

SYSPRO BlueSky

# The Limitless Possibilities of Digitalization

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	SYSPRO Enabling Digital Business Transformation



# SYSPRO BlueSky

## Turning New Ideas into Reality

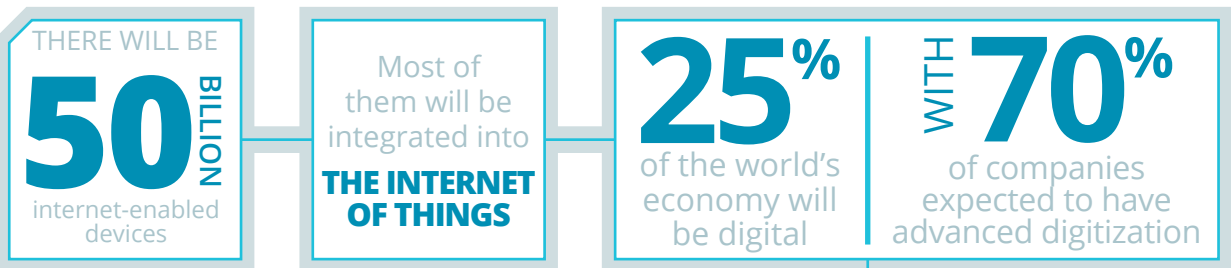
SYSPRO BlueSky is a marketing umbrella term we use to showcase emerging technologies which we believe can improve operational efficiencies in your business. SYSPRO turns BlueSky thinking into pragmatic solutions.

There's no doubt we're living in a brave new world. The boundary between digital and physical is continuing to blur. New technologies are disrupting the status quo and digitization is opening the door to infinite possibilities - with profound implications for the way companies will do business going forward.

### Platform-agnostic disruptive technologies and scalable solutions

SYSPRO BlueSky points you towards the tools and processes to integrate new technologies into your business - with effortless scalability - on a platform that can be used anytime, anywhere, on any device.

## 2020 VISION



## Business leaders not prepared to change will get left behind

The business and operational leaders of tomorrow will be the ones who prepare their organizations by investing in new skills and becoming students of technology and advocates of change—rather than passive observers and consumers of tools and hardware.

## Digital leaders outperform laggards on 3 financial measures

3-YEAR AVERAGE GROSS MARGIN



3-YEAR AVERAGE OPERATING MARGIN



3-YEAR AVERAGE PROFIT MARGIN



■ Digital Leaders (Top 25% of companies)  
■ Digital Laggards (Bottom 25% of companies)

Source: S&P Capital IQ, Keystone Strategy analysis (HBR)

“ The July 2018 release of SYSPRO 8 gives the ERP industry its most approachable implementations of the newest innovations: Machine Learning (ML) and Artificial Intelligence (AI). SYSPRO 8’s “AI to UI” engine includes an ML designer for non-technical users to design their own AI models, to give users the very specific insights, predictions, and anomaly detection they need – and weeds out what they don’t need. So users can build views that “learn” from repeated user actions around suppliers (likelihood of on-schedule delivery); production (predicting final job costs); cash flow (predictions in working capital management); and sales orders (contextual recommendation engine), and provide views, alerts, and remediation paths based on the combined experience of users.”

-Robert Mahowald, Senior Vice President, 451 Research Group

# How will Digitalization Affect the Technology Value Chain?

The demonstrable benefits of these new technologies will speed up their adoption as companies realize failure to do so will be detrimental to their long-term prospects. This brochure serves to introduce you to the most important of these technologies, and how they will affect your business going forward.

