Deloitte.

Thailand Digital Transformation Survey Report 2021

The Impact of COVID-19

June 2021

MAKING AN IMPACT THAT MATTERS since 1845

Preface

The fieldwork for the 2020 Digital Transformation Survey began in late November 2019 and concluded in early January 2020. During the final phase of our analysis, the unprecedent global pandemic COVID-19 occurred. We had no way of knowing it, but the world was about to change dramatically.

Hence, we decided to conducted the pulse survey in November 2020 to January 2021 to understand the impact of COVID-19 towards digital transformation in Thailand.

While we were working and crunching numbers based on our first digital transformations survey in 2019-2020, the world has faced a global pandemic COVID-19. It goes without saying that our analysis will quickly becoming dated and even irrelevant.

Though, there was still relevancy to the information, but undoubtedly, we need a new set of data to fulfil and complete our endeavor in understanding the landscape of digital transformation in Thailand.

Subsequently, we quickly developed and administered a 'pulse' survey to understand the impact of COVID-19 toward the digital initiatives among Thai businesses.

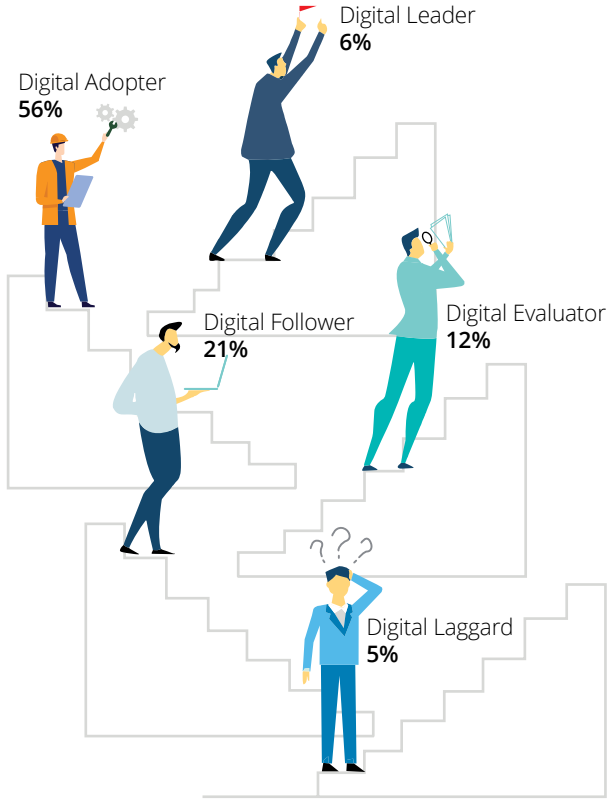
According to our comparative analysis between pre vs. post COVID-19 phenomenon, there are some similarities and differences discovered.

For instances, the pace of digital adoption among different sectors are dramatically changing in post COVID era as founded in financial service and life sciences & health care sectors. In addition, almost technology implementations are rapidly accelerated and well adopted. While most of talent skills required to help organization driving the digital transformation remain the same.
As we move toward another new normal, we all have an opportunity to reset and reimagine a better normal, a brighter future reshaped. Unquestionably, the digital transformation will play a critical role, becoming a business imperative.

Digital Transformation Plan

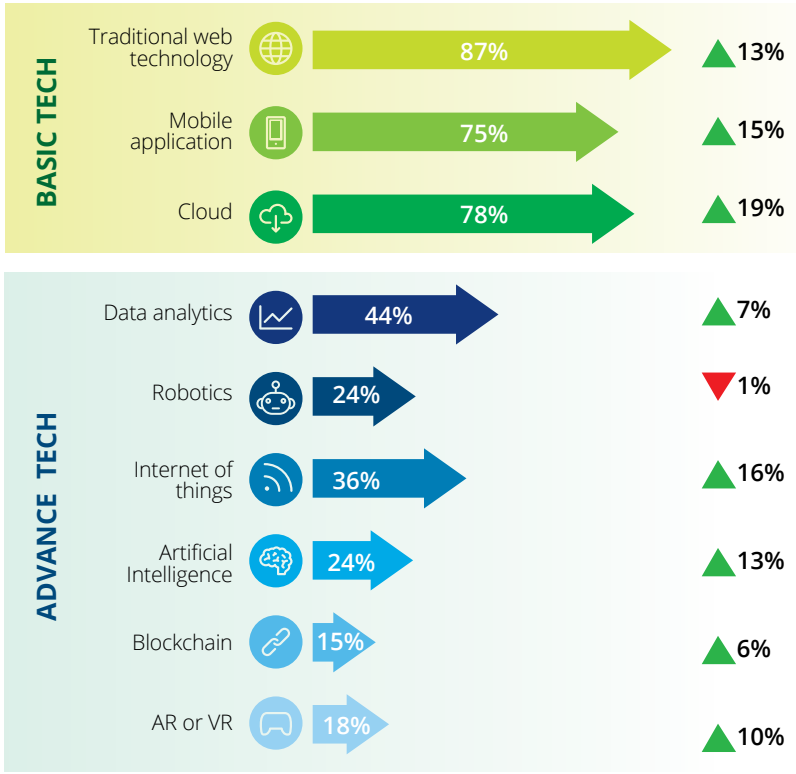
The COVID-19 outbreak results in a tremendous shift in the Financial Services & Life Sciences and Health Care sectors' digital transformation plans

Digital Adoption



Most of the companies has shifted their digital adoption phase from digital evaluator to digital adopter

Technology Implementation



Both advance and basic technology, except robotics , have increased in implementation rate.

Contents

Methodology

The survey aims to understand how businesses in Thailand are integrating digital transformation into their services, and to gain insight into the challenges faced. The survey was conducted twice (Primary survey and Pulse survey) to understand the impact of the COVID-19 pandemic on the digital transformation journey.

Primary survey: An online survey was conducted in October 2019, polling 91 executives across five industries in Thailand (Energy, Resources & Industrials, Consumer, Financial Services, Technology, Media & Telecommunications, Life Sciences & Health Care, and Public Sector) for insights on digital transformation.

Pulse survey: A second online survey was conducted during November 2020 to January 2021. 77 leading companies in Thailand were polled to gain understanding on how business and technology leaders' digital transformation plans were impacted by the COVID-19 pandemic.

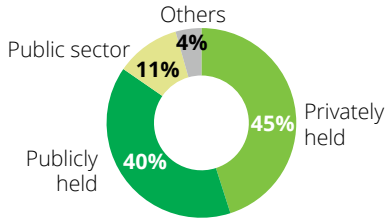
Primary Survey Demographics

Industries

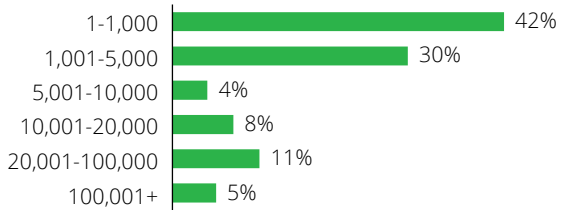
- **30%** Energy, Resources & Industrials
- **27%** Consumer
- **25%** Financial Services
- **13%** Technology, Media & Telecommunications
- **4%** Life Sciences & Health Care

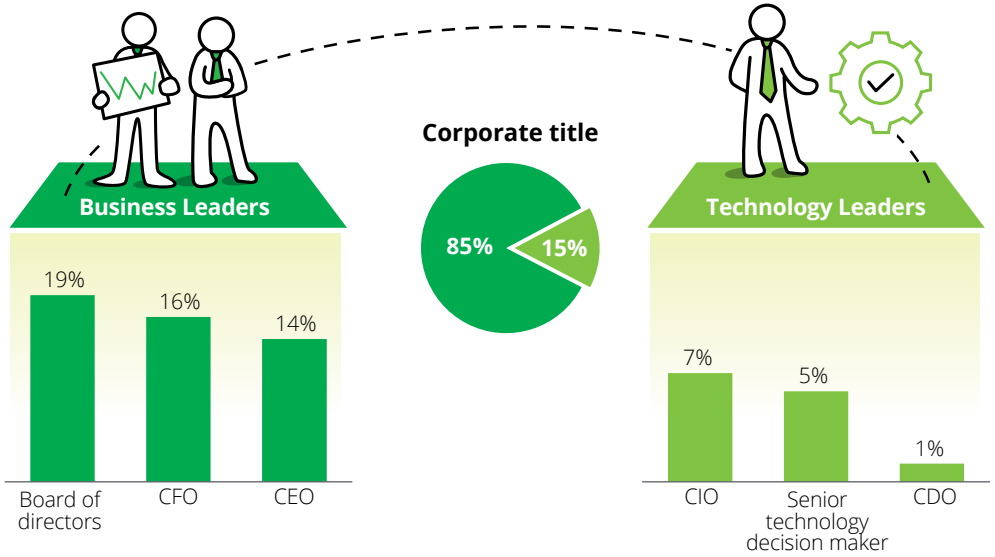
Sample size, n = 91

Company type



Worldwide employee headcount





Primary survey

In the Primary survey, the Energy, Resources & Industrials sector accounted for 30% of the total respondents, making up the highest proportion, followed by the Consumer sector. In terms of company type, privately held companies accounted for the largest segment of respondents. The plurality of respondents amongst the Business Leaders group held a Board of Directors title, followed by CFO. In the group made up of Technology Leaders, CIO made up the largest proportion.

