



INNOVATIONS SINCE 1912

BRUNSVOLL

PRECISION IS OUR PASSION



Brunvoll – AI-drevet RPA

InfoTeam Mars 2026

Sophie Bruckenberger, Brunvoll og Othilie Hoem, Infor

Tydelige gevinster ved hjelp av AI-drevet RPA hos Brunvoll.

Brunvoll presenterer hvordan selskapet har tatt i bruk AI-drevet RPA for å automatisere innlesning og behandling av innkjøpsordrebekreftelser. Løsningen tolker og registrerer bekreftelser direkte i M3, reduserer manuelt arbeid og sikrer høyere datakvalitet. Avvikshåndtering håndteres sømløst gjennom Review Center, Workspace for Innkjøp og direkte i Infor M3. Presentasjonen viser tydelige gevinster og hvordan denne automatiseringen legger et solid grunnlag for videre AI-utvikling hos Brunvoll.

Brunvoll



BRUNVOLL – 113 YEARS OF ENTREPRENEURSHIP



**5 LOCATIONS
IN NORWAY**



**AGENTS IN
20 COUNTRIES**



**~650 EMPLOYEES
~40 APPRENTICES
100+ ENGINEERS**

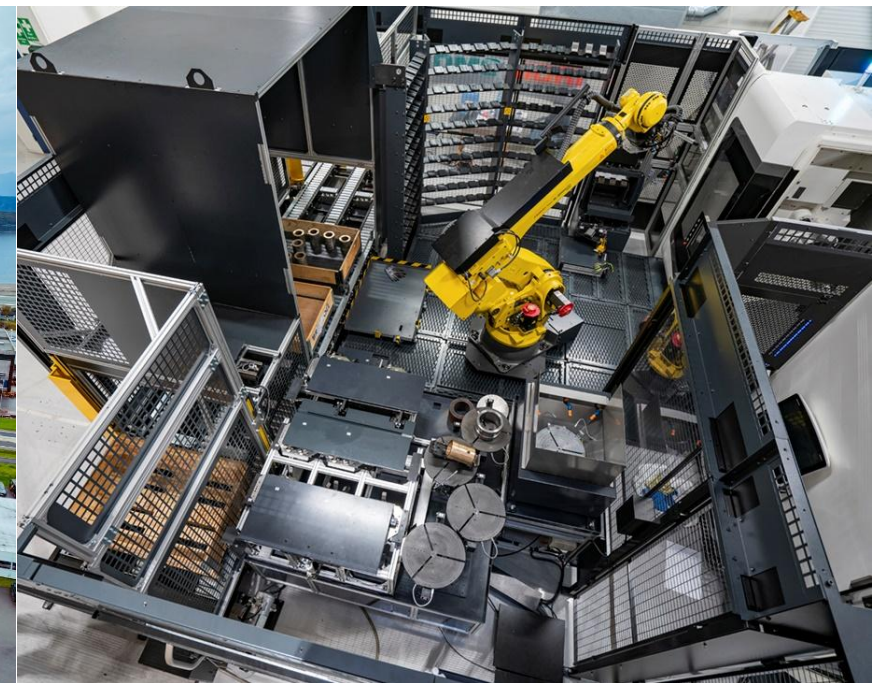


**~ 75% EXPORT
~13 000+ SYSTEMS
~6000 VESSELS**



**~ 2.4 BNOK
REVENUE**

INTEGRATED VALUE CHAIN



MADE IN NORWAY



**AUTOMATED &
ROBOTIZED
PRODUCTION**



