

# Digital Procurement Survey 2019

PwC EMEA

## PwC EMEA Procurement Network

### Austria

Harald Dutzler

### Belgium

Fabian Roosen

### Czech Republic

Marián Bartoš

### Denmark

Thomas Siersbæk Heller-Njor

### Finland

Pekka Pesonen

### France

Isabelle Carradine

### Germany

Dr. Norbert F. Fischer  
Robert Weissbarth  
Jan Herrmann

### Ireland

Mark McKeever

### Italy

Lorenzo Paolo Brunello

### Latvia

Diana Kurpniece

### Luxembourg

Layla Zaidi

### Middle East

Dr. Bashar El-Jawhari

### Netherlands

Mathieu Rosier

### Norway

Selim Sumer

### Russia

Vera Abaturova

### South Africa

Retief Ferreira

### Spain

Manuel Diaz Delgado

### Sweden

Tobias Kihlén

### Switzerland

Ceyhun Togo

### Turkey

Dr. Ismail Karakis

### United Kingdom

Leon Smith



Dr. Ismail Karakis

Digital applications have recently become an integral part of procurement and supply management, affecting almost all procurement and Supply management processes. As PwC EMEA, I am proud to present the results of our European Digital Procurement Survey. In total, we have received over 200 responses from survey participants with various leadership roles in procurement departments from 20 European countries. Our sincere thanks go to all the Turkish procurement departments who agreed to answer our questions as ~25% of the total responses. Turkey has embraced digitalization in procurement area, and while its digitalization rate is lower compared to European countries, it has the potential to be the leader in Europe with its appetite for success and planned investments for the future.

## Authors

Philippe Gaurois  
Senior Manager  
France

Nicolas Staquet  
Consultant  
France

Alexandre Roux  
Consultant  
France

Erika Perrotin  
Director  
France

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The survey was conducted among 200 companies from November 2018 to January 2019, in 20 European countries (France, Germany, Turkey, the Netherlands, Belgium, Italy and Norway were among the highest represented). It follows on from the PwC Digital Procurement Survey 2017, which began our series of reports on the digitization of procurement processes.

The results shed light on procurement department priorities, while providing an overview of digitization and investment prospects. The survey was conceived as a tool for companies to gauge their digital maturity with respect to their business sector and size, and to benefit from examples of real-world applications, such as Source-to-Pay, artificial intelligence, Industry 4.0, data analytics and automation.



## Key takeaways

1. Digitization is a strategic priority for procurement departments across Europe.
  - Regardless of the country, sector or business size, procurement departments' number two priority is to digitize their processes, with streamlining their organization only just taking first place. Talent management and developing supplier collaboration rank next in importance.
2. Digitization is well on track with an average 2.5 out of 7 procurement processes having already switched to digital, compared to 1.5 in 2017.
  - In line with 2017 findings, service-sector businesses are in the lead. Three out of seven of their processes are now digital, as opposed to two out of seven for industry. Digitization is set to expand as it is deemed a strategic priority (priority no. 2) in which companies will continue to invest.
  - SMEs are slower to embrace digital procurement processes, with only 1.5 out of 7 already digitized. For these companies, the shift to digital is not strategic, although upwards of 80% plan to invest.
3. Another striking difference compared to 2017: the digital leap forward in "strategic" processes – a trend that will gain momentum.
  - 60% of companies have started digitizing strategic procurement processes – strategic sourcing, predictive analytics and supplier collaboration tools – compared to 21% in 2017 (a 39-point increase).
  - For transactional aspects – Source-to-Pay, contract preparation and spend trackers – nearly 75% of companies are currently adopting digital solutions. In line with 2017 findings, these processes take priority.
4. Lastly, companies now deem standard solutions like Source-to-Pay and data analytics as foregone conclusions. Some have moved further ahead, initiating projects for AI, automation and Industry 4.0. The proportion of companies aspiring to roll out these technologies is set to double.
  - 80% of companies are currently deploying Source-to-Pay solutions and nearly 90% intend to continue investing.
  - On average, 33% of companies have tested AI, automation and Industry 4.0 solutions, of which 65% intend to invest in these technologies. The survey suggests that the number of AI users will increase by a multiple of 2.3.
5. What lies ahead? Though companies are fully aware of the difficulties involved in accomplishing their projects, future investment will be significant.
  - Conversely, attitudes towards blockchain are mixed, with only 14% of companies having carried out tests, of which 60% consider it to be unsatisfactory.
  - Backed by these observations, we have devised a digital maturity curb.
  - 78% of companies, regardless of their sector or country, stated their intention to invest in at least three digital solutions.
  - Those companies having already rolled out such technologies are faced with acquiring the related skills, which has proved the number one setback for the projects' success (before change enablement and sponsorship). In keeping with the findings of the 22<sup>nd</sup> CEO survey,\* shortage of skills is a major concern for companies.

1. Turkey has come to grips with the issue of digital transformation: for Turkish procurement departments, establishing a customized, sustainable and connected supply chain is the number one priority, before reinforcement of supplier collaboration and digitalization of extended processes.
2. Procurement departments are well on their way to digitizing their processes (2.73 out of 7 processes have already been converted, in line with the European average).
3. Turkish companies are close to the European average in terms of the digitalization of procurement processes, in particular system implementation of P2P tools . Turkey has high investment appetite for adapting the new technologies like blockchain, Industry 4.0, etc.
  - Germany is the clear leader in deploying these technologies, ahead of the rest of Europe. It figures among the top three countries for each of them.
4. Investment for digitalization of procurement departments is set to continue in Turkey, 36% of procurement processes in Turkey are already digitalized in line with the European average which is 37%.

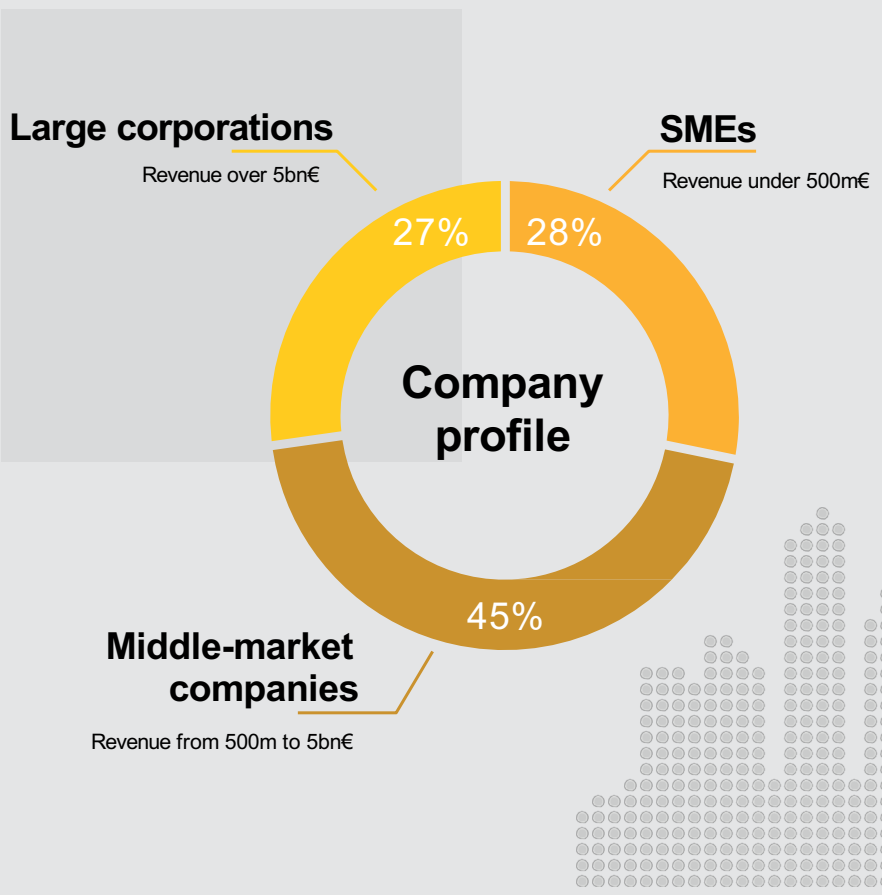
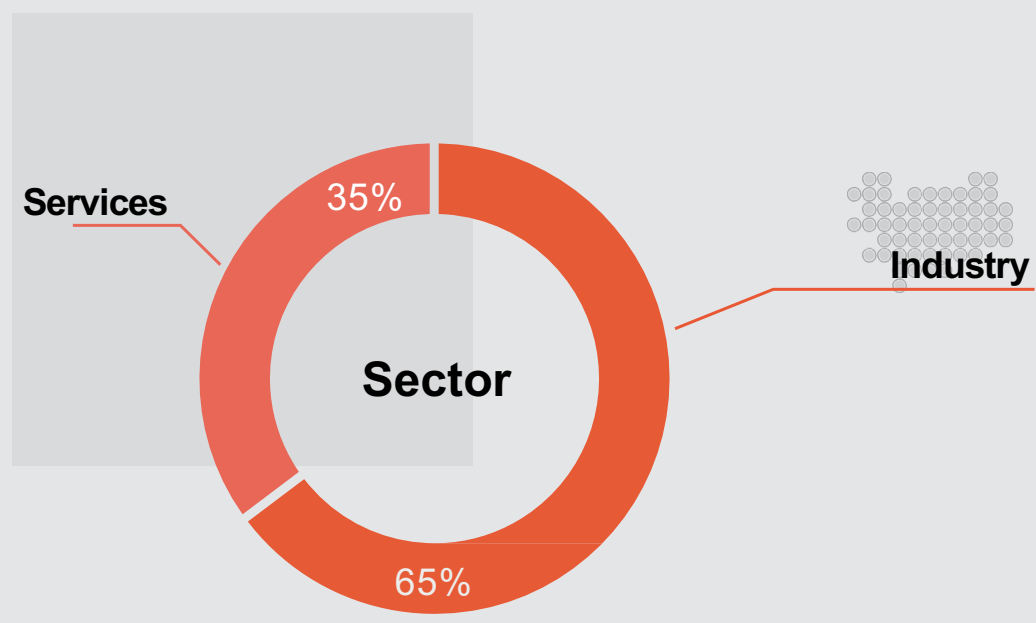
\* According to the [PwC 22<sup>nd</sup> Annual Global CEO Survey \(2019\)](#).