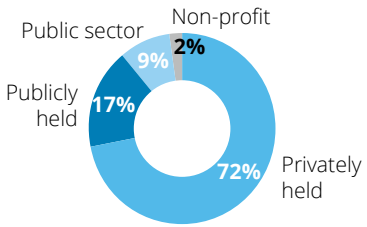
Pulse Survey Demographics

Industries

- **35%** Consumer
- **30%** Energy, Resources & Industrials
- **13%** Financial Services
- **13%** Technology, Media & Telecommunications
- **9%** Life Sciences & Health Care

Sample size, n = 77

Company type



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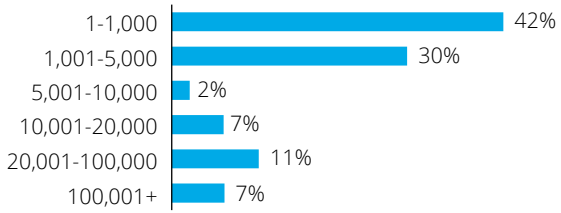
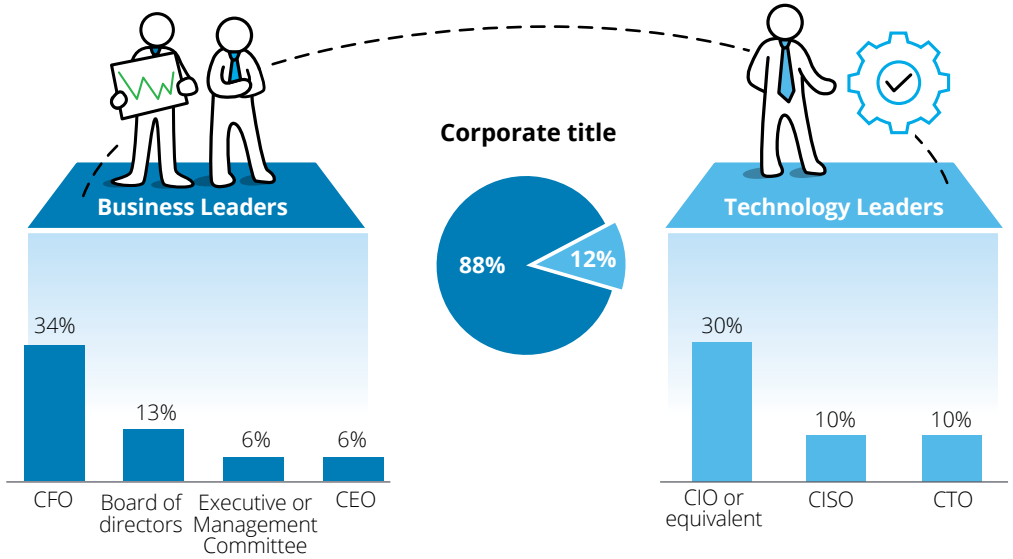


Corporate title



Pulse survey

In the Pulse survey, the Consumer sector accounted for 35% of the total respondents, followed by Energy, Resources & Industrials. In terms of company type, privately held companies accounted for the largest fraction. The proportion of the number of worldwide employee headcount is not significantly different from the Primary survey. The plurality of the respondents amongst the Business Leaders group held a CFO title, followed by the Board of Director title. For the Technology Leader group, the CIO position made up the largest proportion.

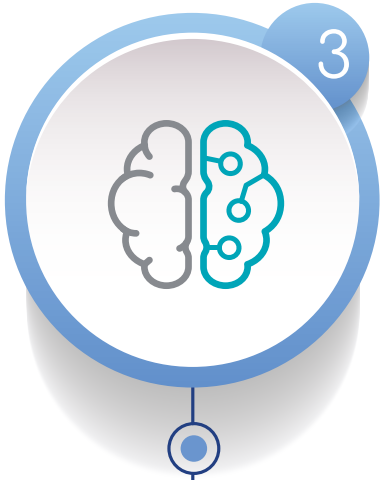
There are 4 key topics in the study

Interpreting perceptions towards digital disruptions

How do the companies perceive digital transformation?

Exploring digital transformation implementations

How have companies initiated digital transformation?

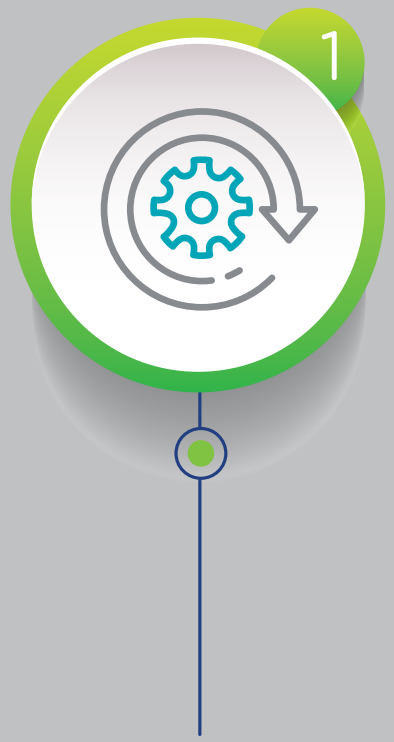


Pinpointing digital transformation skill demands

What are the skill set that companies look for?

Identifying areas of government support in digital transformation

How can the government assist these companies towards their digital transformation journey?



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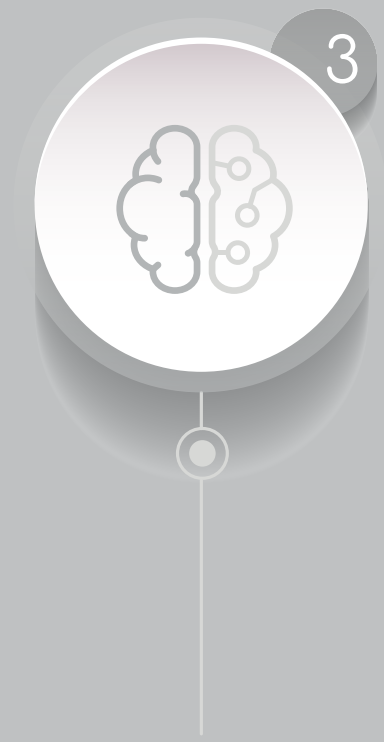

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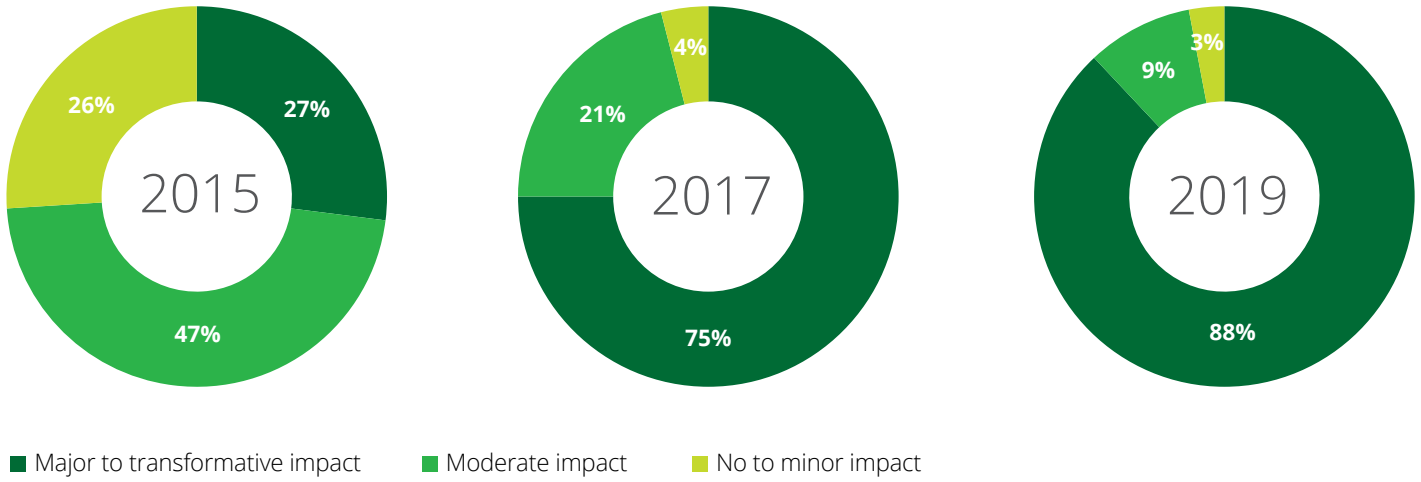
How can the government assist these companies towards their digital transformation journey?