**CO-LOCATED
ENGINEERING &
PRODUCTION**



**+ 150 MNOK INVESTED
LAST YEARS**

OUR PEOPLE IS OUR MOST VALUABLE ASSET



**14 YEARS AVERAGE
LENGTH OF SERVICE**



**70 000 HOURS YEARLY
AT PRODUCT
DEVELOPMENT**



98,9% OWN EMPLOYEES

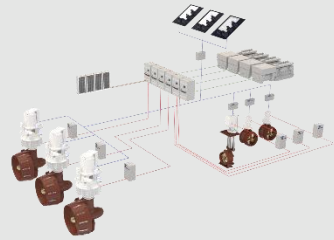


100+ ENGINEERS

EXTENSIVE PRODUCT RANGE – MANUFACTURED IN-HOUSE

AFTER-SALES SERVICES 24/7

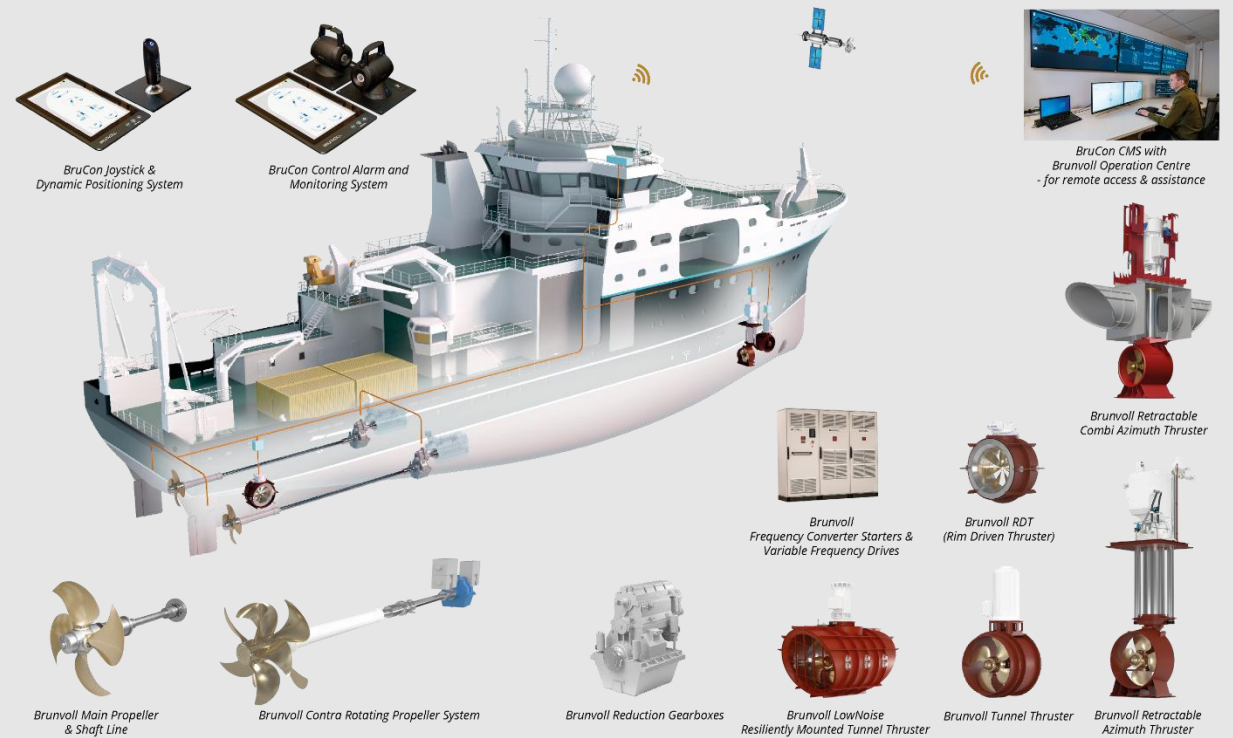
Propulsion & Manouvering



Control & Automation



Electrical & Hybrid



Systems for all ship types

- Brunvoll is among the leaders in development and configuration diversity of propulsion and manoeuvring systems.
- Long experience and close location to well-reputed maritime clusters have given Brunvoll first hand knowledge of new developments and strict requirements applying to vessel operation and how to fulfil the obligations of each vessel when it comes to propulsion and manoeuvring.
- The variety in system solutions are numerous, configured from the wide product range of gearboxes, propellers, azimuth thrusters, thrusters, control & automation systems, and hybrid/electric system integration.



