



The Era of Digital Transformation in Industrial Manufacturing

Survey Report, August 2022



Table of Contents

Introduction and Key Findings	3	The ERP System Capabilities Throughout the Production Processes	14
Survey Findings	8	Availability of Realtime Information for Accurate Forecasting, Planning, and Costs	15
Budget for ERP Solution, 2021 Vs. 2022	9	Utilization of Mobile Devices for ERP Processes	16
Top Challenges in the Manufacturing Processes	10	Top Features in Mobile Devices Contributing to Efficient Work Routine	17
Top Challenges in ERP System's Flexibility, Agility, and Scalability	11	Demographics	18
Availability of Real-Time Visibility of the Entire Inventory Processes	12	About Priority Software	21
Availability of Real-Time Visibility of the Entire Shopfloor Production Processes	13		



Introduction and Key Findings



Introduction

Industry 4.0 and digitization has accelerated growth across the manufacturing industry. In fact, the global smart manufacturing market is expected to grow from USD 277.81 billion in 2022 to USD 658.41 billion in 2029 at a CAGR of 13.1%, according to [Fortune Business Insights](#).

During COVID-19, many manufacturing companies realized the need to redesign their processes and systems in order to survive and grow. According to [McKinsey](#), today's supply chain management, including manufacturing, rests on the demands of consumers. The challenges outnumber the solutions, from fluctuating consumer behaviors, mounting competition, and the quest to become more flexible while minimizing costs and maximizing growth.

Despite efforts to sustain omnichannel supply chains, the pandemic forced suppliers to restructure their manufacturing and operations. New consumer behavior requires dynamic supply chain management, where businesses can drive economic value and growth against the risks of disruptive events.

The improvements that can be realized through data-driven decision making are too important to overlook. However, using data to make decisions requires that the proper digital foundations are in place, something many manufacturers currently lack. As a result, manufacturers are now viewing cloud as the platform to drive tangible business outcomes and digital transformation.

As Enterprise Resource Planning (ERP) is the backbone of manufacturing organizations; shifting to SaaS and cloud-enabled ERP applications is essential to compete in the digital economy.



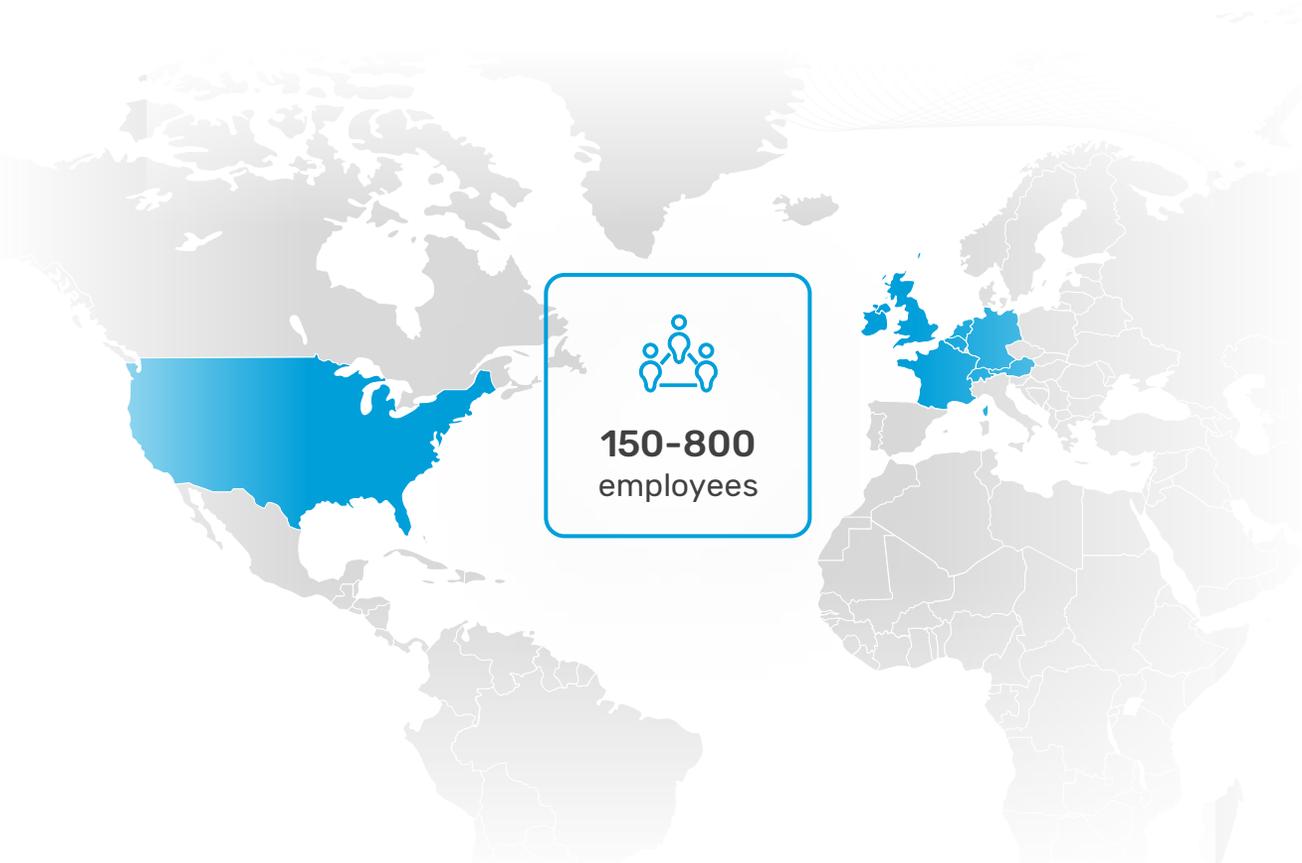
Methodology

Following COVID-19, we decided to launch this survey of 300 C-suite executives in manufacturing companies with between 150-800 employees working in North America and Western Europe, to find out the real status of manufacturing companies' digital transformation.

