THE STATE
OF PROCESS
AUTOMATION

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| AN OVERVIEW

Given multiple converging market pressures, organizations are accelerating the pace and increasing their investment toward transforming to become a true digital enterprise. Enterprises pursuing digital transformation are scrambling to move to modern architectures incorporating the cloud, microservices and mobile applications while also needing to fix short-term bottlenecks using RPA or automating human tasks as remote work becomes widespread.

As a result, process automation has emerged as a linchpin for digital transformation, powering innovation across a company. Process automation is equally sought after to improve an organization's top line as well as its bottom line – helping to improve customer service, lower costs and drive business growth.

Given the increased importance of process automation today, Camunda commissioned a "State of Process Automation" survey of 400 IT decision makers in the US and Europe to benchmark enterprise adoption and determine the biggest trends, challenges and opportunities for improvement.

Results of this survey demonstrate the transformative business value that process automation delivers for a majority of organizations, enabling them to deliver new levels of service and expand business opportunities. But the survey also spotlights the stark challenges enterprises are being faced with as they pursue automation. Their process automation needs are increasingly challenged by a wide range of new technologies, infrastructures and use cases. This new reality raises the danger of incomplete or broken business processes, lack of insight into inefficiencies and bottlenecks, added cost and potentially loss of customers or new growth opportunities.

Furthemore, the survey provides new industry insights, benchmarks and data for process automation teams about typical use cases, deployment practices and the adoption journey of process automation across organizations.

PROCESS AUTOMATION IS A DIGITAL TRANSFORMATION IMPERATIVE

Virtually all (97%) enterprise IT decision makers agree that process automation is vital to digital transformation.

Process automation is cited as a key driver of innovation and an important factor in achieving business outcomes.

97%

Process automation is vital to digital transformation

Question: To what extent do you agree or disagree with these statements? [400]
Showing percentage of respondents who agree with the statement.

PROCESS AUTOMATION DRIVES GROWTH AND EFFICIENCY

Survey results revealed how process automation is a business driver for growth and efficiency in near equal measure.

Half (49%) of an organization's process automation initiatives are focused on driving business growth. This demonstrates that process automation is regarded by respondents as actively contributing to the success of the organization,

improving experiences and the offerings of the business.

The other half of the process automation initiatives highlighted ways business optimization (27%) and other business efficiency factors, including firefighting (17%).
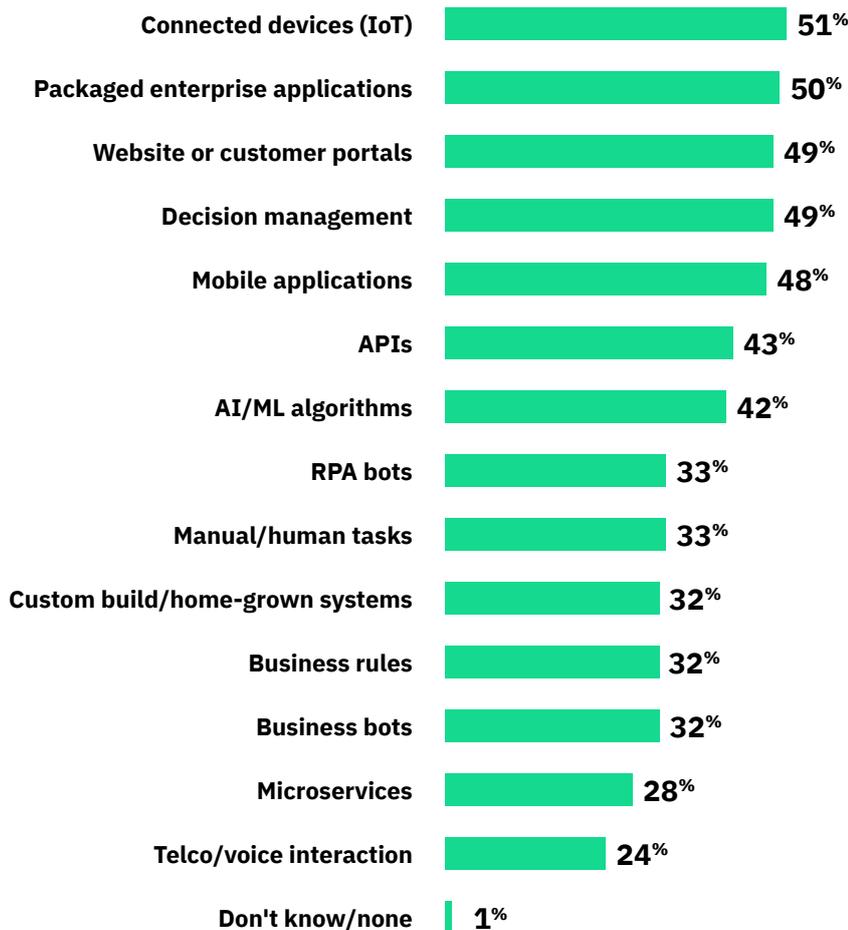
Business Drivers for Process Automation
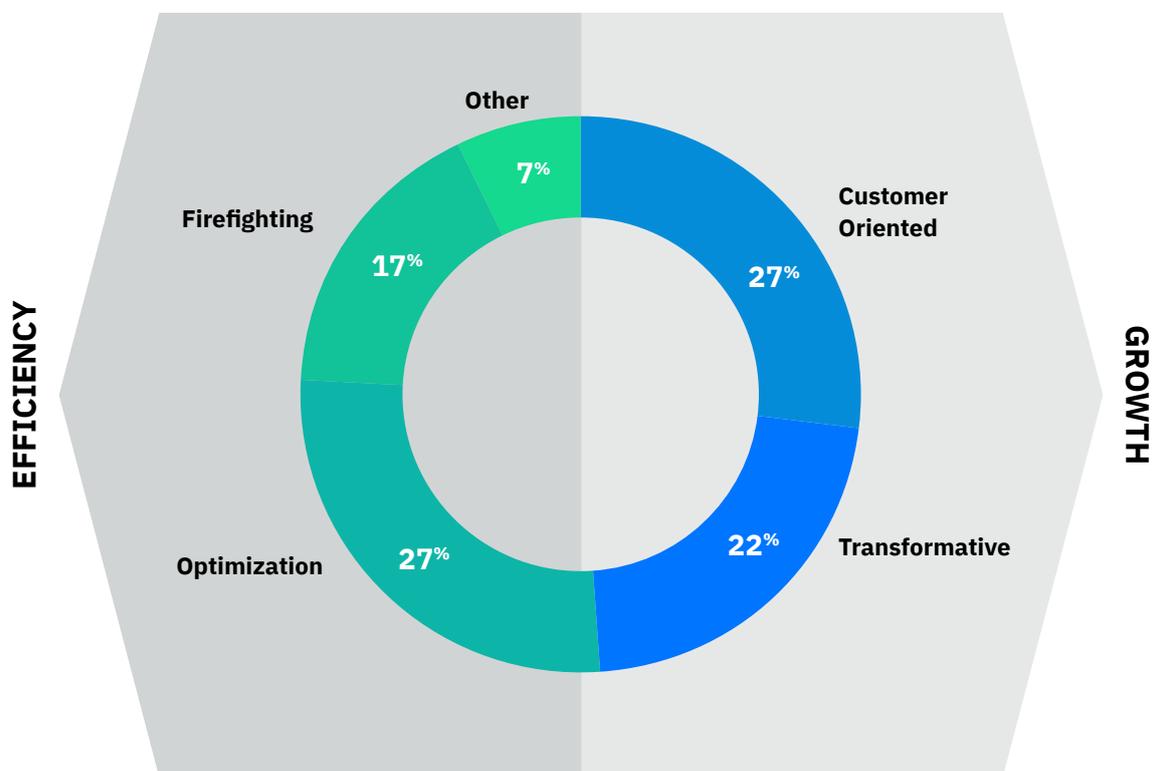