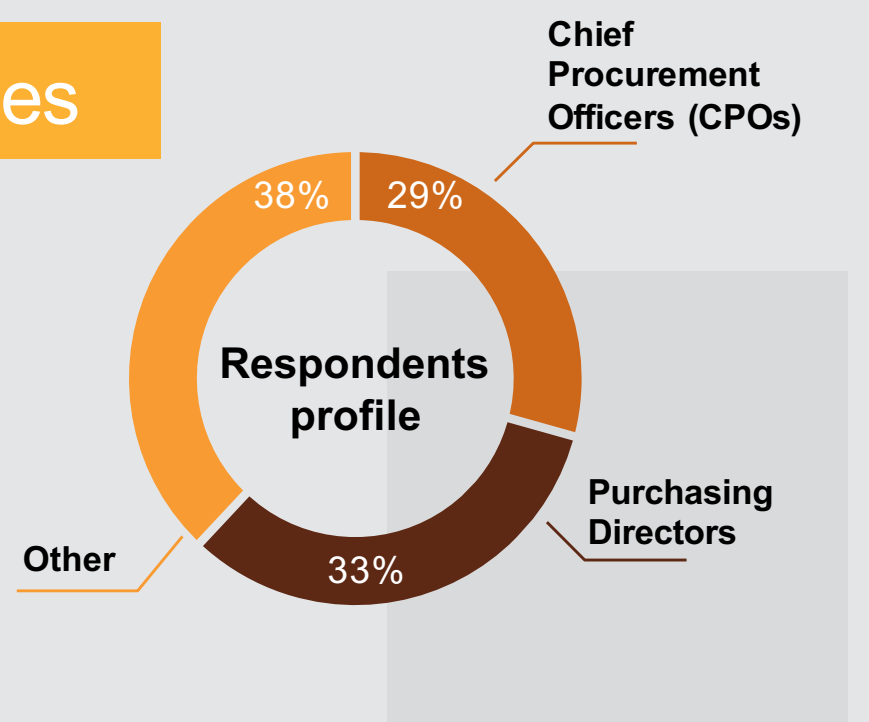
# 16 themes

An online questionnaire on digital procurement processes and technological drivers (S2P, AI, automation, etc.)

Conducted between November 2018 and January 2019



# Over 200 responses



\* Other European countries: Albania, Austria, Bosnia Herzegovina, Denmark, Finland, Greece, Liechtenstein, Luxembourg, Malta, United Kingdom, Sweden, Slovenia, Switzerland





# 1

## Survey results

Adoption of digital procurement solutions is spreading wider and faster





# Digital procurement solutions are a real priority



# #2

The number two priority for procurement departments is the digitization of their processes, which ranks just after the streamlining of their organizations

Procurement departments are fully aware that acquiring digital procurement solutions is a top priority. Some have already made the switch to digital via successful projects, whereas others are keen to start their digitization projects in the near future. For the vast majority, adopting digital solutions for part of their procurement processes already figures on the agenda. Their resolve therefore reflects CEO policy for AI to be deployed throughout their businesses, (68%\*), and which acknowledges data as crucial (95%\*).

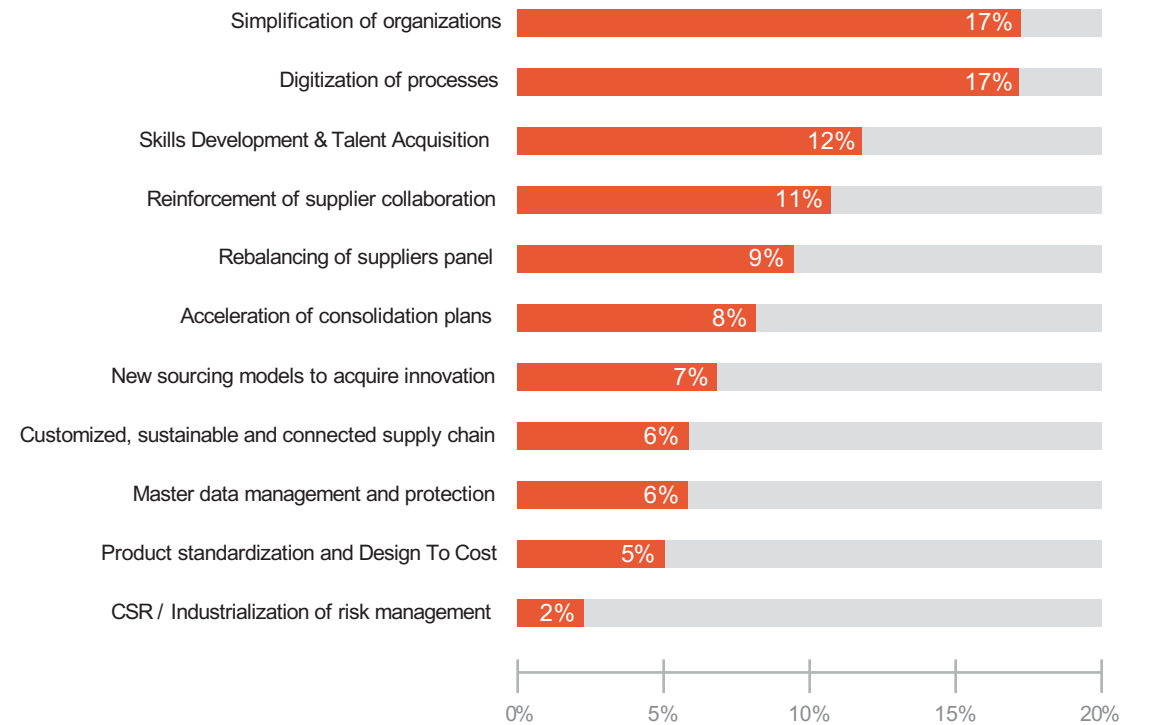
## Streamline, digitize and develop skills: procurement department priorities

Embracing digital solutions is a strategic driver for businesses to gain in agility and operational excellence. It also contributes to expanding skills in the procurement sector overall, which represents a high priority for procurement departments.

\* According to the [PwC 22<sup>nd</sup> Annual Global CEO Survey \(2019\)](#).

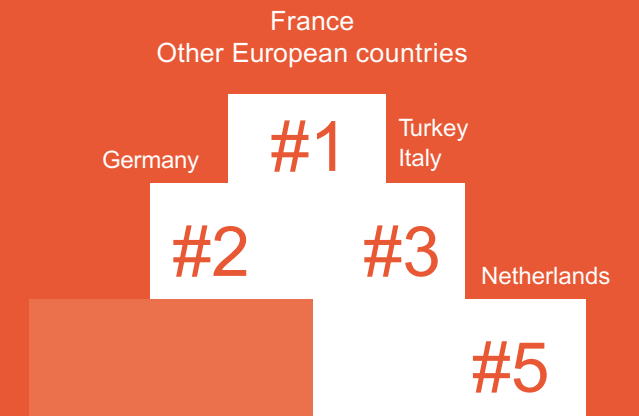


### Order of procurement priorities



### Process digitization as a priority by country

For procurement departments in many countries including France, Germany, Turkey and Italy, process digitization counts among their top three priorities.

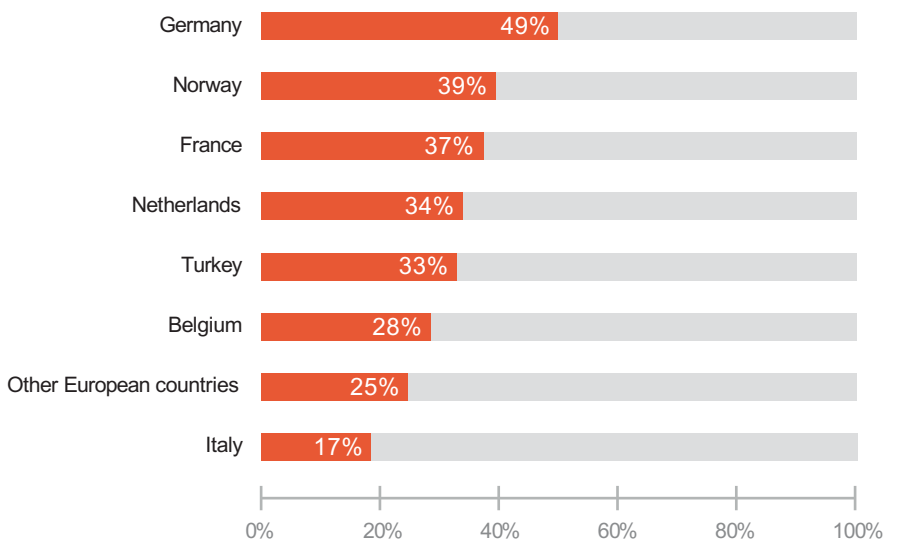


# Service-sector businesses have a head start on digitizing procurement processes



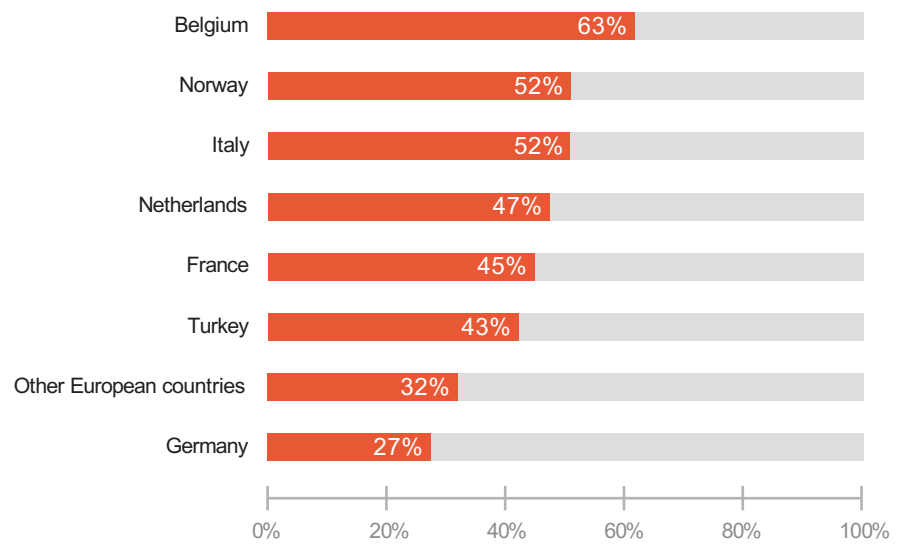
**34%** of procurement processes have been digitized on average in **industry**

Procurement process digitization by country (industry)



**43%** of **service-sector** procurement is digital on average

Procurement process digitization by country (services)



The 2019 survey highlights the good progress companies in the service and industrial sectors have made in digitizing their procurement processes

The service sector nevertheless has an edge on industry for now. The greater complexity of industrial procurement can act as a barrier to the use of innovative technologies and explain the gap in maturity.

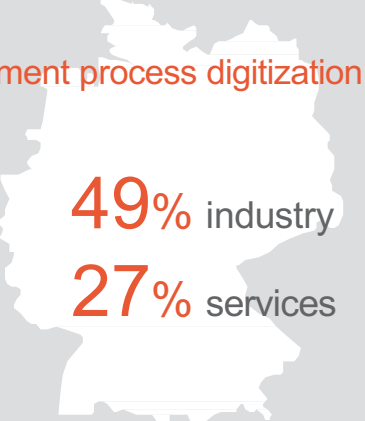
## Germany: the exception

Germany is the sole country where industry outstrips the service sector in its adoption of digital procurement solutions.