We asked about their budget investment in their ERP systems this year and their ability to address current prominent challenges and prepare for future challenges, too. The survey was completed by an independent survey company, Global Surveyz, with all results collected during April-May 2022.

Our assumptions were that most manufacturing companies in highly developed territories have already implemented or are in the middle of implementation cycles with new innovative technologies, such as cloud-based ERP platforms to extend their capabilities. However, we recognized that mobile ERP technology is still in its infancy, and we hypothesized that it would have low existing adoption in most manufacturing operational processes.

The survey covers many aspects of manufacturing capabilities and processes, including their ERP flexibility, scalability and agility, the



importance of real-time data, the use of mobile devices, and more.

The average amount of time spent on the survey was 5 minutes and 06 seconds. The answers to the majority of the non-numerical questions were randomized, in order to prevent order bias in the answers.

Key Findings



96% of today's Manufacturing leaders are experiencing challenges

The C-suite executives report many challenges in manufacturing, despite all of our respondents having adopted ERP technology. Top challenges include limited planning capabilities, limited flexibility, and manual processes, which can lead to communication breakdowns, slow cash flow and operations, and the failure to meet aggressive time-to-market requirements. Being able to adapt to change is a priority for achieving growth, however, to achieve this, companies should consider that a shift in tools and processes is unavoidable.



An open, connected ERP system is a must to achieve innovation and growth

91% of C-suite executives admit that their ERP system has challenges in terms of agility, flexibility and scalability, in particular, scaling ERP with the pace of growth (55%), product personalization (45%), and meeting dynamic customer demand (40%). Flexibility, agility, and scalability are all differentiators for being able to ensure a connected ecosystem of technology and processes to support various needs across the business, including fast response to market changes. Without an open ERP system, data and processes exist in a silo, and business growth and innovation are stunted.



Half of companies don't have real-time inventory or shopfloor visibility

50% of companies don't currently have full real-time inventory visibility, and 57% don't have complete real-time visibility over the shopfloor. However, just 3% and 2% respectively believe that this isn't required. Real-time visibility is set to be table stakes for manufacturers, as accurate inventory data can improve forecasting while lowering the costs of stocking, logistics and shipping. In addition, real-time streaming of shopfloor data supports optimized order delivery, scheduling and communication across departments.



Manufacturers are still lagging behind Industry 4.0 standards

Respondents lack the ability to use their ERP systems for collaboration, analysis, and sharing. For example, over 85% of companies have an ERP which doesn't fully support collaboration. 65% can't achieve full data analysis, which is a major component of modern manufacturing, allowing for predictive maintenance, process improvements, and more. Without these key capabilities, organizations will struggle to respond to market conditions, inform strategic decision-making, and sync information between stakeholders.



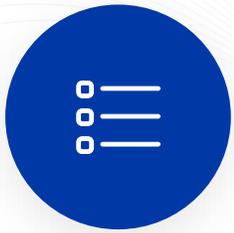
Availability of real-time information for accurate forecasting, planning, and costs is a critical success factor

Most manufacturers see the impact of real-time data on accurate production forecasting, planning and cost management. 72% call it out as a contributor to these goals. With greater visibility into what's happening in areas from inventory to the shopfloor, there's no doubt that manufacturers will be able to more accurately plan and forecast, therefore optimizing cash flow and reaching specific business goals.



Mobile ERP is becoming an important part of the product process for Manufacturing leaders

The future of manufacturing is a connected factory where all elements can communicate, facilitating enhanced visibility and control. The Industrial Internet of Things (IoT) makes this vision possible through sensors interconnected with machines, software, and applications. Mobile ERP functionalities allow manufacturers to input, access, and analyze all of this connected data using mobile devices instead of workstations. By viewing mobile adoption rates for a wide range of processes across the manufacturing industry, we can see that mobile technology will be a key player in kickstarting or accelerating the industrial digital revolution.



Survey Findings



Budget for ERP Solution, 2021 vs. 2022

The average budget in 2022 has increased for **82%** of companies by an average of **20%**, compared to 2021 budget.

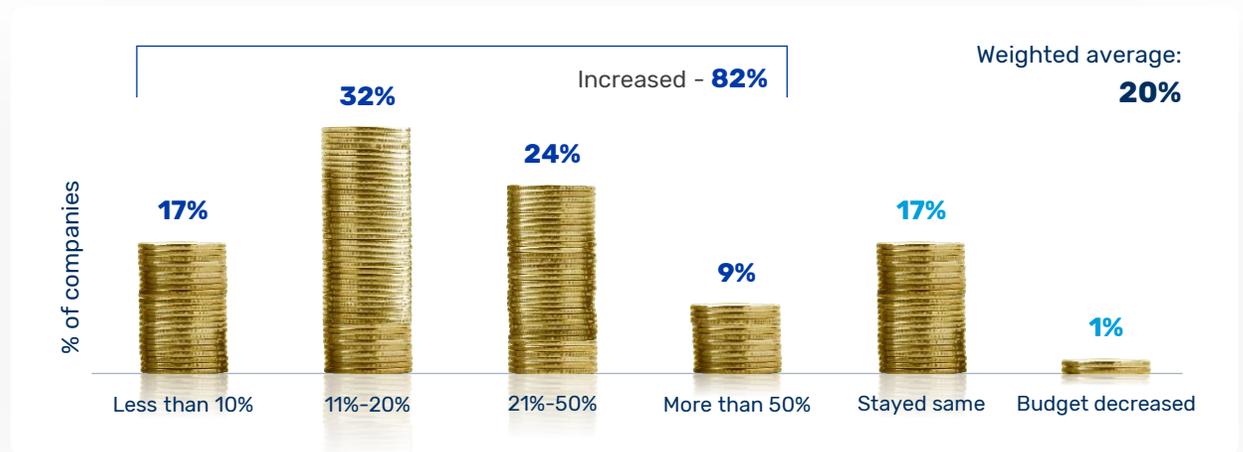
It's clear that the vast majority of manufacturers acknowledge the need to increase their ERP budget investment. In order to support digital transformation, stay aligned with the dynamic market, and drive growth into new markets, the increase in budget is essential.

