June 2021

Technology Impact
Pulse Survey Report 2021

Volume 1: Trends across the market

Emergence

Introduction

- The Emergence Partners Technology Impact Pulse Survey is conducted periodically to find the technology investment priorities of large organisations, and their satisfaction with the outcomes

- The survey is conducted through telephone interviews with senior managers in large organisations across US, UK, and Europe

- Our aim is to present real insights into the state of digital transformation, and to dispel myths

- We question each participant on the top three priorities from the past 12 months. We then explore the drivers, the challenges, the Return on Investment (RoI), and the levels of satisfaction with achieving desired outcomes for each

- We also explore if they engaged with any consultancies and external service providers, and if so, the drivers for choosing their providers, and the satisfaction with their work

- The findings of our inaugural survey conducted in Q1 2021 are presented in this report together with our analysis

- The report is aimed at:

    1. Decision-makers who wish to:

        i. Understand the market and what their peers are investing in

        ii. Benchmark the success of their technology investments and the ROI achieved against peers

    2. Technology vendors and service providers looking for market insights to improve their offerings and go to market strategies

    3. Consultancies and service providers who wish to understand satisfaction levels within the sector and how to improve services

- We will present the findings of the survey in a series of reports. In this first volume we provide the view across all industries and geographies

- Volume Two will provide the findings by country and industry

- In a third volume, to be published later, we will provide the findings and our analysis at a more granular level

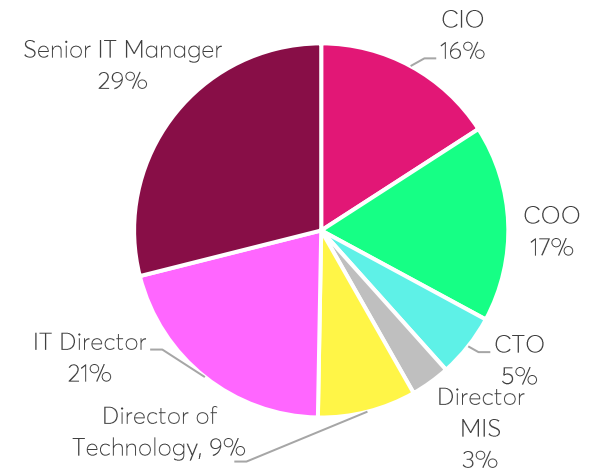# Profile of survey participants by country and industry

We asked 177 large enterprises in the US, UK, Germany, France and other major countries in Europe, about their top 3 technology investment priorities in the past 12 months
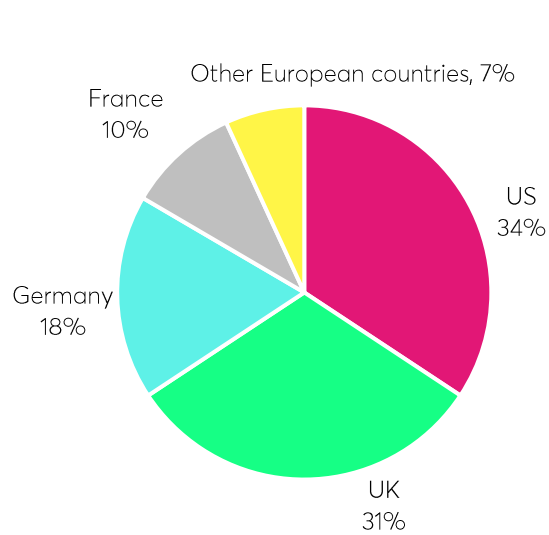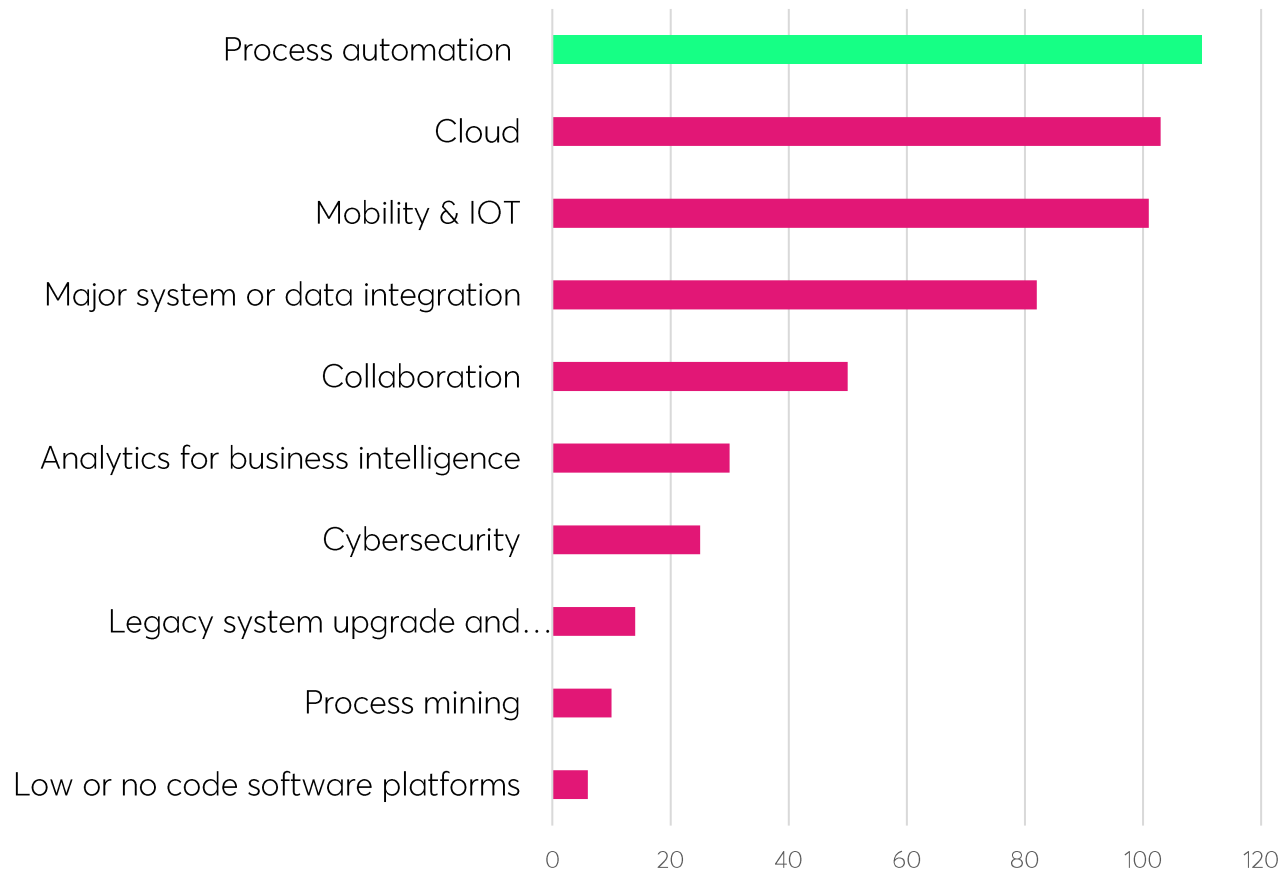

