deltakelsen til også å gjelde andre enn bare eksperter vil bringe inn andre perspektiver som eksempelvis hvordan det er å leve under gitte forutsetninger og teknologi (Stahl et al., 2014).

### 2.4.4 Usikker merverdi av interorganisatorisk framsyn

Forskningen så langt har ikke gitt svar på i hvilken grad interorganisatorisk framsyn kan være vellykket brukt på tvers av organisasjoner for å fremme felles mål, danne nye verdinettverk, og takle samfunnsutfordringer (Gordon et al, 2020). Forskningen så langt har heller ikke tilstrekkelig forståelse av praksiser, styring, kulturelle forutsetninger og suksesskriterier for "åpent framsyn". Gordon et al (2020) mener at til syvende og sist må framsyn handle om resultater. På organisasjonsnivå er det ulike utfallskriterier som er verdt å undersøke nærmere (Gordon et al, (2020).

Fordelene med "åpent framsyn" er blant annet deling av ressurser, ekspertise og risiko (Wiener, 2017). I tillegg vil samarbeid fremme mer kreativitet, øke evnen til å tenke utradisjonelt samt utfordre eksisterende mentale modeller (Gattringer et al., 2017; Heger & Boman, 2015; Keinz & Prügl, 2010; van der Duin et al., 2014; Wiener, 2017). Antall deltakende aktører og organisasjoner vil påvirke framsynet. Et lite antall aktører/ organisasjoner vil kunne gi en sterkere integrasjon av arbeidet i de deltakende organisasjonene (Pisano & Verganti, 2008), samtidig er det også enklere å koordinere og kontrollere prosessen (Bengtsson et al., 2015; Wiener et al., 2020). I motsatt ende vil mange deltakere i prosessen minke ressursbruken ytterligere samtidig som at sjansene for radikal innovasjon øker (Bengtsson et al., 2015). Videre kan felles kunnskap anvendes av den enkelte deltakende organisasjon. Imidlertid er utvelgelse av egnet partner for slikt samarbeid være en utfordring (Gattringer et al, 2017). Ifølge Gattringer et al (2017) tyder det på at diversitet blant deltakerne er avgjørende, mens organisatorisk nærhet er mindre viktig. Denne teorien tar imidlertid ikke høyde for et komplekst organisasjonsfelt hvor ikke alle organisasjoner er deltakende, men hvor det er mål at de skal samordnes med øvrige organisasjoner som i helsefeltet.

Zeng, Koller og Jahn (2019) antyder at det som kan virke fordelaktig ved å åpne framsynsaktiviteter for bredere interessenter i en organisasjon og på tvers av organisasjoner, medfører samtidig en fare for å distrahere det opprinnelige målet med en strategisk fordel siden fokus kan gå tapt på grunn av et for stort antall deltakende interessenter (Marinković et al., 2022). Marinkovic et al (2022) vurderer at fremtidig forskning bør utforske graden av åpenhet som virker best mulig i hvilken type organisasjon for eksempel uavhengighet av størrelse og bransje. Kontekstuelle faktorer kan være av betydning, siden det ikke kan sies på forhånd hvilken grad av åpenhet som passer en bestemt organisasjon i en spesifikk bransje og størrelse som store sammenlignet med oppstartorganisasjoner på et bestemt tidspunkt i dets eksistens.

## 2.5 Organisatorisk læringsteori og interorganisatorisk framsyn

### 2.5.1 Kobling av forskningsfeltene

Burt og Nair (2020) gir en systematisk litteratur gjennomgang av relasjonene mellom scenarioer, strategisk framsyn og organisasjonslæring. De avdekker en upresis forståelse og konseptualisering av scenarioanalyser. Scenarioanalyser er både en prosess og ett resultat av en prosess, noe som ifølge Burt og Nair (2020) er hovedårsaken til fagfeltets metodiske kaos.

Organisatorisk læring har som mål å forklare hvordan organisasjoner frambringer, forvalter og overfører kunnskap mellom dens medlemmer. Den er assosiert med læringskurven hos en organisasjon som illustrerer hvordan kunnskap om et særskilt tema øker over tid som en organisasjon arbeider med et temaet (Marinković et al., 2022). Gjennomgangen til Burt og Nair (2020) viser videre en teoretisk forbindelse mellom strategisk framsyn og organisasjonslæring (Burt & Nair, 2020). Antakelsen i litteraturen er at organisasjonslæring fører til strategisk framsyn (Burt & Nair, 2020; Gattringer & Wiener, 2020).

Burt og Nair (2020) finner støtte hos Vecchiato (2012) og Levinthal (2018). Vecchiato (2012) argumenterer for at hovedgevinsten av strategisk framsyn synes å være det å etablere prosesser for planlagt læring om fremtiden. Mens Levinthal (2018) argumenterer for at det er nødvendig å skifte søkelys fra å forbedre strategisk beslutningstaking til å utforme organisasjoner til å fungere som kompleks, adaptive systemer som evner å oppnå tilfredsstillende strategiske resultater. Dette er i overenstemmelse med tidligere konseptualisering av Daft og Weick (1984), som foreslo at organisasjoner kan forstås som fortolkningssystemer. Det blir derfor viktig å forstå hvordan man kan organisere kollektiv

innsikt, meningsskaping og strategisk gjennomføring for å forbedre organisasjoners fremtidige suksess (Gordon et al., 2020).

Burt & Nair (2020) bruker enkel- og dobbelløkket læringsmekanismer for å forklare trinn for læring en organisasjon gjennomgår for å genere framsyn fra scenarioplanlegging. På samme måte bruker Gattringer & Wiener (2020) komponenter fra interorganisatorisk læring, som tillitt, koblinger, gjensidighet og forpliktelser for å studere hvordan oppstartsfasen for samhandlingsprosjekter om framsyn kan utformes og realiseres. Gattringer et al (2017) argumenterer for viktigheten at deltakende organisasjoner i interorganisatorisk framsyn til en viss grad er like nok for å kunne fasilitere læring og forutse fremtidige utviklingstrekk (Gattringer et al, 2017). Vi skal i vår studie undersøke et interorganisatorisk framsyn i heterogent og komplekst organisasjonsfelt hvor ikke alle deltar med hensyn til kunnskapsoverføring. Vår forskning kan dermed gi ny innsikt fra annen kontekst til Gattringer (2017) sin forståelse om behovet for at deltakende organisasjoners i et interorganisatorisk framsyn ligner på hverandre for at kunnskapsoverføring skal finne sted.

En annen kobling mellom framsyn og læringsprosesser kan være når Bourmistrov (2019) argumenter for at metoder som den intuitivt logiske strategiske metodikken for "strategisk framsyn" har størst relevans i usikre tider som nå, dette er en kvalitativ metode som passer sammen med å tenke framsyn som læringsprosesser (Bourmistrov, 2019). E-helses valg av scenariometode kan dermed også ha betydning for om dette interorganisatoriske framsynet gir læringsprosesser og blir dermed en vellykket kunnskapsoverføring.

### 2.5.2 Modenhets- og nettverksteori

I dette underkapitlet presenterer vi kort forskningen på interorganisatorisk framsyn i perspektiv av modenhets- og nettverksteori innenfor organisasjonsforskningen.

**Modenhetsteori**

En langtids studie har bevist eksisterende sammenheng mellom modenhet av organisasjoners framsynspraksis og fortjeneste. Resultatene indikerer at fremtidsberedskap er en sterk forutsetning for suksess (Rohrbeck og Kum, 2018).

Janzwood og Piereder (2019) har utviklet et referansemålingsrammeverk for utvikling av framsynsprogrammer i offentlig sektor (Janzwood & Piereder, 2019). Dette tar utgangspunkt i modenhetsteori og kan være med på å gi forklaringsvariabler på teknisk, kulturelt og strukturelt nivå for hvorfor interorganisatoriske framsyn feiler som kunnskapsoverføring til organisasjoner i helsesektoren.

**Nettverksteori**

Mange interorganisatoriske framsynsstudier er bygget på nettverks- og samhandlingsteorier. Disse teoriene støtter utviklingen av framsyn fra en statisk, eksternt orientert prosess til et samhandlingssystem av delt kunnskap om utviklingstrekk med et uttalt internt og eksternt perspektiv (Marinkovic et al, 2022). Gattringer, Wiener, & Strehl, 2017; Gattringer & Wiener, 2020; van der Duin et al., 2014 finner at nettverkselementer av framsyn er tatt i bruk på ulike nivåer i en organisasjon, mellom organisasjoner og i forskjellige konstellasjoner av samarbeid mellom private og offentlige organisasjoner i samhandling om framsyn (Marinkovic et al, 2022).

Djuricic & Bootz (2019) har begynt å utforske rollen av framsyn i å understøtte nettverkskommunikasjon og derfor dens rolle i diskusjoner på tvers av organisasjoner (Marinkovic et al, 2022). Rohrbeck et al. (2015) har funnet at framsynsaktiviteter bør gjøres tilgjengelig for et stort spenn av deltakere. Dette kan bidra til blant annet utvikling av en felles verdibase og mangfoldige perspektiver.

### 2.5.3 Utfordringer og begrensninger ved organisatorisk læringsteori

Burt og Nair (2020) avdekker tre verdifulle innsikter med hensyn til utfordringer ved læring av organisasjonserfaring. For det første fremheves det mulighetene for "læringsfeller", nemlig kompetansefellen, overtroisk læring og kortsynthetsfellen, som kan føre til mangel på fremtidsrettet tenking. For det andre antydes det tilstedeværelsen av to forskjellige typer læring, nemlig enkelt- og dobbeltsløyfelæring. For det tredje viste det hvordan "læringsfeller" kan begrense organisasjoner til enkeltsløyfelæring som hemmer strategisk tenking. For å overvinne disse utfordringene, kreves det at organisasjoner går over fra enkeltsløyfelæring til dobbeltsløyfelæring. Dette viser at det er teoretisk forståelse om at det eksisterer en rekke utfordringer som kan være med på å forklare hvorfor integrering av et interorganisatorisk framsyn ikke blir vellykket.

Vi forstår Burt og Nair (2020) at teorien om organisasjonslæring som metodisk forståelse av interorganisatorisk framsyn kommer til kort med hensyn til å forstå overføring av framsyn mellom individer og organisasjoner. Teorien setter søkelys på hvordan organisasjoner kan tilegne seg, skape og lagre kunnskap, imidlertid hensyntar den ikke like stor grad sosiale og kulturelle faktorer som påvirker hvordan kunnskap deles og oversettes mellom individer og organisasjoner. Den kontekstuelle forståelse av kunnskapens relevans og bruk kan etter vår vurdering bidra til utvidet forståelse av interorganisatorisk framsyn som fenomen. En mer

omfattende teori som inkluderer sosiale og kulturelle faktorer i større grad, er translasjonsteori og kan gi en dypere forståelse om hvorfor og hvordan kunnskap overføres mellom individer og organisasjoner.

## *2.6 Translasjonsteori og interorganisatorisk framsyn*

Vi vil ikke i denne litteraturgjennomgang, gjennomgå forskningsfeltet om kunnskapstranslasjon i bredt. Translasjonsteorifeltet har et sterkt søkelys på barrierer for translasjon av kunnskap. Det er syv hovedtyper barrierer; 1) formell struktur, 2) kapasitet for adopsjon, 3) sosiale nettverk, 4) geografisk distanse, 5) kulturell distanse, 6) institusjonell distanse og 7) trekk ved kunnskapen (Røvik, 2023). Disse syv variablene/ barrierene klarer ikke ifølge Røvik (2023) å forklare variasjon i resultatet i translasjonsprosessene. Han retter i sitt bidrag oppmerksomheten mot aktøren, det vil si den aktive translatøren som x-faktor innenfor feltet (Røvik, 2023). I kontekst av interorganisatorisk framsyn og kunnskapstranslasjon er det få vitenskapelige artikler publisert.

Major og Hayes (2000) er den første artikkel vi finner som beskriver framsyn i et konseptuelt rammeverk for kunnskapstranslasjon. Kunnskapstranslasjon er både overføring av kunnskap fra et sted til et annet og endring av kunnskap til en forståelig form. Tidligere forskning før Major og Hayes (2000) viser at organisasjoner oppfatter framsyn som regnes å være en kunnskapskilde til å være immateriell og strategisk. Det konseptuelle rammeverket gir forståelse av reisen av at konkrete strategiske data samles til informasjon, så til kunnskap som abstrakte objekter (dekontekstualisering), som igjen omdannes og operasjonaliseres til forståelse, visdom og konkrete handlinger (kontekstualisering) (Major & Cordey-Hayes, 2000).

Siden Major & Hayes (2000) finner vi kun Fritzsche (2018) med teoretisk bidrag innen interorganisatorisk framsyn og translasjonsteori. Fritzsche (2018) introduserer begrepet translasjon til forskning om åpne laboratorier og organisasjoners framsyn og som en ny tilnærming til samhandling på tvers av organisasjoner. Forskeren argumenterer for at denne tilnærmingen erkjenner mulighet for grunnleggende motstridende særinteresser til ulike interessenter i deres interaksjoner og gjør det mulig å undersøke rolle en organisasjons framsyn har i symbiose med innovasjonsledelse (Fritzsche, 2018). Den har imidlertid ikke studert om og hvordan translasjon foregår som følge av interorganisatorisk framsyn hos organisasjoner som ikke har deltatt i prosessen.