*Percentages do not add up to 100% due to rounding up of numbers

Figure 1: 2021 ERP Solutions Budget



Figure 2: 2022 ERP Solutions Budget Change



Top Challenges in the Manufacturing Processes

96% of companies admitted they have challenges in the manufacturing process.

The top challenges are limited planning capabilities (46%), limited flexibility in product modifications/changes (44%), and manual processes that are time and resource consuming (43%).

When we look at this data broken down by region, limited planning capabilities is by far more challenging in Europe (54%) compared to North America (36%).

For North America, the top challenge is manual processes that are time and resource consuming (53%) which in contrast, is only a challenge for 36% of European companies.

Manufacturers need to understand that in order to address these challenges, a change in infrastructure and processes is inevitable. Otherwise, if not dealt with correctly and efficiently, these challenges can lead to major drawbacks in operations, slow cash flow, communication breakdowns, and failure to meet time-to-market requirements.

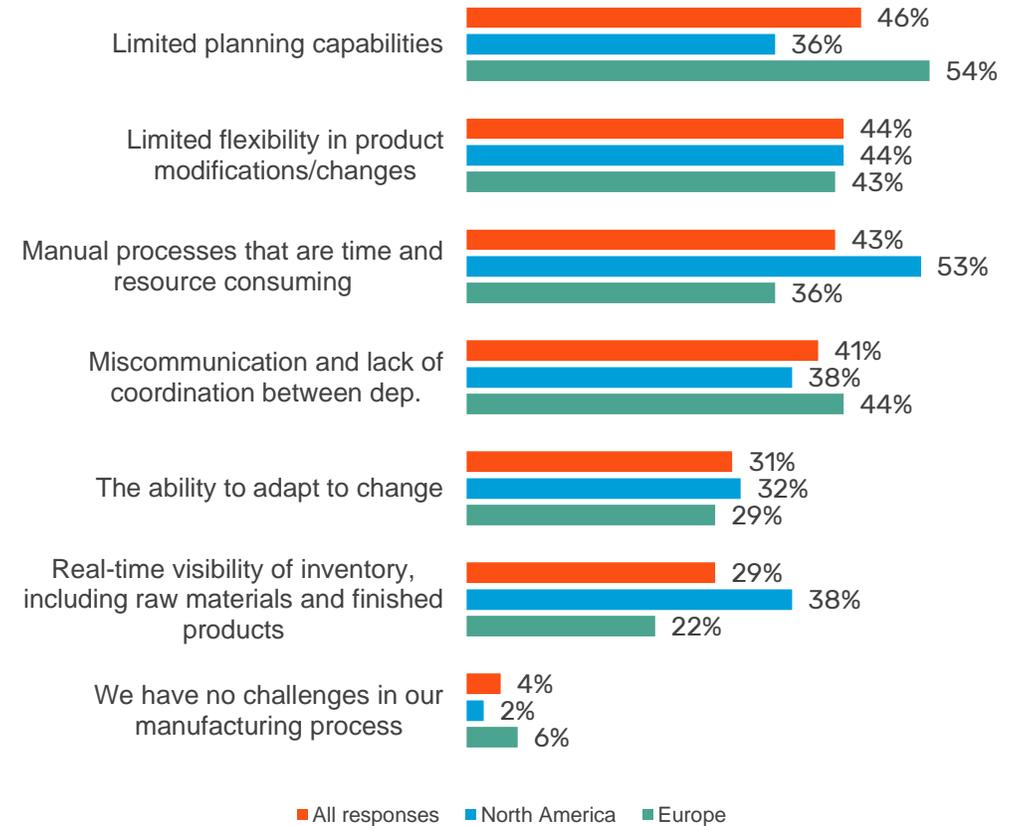


Figure 3: Top Challenges in the Manufacturing Processes

*Question allowed more than one answer and as a result, percentages will add up to more than 100%

Top Challenges in ERP System's Flexibility, Agility, and Scalability

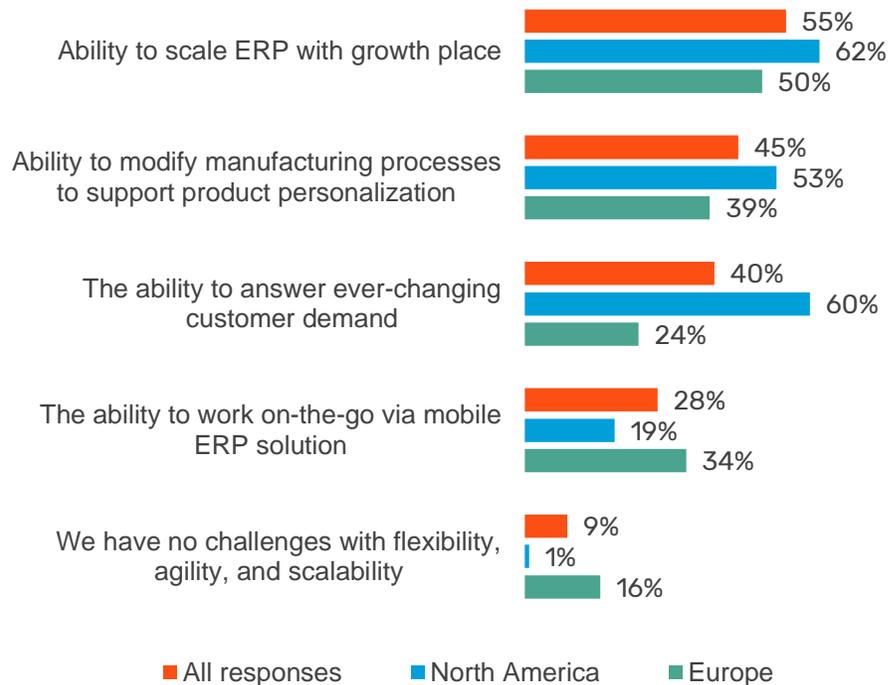


Figure 4: Top Challenges in ERP System's Flexibility, Agility & Scalability

91% of companies admit to having challenges in their ERP system's flexibility, agility, and scalability.