Split of participants by country
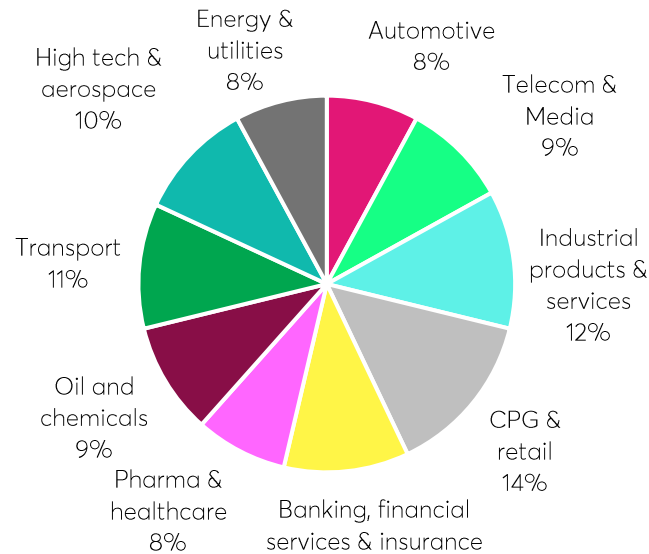
**Split of participants by industry**

Split of participants by role

Technology investment priorities in the last 12 months | Frequency of listing as one of top 3

Chart — Frequency of listing as one of top 3:

- Process automation: ~110
- Cloud: ~103
- Mobility & IOT: ~101
- Major system or data integration: ~82
- Collaboration: ~50
- Analytics for business intelligence: ~30
- Cybersecurity: ~25
- Legacy system upgrade and…: ~14
- Process mining: ~10
- Low or no code software platforms: ~6

(x-axis: 0, 20, 40, 60, 80, 100, 120)

- In the survey, process automation was mentioned the most as a top three priority investment area in 2020

- The need to automate processes was heightened by the pandemic due to staff shortages, lock downs, cost pressures, and the increase in digital business as a whole

- We asked about specific segments of process automation and we will explore it accordingly in the rest of the report:
  - IT process automation using intelligent solutions
  - IT process automation using Robotic Process Automation (RPA)
  - Business process automation using intelligent solutions
  - Business process automation using RPA

- The pandemic led to huge demand for cloud and flexible infrastructure to support increasing volumes of digital business, as shown by the survey participants marking cloud as a top priority in 2021

- Additionally, with many knowledge workers switching to home offices and to unusual shift patterns to cater for children at home, the need for on-demand computing capacity and collaboration, mobility, messaging, and virtual meeting channels grew, driving more investment in cloud

- Digital transformation requirements continued to drive the market for mobility and IOT investments, as well as systems and data integration

Frequency of listing of automation as a top 3 priority, split by function and type of Intelligent Automation Technology
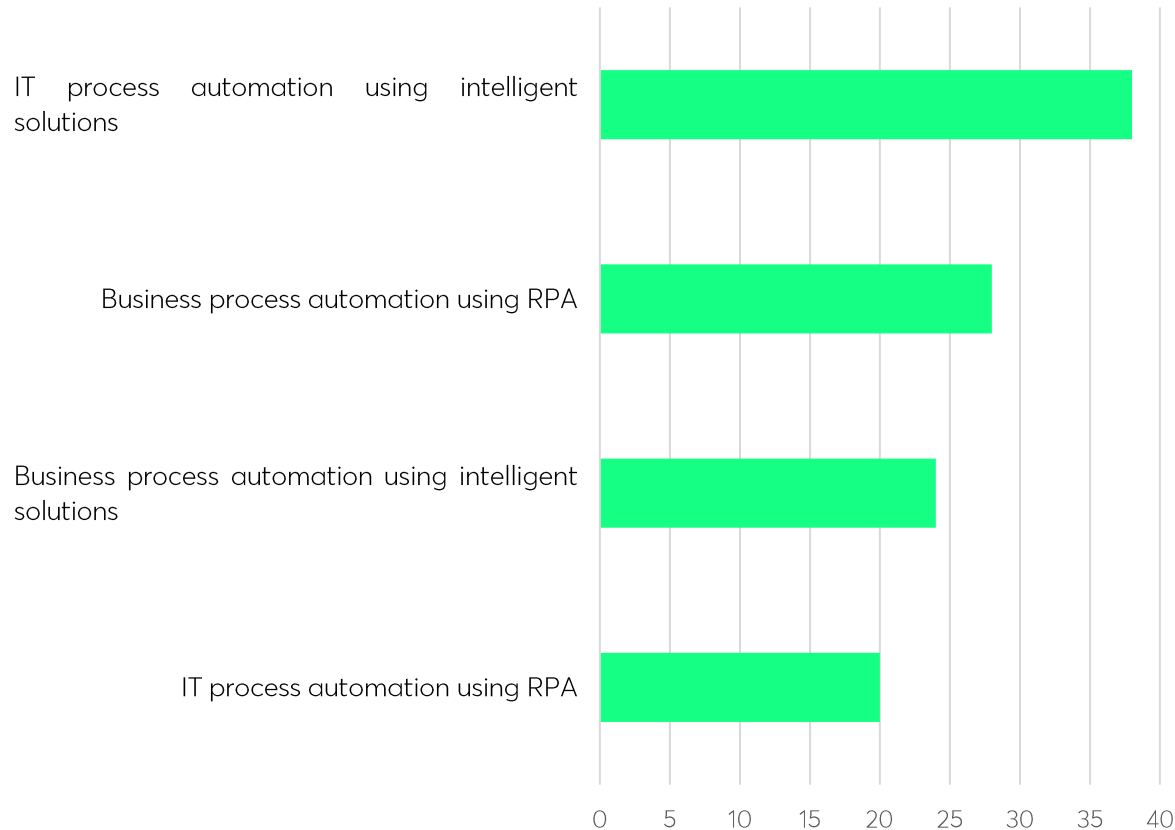
- Automating IT processes has risen as a priority due to the increased workload of IT departments with the continued shift to digital business, home working, and shortage of staff due to the pandemic

