

Procurement Data, Systems,
Processes & Compliance

enabling sustainable value to our business partners
by driving operational excellence through
innovation, digitalization, standardized processes & compliance

Linde plc Procurement

Data, Systems, Processes & Compliance (DSPC)

September 2020
Theofanis Zoumis

Making our world more productive



The New Linde



- The leading industrial gases and engineering company
- Formed in 2018 with the merger of Linde AG and Praxair, Inc – two world-class companies with nearly 140 years of shared history and successful achievements

One Linde

Uniting with a shared Vision, Mission and Strategic Direction, and demonstrating our Values and Behaviors in everything we do

2 million+

customers
Enabling a more diverse and balanced portfolio

100+

countries

Enabling strong, complementary positions in all key geographies and end markets

~80,000

employees

Achieving our full potential, individually and collectively

\$8 million

charitable giving in 2019

Supporting our communities through contributions and employee volunteerism

6,500+

active patent assets worldwide

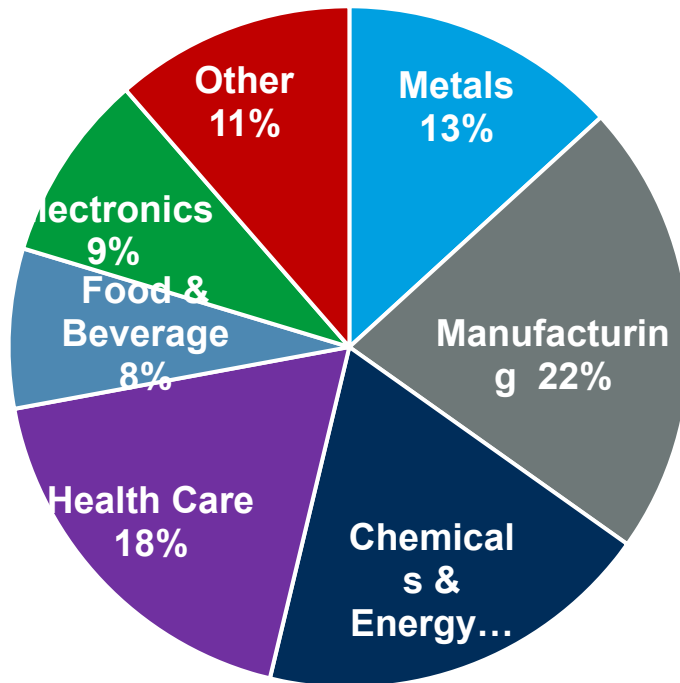
Leading with innovative products, solutions and technologies



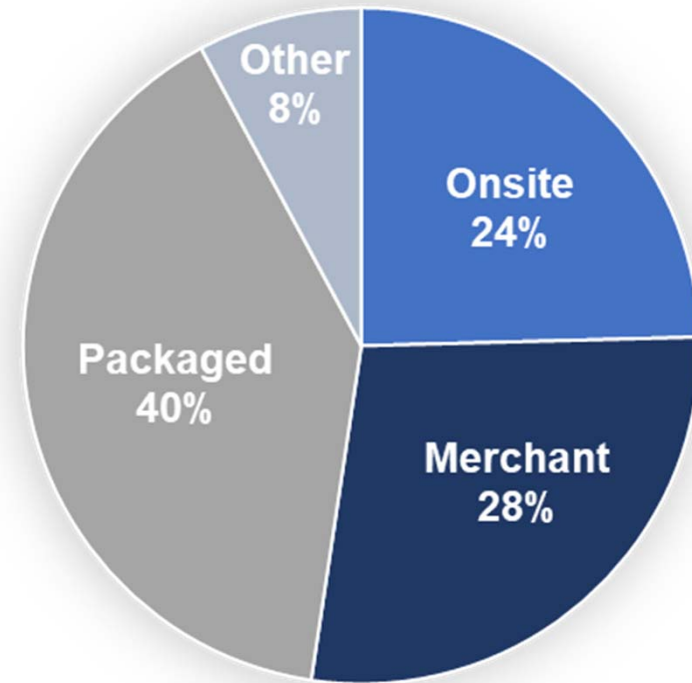
2019 Sales⁽¹⁾



End Market

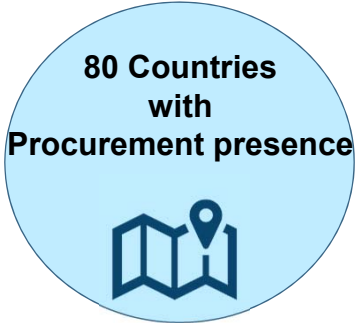


Distribution Mode



(1) Total sales excluding Linde Engineering ~25B US\$

Linde plc Procurement Snapshot – YE 2019



*Not including Elgas, GIST, PST and legacy PX hispanic countries
**Only related to sourceable spend