## 2.7 Vårt teoretiske bidrag

Vi har i kapitel 2.1-2.7 presentert forskningslitteraturen om framsyn og interorganisatorisk framsyn. Forskningsfeltet om interorganisatorisk er relativt nytt og har sitt utspring fra forskning på interorganisatorisk samarbeid om innovasjon mellom oppstartsbedrifter, og små og mellomstore bedrifter. Vår case har et helt annet utgangspunkt hvor det er en organisasjon som opererer på vegne av et komplekst organisasjonsfelt hvor ikke alle deltar i interorganisatorisk samarbeid. Det er så langt, så vi vidt vi har funnet svært begrenset forskning på implementering og bruk av interorganisatorisk framsyn i det hele tatt. Videre har dette forskningsfeltet så langt i størst grad vært forsøkt forklart med teori om organisasjonslæring. Vi finner imidlertid begrensninger i bruk av denne forklaringsteorien ved at den ikke i tilstrekkelig grad innlemmer den kontekstuelle forståelse av kunnskapens relevans og bruk ved overføring og oversettelse av kunnskap mellom individer og organisasjoner. Translasjonsteori er eksempel på en slik teori som kan bidra til å gi dypere forståelse for vår problemstilling. Vi har imidlertid funnet kun et få talls artikler som har undersøkt interorganisatorisk framsyn med translasjonsteori og denne har ikke undersøkt problemstillingen vår.

## 3.0 Metodiske aspekter

Med bakgrunn forskningslitteraturen og vår problemstilling redegjøres det i dette kapitlet for metodiske aspekter ved forskningsarbeidet.

## 3.1 Forskningsdesign

Samfunnsvitenskapelig forskning deles i to ulike hovedformer for metodisk tilnærming til studier. Kvalitativ tilnærming tar utgangspunkt i data som finnes i form av tekst, lyd og bilde. I kvantitative tilnærminger uttrykkes informasjonen og dataene i tall og mengdestørrelser. Studiens problemstilling, hva som skal undersøkes og hensikten har lagt føringer for valg av metode. Ingen av de metodiske tilnærmingene anses bedre enn den andre og det er ingen hindringer for å kombinere tilnærmingene i en undersøkelse. Valget av metodisk tilnærming var styrt ut fra en nyttebetraktning i forhold til hvilket forskningsdesign og metodevalg som best kunne belyse undersøkelsens problemstilling (Johannessen et al., 2020).

I vår studie har vi søkt å få en forståelse om hvorfor og hvordan E-helses scenarioanalyse feiler som kunnskapsoverføring mellom enheter og organisasjoner i et komplekst organisasjonsfelt som helsesektoren. Vi har brukt forskningsspørsmålene hvordan og hvorfor det skjer eller ikke, samt hvilke utfordringer finnes i translasjonen.

Studien var eksplorativ og beskrivende med kausalt design. Eksplorativ forskning brukes når det er lite kunnskap om et emne eller problem, og man ønsker å få et bredere og mer omfattende bilde av situasjonen (Saunders et al., 2012; Swedberg, 2020). Det vil si at vi har søkt å beskrive om ett gitt sett av forståelser og beskrivelser av fremtiden (scenarioer) tas i bruk hos organisasjoner et komplekst organisasjonsfelt. Vi forsøkte å skape økt kunnskap om strategisk framsynsarbeid eksemplifisert, konkretisert og avgrenset til scenarioarbeid og hvordan dette nyttiggjøres innenfor ett viktig samfunnsområde i Norge i dag.

Undersøkelsen har søkt å fange opp og å beskrive et komplekst område på en strukturert måte for å få en dypere forståelse av fenomenet samtidig som at vi har søkt å sette det i en praktisk kontekst. Det er utøvd en viss grad av fleksibilitet både i datainnsamlingen og -analysen innenfor de strukturene som er satt. Videre ønsker vi å bidra til teoriutvikling både gjennom raffinering av eksisterende teori innenfor framsynsforskningen samt å undersøke nye teoretiske vinklinger på området. Kvalitativ tilnærming til våre problemstillinger har bidratt til en helhetlig og holistisk forståelse i tillegg til utstrakt dybdekunnskap om scenarioanalysen og strategisk framsynsarbeid (Kvale et al., 2015).

Generelt er det flere retninger innenfor den kvalitative forskningstilnærmingen. Vårt forskningsdesign er bygget på ett fenomenologisk design. Fenomenologiske tilnærminger benyttes for å studere eller undersøke hvordan verden forstås og oppleves ut fra erfaringer. Vi forstår dermed det vi har undersøkt gjennom dokumentstudier og informantenes subjektive erfaringer, opplevelser og fortolkninger av strategisk framsynsarbeid (Johannessen et al., 2020). Vi har fortolket informasjonen informantene uttrykker om virkeligheten, noe som har forutsatt bruk av en hermeneutisk vitenskapsteoretisk tilnærming. I analysen av dataene/ informasjonselementene har vi lett etter meningsinnholdet. Meningsinnholdet har måttet forstås i relasjon til sammenheng og kontekst som informasjonen/ dataene kommer fram i (Gunneriussen, 1999). Forståelsen av det vi har studert utvikles kontinuerlig ved å bevege oss mellom en fortolkning av spesifikke detaljer og utsagn for seg selv og tolkning av detaljer og data i helheten og i sammenheng. Prosessen var iterativ. Det vil si at vi måtte gå flere runder med empiri ved at temaer ble identifisert, kodet og iterativt analysert til første ordens temaer og senere til annen ordens temaer, se Del 1 kapitel 3.5 for nærmere beskrivelse. Kvale og Brinkmann (2015) beskriver prosessen som den hermeneutiske sirkel. Gjennom iterasjonene mellom detaljer og helhet er det utviklet en stadig dypere forståelse av fenomenet som undersøkes.

Informasjon og data vår undersøkelse har bygget på, ble innhentet først og fremst gjennom skriftlige dokumenter og intervjuer. Informasjon fra skriftlige kilder har gitt oss muligheten til å undersøke problemstillingen på både ett mer strukturelt nivå, men også undersøke om scenarioene er nedfelt i virksomhetenes dokumenter, planer og strategier. Videre har vi kunnet se spor etter bruken av scenariene i formelle prosesser og beslutninger. Holme og Solvang (1996) skiller mellom fire ulike skriftlige kilder. Vi har benyttet institusjonelle kilder, både offentlige, men også konfidensielle institusjonelle kilder der vi har tilgang til disse. Offentlige institusjonelle kilder er kilder som er offentlige og allment tilgjengelig, eksempelvis verdidokumenter, målsettinger, instrukser eller rapporter. Konfidensielle institusjonelle kilder er kilder som i utgangspunktet ikke er allment tilgjengelige slik som virksomhetens private rapporter til internt bruk, interne arbeidsdokumenter eller interne analyser og vurderinger.

Kombinasjonen av både intervjuer og dokumentanalyser har gitt oss en form for metodetriangulering, det vil si bruk av flere ulike og komplementære metoder. Johannesen et al (2020 s. 251) mener det er fordelaktig å bruke flere ulike metodiske tilnærminger. Forståelse av fenomenet vi har studert har gjort datagrunnlaget mer valid. Gyldigheten og relevansen til dataene i forhold til problemstillingen har etter vår vurdering blitt styrket.

### 3.2 Tidsskrift

Avgjørelsen om å levere forskningsoppgaven som en vitenskapelig artikkel har tatt tid, slik at det har vært med å prege prosessen med å skrive masteroppgaven. Når avgjørelsen var tatt har vi vært nødt til å finne oss et egnet tidsskrift å publisere oppgaven i. Technological Forecasting and Social Change er det mest sentrale tidsskriftet innen fagfeltet og vi har vurdert at vår problemstilling og studiedesign fyller kriteriene for publisering. Vi har derfor valgt dette tidsskriftet. Del 2 er derfor skrevet i tråd med dette tidsskriftets forfatterveiledning, Appendix D er forfatterveiledningen i sin helhet. Ved utarbeidelse av Del 2 har vi fått maskinell bistand til oversettelse utkast fra norsk til engelsk.

### 3.3 Utvalg

Målgruppen for forskningsoppgaven var strategiske ledere i organisasjoner i helsesektoren. Helsektoren er et stort og mangfoldig organisasjonsfelt som består av en rekke ulike organisasjonstyper i ulike størrelser og som er organisert rundt den offentlige helsetjenesten. En overordnet inndeling er offentlige, private eller interesse organisasjoner. I den offentlige delen finnes departement, direktorater, tilsyn, regionale helseforetak, helseforetak, kommuner

og statlige og kommunale foretak. Den private delen består av leverandører av produkter og tjenester. Interesseorganisasjonene er mangfoldig og representer ulike særinteresser. I tillegg finnes det en fjerde kategori som omfatter ideelle organisasjoner, men som vi ikke har fattet interesse for i denne sammenhengen.

Ledere på strategisk nivå i organisasjoner var interessante for denne forskningsoppgaven, siden disse lederne burde ha kjennskap til nasjonalt strategiarbeid samtidig med strategisk tenkning i egen virksomhet og vil dermed kunne gi verdifull informasjon. Det var også et spørsmål om det var hensiktsmessig å avgrense utvalget av informanter ytterligere til å intervjue ledere på strategisk nivå med ansvarsområde innenfor for digitalisering eller digital helse i sin virksomhet. Disse ville ha bedre forutsetninger for å ha kjennskap til det nasjonale strategiarbeidet på området, imidlertid vurderte vi at det ikke var nødvendigvis en forutsetning for å være en god informant for å belyse problemstillingen, fordi digitalisering ikke er adskilt domene i helsesektoren.

I kvalitative studier står ikke representativitet sentralt i utvalget av informanter. Det finnes heller ikke teoretiske grenser hva som anses for å være et riktig antall informanter. Dette gjelder både nedre og øvre grenser. Johannessen et al (2020) mener at man bør fortsette til man når et tidspunkt for datametning og at valg av informanter dermed blir en serie av strategiske beslutninger gjennom forskningsprosessen (Johannessen et al., 2020) (s. 57).

Gjennom å foreta "... systematiske vurderinger av hvilke enheter som ut fra teoretiske og analytiske formål er mest relevant og mest interessant " (Grønmo, 2004) (s. 88), har problemstillingen blitt svart ut. For dybdeintervjuene har vi valgt ledere på strategisk nivå hos ulike aktørtyper som relevante informanter.

### 3.4 Datainnsamling
Målet med dokumentstudiet og dybdeintervjuene var å samle data og empiri som kunne gi svar på hvorfor og hvordan scenarioanalysen feilet som kunnskapsoverføring mellom enheter og organisasjoner.

### 3.4.1 Dokumentstudiet
I dokumentstudiet har vi søkt etter informasjon om nasjonal politikk og strategier innen e-helse i institusjonelle skriftlige kilder hos ulike virksomheter i sektor. Virksomhetstyper er Stortinget, statlige etater, offentlige foretak, kommuner, interesseorganisasjoner og private leverandører, se Del 2, Section 4.1.1, Figure 1. Vi har avgrenset til Stortinget, Helse- og omsorgsdepartement og virksomheter som E-helse har oppgitt som deltakere i utvikling av E-

helsestrategi. Eksempler på institusjonelle skriftlige kilder er nettsider, referater, korrespondanse, rapporter, scenarioanalyser, strategidokumenter m.m. Vi har søkt E-helse om innsyn til alle relevante dokumenter knyttet til scenarioanalysen. Vi har kun fått delvis innsyn. Vi har også spurt intervjuobjektene om det er dokumenter som vi bør kjenne til eller få tilgang til fra deres virksomhet. Videre har vi søkt om det finnes andre scenarioanalyser for offentlig helsetjeneste.

### 3.4.2 Kvalitative dybdeintervjuer

Vi ønsket å skaffe til veie beskrivelser om scenarioanalysen innlemmes eller ikke innlemmes, hvilke utfordringer som finnes ved kunnskapsoverføringen. Johannessen et al (2020) gir støtte i at dette er passende metode, fordi kvalitative intervjuer kan brukes til å få blant annet detaljerte beskrivelser av informanters erfaringer, forståelser og holdninger rundt et fenomen. Intervju vil i større grad enn et spørreskjema kunne bidra til å gi nødvendig innsikt gjennom å gi informantene større frihet enn hva et spørreskjema gir rom for (Johannessen et al., 2020).

Siden vi fant ingen teori om fenomenet scenarioanalyser i norsk helsesektor og begrenset teori om interorganisatorisk framsyn som kunnskapsoverføring, og prosjektet er empiridrevet har det vært nødvendighet å kunne tilpasse problemstillingen underveis. Kvalitative intervjuer er en metode som er fleksibel med hensyn til å skreddersy og få frem kompleksitet og nyanser (ibid.).

I dette studiet har vi gjennomført semistrukturerte intervju. Dette er en metode hvor intervjuguiden er utviklet som en liste over temaer og generelle spørsmål som søkes belyst av intervjuobjektet (Johannessen et al., 2020). En fordel med en slik tilnærming har vært at den har gitt fleksibilitet og det passer godt sammen med et fenomen som scenarioanalyser som er komplekst i den forstand at den har mange mulige funksjoner. Intervjuguiden ble bygget opp rundt temaene; bakgrunn, dannelse, spredning, mottak og bruk sammenholdt med enkelte standardiserte spørsmål etterfulgt av åpne underspørsmål. (se Appendix A). Metoden dekker også behovet for å stille oppfølgingsspørsmål underveis avhengig av intervjuobjektets kunnskap og erfaringer. En ulempe med metoden er at kan være ressurskrevende å systematisere innsamlede data og empiri på et vis som gir grunnlag for valid komparasjon av data.