The vast majority of global executives admit that their industries will be disrupted to a major or transformative extent

Global perspective on the impact of digital disruption
(% of respondents, n=1,200)

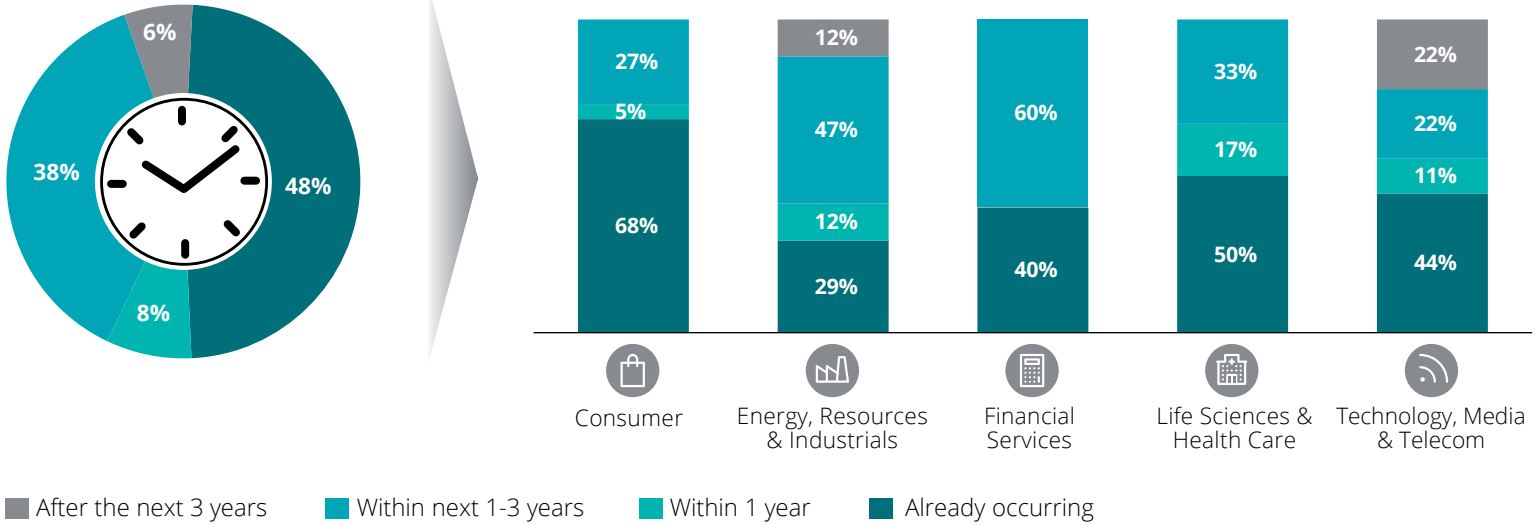


Source: Digital Vortex 2019

- According to The Digital Vortex 2019 study, 88% of total respondents across the globe reported that digital disruption would have a major or transformative impact on their companies whereas only 3% believed that digital technology would not disrupt their businesses.
- Over the years, there has been increasing recognition by executives on the impact of digital disruption.
- The Digital Vortex 2015 study showed that only 27% of total respondents believed that digital disruption would have a major or transformative impact on their companies. This number grew to 75% and later to 88% in 2017 and 2019, respectively.

5 major sectors reflects on the digital disruption timing

Perspective on digital disruption timing by industry
(% of respondents, n=88)

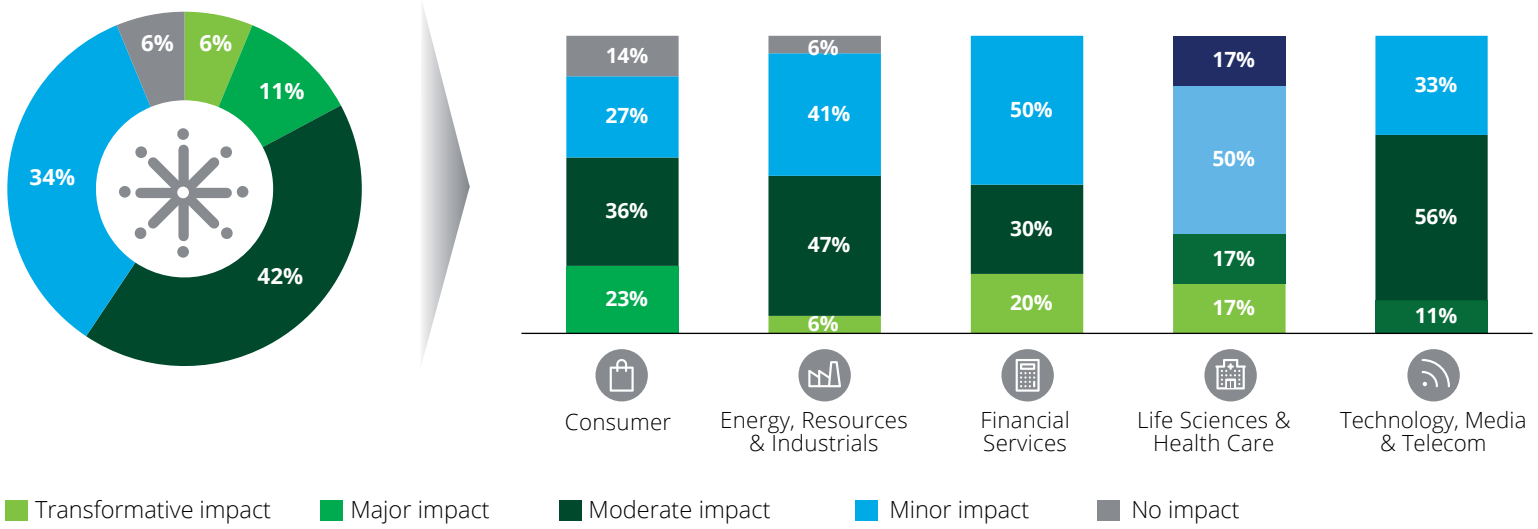


Source: Deloitte analysis based on Digital Transformation and Technology survey in October 2019

- Approximately half (48%) of the respondents believe that a digital disruption has already occurred. In comparison to the Primary survey conducted before the COVID-19 pandemic, the proportion of those who perceived that the disruption would occur within the next 1-3 years rose by 8%.
- The Consumer sector saw roughly a 20% increase in the number of firms that believed that digital disruption had already occurred, compared with pre-COVID-19 times. However, there was no change in the Life Sciences & Health Care sector, and the remaining sectors showed less interest in the matter. Finally, the perception that digital disruption is to occur within the next 1-3 years increased across all sectors.