Data, Systems, Processes & Compliance

Strategic intent and scope



Data



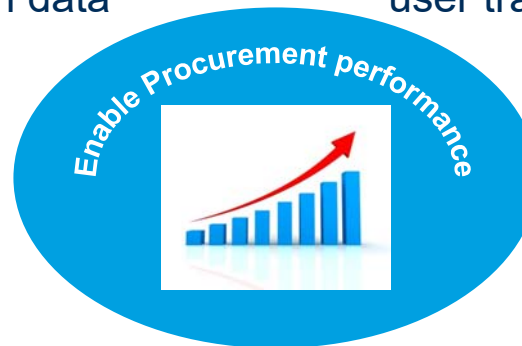
- Standardise reporting and KPIs
- Maturity Roadmap
- Monitor procurement performance & controlling
- Discover savings

opportunities through data transparency

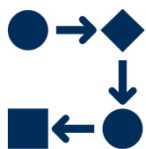
Systems



- Design and implement digital tool landscape, e.g.
 - Procurement suite
 - Marketplace for C-materials
- Change Management and user training / support



Processes



- Reduce process cost by streamlined processes, e.g.
 - Increase PO automation
 - Robots for repetitive tasks
- Govern processes to ensure compliance

Compliance



- Develop and implement policies
- Ensure SOX & GDPR compliance
- Mitigate and resolve internal audit findings
- Invoice Audit on overpaid invoices

Linde Marketplace LMP

What is it all about?



In 2019

... 750 SRM users have the same problem



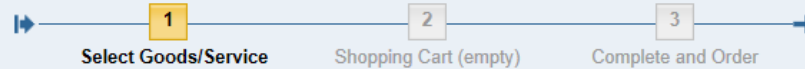
Germany (Period: 15 months)
- ~1000 Headsets purchased
- Average unit price: 110,50 EUR
- Price range: 13 to 269 EUR

How does the search work?



Shop in 3 steps: Step 1 (Select Goods/Service)

◀ Previous | Next ▶ | Order | Close | System Info | Create Memory Snapshot



Find:

- Browse:**
- [Old Shopping Carts and Templates](#)
 - [Internal Goods/Services](#)
 - [Limit Item: Invoice Only](#)
- | | |
|--|---|
| Adolf Würth GmbH & Co. KG | Analytik - Altmann Analytik GmbH & Co. KG |
| Brandportal Prod | Burckhardt Germany |
| Conrad Electronic SE | Denios AG |
| EUROPART Holding GmbH | Elektronik - Hagemeyer |
| Elektrotechnik - Phoenix Contact GmbH | Endress & Hauser |
| Fluidsysteme - Schwer Fittings GmbH | GCE Germany |
| GM Gummi & Kunststoffe | Gas Cylinders - Amtrol |
| HPS DE Catalogue Germany | Hilti Deutschland GmbH |
| Hoffmann tools | Inmac |
| Instrumentation valves and fittings - Hamlet | Kaiser + Kraft |
| Kroschke sign-international GmbH | Landefeld GmbH |
| Linde Leuna DE 0925 | Linde MDM (Contracts, Internal catalogues) |
| Lutz fittings & tools | Lyreco Deutschland GmbH |
| Marketplace - Mercateo for Germany | Mineralöl - HMH Mineralöle GmbH |
| RS Components GmbH | Ratioform Verpackungen GmbH |
| Reinstgasearmaturen - Rotarex Deutschland GmbH | Schweitzer Sortiment |
| Siemens Germany | Sigma-Aldrich Chemie GmbH |
| Sign - Kroschke sign-international GmbH | Swagelok |
| Technik - WIKA | WTO Germany |
| Werbemittel - Eidex | |

Free Text: [Describe what you need](#) If you cannot find it above

How does the search work?