This reflects the great maturity of the German industrial landscape and its participants' identification of digital technology as a driver for operational excellence.

Moreover, adoption rates vary greatly according to business type. A detailed analysis for each company profile is presented later in this report.

Procurement process digitization



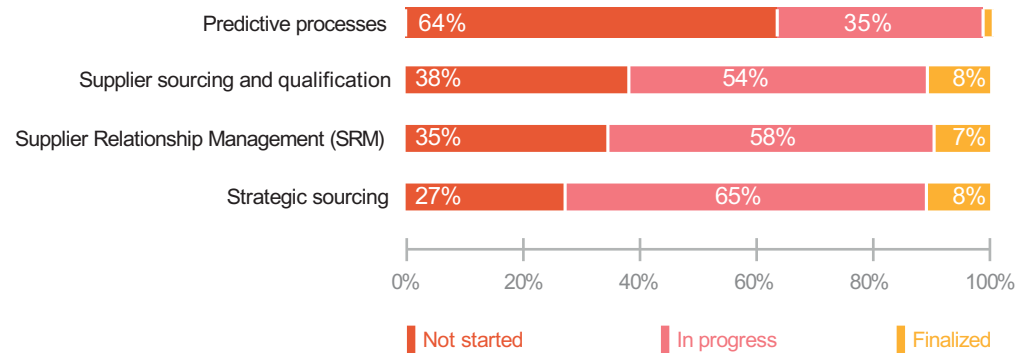
# Digitizing strategic procurement processes is at last on the agenda



60%

of procurement departments are switching their **strategic processes** to digital

## Digitization of strategic procurement processes



74%

of procurement departments have begun digitizing their **transactional processes**

## Digitization of transactional procurement processes

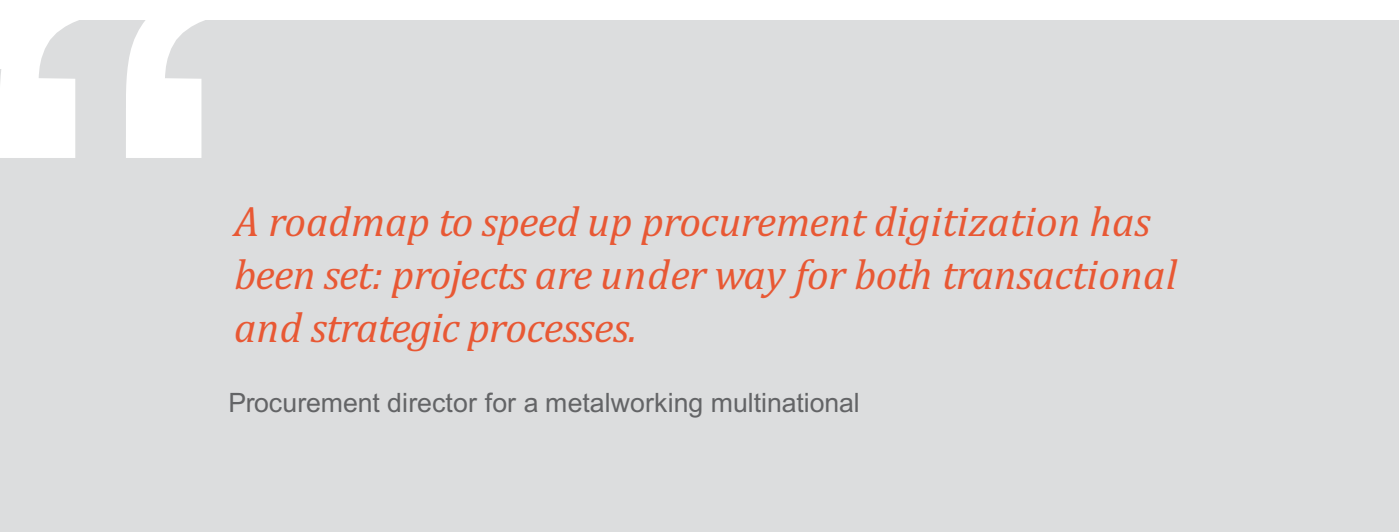


## Digital investment covers all processes

In keeping with the findings of the Digital Procurement Survey 2017, transactional processes remain a top priority for procurement departments, to which they attribute a potential for quicker value creation.

Today, much progress has been made in digitizing strategic processes.

\* According to the [PwC Digital Procurement Study \(2017\)](#)



*A roadmap to speed up procurement digitization has been set: projects are under way for both transactional and strategic processes.*

Procurement director for a metalworking multinational

# Use cases and feedback help position the different technologies on the maturity curve

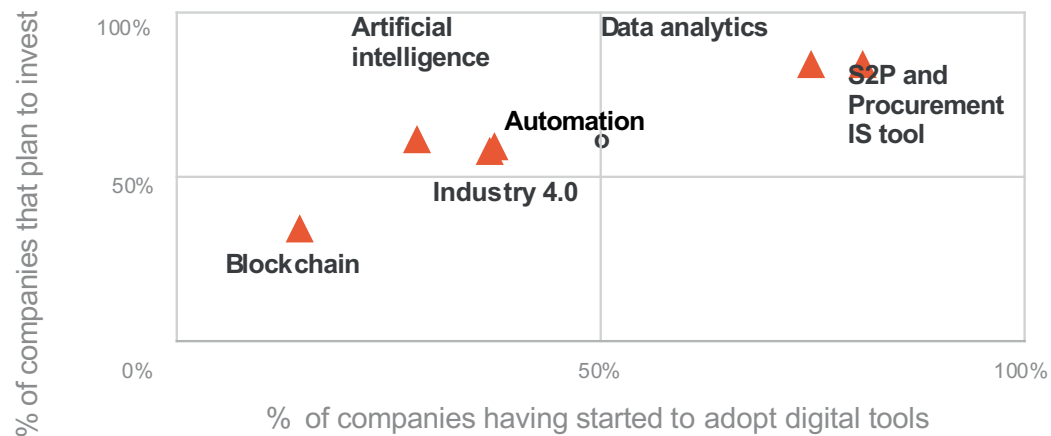


## Levels of maturity

Companies' adoption rate and planned investment in technology reveal four distinct maturity levels, defined according to where the technologies appear on the maturity curve.

The first wave of digitization was the roll-out of procurement information systems and data solutions, which have been largely implemented (78%). This paved the way for the second wave, which is currently being deployed and adopted (37%).

### Technology maturity



Data analytics includes big data, data visualization and process intelligence technologies

Automation includes robotic process automation (RPA), web crawler and chatbot technologies

Artificial intelligence includes data mining and machine learning technologies

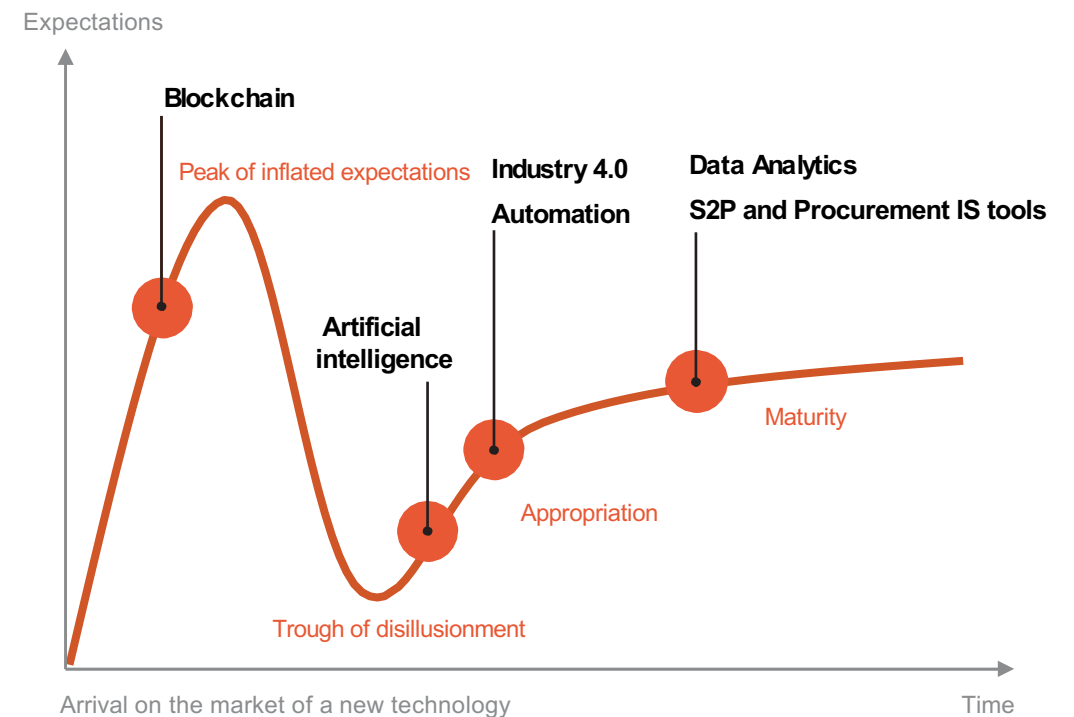
Industry 4.0 includes 3D printing, drone and internet of things (IOT) technologies

## Numerous technologies for specific use cases

The most widely deployed technologies are also the most mature, such as procurement information systems and data solutions.

The next wave of technological innovation will include process automation and Industry 4.0, followed by AI and blockchain.

### Technology maturity curve





# Most frequent use cases

## Data analytics



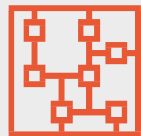
- Dynamic dashboards for procurement KPIs
- Automatic data cleaning
- Data visualization of procurement spend
- Data visualization of supplier risks
- Digitization of procurement performance management
- 360-degree vision of a category, supplier, etc.
- Data visualization for end-to-end processes (process intelligence)

## Artificial intelligence



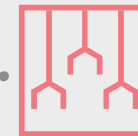
- Automated supplier qualification
- Automated supplier sourcing recommendations (cognitive sourcing)
- Web crawler applications to assess suppliers
- Supplier chatbot, opinion leader chatbot
- Machine learning to enhance catalogue data (captions, images, etc.)
- Automatic expense categorization
- Automated reconciliation: order/reception/bill
- Analysis of contractual terms and conditions, identification of potential risks and non-compliance with contractual clauses

## Blockchain



- Product passport to improve traceability
- Quality item traceability
- Secure supplier payment systems
- Contract update tracking

## Automation



- RPA of the entire P2P process
- Automated data re-entry: order confirmation and cancellation, supplier creation
- Automatic reporting document generation
- Automatic standard report generation
- Automated email reminders (purchase request approval, supplier confirmation, etc.)