Johansen et al (2020) trekker frem at en semistrukturert intervjuguide kan avhjelpe situasjonen gitt at en forberedt strategi på hvilke oppfølgingsspørsmål som kunne være relevante å stille er styrende for dialogen. I planleggingen er det viktig å gå bredt ut. I

gjennomføringen viste det seg at dette var spesielt viktig i forhold til nøkkelspørsmålene hvor det var mulig å få nødvendig og utdypet informasjon knyttet til problemstillingen og formålet med studiet (Johannessen et al., 2020). Øvelsen krever blant annet at vi har en god intuisjon for hva som kan være nyttig informasjon i gjennomføringen -om dette var en informasjon man ønsket å gå i dybden på og få vite mer om. Vi har gjort dette ved å stille oppfølgingsspørsmål eller oppfordret informantene til å utdype det allerede gitte svaret.

En rekke forhold som intervjusted og forskerens usikkerhet i intervjusituasjonen er mulige utfordringer for gjennomføringen (Johannessen et al., 2020). Slike utfordringer har vi i forkant av intervjuene reflektert over og gjort forberedelser rundt. Vi har måttet finne måter for å redusere deres betydning i gjennomføringen. Valg av intervjusted var en utfordring, ettersom gjerne skulle gjennomført intervjuet i informantens naturlige omgivelser. Vi bor i Oslo og Bodø og aktuelle informanter finnes også andre steder i landet. Dagens digitale teknologi muliggjør virtuelle intervjuer over for eksempel Teams eller lignende. Johannessen et al (2020) argumenterer for at virtuelle intervjuer gir mulighet til å nå informanter uavhengig av geografisk sted. Vi valgte å gjennomføre intervjuene virtuelt via Teams. Det ga oss et større utvalg av informanter, men vi mistet samtidig anledningen som fysiske intervju gir for å observere informanten underveis i intervjuet. Både vi som intervjuere og informanter virket imidlertid trygge på å bruk av slik teknologi. Det var viktig å bygge tillitt med informanten, det har vi gjort både gjennom muntlig henvendelse og oversendelse av skriftlig informasjon om forskningsoppgaven og hovedtemaene for intervjuet.

Videre for å begrense vår usikkerhet til forskerrollen valgte vi å gjennomføre et testintervju med en kollega i forkant av de avtalte intervjuene. Dette var en nyttig erfaring og ga flere læringspunkter med hensyn til de forhåndsutformede spørsmålene i intervjuguiden, samt teknisk og praktisk gjennomføring av intervju digitalt.

Vi brukte lydopptaker og transkriberingsfunksjon i Teams under intervjuene for å sørge for å dokumentere det som blir sagt. En fordel ved slikt opptak slik vi ser det er at vi kunne sette søkelys på vår og informantenes tilstedeværelse under intervjuet slik at vi får stilt relevante oppfølgingsspørsmål. Ved ikke slik bruk ville vi ha risikert å ha et kontinuerlig søkelys på hva som ble sagt for å sikre skriftlig dokumentasjon fortløpende og at den samlede skriftlige dokumentasjonen ble så komplett som mulig. Dette ville kunne gå på bekostning av verdifull informasjon.

Vi har brukt vår kjennskap til organisasjonsfeltet og kontaktnett for utvelgelse av informanter. Vi har samtidig vært åpne for nye forslag til informanter underveis i intervjuprosessen, såkalt snøballmetoden (Johannessen et al., 2020) for videre utvelgelse ettersom vi ikke kunne utelukke at informantene kunne besitte andre mer relevante kunnskaper om egnede informanter enn oss. En slik tilnærming har hjulpet oss frem til et par nye informanter som vi ikke hadde kjennskap til før og gitt tilgang på mer dybdekunnskap fremfor om vi hadde låst oss fast til predefinere kriterier om variasjon og bredde i typer informanter.

Vi har intervjuet åtte informanter som fra ledelse i E-helse, statlig etat, regionalt helseforetak, interesseorganisasjon, privat leverandør og kommune. Vi har måttet veie antallet informanter mot mengde empiri vi har tid og ressurser å behandle og analyse innenfor rammene av forskningsoppgaven.

### 3.5 Databehandling og analyse

Datamaterialet og dermed informasjonsmengden var etter innsamlingen av dokumenter og gjennomføring av intervjuer stor. For å forstå scenarioanalysens betydning for strategisk framsyn i organisasjonsfeltet og de utfordringene som finnes for å ta denne i bruk har vi en fenomenologisk tilnærming (se Del 1 kapittel 3.1). Fenomenologisk tilnærming gir oss muligheten til å utforske og beskrive mennesker/ aktørers erfaring med scenarioanalyser og hvordan de forstår ulike momenter i vår problemstilling. Vi har søkt å forstå både erfaringer og begrunnelser organisasjoner har for sine handlinger om scenarioanalyser. Patton (2015) vektlegger "levd erfaring" hos informantene som en viktig forutsetning for å kunne få gode og valide data i innsamlingsprosessen (Patton, 2015).

Vår utfordring har vært å redusere mengden data før analysearbeidet kan påbegynnes. Problemstillingen har dannet grunnlaget for gjennomføring av intervjuene. Det at vi har brukt en semistrukturert intervjuguide gjør at intervjuene ikke er gjennomført helt likt. Det har vært viktig å finne meningsbærende elementer i intervjuene i lys av problemstillingen. For vårt formål og i ett fenomenologisk design vil man kunne anta at en tverrsnitts basert og kategorisk inndeling av tekstelementene trolig være mest aktuell (Johannessen et al., 2020). Vi anvendte innledningsvis transkriberingsfunksjonen i Teams for en første transkribering av intervjuene. For å finne og trekke ut den viktigste informasjonen og de mest relevante observasjonene fra materialet har vi utledet koder fra datamaterialet nærmere bestemt induktivt med utgangspunkt i Gioia et al 2012 (Gioia et al., 2012). Dette har skjedd iterativt i

en hermeneutisk sirkel slik at det vil være nødvendig å ha god oversikt og kjennskap til dataene.

Temaer var identifisert, kodet og iterativt analysert til følgende første ordens temaer

- Ulike kompetanse til scenario scenarioer som verktøy
- Manglende aksept til denne scenarioanalysen
- Ambisjon av endring av mentale modeller hos ledere
- Unødvendig prosess
- Ikke felles problemforståelse
- Komplekst og fragmentert organisasjonsfelt
- Manglende vilje til å ta i bruk analysen

Vi har måttet gå gjennom alle tekstene og transkriberingen flere ganger slik Malterud (2017) i Johannesen et.al (2020) anbefaler. I de neste rundene utforsket vi de gjensidige avhengighetene mellom disse temaene. Prosessen ga muligheten til en dypere utforskning og forståelse av empirien. Dette resulterte i en ytterligere foredling av de tidligste observerte temaene som vi igjen aggregerte til tre andre ordens tema

- Utfordringer ved scenarioanalysen
- Utfordringer i styring
- Utfordring ved scenariokompetanse

Etter hvert som helhetsbildet ble dannet har vi kunnet sammenfatte poenger, uttalelser og tekstelementer på ett mer detaljert nivå. Gjennom arbeidet med først å forstå helheten og deretter gjennom det ytterligere arbeidet med helheten samtidig finne detaljer og enkeltelementer har vi opparbeidet en større grad av forståelse av fenomenet vi studerer. Videre har kodeverket i seg selv vært gjenstand for kategoriseringer og kondensering etter hvert som vi arbeidet med tekstene slik at vi har kommet fram til sammenfatninger av funnene våre. Sammenfatningene av funnene har bidratt til økt forståelse av strategisk framsynsarbeid generelt og bruken av scenarioer spesielt.

### 3.6 Spørsmål knyttet til validitet, reliabilitet og objektivitet

Begrepene pålitelighet, troverdighet og overførbarhet og overenstemmelse brukes av Guba og Lincoln 1994 som mål på kvalitet i kvalitativ forskning (Johannessen et al., 2020). Pålitelighet eller reliabilitet er kritisk i kvantitativ forskning, hvor det finnes måter å teste dataenes reliabilitet. Imidlertid er ikke dette like relevant for kvalitativ forskning blant annet fordi det

ikke benyttes i strukturert datainnsamling, og ingen har samme erfaringsbakgrunn som forskeren slik at ingen ikke kan duplisere datainnsamling, håndtering og tolkning. Utover å studere skriftlige kilder har vi hatt et bredt utvalg av informanter, slik at vi i størst mulig grad har forsøkt å forebygge at vi som forskere stiller ledende spørsmål og dermed påvirker svarene.

Med validitet menes troverdighet og overførbarhet. Validitet i kvalitative undersøkelser dreier seg derfor om i hvilken grad forskerens framgangsmåter og funn på en riktig måte reflekterer formålet med studien og representerer virkeligheten (Johannessen et al., 2020). Vi har hatt et bredt utvalg av informanter fra ulike virksomheter. Vi har latt informantene lese gjennom funn som er relatert til informasjon de har gitt for å styrke troverdigheten av intervjuene (Johannessen et al., 2020). Vi kunne imidlertid ha styrket troverdigheten ved å la dem lese gjennom transkriberinger og / eller tilbakeføre resultatene til informantene for å få bekreftet resultatene, siden det er ikke innenfor denne oppgaves rammer å la andre kompetente personer analysere samme datamateriale for å se om de kommer til samme resultat som oss (Johannessen et al., 2020). Overførbarhet av kvalitativ forskning styrkes ved å gi fyldige beskrivelser, slik at det er enklere for andre å bedømme om studiens resultater kan overføres til andre kontekster. I så henseende har det vært viktig for oss i denne undersøkelsen å forsøke å søke dybde fremfor bredde for å gi en fyldig beskrivelse av problemstillingen. Dokumentstudiet har bidratt til å styrke validitet og reliabilitet.

### 3.7 Refleksjoner

### 3.7.1 Refleksjon rundt egen rolle som forsker

Ved kvalitative undersøkelser er det flere forhold rundt forskeren som er viktige som nærhet og holdning. Forskere må derfor være seg selv bevisst, redegjøre og kritisk vurdere de etiske utfordringene ved forskerrollen. Et sentralt begrep er refleksivitet som handler om forskerposisjon og kompetanse. Refleksivitet handler derfor om forskeren klarer å se og forstå konsekvensene av seg selv som forsker i relasjonen til informantene, innhenting av empiri, teori og forforståelser (De nasjonale forskningsetiske komiteer, 2021).

Vi har erfart i prosjektet at vi gjennom våre arbeidserfaringer har mange subjektive meninger om temaet og har måttet foreta avveininger om innretning av forskningsoppgaven og dens problemstilling. Bevissthet rundt våre forforståelser og rolle som forskere har vært viktig for oss å ivareta på en best mulig måte gjennom hele prosjektet for å ivareta de forskningsetiske retningslinjene.

### 3.7.2 Styrker og svakheter ved valgt design og metode

Det er i dag nokså bred enighet om at forskere innenfor samfunnsvitenskap ikke kan være helt nøytrale i sin forskning. Forskeren tar gjennom arbeidet fortløpende valg. Disse valgene har en direkte inngripen iblant annet hvordan problemstillingen skal formuleres, hvilke data som skal brukes og hvordan disse skal samles, håndteres og tolkes. Alle slike beslutninger vil kunne påvirkes av forskerens forforståelse og andre relevante preferanser. Bekreftbarheten kan ifølge Johannessen et al (2020) sikres ved at forskerne gir en beskrivelse av alle beslutninger, slik at leseren kan følge og vurdere disse. Bekreftbarheten kan også styrkes om forskeren foretar en vurdering om sine refleksjoner støttes av annen litteratur eller informantene. Vår nøytralitet har vært utfordret særskilt gjennom erfaringer vi har fra arbeidslivet der vi har arbeidet med eller i tilknytning til organisasjonsfeltet som vi studerer. Vi har derfor måttet søke å utfordre hverandre og oss selv spesielt til forhold som vi har tatt for gitt og der vi har kunne vært drevet av konformeringsbias. For å trygge arbeidet ytterligere har vi valgt å levere masteroppgaven som en artikkel i et fagfellevurdert tidsskrift. En fagfellevurdering av arbeidet slik av vi er sikre på at det vi har tatt for gitt, og det vi ubevisst har søkt bekreftelse på kan bli fanget opp av andre forskere/ fagfeller.

Ettersom datagrunnlaget i kvalitativ forskning er svært begrenset med hensyn til antallet informanter, har vi ikke muligheten for generalisering. Selv om studien heller ikke tar utgangspunkt i kausalvitenskapelige kriterier, har vi vurdert at den kan bidra til økt innsikt, kunnskap og forståelse av bruk av scenarioanalyser i et komplekst organisasjonsfelt som helsesektoren (Johannessen et al., 2020).

Det er forventet at vi som kvalitative forskere har bragt et unikt perspektiv inn i vår studie, imidlertid har det vært viktig at funnene var resultat av forskningen og ikke av våre subjektive holdninger. Bekreftbarhet skal sikre dette. Bekreftbarhet tilsvarer objektivitetskriteriet i kvantitativ forskning (Johannessen et al., 2020) (s. 252). Det har derfor vært viktig at vi som forskere ikke har truffet subjektive slutninger. Ved bruk av en hermeneutisk tilnærming og fenomenologisk metode har innhold og tolkning av informasjon som har kommet frem i intervjuene dannet grunnlaget for våre slutninger. Vi har heller ikke startet på bar bakke uten oppfatninger om scenarioanalyser. Vi har begge arbeidserfaring fra sektoren og vi kan ikke utelukke at våre forkunnskaper har kunnet påvirke undersøkelsen.

Vi arbeider imidlertid ikke i den aktuelle målgruppen av informanter og samtidig ved at undersøkelsen har inkludert informanter fra en rekke organisasjoner vurderer vi at det nok har

vært enklere å oppfylle kravet om bekreftbarhet. Imidlertid har vi forsøkt å være bevisst faren med å treffe subjektive slutninger i arbeidet.