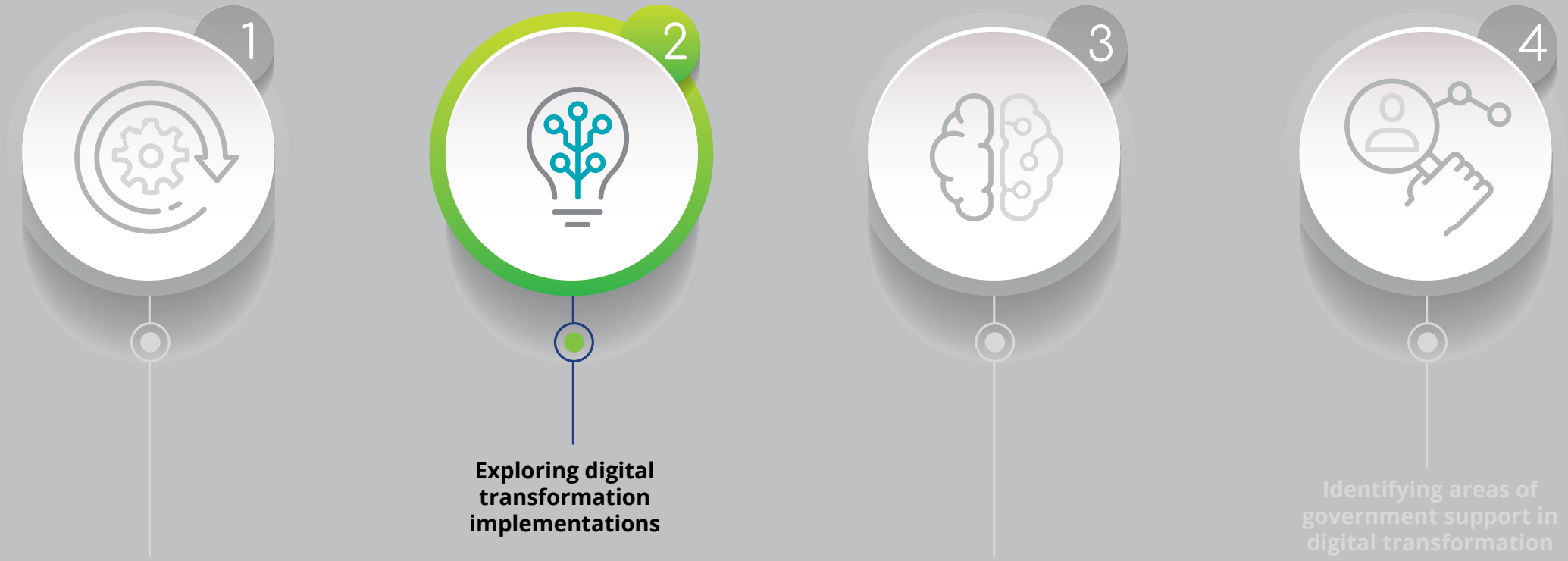
5 major sectors reflect on the degree of digital disruption impact

Perspective on level of digital disruption impact by industry
(% of respondents, n=64)



Source: Deloitte analysis based on survey in October 2019

- Before the COVID-19 pandemic, over 50% of the respondents believed that digital disruption had a moderate to transformative impact on their company. However, the remaining respondents believed that the disruption had a minor impact on their company, which was a 12% increase from the previous year's survey.
- Life Sciences & Health Care sector drastically shifted their views after the pandemic began. Approximately one-third believed the disruption to have a major and transformative impact, while the remaining half said a moderate impact.
- In the Primary survey, Technology Media & Telecom sector had the highest number of respondents who believed the industry would be disrupted to a major or transformative extent, at 42%. When asked after the COVID-19 pandemic began only 11% faulted digital disruption to make a major impact.
- Consumer and Energy, Resources & Industrial sectors' respondents who believed that digital disruption had no impact tallied to 14% and 6% respectively.



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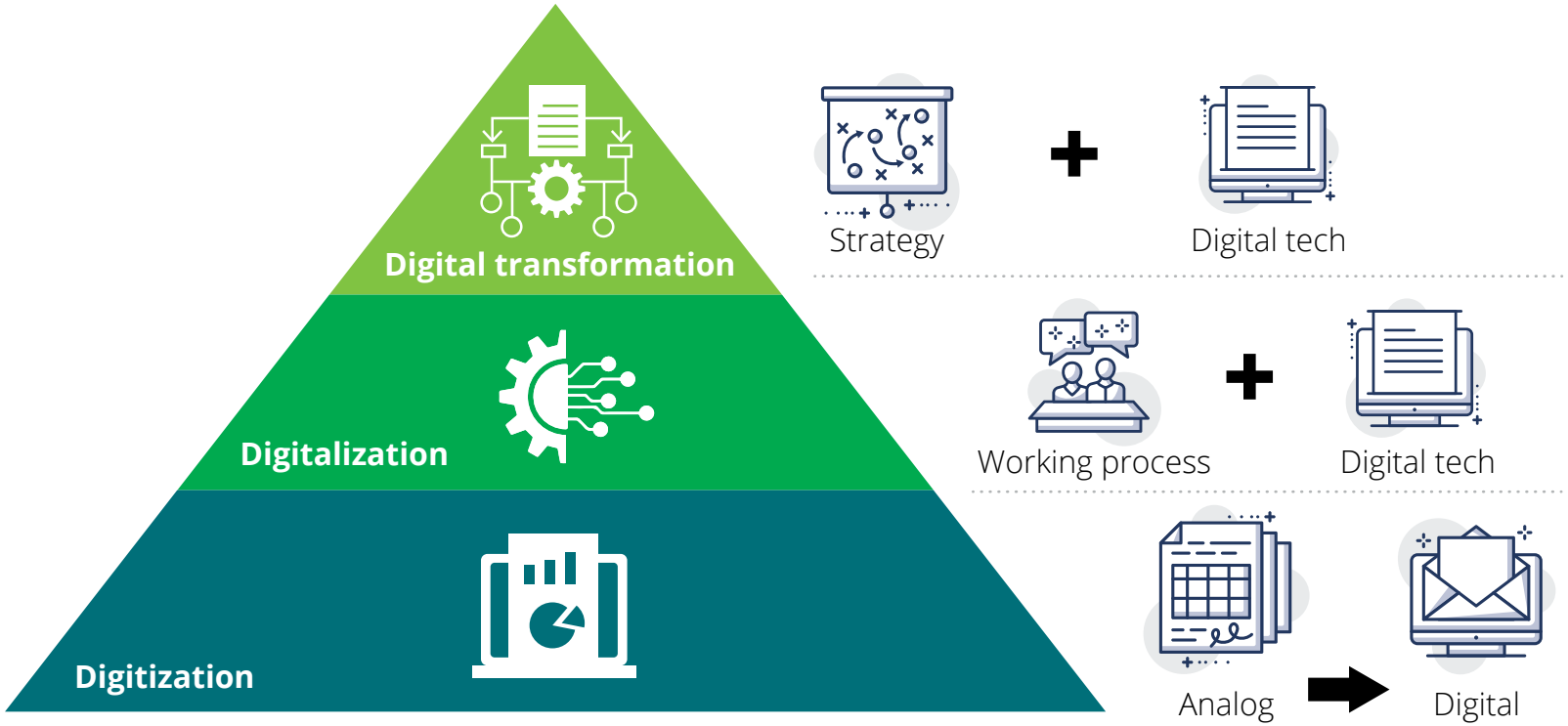
How digital transformation differs from digitization and digitalization