Question: Thinking about all of your organization's process automation initiatives up until now (that you are aware of), approximately what percentage of them would you categorize in each of the following? [400] Showing average percentages.

TODAY'S PROCESSES TOUCH EVERY PART OF AN ORGANIZATION

Processes are complex and include many different steps, components and end-points across different technologies. On average, a single process typically includes five different types of such components.

| Component	Percentage
Connected devices (IoT)	51%
Packaged enterprise applications	50%
Website or customer portals	49%
Decision management	49%
Mobile applications	48%
APIs	43%
AI/ML algorithms	42%
RPA bots	33%
Manual/human tasks	33%
Custom build/home-grown systems	32%
Business rules	32%
Business bots	32%
Microservices	28%
Telco/voice interaction	24%
Don't know/none	1%

Question:
Which of the following components are included as part of a typical process automation implementation within your organization? [400]

5

Average number of components per process
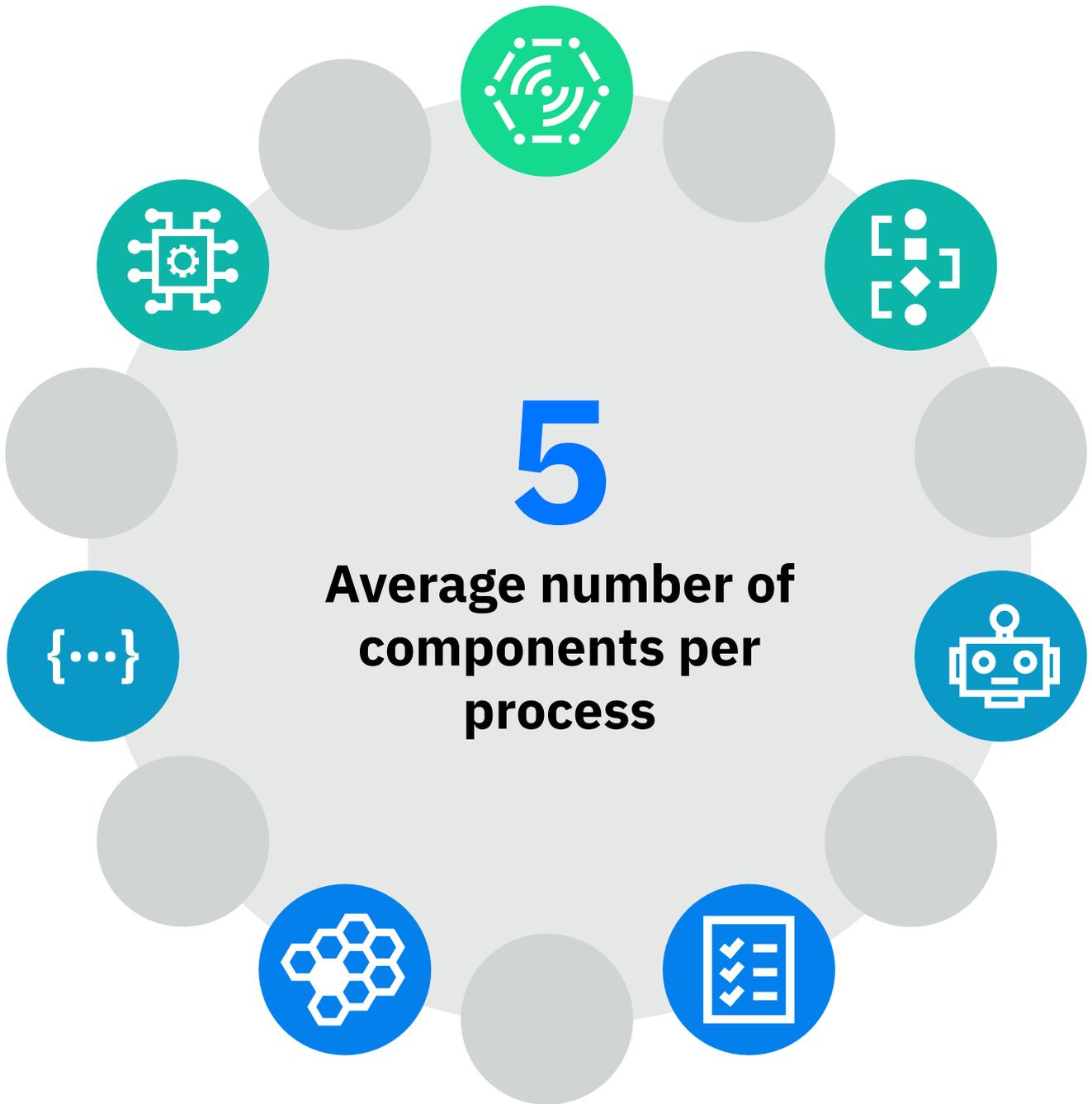
Question:
Which of the following components are included as part of a typical process automation implementation within your organization? [400]

PROCESSES RUN ANYWHERE

Organizations are dealing with added complexity. In addition to the wide variety of endpoints, such as mobile devices, IoT devices or personal computers, the heavy lifting of process automation is done anywhere – on premises, in the private or public cloud, or some hybrid scenario.