The top challenges are the ability to scale ERP with the pace of growth (55%), ability to modify manufacturing processes to support product personalization (45%), and the ability to answer ever-changing customer demand (40%).

All three of these top challenges are more of an issue for companies from North America than Europe.

The need for a flexible and open ERP system rises from the understanding that no ERP system exists in a silo, and no one solution can possibly answer all the demands of today's businesses. Instead, today's manufacturers need to choose multiple best-of-breed systems and third-party vendors that work together.

As a result, an open ERP system that allows for connectivity is a must for any growing business, allowing for both innovation and agility.

*Question allowed more than one answer and as a result, percentages will add up to more than 100%

Availability of Real-Time Visibility of the Entire Inventory Processes

When it comes to the inventory process, half of companies (50%) are not equipped with a technology that provides real-time visibility over the entire process.

When deep diving to see responses by region, more companies from North America (64%) are equipped with this technology compared to Europe (38%).

Not having real-time visibility into inventory means companies are unable to optimize warehouse stocking and keep costs low, therefore, they cannot ensure they meet customer demand. Manufacturers are also not able to use their inventory data to help lower logistics and shipping/ inventory carrying costs.

An ERP system that supports real-time data enables brands to increase their forecasting rate significantly and has a dramatic effect on the warehouse's ability to manage stock not only for current orders but on future ones as well.

For example, an ERP system with AI and machine-learning capabilities enables manufacturers to manage cross-company processes with business intelligence and insight for better and more accurate management.

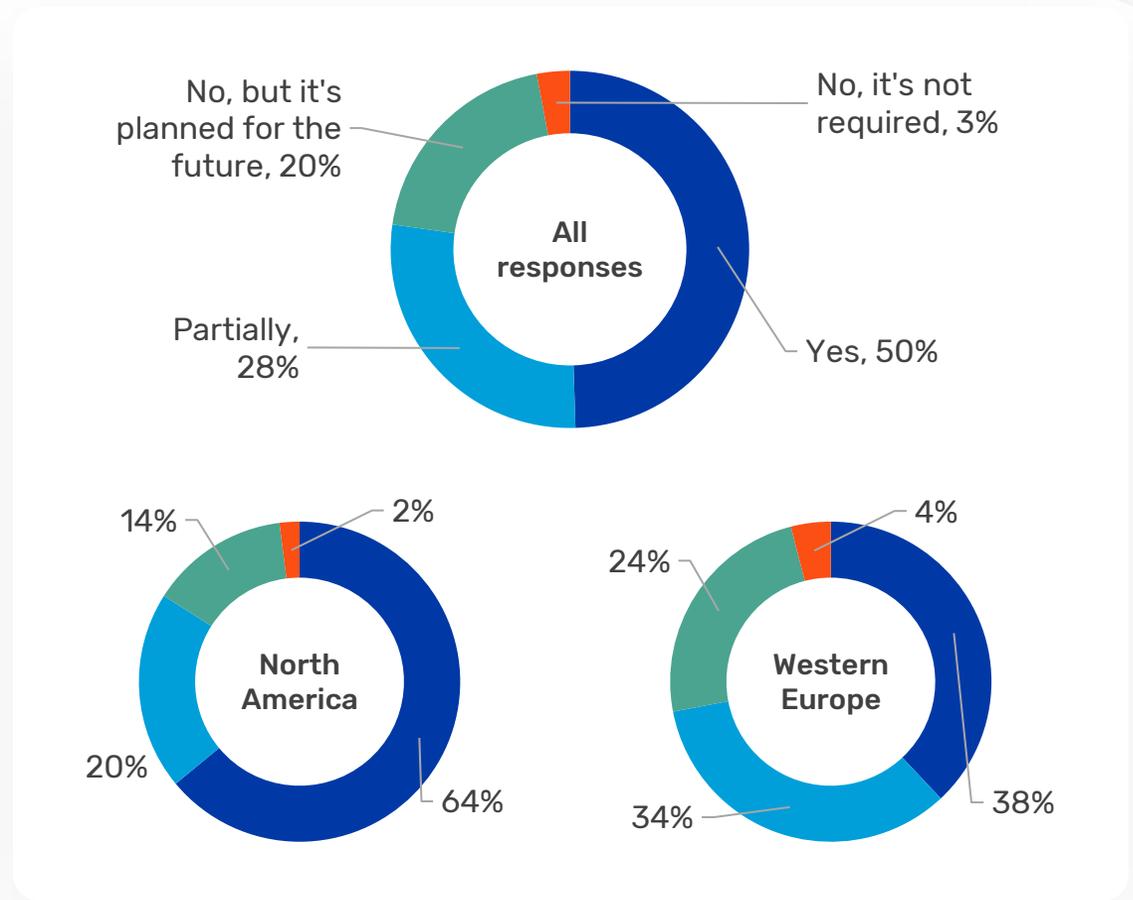


Figure 5: Companies' Ability to Provides Real-Time Visibility to the Entire Inventory Processes

Availability of Real-Time Visibility of the Entire Shopfloor Production Processes