- With that and the extra burden of staff working from home, IT departments have faced backlogs of service desk cases, e.g. catering for demand for laptops and securing edge devices

- Intelligent automation solutions, such as those with Natural Language Processing (NLP) and conversational AI (chatbots) that can understand unstructured data and its context, have come to the fore in this segment of the market, powered by AI to handle the first line of support and service ticket resolution

- Demand for services in some sectors, such as online retail and financial services, rocketed in 2020. This, combined with an increase in staff absences, has boosted investment in RPA. The transactional nature of eCommerce has led to slightly more demand for RPA compared with intelligent solutions for business process automation

- It is the combination of the both RPA and smart AI-based technologies that leads to larger scale automation in the enterprise

- Those that had already deployed RPA will have looked to the other parts of the intelligent automation spectrum to digitise and codify more of their processes

Drivers for investment - scored out of 5

- The top three drivers for investing in technology were improving business processes, cutting costs, and increasing capacity. Most leading organizations aim to achieve these objectives as part of their continuous improvement programmes. In 2020, however, the pandemic increased the urgency of achieving these outcomes

- Satisfaction levels with outcomes of the investment for those drivers were generally high with average ratings of 4 out of 5. The highest levels of satisfaction were with investments in improving business processes, increasing capacity, and staff productivity

- At the same time, satisfaction with technology investment for the less important drivers, such as speeding up go to market and responding to regulatory changes, were relatively high compared with the importance of those drivers

Legend: ▮ The most important driver for investment in technology — Satisfaction with the outcomes of the investment
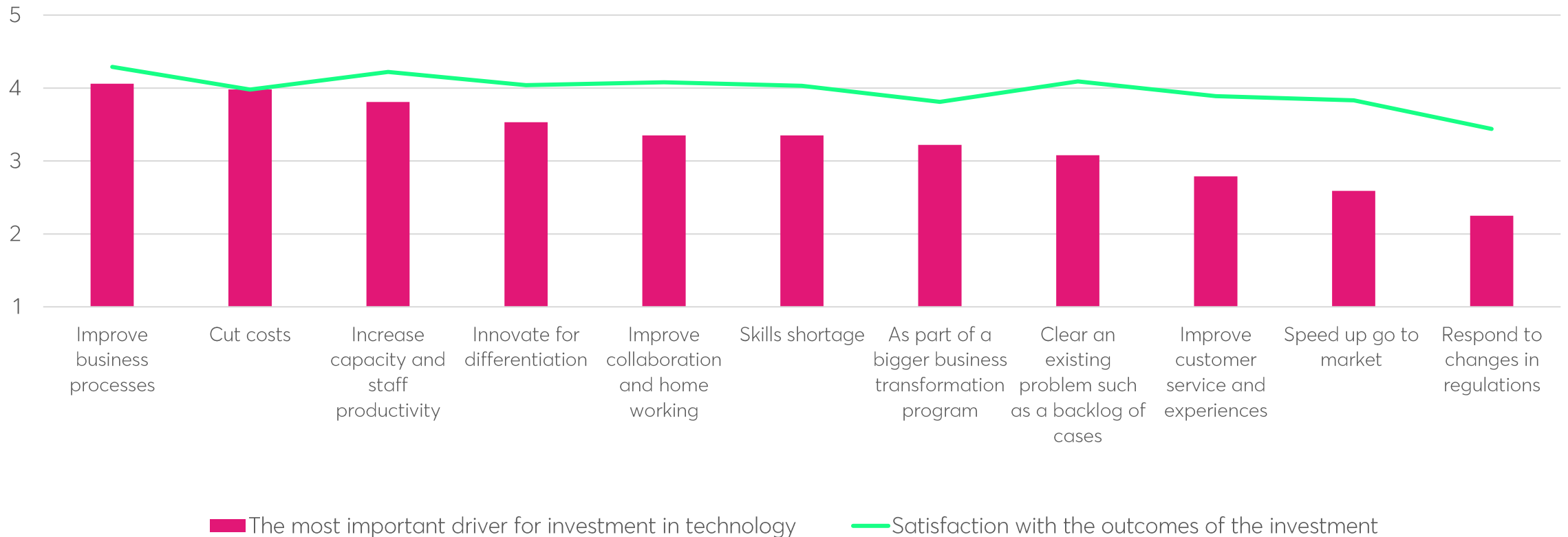
The importance of technology as a priority for investment in 2020 vs satisfaction with it post deployment

- This chart shows the importance of technology as a priority marked out of 5, against the level of satisfaction with it after deployment, averaged across all drivers for investment

- Low /no code came out as a winner when assessed in terms of investment priority in the last 12 months vs satisfaction. Although few participants rated it as a priority, those that had were very satisfied with it

- Process automation using intelligent solutions and RPA scored high in terms of both priority and satisfaction in both business and IT process areas