### 3.7.3 Etiske problemstillinger og SIKT (NSD) krav

Innenfor samfunnsvitenskapelig forskning kan vi som forskere møte etiske dilemmaer, fordi denne type forskning tar utgangspunkt i mennesker (Johannessen et al, 2020). Et eksempel som vi må være forberedt på at det kan komme frem sensitive opplysninger enten av forretnings- eller personsensitiv informasjon Vi må derfor lese og forstå hvilke regler og rutiner som gjelder om dette blir aktuelt.

Ifølge Johannessen et al. (2020) stilles det krav til samtykke fra informanter som kan identifiseres fra en studie. Dette fører også til at prosjektet har fulgt Nord universitets rutiner for innrapportering av undersøkelsen til Norsk senter for forskningsdata. Det var også en forutsetning om at vi har hatt rutinene på plass for å innhente samtykke og vært tydelig på vår taushetsplikt, slik at vi ikke misligholder informantenes tillitt. Vi har derfor etterlevd kravet om informert samtykke ved å innhente dette i forkant av intervjuene. I tillegg laget vi skriftlig informasjon om studien slik at informantene blant annet hadde informasjon om formålet med undersøkelsen, hva de samtykket til, at deltakelsen var frivillig og samtykket kunne trekkes tilbake når de selv måtte ønske, deres rettigheter, hvordan vi ville behandle personopplysninger, retningslinjer rundt bruk av opptak under intervjuene, håndtering av opplysninger i etterkant av studien og kontaktopplysninger til databehandleransvarlig for studien. Ved en slik tilnærming vurderer vi at vi har ivaretatt informantenes selvbestemmelse.

Vi har også være påpasselige med at informanter anonymiseres. Taushetsplikten til forskere står sentralt i forskningen. Når vi skal opptre som forskere har vi ikke kunnet bruke opplysninger på en slik måte at informantene kan identifiseres uten deres samtykke (Johannessen et al., 2020). Vi har forpliktet oss til å følge samtykkeerklæringen om hvilken informasjon vi kan bruke og ikke bruke. For denne undersøkelsen har vi gitt informantene valg i hvilken grad de ønsker å være anonyme. Bruk av navn, stillingstittel og virksomhet har derfor vært opp til informantene å bestemme selv. Informantene har som nevnt over fått et informasjonsskriv i forkant av intervjuene, om at vi har vi taushetsplikt. Vi har gjentatt denne informasjonen på nytt under intervjuet om informantenes rett til anonymitet og om vår taushetsplikt. Vi mener at denne tilnærmingen har bidratt til å betrygge informantene, slik at de ikke har holdt tilbake verdifull informasjon.

Det har vært viktig for oss å følge gjeldende forskningsetiske retningslinjer gjennom hele masteroppgaven. Vi har gitt informantene som ønsket transkriberingen muligheten til å kontrollere, at vi har brukt deres informasjon på en korrekt måte i tråd med samtykkeerklæringen og hvilken informasjon de har gitt oss. Til sist vil vi sende den endelige masteroppgaven til informantene. Alle disse handlingene er gjort for å etterleve vår plikt og ansvar som forskere om å respektere informantene og unngå skade, samt forsikre oss om at informantenes rettigheter ivaretas under alle faser frem til dette forskningsprosjektets slutt.

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**Del 2 – Vitenskapelig artikkel i Technological forecasting and social change**

**Title page**

Why and how inter-organizational foresight fail as knowledge transfer – a case study from the healthcare sector in Norway.

Brief running title: Foresight as knowledge transfer

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**Highlights**

- We study a rejected inter-organizational foresight.
- We report barriers, where use of translation theory gives new explanatory models.
- Foresight process and result have both to be legitimate to be integrated.
- Lack of communities of translators may explain the rejection.

**Abstract**

This study explores an inter-organizational foresight process that failed to meet its objectives. We examine the scenario analysis process that aimed to inform a new eHealth strategy for the Norwegian healthcare sector, facilitating coordination of development, investments, and policymaking. Our findings suggest that the scenario analysis was underutilized as a knowledge base for the strategy. Although there were some indications of positive impacts, such as improved decision-making and diverse perspectives at the outset, they were limited in scope.

To gain a comprehensive understanding of the subject matter, we analyze known barriers identified in foresight literature and integration studies. These barriers explain a significant portion of the failure; however, unidentified factors remain unexplained. The analysis is based on established theories of organizational learning and translation. Our findings emphasize the importance of legitimacy in scenario analysis results and highlights the role of communities

of translators in foresight endeavors' success or failure. Our study contributes to existing foresight literature and provides insights into weaknesses of inter-organizational foresight processes.

**Keywords**

Inter-organizational; foresight; scenario; translation; strategy; public sector

**Abbreviations**

The Norwegian Directorate of eHealth – The Directorate.

## 1.Introduction

The development of public policies and private company strategies requires methods for building valid knowledge that consider uncertain aspects of the further development of the present, for instance in relation with; technological advancements, globalization, an aging population, the development of chronic diseases, environmental challenges, and natural threats (van der Duin et al., 2009). Foresight can be utilized as an analytic tool that potentially enables organizations to make active approach towards the future.

Inter-organizational foresight is an emerging activity, both in practice and as a field of research, where different parties and actors from various organizations try to predict possible future scenarios and challenges (Gattringer et al., 2017; Rohrbeck et al., 2015). Foresight is employed to develop joint objectives and strategies (Wright et al., 2020) and is increasingly becoming more significant in both public and private organizations (Gattringer et al., 2017; Janzwood & Piereder, 2019).

In this study, we will examine various aspects of the creation, practical use /effect of a scenario analysis that set out to serve as knowledge base for a new eHealth strategy in Norway. The healthcare sector is a complex organizational field comprising of private and public organizations and NGOs. Due to the complexity of the sector, it became impractical for all actors to participate in the work process.

Public and private organizations have different driving forces and interests, but one common feature is their experience of an uncertain future with disruptive changes (Rohrbeck & Schwarz, 2013). Public organizations often use foresight as a knowledge base in their strategic planning and policy development (Lehoux et al., 2020). On the other hand, private businesses use foresight to discover new opportunities, trends, and technologies to change

their strategies and markets. In this sector, foresight is also linked to the early phases of innovation processes (Gattringer et al., 2017; Heger & Boman, 2015; Rohrbeck et al., 2015).

Inter-organizational collaboration on foresight has been explored in several studies), which demonstrate that exercising foresight can be challenging for individual businesses (Gattringer et al., 2017; Heger & Boman, 2017. A joint effort with diverse actors can increase its benefits by considering other opportunities that lie outside one's area of expertise and knowledge (Eggers & Kaplan, 2009), and reducing the risk of "cognitive blindness" (Gattringer et al., 2021).

The healthcare sector is developing rapidly, and foresight is perceived as a workable approach to analyzing the field, form strategies, and create a basis for innovation. It is crucial to understand the challenges and future issues that are not immediately apparent – to find trends, analyze and comprehend the environment, and create a dialogue between the actors in the field (Cagnin et al., 2013; Petrick & Martinelli, 2012; Wiener et al., 2020).

While it is true that foresight is time-consuming, requiring careful selection of participants and experts and a deep understanding of the organizational field under investigation, it is still essential (Mietzner & Reger, 2005), However, it may not be practical or expedient for all organizations to participate in foresight. In this study, we will examine how inter-organizational foresight can be transferred to and integrated into units or organizations that have not participated in the process. In our case it was found that the integration and transfer of the scenario analysis had failed, and we set out to investigate further the question of; why and how inter-organizational foresight fail as knowledge transfer. There is limited research on this issue, and by examining the transfer of knowledge between units and organizations, through the lens of theories of organizational learning and translation- we aim to contribute to increasing knowledge in the field.

This paper examines the process of scenario analysis as a component of strategy development. The study presents the findings obtained from interviews and document studies, focusing on the quality of the data.

Firstly, our findings show that integrating the scenario analysis internally within the strategy development process of The Norwegian Directorate of eHealth (The Directorate) has been unsuccessful. The organization faces challenges in effectively incorporating the scenario analysis into its strategies.

Secondly, the utilization of scenario analysis within the healthcare sector is limited. Organizations within this sector have not fully embraced the use of scenario analysis as a valuable tool for informing their strategies and decision-making processes.

Lastly, there is a lack of transfer of scenario analysis among organizations operating in the healthcare sector. The practice of sharing and disseminating the findings and insights gained from scenario analysis is not common, hindering the potential benefits of collective learning and collaboration.

In conclusion, this study highlights the shortcomings in integrating scenario analysis within the strategy development process of The Directorate, the limited adoption of scenario analysis in the healthcare sector, and the lack of knowledge exchange among organizations. These findings underscore the importance of addressing these challenges to enhance the effectiveness and impact of scenario analysis in informing strategic decision-making processes within the complex and loosely coupled organizational fields and domains.

## 2. Theory

This article builds upon existing research and knowledge in the areas of open foresight and organizational learning. Additionally, we draw upon elements from translation theory to explore the transfer of ideas, thoughts, and mental models from foresight to actors who are not directly involved in the process.

It is important to note that foresight is not simply a predictive tool, but rather a process that generates new insights (Andersen & Andersen, 2017). While foresight is a dynamic process, it also produces tangible outcomes (Burt & Nair, 2020). It serves as a knowledge foundation for innovation and strategy development within private organizations and informs policy and legislation in the public sector (Andersen & Andersen, 2017).

Traditionally, research on foresight has primarily focused on internal organizational processes (Gordon et al., 2020; Marinković et al., 2022). However, more recent attention has been directed towards fostering collaboration and interaction among actors from different organizations and industries (Gattringer & Wiener, 2020; Janzwood & Piereder, 2019; Lehoux et al., 2020; Wiener et al., 2018). This shift reflects a growing recognition of the value of inter-organizational cooperation in foresight activities.

By combining insights from open foresight, organizational learning, and translation theory, this study aims to contribute to our understanding of how foresight knowledge can be

effectively shared and applied among actors who have not directly participated in the foresight process.

## *2.1 Inter-organizational foresight*

There are two primary approaches to inter-organizational foresight: open foresight (Wiener, 2017; Wiener et al., 2018) with "collaborative foresight" (Gattringer & Wiener, 2020), and anticipatory governance (Heo & Seo, 2021; Lehoux et al., 2020) with "participatory foresight". The distinction between these forms of foresight lies in the extent and nature of collaboration among participants. Inter-organizational foresight involves a collective process where multiple organizations collaborate in decision-making and implementation (Wiener, 2017), setting it apart from other forms of collaboration (Gattringer & Wiener, 2020). Unlike seeking joint solutions to future challenges, this type of foresight aims to generate new perspectives, ideas, and knowledge about future developments through collaborative efforts (Gattringer & Wiener, 2020). The participating organizations independently utilize the generated knowledge, and the interaction among new participants fosters the exchange of fresh perspectives (Gattringer & Wiener, 2020).

The advantages of inter-organizational foresight include resource sharing, expertise pooling, and risk mitigation (Wiener, 2017). Collaboration also promotes creativity, unconventional thinking, and the challenging of existing mental models (Gattringer et al., 2017; Heger & Boman, 2015; Keinz & Prügl, 2010; van der Duin et al., 2014; Wiener, 2017). The number of participating actors and organizations can influence the outcomes of foresight activities. A smaller group allows for better integration within participating organizations (Pisano & Verganti, 2008) and easier coordination and control of the process (Bengtsson et al., 2015; Wiener et al., 2020). Conversely, a larger group reduces resource utilization within each participating organization while increasing the potential for radical innovation (Bengtsson et al., 2015).

However, there are challenges to making inter-organizational foresight function as intended. The healthcare sector and related industry, for instance, consists of loosely connected actors and organizations. The relationships among these actors are characterized by limited dependence (Weick, 1976), infrequent interaction and cooperation (Hasenfeld, 1983), indirect connections (Weick, 1982), lack of systematic coordination (Staber & Sydow, 2002), and randomness (Weick, 1982). Formal coordination mechanisms are scarce within the field (Pinelle & Gutwin, 2006).

## 2.2 Knowledge and learning in scenario building.

The Directorate utilized scenario analysis as foresight method. Burt and Nair (2020) have conducted a systematic literature review exploring the relationships between scenarios, strategic foresight, and organizational learning. The review reveals several noteworthy conditions: Firstly, it is found that there exist an imprecise understanding and conceptualization of scenario analysis. Scenario analysis is perceived both as a process and as the result of a process, the methodological frameworks employed complex as the two ends are targeted in a singular approach. Secondly, the review finds an established theoretical connection between strategic foresight and organizational learning, suggesting that organizational learning fosters strategic foresight. Lastly, the review identifies challenges in the form of learning traps associated with single-loop learning, which hinder the development of strategic foresight. Overcoming these challenges requires organizations to transition from single-loop to double-loop learning (Burt & Nair, 2020).

While Burt and Nair (2020) investigate learning and unlearning within a single organization, our study examines foresight work within an organizational field. Drawing on the literature review presented in Gattringer and Wiener (2020), we identify factors that facilitate inter-organizational learning. These factors include relational capital, which encompasses shared goals, visions, trust, open interaction, and a sense of community, as well as relational norms such as information sharing, quality, and joint use of information technology.

The process and outcome of foresight work are seen as integral to learning, development, and innovation in various businesses. However, existing research has not extensively explored how foresight work can influence actors who are not actively involved in the process, that is, those who do not learn through direct participation.