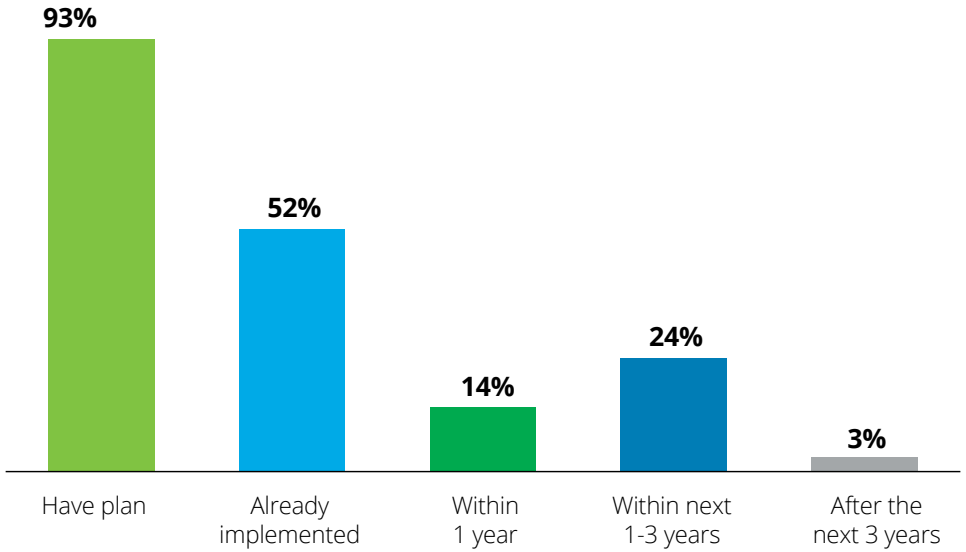
Digital transformation



Source: North Carolina State University and Ionology

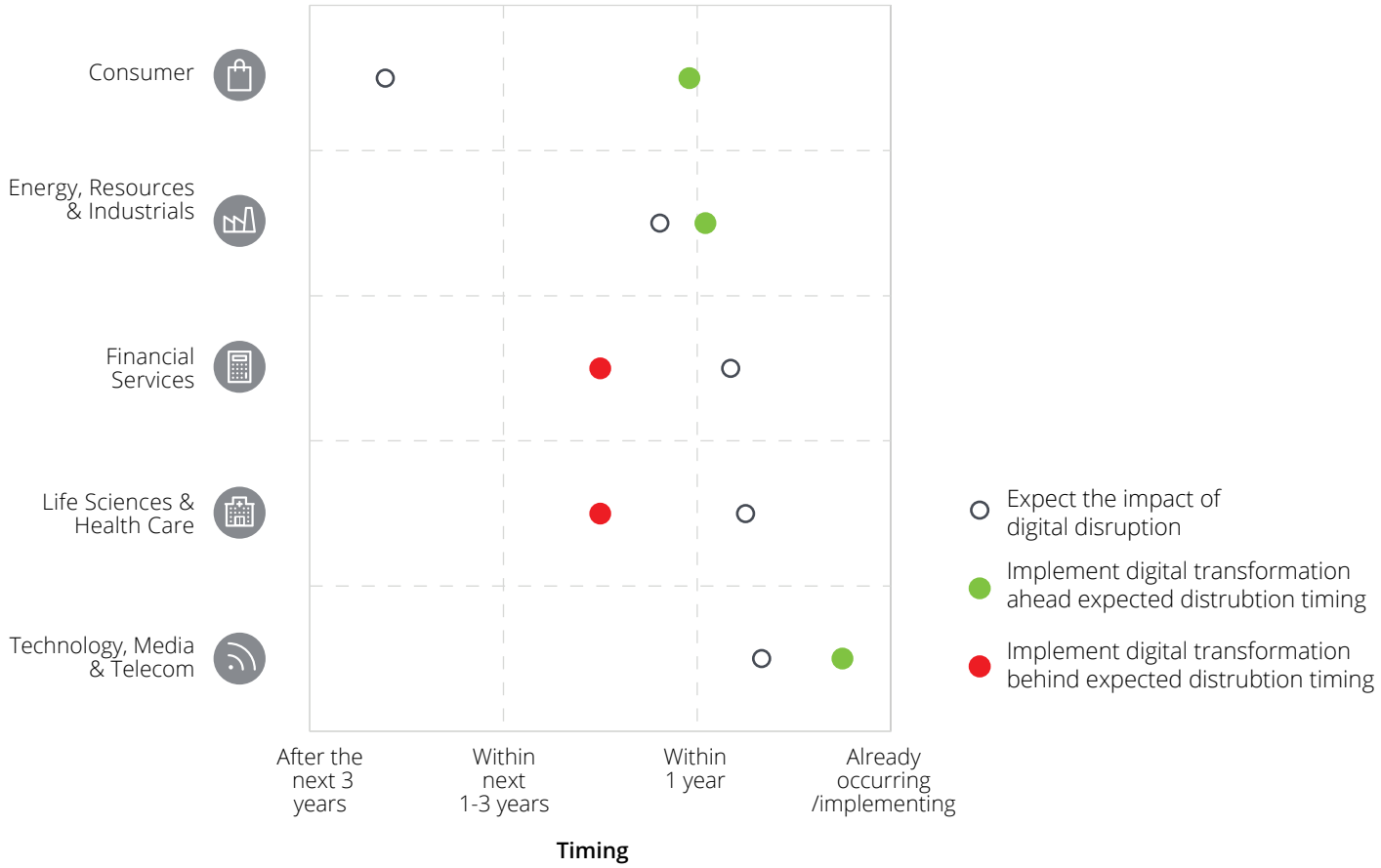
93% of total respondents plan to implement digital transformation initiatives and among that over 50% have already implemented the plan

When will company implement digital transformation initiatives
(% of respondents, n=66)



Perceived level of urgency and impact of digital transformation prior to the COVID-19 pandemic

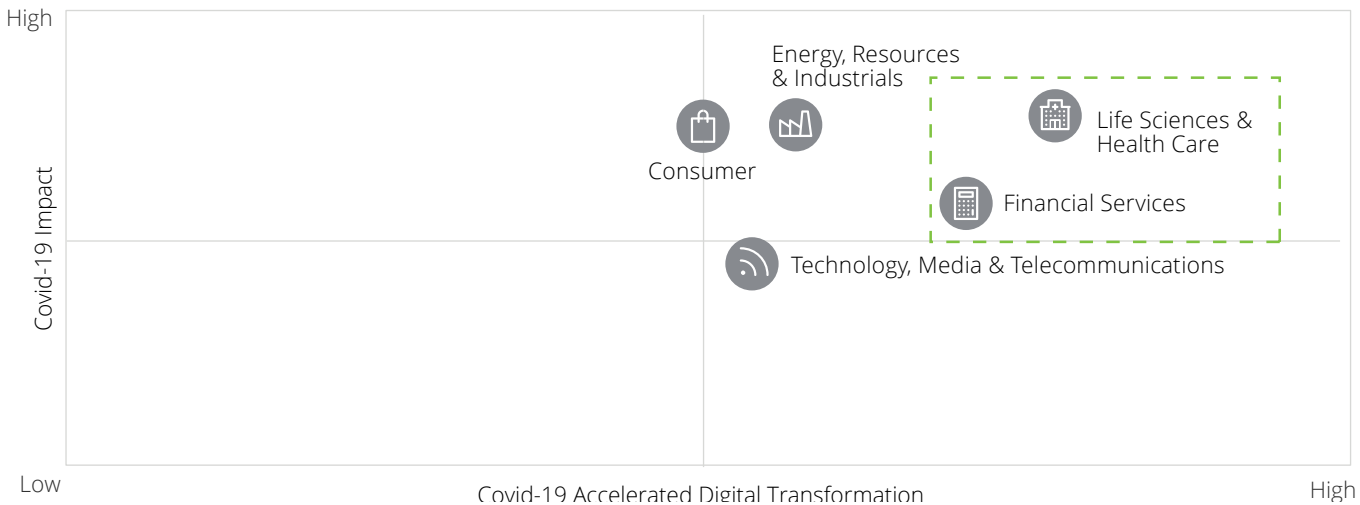
When will company implement digital transformation initiatives (Primary survey)
(% of respondents, n=88)



Primary survey,
In the **Primary survey,** most sectors started implementing digital transformation initiatives ahead of the expected impact time of digital disruption, except Financial Service and Life Science & Health Care sector.