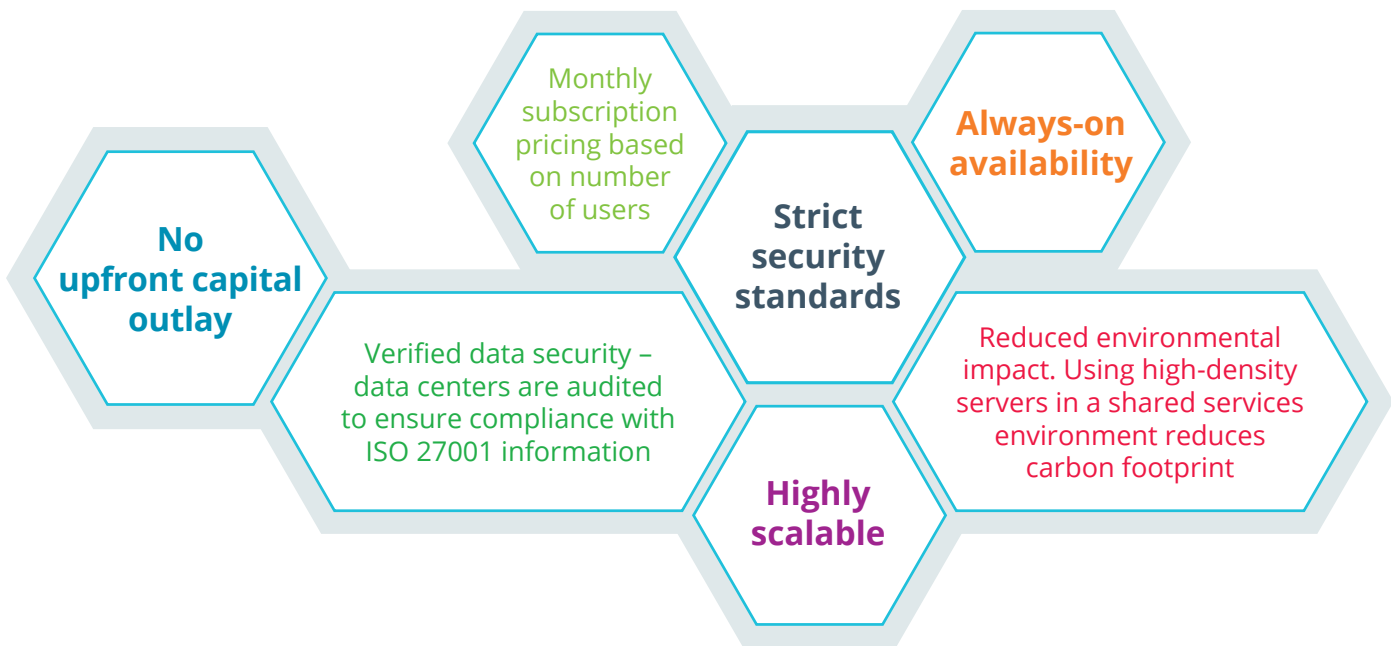


# Cloud

SYSPRO Cloud is an Infrastructure as a Service (IaaS) offering that seamlessly and securely takes care of all your core technology, storage and networking capabilities.

The full functionality of SYSPRO ERP is available through SYSPRO Cloud, which delivers an always-available, fully-managed ERP infrastructure, allowing you to focus on your core business without worrying about having to manage your IT.

You may choose to provide your own SQL licence Infrastructure as a Service (IaaS) or you can take advantage of the Microsoft Azure SQL Platform as a Service (PaaS). Consumption and costs are based on usage so you only pay for what you use. SQL Azure is as scalable and elastic as your business growth.



## SYSPRO has taken simplifying your success one step further by integrating Office 365

With SYSPRO ERP and Office 365 integration you don't need a separate desktop installation of Office 365 to enjoy all its great features, including the ability to export to Excel and Office in the cloud and integrating industry-leading enterprise reporting and core business processes into your e-mail system.



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### How You Benefit

Enables you to save money, reduces your impact on the environment, and improves your IT services by removing your IT burden, allowing you to focus on your core business at a fixed monthly cost.

# Mobility

SYSPRO Espresso is a ground-breaking, user-friendly mobile ERP application that gives you access to your SYSPRO business information wherever you are, 24/7. SYSPRO Espresso works seamlessly on any popular mobile device – and even on your desktop via a browser.

For product-focused companies, establishing the most appropriate distribution strategy is key to success. With the mobile ERP capabilities of SYSPRO Espresso, you can have complete control over the planning and management of every facet of your business.

## Benefits of adopting the SYSPRO Espresso mobile solution:

- Increased productivity and better decisions**  
Search and retrieve up-to-date information whenever you need to
- Empowered employees**  
Work and access secure information anywhere, anytime
- Improved customer engagement**  
Provide real-time sales and service information
- Streamlined supply chain**  
Supplier and inventory data at your fingertips
- Tailored experience**  
Customize the look and experience of SYSPRO Espresso applications
- Always accessible**  
Even when not connected, SYSPRO Espresso applications work offline and can synchronize later when you have a connection
- Library of applications available**  
There are additional applications for use on Espresso via the community platform of the SYSPRO App Store
- Extensible experience**  
Extend on the existing Espresso capabilities such as real-time monitoring and synchronization of IoT devices across all platforms

## How You Benefit

Enables you to use applications that will work any time, any place, and on any popular device, providing instant and secure access to information about your customers, suppliers, inventory items, and other key business information.