Cruise



Ro-Pax



Shuttle Ferries



Yacht



Navy



Fishing



Fish Farming



Offshore



Wind farm support



Wind farm support

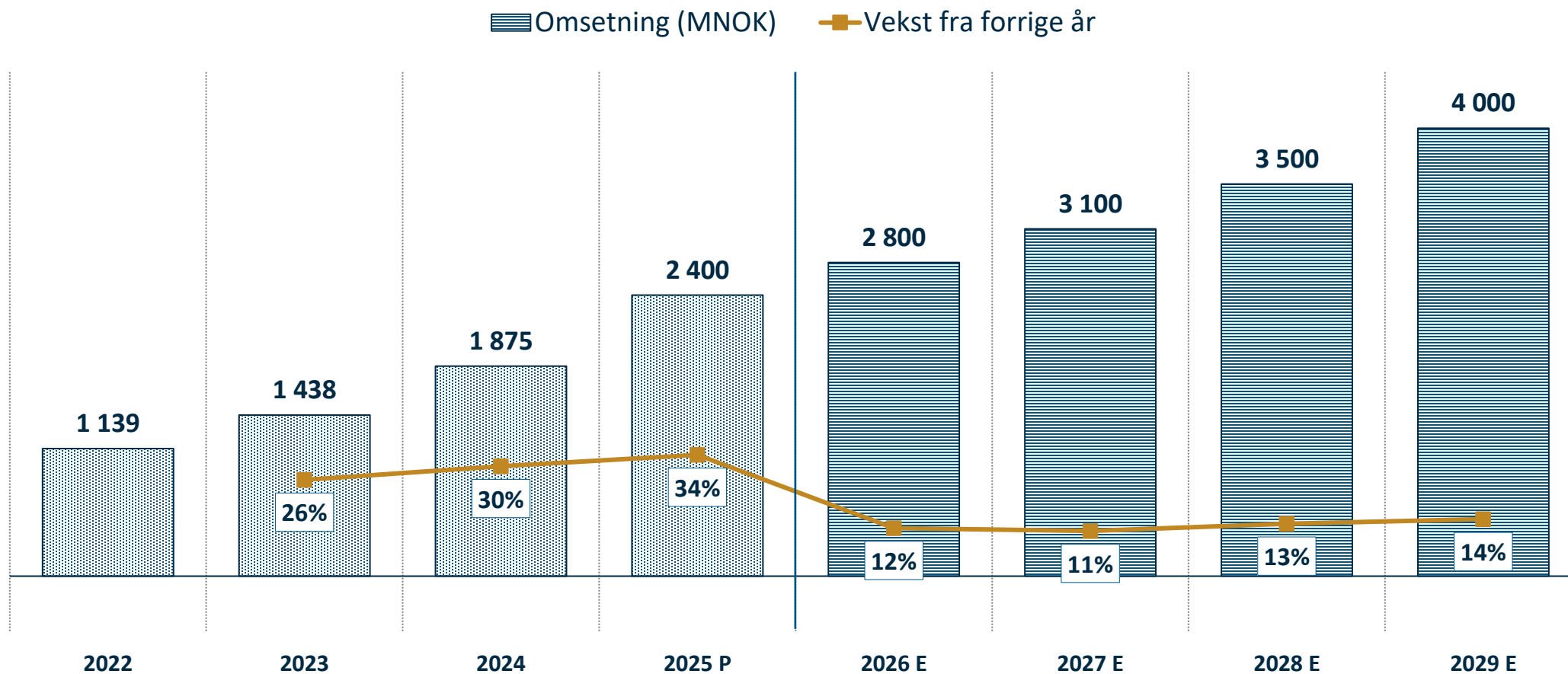


Shuttle Tanker



Cargo/Containers

Strong growth and big ambitions



Brunvoll og Infor M3

Brunvoll på ITD:

Cloud reisen i 2024

Effektivisering av Kundeordreregistrering i 2025

Organisering under CDO

IT Operations Manager

8 ansatte innenfor sikkerhet, nettverk og IT Drift

Brunvoll Business Systems (BBS) avdeling (direkte til CDO)

3 utviklere (2 Solutions Architects, 1 Senior)

4 forretningskonsulenter ERP

1 forretningskonsulent CRM

1 forretningskonsulent Digitale løsninger



Hovedprosesser M3

Produksjon, prosjekt, vedlikeholdsordre

Kundeordre, økonomi, logistikk, innkjøp

Factory Track



Antall brukere

245 (hvorav 205 full lisens, 40 ltd lisens)