32%
On Premise

45%
Hybrid
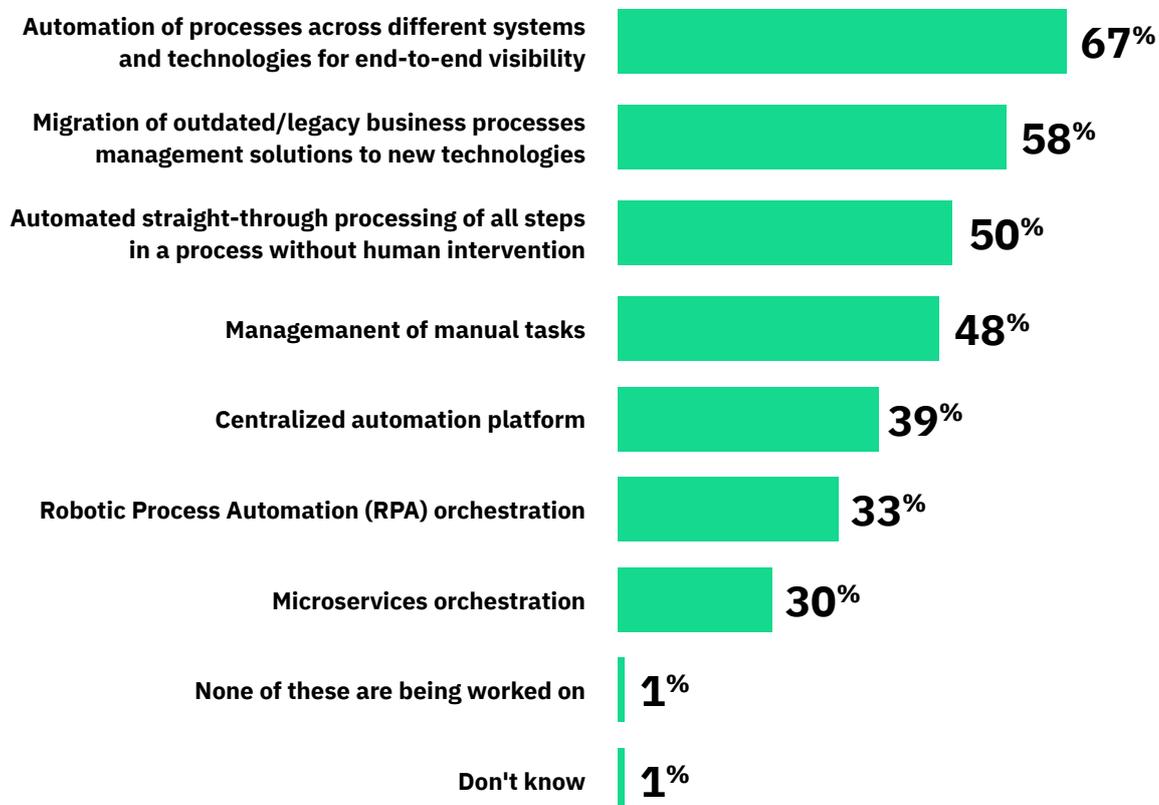
58%
Private Cloud

47%
Public Cloud
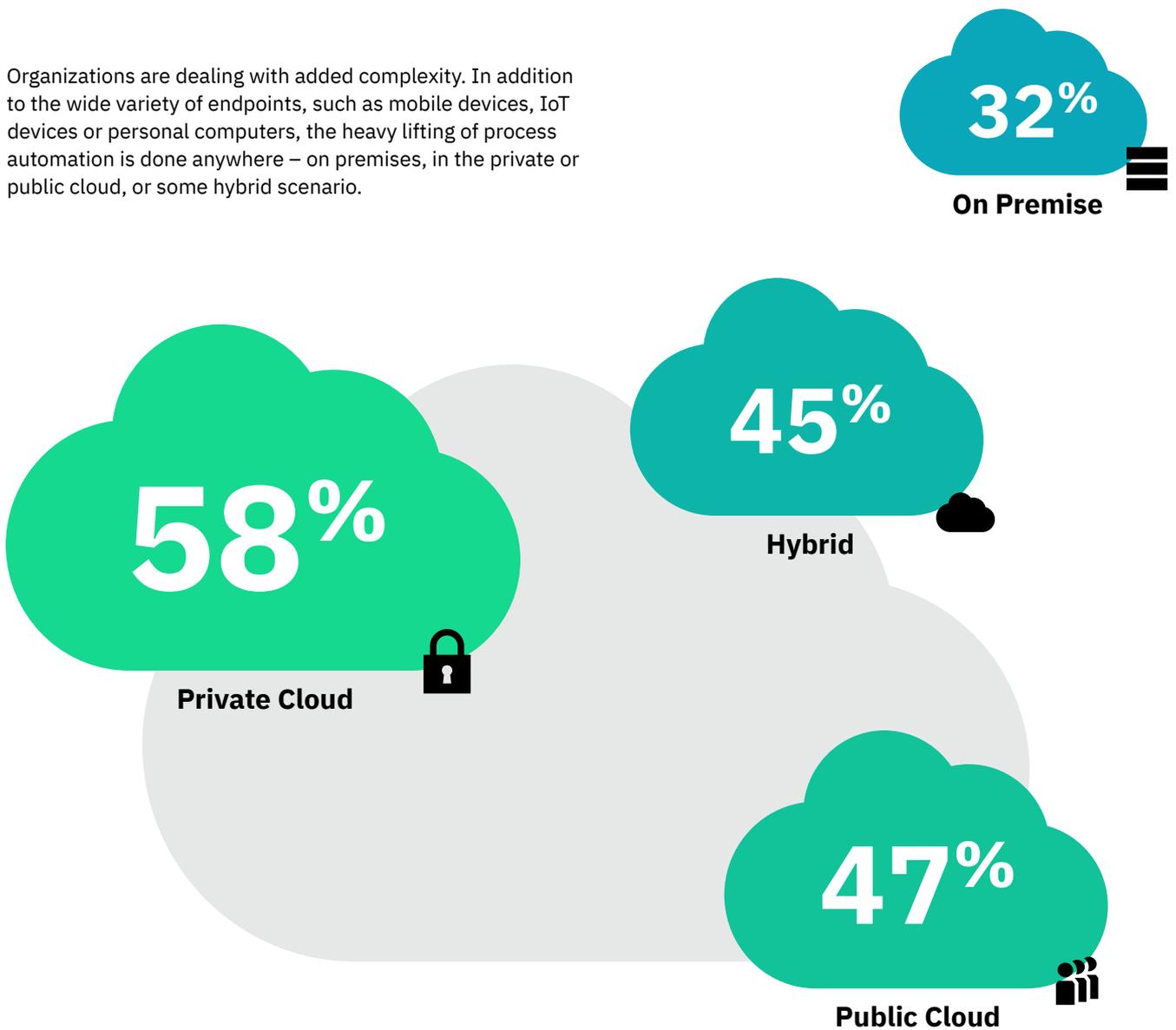
Question:
"What best describes the infrastructure used for these various process automation components in your organization"? [400]

PROCESSES AUTOMATION SUPPORTS A WIDE RANGE OF USE CASES

Process automation is being implemented for a wide variety of use cases.

From supporting end-to-end visibility to the management of manual tasks, organizations are taking advantage of the possibilities offered by process automation.

Use Case	Percentage
Automation of processes across different systems and technologies for end-to-end visibility	67%
Migration of outdated/legacy business processes management solutions to new technologies	58%
Automated straight-through processing of all steps in a process without human intervention	50%
Managemanent of manual tasks	48%
Centralized automation platform	39%
Robotic Process Automation (RPA) orchestration	33%
Microservices orchestration	30%
None of these are being worked on	1%
Don't know	1%

Question:
What types of process automation use cases is your organization currently working on? [400]

INVESTMENT IN PROCESS AUTOMATION IS INCREASING

The rise of the remote work and rapid changes in how business gets done further emphasized requirements for process automation.

Meanwhile, growing pressures to deliver service more efficiently mean organizations are increasing their investment in process automation.