## Industry 4.0



- Real-time product localization and supplier performance monitoring
- Industrial maintenance performed by surveillance drones
- Onboard sensors to monitor product use by suppliers
- Voice control
- Real-time order tracking
- Automatic reception via product tracking

## S2P and procurement IS tools



- S2P cloud solutions (Source-to-Contract and Procure-to-Pay)
- Electronic signature
- Supplier portal
- Direct procurement via supplier portal
- Digital RFX platform
- e-auctions
- PO flip self-billing
- Marketplace (Amazon Business, Mercateo, etc.)

# Technology adoption differs from one country to the next, with some countries acting as trailblazers

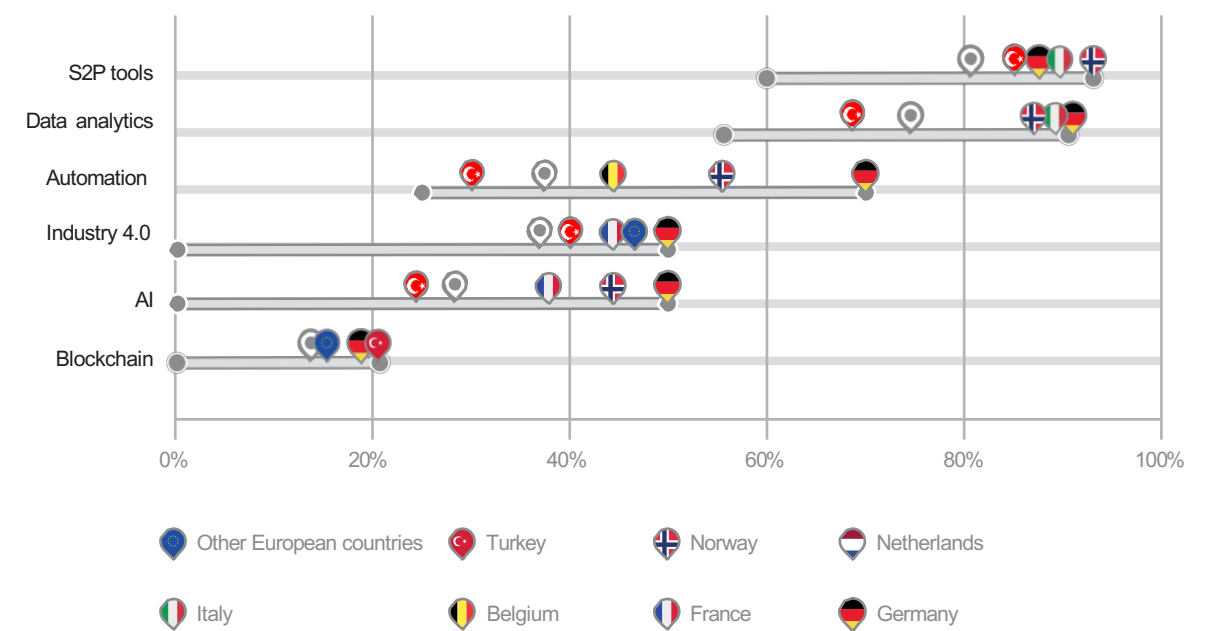


## Variable pace of deployment across Europe

Some countries, such as Norway and particularly Germany, are well ahead in terms of deploying digital technologies. This lead can be best seen for less mature technologies like blockchain and artificial intelligence. Contrary to pioneering Germany, some countries have yet to initiate any roll-out of these solutions.

The trend therefore highlights a gradual shift to digital beginning with mature solutions like S2P, which provide a technology base.

Breakdown of companies having started to adopt digital tools by country, with the top three most advanced countries



**Min:** Countries with the lowest percentage of companies having started to adopt digital tools

**Max:** Countries with the highest percentage of companies having started to adopt digital tools

**Average:** European average of companies having started to adopt digital tools

# High correlation between technology satisfaction rates and maturity

90%

of procurement departments using an **S2P solution** say they are **satisfied** with their investment

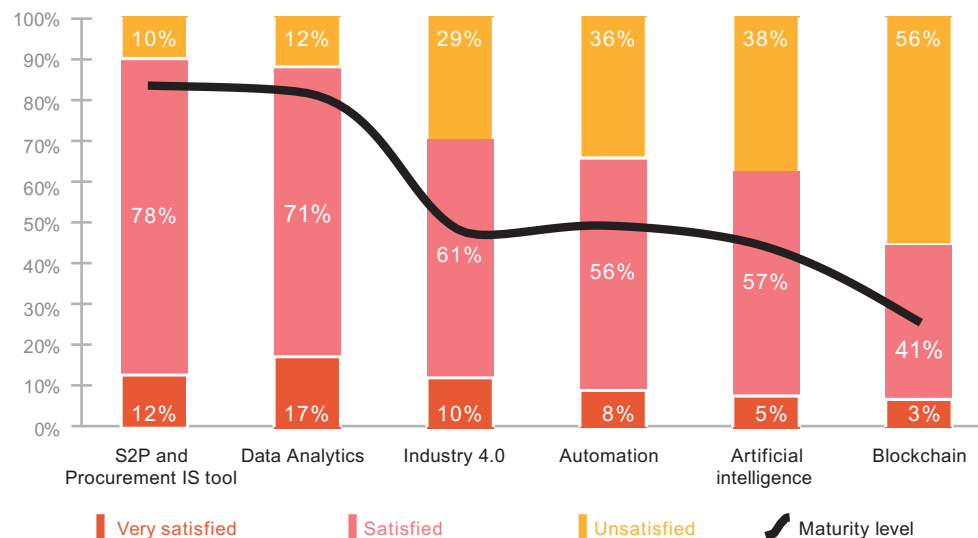
Deploying an S2P solution is very often approached as a comprehensive transformation project and therefore managed with all the stakeholders required for the success of such an ambitious undertaking.

56%

of procurement departments using a **blockchain solution** say they are **unsatisfied** with their investment

Conversely, implementing blockchain, which is considered an immature technology, results in fairly low levels of user satisfaction.

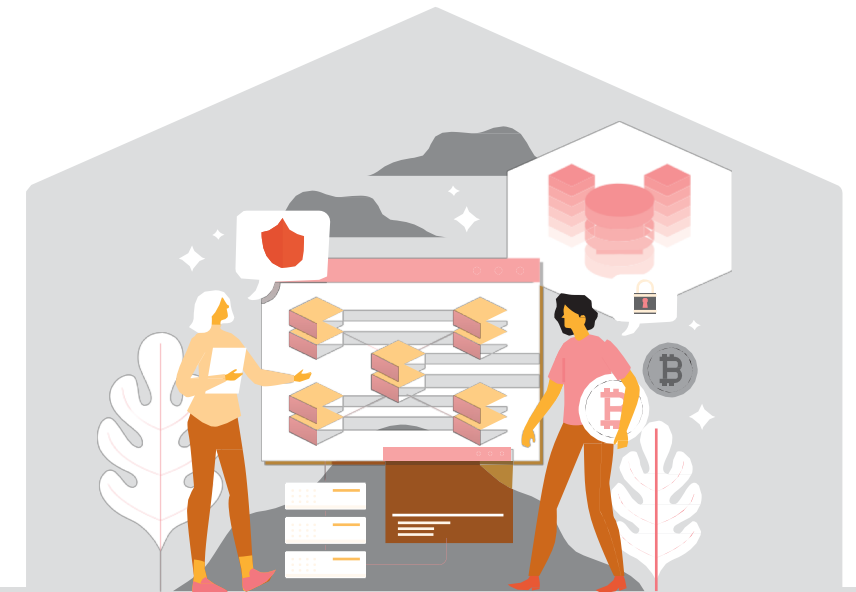
Digital project satisfaction and maturity



## New technology deployment and uptake requires support

Key to achieving the goals determined at the outset of a project is providing support for the change as early on as the planning phase.

It is important to define the project's scope (proof of concept, pilot, etc.) and form a team that covers all the required skills (technical expertise, change enablement, methodology, etc.).



*Investments made in automating and digitizing the S2P process have considerably raised productivity and prompted us to continue investing in other procurement processes.*

Procurement director for a large engineering company

Skills availability constitutes the main obstacle to implementing these technologies, closely followed by change enablement and sponsorship



19%

of procurement departments with significant digitization experience (i.e., more than 51% of processes digitized) say a lack of skills is the main obstacle in digitization projects

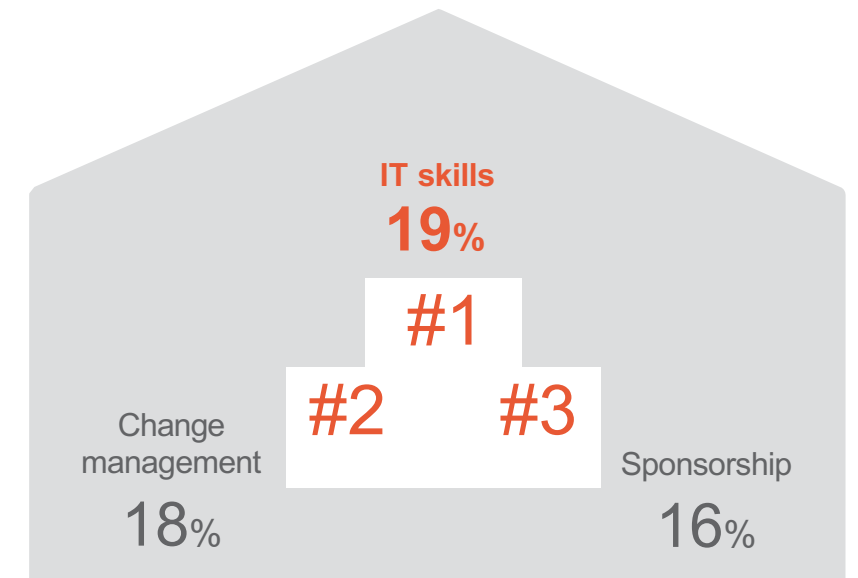
Although digital technologies are seen as important drivers, certain challenges can complicate their use. Skills shortage also appears to be a major concern for CEOs (CEO Survey\*).

\* According to the [PwC 22<sup>nd</sup> Annual Global CEO Survey \(2019\)](#).



The digital transformation must be supported by genuine change enablement, which includes upskilling for all stakeholders on new procurement practices

Companies face different obstacles depending on their maturity. A lack of in-house skills has been identified as the leading obstacle for companies that have begun their transformation. One of the main challenges for companies in the midst of digitization is a lack of in-house support.



