

Körber Supply Chain

Voice and SAP

What your IT team needs to know



Introduction

Distribution center (DC) picking processes have progressed from paper-based operations to radio frequency (RF) barcode scanners. More recently, they have deployed pick-to-light technologies which use illuminated displays to show an item's location. Yet, while these technologies are demonstrably more effective than paper processes, operators still need to divert their attention to a screen, keyboard or handheld device. This distracts the picker, slows productivity and introduces opportunity for error.

DCs face growing omnichannel complexity and order fulfillment challenges, which means gaining step efficiency improvements is paramount. Voice technology allows operatives to remain both hands- and eyes-free as they work. This optimizes their productivity and concentration on the task.

SAP's open architecture supports a range of voice integration methods, and many SAP customers are already achieving significant productivity and accuracy gains as a result. Whether you are running SAP's Extended Warehouse Management (EWM) solution or are still on Warehouse Management (WM), voice can easily and rapidly be added to your operation with SAP certified interfaces for both SAP NetWeaver® and SAP S/4HANA ERP. The resulting seamless integration of the ERP with the warehouse management solution through to the voice users significantly improves productivity and efficiency of warehouse processes. This leverages your investment in SAP and helps DCs deliver on their customer promises, achieve bottom-line results and scale efficiently.

Voice technology in numbers

Increases productivity
between 10 and 50%
(averaging at 10-20%)

Improves accuracy
to at least 99.5% (with customer reports of 99.99%)

Reduces training time
by up to 50%



Transforming your distribution workflows

Voice, integrated into SAP, has become a crucial strategic tool for many DCs. It works by sending an associate verbal instructions through a headset connected to a mobile device. They then confirm each step through the headset in real time as it's completed, before being guided to the next task. Voice also supports multi-modal options such as scanners, printers and screen displays.

Since using voice, DCs have reported a 50% decrease in picking errors and a typical return on investment (ROI) in under a year. This is due to voice providing superior ergonomics, removing distractions, and helping its users be both more accurate and more productive.

“Voice technology makes it very easy for workers to stay focused. By minimizing distractions like paper and screens, they never have to take their eyes off the task they’re completing, which drives increases in accuracy.”

Glen Theiss

Senior Director, Körber Voice

In contrast to voice applications commonly used on mobile phones or in the home, industrial voice technology is specifically designed to give very rapid voice recognition in noisy, rugged environments. The “noise cancellation” capability reduces common warehouse background noise such as pallet drops, truck horns and conveyor-system mechanisms. Market-leading voice solutions are available in more than 40 languages, enabling associates to interact with SAP in the most natural and efficient way.

Voice with SAP easily scales with your business as you grow and manage seasonal peaks. Clear and simple guidance minimizes the onboarding time of new associates and capacity can be rapidly added, without complex and expensive changes to your DC infrastructure.

Migrating to SAP EWM

In 2027, SAP will “sunset” the previous versions of its warehouse management system, at which point support for the legacy solution will cease and functionality will be limited. Realistically, this leaves a 2- to 3-year migration window, potentially less for businesses with complex, multiple warehouse sites and DCs. This provides an extra incentive to start planning their migration sooner, rather than later.

Compared to its earlier warehouse management version, SAP EWM offers more features, advanced functionality, faster processing, improved integration capabilities and embedded real-time data analytics. There are a range of proven voice integration options for SAP EWM that support various processes and IT strategies. All SAP voice and supply chain solutions are fully compliant with GDPR.

Brakes Group

“The voice system works alongside the SAP system, and from an operators, perspective, it works really well. We’ve been able to pick across all areas of the warehouse: ambient, chill and freezer, and we’ve seen consistency across all these areas.”

John Gibson

Operations Manager, Brakes Group

Key Integration considerations

There are two predominant ways to integrate voice technology into SAP EWM:

- Direct integration – SAP connects directly with the warehouse execution function
- Indirect integration – uses an intermediary middleware, when additional functionality such as dashboards and labor tracking is desired from the voice system

In order to determine which option is the best fit for you, consider the following for your operation:

1. The need for real-time communication or data exchange

A direct integration will enable real time data availability within the SAP system. The indirect integration may operate on a small delay, ranging from a few seconds to a few minutes depending on the system.