## 2.3 Integration through translation

To successfully integrate foresight into businesses requires a shared understanding of the concept at the inception. In this context, integration of foresight refers to the process of incorporating foresight activities, insights, and outcomes into organizations' decision-making and strategic planning processes. It involves utilizing foresight and its outcomes within organizations. However, organizations face challenges in adopting and linking foresight knowledge to decision-making processes. Stehn, Twist, van der Vlist, and Demkes (2011) highlight in their study that organizations struggle to adopt foresight-based knowledge and effectively integrate it into decision-making processes (Hines & Gold, 2015).

Regardless of whether foresight work is conducted internally, in collaboration with others, or by leveraging foresight work done by external parties, it must be somehow integrated into the decision-making processes to achieve its intended purpose. Hines and Gold (2015) identify three challenges for integrating foresight work in organizations. Challenge no.1 is the episodic use of foresight work, which lacks systematicity over time and depends on individual factors. Challenge no.2 is the cultural resistance to foresight work. The final challenge is the lack of prioritization of the integration of foresight work within the organization.

Hines and Gold further break down cultural resistance into four barriers to the integration of foresight work. Firstly, foresight competes for attention within the organization. Secondly, it is perceived as a threat, as it can be abstract and intangible, making it difficult to manage. Lastly, organizations often lack the capacity to carry out foresight work effectively (Hines & Gold, 2015).

Research on inter-organizational foresight, which build on studies related to learning, innovation, and development, has emphasized key factors such as participation, collaboration, management anchoring, and integration.

Organizational learning theories in general conceptualize knowledge as routines and practices (Argyris & Shön, 1996). Duncan and Weiss (1985) argue that organizational knowledge encompasses the forms of knowledge which evolves around activities of the organization, that knowledge can be acquired from actors beyond those directly involved in its creation. The capacity and ability of organizations to innovate are connected to their capability to imitate and learn from other organizations (Røvik, 2023). Considering scenario analysis as a form of knowledge, the participation in the process becomes less crucial compared to the emphasis found in existing research. The outcomes of scenario analysis become essential in understanding how they influence mental models and decisions. Scenario analyses can be transferred from one organization or unit (sender) to another organization or unit (receiver). Translation theory offers insights into this process (Røvik, 2023; Scheuer, 2021) and can help understand how scenario analysis can be utilized by organizations that did not actively participate in the process itself. This is particularly important in large, loosely connected, and complex organizational fields such as the healthcare sector.

Fritzsche (2018) studied how cultural translation in collaboration on foresight in open laboratories contributes to understanding the processes of "corporate" foresight. However, in this study we take a broader perspective. The translation process can be understood as

comprising two key processes: decontextualization and contextualization. Decontextualization involves extracting the scenario analysis from its original context and representing it through abstract mediums such as text, images, and graphic representations. The abstract representation of knowledge is referred to as a "token," which has been removed from its original context. Contextualization, on the other hand, occurs within the receiving organization, where the token is given meaning and applied within its specific context (Røvik, 2016; Røvik, 2023).

Translational theory provides insights into how knowledge, mental models, and ideas are transmitted as tokens. It also highlights the properties that a token should possess to facilitate its transfer and translation between entities or organizations. If we consider the scenario analysis as a token, capable of creating new relationships and connections that did not previously exist, it becomes more easily transferable between organizations and undergoes a translational process (Callon & Latour, 1981; Latour, 1986).

Czarniawska and Jorges (1996) demonstrate that certain aspects of a token can influence the translation process. Tokens that are perceived as fashionable and attract attention are more likely to be successfully translated between different organizations and entities. Fashionable tokens are considered legitimate, evident, and face little skepticism regarding their plausibility. Developing a fashionable token requires a well-defined process involving legitimate actors and resulting in legitimacy and social acceptance (Røvik, 2023; Scheuer, 2021).

The competence of the translator plays a crucial role in the success of the translation process (Røvik, 2023). Røvik (2023) breaks down translation competence into four areas: 1) Bilingualism, where the translator must be proficient in the languages used by both the sending and receiving organizations; 2) Knowledge of translation rules and norms, including the ability to choose between different sets of rules for translation; 3) Bicultural understanding, which entails comprehending the cultures of both the sending and receiving organizations; and 4) Knowledge of the subject matter being translated.

### 2.4 Summing up

This article explores the integration of foresight knowledge into organizations and the transfer of ideas and mental models from foresight to actors not directly involved in the process. Foresight is seen as a process that generates new insights and tangible outcomes, benefiting innovation, strategy development, and policymaking. The focus has shifted from internal

organizational processes to inter-organizational collaboration in foresight activities, highlighting the advantages of resource sharing, expertise pooling, and creativity. However, challenges exist in making inter-organizational foresight effective, especially in complex organizational fields with limited coordination mechanisms.

There is an established understanding that organizational learning from foresight processes fosters strategic foresight. There are factors as the existence of relational capital and norms which facilitate organizational learning as well as the need of double looped learning process in the organization. Existing research has not explored how foresight could diffuse and move to organizations and actors not involved in the foresight process.

Translation theory is additionally employed to understand how foresight knowledge can be effectively shared and applied among actors not directly participating in the foresight process. The translation process involves decontextualization and contextualization of scenario analysis, where tokens representing knowledge are transferred and given meaning within receiving organizations. Fashionable tokens that attract attention and possess legitimacy are more likely to be successfully translated. The competence of the translator is essential for the translation process, requiring bilingualism, knowledge of translation rules and norms, bicultural understanding, and subject matter expertise.

## 3. Materials and methods

In this section, we present an overview of our chosen research design, the process of selection, data collection, and subsequent data processing and analysis. Our primary objective is to make a valuable contribution to the advancement of knowledge in the field of strategic foresight. We achieve this by specifically focusing on its application within a significant societal domain in present-day Norway. Through concrete examples and a deep exploration of the utilization of strategic foresight, we aim to shed light on both its practical implications and limitations. By doing so, we provide valuable insights that can inform future.

### 3.1 Research design

Our research aims to address the question of why and how inter-organizational foresight often fails as a means of knowledge transfer. Specifically, we investigate the scenario analysis conducted by The Directorate, along with the response and attitudes among actors within the Norwegian healthcare sector towards this analysis. To gather comprehensive insights, our study employs a combination of data obtained from written documents and in-depth interviews.

By analyzing written institutional sources, we have been able to explore the issue at a structural level. This approach enables us to investigate the extent to which the scenarios presented in the analysis are integrated into the actors' documents, plans, and strategies. However, it should be noted that access to certain documents has been limited[3], something which again has influenced the scope of our investigation. Nonetheless, we strive to provide a thorough examination of the interplay between the scenario analysis and the broader institutional landscape within the healthcare sector.

## 3.2 Selection

The study primarily targets managers at the strategic level within organizations operating in the Norwegian healthcare sector. To gather data, we employed a two-fold approach consisting of a document study and in-depth interviews.

The document study involved comprehensive searches for written institutional sources, as outlined in Table 1. These sources were carefully examined to extract relevant information pertaining to our research objectives.

Additionally, in-depth interviews were conducted with managers occupying strategic roles in various types of organizations within the healthcare sector. The selection of these managers was based on their responsibility for making strategic decisions on behalf of their organizations. This criterion ensures that they possess knowledge regarding national strategy work within the Norwegian healthcare sector, as well as strategic thinking within their own business. Their expertise and insights provide valuable information to our study.

| Data source | Sample | Data analysis |
|---|---|---|
| Documents | Websites, minutes, correspondence, reports, scenario analyses, strategy documents etc. | Document analysis |
| Semi-structured interviews | 8 interviews of managers at key actors<br>- State agency<br>- Interest organization<br>- Private supplier<br>- Regional health authority | Qualitative content analysis (based on audio recordings/transcripts via Teams) |

Table 1. Overview of selection of data sources.

## 3.3 Data collection

**Document study**

During the document study, our research focused on identifying information concerning

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[3] Complaint to the Norwegian Ministry of Health and Care services about access

national eHealth policies and strategies. We carried out broad searches for relevant secondary data within various organizations operating in the sector. Specifically, our attention was directed towards the Storting (Parliament), the Ministry of Health and Care Services, as well as organizations acknowledged by The Directorate as participants in the development of the eHealth strategy.

To gather a comprehensive range of secondary data, we explored sources such as websites, minutes of meetings, correspondence, reports, scenario analyses, and strategy documents, with more. In the pursuit of gathering a comprehensive understanding of the subject matter, we submitted a formal request to The Directorate, seeking access to all pertinent documents related to the work with the scenario analysis.

Furthermore, we proactively reached out to our interviewees, inquiring whether there were any additional documents within their respective organizations that we should be aware of or have access to. Additionally, we investigated the possibility of other scenario analyses concerning public health services. This comprehensive approach ensured that a broad range of sources was made available for assessment in the analytic phase.

**Qualitative in-depth interviews**

The interviewees were recruited through our professional networks, and recommendations from our existing informants. Prior to their involvement, all informants provided their informed consent to participate in the research project. The interviews conducted followed a semi-structured approach where predefined topics had been distributed to the informants beforehand. Please refer to Appendix A for the Interview Template, which outlines the key areas covered.

The interview guide primarily focused on exploring the informants' perspectives on background, , formation, dissemination, reception, and subsequent actions related to the scenario analysis carried out by The Directorate. It aimed to delve into their insights regarding the planning and execution of the scenario analysis, as well as the challenges associated with knowledge transfer across units and organizations within the Norwegian healthcare sector.

To facilitate efficient communication, all interviews were conducted digitally, enabling us to engage with informants remotely. Through these interviews, we gained valuable insights into the intricacies of conducting a scenario analysis and the existing challenges related to knowledge transfer within the Norwegian healthcare sector, both at the individual and organizational level.

### 3.4 Summing up

Section 3.1 to 3.3 provides an overview of the research design, including the selection process and data collection. The primary objective is to contribute to the knowledge advancement in the field of strategic foresight by examining its application in the Norwegian healthcare sector. The study focuses on the scenario analysis conducted by The Directorate and explores the response and attitudes of actors within the healthcare sector. Data is collected through written documents and in-depth interviews. The document study examines the integration of scenarios into actors' documents, plans, and strategies, while the interviews provide insights into strategic decision-making and knowledge transfer challenges. The research extensively searches for relevant information from various sources and engages with managers responsible for strategic decisions in the healthcare sector. The interviews follow a semi-structured approach, covering topics related to background, formation, dissemination, reception, and actions regarding the scenario analysis. The study aims to shed light on the practical implications and limitations of strategic foresight in the healthcare sector.

### 3.5 Data processing and analysis

The coding process for our data involved deriving codes in an inductive manner, following the approach outlined by Gioia et al. (2012). Additionally, our theoretical understanding of the subject matter informed the development of the code structure, which aimed to establish a connection to translation theory. Please refer to Appendix B for a summary of the coding and analysis.

Given our research objectives and the phenomenological design, we opted for a cross-sectional and categorical division of the text elements. This approach allowed us to systematically analyze the collected data and identify meaningful patterns and themes. By categorizing the data into distinct sections, we aimed to enhance our understanding of the phenomenon under investigation.

Subsequently, we delved deeper into exploring the interdependencies between these identified themes in the subsequent analysis phase. This iterative process provided us with a valuable opportunity to gain a more comprehensive and nuanced understanding of the empirical evidence. As a result, we refined the initially observed themes, aggregating them into three overarching second-order themes.

This approach to data analysis allowed us to uncover rich insights and draw connections within the dataset, contributing to a more nuanced and comprehensive understanding of the research topic.

## 4. Results

In the following, we present the findings that emerged from our analysis. The data analysis revealed several key insights regarding the Norwegian healthcare sector. Firstly, we observed a significant diversity within the field, indicating the presence of various types of organizations and approaches. Secondly, we found a lack of commitment among these organizations towards national policy, as well as a general reluctance to utilize management tools.

One of the main findings of our study is that the ambition of The Directorate of integrating the scenario analysis into the strategic work of players in the field had not been followed up by anyone. Despite the potential benefits of scenario analysis, it appears to have not been effectively incorporated into the decision-making processes of these organizations. This finding highlights a missed opportunity for leveraging scenario analysis as a strategic tool.

Furthermore, our analysis indicates that scenario analysis struggles to gain attention and fails to establish itself as the prevailing future image for organizations in the field. It faces harsh competition from other factors and fails to capture the full attention of decision-makers.

With the aim of providing an overview of the case study that informs this work, a brief description of the organizational field and the specific case under investigation is given below. Subsequently, we present the findings derived from our data analysis, organizing them according to second-order categories, namely: challenges in the scenario analysis, in management practices, and with foresight skills.

### 4.1 The Norwegian healthcare sector

### 4.1.1 Many management channels and independent actors

The Norwegian Health Service is a publicly funded healthcare system that ensures access to healthcare for all residents of Norway. It comprises various actors, including hospitals, healthcare clinics, nursing homes, and private healthcare providers, operating within decentralized networks. The Storting, or Parliament, holds legislative power and is responsible for funding and regulatory measures. The Norwegian government, on the other hand, possesses executive power and is accountable for implementing the approved policies.

The Storting plays a pivotal role in developing long-term strategies for the Norwegian healthcare sector by adopting annual and multi-year plans. The state manages the healthcare system through the annual state budget processes.

At the national level, the Norwegian Ministry of Health and Care Services oversees the administration of the healthcare system. It delegates the responsibility of delivering health services to regional health organizations, county authorities, and municipal authorities. The Ministry directly manages specialist health services through four regional divisions, which, in turn, are responsible for providing care and overseeing a total of 32 principal units. Additionally, there are 11 county councils and 356 municipalities in Norway that have the responsibility of delivering dental and primary health services, respectively.