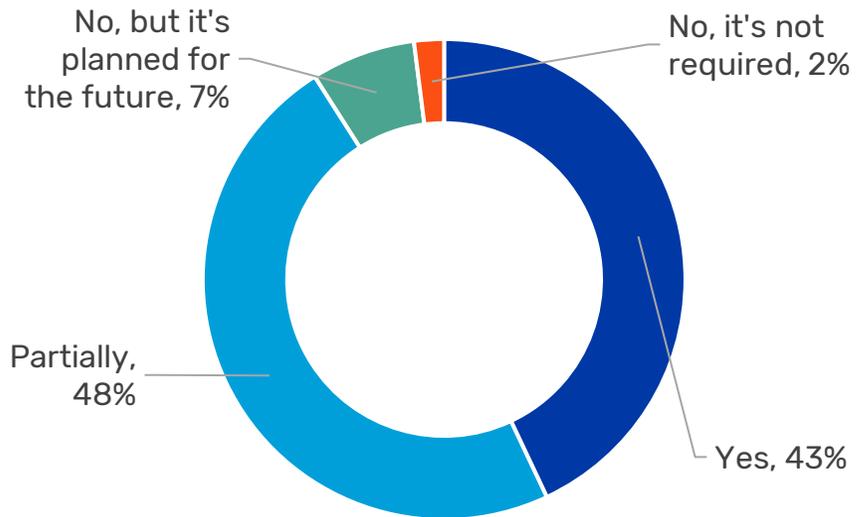


Figure 6: Companies' Ability to Provides Real-Time Visibility to the Entire Shopfloor Production Processes

When it comes to the shopfloor production process, only 43% of companies are equipped with a technology that provides real-time visibility over the entire process.

Shopfloor management requires real-time data streaming for optimized order delivery, production scheduling, communication between different stakeholders, and more.

Shopfloor visibility and control improves communication between departments, ultimately allowing teams to pursue and fix issues collaboratively. Without this visibility, decision-makers may be the last to know when there are issues or problems occurring on the shopfloor.

An ERP that enables real-time management would support such optimization to avoid malfunctions caused by misinformation and shorten the response time to meet essential time to market requirements.

The ERP System Capabilities Throughout the Production Processes

We asked survey respondents if their ERP system enables their organization to have a full view of their operations with the ability to collaborate, analyze and share their organization’s production processes.

Analyze is the top capability available, with 35% of respondents indicating this is fully available throughout their production processes.

While collaboration is highly important, it is lagging behind with only 15% indicating they have this capability fully right now.

Connected data collection is changing the manufacturing industry, reducing human error and allowing for faster decision-making and process changes, such as navigating through complex processes, and improving overall functionalities.

The ability to analyze, share and collaborate enables businesses to respond better to market conditions, improve strategic business management, and make sure all aspects of the process are synced between different stakeholders, all through one mastermind platform.

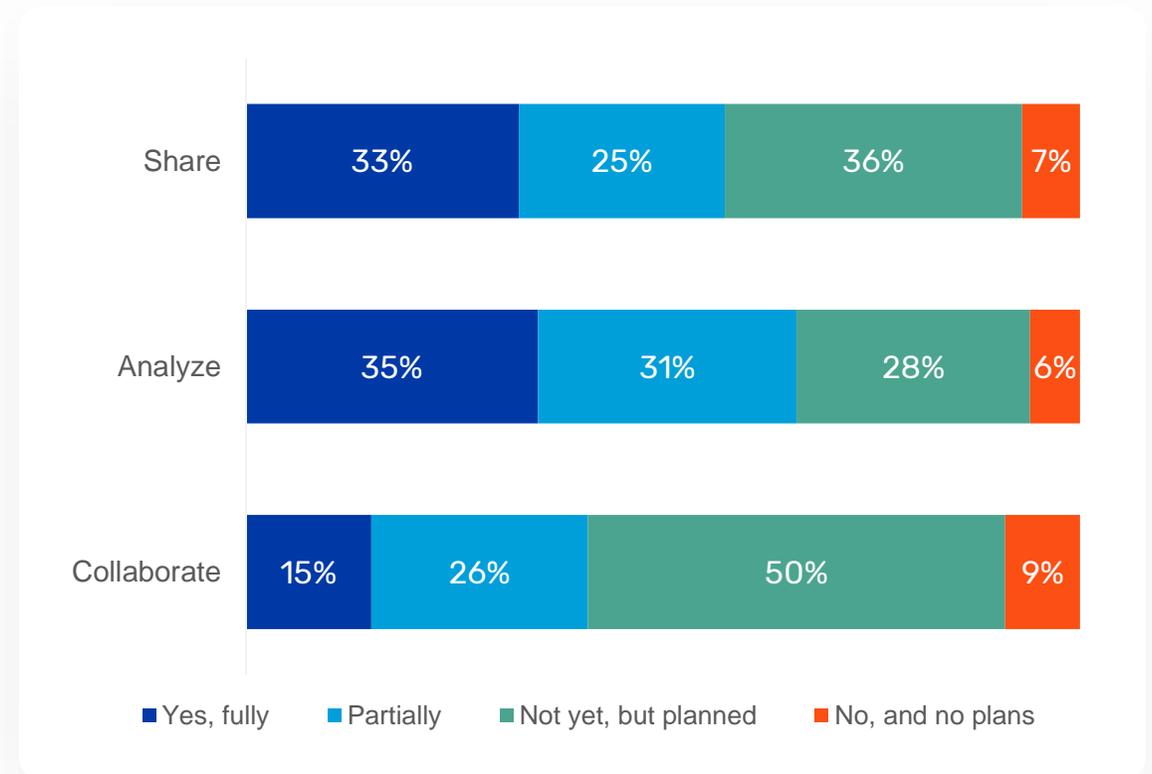
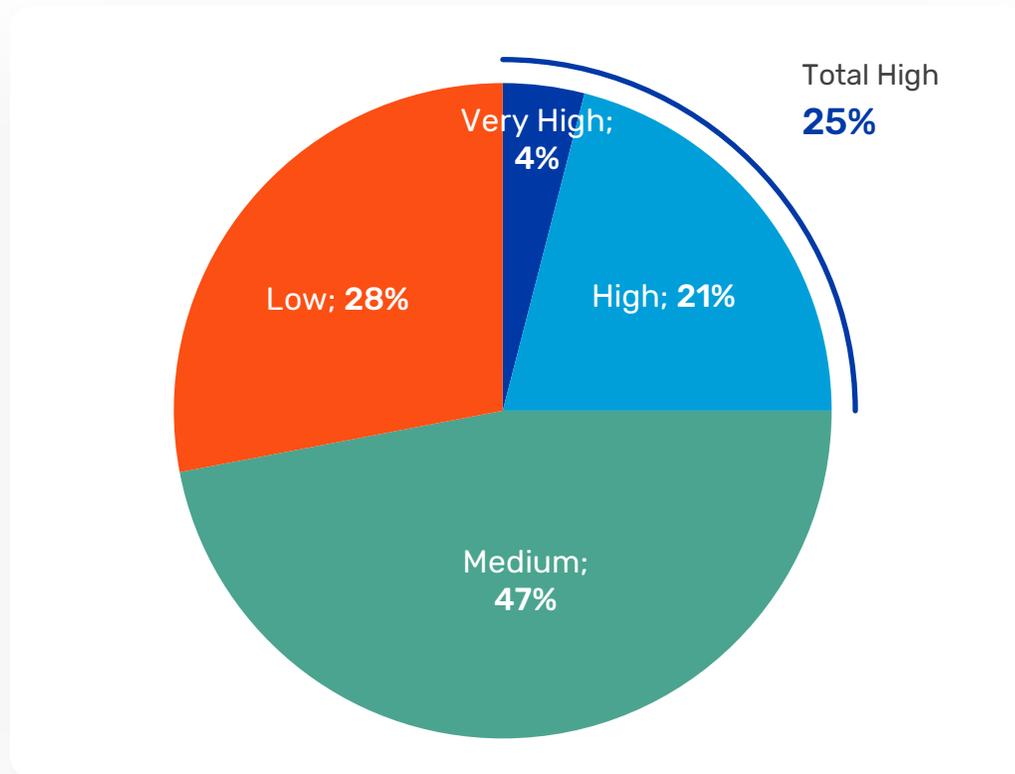