84%

Plan to increase investment in process automation

Market forces driving growth of process automation projects

The digital transformation imperative is further accelerated by macro-economic forces of competition and changing working conditions.

80%

More automation is happening because there are fewer people in the office

91%

The pandemic has resulted in more collaboration between IT teams and business stakeholders to solve challenges
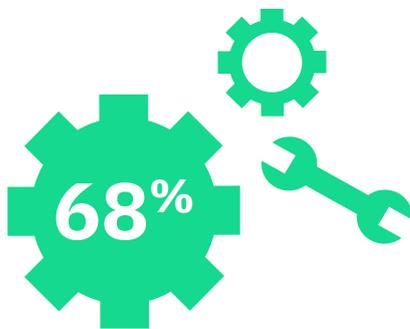
Questions:
What are the top three most important business drivers behind process automation in your organization?
Does your organization plan to increase, maintain or decrease investment in process automation in the next 24 months? [400]

COVID-19 INCREASED URGENCY FOR PROCESS AUTOMATION INITIATIVES

As businesses rapidly adapted to the challenges of the COVID-19 pandemic, their process automation plans often moved forward as a result.

Disruptions in workflow often revealed broken processes, and process automation helped bridge the gap through disruption.

68%

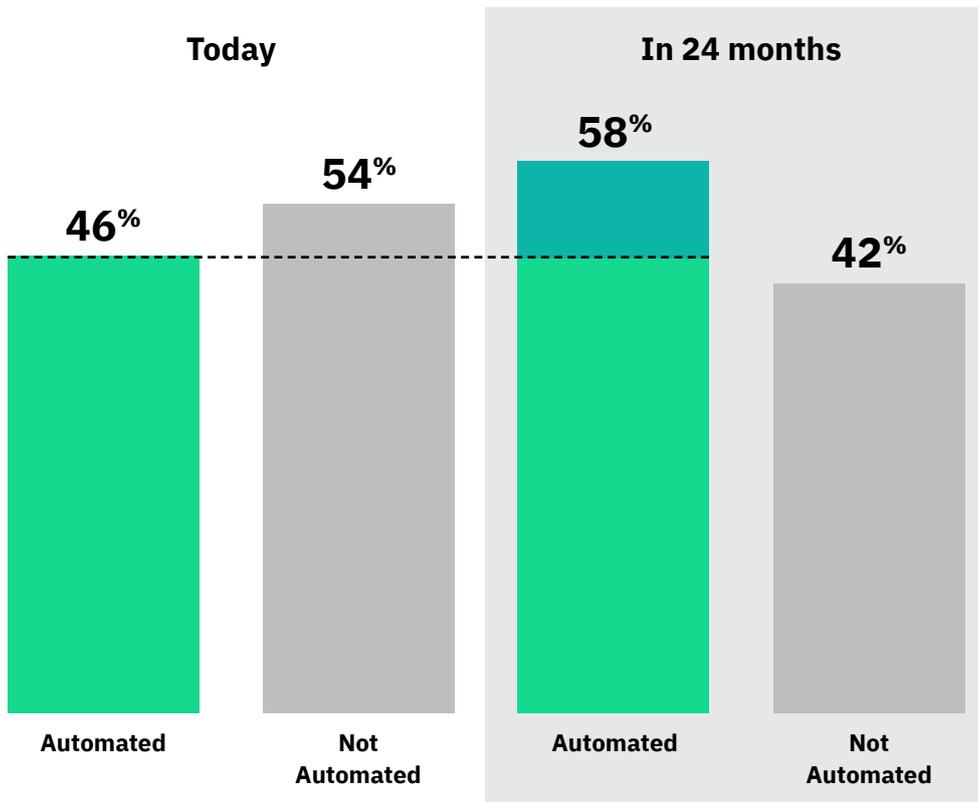**Report that their organization suffered breakdowns of key business processes due to remote work**

88%
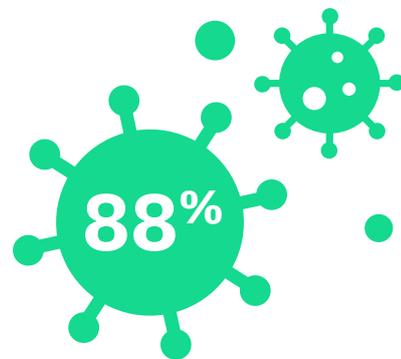
IT initiatives have been started or accelerated due to COVID-19

Questions:
Which of the following IT initiatives, if any, have been accelerated or started due to COVID-19?
To what extent do you agree or disagree with these statements? Showing percentage of respondents who agree with the statement shown [400]

PROCESSES WILL INCREASINGLY BE AUTOMATED

Nearly half (46%) of respondents' organization's processes are automated on average, and this is set to grow to 58% on average in the next 24 months.

Today		In 24 months	
46%	**54**%	**58**%	**42**%
Automated	Not Automated	Automated	Not Automated

PROCESS AUTOMATION IS NOT WITHOUT CHALLENGES

Nearly nine in 10 (88%) IT decision makers say that at least one challenge was experienced during their most recent process automation project. Most respondents that reported challenges with their process automation implementation, cited organizational and project management issues along with disjointed technical infrastructure.