Lite transaksjoner, men komplekse prosesser med MTO / ETO

Bakgrunn for RPA

Robotic Process Automation



Valg av RPA – og usecase

- Brunvoll satser på AI-drevet RPA for å automatisere manuelle prosesser
- 2 konkrete usecase ble definert
 - Automatisk innlesing av PO-ordrebekreftelser
 - Arkivering av sertifikater i IDM
- BSL og KI-Leads initiativ for å øke modenheten i organisasjonen



Hvorfor AI-drevet RPA

Automatisert
dokumentbehandling

Intelligent tolkning
med AI

Integrasjon med
Infor M3

Sømløs
avvikshåndtering i
Workspaces og i
Infor M3

UseCase PO-bekreftelse



Dagens flyt



EDI



Manuell bekreftelse, re-
bekreftelse, avvikende
bekreftelse



Auto bekreftelse på
ordretypen

Datagrunnlag & Grunndata

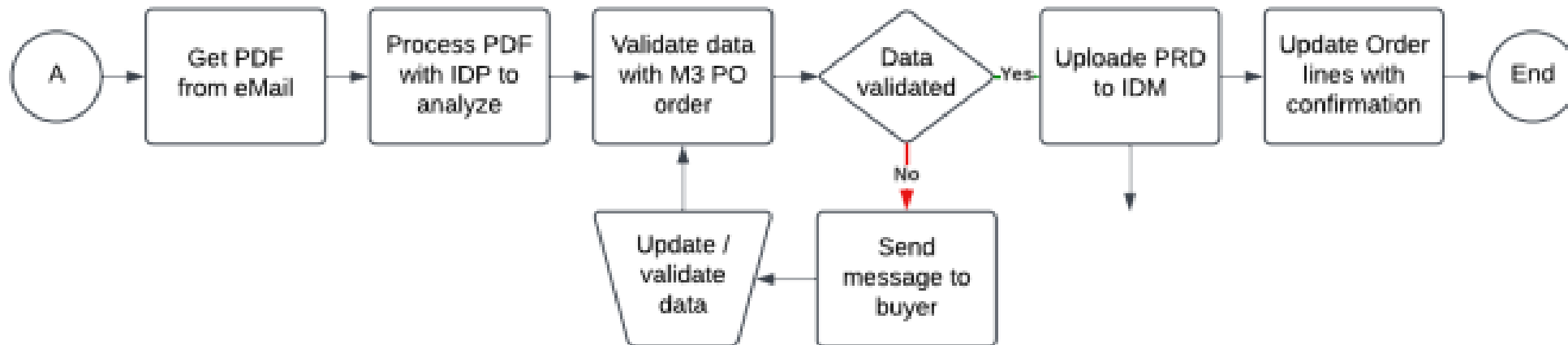
Mye har leverandørens artikkelnummer, men ikke alt