2. The strength of Wi-Fi connectivity, or the ability for workers to work off-network for extended periods of time

A direct integration relies on a strong Wi-Fi connection to transmit the orders from the WMS system to the worker. An indirect integration can provide tasks in bundles, allowing workers to function without Wi-Fi for significant periods of time.

“We had no prior experience with voice, yet this was the biggest win from our SAP implementation. Voice is the most productive solution we’ve ever implemented and it provided the fastest return on investment.”

Paul Courchene

Logistics Core Team Leader, Patterson

3. Availability of IT resources

Direct integrations are often supported with SAP-capable resources, where indirect integrations are supported by non-SAP resources.

4. Location of user accounts

In a direct integration, user accounts are created and retained in SAP. For indirect integrations, the accounts are stored in the middleware system.

5. The need for continuous SAP connectivity

Much like the Wi-Fi connectivity, direct integrations require a continuous connection to SAP. Indirect integrations can run tasks on their own for periods of time, then update information back.

6. Location of metrics and records including deliveries, warehouse orders and KPIs

A direct integration allows data to be created and retained within SAP. An indirect integration will store this information in the middleware system.

Patterson Companies

Patterson Companies distributes dental and animal health technology products, shipping around 25,000 products every day with around 92% on a same-day or next-day basis. Most of its processes used paper-based documentation, and it needed a solution to solve issues within its batch management and serial number matching. After migrating to voice, it experienced a 25% increase in productivity, a reduction in training from weeks to hours, and halved its checking procedures while maintaining high degrees of accuracy.



The future of voice

Historically, industrial voice technology was developed for case, piece or batch picking. As picking processes make up approximately 50% of DC labor costs, this area presents the most opportunities for ROI.

Now, voice is expanding into areas across the DC, such as:

- cycle counting
- stock replenishment
- carousel line
- truck loading
- and many more

Voice control applications are also being designed for either “person-to-goods,” or “goods-to-person” processes, both of which use automated retrieval systems.

Voice also makes a real difference to companies that have a major inspection or manufacturing component to their business, such as fleet maintenance, MRO, or highly customized manufactured goods. It allows technicians to operate hands-free, follow process steps sequentially and remain undistracted. They can feed more detailed voice feedback into the system, compared to the more rushed written or typed responses they may have provided through manual processes. This leads to improved data analysis on inspection results, on top of greater speed and accuracy.

“Voice gives you the flexibility and scalability to integrate further technologies such as vision-enabled glasses and robotics.”

Thomas Bleeker
Sales Director, Körber Voice



Critical success factors – why Körber?

Through our global presence, we can provide local support wherever you are located. We can also roll out SAP-enabled voice applications across your different international locations, leading to both multi-site integration and economies of scale. We have a unique depth of experience in integrating voice with SAP supply chain solutions, having rolled out extensive implementations in Europe, the USA, Asia and Australia. Additionally, we offer one of very few SAP-certified voice options on the market.

As a long-term SAP partner with SAP-certified integration products, we have focused on building supply chain process workflows and implementation methodologies for over 20 years. We understand that process is the main improvement driver and technology is the enabler, and also that no two businesses have the same processes. This approach has ensured the success of every project we undertake.

We achieve results through a tried and tested approach of an initial pilot project to demonstrate cost and efficiency savings, followed by a planned step-by-step roll-out. As technology evolves, we provide flexible upgrade options to take advantage of new capabilities while still leveraging your core SAP integration investment.

We can seamlessly integrate voice with your SAP landscape and scale it over time, allowing you to keep aligned with the changing needs of the business and providing you a unique cost advantage.

We pride ourselves on being a long-term partner, and as your business dynamics change, we are on hand to support your changing needs.

Conclusion

Speech is the most natural way to communicate, in both receiving instructions and providing responses. So, for DCs wishing to optimize their productivity, it is an obvious choice.

As artificial intelligence and machine learning advance, voice will continue to increase its range of applications and capabilities. Ultimately, integrating voice technology through SAP EWM allows DCs to operate more efficiently and safely from the ground up. Those who achieve best results continually review, update and evolve their processes. In this scenario, SAP Voice delivers a compelling business case.

Find out more

For more information on how SAP-enabled voice can transform your business, please visit our website.

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