*For the various successive activities in the S2P process to run smoothly, prior support is required for all stakeholders, particularly management.*

Procurement director for a manufacturing multinational



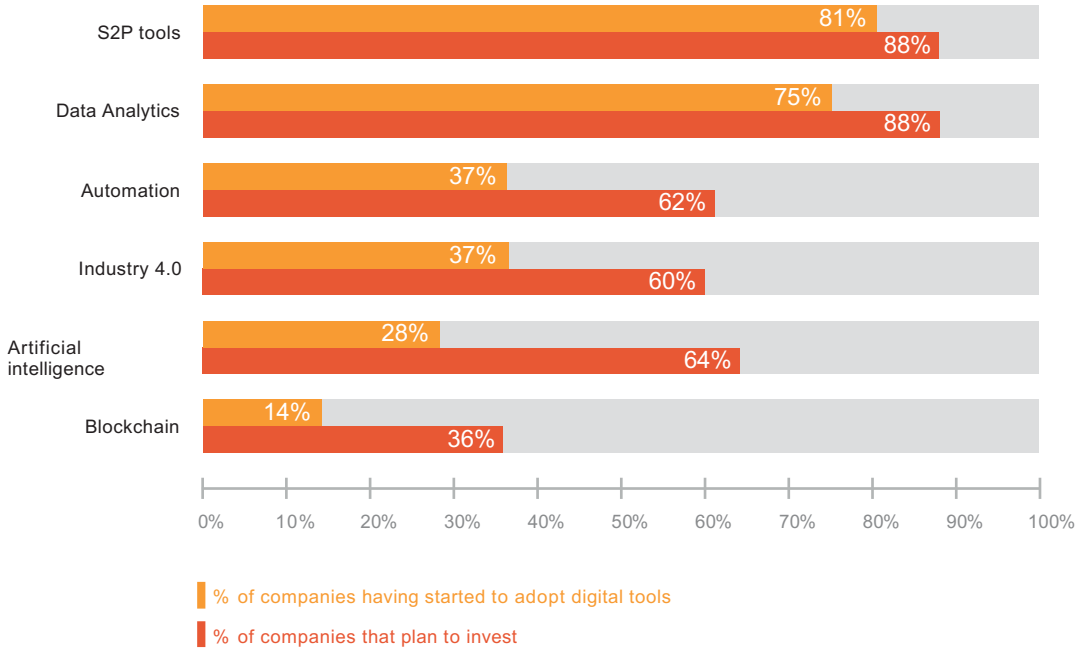
# Moving forward: procurement departments are investing more heavily and diversifying their choice of technologies

78%

of CPOs, regardless of the sector, say they intend to invest in at least three digital solutions

The 2019 survey clearly indicates that companies across the board plan to invest in digital technologies in the coming years.

### Use of digital technologies



S2P solutions are the first step in a procurement department's digital journey.

Procurement IS solutions and data analytics tools are the two most popular technologies, with the highest implementation rate and plans for investment.

But automation, Industry 4.0, artificial intelligence and blockchain technologies have the highest development potential.

These technologies garner the highest levels of planned investment compared to their level of implementation, meaning that many companies that have not yet introduced the solutions plan to do so.



*Further digitization is on the cards, with process intelligence and artificial intelligence. We're also evaluating automated solutions to assess suppliers.*

CPO for a large international retail company

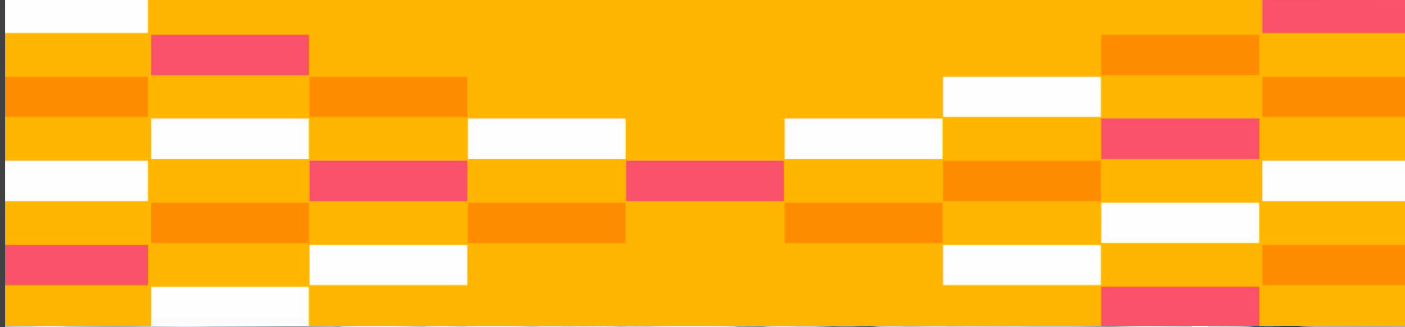
# Mature technologies (S2P tools and data analytics) remain priority investment targets for European companies across the board

## Ranking of the most popular technologies according to company investment plans by country



	S2P tools	Data Analytics	Automation	Industry 4.0	Artificial intelligence	Blockchain
France	1	1	3	5	4	6
Germany	1	1	3	5	3	6
Norway	1	1	3	3	5	6
Belgium	3	1	5	3	1	6
Netherlands	2	1	3	5	3	6
Italy	1	2	3	4	4	6
Turkey	1	1	5	3	4	6
Other European countries	1	2	4	4	3	6
Part of companies that plan to invest	88%	88%	62%	60%	64%	36%

Ranked from 1 to 6, 1 corresponding to the greatest intention to invest



## Countries' investment plans coincide with the waves of technology maturity

European companies say they are most likely to invest in mature technologies such as S2P tools and data analytics.

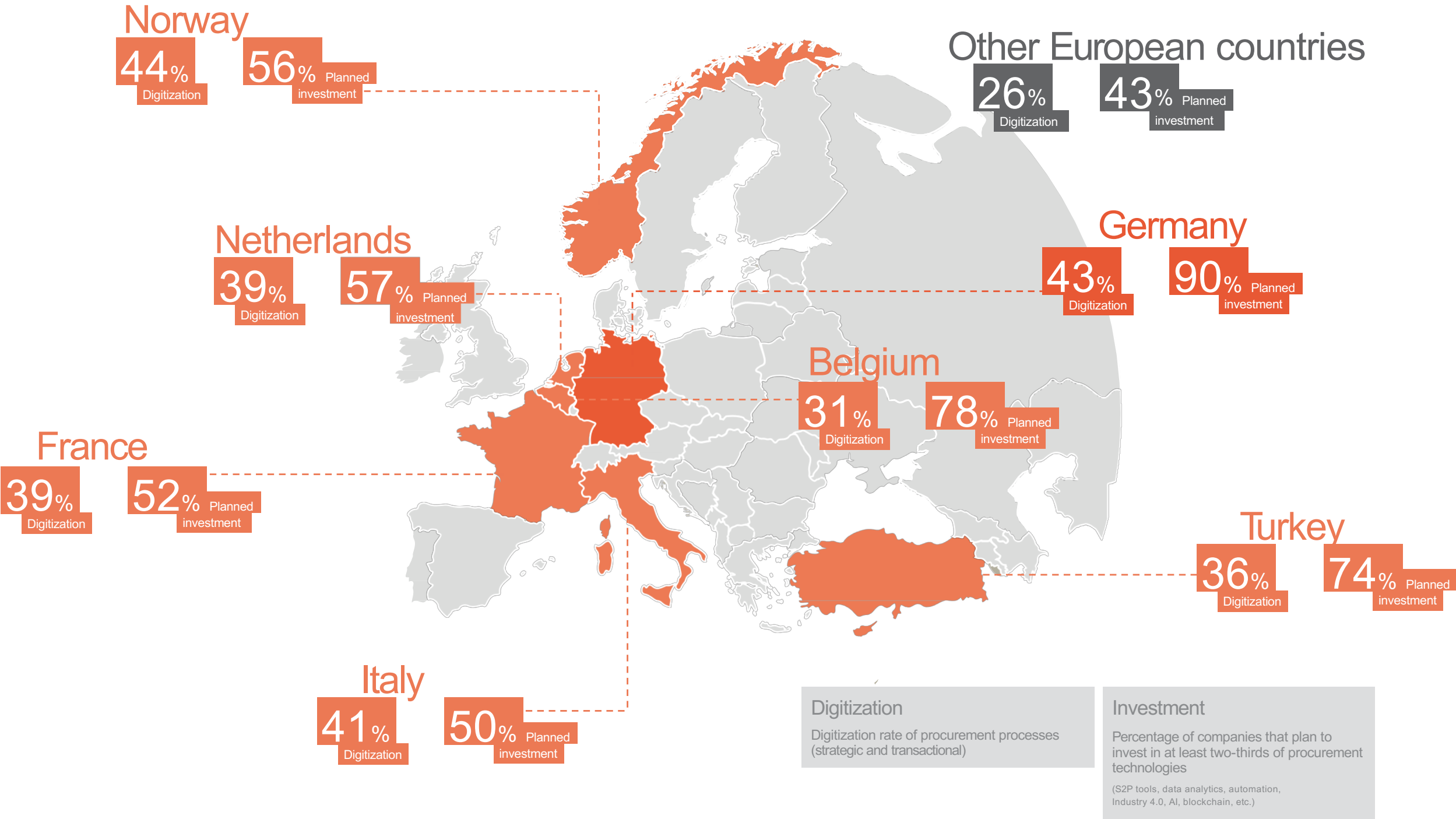
Emerging as less of a priority are automation, Industry 4.0 and artificial intelligence, which in most countries are ranked between 3<sup>rd</sup> and 5<sup>th</sup> place in terms of planned investment.

For now, procurement departments show no unanimous interest in investing in blockchain.

Plans to invest therefore correlate with a technology's level of maturity and target the most mature.