Flest bekreftelser via pdf, noe via e-post eller telefon

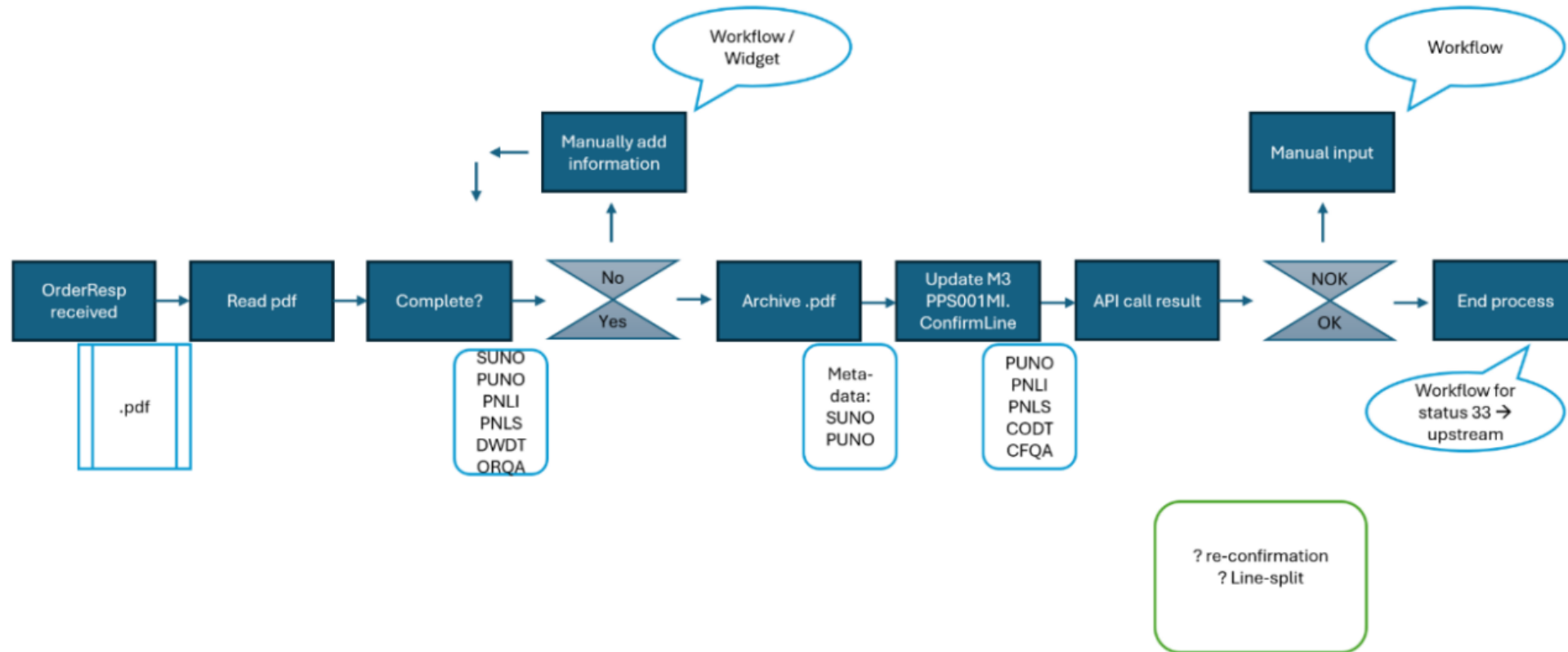
Utallige ulike formater fra leverandører
dato, enheter, språk, mm

Usecase: PO ordrebekreftelse

1. Detect PDF in e-mail
2. PDF analysis using IDP
3. Validation against M3
4. Handling unvalidated data
5. Uploading to IDM
6. M3 Update via API
7. Error Handling



Prosessen detaljert



Avvikshåndtering

- Review Center – for dokument som ikke kunne tolkes
- Dashboard for avvikende bekreftelser
- PPS220 personaliseringer

The screenshot displays the 'Review Center' interface for 'PurchaseOrder Confirmation'. The main status is 'Needs Verification (1)'. The document being reviewed is for 'PO Number : 527370', with a 'Last Run Time : 2025-11-27T20:13:26.674Z'. The document preview shows a 'STORK ELEKTRO & AUTOMASJON' order confirmation. The form on the right allows for editing the 'PO Number' (527370), 'Supplier name' (Stork), and 'Address' (Brynsveien 100, 1352 KOLSÅS). The 'Comments' field contains the text 'PO number is not available in M3'.

Pos.	Varenr.	Enhet	Typen	Antall	Enh.	Pris	Ret.	%	Beløp	L.
1	138571		RLWIP28040014-C	30,00	STK	381,00	0%		11 430,00	02
2	13		RLWIP28040014-C, Pn 100, 2-hvite, 600mm bunn, 1,6m kabel							
3	11		Varenr over er bestillingene og kan ikke returneres.							