Figure 7: The ERP System Capabilities Throughout the Production Processes

Availability of Realtime Information for Accurate Forecasting, Planning, and Costs



72% of companies rated their ability to have real-time information as a contributor for achieving accurate production forecasting, planning, and cost management.

While real-time information is highly important, 28% reported this capability as low contributor.

Real-time information in manufacturing forecasting allows for faster decision-making and process changes.

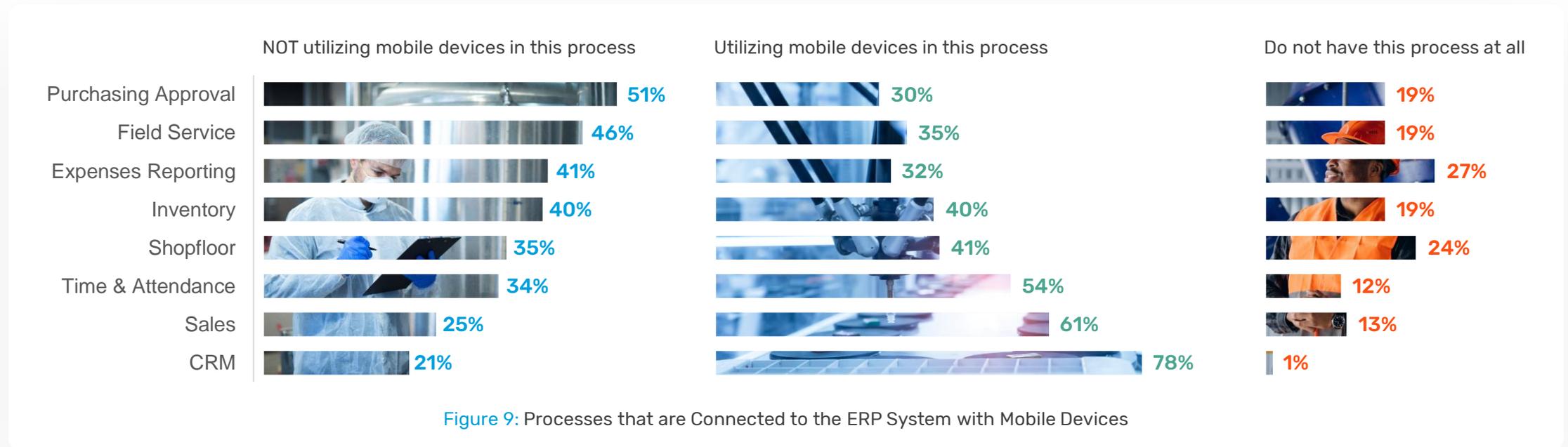
With greater visibility into key metrics, manufacturers can generate more accurate production plans that affect their cash flow and reduce costs, and more easily stay aligned with their business goals.

Figure 8: Companies' Ability to Have Realtime Information for Accurate Forecasting, Planning & Costs

Utilization of Mobile Devices for ERP Processes

While the areas of business that are utilizing ERP systems connected to mobile devices the most are CRM (78%) and Sales (61%), Inventory and shopfloor are mid-level adopters, with 40% of inventory processes already utilizing mobile devices connected to the ERP system, as well as 41% of shopfloor processes.

We expect to see a lot deeper and wider interest and adoption over the next few years, as Mobile ERP allows improved communication, field data collection processes, and boosts operational effectiveness, emergency preparedness, product diagnostics, and quality of reporting.



*Question allowed more than one answer and as a result, percentages will add up to more than 100%

Top Features in Mobile Devices Contributing to Efficient Work Routine

The top features of mobile devices that are contributing to efficient work routines are reporting (58%), customer communication (55%), and scanning-barcodes and QR (44%).