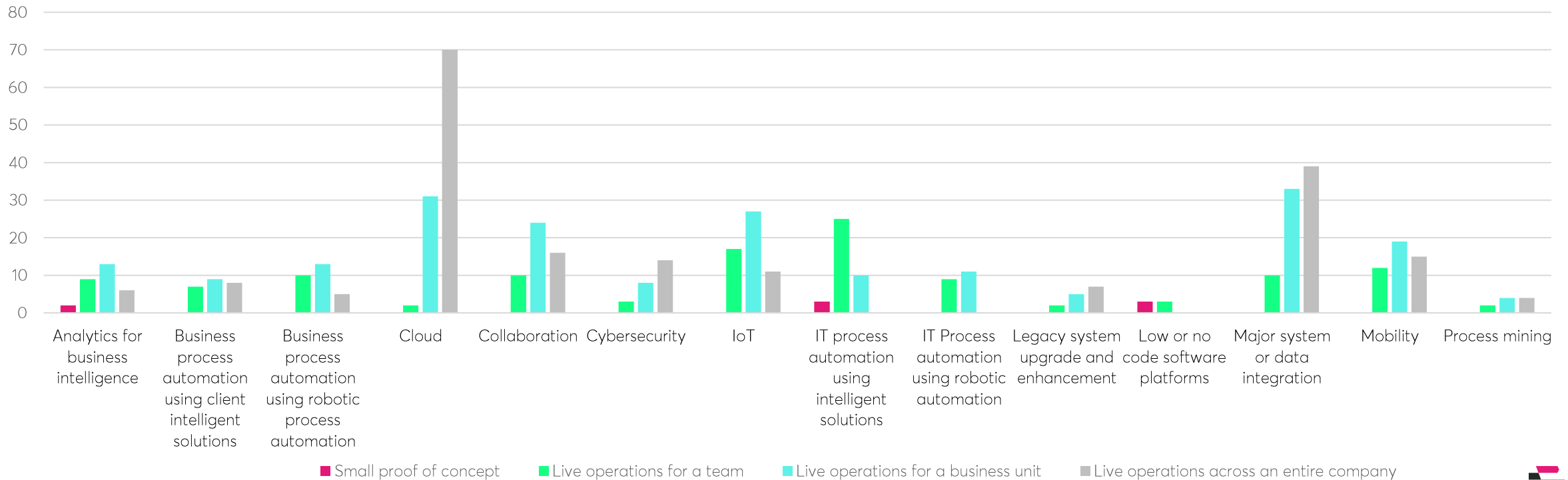- IOT and mobility solutions were also rated highly in both priority and satisfaction
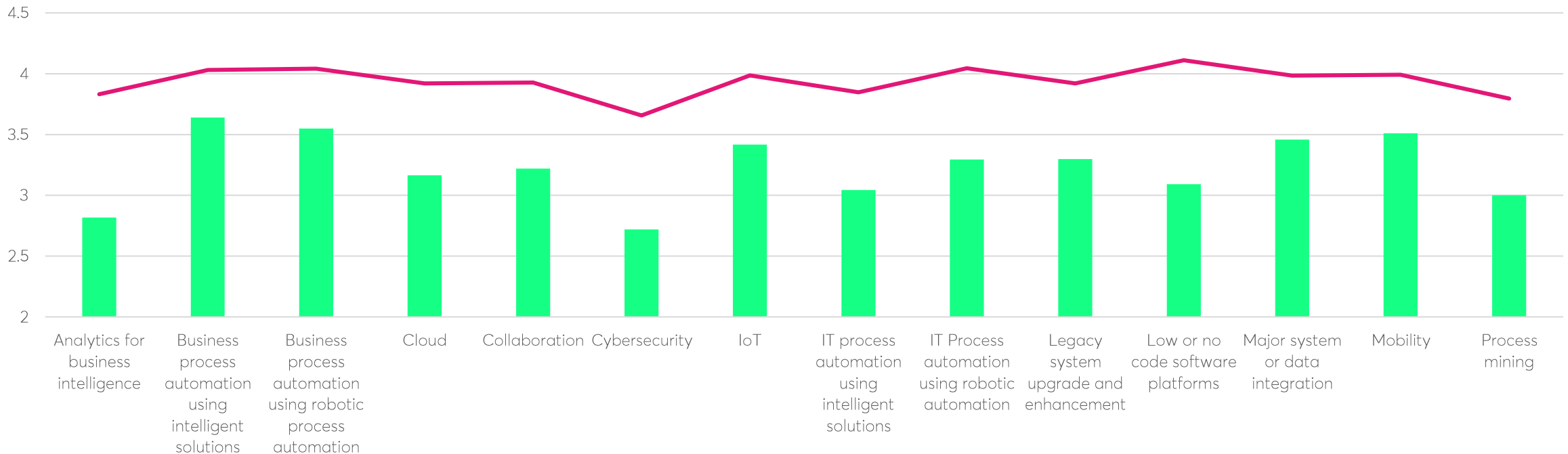
Legend: The importance of technology as a priority for investment in 2020 — Satisfaction with the technology averaged across all the drivers for investing in it

Scale of deployment of each technology in the past 12 months

- The survey shows a clear tendency towards business unit or company wide deployments of technology. This is unsurprising given the cost and the effort that goes into a trial, that can then produce little value. Poor specification in a pilot or a trial can mean that it does not reflect the reality of a complex larger deployment, resulting in wasted and duplicated effort and costs

- If holistic transformations do not occur, some teams will be left behind others in business units, leading to two speed development and the lack of internal alignment with inherent process, communications, and service issues

- Migration to cloud and data integration at scale are priorities to provide flexible options for corporate technology stacks, and to support digital transformation

- Business process automation deployments were focused within teams and business units. This is a recurring theme in the intelligent automation market, confirming the tactical nature of these deployments

- Low code and process mining were also at a low scale. The markets for these technologies are in a nascent state, and we expect the picture to change as enterprises mature in their adoption of automation technologies, and get to understand the potential of low code and process mining as enablers of more automation

Legend: Small proof of concept · Live operations for a team · Live operations for a business unit · Live operations across an entire company

The top three challenges faced by organisations when deploying technology broken down by technology

- The top three challenges that enterprises faced in adopting technology in the last 12 months were:
  - Staff shortages
  - A lack of skills and knowledge in newer technologies
  - Complexity and system integration issues
- Complexity continued to slow down legacy upgrades and data integration
- While low code and cybersecurity investments faced the least scale of challenges, staff shortages and lack of skills dominated intelligent automation adoption
- These are perennial problems perhaps magnified during the pandemic as experienced personnel were unable to travel, to provide help and advice where it was most needed
- Another contributing factor was economic uncertainty caused by the pandemic leading to a clampdown on spending on training and hiring