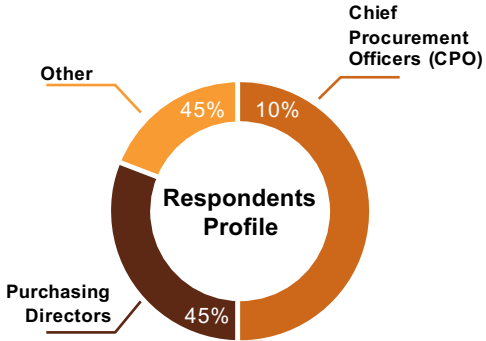
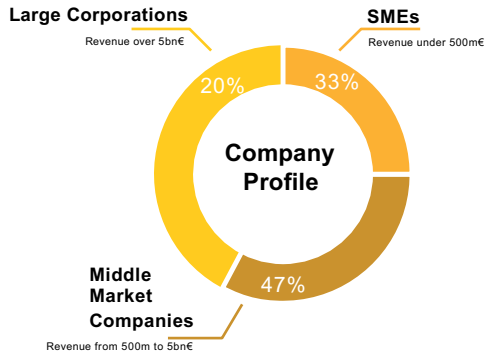
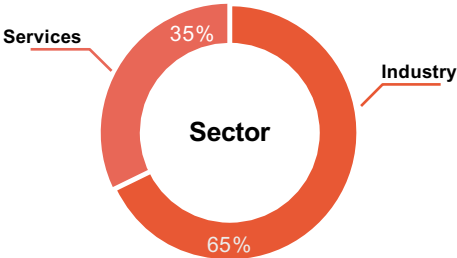
# Digitization and planned investment by country: Germany confirms its digital commitment



# Close-up on Turkey: procurement departments in the early stages of the digitization cycle

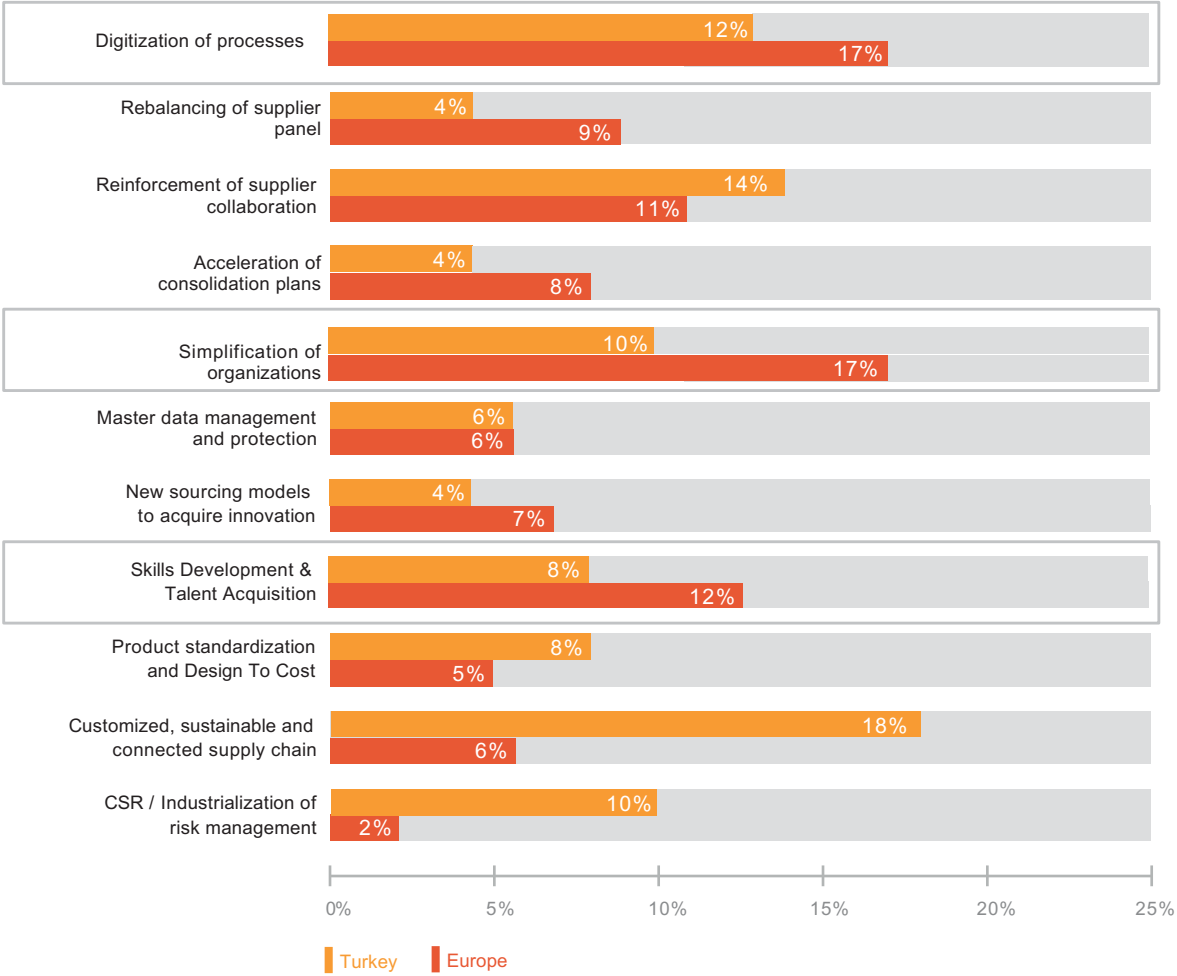
**Turkey**  
49 respondents

- Industrial Manufacturing (16%)
- Healthcare (10%)
- Retail (10%)
- Consumer Goods (10%)
- Engineering & Construction (8%)
- Automotive (8%)
- Chemicals (5%)
- Energy, Utilities & Mining (5%)



Turkish procurement departments are aware of the importance of digitizing purchasing processes and view it as a top priority.

Procurement department priorities in Turkey and in Europe



## Digitization is a priority in a country in transition

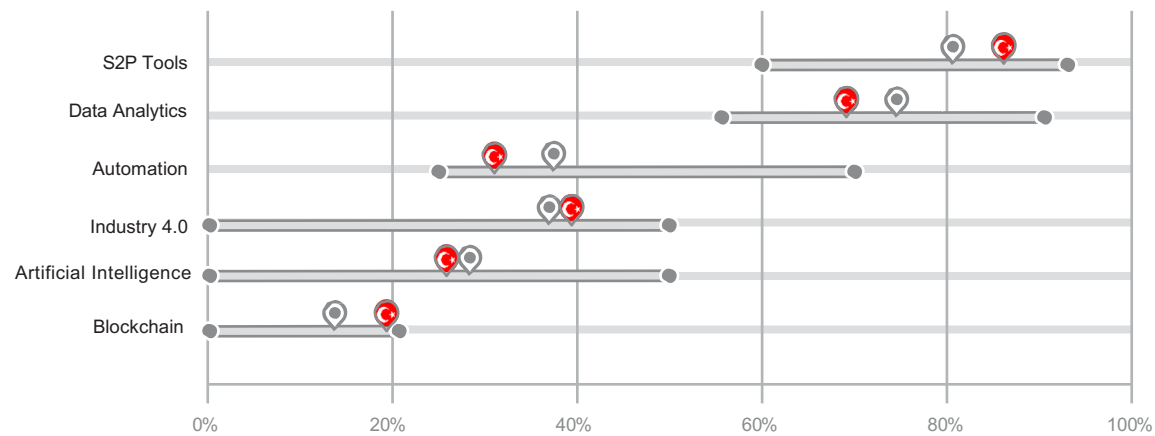
Reinforcement of supplier collaboration stands out as the second most important priorities of procurement departments in Turkey with 14% ratio which contrasts with other European companies that have 11% and demonstrates that Turkish procurement departments are making their digital transition. .

The digitization rate of procurement processes in Turkish companies figures among the European average, and the stakeholders do not identify developing IT skills as a top priority, despite it indicating digital maturity. Turkey does not emerge as a technology pioneer among European countries either, however, percentage of Turkish companies that plan to invest in at least two-thirds of procurement technologies is ranked 3rd among European countries.

## Digitization rate of procurement processes

37% Europe 36% Turkey

Position of Turkish companies compared to their European counterparts in the adoption of digital tools



**Min:** Countries with the lowest percentage of companies having started to adopt digital tools  
**Max:** Countries with the highest percentage of companies having started to adopt digital tools  
**Average:** European average of companies having started to adopt digital tools



# 2

## Company profiles

Five profiles emerge from an analysis of European companies' current and projected position in the digital transition

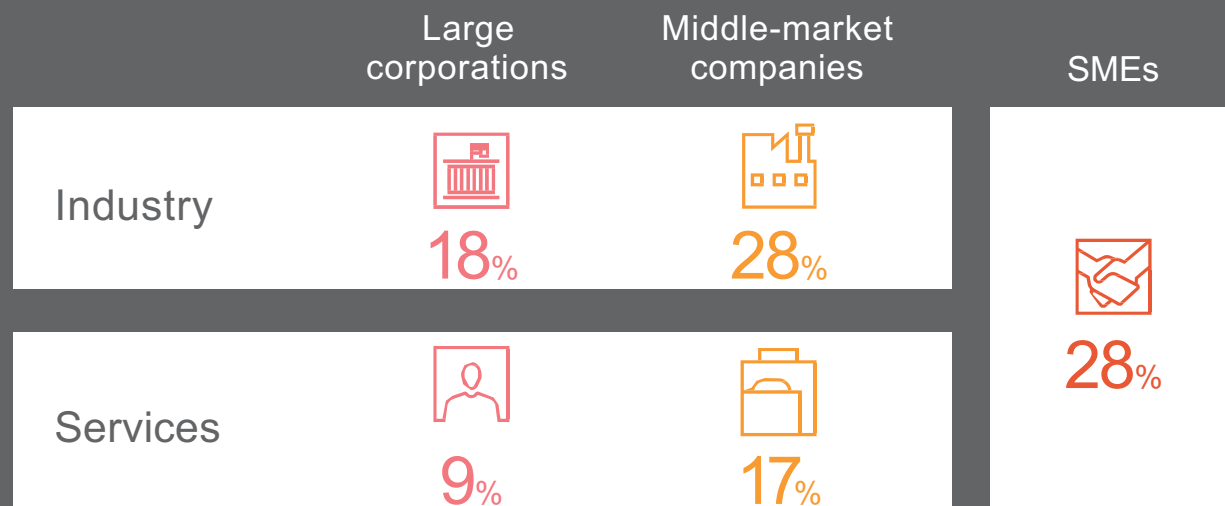




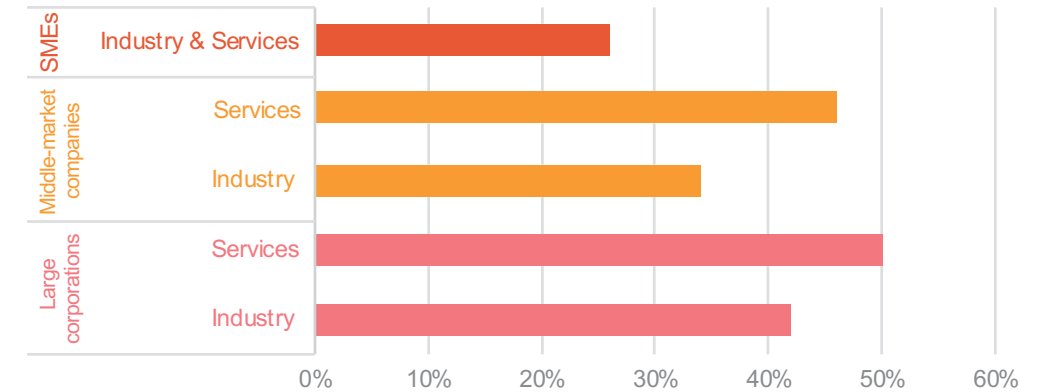
## Breakdown of company profiles

The Digital Procurement Survey 2019 highlights certain trends and specificities in company profiles. Overall, procurement digitization has been under way since 2017 across all company sizes and business sectors. Although the digital transformation is on all companies' agenda in 2019, mid-sized and large companies were faster to grasp the advantages and opportunities offered by digitizing their procurement processes.