Top 3 Process Automation Challenges

Changing priorities	34%
Disjoinetd systems/ Technologies	33%
Project took too long	30%

Nearly 9 in 10 report challenges with their most recent process automation project

Question:
Thinking about the most recent completed process automation project in your organization that you have knowledge regarding, what challenges, if any, were encountered? [400]

COMPANIES ARE AT RISK FOR CRITICAL BUSINESS PROCESSES BREAKING, LOSS OF REVENUE AND REPUTATION

Many organizations are still relying on manual or inconsistent reporting to decide how to optimize or improve already automated processes, and to identify patterns and bottlenecks. Some organizations also do not use KPIs to measure these. This lack of visibility and strategic oversight increases the chances that critical business processes could break unnoticed, and cause harm to revenue and reputation.

Process visibility and alerts are lacking in many organizations

58%
Review process analytics reports periodically

55%
Use real-time dashboards

48%
Perform periodic log analysis

25%
Use manual ad-hoc reporting

Question:
What approaches, if any, does your organization use to decide how to optimize or improve already automated processes, and identify patterns and bottlenecks? [400]

RPA IS PART OF THE PROCESS AUTOMATION LANDSCAPE: SHORT TERM BENEFITS, BUT NOT WITHOUT CHALLENGES
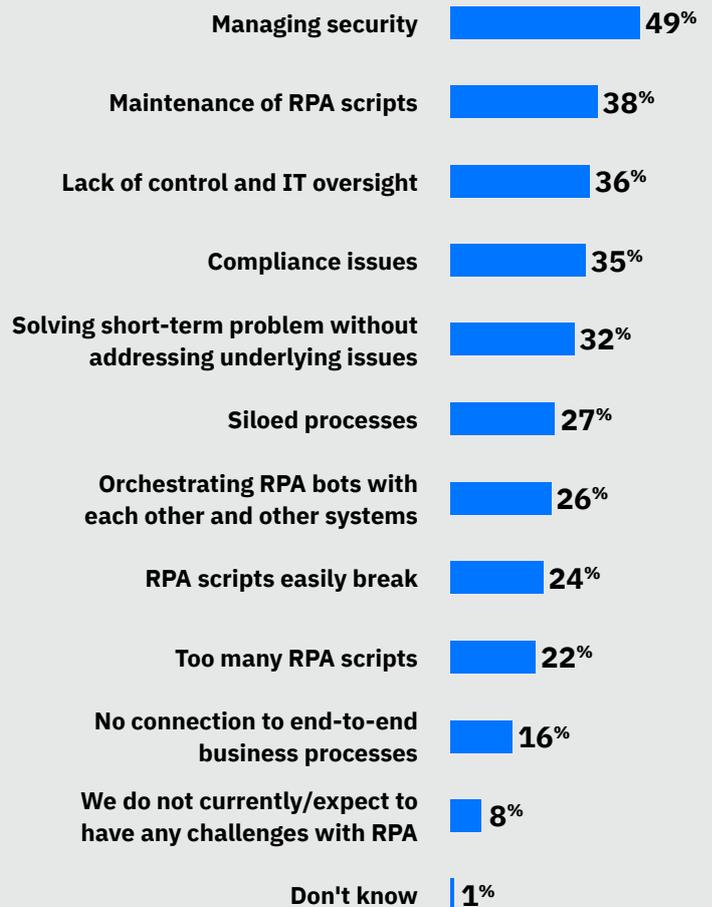
77% Use RPA

91% Experience problems with RPA implementations

While 65% of respondents that use RPA reported that RPA helped delivery automation quickly, most all (91%) cited challenges such as managing security, maintenance, lack of control, compliance, and only solving the short-term problem instead of the underlying issue.

Challenge	%
Managing security	49%
Maintenance of RPA scripts	38%
Lack of control and IT oversight	36%
Compliance issues	35%
Solving short-term problem without addressing underlying issues	32%
Siloed processes	27%
Orchestrating RPA bots with each other and other systems	26%
RPA scripts easily break	24%
Too many RPA scripts	22%
No connection to end-to-end business processes	16%
We do not currently/expect to have any challenges with RPA	8%
Don't know	1%