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# IoT and IIoT

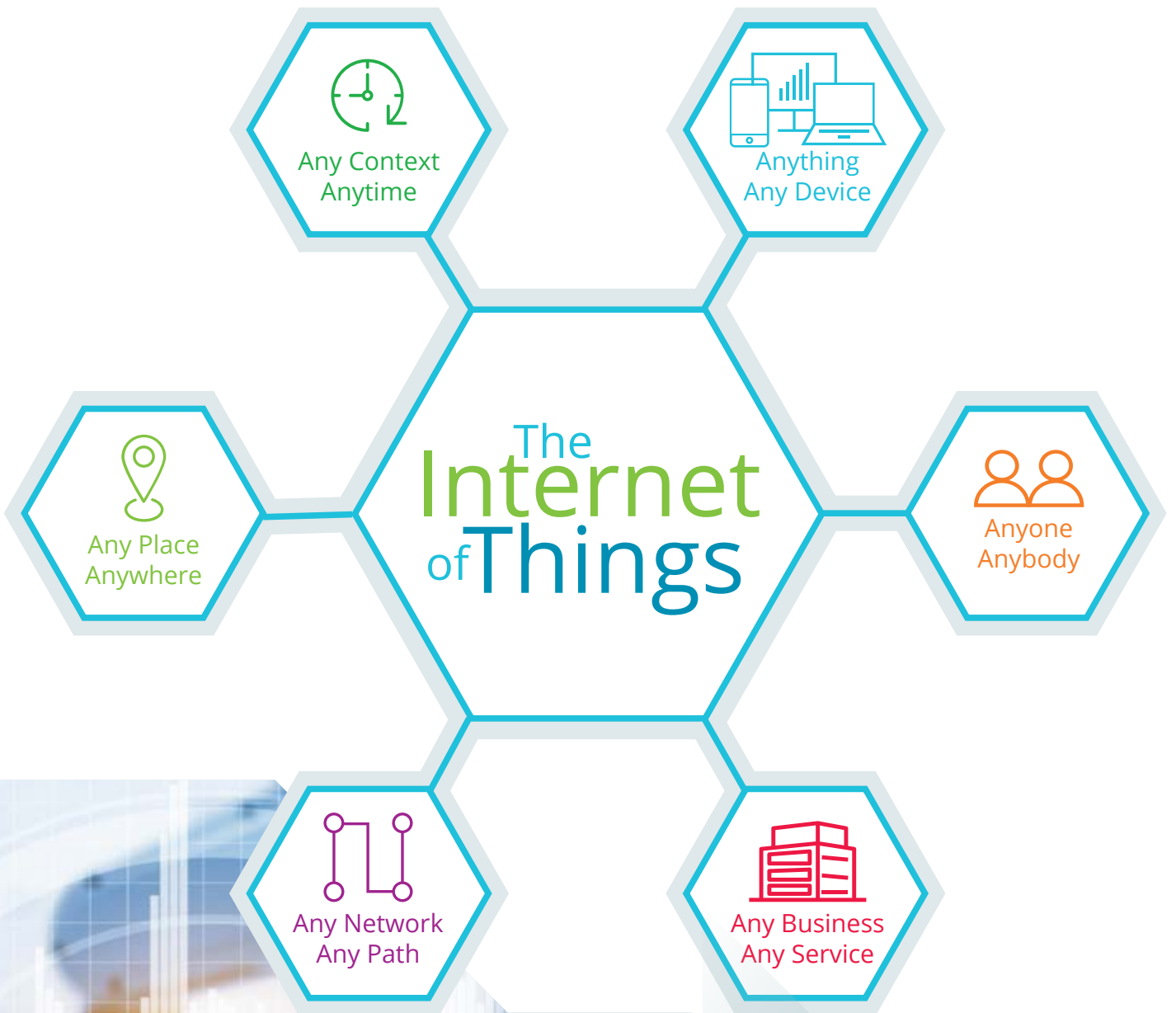
The Internet of Things (IoT) is the concept of connecting any device with an On/Off switch to the internet and/or to each other, in order to create a network of physical devices, vehicles, home appliances, and other items embedded with electronics, software, sensors, actuators, and network connectivity, and enable these objects to connect and exchange data.