After 1 min

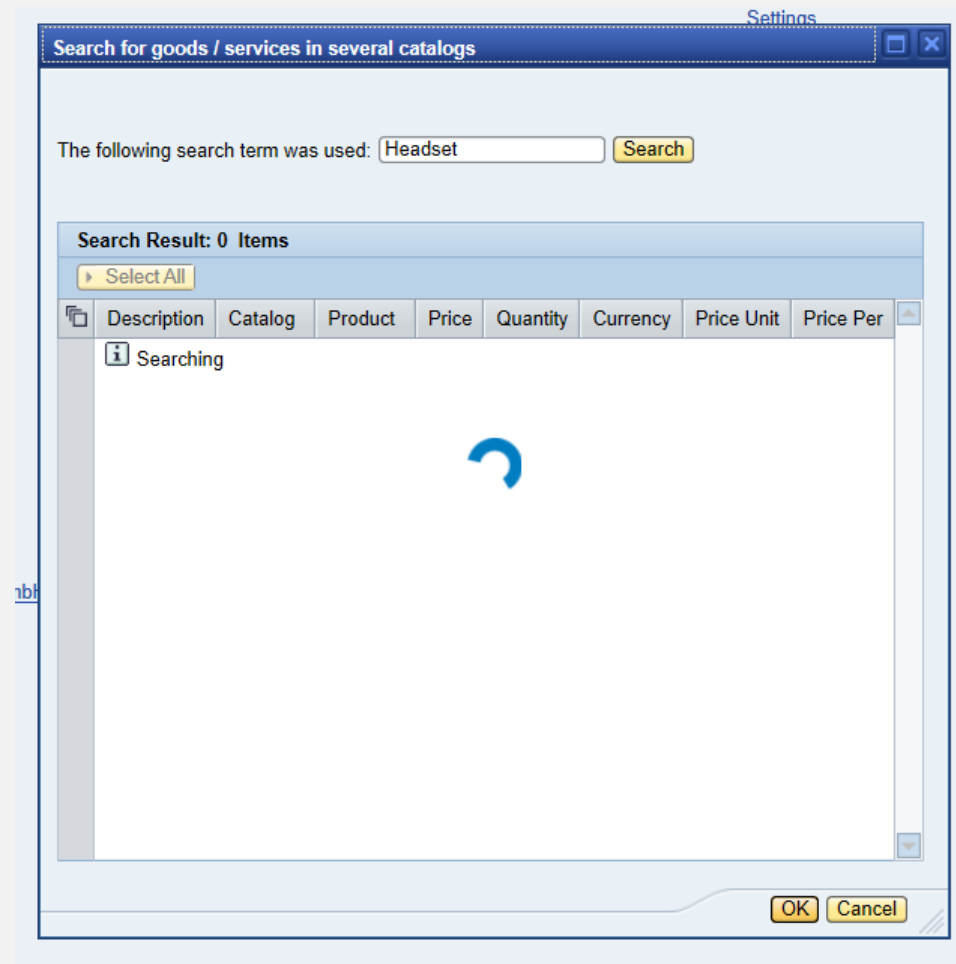
After 2 mins

No result

Search starts automatically again

After 5min

I give up



How does the search work?



Shop in 3 steps: Step 1 (Select Goods/Service)

◀ Previous | Next ▶ | Order | Close | System Info | Create Memory Snapshot

1 Select Goods/Service 2 Shopping Cart (empty) 3 Complete and Order

Find:

Browse: [Old Shopping Carts and Templates](#) [Adolf Würth GmbH & Co. KG](#) [Analytik - Altmann Analytik GmbH & Co. KG](#)
[Internal Goods/Services](#) [Brandportal Prod](#) [Burckhardt Germany](#)
[Limit Item: Invoice Only](#) [Conrad Electronic SE](#) [Denios AG](#)
[EUROPART Holding GmbH](#) [Elektrotechnik - Phoenix Contact GmbH](#) [Elektronik - Hagemeyer](#)
[Elektrotechnik - Phoenix Contact GmbH](#) [Fluidsysteme - Schwer Fittings GmbH](#) [Endress & Hauser](#)
[GM Gummi & Kunststoffe](#) [HPS DE Catalogue Germany](#) [GCE Germany](#)
[Hoffmann tools](#) [Instrumentation valves and fittings - Hamlet](#) [Gas Cylinders - Amtrol](#)
[Kroschke sign-international GmbH](#) [Linde Leuna DE 0925](#) [Hilti Deutschland GmbH](#)
[Linde Leuna DE 0925](#) [Linde Fittings & Tools](#) [Inmac](#)
[Marketplace - Mercateo for Germany](#) [Landefeld GmbH](#) [Kaiser + Kraft](#)
[RS Components GmbH](#) [Linde MDM \(Contracts, Internal catalogues\)](#) [Landefeld GmbH](#)
[Reinstgasearmaturen - Rotarex Deutschland GmbH](#) [Lyreco Deutschland GmbH](#) [Lindes MDM \(Contracts, Internal catalogues\)](#)
[Siemens Germany](#) [Mineralöl - HMH Mineralöle GmbH](#) [Lindes MDM \(Contracts, Internal catalogues\)](#)
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[WTO Germany](#)