COVID-19 impact and COVID-19 accelerated digital transformation by industry

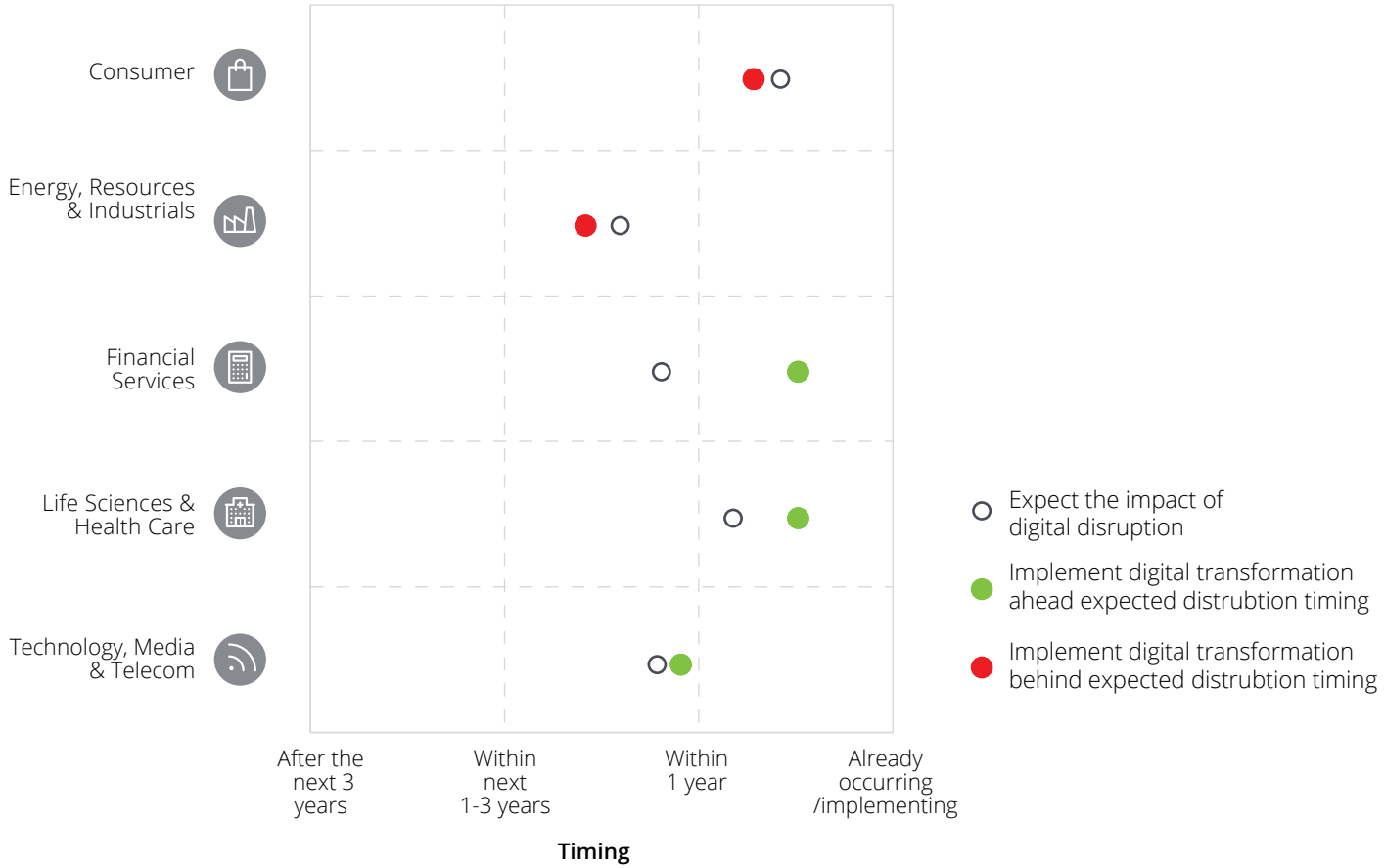
When will company implement digital transformation initiatives (Pulse survey)
(% of respondents, n=77)



All 4 sectors, apart from Technology, Media & Telecommunications, considered the COVID-19 pandemic to have had a high impact on their business. Notably, Life Sciences & Health Care, and Financial Services sectors regarded the pandemic to have had a high impact as well as contributing to a high acceleration on digital transformation.

Perceived level of urgency and impact of digital transformation after the COVID-19 pandemic

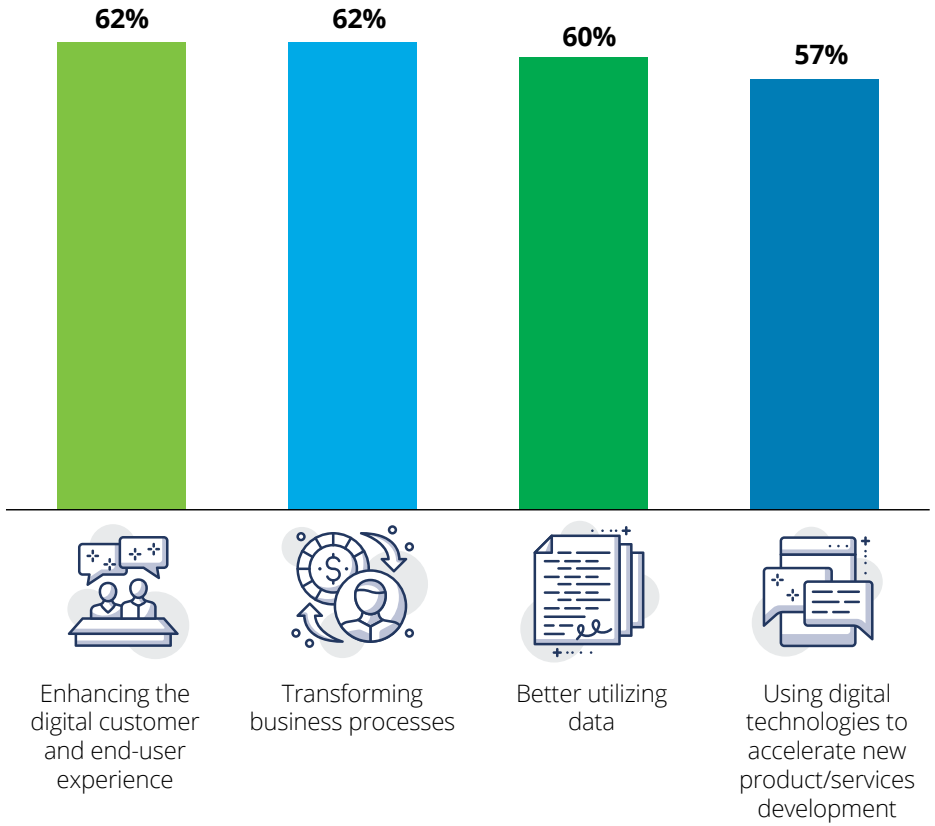
When will company implement digital transformation initiatives (Pulse survey)
(% of respondents, n=77)



Pulse survey
The COVID-19 outbreak greatly affected the Finance services & LSHC sectors' plans to implement digital transformation initiatives. For both these sectors, digital transformation has now been given a higher priority and recognized as necessary to implement within 1 year, contrary to prior the pandemic where digital transformation was only a plan in the works. There is an evident trend of a higher importance placed on digitalization and an increased urgency to adapt as a result of the COVID- 19 pandemic.

Enhancing end-user experience and transforming business processes are key purposes for companies to implement digital transformation initiatives

Main purposes
(% of respondents, n=87)



Sector: Financial services
Key focus: Enhancing end-user experience

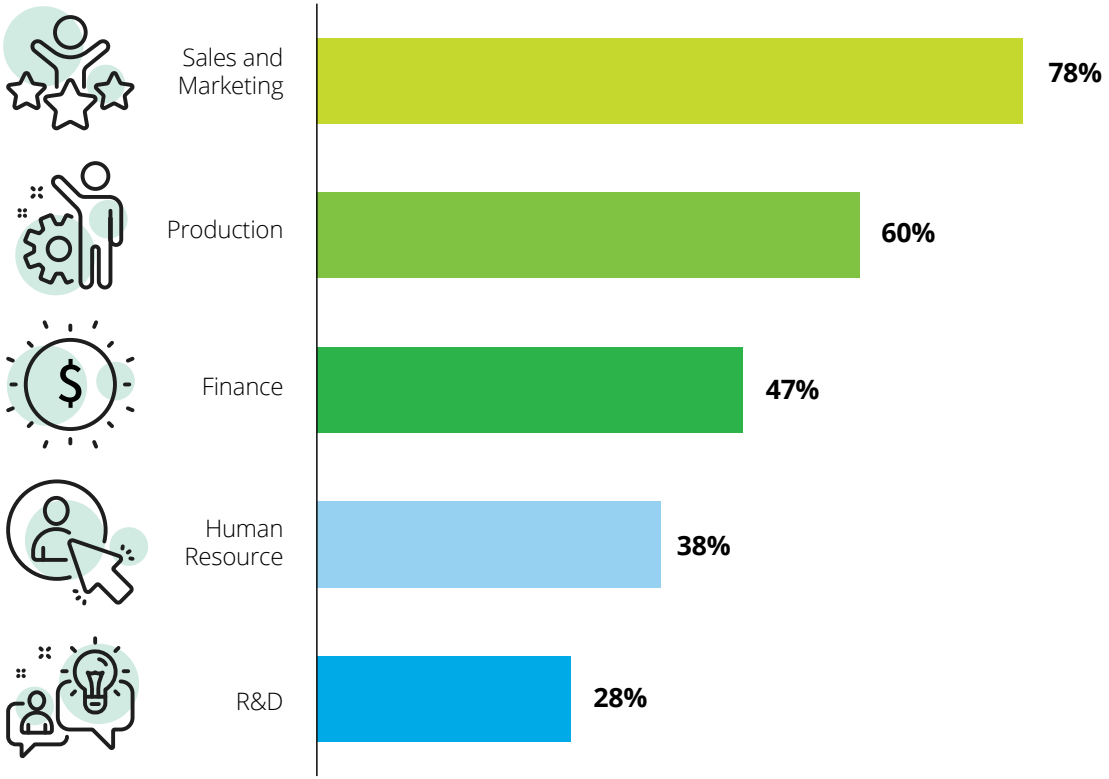
Sector: Technology, Media and Telecommunications
Key focus: Using digital technologies to accelerate new product or service development.