The driving philosophy behind IoT is that smart machines are better than humans at accurately, consistently capturing and communicating data. This data can enable companies to pick up on inefficiencies and problems sooner, saving time and money and supporting business intelligence efforts. In manufacturing specifically, the Industrial Internet of Things holds great potential for quality control, sustainable traceability, and overall supply chain efficiency.

## The Industrial Internet of Things (IIoT)

More and more companies are incorporating AI, especially machine learning, into their IoT applications to increase intelligence capabilities. These technologies automatically identify patterns and detect anomalies from the sensors and data generated from the machines such as temperature, pressure, humidity, air quality, vibration, and sound. Companies are also finding that machine learning has significant advantages over traditional business tools for analyzing IoT data, including the ability to make operational predictions 20 times earlier and with far greater accuracy.





## Key Uses for IoT and the Industrial Internet of Things

The Internet of Things (IoT) using sensors will allow machines to talk to each other. Industrial Internet of Things monitors activities and conditions and provides remote control functions, but these capabilities can extend far beyond what IoT currently provides. With the Industrial Internet of Things, individual items, cases, pallets, containers, and vehicles can be equipped with auto identification tags and tied to GPS-enabled connections to continuously update location and movement. Manufacturing execution systems are embracing the Industrial Internet of Things technology to enable closer monitoring of more parameters, and more sophisticated control of processes and quality as a result.

SYSPRO has the means to interface into the Internet of Things through the use of our RESTful<sup>1</sup> APIs. Within the Microsoft Azure hub you can connect telemetry sensor data from your IoT devices into SYSPRO utilizing SYSPRO's RESTful APIs. This provides you with the integration capability of your devices to send key messages that will initiate the workflows for transactions within your ERP.

### <sup>1</sup>RESTful APIs

REST stands for Representational State Transfer. RESTful APIs offer a great deal of flexibility, are designed to take advantage of existing protocols, such as HTTP when used for web, to transfer data.



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## How You Benefit

Unprecedented level of visibility throughout the supply chain, using devices to extend existing manufacturing and supply chain monitoring and management systems to provide broader, more detailed visibility and enable automated controls and increasingly accomplished analytics.

# Socialization

This interface is simple to use, familiar, and especially desirable for millennial business owners.

Social ERP provides collaboration capabilities to follow and track key data, take action, and communicate relevant information to internal and external stakeholders, and creates a more harmonious working environment.

Bringing the social media aspect into the core of ERP, SYSPRO Harmony answers the needs of the modern-day workforce by incorporating a familiar social media-type interface on which to do business. Embedded within the SYSPRO software, Harmony has been designed to simplify the user experience and increase user engagement.

Harmony allows posting and collaboration within the network of the organization using real-time information from the SYSPRO database. By simplifying messaging in Harmony, you are creating conversations and collaborating with other areas of your organization, allowing you to quickly and effectively achieve your work by harmonizing events or data to relevant people, and ultimately to your organizations' beat.

Harmony provides the equivalent of a newsfeed or notifications, auto-populate conversations with relevant information, based on key ERP components the user chooses to 'follow'. Instead of needing to go into the system to retrieve pertinent information, the system intelligently pushes it to you, alerting the user of activities related to those components.

Through a rules-based engine, it surfaces and pushes relevant business and operational information to the right people, thereby encouraging enterprise-wide collaboration, which in turn improves productivity throughout the organization.

## How You Benefit

Improved user experience, system engagement, and collaboration, by creating a working business environment that reflects current technology behavior and usage.



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# Artificial Intelligence - from AI to UI

With the introduction of digital and embracing new message streams from digital, a new approach to making sense of all this data is needed. Artificial Intelligence and Machine Learning (the engine behind AI) gives computers the ability to make sense of and learn from data to perform specific tasks without manual interference. It provides analysis and insights to users, addressing the large amounts of structured and unstructured business and industry data that companies increasingly need to consider as part of their decision-making process.