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How does the search work?



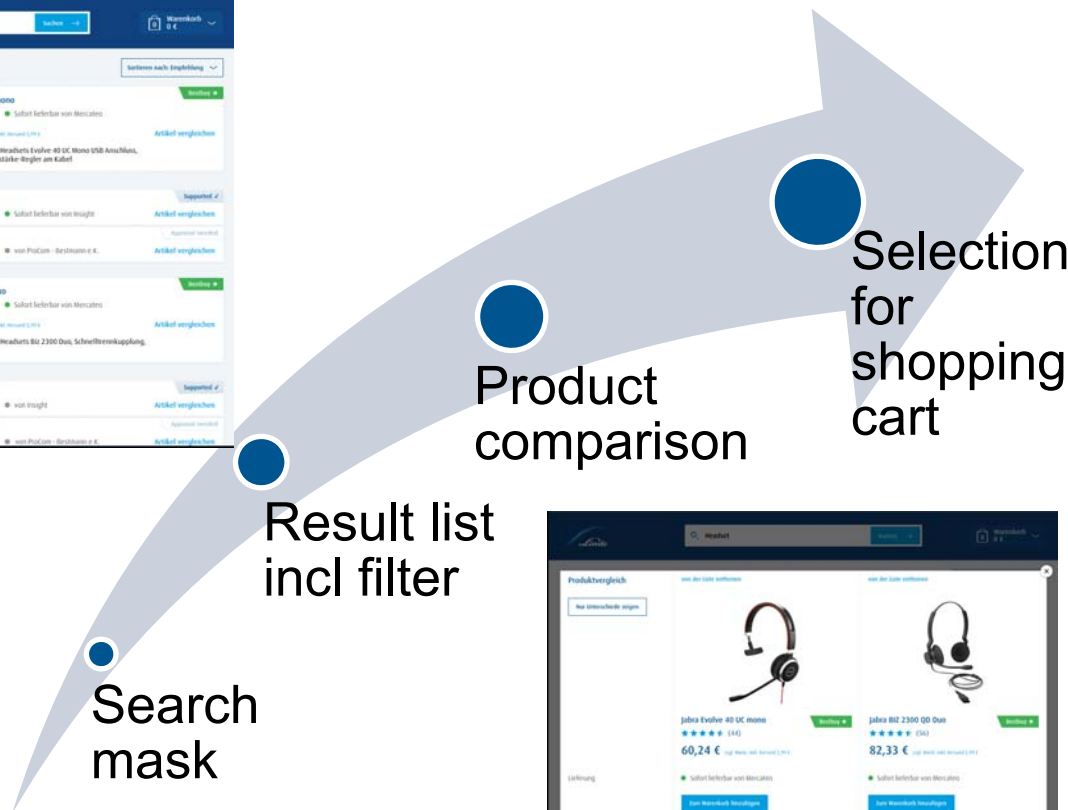
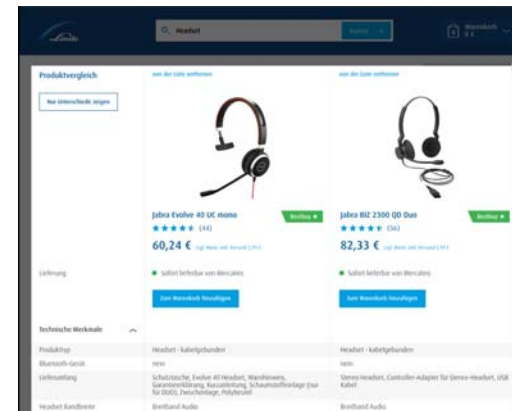
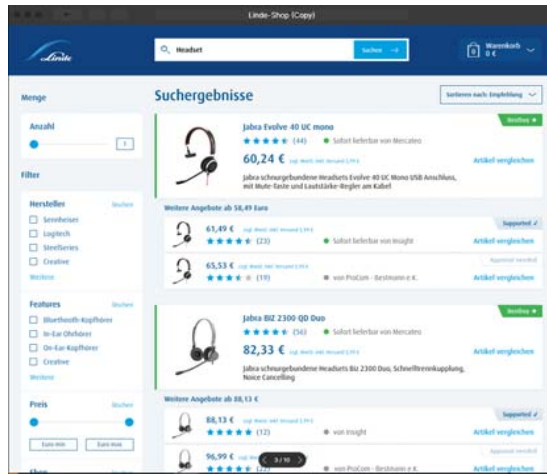
List View