Shortage of staff — Lack of skills and knowledge — Complexity and systems integration issues
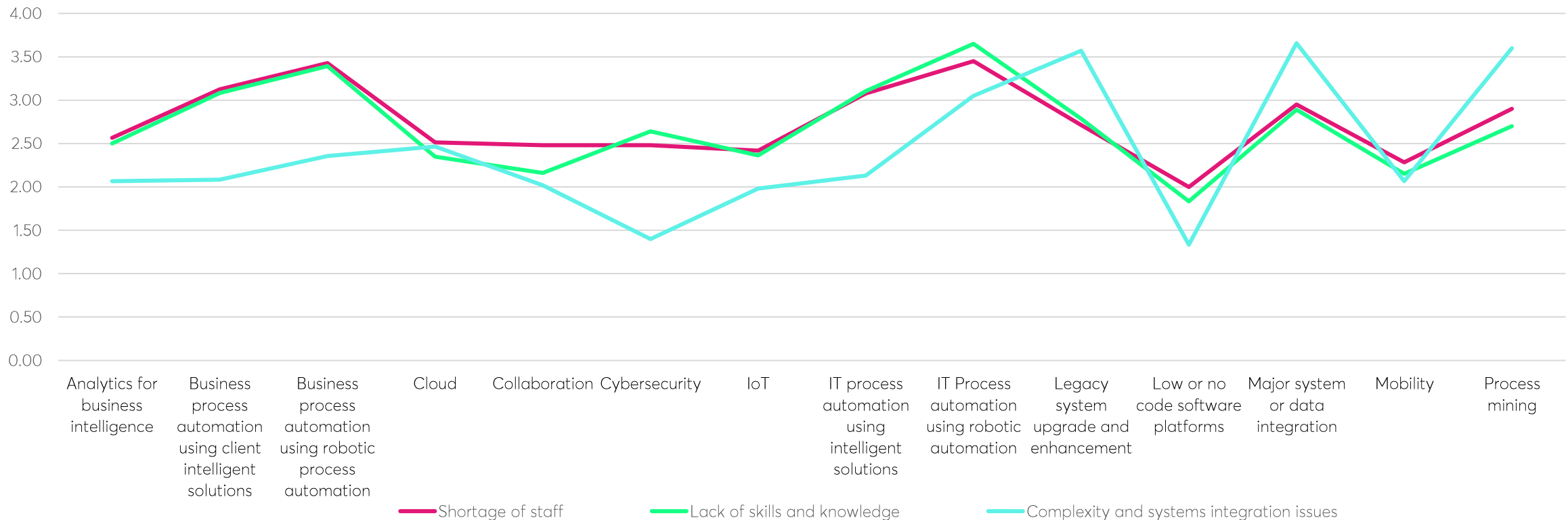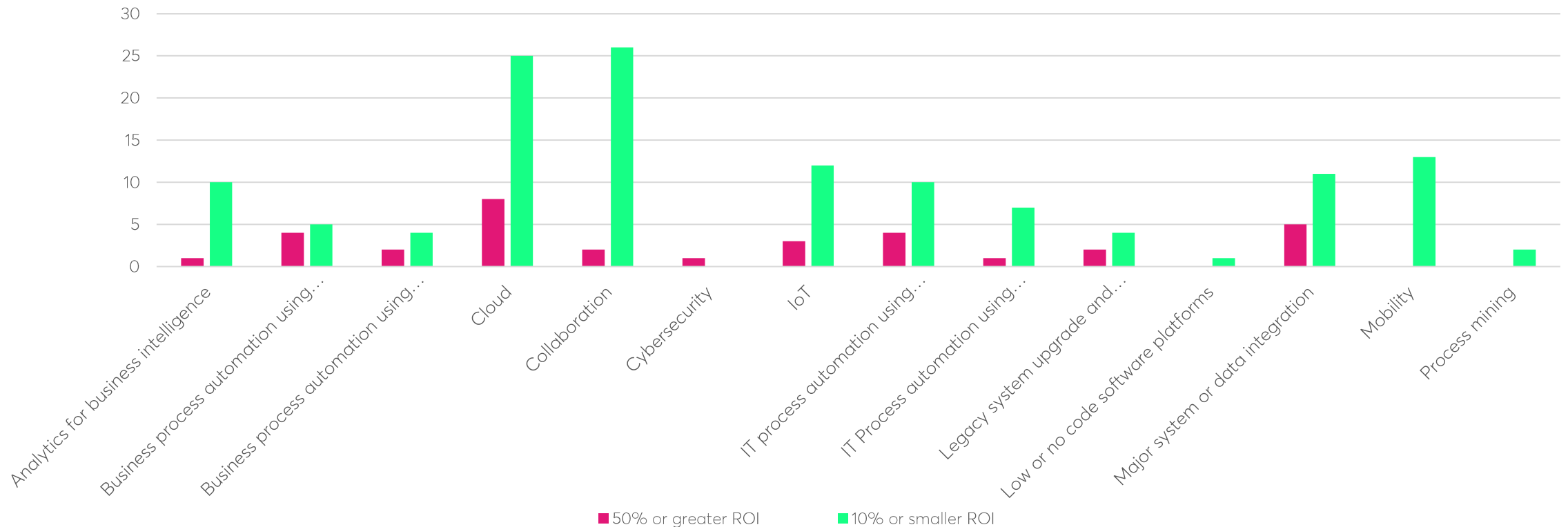
Expected ROI vs satisfaction with it for each of the top three investments

- Enterprises expected their investments in technology to deliver returns of between 14% and 35% (23% on average)

- The highest ROI was expected from Cybersecurity at 35%, followed by business process automation at 28%

- Expectations of ROI from analytics and business intelligence came 4th from the bottom, and even then these technologies only just met expectations. This is surprising given the maturity of the analytics market. However, the growth in volumes of data could be a factor given the increasing costs and complexity of data integration projects

- Collaboration, mobility, and low code platforms were expected to deliver the lowest level of returns, but their buyers were extremely satisfied with them indicating higher than expected ROI