Questions:
Which of the following best describes your organization's use of Robotic Process Automation (RPA)?
What challenges does your organization have, if any, regarding RPA deployments? What benefits, if any, does your organization see/expect to see from RPA? Based on respondents whose organization uses RPA to some extent, or plan to use RPA in the next 12 months? [336]
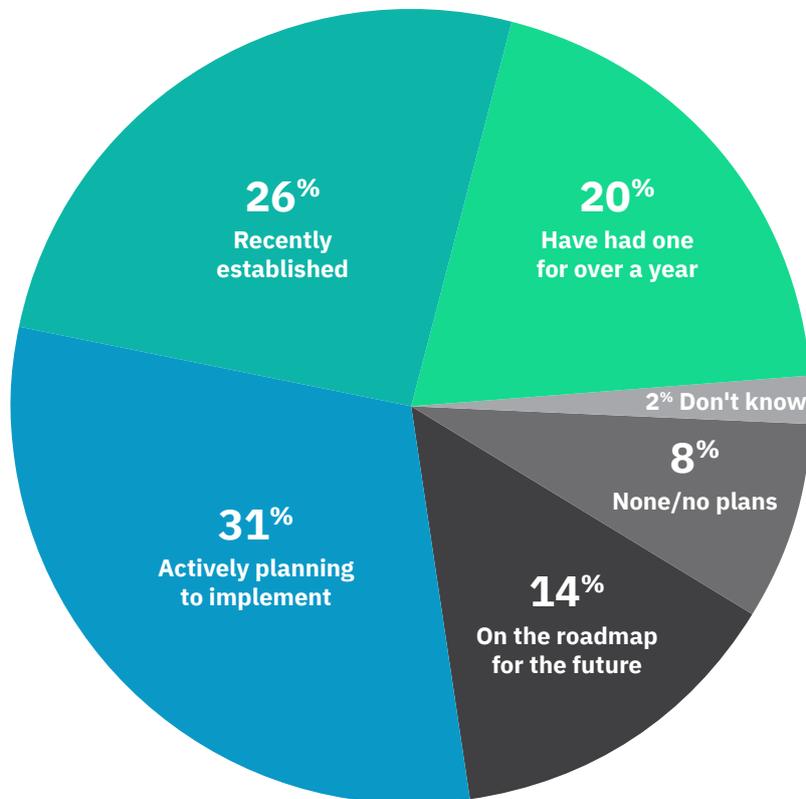
PREVALENCE OF CENTERS OF EXCELLENCE INDICATE BROAD INTEREST IN PROCESS AUTOMATION ACROSS IT ORGANIZATIONS

76% of all respondents reported that they either already have a Center of Excellence in place or are actively working on one.

Centers of Excellence are established to provide leadership, best practices, support and training for Process Automation across an organization.

Organizations invest heavily in the roll-out of process automation across an organization with Centers of Excellence growing from 20% a year ago, to 46% today, with an additional 31% being actively planned.

Centers of Excellence on the Rise

26% Recently established

20% Have had one for over a year

2% Don't know

8% None/no plans

31% Actively planning to implement

14% On the roadmap for the future

Question:
Does your organization have a center of excellence that includes process automation (including Business Process Management (BPM), RPA, etc.)? (Percentages add to more than 100 due to rounding.) [400]

THE STATE OF PROCESS AUTOMATION 2020 KEY TAKEAWAYS

1 Process automation is critical for the success of digital transformation. It's a key component of the IT strategies of many organizations, and many are accelerating their investments here.

2 Processes are complex and incorporate many different steps and components across different technologies that need be automated.

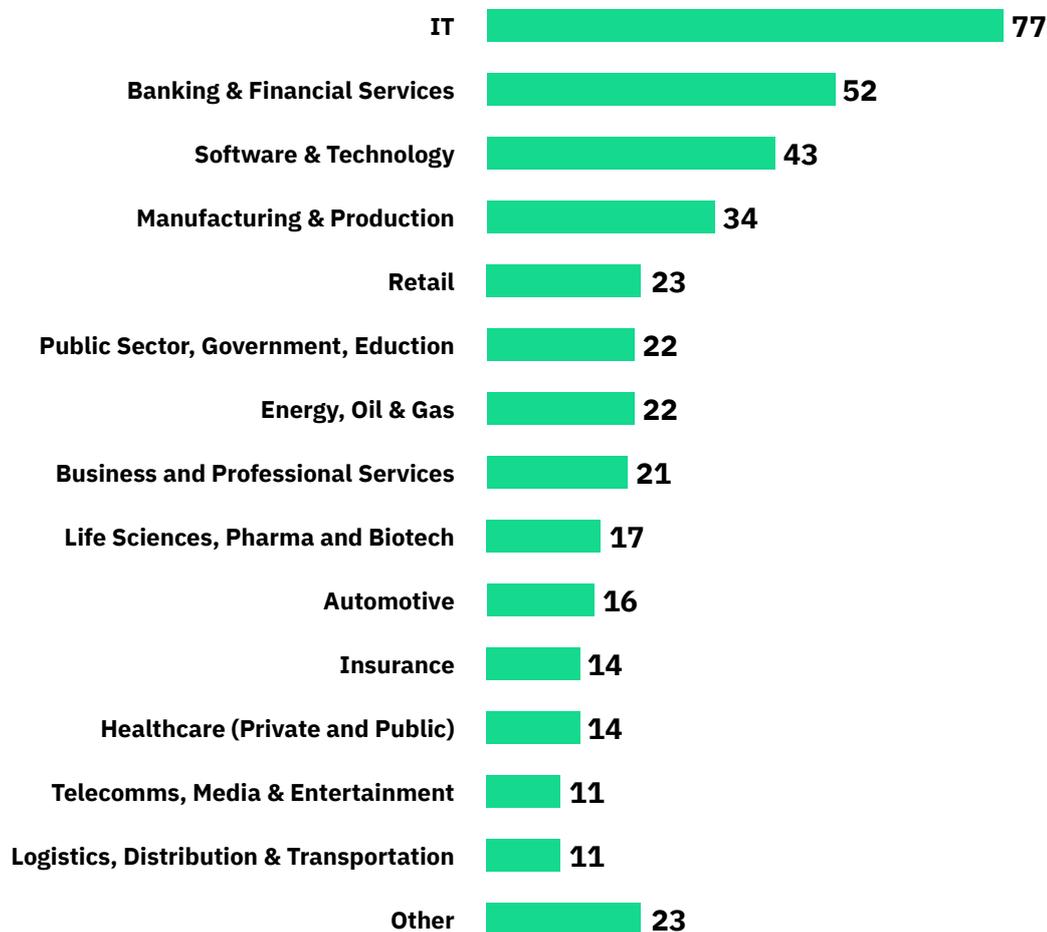**3** Companies are stepping on the gas pedal and are looking to increase investment in process automation.