Add to Cart
 Cart Preview
 Compare
 Number of It:

Select	Quantity	Action	Supplier	Short Description	MGF Material Group	Order Unit	Price Information	Price Base	Quantity	Supplier Part Number	Plant	Long Description	Supplier Catalog Name
<input type="checkbox"/>	1		ProCom - Bestmann e.K.	Headset schnurlos 1-ohrig f.Tel,PC,Mobil	08-04-05 Voice fixline hardware	Each.	232.80 EUR		1	JB9555-583-111X-LIN		Engage 75 mono einohrig inkl. Anschlussmöglichkeit für alle Linde Telefone, PC und Mobiltelefone. Die korrekte Endkonfiguration erfolgt telefonisch oder per Mailabfrage an Sie durch die Fa. ProCom-Bestmann. Eine Antwort ist danach erforderlich.	MDM_DE_PGV
<input type="checkbox"/>	1		ProCom - Bestmann e.K.	USB Headset ANC, Nackenbügel beidohrig	08-04-05 Voice fixline hardware	Each.	144.80 EUR		1	JB7099-823-309X-LIN		Jabra Evolve 75e ANC mit Nackenbügel beidohrig. Mikrophon am Kabel. USB Anschluss via Dongle, mit Mute-Taste und Lautstärke-Regler am Headset, bis zu 14 Stunden Gesprächszeit	MDM_DE_PGV
<input type="checkbox"/>	1		ProCom - Bestmann e.K.	Headset schnurgeb. 1-ohrig alle Telefone	08-04-05 Voice fixline hardware	Each.	73.00 EUR		1	JB2309-820-104X-LIN		Jabra BIZ 2300 einohrig incl. Anschlußkabel zum Anschluß an alle Linde Telefone	MDM_DE_PGV
<input type="checkbox"/>	1		ProCom - Bestmann e.K.	Umschalter zwischen Telefon und Headset	08-04-05 Voice fixline hardware	Each.	19.70 EUR		1	JB6599-823-499X-LIN		Jabra DanaSwitch. Umschalter zwischen Telefon und Headset für Telefone ohne Headset Schnittstelle (Ericsson, Aastra, Mitel)	MDM_DE_PGV
<input type="checkbox"/>	1		ProCom - Bestmann e.K.	Headset schnurlos 1-ohrig alle Telefone	08-04-05 Voice fixline hardware	Each.	152.20 EUR		1	JB9559-583-111X-LIN		Jabra PRO 920 einohrig inkl. Anschlussmöglichkeit für alle Linde Telefone. Die korrekte Endkonfiguration erfolgt telefonisch oder per Mailabfrage an Sie durch die Fa. ProCom-Bestmann. Eine Antwort ist danach erforderlich.	MDM_DE_PGV
<input type="checkbox"/>	1		ProCom - Bestmann e.K.	USB Headset schnurgebunden 2-ohrig	08-04-05 Voice fixline hardware	Each.	60.50 EUR		1	JB6399-829-209X-LIN		Jabra Evolve 40 UC beidohrig, USB Anschluss für VoIP-Softphones. Mobiltelefone und Tablets über 3,5mm Klinkestecker.	MDM_DE_PGV