Workspace med drillback til Infor M3

The screenshot shows a workspace interface with a top navigation bar containing a home icon, a menu icon, and a tab labeled "INNKJOP_v1.0". The main content area is titled "Min Oversikt" and contains several data cards. A red circle highlights the "INNKJOP_v1.0" tab, and a red arrow points from it to a card labeled "ÅpneLinjer - status 33", which is highlighted in yellow. Other cards include "MineLeverandører", "ÅpneOrdre - ikke utskrevet", "ÅpneOrdre - ikke bekreftet", "ÅpneOrdre - ikke mottatt", "ÅpneLinjer - Status 65", "ÅpneLinjer - Forsinket (10d)", "ÅpneLinjer - Forventet mottatt i dag", "Transpor", "Klar for O", "M3 Application Messages", "Task List", and "Leverand".

Card Title	Value
MineLeverandører	0
ÅpneOrdre - ikke utskrevet	0
ÅpneLinjer - status	33
ÅpneLinjer - Forsinket (10d)	0
ÅpneOrdre - ikke bekreftet	0
ÅpneOrdre - ikke mottatt	0
ÅpneLinjer - Status	65
ÅpneLinjer - Forventet mottatt i dag	0

PPS220 – personaliseringer og fargekoder

PPS220 Purchase Order. Display Lines

Brunvoll AS Brunvoll AS

BUYE: <USID> AND ORTY...

Filter Options

Sorting order: 9-For Dashboard View: STD-15-Enkelt PO

Showing 0 filtered hits on search for BUYE: OTHHOE AND ORTY:(NOR OR EDI OR AUT) AND PUSL:33

Order	POu	Pur price	Line amt	Cur	Req dt	Cfdldt	Dev dt	Pl dt	Lst	Hst	Our ref no	
-------	-----	-----------	----------	-----	--------	--------	--------	-------	-----	-----	------------	--

Ordrebekreftelsesdokument vises i IDM – Related informasjon

PPS200 Innkjøpsordre. Åpne

Handlinger Alternativer Beslektet Verktøy

Brunvoll AS Brunvoll AS

Søk

Sorteringsrekkefølge: 1-IO nummer Vis: STD-1-1

F13 - Innstillinger

Laveste status: -Blank -Blank

Innkjøper: LIACAM LIACAM

Bruk

IO-nr	Low Status	High Status	Ord Date	L.dat	Innkjøper	Ord Type	Leverandør	Leverandørnavn	Ordreverd br	Val	Lsu
530132											
530132	33	33	180226	120326	LIACAM	LEI				NOK	BRV
530133	35 - bekreftet	35	180226	250326	LIACAM	LEI				NOK	BRV
530171	85 - fakturert	85	190226	270226	LIACAM	NOR				NOK	BRE
530227	75 - lagerlagt	85	230226	250226	LIACAM	NOR				NOK	BRE
530228	20 - utskrevet	20	230226	010626	LIACAM	NOR				EUR	BRV
530235	85 - fakturert	85	230226	250226	LIACAM	NOR				NOK	BRE
530315	35 - bekreftet	35	250226	300426	LIACAM	NOR				NOK	BRV
530316	35 - bekreftet	35	250226	160926	LIACAM	NOR				EUR	BRV
530317	35 - bekreftet	35	250226	100426	LIACAM	NOR				NOK	BRE

Startside Innkjøp

Related Information

Alle

Ordrebekreftelse_nr_3...

Behandle Wishdate

Godkjenn avvik. bekreftelse

Favoritter

Artikkelgrunndata

Innkjøpsordrer

Implementeringsprosess

- Definere Usecasene med Infor
- Sette opp TST miljøet
- Definere testdata
 - Ikke bare «flest PO-linjer» men også kvalitativ vurdering (pdf + grunndata i M3 = match?)
- Iterativ prosess
 - Avdekke vanlige avvik (f.e. datoformater, etc)
- Løftet løsningen raskt til PRD
 - Testdataproblem i TST
 - «enkelt» å kontrollere testing i PRD
- Skru på autoinnlesing fra mailboksen
 - Innkjøpere videresender manuelt (eller via regler)
- (Dele ny e-postadresse for bekreftelser med leverandørene)

Gevinster og erfaringer



Gevinster og resultater

- Redusert manuelt arbeid
 - Forbedret datakvalitet
 - Forbedret prosessintegritet og -behandlingstid
 - Opplevelse av «meningsfull» jobb
-
- Kanskje ikke størst besparelse i kroner og øre, men viktig å sparke i gang riktig tankesett rundt skalerbarhet av prosesser og utnyttelse av ressurser