## AI to UI

SYSPRO provides an underlying machine learning and artificial intelligence engine that, together with our flexible cards infrastructure, instantly surfaces anomalies, trends, patterns, and developments, together with business insights directly to the user interface. By surfacing these insights directly to the users processing transactions, their attention is drawn to aspects they may not have been aware of.

This practical application of ML and AI provides an improved user experience and enables organizations to take advantage of these new technologies to become more efficient.

- The ML and AI engine is available out-of-the-box for both cloud or on-premise deployments
- Design you own AI models simply with an easy to use ML Designer
- Attach AI models anywhere in SYSPRO's web based interface, Avanti.



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## How You Benefit

Greater control and quicker decision making, as 'big picture' insights across your business instantly surface anomalies, trends, patterns and developments.





## Uses

In a business context, when coupled with the power of ERP, AI can answer questions about your business you have yet to ask.

- **Predictions:** Use historical data to predict the future. As an Example, from a seasonal perspective, you could predict when a customer might purchase a particular product, or use historical data to predict when a customer might default on payments based on past behavior.
- **Anomaly Detection:** AI trawls through your database detecting the norm for particular users, and compares this to all transactions, for example, posting of sales orders, requisitions, and purchase orders. If anomalies are found the relevant people are immediately alerted. This is typically used to capture fraudulent transactions or even incorrect key strokes.
- **Computer Vision:** AI has the ability to analyze stills and video images in real time. Not dissimilar from that which is currently used by the autonomous car to detect objects, with SYSPRO ERP, this capability can assist with health and safety regulations on the factory floor and for quality assurance. For example, using facial recognition to detect who is authorized to use machines or forklifts; or taking pictures of products as they come off the production line to provide real-time quality checks.
- Additional practical applications of AI and Machine learning with SYSPRO include the following:





## Big Data and Analytics

Driven by specialized analytics systems and software, big data analytics can point the way to various business benefits, including new revenue opportunities, more effective marketing, better customer service, improved operational efficiency, and competitive advantages over rivals.

Big data analytics applications enable data scientists, predictive modelers, statisticians and other analytics professionals to analyze growing volumes of structured transaction data, plus other forms of data that are often left untapped by conventional business intelligence (BI) and analytics programs. This encompasses a mix of semi-structured and unstructured data -- for example, internet clickstream data, web server logs, social media content, information from customer emails and survey responses, mobile phone records, and machine data captured by sensors connected to the Internet of Things.

On a broad scale, data analytics technologies and techniques provide a means of analyzing data sets and drawing conclusions about them to make informed business decisions.

### How You Benefit

By harnessing big data with predictive analytics, provides a means of analyzing data sets and drawing conclusions about them to enable strategically informed decisions.



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# Bots

One offshoot of Artificial Intelligence is an intelligent and human-like chatbot that can answer, analyze, and predict queries quickly and accurately.

Chatbots are fast becoming a broad technology initiative for many organizations. This emerging platform has unlimited potential for business applications as it can analyze information from various sources to create efficiencies, improve processes, and increase revenue, all with limited human intervention.

Chatbots integrate with legacy systems and use natural language processing to create real-time conversations and information exchanges with users. According to a recent study, 80% of executives were planning to use chatbots in their sales and marketing departments by 2020.

Chatbots that answer and even predict customer queries will free up resources within businesses.

An AI web robot already resides within the SYSPRO ERP ecosystem (SYSPRO's digital citizen) and streamlines business functions through natural conversations with the Bot.

## How You Benefit

Significantly improved customer service by providing customers and suppliers within your supply chain with an always-on and consistent self-service; predicting and responding to queries quickly and accurately; and freeing up resources within business.



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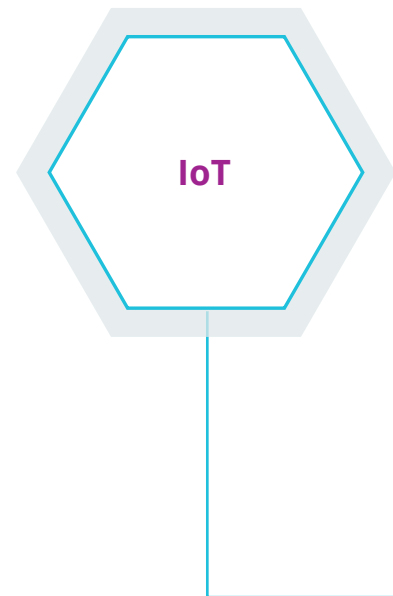
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# SYSPRO Enabling Digital Business Transformation

SYSPRO believes that digital transformation in industry is key to remaining competitive and have adopted specific emerging technologies and made them available so as to enable our customers on the journey of digital transformation, at their pace.