<input type="checkbox"/>	1		ProCom - Bestmann e.K.	USB Headset schnurlos 2-ohrig	08-04-05 Voice fixline hardware	Each.	128.80 EUR		1	JB6599-823-499X-LIN		Jabra EVOLVE 65 UC beidohrig inkl. Ladestation, USB Anschluss via Dongle, mit Mute-Taste und Lautstärke-Regler am Headset, Busylight integriert, Bluetooth, bis zu 10 Stunden Gesprächszeit	MDM_DE_PGV
<input type="checkbox"/>	1		ProCom - Bestmann e.K.	USB Headset schnurlos 1-ohrig	08-04-05 Voice fixline hardware	Each.	123.50 EUR		1	JB6593-823-499X-LIN		Jabra EVOLVE 65 UC einohrig inkl. Ladestation, USB Anschluss via Dongle, mit Mute-Taste und Lautstärke-Regler am Headset, Busylight integriert, Bluetooth, bis zu 10 Stunden Gesprächszeit	MDM_DE_PGV
<input type="checkbox"/>	1		ProCom - Bestmann e.K.	USB Headset schnurgebunden 1-ohrig	08-04-05 Voice fixline hardware	Each.	54.50 EUR		1	JB6393-829-209X-LIN		Jabra Evolve 40 UC einohrig, USB Anschluss für VoIP-Softphones. Mobiltelefone und Tablets über 3,5mm Klinkestecker.	MDM_DE_PGV
<input type="checkbox"/>	1		ProCom - Bestmann e.K.	Headset schnurlos 2-ohrig f.Tel,PC,Mobil	08-04-05 Voice fixline hardware	Each.	239.15 EUR		1	JB9559-583-111X-LIN		Engage 75 duo beidohrig inkl. Anschlussmöglichkeit für alle Linde Telefone, PC und Mobiltelefone. Die korrekte Endkonfiguration erfolgt telefonisch oder per Mailabfrage an Sie durch die Fa. ProCom-Bestmann. Eine Antwort ist danach erforderlich.	MDM_DE_PGV
<input type="checkbox"/>	1		ProCom - Bestmann e.K.	USB Headset schnurlos 2-ohrig ANC	08-04-05 Voice fixline hardware	Each.	199.80 EUR		1			(Großraumbüro): Jabra EVOLVE 75 ANC beidohrig inkl. Ladestation, USB Anschluss via Dongle, Active Noise Cancellation (ANC) mit vier Mikrofonen für z.B. Großraumbüro, Mute-Taste und Lautstärke-Regler am Headset, 2 Busylight integriert, Bluetooth, bis zu 15 Stunden Gesprächszeit.	MDM_DE_PGV
<input type="checkbox"/>	1		ProCom - Bestmann e.K.	Headset schnurlos 2-ohrig alle Telefone	08-04-05 Voice fixline hardware	Each.	177.95 EUR		1	JB920-29-508-1X-LIN		Jabra PRO 920 beidohrig inkl. Anschlussmöglichkeit für alle Linde Telefone. Die korrekte Endkonfiguration erfolgt telefonisch oder per Mailabfrage an Sie durch die Fa. ProCom-Bestmann. Eine Antwort ist danach erforderlich.	MDM_DE_PGV
<input type="checkbox"/>	1		ProCom - Bestmann e.K.	Headset schnurgeb. 2-ohrig alle Telefone	08-04-05 Voice fixline hardware	Each.	93.00 EUR		1	JB2309-820-104X-LIN		Jabra BIZ 2300 beidohrig incl. Anschlußkabel zum Anschluß an alle Linde Telefone	MDM_DE_PGV