Erfaringer

- Installasjon av lokal programvare; sikkerhet
- Endringsledelse
- Løsningen er plug&play, men forutsetningene må være i orden
 - Grunndata
 - Arbeidsprosesser og -integritet

Vegen videre

- Rulle ut usecase 2 for Sertifikatarkivering i IDM
- Se på flere usecase
 - Internfakturering
 - Følgeseddelbasert godsmottak av 2boks varer
- Posisjonering
 - Utviklingsmuligheter

Ekstra materiale



Hvorfor AI-drevet RPA?

Document Processor Overview

Hello Othilie,
Welcome to Infor Document Processor
Try below flows to see how it works.

- Infor SignedDocument Classification Pre Build DF - GenAI [Try It Now](#)
- Infor Invoice Classification Pre Build DF - GenAI [Try It Now](#)
- Infor Document Classification Pre Build DF - GenAI [Try It Now](#)
- Infor Invoice Classification Pre Build DF - AWS Textract [Try It Now](#)
- M3_POItemCertificate [Try It Now](#)
- Purchase Order confirmation [Try It Now](#)

Document Processor | OS | RPA Management

Document Processor Flow

Document Processor Flow	Active Version	Versions	Activities	Document Classes	Date	Status
→ Infor SignedDocument Classi...	v1	2	Entity Classification	SignedDocument	Feb 8, 2025, 4:40 PM	Active
→ Infor Invoice Classification Pr...	v1	2	Entity Classification	Invoice	Oct 12, 2024, 5:42 PM	Active
→ Infor Document Classificatio...	v1	2	Document Classificati...	Bill Of Lading,Invoice,Ot...	Oct 12, 2024, 5:42 PM	Active
→ Infor Invoice Classification Pr...	v1	1	Entity Classification	Invoice	Apr 13, 2024, 6:23 PM	Active
→ M3_POItemCertificate	v4	3	Document Classificati...	Certificates,Other	Mar 9, 2026, 3:01 AM	Active
→ Purchase Order confirmation	v1	1	Entity Classification	Purchase Order confirma...	Feb 11, 2026, 5:39 AM	Active

← Purchase Order confirmation

+ Create New Version



- Om Basic Info
- Om Document Class
- Om Activity
- Om Prompt > **Videre til Prompt på neste slide**

- Prompt Update for å hente korrekt PO-nummer fra PDF
- Før: Hentet ut riktig PO-nummer, men inkluderte space + "tekst"

Purchase Order confirmation + Create New

Basic Info
Document Class
Activity
Prompt
Summary

Disclaimer: *

ⓘ AI-generated responses may not always be fully accurate. Please verify the information before proceeding.

Purchase Order confirmation Prompt

User: You are an expert Document-Based Question-Answering tool assigned to extract specified entities from a provided document. Analyze the provided PDF document carefully. The document includes layout details, and the OCR text is provided page by page within <Page {Page Number}> tags. Entities to be detected are marked within <entities></entities> tags. Think step by step and use the clues to consider what information is potentially relevant for an entity.

Entities
Document Type, Purchase Order(Number), Vendor Address, Vendor Name, Vendor Phone Number

Clues

#	Clues
1	Document Type - The classification or category of the business document based on its purpose and content. Return a single standardized document typ...
2	Purchase Order(Number) - Extract PO numbers ONLY from dedicated fields labelled "Requisition" or "Your Document" or "Your Reference" or "PO Numb...
3	Vendor Address - Extract only the physical location/address of the vendor, excluding the vendor name. Focus on street address, city, state, postal code - ...
4	Vendor Name - Extract a list of unique vendor or supplier company names from the document. Only include business entities that are clearly acting as v...
5	Vendor Phone Number - The phone number of the seller or service provider.

Instructions + 🗑

#	Instructions
1	There are 5 entities in <entities></entities> tag, be diligent in ensuring to capture all entities value completely upfront without missing any.