Mean of ROI aimed for by investment in technology over the last 12 months   Satisfaction with the ROI to date
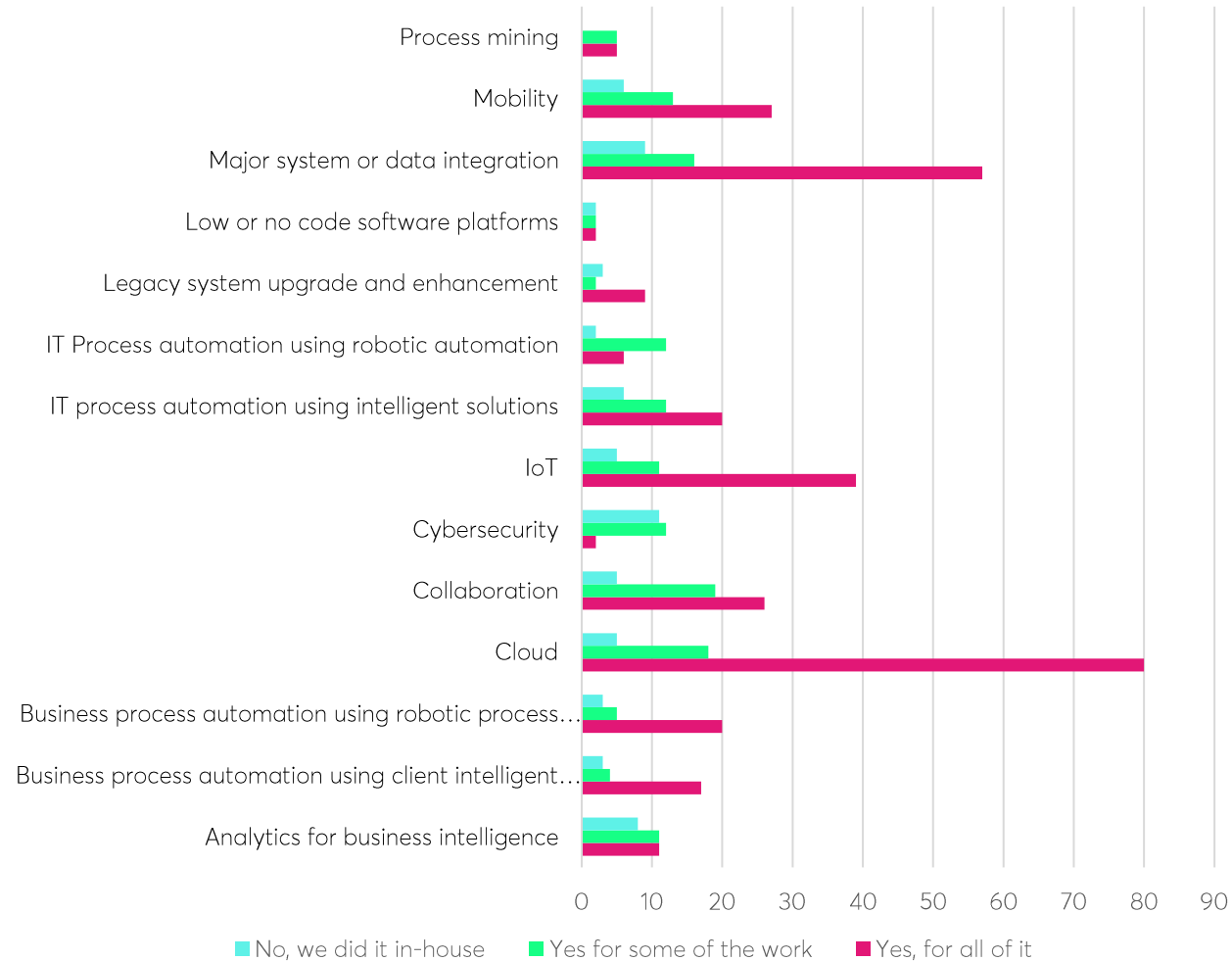
Analysis of ROI expectations – the outliers

- We compared the extreme ROI expectations, the outliers at either end of the spectrum, the very low, and the very high. We found that more participants expected returns at the lower end (less than 10%) rather than the higher one (50% or more)

- We believe this is driven by companies investing in leading edge technologies for the first time and are therefore aiming low. The pandemic is also likely to have affected this having sped up the pace of transformation projects, with many first-time adoption projects operating from a need to maintain the size of the business, and not growth

- That said, we believe that the low expectations from buyers is something that suppliers need to address, either to make it easier for enterprises to adopt technology and achieve outcomes, or to set the correct level of expectations

- Many vendors have created customer success teams, but more handholding may be necessary than ever before given the perennial problem of skills shortages

- We expect that more adoption of low/no code and advances in intelligent and automated code generation, containerisation, and deployment aides will help reduce costs of technology adoption and increase the ROI
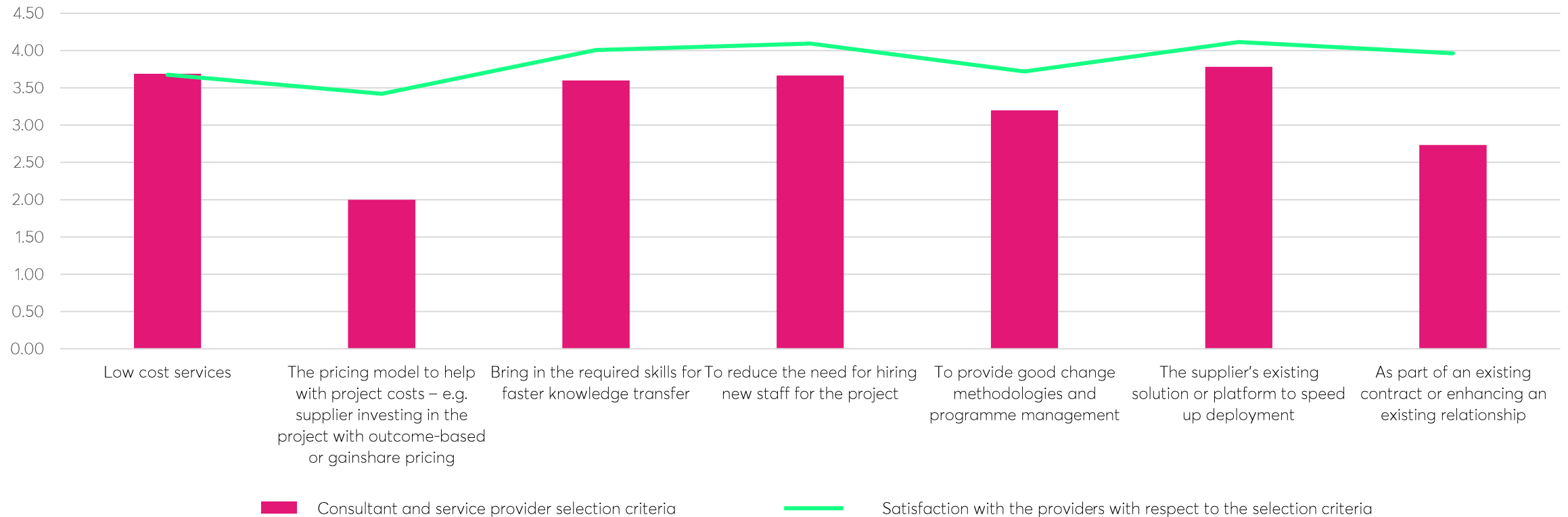