Linde Marketplace LMP

Demands for a new solution



Search mask

Result list incl filter



Product comparison

Selection for shopping cart

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Possible Options considered



	Own development	Artificial intelligence	SAP SRM add on	Marketplace
 Limitations	Background search required, but only possible for 1/3 of our catalogues	Solution is not clear yet, for them this is a standard solution, but still very pricy	OCI5 required, not available in all catalogues	Only non configurable catalogues. No guided buying.
 Price	€	€€€	€€	€

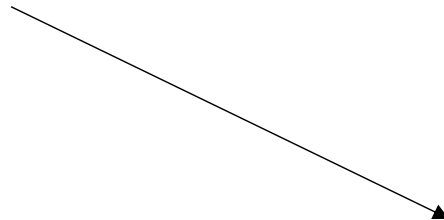
Based on the feature set and additional price competition through the number of suppliers in the market place Mercateo was chosen.

Linde Marketplace LMP

Guided Product Search – Business Case



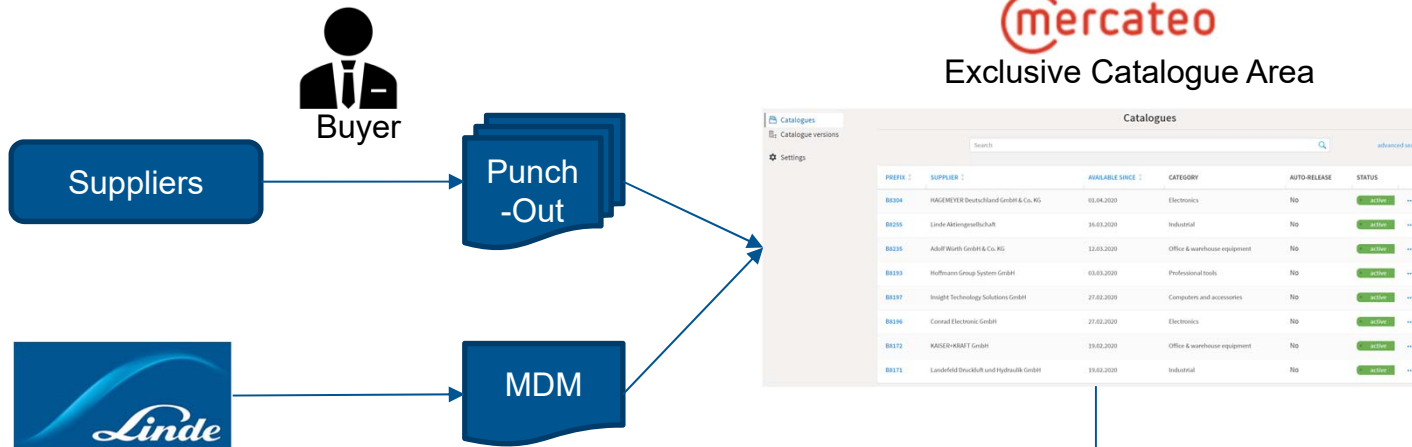
Savings of **20 T€**
for headsets only



Potential savings estimated to 1% of indirect spend, due to:

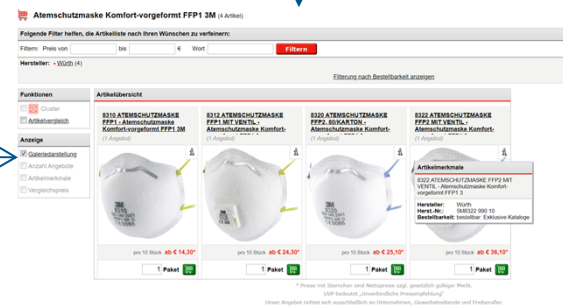
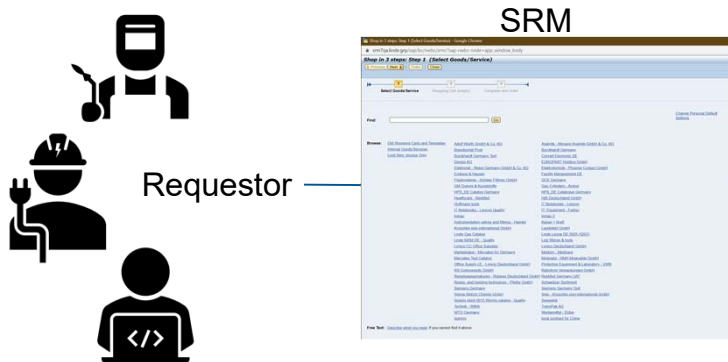
- Easy access, search and comparison
- Supplier needs to maintain “catalogue”
- Consideration of delivery time, freight cost, scaled pricing and number of deliveries
- Vastly greater price competition

Linde Marketplace LMP Setup - Today



- Relation to supplier
- Informed about changes
- Tests against contract
- Releases into production

Linde Marketplace



No changes – process remains as-i



Linde Marketplace LMP

Achievements, Challenges & Next Steps



- Positive user experience and customer feedback
- Additional savings achieved (~8%)
- PO Automation improved by 2%

- Technical: Punch-out catalogues have to be „flat“
- Vendors: Resistance by some vendors with own web shop
- Own organization: Covid – 19: Lock down, furlough & Internal grown catalog

- Integrate Linde internal catalogues
- Move further content into Marketplace
- Roll solution out to other countries



Thank you for your attention.

Linde plc
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Making our world more productive