Mobile ERP implementation is crucial in manufacturing. It improves shopfloor product processes and inventory management, as users can use mobile to record material and inventory movements, track progress in production stations, and quickly generate shipping documentation. It cuts down on labor costs by eliminating manual work and offers additional benefits including reporting and geo-location tracking.

*Question allowed more than one answer and as a result, percentages will add up to more than 100%

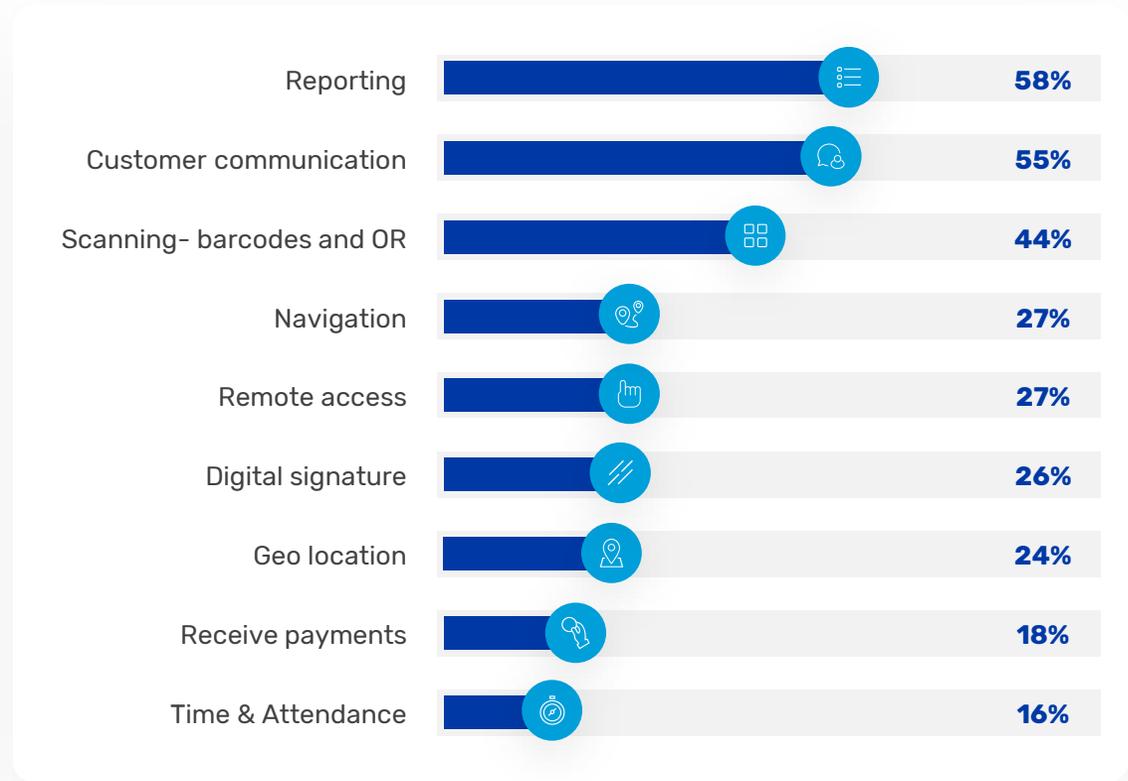


Figure 10: Top Features in Mobile Devices Contributing to Efficient Work Routine



Demographics



Company Size, Country & Title

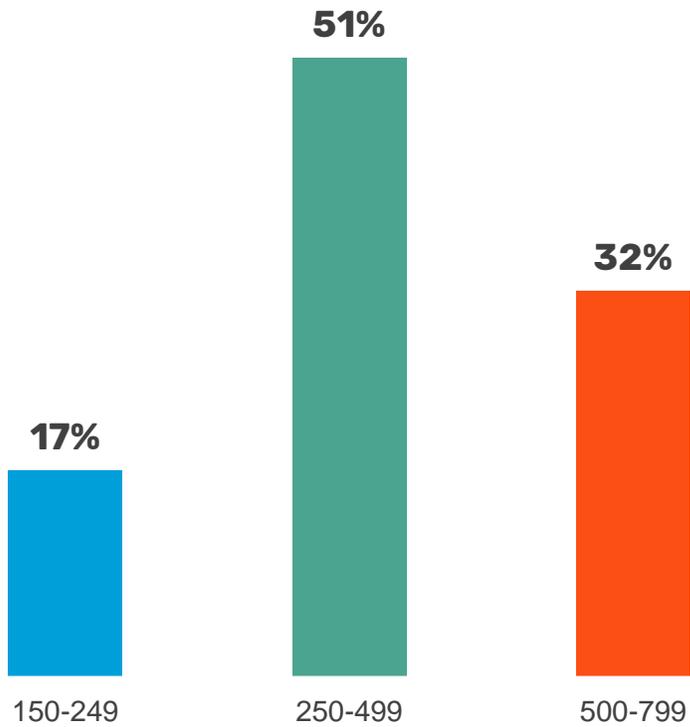


Figure 11: Company Size

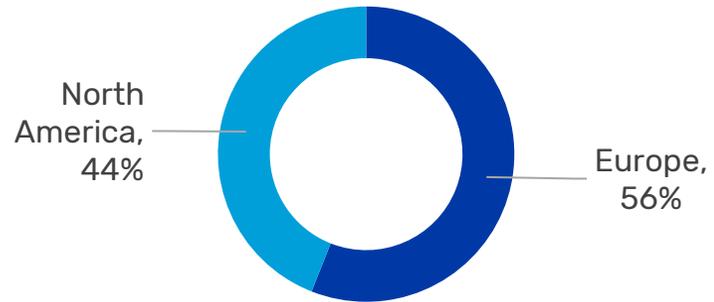


Figure 12: Country

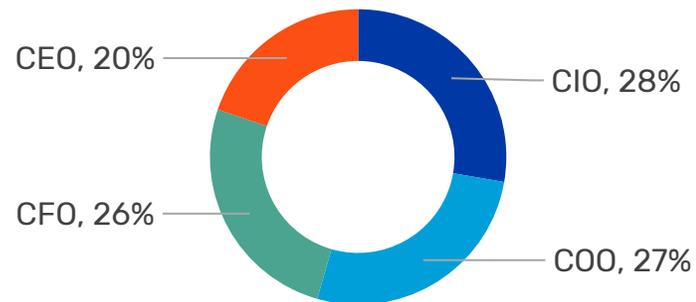


Figure 13: Title

Industry, ERP Users and ERP IT Managers

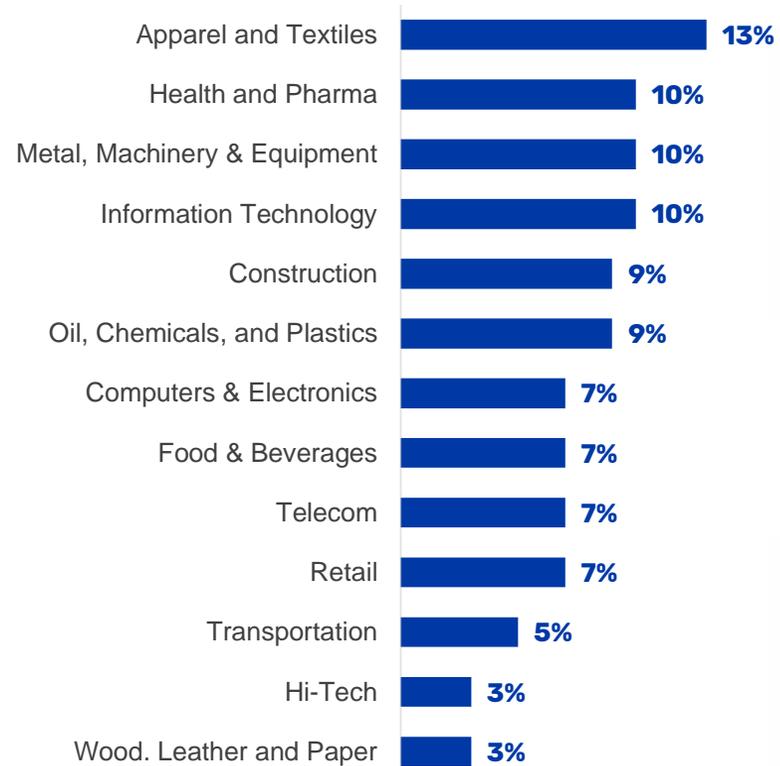


Figure 14: Manufacturing Industry

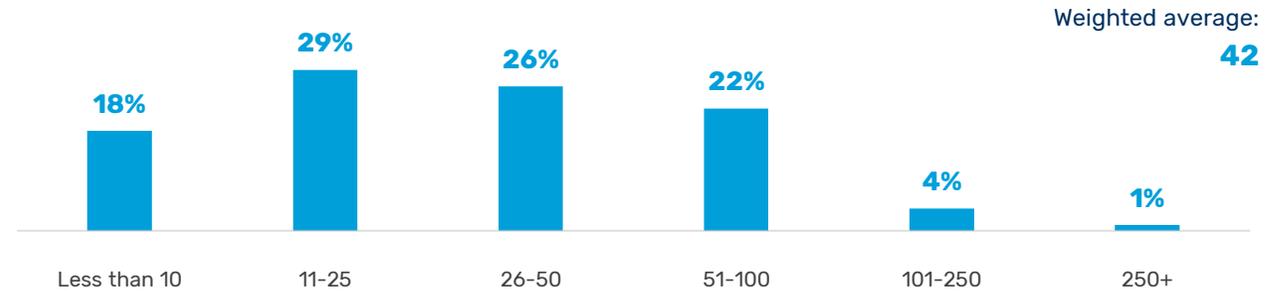