■ 50% or greater ROI   ■ 10% or smaller ROI

Engagement with external consultants or service providers

Chart legend:
- No, we did it in-house
- Yes for some of the work
- Yes, for all of it

Categories (top to bottom):
- Process mining
- Mobility
- Major system or data integration
- Low or no code software platforms
- Legacy system upgrade and enhancement
- IT Process automation using robotic automation
- IT process automation using intelligent solutions
- IoT
- Cybersecurity
- Collaboration
- Cloud
- Business process automation using robotic process…
- Business process automation using client intelligent…
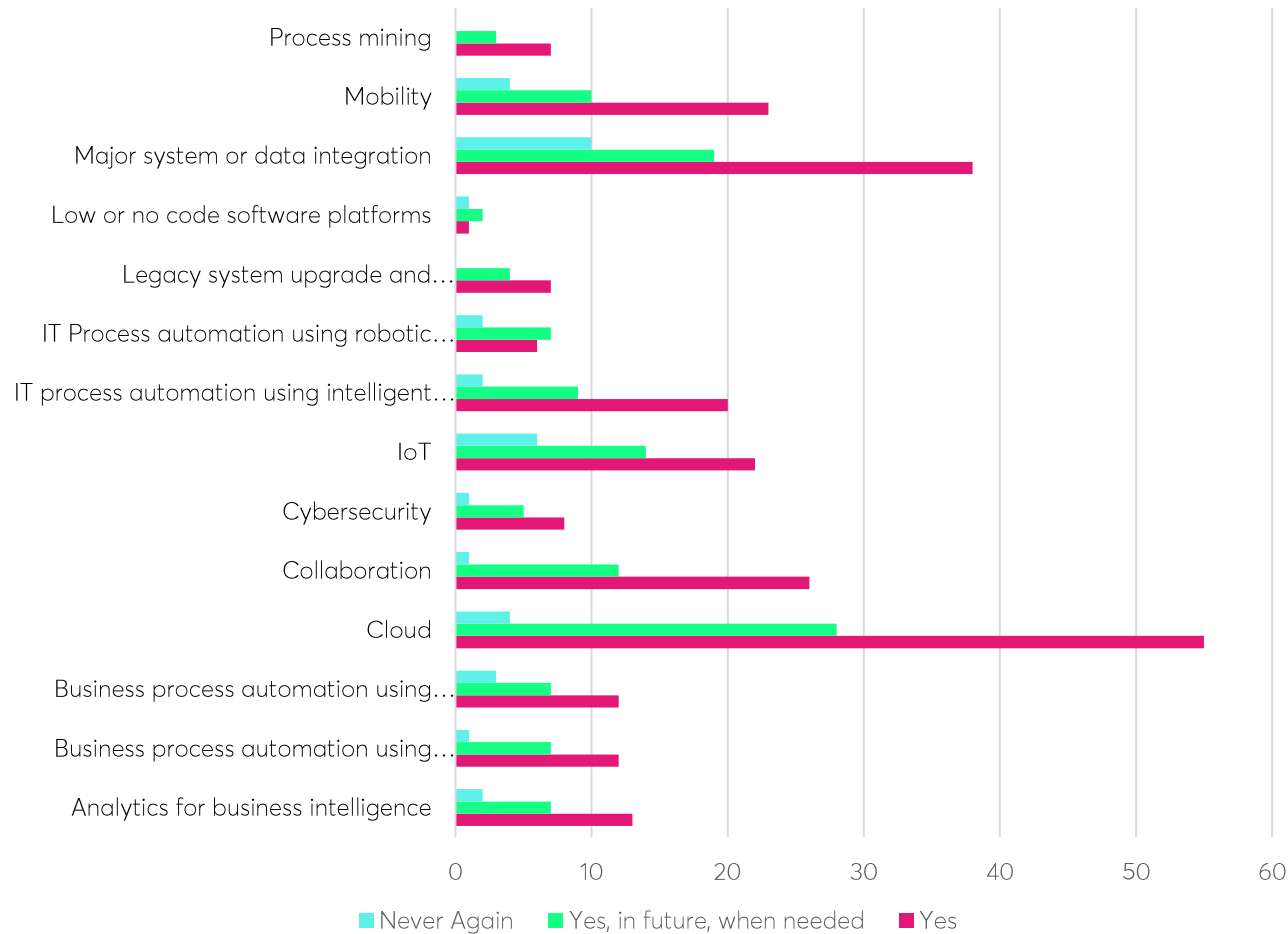- Analytics for business intelligence

- 87% of participants had engaged consultants and external service providers to deploy their top three priority technologies in the previous 12 months, with only 13% doing it in-house

- 60% had engaged consultants and external service providers for the entirety of the work

- The use of external expertise for the whole of the project was at the highest level for cloud adoption, major system of data integration, IOT, and mobility

- In the different segments of process automation, use of external professional services for the complete project dominated the approach to adoption, except for RPA in IT process automation. In this segment, IT only needed partial help from external experts. This is unsurprising given that IT departments typically have teams with software development and implementation skills in place