The purpose of the digital transformation within the Life Sciences and Health Care sectors is to transform the business process. This will provide the firms with agility that will enhance and refine operational processes, improve the patients' experiences, and save lives.

Source: Deloitte analysis based on Digital Transformation and Technology Survey in October 2019

Thai companies highly concentrate on both frontend and backend functions, especially sales and marketing as well as production and finance when implementing digital transformation.

Main focus functions
(% of respondents, n=87)

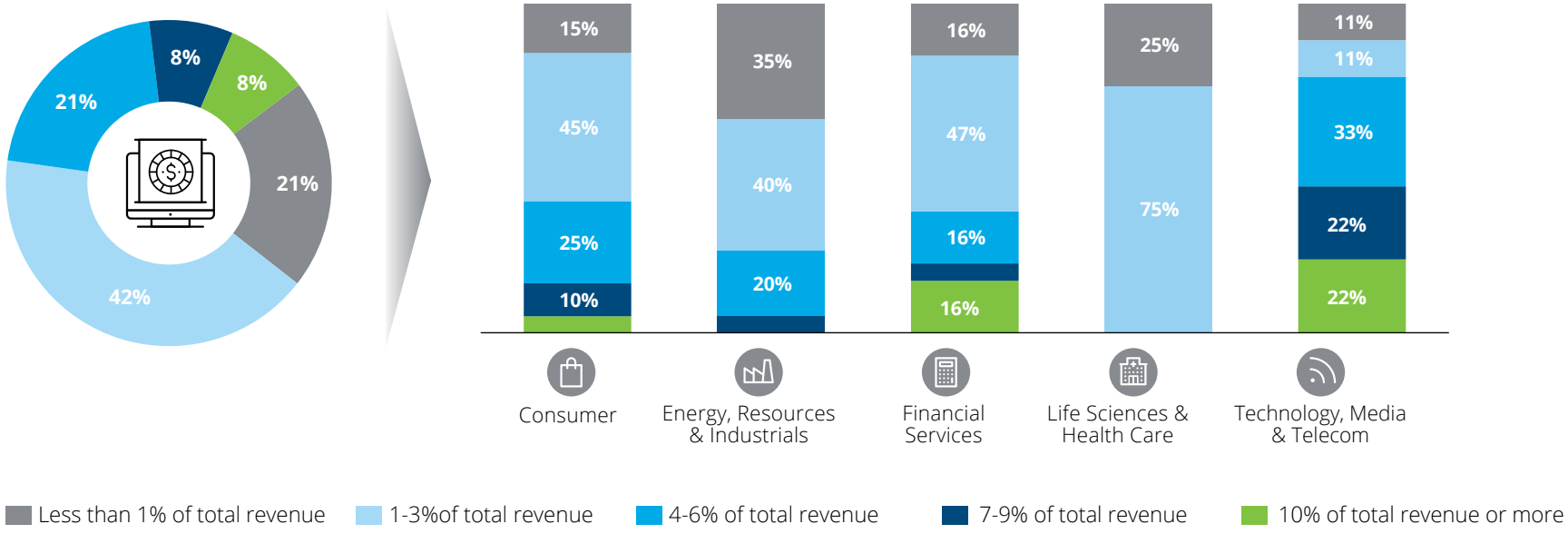


- 78% of respondents identified Sales and Marketing as the main function of their companies' digital transformation initiatives
- This was followed by the Production function, which was considered by 60% of the total respondents. It is expected that artificial intelligence will revolutionize the manufacturing sector due to several benefits such as refining Root Cause Analysis (RCA), improving production defect detection, and streamlining predictive maintenance.
- The Finance function followed, selected by 47% of total respondents.
- Almost all industries, especially Consumer and Financial Services acknowledge that the Sales and Marketing function is their main focal area. However, Energy, Resources, and Industrials have differing views as respondents in these industries prioritize the Production function.

Source: Deloitte analysis based on Digital Transformation and Technology Survey in October 2019

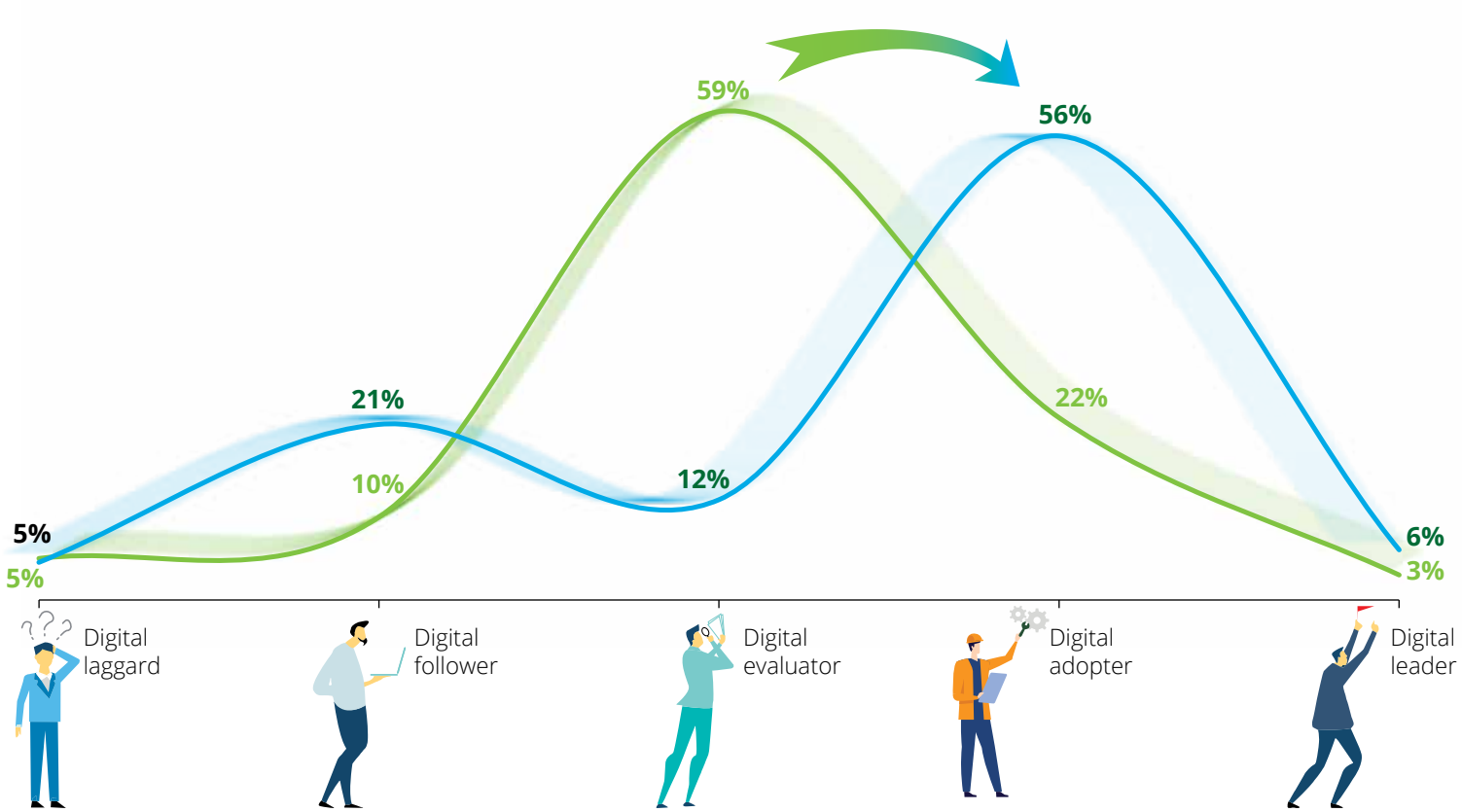
Technology, Media and Telecom (TMT) and Financial services industries spend higher on digital transformation initiatives than peers

Budgets on digital transformation initiatives by industry
(% of respondents, n=72)