KS, also known as The Norwegian Association of Local and Regional Authorities, serves as an interest and employer organization, representing all municipalities and county municipalities in the country. Figure 1 provides an overview of the organizational field and management of the public health service, highlighting the coexistence and interaction with other actors within the healthcare system. This framework illustrates the landscape of organizations operating within the healthcare field.
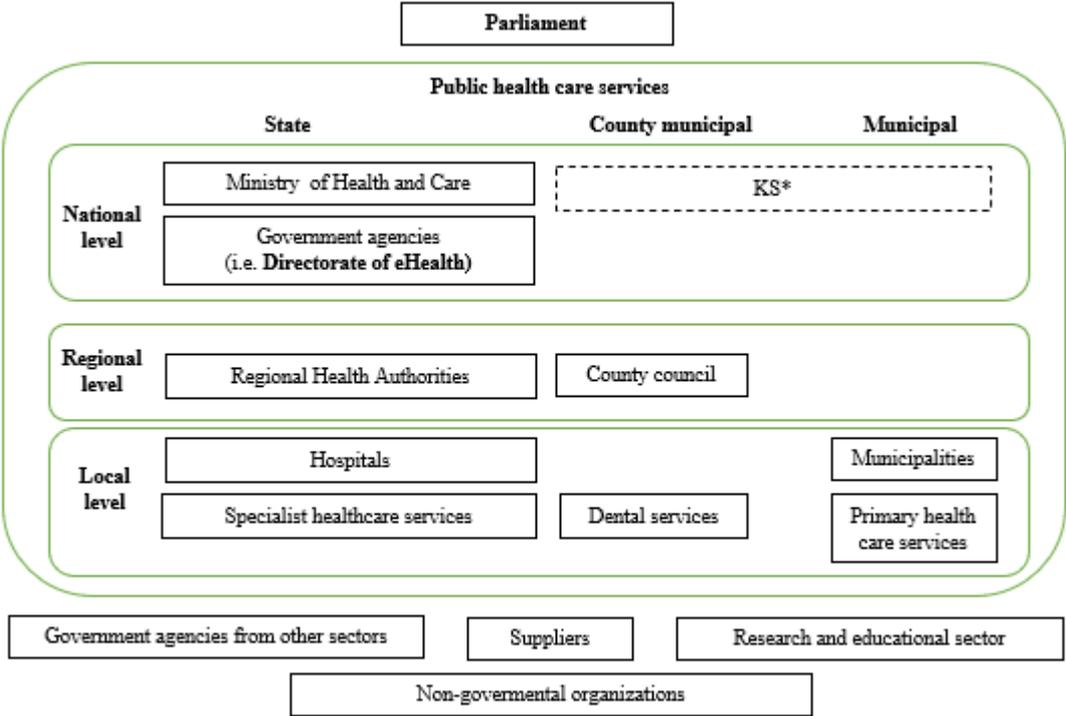


*KS is The Norwegian Association of Local and Regional Authorities

Figure 1. Organization and management of the Norwegian public health service.
Source: Authors.

There are currently 58,689 registered businesses operating within the healthcare and social sector. This sector employs over 400,000 individuals who work in various capacities within the health and care services. Furthermore, the private sector includes a supplier industry that not only offers health services but also provides a range of other services and products.

### 4.1.2 Healthcare is prioritized in Norway

The state budget for the year 2023 allocates a total of NOK 1,581.6 billion. Out of this amount, NOK 260.5 billion (16.5% of the budget) is dedicated to the provision of health services and reimbursements. In terms of the country's Gross Domestic Product (GDP), health expenditure represents 10.1%. It is worth noting that Norway is internationally recognized for having one of the highest quality health services, although it also has the highest health expenditure compared to other countries.

### 4.1.3 Time consuming

The Directorate operates as a subordinate agency under the Ministry of Health and Care Services in Norway. Its establishment in 2015 aimed to bolster the implementation of digitization within the organizational field of healthcare. As a national authority, The Directorate assumes the responsibility of facilitating coordinated and comprehensive development of eHealth initiatives. This involves ensuring efficient allocation of resources and fostering unity among various stakeholders, aligning them towards shared goals, priorities, and plans.

Since the late 1990s, the policy landscape has witnessed the adoption of strategies, plans, and reports to the Storting (Parliament) concerning the use of information technology within the organizational field. These endeavors have achieved varying degrees of success in implementing national policy and coordinating the approximately 17 000 organizations that bear significant responsibility for digitalization. However, many of these organizations operate with a considerable level of autonomy and maintain loose connections with each other.

Recognizing the need for a renewed approach, The Directorate made the strategic decision in 2021 to develop a new eHealth strategy for the Norwegian healthcare sector. As part of the knowledge base for this strategy, the examined scenario analysis was included. This step

exemplifies The Directorate's commitment to incorporating a diverse range of perspectives and insights into its strategic planning process.

## 4.2 The scenario analysis

The Directorate developed four future scenarios for digital transformation of healthcare sector towards 2035. The scenario analysis plays a crucial role in the development of the new eHealth strategy by addressing uncertainty and ensuring that the strategy is resilient towards a changing environment. Its purpose is to shed light on the necessary resources for successful digitalization in the health and care services, as well as the new opportunities and challenges associated with the sector's digital transformation. Please refer to Appendix C for a summary of the scenario analysis.

However, our research indicates that there are challenges within the scenario analysis that rendered it irrelevant for organizations in the organizational field. It appears that a well-executed technical analysis and a pre-determined scenario alone are insufficient to influence organizations' perspectives on the future. Our findings highlight challenges related to the ambition to undertake the analysis, the lack of management support, and a perceived lack of added value and benefits provided by the scenario analysis.

### 4.2.1 Introspective aims with sector ambitions

The data suggests that the scenario analysis conducted by The Directorate primarily served internal purposes, such as enhancing their own expertise and encouraging their management team to adopt a more strategic approach. However, it is evident from the data that the intention was for the scenario analysis to serve as a knowledge base for The Directorate's new eHealth strategy, aiming to unite the sector under common goals and comprehensive eHealth policies. The scenario analysis was meant to ensure the robustness of the strategies in the face of uncertainty and changes in the working environment.

Interestingly, the inclusion of the scenario analysis in The Directorate's eHealth strategy process was coincidental, as the planning of carrying out such an analysis for strategic purposes had started in advance. It appears that the decision to initiate the scenario analysis in relation to the work on the eHealth strategy, was made solely by the Directorate without joint involvement from key stakeholders in the sector.

The finding that The Directorate had an internal focus is further supported by informants' statements, indicating that the analysis was primarily an internal process in which they provided input. The broader sector was largely excluded from contributing to the process.

Additionally, the data reveals that The Directorate chose to involve only about 100 participants from various organizations during the preparation phase. This sample size is considerably small, considering the target group of the 17,000 organizations, as summarized in Table 2.

| Role | Number of people | Number of businesses | Business types |
|------|------------------|----------------------|----------------|
| Project group | 5 | 2 | Directorate, consulting house |
| Expert interviews | About. 25 | Unknown | Unknown |
| Working groups | 28 | 9 | Directorates, business, research, regional health authorities and NGOs |
| NUFA | 29 | 23 | Directorates, business, research, regional and local authorities, private and public suppliers, and NGOs |
| Total | About. 87 | At least 25 | |

Table 2. Overview of participants in the scenario analysis.

### 4.2.2 Lack of managerial support

The findings suggest that internal anchoring of the scenario analysis is weakened during the strategy process due to several changes in internal management. As a result, the scenario analysis is disregarded by the new internal management responsible for developing the eHealth strategy. This strategy is intended to serve as a coordination tool for the organizational field under The Directorate's purview. The data reveals a weak connection between the completed scenario analysis and the draft of the sector's eHealth strategy. Consequently, it appears that the completed scenario analysis does not play a significant role in the subsequent strategic work.

This observation is further supported by the finding that discussions in the National eHealth council, which comprises key senior executives from the sector and serves as an advisory body for The Directorate, primarily focus on the draft strategy rather than the scenario analysis. It indicates that the scenario analysis has not gained prominence or attention within this influential decision-making forum.

### 4.2.3 Rejection of the scenario analysis

Our investigations reveal that the scenario analysis has been deemed useless and rejected by the organizational field, indicating a lack of interest and utilization among its members. The highly competitive nature of the organizations in the field contributes to the challenge of gaining attention for the scenario analysis. Findings indicate that the analysis is perceived as uncompetitive and fails to attract attention from the stakeholders. Several informants confirm

that the field does not comprehend the intended beneficiaries or usefulness of the analysis. One informant suggests that the analysis lacks significance as a milestone, while another highlights the importance of the process and participation in foresight rather than the specific outcome.

It is noteworthy that most organizations in the field were excluded from the development process. The final report, along with the draft eHealth strategy, was distributed to the field for public consultation. The Directorate extended invitations to a total of 486 organizations to provide input on the eHealth strategy, yet only two out of the 89 consultation responses addressed the scenario analysis. One response raises concerns about the allocation of resources to the scenario analysis without its integration into the draft strategy. The second input, from an individual in the private sector, expresses interest in one of the future scenarios called "Citizen choice", please refer to Appendix C for summary of scenario analysis. Additionally, an informant from a private supplier finds the scenario analysis relevant as it indicates that the public sector has contemplated assigning different roles to the private sector in the future.

### 4.3 Management

The evidence presented in the material supports the finding of that challenges in governance have a significant impact on the effectiveness of foresight in shaping strategies in complex organizational fields involving governmental, private, and interest organizations. In the following, we will outline some of the challenges that arise due to the state governance model, the heterogeneous nature of the organizational field, and the suboptimal coordination among the various stakeholders. Additionally, there is often a lack of agreement regarding the goals, means, and resource allocation, which further compounds the challenges.

### 4.3.1 Minimal use in state governance

Our investigation reveals that scenario analyses in the field of eHealth are not systematically integrated into policy formulation or coordination methods. Additionally, the findings indicate that directorates are primarily responsible for implementing and monitoring policies with a duration of two to five years. An informant, who possesses extensive managerial experience in the public administration, suggests that scenario analyses extend beyond the time horizon covered by The Directorate's framework. Instead, they belong to the knowledge base required for policy formulation at the political level.

### 4.3.2 Heterogeneous organizational field and suboptimal coordination

Our research findings support the observation of that there is a lack of a causal relationship between scenario analysis and the expectations and assumptions held for strategy and foresight work within The Directorate. This lack of connection is evident among actors both within The Directorate and in the broader context that the strategy and scenario analysis aim to coordinate.

Furthermore, the findings reveal a lack of commitment among various organizations towards nationally made decisions. These organizations encompass different players who face distinct challenges related to their organizational structure, technology, regulations, and available resources (see, section 4.1.1 Figure 1). Notably, there is a significant disparity in resources between private sector actors, municipalities, health trusts, regional health authorities, and state actors. Additionally, variations exist in technological maturity and willingness to invest in digital technology within the sector. While health trusts are partially coordinated through regional health authorities and national policies, municipalities operate as independent actors with their own investment decisions.

The Directorate employs various informal and formal structures for coordination, including meetings, projects, programs, a council model, and a consultative institute. However, our findings indicate that these coordination mechanisms themselves function sub-optimally for their intended purpose.

The scenario analysis is perceived as a distraction from ongoing activities and work, and there is limited capacity for foresight, understood here as the integration of scenario analysis into an organization's own strategic work. Informants believe that challenges are a given, and they possess a clear understanding of what it takes to address the sector's challenges.

### 4.3.3 Disagreement on goals, means and use of resources

Findings suggest that national participation and coordination require significant resources and divert attention and focus from organizations' core activities. Some informants were explicit in their belief that the development of the eHealth strategy and scenario analysis was an unnecessary allocation of resources, considering that there is already consensus on the challenges and goals within the organizational field, as described in St. Meld NO 9 (2012-2013) - "One citizen - one record." This initiative aims to ensure that essential health information follows the patient throughout their healthcare journey.

Furthermore, the Central Association of Municipalities (KS) disagrees with the central goal formulations. Specifically, their skepticism is directed towards the lack of interaction, commitment, and involvement of stakeholders in the organizational field, as well as a perceived lack of ownership and decision-making authority, particularly regarding the direction, goals, and measures. The consultation response from KS aligns with the feedback provided by several municipalities, highlighting a lack of open interaction in the process and a limited sense of community among key actors in the field.

## 4.4 Foresight skills

The available evidence suggests that the actors involved have limited competence in foresight practices. Scenario methodology does not appear to be a well-established approach, and its utilization in public sectors in Norway seems to be based mostly on anecdotal instances. The interviews conducted in this study indicate that only a small proportion of the informants demonstrate professional proficiency in scenario methodology. Furthermore, the findings highlight significant variations among the informants in terms of their knowledge, sporadic application, skills, and attitudes towards scenario methodology.

### 4.4.1 Limited knowledge

In our data set, we find that entrepreneurial competence is greatest among hired consultants and some external participants who, among other things, were recruited based on their broad experience from scenario work at the societal level. Several of the informants, both project management and recipients of the analysis, find that scenario methodology is an abstract and complex method to understand. This is exemplified by the fact that the informant who for the first time leads scenario work stated that it required some time to acquire sufficient knowledge, and that it nevertheless felt equally demanding each time to communicate the purpose and use of the scenario analysis to both the participants in the preparation and other stakeholders.

### 4.4.2 Episodic use

Most of the informants have limited prior experience with scenario analyses, often with sporadic exposure to the method in the past. Conversely, there are also some informants who lack any practical experience but possess only theoretical knowledge of the approach. Notably, an informant with extensive leadership experience in the organizational field emphasizes that scenario methodology has intermittently surfaced over the course of the last three decades.

