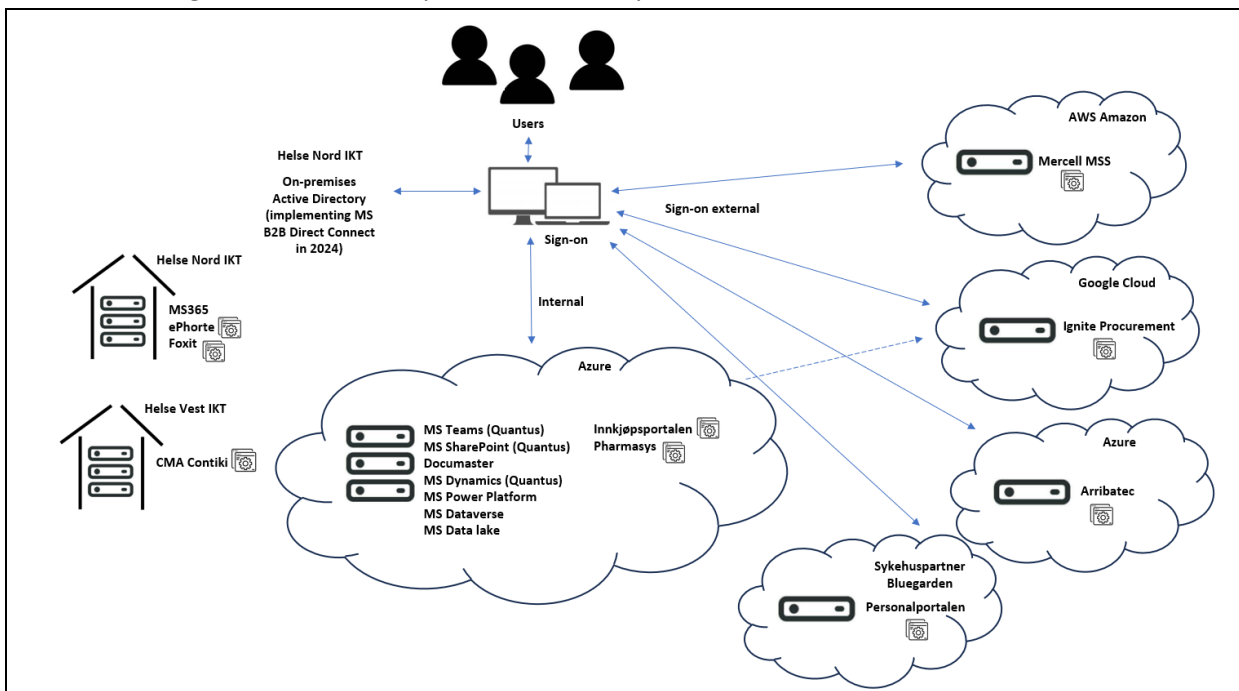


## Attachment 4 – Customers’ existing technical platform

### Cloud architecture

Sykehusinnkjøp HF primarily uses the Microsoft Azure cloud platform to run internally configured/developed solutions including data storage, data processing, network, and analysis. The organization uses Microsoft Teams and Dataverse to let users collaborate internally and with users from the health regions or its customers. Apps (custom apps), workflows and dashboards are available in Teams through Power Apps and Power Automate. Both Dataverse and other databases provides data for reports in the Power Platform. To store, process and manage the large amounts of structured, semi-structured and unstructured data Sykehusinnkjøp HF receives, the organization uses Microsoft Data Lake as a centralized repository.

An overarching illustration of our present technical platform:



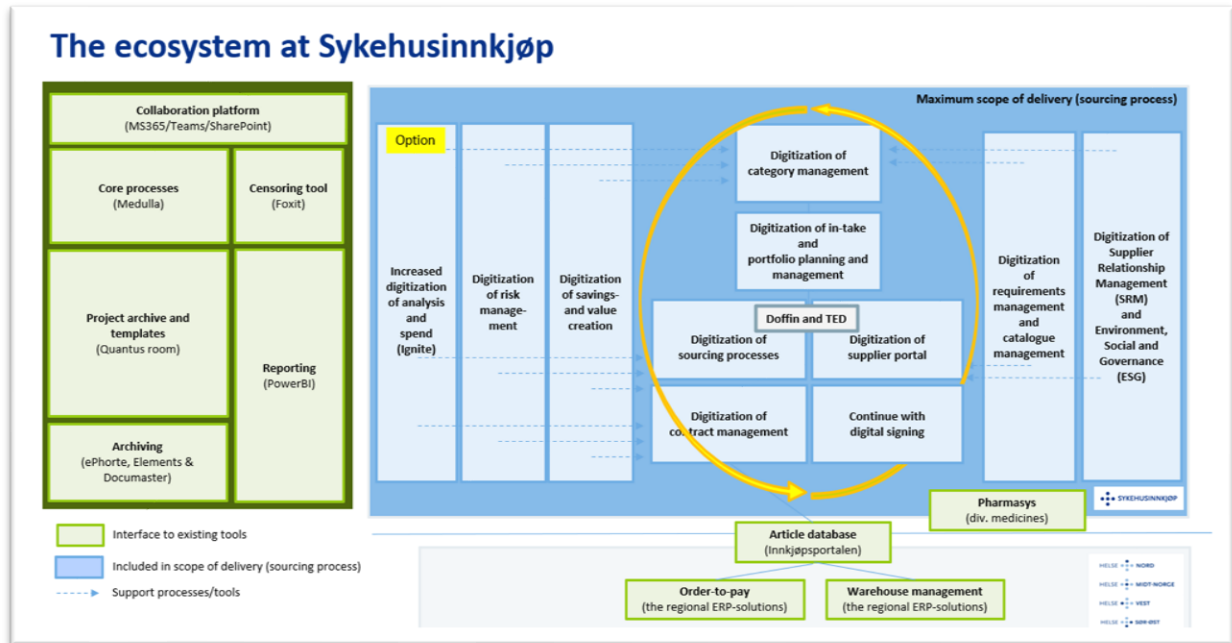
In addition to our internally configured/developed and run Microsoft solutions, we use two procurement specific software packages (Merzell and Ignite) that are hosted by external providers, while CMA Contiki is available through an internal provider. The Merzell cloud solution is used by many employees for sourcing and contract signing activities while the Contiki contract management solution is run by Helse Vest IKT and used by the regional health authorities in Helse Vest and by Sykehusinnkjøp division west to collaborate with regional users. The Merzell and CMA Contiki systems will be replaced as part of this procurement.

### Sourcing strategy

Sykehusinnkjøp 's sourcing strategy dictates that standard software should be used or services should be purchased where available and that adequately covering Sykehusinnkjøp’s needs. Sykehusinnkjøp is therefore open to changing its internal processes so that standard solutions and services can be used.



The platform is further depicted in the functional illustration below. The green boxes indicate components of the ecosystem which we plan on using moving forward, while the blue boxes are the new tools, that will be replace existing tools, and is covered by this procurement.



### Main components of the current system landscape

Program	Description
Microsoft 365	MS 365 is a cloud-powered platform that includes applications such as Microsoft Teams, Word, Excel, PowerPoint, Outlook, OneDrive.
Microsoft Teams	MS Teams is our collaboration platform and a part of the MS 365 platform. It is designed for communication and collaboration internally and between organisations. It brings together chat, video conferencing, file sharing, and task management in a single application, enabling a workgroup to work together effectively, wherever they are located. Teams supports instant messaging, group chat, and channels organized around specific projects or themes.  The platform also allows users to connect various applications and services, including third-party tools, to adapt the workflow.
Microsoft SharePoint	MS SharePoint is a browser-based platform for content and document management, collaboration, and information sharing internally and between organisations. SharePoint supports access control, customization and version control of websites and documents, through built-in functions. The platform is seamlessly integrated with Office applications and enables real-time collaboration, improving productivity and workflow.