## Company sample group according to profile



## Procurement digitization by company profile



SMEs have also shown progress in their digital transformation, but lag behind large corporations. This could be put down to financial investment reasons or corporate culture, for example. In addition, the survey underlines the lead taken in the digital transformation by middle-market companies and large corporations in the service sector, as opposed to those in industry. The gap is mainly due to the greater complexity involved in industry procurement and therefore the greater investment required to shift to digital.



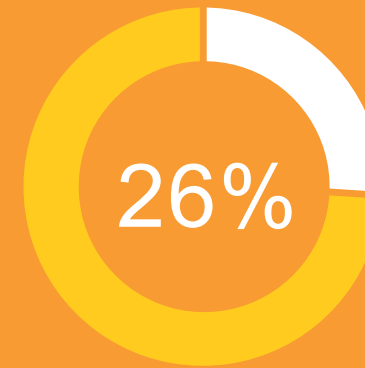
## SME procurement department (industry & services)

### Main procurement issues:

- Simplification of organizations (17%)
- Rebalancing of suppliers panel (15%)
- Reinforcement of supplier collaboration (11%)



### Percentage of procurement processes digitized:



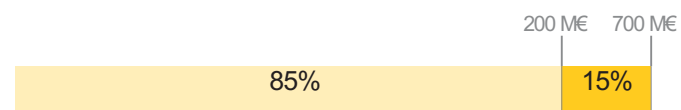
Having transitioned only 26% of their procurement processes to digital, SMEs show a still small but growing appetite for digitization. Digital challenges faced by this segment include conducting relevant training, identifying potential gains, attracting and developing skills, changing the corporate culture and budgeting for the necessary investments. SMEs must overcome these obstacles in order to step up their digital transformation.

### Characteristics

#### Revenue

**Under €500m**

#### Procurement amounts managed



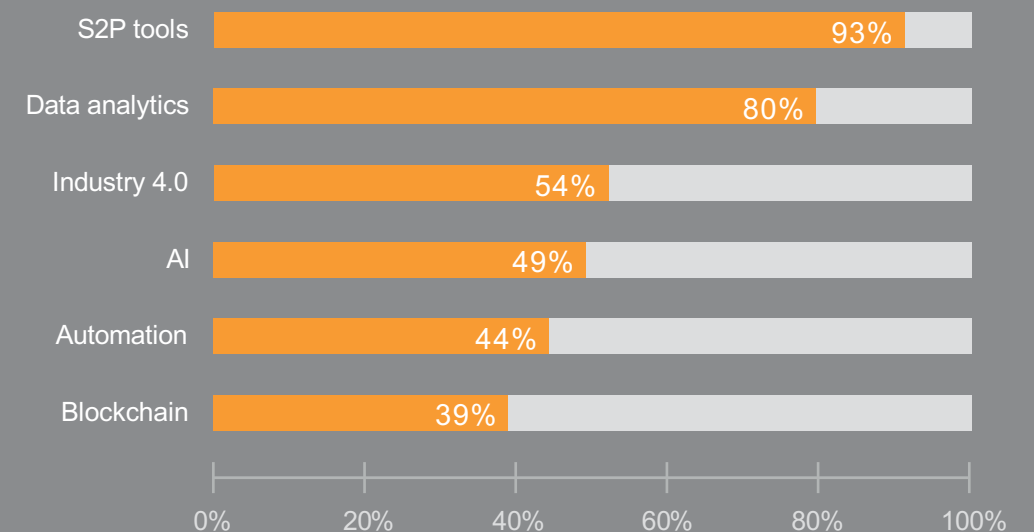
#### Procurement-related employees



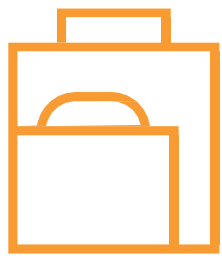
### Main business sectors in the survey

- Manufacturing (13%)
- Technology (11%)
- Automotive (11%)
- Business services (11%)
- Energy & Utilities (8%)
- Engineering & Construction (6%)

### Plans for investing in technologies







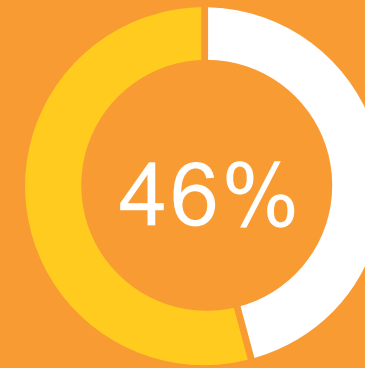
# Middle-market procurement department (services)

## Main procurement issues:

- Skills Development & Talent Acquisition (21%)
- Digitization of processes (21%)
- Simplification of organizations (15%)



## Percentage of procurement processes digitized:



Middle-market companies in the service sector see the digital transformation as a strategic challenge in staying competitive. Their digitization rate now stands at 46% after a catch-up effort in recent years. The tangible benefits the companies now enjoy include reduced costs, improved lead times and more reliable operations. Fully aware of the opportunities offered by this transformation, middle-market companies in the service sector have resolutely placed digitization at the top of their agenda.

## Characteristics

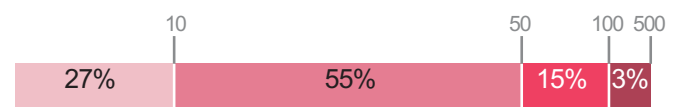
### Revenue

€500m to €5bn

### Procurement amounts managed



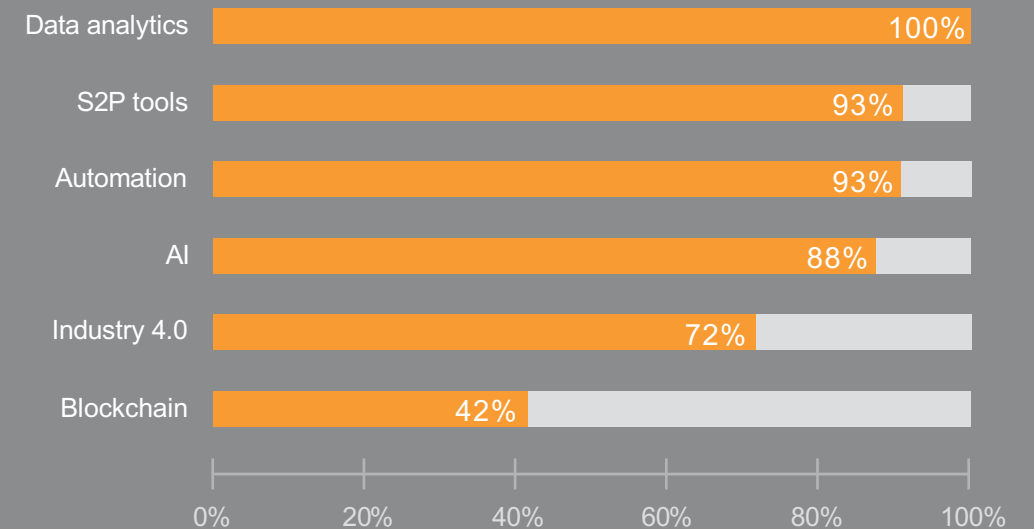
### Procurement-related employees

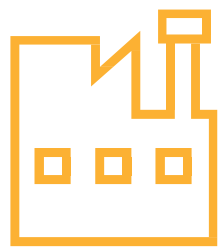


## Main business sectors in the survey

- Health (24%)
- Business services (18%)
- Media & Leisure (18%)
- Retail (12%)
- Banks & Capital markets (9%)
- Insurance (9%)

## Plans for investing in technologies





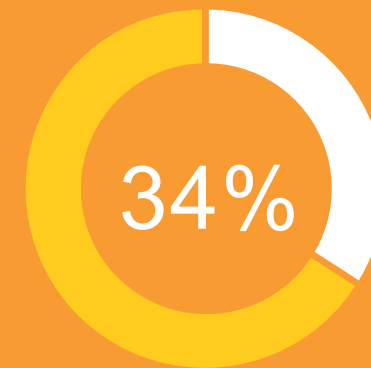
## Middle-market procurement department (industry)

### Main procurement issues:

- Digitization of processes (20%)
- Simplification of organizations (15%)
- Reinforcement of supplier collaboration (13%)



### Percentage of procurement processes digitized:



While industry's digital transformation is slightly behind that of the service sector, mainly owing to the greater complexity involved in industrial procurement, digitizing procurement processes is recognized as a prerequisite for getting ahead in a competitive market. Given how crucial the direct benefits are, particularly in terms of quality, productivity and customer satisfaction, procurement managers in industry are aware that keeping pace with digitization is a must.

### Characteristics

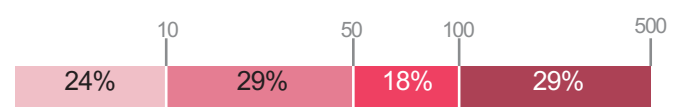
#### Revenue

€500m to €5bn

#### Procurement amounts managed



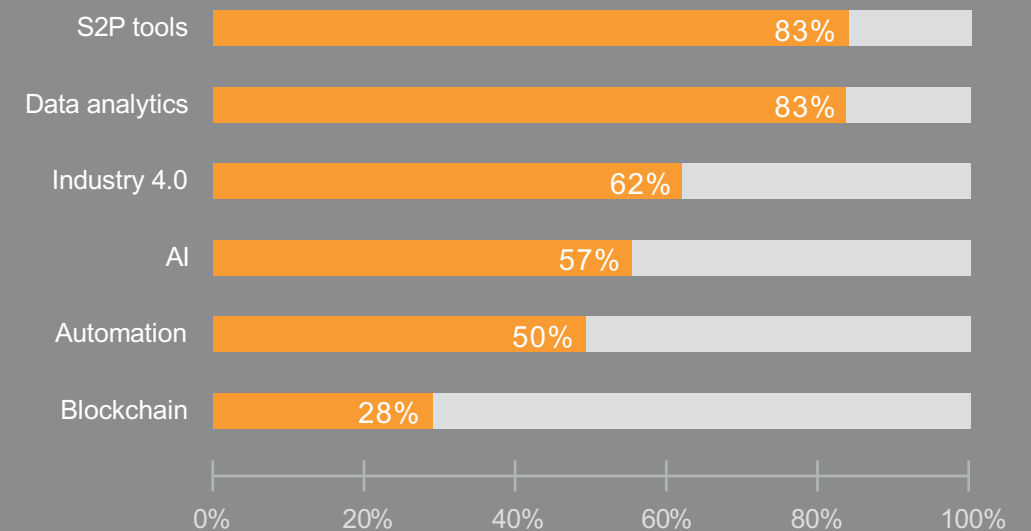
#### Procurement-related employees



### Main business sectors in the survey

- Engineering & Construction (22%)
- Manufacturing (18%)
- Agribusiness (16%)
- Energy & Utilities (15%)
- Retail & Consumer goods (11%)
- Chemicals (7%)