The most important selection criteria and satisfaction levels for consultants and service providers

- The external providers' existing solutions or platforms to speed up deployment were the highest rated selection criteria, followed closely by the need to reduce hiring new staff specifically for the project

- Satisfaction with external providers was very high for these selection criteria, as was use of consultants to bring in skills to speed up knowledge transfer

- Low-cost services was another important selection factor, but external providers only just met clients' expectations in this context


Legend:
- ▬ Consultant and service provider selection criteria
- ━ Satisfaction with the providers with respect to the selection criteria

Attitudes towards more engagements with external service providers

Chart categories (top to bottom):
- Process mining
- Mobility
- Major system or data integration
- Low or no code software platforms
- Legacy system upgrade and...
- IT Process automation using robotic...
- IT process automation using intelligent...
- IoT
- Cybersecurity
- Collaboration
- Cloud
- Business process automation using...
- Business process automation using...
- Analytics for business intelligence

Legend: ■ Never Again ■ Yes, in future, when needed ■ Yes

X-axis: 0, 10, 20, 30, 40, 50, 60

- Attitudes towards service providers and consultants were generally positive with 72% of the survey participants stating that they would either continue to work with them, or hire them as needed in the future

- The outlook is particularly good for external service providers in the fields of cloud adoption and migration, major system or data integration, collaboration, and IOT

- Major system and data integration projects saw plenty of the two extremes of client satisfaction:
  - They received the second highest number of respondents saying a definite yes to the use of consultants in future
  - This was accompanied by the highest number saying never again

Technology investment priorities for the next 12 months

- Except for cloud, investment priorities for the next 12 months are spread fairly evenly across technologies

- Cloud continues to be a priority on the back of digital transformation, and supporting enterprise flexibility and agility after the lessons learnt in resilience during the peak of the pandemic

- As for other technologies, the pandemic could be the catalyst that is making organisations take in the bigger picture and address gaps in their capabilities

- Another reason for the lack of a clear direction in technology investment could be the general uncertainty about the future, and organisations wanting to hedge their bets
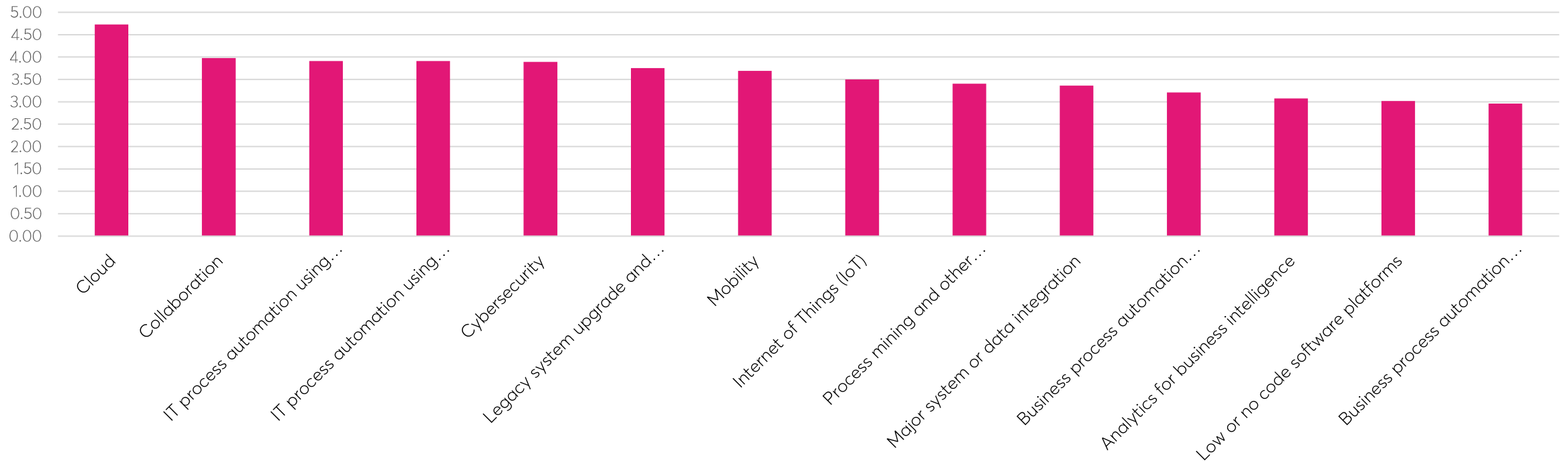
Summary of key findings

Process Automation

Although investment in business process automation was a top priority for large enterprises in 2020, and satisfaction with it was high, scale of deployments remained small. Half of all deployments were at team or proof of concept level, with only 12% at large, company-wide scale. This is surprising given the challenges of staff shortages and capacity issues in the pandemic

Cloud

- Migration to cloud was a high priority in 2020, accelerated by the need to support work from home and increased levels of on-line business in the pandemic
- Satisfaction with the outcome of investment in cloud was good but it was even better with its ROI. These were at 3.98 and 4.21 out of 5 respectively

Professional services

- 87% of participants had engaged consultants and external service providers to deploy their top three priority technologies in 2020
- Satisfaction with consultants and external service providers was generally high with 72% of the survey participants stating that they would continue to work with or hire them again

Low code

Low code was not a priority in 2020 but those who deployed it gave it the highest satisfaction rating in terms achieving investment outcomes

Challenges

Staff shortages, lack of skills, complexity and system integration issues continue to hamper technology adoption, driving demand for consultancy services

2021 priorities

There is a lack of clarity about technology investment priorities in 2021, no doubt caused by pandemic uncertainty

Emergence Partners is a new breed of Tech Consultancy and exist to make the world a better place to live and work through the thoughtful adoption of advanced technologies. We set out to be different. To be true strategic partners to our clients. To listen. To move fast, with passion and purpose. We blend independent technology expertise with an understanding of human impact – we never forget that people are at the heart of every business and the communities around them. We are a catalyst for change for business leaders and their businesses - helping them shift from a narrow, risk-averse mindset to an agile, experimental and adaptable one. We call all this, **Profound Transformation** and it's what we deliver for our clients.

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