Figure 15: Users of the ERP System

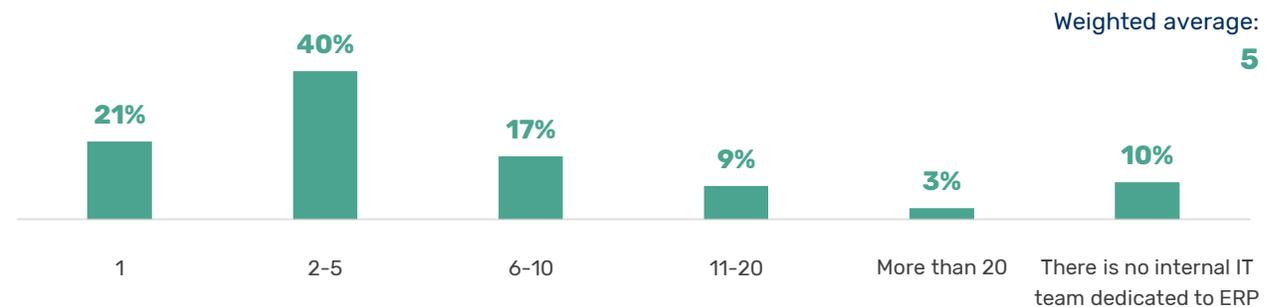


Figure 16: IT Employees Who Manage the ERP System

About Priority Software

Priority is a leading provider of scalable, agile, and open cloud-based business management solutions for a wide range of industries and organizations of all sizes; from global enterprises to small and growing businesses. Recognized by top industry experts and analysts for its product innovation, Priority provides real-time access to business data and insights from any desktop or mobile device, enabling organizations to increase operational efficiency, improve the customer experience, identify new opportunities, and outpace the competition. With offices in the US, UK, Belgium, and Israel and a global network of business partners, Priority empowers 75,000 customers in 40 countries with smart and intuitive business management platforms that drive accelerated organizational growth.

Contact Us

For more information, please visit us:



+972-3-9251000



Priority@priority-software.com