### Plans for investing in technologies





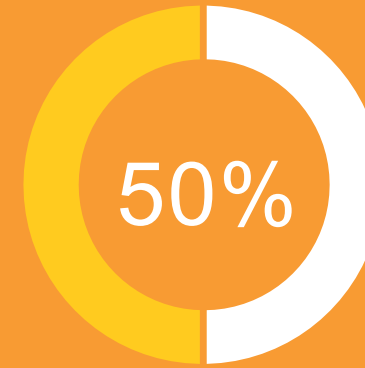
# Large corporation procurement department (services)

## Main procurement issues:

- Simplification of organizations (33%)
- Digitization of processes (22%)
- Acceleration of consolidation plans (17%)



## Percentage of procurement processes digitized:



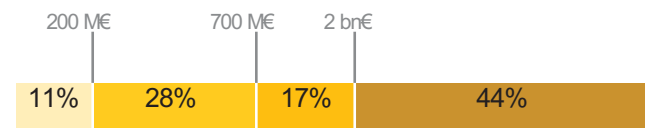
With 50% of their processes digitized, large corporations in the service sector have made clear progress in their transformation, which for some began in the 2000s. Today, this segment figures among the pioneers of digital procurement transformation. Fully aware of the issues and opportunities that digitization offers, these companies can now concentrate on new challenges, particularly AI and data linking within their ecosystem.

## Characteristics

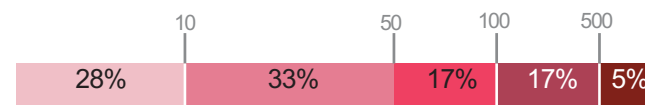
### Revenue

Over €5bn

### Procurement amounts managed



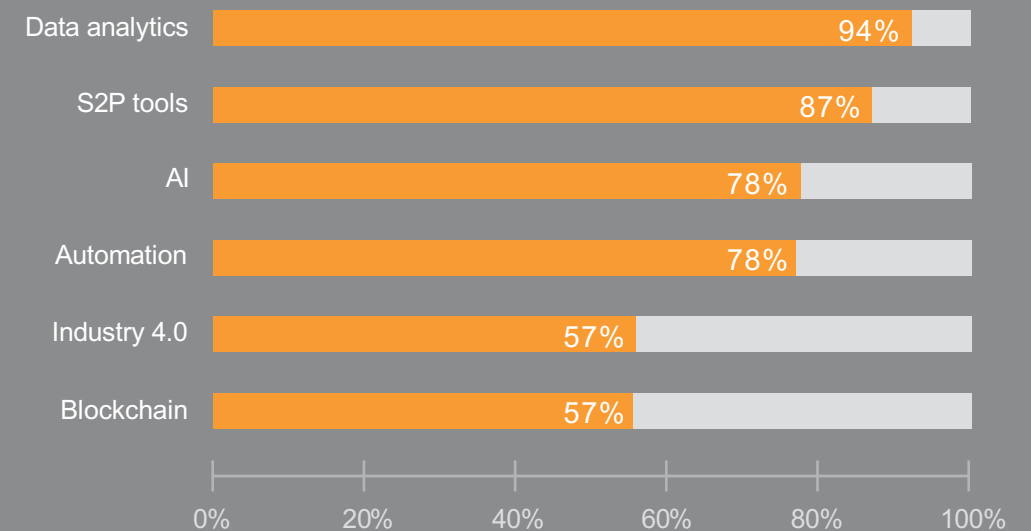
### Procurement-related employees

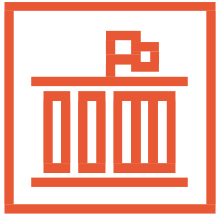


## Main business sectors in the survey

- Banks & Capital markets (33%)
- Media & Leisure (22%)
- Retail (11%)
- Insurance (11%)
- Business services (11%)
- Health (11%)

## Plans for investing in technologies





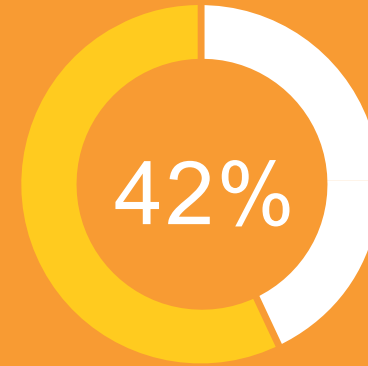
# Large corporation procurement department (industry)

## Main procurement issues:

- Reinforcement of supplier collaboration (20%)
- Digitization of processes (20%)
- Simplification of organizations (17%)



## Percentage of procurement processes digitized:



While fully recognizing the importance of digitization but still lacking systematic application, industry also falls short in its digital transformation within the large corporation segment, which could owe to the extent of the investment and restructuring required. To address performance issues and meet the increasingly high expectations of consumers, large industrial corporations today view digital transformation as one of the most relevant business drivers. Consequently, they are quickening the pace of their transition, which is already a crucial factor for retaining a competitive edge.

## Characteristics

### Revenue

**Over €5bn**

### Procurement amounts managed



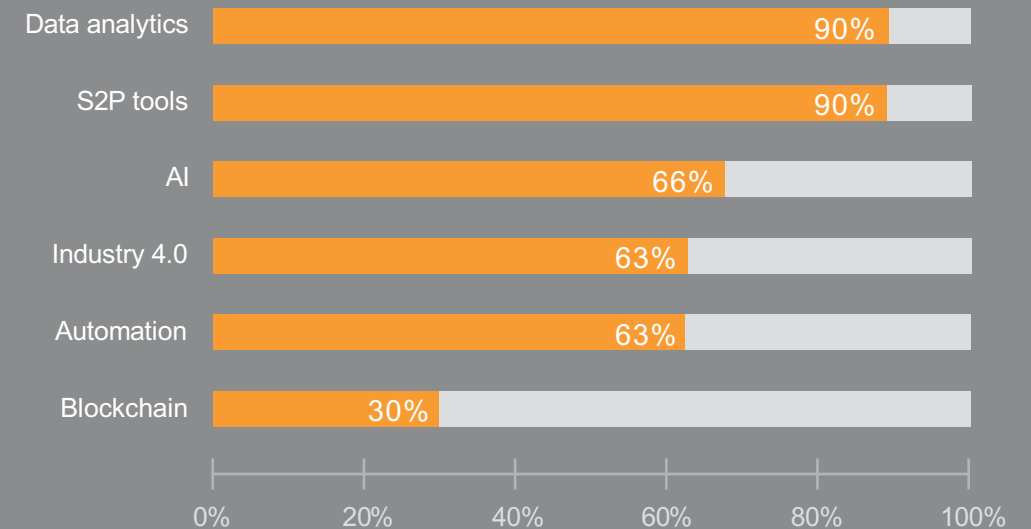
### Procurement-related employees



## Main business sectors in the survey

- Energy & Utilities (23%)
- Manufacturing (17%)
- Retail & Consumer goods (11%)
- Engineering & Construction (11%)
- Technology (9%)
- Metalworking industry (6%)

## Plans for investing in technologies



## Your contacts at PwC Procurement EMEA

### Austria

Harald Dutzler  
[harald.dutzler@pwc.com](mailto:harald.dutzler@pwc.com)

### Belgium

Fabian Roosen  
[fabian.roosen@pwc.com](mailto:fabian.roosen@pwc.com)

### Denmark

Thomas Siersbæk Heller-Njor  
[thomas.siersbaek.heller-jor@pwc.com](mailto:thomas.siersbaek.heller-jor@pwc.com)

### Czech Republic

Marián Bartoš  
[marian.bartos@pwc.com](mailto:marian.bartos@pwc.com)

### Finland

Pekka Pesonen  
[pekka.v.pesonen@pwc.com](mailto:pekka.v.pesonen@pwc.com)

### France

Isabelle Carradine  
[isabelle.carradine@pwc.com](mailto:isabelle.carradine@pwc.com)

### Germany

Dr. Norbert F. Fischer  
[norbert-f.fischer@de.pwc.com](mailto:norbert-f.fischer@de.pwc.com)

### Jan Herrmann

[jan.herrmann@pwc.com](mailto:jan.herrmann@pwc.com)

### Robert Weissbarth

[robert.weissbarth@pwc.com](mailto:robert.weissbarth@pwc.com)

### Ireland

Mark McKeever  
[mark.mckeever@pwc.com](mailto:mark.mckeever@pwc.com)

### Italy

Lorenzo Paolo Brunello  
[lorenzo.paolo.brunello@pwc.com](mailto:lorenzo.paolo.brunello@pwc.com)

### Latvia

Diana Kurpniece  
[diana.kurpniece@pwc.com](mailto:diana.kurpniece@pwc.com)

### Luxembourg

Layla Zaidi  
[layla.zaidi@pwc.com](mailto:layla.zaidi@pwc.com)

### Middle East

Dr. Bashar El-Jawhari  
[bashar.el-jawhari@pwc.com](mailto:bashar.el-jawhari@pwc.com)

### Netherlands

Mathieu Rosier  
[mathieu.rosier@pwc.com](mailto:mathieu.rosier@pwc.com)

### Norway

Selim Sumer  
[selim.sumer@pwc.com](mailto:selim.sumer@pwc.com)

### Russia

Vera Abaturova  
[vera.abaturova@pwc.com](mailto:vera.abaturova@pwc.com)

### South Africa

Retief Ferreira  
[ferreira.retief@pwc.com](mailto:ferreira.retief@pwc.com)

### Spain

Manuel Diaz Delgado  
[manuel.diaz.delgado@es.pwc.com](mailto:manuel.diaz.delgado@es.pwc.com)

### Sweden

Tobias Kihlén  
[tobias.kihlen@pwc.com](mailto:tobias.kihlen@pwc.com)

### Switzerland

Ceyhun Togo  
[ceyhun.togo@pwc.com](mailto:ceyhun.togo@pwc.com)

### Turkey

Dr. Ismail Karakis  
[ismail.karakis@pwc.com](mailto:ismail.karakis@pwc.com)

### United Kingdom

Leon Smith  
[leon.c.smith@pwc.com](mailto:leon.c.smith@pwc.com)