Program	Description
	Some <b>Intake and portfolio planning</b> (to be replaced) and some project/sourcing collaboration used through SharePoint.
Dynamics 365	Dynamics is a cloud-based enterprise software platform, bundling ERP, CRM and HCM products alongside Power BI reporting functions in one streamlined, unified package.
Microsoft Power Platform	MS Power Platform is a browser-based platform for development, automation, analysis, and decisions based on data from own business processes. The platform includes Power BI for business analysis, Power Apps for app development, Power Automate for process automation. These tools can be used individually or together to solve complex business challenges, improve productivity, and drive innovation through digital transformation. Power Platform is closely integrated with Microsoft 365, Dynamics 365, and Azure, as well as can connect and utilize data from third-party applications, making it a flexible solution for developing custom business applications and workflows. Power Pages makes it possible to offer self-service portals for customer solutions, for enhanced interaction with customers and partners.
Power BI	Data visualization and reporting tool used in Sykehusinnkjøp HF.
Merzell MSS <i>(to be replaced by procurement)</i>	Merzell Sourcing Service (MSS) is an electronic <b>sourcing and contract management tool</b> available through the internet and running on AWS Amazon web service. It is accessible for both purchasing organizations and suppliers.
CMA Contiki <i>(to be replaced by procurement)</i>	<b>Contract management tool</b> used in Helse Vest RHF and for the Helse Vest portfolio and an on-premises solution run by Helse Vest IKT. It is accessible for Sykehusinnkjøp division west sourcing and contract managers.
Foxit <i>(Potentially to be replaced by procurement)</i>	<b>Censoring/redating tool.</b>
Arribatec (Medulla)	Qualiware software that is a process- and compliance-based management system.
Ignite Procurement <i>(to be integrated with through procurement)</i>	<b>Spend analytics tool.</b> The new tool must integrate with Ignite Procurement to present system users with spend data per category, sourcing process, contract, per supplier, and for each health trust where Sykehusinnkjøp is a purchasing central and provides procurement services to them.
Quantus <i>(risk management and savings- and value)</i>	Internally developed system using the Microsoft platform components. Contains functionality for sharing of internal project/sourcing work rooms, <b>risk management, savings- and value creation</b> and reporting.



Program	Description
<i>creation to be replaced by procurement)</i>	
Innkjøpsportalen <i>(Intake and portfolio planning to be replaced by procurement)</i>	Internally developed system for the management and distribution of new and updated <b>contract catalogues</b> (article master files) to the health regions. <b>Intake and portfolio planning</b> and sourcing reporting to be replaced. The tentative plan is to make Innkjøpsportalen into a pure article database. The new tool must integrate with Innkjøpsportalen.
Pharmasys <i>(Parts potentially to be replaced by procurement)</i>	Internally developed system for the management and distribution of information and agreements regarding medicines and pharmaceuticals. The new tool must integrate with Pharmasys, which has a complex set-up with integrations with external systems not listed up here. There is a certain degree of overlap in sourcing and contract management functionality which will be discussed in the dialogue phase.
Personalportalen	Today's payroll and personnel data system for Sykehusinnkjøp. Function is outsourced to Sykehuspartner HF. This tool will be relevant with regards to measuring effort on hourly basis related to all activities in the new tool.
ePhorte <i>(to be replaced by Documaster)</i>	Tietoenvry's archiving solution used for archiving information and files in according with the existing archiving regulations ( <a href="#">lov om arkiv</a> ).
Documaster	Microsoft 365 archiving integration tool with metadata driven classification, management and retrieval of business-critical documentation. The new tool must integrate with Documaster.
Identity and access management	Managed by Helse Nord IKT through internally developed solution with integration towards Active Directory and soon to be shared via MS B2B Direct Connect.

### Basic IT-services

Helse Nord IKT HF provides Sykehusinnkjøp with basic IT-services. By basic services we mean:

- Endpoint hardware and software (PCs and PC clients)
- Identity and access management
- Management of endpoints (PC client)
- Security and networks
- Configuration management
- Help desk / support

Helse Nord IKT follows recommended update frequencies for the Microsoft operating system meaning the clients are updated often and at least once a month.



### ERP-systems in use at health regions

Innkjøpsportalen (article master database) is used to share new and updated catalogue content with the health regions that use the following ERP-systems:

Region incl. health trusts	ERP-system
Helse Sør-Øst RHF	<a href="#">Oracle</a>
Helse Vest RHF	<a href="#">SAP</a>
Helse Midt-Norge RHF	<a href="#">SAP</a>
Helse Nord RHF	<a href="#">Amesto Clockwork</a>

The health regions use post-award EHF product catalogues as defined by the Norwegian agencies for public and financial management (DFØ). EHF is the equivalent of Peppol BIS which is based on Universal Business Language (UBL) and is governed by DFØ.