### 4.4.3 Lack of skills

The findings highlight a deficiency in managers' ability to translate the societal scenario presented in the analysis into localized scenarios applicable to their specific areas of responsibility. One informant emphasizes the necessity of domain-specific scenarios for their relevance, stating that the scenario analysis is currently too general. Moreover, the informant expresses concern about the lack of specialized expertise within the organization to facilitate this translation process effectively.

Another informant underscores the importance of widespread knowledge and understanding of the scenario analysis within the complex organizational field. According to this informant, successful utilization of the analysis requires collaborative partners and stakeholders to possess a shared comprehension of its implications and potential applications.

### 4.4.4 Resistance

We would like to emphasize the findings regarding the informants' attitudes towards scenario methodology and their reluctance to utilize the analysis in strategy development within the organizational field. Overall, the informants demonstrate a more favorable disposition towards scenario methodology in general, rather than its application specifically in the eHealth context. Furthermore, there is a noticeable tendency among the informants to prioritize immediate concerns and present circumstances.

Many informants explicitly express the belief that the sector possesses a comprehensive understanding of the existing challenges and the necessary actions to address them. They argue that the successful execution of the current strategy relies primarily on the willingness and allocation of resources rather than a perceived need for additional strategy development.

### 4.5 Summing up

The key insights from our results include the presence of diverse organizations and approaches within the field, a lack of commitment to national policy and management tools, and the absence of integration of scenario analysis into strategies. The scenario analysis was primarily internally positioned and lacked involvement from key stakeholders. It also faced challenges such as a lack of managerial support, rejection by the field, and difficulty in capturing stakeholders' attention. The findings highlight challenges in management, such as minimal use of scenario analysis in state governance, suboptimal coordination in a heterogeneous organizational field, and disagreements on goals and resource allocation. There

is also limited foresight competence among businesses, with limited knowledge, episodic use, and a lack of skills in scenario methodology.

## 5. Discussion

Research on open foresight emphasizes the importance of participation, cooperation, management support, and the integration of foresight. It draws on existing works on learning, innovation, and development to inform its findings.

However, our analysis indicates that the ambitions set by The Directorate for scenario analysis have not been adequately met. The initial objectives of the scenario analysis were to challenge management's mental models, facilitate internal competence building, and expand the knowledge base for a new eHealth strategy. Nevertheless, our findings reveal skepticism regarding both the execution of the scenario analysis process and its ability to deliver added value. Therefore, the ambitions for the scenario analysis remain unfulfilled.

To delve into this issue further, we divide the discussion into two chapters. In Chapter 5.1, we examine the failure to meet the ambitions based on established approaches in the foresight literature. Subsequently, in Chapter 5.2, we explore whether adopting a translational theory approach can offer alternative perspectives on the non-fulfillment of these ambitions.

### 5.1 Barriers to inter-organizational foresight

As described at the start out, foresight is a multidisciplinary field that draws upon models and theories from various disciplines, including innovation research and organizational learning (Burt and Nair, 2020). If we use existing literature, we find some explanations for failing inter-organizational foresight integration. The existence of relational capital and norms among participants and the organizations they represent plays a crucial role in facilitating inter-organizational learning within the realm of foresight. Relational capital encompasses shared goals, visions, trust, open interaction, and a sense of community (Gattringer and Wiener, 2020). In the subsequent sections, we will discuss key aspects of foresight based on our findings, such as the inter-organizational context, the dearth of relational capital, anecdotal usage, cultural resistance, limited competence, and the dual nature of foresight as both a process and an outcome.

Inter-organizational foresight is a joint process of foresight between several organizations. Inter-organizational foresight requires the active inclusion of other actors. The parties to the cooperation have jointly developed a common platform for the scenario analysis. They often participate on equal terms and the parties see benefit from participating in an inter-

organizational collaboration (Wiener, 2017). As addressed above, the decision to start work on the scenario analysis and the premises for implementation was made by The Directorate alone. The present scenario analysis thus differs from the ideal context on which the theory of inter-organizational foresight is based. The review serves internal goals for The Directorate, with the potential for the scenario analysis report on eHealth having a significant impact on the broader development of the eHealth organizational field. The process is thus more like an intra-organizational foresight than an inter-organizational foresight process. The approach has led to the weakening of the method's potential effect on the formation of common understandings of possible future scenarios and thereby common mental models among organizations and members in the field.

Gattringer and Wiener (2020) shows in their work that common goals and visions are not a prerequisite for success with inter-organizational foresight. Our data supports Gattinger and Wiener, as there are few common goals and visions associated with the scenario analysis of The Directorate. The work itself is seen by many as unnecessary and of little use. Other elements of relational capital must therefore be present for learning to take place across organizations. It is our observation that existing research provides few answers to how to solve the challenges of creating common mental models across different units in loosely coupled fields with a high degree of complexity.

Hines and Gold (2015) highlight episodic use as a clear challenge to fitting foresight into a business. Through our study, we cannot find a repetitive and systematic use of foresight in general or the current scenario analysis, either in the field of organization or internally in The Directorate. The work process is not built into the management systems in the same way as, for example, projections are. Nor do we find that norms and rules for integration have been established. The integration of foresight seems to be small. We thus confirm previous research on the challenges of episodic use of foresight for integration of foresight.

Our analysis support Hines and Gold (2015), who state that cultural resistance as a challenge to the integration of foresight; cultural resistance understood as the challenges of: 1) competition for attention, 2) foresight as a threat, 3) unwieldy, abstract, and immaterial, and 4) lack of capacity to drive foresight (Ibid). It is evident that the scenario analysis of The Directorate was met with cultural resistance, even though we do not make direct findings that the scenario analysis is perceived as a threat or that there is a lack of capacity to drive foresight. However, the actors are mental here and now and that foresight is not prioritized

and established as a strategic tool in the organizational field. Furthermore, the scenario analysis loses out in competition for market participants' attention, and some do not have the competence to translate the analysis into their own strategies. This is consistent with previous research on barriers to the integration of foresight.

Integrating foresight into organizations requires knowledge of foresight (Hines & Gold, 2015). This is evident from our study of gaps in knowledge about conducting scenario analyses. One of the reasons is precisely to acquire more knowledge about this type of work and to use external consultants. However, according to Hines and Gold (2015), the use of external consultants is a sign of little desire to incorporate foresight into the organization. This is something that The Directorate chooses to do. We see that there is varying foresight competence in the field. We have informants who talk about how they must acquire this competence, while others are familiar with the method. Some report that they do not have the ability to translate the scenario analysis into their own strategies. Furthermore, we have also made findings that show one of the two internal participants from The Directorate in the project quit during the strategy process. These findings may help explain why the analysis is rejected by The Directorate of and other organizations.

Scenario analysis can be both a process and a result (Burt &; Nair, 2020), The Directorate emphasized the result and simplified the process. Our data set reveal that there was a limited sample of participants involved, and few expectations made towards external actors in the process. There are no plans made for further use of the result. However, existing theories does not clarify what is considered to be most important; whether foresight is process or result, but merely describes that it can be both. Burt and Nair (2020) point out that the lack of separate methods for the development process and the further translation into systematic and agreed use of the report creates chaos. However, we suggest that the symbiosis between process and result is interesting to understand more of in the context of the integration of inter-organizational foresight in cases such as this, since the context differs from previous research and understanding of inter-organizational foresight. In this case, the added value should be decision-making that aligns organizations that were involved in the scenario analysis with those that were not, rather than providing individual strategic advantages, as is the case with open foresight.

### 5.2 Translation

Organizational translation theory, proposed by Røvik (2016, 2023) is relevant in the context of understanding and analyzing the challenges and dynamics of implementing organizational changes and strategies. It offers valuable insights into how ideas, practices, and knowledge are translated and transformed between organizations.

By incorporating organizational translation theory, we can better comprehend the complexities and nuances of introducing foresight practices and methodologies within and between organizational settings. This theory emphasizes the importance of examining how concepts and approaches are interpreted, adapted, and incorporated into the existing organizational context.

Røvik's organizational translation theory provides a framework for exploring the factors that influence the successful integration of foresight initiatives. It sheds light on the role of various actors, such as managers, employees, and stakeholders, in translating foresight knowledge into actionable strategies and practices.

By utilizing organizational translation theory, we can gain a deeper understanding of the challenges related to limited foresight competence, cultural resistance, and the episodic use of scenario methodology, as mentioned in the previous text. It helps us examine how these factors impact the adoption and implementation of foresight practices within and between organizations, ultimately contributing to a more comprehensive analysis of the situation.

In our study, we have identified several barriers to the dissemination of foresight practices across multiple organizations. A barrier refers to an obstacle that hinders or complicates the occurrence of a particular phenomenon (Røvik, 2023). Translational theory places significant emphasis on the role of actors involved in knowledge transfer. In our analysis, we will employ translational theory to highlight the influence of actors in the transfer of scenario analysis, as well as the characteristics of the scenario analysis itself. Our intention is not to introduce additional barriers, but rather to gain a deeper understanding of the process from a different perspective, thereby contributing potential new insights to the field of foresight.

### 5.2.1 Transferring outcome of scenario analysis

Drawing on translation theory, we can assert that the outcome of scenario analysis must generate new relationships and connections to have favorable conditions for transmission and translation (Callon, 1986; Callon & Latour, 1981; Latour, 1986). However, our findings shows that only a few organizations have shown any interest in scenario analysis. Among

these organizations, one recognizes the novelty and value of foresight knowledge and actively utilizes it in collaboration with other businesses. Nevertheless, they do not reap the benefits of this new knowledge, as they find that other organizations lack awareness and understanding of scenario analysis. On the other hand, many organizations in the Norwegian healthcare sector reject scenario analysis, often citing its perceived irrelevance or its failure to provide new insights into challenges and future scenarios.

We observe that the result and content of scenario analysis could play a crucial role in facilitating knowledge transfer across different organizations. If the outcome of scenario analysis is widely accepted, legitimized, and desired, it becomes fashionable and thus more readily transferred and translated (Czarniawska & Jorges, 1996; Røvik, 2023; Scheuer, 2020). For scenario analysis to gain popularity, it needs to be presented in a simple and understandable manner, enabling recipients to easily utilize it. We posit that the perceived legitimacy of scenario analysis is closely tied to the foresight competence within the organizational field. Our findings indicate that scenario analysis itself is a complex methodology, challenging to comprehend and employ. In an organizational field with low foresight competence, we believe that the approach must be intuitive and user-friendly for effective knowledge translation to occur.

### 5.2.2 The translator

In this context, the term "translator" is used metaphorically to refer to the process of transferring and transforming ideas, practices, and knowledge between organizations. It does not refer to a specific individual or professional translator. The concept of translation in organizational theory focuses on the actors and mechanisms involved in the transfer and adaptation of ideas rather than a literal translation performed by an individual. In the context of scenario analysis, the actors involved in creating the analysis, managers, employees, and stakeholders, can be considered as translators.

The competence of the translators, including their bilingualism, understanding of translation rules, bicultural knowledge, and familiarity with the token (the content being translated), plays a crucial role in determining the success of the translation process. In complex organizational fields like the Norwegian healthcare sector, gaining a deep understanding of internal organizational cultures can be challenging, especially for translators located within the sending organization. The material indicates that there is limited knowledge of scenario analyses throughout the organizational field, even among those who participate in the work.

The scenario analysis requires expertise from multiple domains, such as medicine, computer technology, digitalization, innovation, and foresight. A good translation necessitates knowledge in all these fields. However, examples of translators who master both approaches are scarce in the current process. To improve translation competence, it is essential to master the professional cultures of these domains to a greater extent.

Sharing knowledge is another critical aspect of the translation process. In our case, knowledge sharing should encompass the fields of healthcare, healthcare systems, technology, digitalization, innovation, and foresight. Foresight research supports the importance of knowledge sharing for successful translation. Competence in translation is multifaceted, encompassing not only knowledge but also skills and abilities. Our research has identified varying levels of foresight skills among the informants, highlighting the need for competence-enhancing measures, both interdisciplinary between medicine and computer technology and specifically in foresight.

In addition to translator competence, motivation plays a significant role in the integration of inter-organizational foresight. Motivation, understood as ownership of the token and self-interest in adopting it, is crucial for the successful implementation of scenario analyses. Cultural and individual resistance to both the process and the results of scenario analyses have been observed in our findings. Therefore, motivation becomes a vital factor alongside translator competence in promoting the integration of inter-organizational foresight in complex organizational fields.

## 6. Conclusion

In conclusion, the article discusses the research on inter-organizational foresight and its emphasis on participation, cooperation, management support, and integration. However, the analysis reveals that the scenario analysis conducted by The Directorate did not meet its initial objectives and faced skepticism regarding its execution and value.

We examine the challenges to inter-organizational foresight, including the lack of relational capital, anecdotal usage, cultural resistance, limited competence, and the focus on the scenario analysis as an intra-organizational process rather than inter-organizational. It highlights the importance of shared goals, visions, trust, and open interaction in facilitating inter-organizational learning.

We introduce organizational translation theory to understand the dynamics of implementing organizational changes and strategies. It emphasizes the interpretation, adaptation, and

incorporation of foresight concepts and approaches into the existing organizational context. The theory offers insights into the factors influencing the integration of foresight initiatives and the role of actors in translating foresight knowledge into actionable strategies.

By applying translational theory, we have explained the challenges related to limited foresight competence, cultural resistance, and episodic use of scenario methodology. It seems of importance of generating new relationships and connections through the outcome of scenario analysis and the need for simplicity, understandability, and perceived legitimacy for effective knowledge transfer. The role of translators, including their competence, knowledge sharing, and motivation, is highlighted as crucial in the translation process.