4 But as implementations increase, some companies are struggling with proper visibility and success metrics and risk both revenue and reputation as a result.

SURVEY DEMOGRAPHICS

400 IT decision makers and process automation experts, covering roles such as C-Level, Director, VP, Manager, Architect, Engineer in North America and Europe.
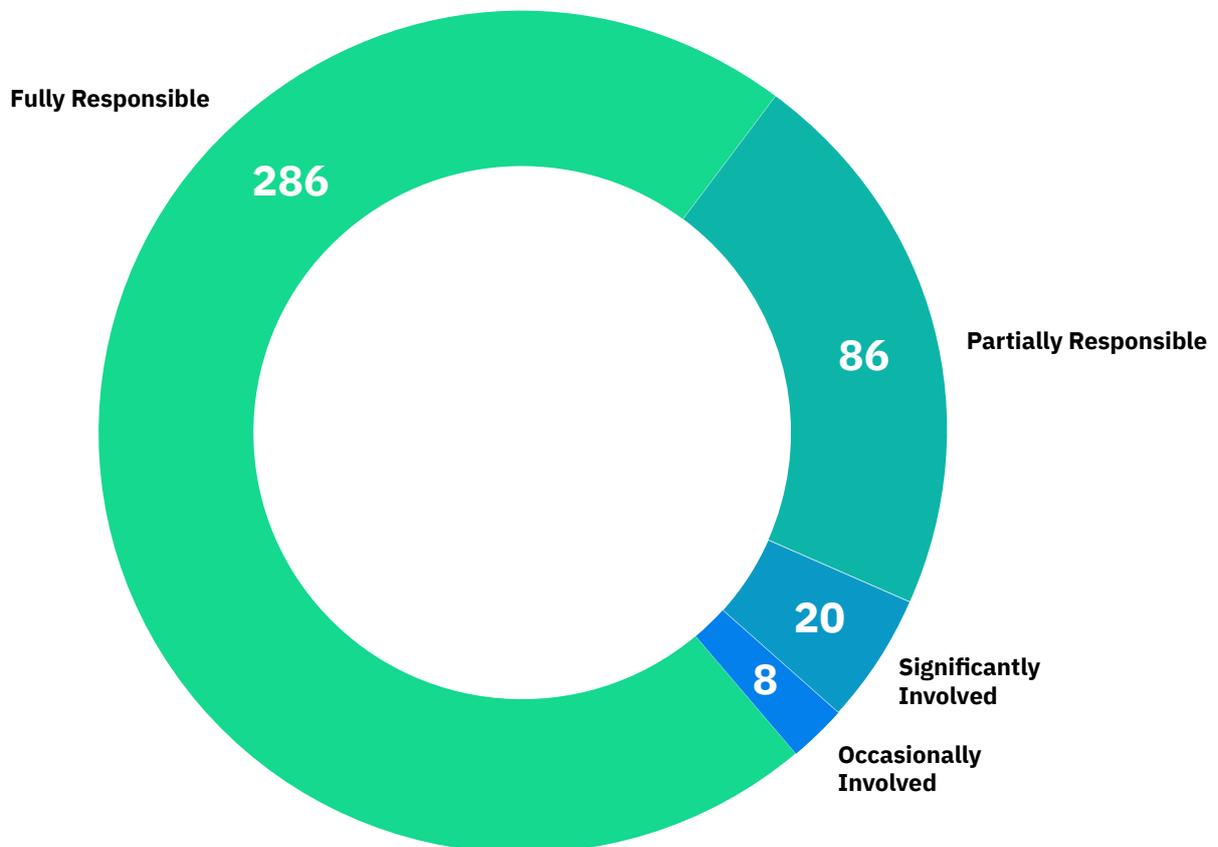
Sector

Sector	Value
IT	77
Banking & Financial Services	52
Software & Technology	43
Manufacturing & Production	34
Retail	23
Public Sector, Government, Eduction	22
Energy, Oil & Gas	22
Business and Professional Services	21
Life Sciences, Pharma and Biotech	17
Automotive	16
Insurance	14
Healthcare (Private and Public)	14
Telecomms, Media & Entertainment	11
Logistics, Distribution & Transportation	11
Other	23

Number of Employees

More than 3,000	170
1,000 - 2,999	121
500 - 999	109

Involvement in process automation

Fully Responsible — 286

Partially Responsible — 86

Significantly Involved — 20

Occasionally Involved — 8

Source: Survey fielded by Vanson Bourne on behalf of Camunda in August-September 2020

ABOUT
CAMUNDA

Camunda is an open source software company innovating process automation with a developer-friendly approach that is standards-based, highly scalable and collaborative for business and IT.

A community of thousands of users across companies such as Allianz, ING and Vodafone design, automate and improve mission-critical business processes end-to-end with Camunda.

Our workflow and decision automation tools enable them to build software applications more flexibly, collaboratively and efficiently, gaining the business agility, visibility and scale needed to drive digital transformation. Learn more at **www.camunda.com**