Here are some of the ways in which SYSPRO has provided feasible, pragmatic, and value-adding application of emerging disruptive technologies to enable digital business.

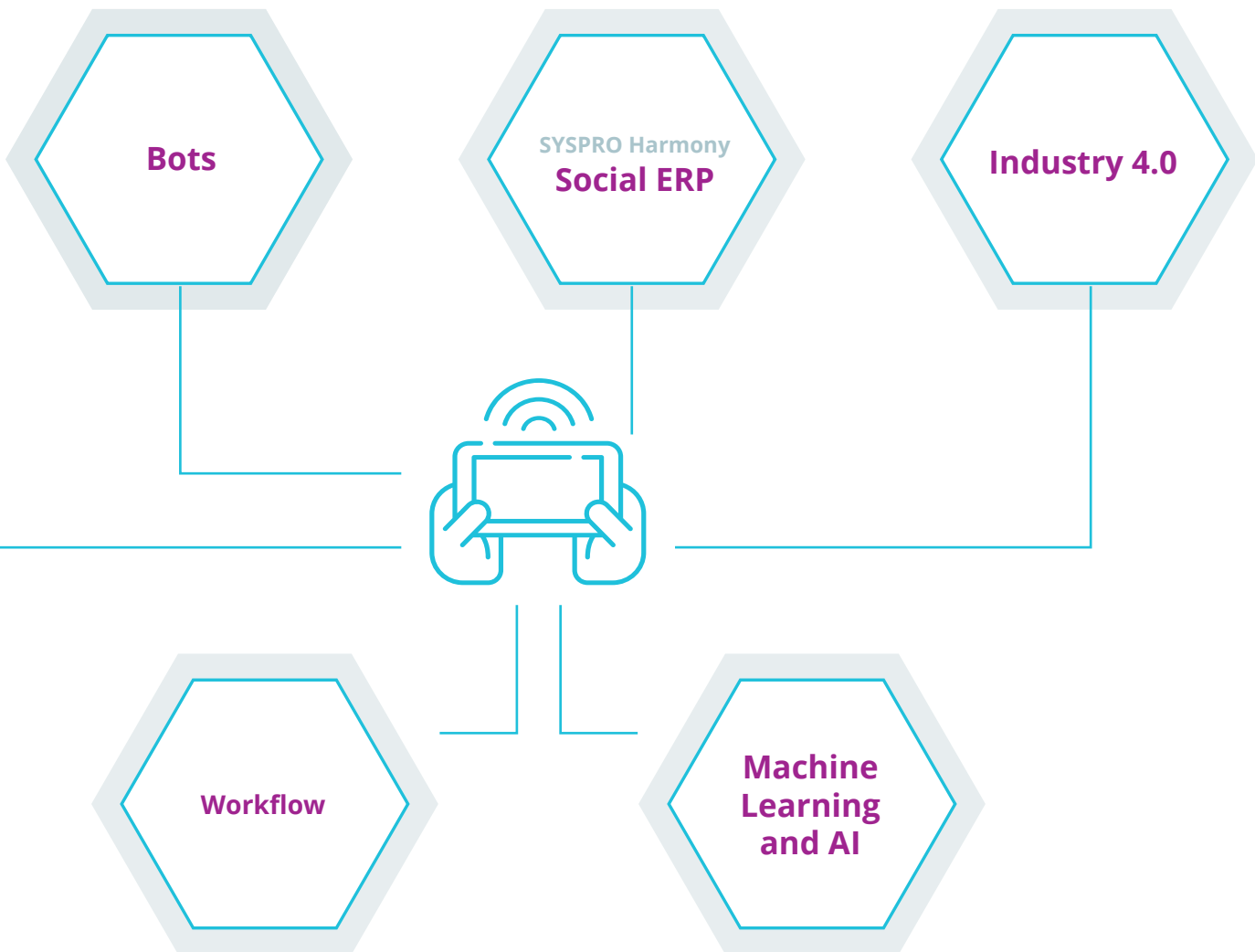
The enablement of integrated digital devices, (IoT) working collaboratively and contextually with the SYSPRO business solution.