Overall, the study underscores the barriers to inter-organizational foresight and proposes the application of translational theory to gain a deeper understanding of the challenges and dynamics of implementing foresight practices within and between organizations. It suggests the importance of fostering relational capital, enhancing foresight competence, addressing cultural resistance, and promoting motivation and knowledge sharing to facilitate the integration of inter-organizational foresight in complex organizational fields.

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**Appendices**

A. Interview template

B. Summary of coding and data analysis

C. Summary of knowledge base – eHealth strategy from 2023. Part II – Scenario analysis. Digitalization of health and care sector towards 2035

D. Technological forecast and social change. Author information pack (dated 4th of March 2023)

**Vitae**

This is completed upon submission of the article.

# Appendix A. Semi-structured Interview Guide

## Information
Welcome, and thank you for taking the time to participate in this study. We greatly appreciate your involvement.

The interview will be recorded and transcribed as soon as possible. The audio files will be deleted once the project is completed, no later than June 2023. The same applies to the files containing the transcriptions.

The estimated duration of the interview is approximately 1 hour, and no specific breaks have been scheduled.

## Introduction
We are students at the Nord University Business School. This interview is part of the master's thesis in Strategic Management and Leadership (MBA). The topic of the thesis is the use of scenario analysis for the management and influence of multiple organizations and businesses.

Our research focuses on the new strategy and scenario analysis by the Norwegian Directorate of eHealth, which is currently under review in autumn 2022.

## Agenda
1. Technical aspects
2. Attempt to structure the discussion within the themes.

## Background
1. What's your name, position, and organization?
2. Do you consent to participating in the study in accordance with the provided information letter?
3. Briefly tell us about yourself and your background.
4. What is your relationship with eHealth? Alternatively, what is your connection to eHealth?
5. How do you understand the concept of scenario?
6. What interest do you have in scenarios?
   a. What experiences and attitudes do you have regarding scenarios? Please provide examples.
   b. To what extent have scenarios been useful to you, and what was the reason for that?
   c. What do you think are the success criteria for developing and using scenarios?
7. In your opinion, what are the greatest challenges in the healthcare sector regarding digitalization?
8. How do you think scenario work can be useful in addressing these challenges?

## Formation of the Scenario Analysis: How it Came About
1. Can you tell us about your involvement with the scenario analysis (Working group, Informant, NUFA, NUIT, NEHS)? Did you participate in the process?
2. How would you describe your participation and the process itself? Was it closed/open, directive/inclusive? Was the analysis already developed from the Directorate's perspective, or did you start from scratch?
3. To what extent was the purpose of the scenario analysis clear to you?
4. How would you describe your participation?
   a. Who was the analysis created for?

b. How would you describe the formation of the analysis?
c. Did you experience any disagreements during the process, and how were they handled? What disagreements or discussions occurred during the formation of the analysis?
d. Who was involved in the development?
e. What would you have done differently if you were to participate again?

5. What are your key takeaways from participating in this work?
6. Has your perception of the future changed because of your participation? What is the reason for that?
7. What feedback have you received regarding the formation of the scenario from others who participated in the work? From colleagues who did not participate? Or from others?
8. How has eHealth envisioned the use of the scenario analysis by stakeholders other than themselves? Has it been discussed or used as an argument for others to utilize the scenario analysis? Is it considered purely a "knowledge base"?

## Dissemination

1. Are you familiar with how the scenario analysis has been communicated to others who were not originally involved in the scenario work? What might be the reason for that?
2. Have you been encouraged to have dialogues with others during or after the process?
3. Have you noticed that people have requested the scenario analysis? What might be the reason for that?
4. Whom have you included in your discussions regarding the development of or input to the analysis, and what feedback did you receive from them? What was the reason for that?
   a. How would you describe how the analysis has been communicated and anchored with the stakeholders in the sector?
   b. Who are the key stakeholders regarding adopting the analysis?
   c. How are the stakeholders made aware of the analysis?
   d. Are there stakeholders who should have been handled differently or more actively?

## Reception of the scenario analysis

1. Has the scenario analysis been used in your organization? What is the reason for that?
2. How has the scenario analysis been received in your organization? What is the reason for that?
3. How and why did you become aware of the analysis?
4. How do you and your organization evaluate the analysis?
5. What disagreements and discussions have you experienced regarding the analysis? What is the reason for that?
6. Has your organization made any changes to the analysis, and if so, what, and why?
7. What do you feel is missing from the sender regarding the reception of the analysis? Why?

## Use of scenario analysis

1. What did you use before you received the scenario analysis, and why?
2. How has the scenario analysis been used in your organization? Specify—management meetings, discussions, what aspects? Attitudes? Indifference? Why?
3. What relevance and utility does the analysis have for you and your organization? Why?
4. What have you used the analysis for? Specify—why?
5. Has the analysis influenced your organization's decisions in any way? What is the reason for that?
6. Do you consider the analysis in your work on future strategies? What is the reason for that?

7. Do you find that the scenario analysis has any function for coordination and collaboration with other actors in the sector? Do you have any examples where you see that it has contributed to coordination and collaboration? What is the reason for that?
8. What legitimacy does the analysis have? Why does it have legitimacy or why does it not have legitimacy?
9. What alternative tools do you use for collaboration and coordination? What is the reason for that?
10. Has this scenario analysis led you to consider using scenario analysis as a methodology in the future? What is the reason for that?

## Closing

1. Are there any questions that we should have asked but haven't?
2. Are there things you feel you should have said but haven't had the opportunity to?
3. Are there people or documents you think we should talk to or be aware of?
4. Do you have any questions for us?

**APPENDIX B**

| Empirical examples | 1.st order themes | 2.nd order themes |
|---|---|---|
| **Strategic preardness**<br>«Used to strenghten internal competence»<br>«Scenarioanalysis is intended to be a tool for strategy development»<br>«There is need to account for uncertainty and make strategies resilient to change" | Introspective aims with sector ambitions | Challenges in scenario analysis |
| **Participations**<br>«28 internal participants in the workshop, none of whom were patient representatives»<br>«For us, this was merely a process in which we provided input»<br>«I submitted my yellow note» | Non-respesentative and non-binding participation | |
| **Managment anchoring**<br>Change in leadership, subproject leader leaving, new political and internal leadership.<br>«I read the analysis for the first time yesterday.»<br>«Not addressed in NEHS» | Lack of managerial support | |
| **Result**<br>«Uncertain about how well-known it is. I don't think it carries any inherent power on its own.»<br>«This scenario analysis is not going to stand as a milestone.»<br>«I don't know who this analysis will be useful for.»<br>«It indicates that the public sector has considered this, without it being evident in the strategy.» | Ineffective outcome | |
| **Governance model.**<br>«Unclear political ambitions and willingness to finance.»<br>"Annual state budget process."<br>«The department only governs state actors.» | Minimal use in state governance | Challenge in management |
| **Coordination**<br>«I don't think NUFA is a good anchoring arena at all.».<br>«So we discover that the municipal sector has not been digitized.»<br>«Too many steering committees.» | Suboptimal coordination mechanisms | |
| **Organizational field**<br>«Government agencies and organizations, NGOs, private entities, municipal, etc.»<br>"The state, county municipality, and municipality are responsible for healthcare services."<br>«17,000 organizations with a high degree of independent responsibility for digitalization.» | Heterogeneous organizational field | |
| **Goals, means, and resource allocation.**<br>«More focus on delivering health outcomes rather than e-health itself.»<br>«We are far from delivering on the ambition of the previous strategy.»<br>"The main challenge is likely the organization and not technology." | Disagreement about goals, means, and resource allocation | |
| **Knowledge**<br>«I spent every evening reading up on the method.»<br>«I spent a lot of time communicating about what the scenario analyses should be, and it was equally difficult every time.»<br>«More participants with previous competence in scenario methodology.» | Limited knowledge | Challenges with foresight skills |
| **Experiences**<br>"Throughout my 30 years in the sector, scenario methodology has surfaced from time to time."<br>"We have not used scenario analysis in our strategic work."<br>"We have used scenario analysis on certain occasions." | Episodic use | |
| **Usage**<br>«Then we need to lower our expectations or scale it back a bit.»<br>«No one else was familiar with it»<br>«Two consultation responses comment on the scenario analysis in the consultation. | Lack of skills | |
| **Attitudes**<br>«Important and valuable approach to strategy work.»<br>«One must work step by step and interactively. A scenario analysis doesn't really provide good guidance for that.»<br>«I haven't planned to use this to secure the direction»<br>«I don't think scenario analyses are prioritized tasks anymore» | Resistance | |

# Appendix C. Summary of knowledge base – eHealth strategy from 2023. Part II – Scenario analysis. Digitalization of health and care sector towards 2035

The future is uncertain, and the direction of societal development over the next 15 years is highly uncertain. Regardless of the state of the healthcare sector in 2035, what resources should we have in place to succeed in the digital transformation of the sector? What new opportunities or challenges arise when considering the digitization of health and care from a 2035 perspective? These are the questions the scenario analysis aims to address. Representatives from the healthcare sector, research communities, and businesses have jointly derived implications, success factors, and strategic resources from four different future scenarios. The future scenarios have been developed based on various driving forces identified through multiple analyses and in-depth interviews. Two key dimensions were identified as central uncertainties for the future: "Digital transformation in society" and "Execution of health and care services." Based on these dimensions, four scenarios were developed:
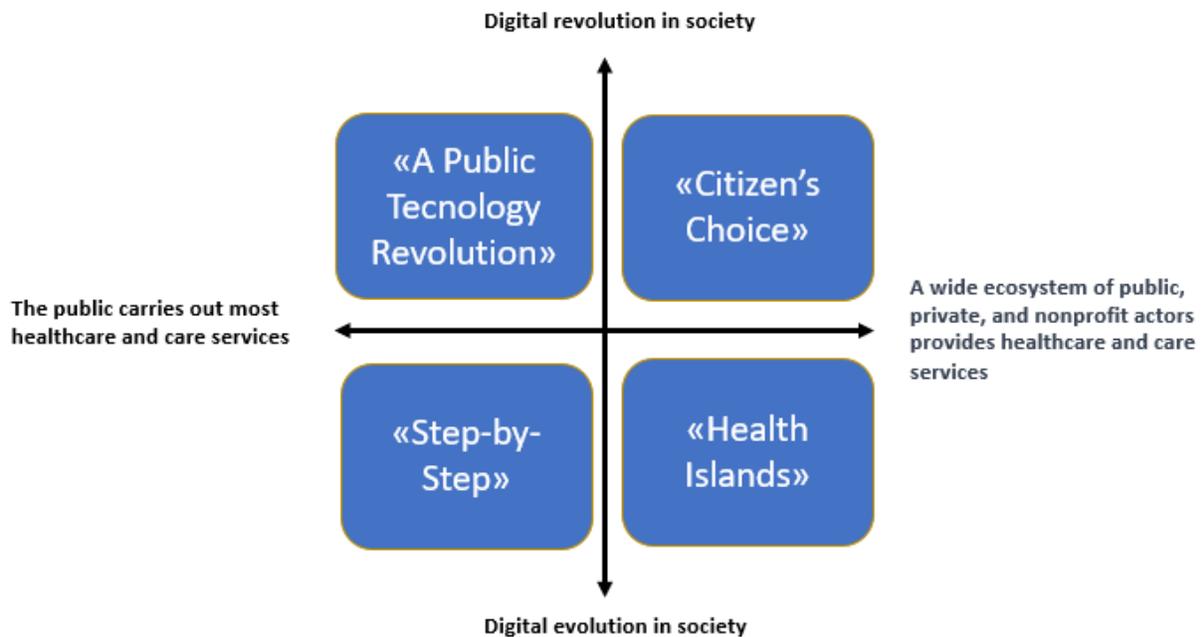


**"Citizen's Choice"** - In this scenario, society has undergone a comprehensive and rapidly changing digital transformation, with a broad ecosystem of actors providing health and care services.

**"Health Islands"** - In this scenario, the pace of digitalization has evolved more gradually, with a less comprehensive and slower rate of change, but still with a broad ecosystem of actors offering health and care services.

**"Step-by-Step"** - In this scenario, the digital transformation has also evolved gradually, with a less comprehensive and slower rate of change. However, unlike "Health Islands," it is primarily the public sector that delivers health and care services.

"**A Public Technology Revolution**" - In this scenario, the digital transformation of society has been comprehensive and rapid, but primarily the public sector delivers health and care services, in contrast to the "Citizen's Choice" scenario.

The analysis of the scenarios reveals the following success factors for succeeding in all four scenarios:

- Competence
- Privacy and information security
- Simple and user-friendly digital tools
- Common technological components for effective data sharing
- Shared direction for digitization in the health and care sector

Additionally, the analysis highlights the following opportunities that should be explored in further strategic work for all scenarios:

- New roles for healthcare professionals, citizens, and relatives as a result of increased digitalization
- Innovation opportunities in privacy and information security
- Business development and collaboration with private actors
- Possibility for increased specialization and more prevention
- Increased utilization of technology for decision support
- Rethinking health in response to the green shift and sustainability challenges in society
- Improving the quality of healthcare services
- Encouraging a richer supplier market

**Translated from Norwegian into English**

**Source:** https://www.ehelse.no/strategi/nasjonal-e-helsestrategi-for-helse-og-omsorgssektoren/kunnskapsgrunnlag-nasjonal-e-helsestrategi/_/attachment/inline/7537ae53-c127-4064-8e26-f6c26c58204e:3d08e86ca02f4c2701580975c3dde2f4487709f7/Kunnskapsgrunnlag_Del%20II_Scenarioanalyse%20v1.0.pdf

Appendix D:

# TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE

An International Journal

## TABLE OF CONTENTS

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