- Eksempel:
Prompt for teksttolkning
- PO-Nummer: **529395**
- Vil ikke ha " linje 2" med i tolkning
- Hva gjør man? Oppdaterer prompt



ORDER ACKNOWLEDGEMENT

Order: **401012939**

Brunvoll AS
Eikremsvingen 2c
6422 MOLDE
Norway

Norsk momsrepresentant:
DEIF Norge AS
Døvleveien 41, 3170 SEM
Telefon: 33 38 16 00
URL: www.deif.com

DEIF A/S
Frisenborgvej 33
DK-7800 Skive
CVR No. 1579 8416
Foretaksregisteret
Org. No. 980 889 327 MVA
Nordea Bank Norge ASA
Account No. 6021.07.01527
IBAN: NO6360210701527
SWIFT: NDEANOKK

Date: 29-01-2026

Customer	:400386	Delivery Address:	Brunvoll AS
Order Date	:29-01-2026		Eikremsvingen 2c
Cust. Order	:529395 linje 2		6422 MOLDE
Sales Rep	:Anita Aa. Kirkhorn		Norway
Carrier/LSP	:Courier Express		
Labelling	:		

Pos	Qty	Item	Dispatch	Price/Unit	Amount NOK
-----	-----	------	----------	------------	------------

DEIF A/S declares that the products covered by this document, except where otherwise clearly indicated, are of Danish/EU preferential origin.

Please check carefully that our order acknowledgement details are exactly as you require to assist us in making correct shipment.

PO: 529395 linje 2 (øvrige linjer bekreftes fra DEIF Marine Instruments)
ref: Martin Harvold

20	5	2962390110 multi transducer, type MTR	25-02-2026	10155,28	50776,40
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■ FØR

Review Center

PurchaseOrder Confirmation

Needs Verification (17) Pending Process (0) Missing Information (0) Others (8)

PO Number : 529395 linje 2

Toptekster Ugyldige linjer Gyldige linjer

PO Number * 529395 linje 2 Supplier ID *

Supplier name DEIFA/S Address Frisenborgvej 33, DK-7800 Skive

Phone 33 38 16 00 Comments PO number is not available in M3

DEIF ORDER ACKNOWLEDG

Brunvoll AS
Eikremsvingen 2c
6422 MOLDE
Norway

Customer :400386 Delivery Address:
Order Date :29-01-2026
Cust. Order :529395 linje 2
Sales Rep :Anita Aa. Kirkhorn
Carrier/LSP :Courier Express
Labelling :

Pos	Qty	Item
-----	-----	------

■ ETTER

Welcome Page Document Processor

Purchase Order confirmation

Info

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Purchase Order confirmation Prompt

User: You are an expert Document-Based Question-Answering tool assigned to extract specified entities from a provided (Page Number)-> tags. Entities to be detected are marked within <entities></entities> tags. Think step by step and use the

Entities

Document Type, Purchase Order(Number), Vendor Address, Vendor Name, Vendor Phone Number

Clues

#	Clues
1	Document Type - The classification or category of the business document based on its purpose and content. Re
2	Purchase Order(Number) - Extract PO numbers ONLY from dedicated fields labelled "Requisition" or "Your Document" or "Your Reference" or "PO Number" or "Your order/" or "Your orde
3	Vendor Address - Extract only the physical location/address of the vendor, excluding the vendor name. Focus on street address, city, state, postal code - not company names.
4	Vendor Name - Extract a list of unique vendor or supplier company names from the document. Only include business entities that are clearly acting as vendors or suppliers. If a supplier is
5	Vendor Phone Number - The phone number of the seller or service provider.

Purchase Order(Number) - Extract PO numbers ONLY from dedicated fields labelled "Requisition" or "Your Document" or "Your Reference" or "PO Number" or "Your order/" or "Your orde" - never from item descriptions, codes, or other text fields. If none of these fields contain a PO number or are blank, return "NOT AVAILABLE" instead of extracting PO-like patterns from the document. Once extracted, return only the numeric PO value. Strip any trailing or leading text, words, symbols, or qualifiers (e.g., "linje 2", "line", "ref", "#"). If the extracted value contains mixed content, keep only the contiguous digits that represent the PO number.

ent carefully. The document i ally relevant for an entity.