The provision of digital citizens (Bots) across the organization, be they internal or supply-chain focused, enabling engaging connection points between stakeholders and the SYSPRO business solution. With the application of Bots businesses are able to evaluate which of their repetitive processes they can 'train' the Bots to perform those skills as proficiently as any person would, and to deploy them to enable scaling.

Applying the way modern and emerging generational cohorts are used to engaging with systems and the world around them, by allowing all to interact with the SYSPRO business solution in the same manner. This encourages greater collaboration amongst peers, and is known to improve productivity.

The pragmatic application of Industry 4.0, ensuring organizations today, with current equipment and factories are able to readily connect and harmoniously engage with the SYSPRO business solution, embracing IIoT and traditional shop floor technologies.



Workflow connects services, manages events, and orchestrates your digital moments.

With the introduction of digital and embracing new message streams from digital, a new approach to making sense of all this data is needed. SYSPRO makes use of Machine Learning and Artificial Intelligence to make sense of data and provide analysis and insights to users, addressing the large amounts of structured and unstructured business and industry data that companies increasingly need to consider as part of their decision-making process.

## SYSPRO Connected Services

SYSPRO provides RESTful APIs to extend or integrate into your SYSPRO ERP application. Whether you are integrating to intelligent devices such as IoT, business partners across your supply chain, or to other systems be they on-premise or in the cloud, SYSPRO APIs and Workflow provide flexible interactions and integrations that orchestrate data, messages, and business moments.

### It encourages:

- Integration with other line-of-business, third-party products, and online platforms such as e-commerce sites
- A consolidated view of businesses and operational aspects – enabling unified workflows
- Information interchange with external devices such as tablets and scanners
- Easier collaboration and information sharing with business partners
- Digital moment, event, and workflow orchestration
- Future-proofing your business through seamless upgrade technology (version-less software)
- Data exchange without compromising on data integrity and security
- Singular and automated data entry, reducing duplicated and inaccurate records
- Enabling data to be stored in one place for consolidated reporting and analysis.

1

The Right  
Information

2

To the  
Right Person

SYSPRO  
Connected Services  
are comprised of  
three service areas  
to provide:

3

At the  
Right Time

## 1. Data Connector Services:

SYSPRO's e.Net APIs provide integration to other applications for the extension of your SYSPRO ERP application across the entire ecosystem, within and beyond your enterprise and makes use of RESTful<sup>1</sup> technologies to facilitate the integration and interactions between systems.

<sup>1</sup>RESTful APIs

Stands for Representational State Transfer. RESTful APIs offer a great deal of flexibility, are designed to take advantage of existing protocols, such as HTTP when used for web, to transfer data.

### This allows:

- Better communication and data transfer over the Internet
- Simplified network administration and communications infrastructure
- Multiple platform connectivity and availability – Windows, web, mobile
- Accessibility from anywhere at anytime
- A simplified development environment in which developers can customize SYSPRO's business functionality to suit end-user requirements
- Cloud-enabled business models, operational structures, and business systems to be streamlined and connected.

## 2. Workflow Connector Services:

For organizations concerned with ensuring business processes are conducted properly, the SYSPRO Workflow Connector Service maintains workflows and activities, and allows for collaboration between people, documents, software, and systems, and can stretch across various organizations and around the world.

SYSPRO provides a set of tools for organizations to orchestrate their own workflows according to their business processes, simply and effectively.

With SYSPRO's Workflow Connector Service you have the ability to initiate, progress, control, and monitor your business processes from the cloud on any device, any platform 24/7.

## 3. Notification Services:

SYSPRO's Notification Service on Espresso keeps everyone in your supply chain up-to date and in the know by sending alerts via a push notification to mobile devices.

When a user is alerted to an issue, they have immediate access to the most pertinent and relevant information without having to navigate to it. By notifying users of anomalies detected, their attention is directed to aspects they may not have been aware of, enabling them to take immediate action when it matters most, in real-time.

With SYSPRO's Notification Services, you can:

- Alert users to critical business occurrences
- Increase productivity and business performance with actionable insight
- Enable proactive execution of critical tasks.



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