Source: Deloitte analysis based on Digital Transformation and Technology Survey in October 2019

Pulse Survey shows companies expediting their digital transformation plans to align with the pace of digital disruption



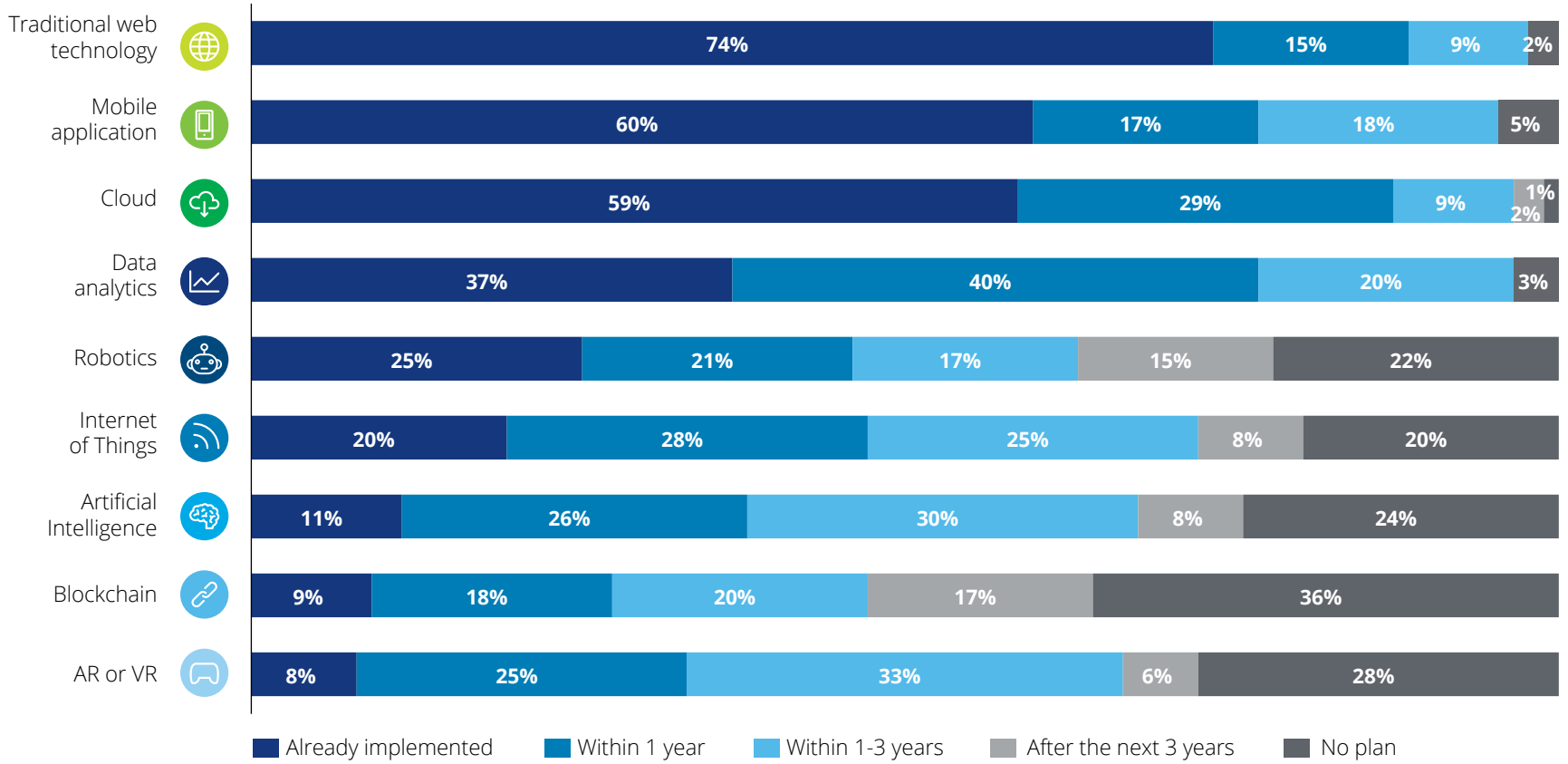
Primary Survey

Pulse Survey

Between the Primary and Pulse survey we see substantial right shift in the next stage of digital disruption. In the Pulse survey, double the number of companies from the Primary survey, now identify themselves as digital adopter and digital leader.

Basic technologies have already been deployed while only few companies have implemented advanced technologies

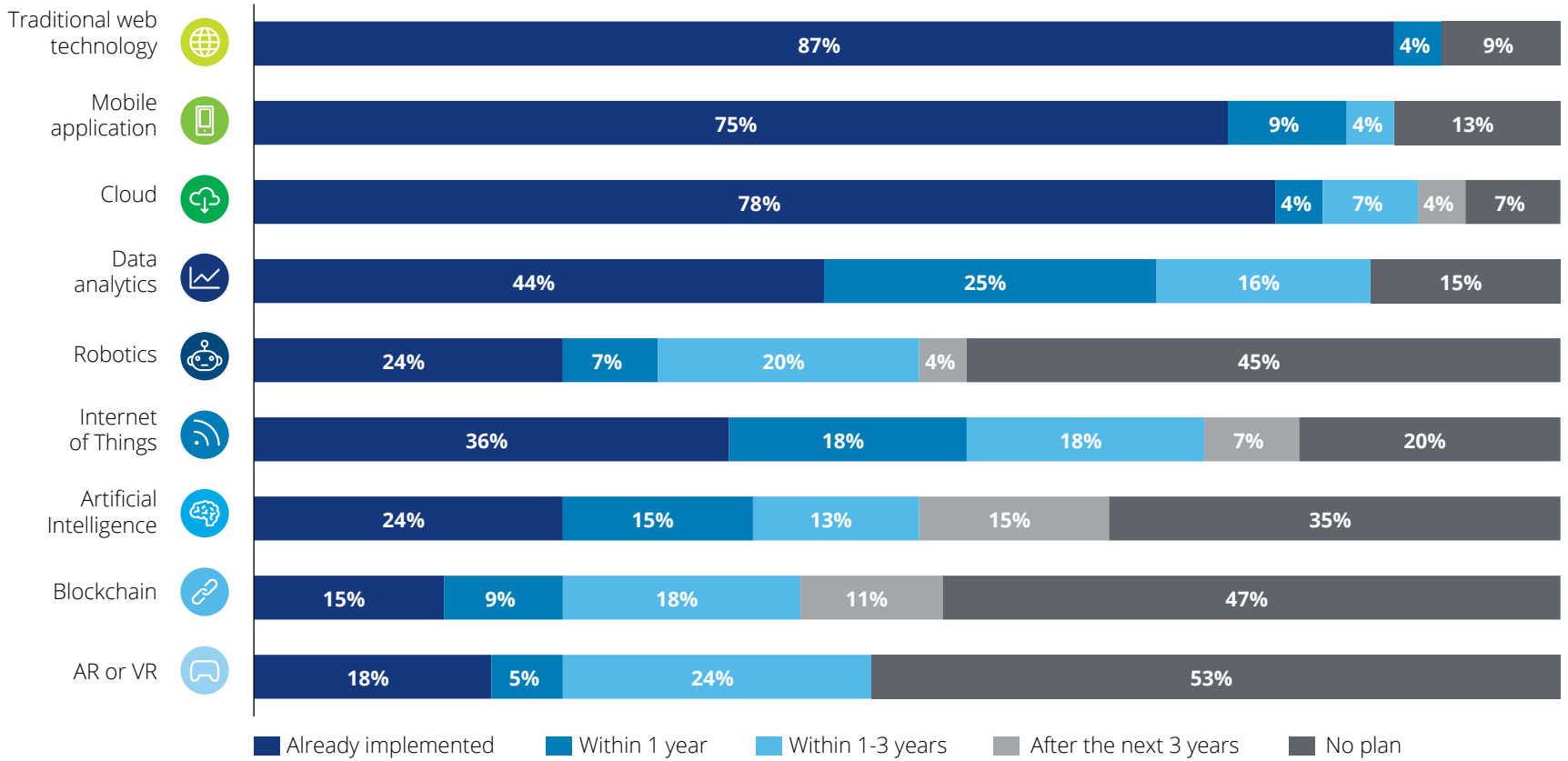
Digital technologies implemented or plan to invest (Primary survey)
(% of respondents, n=87)



Source: Deloitte analysis based on Digital Transformation and Technology Survey in October 2019

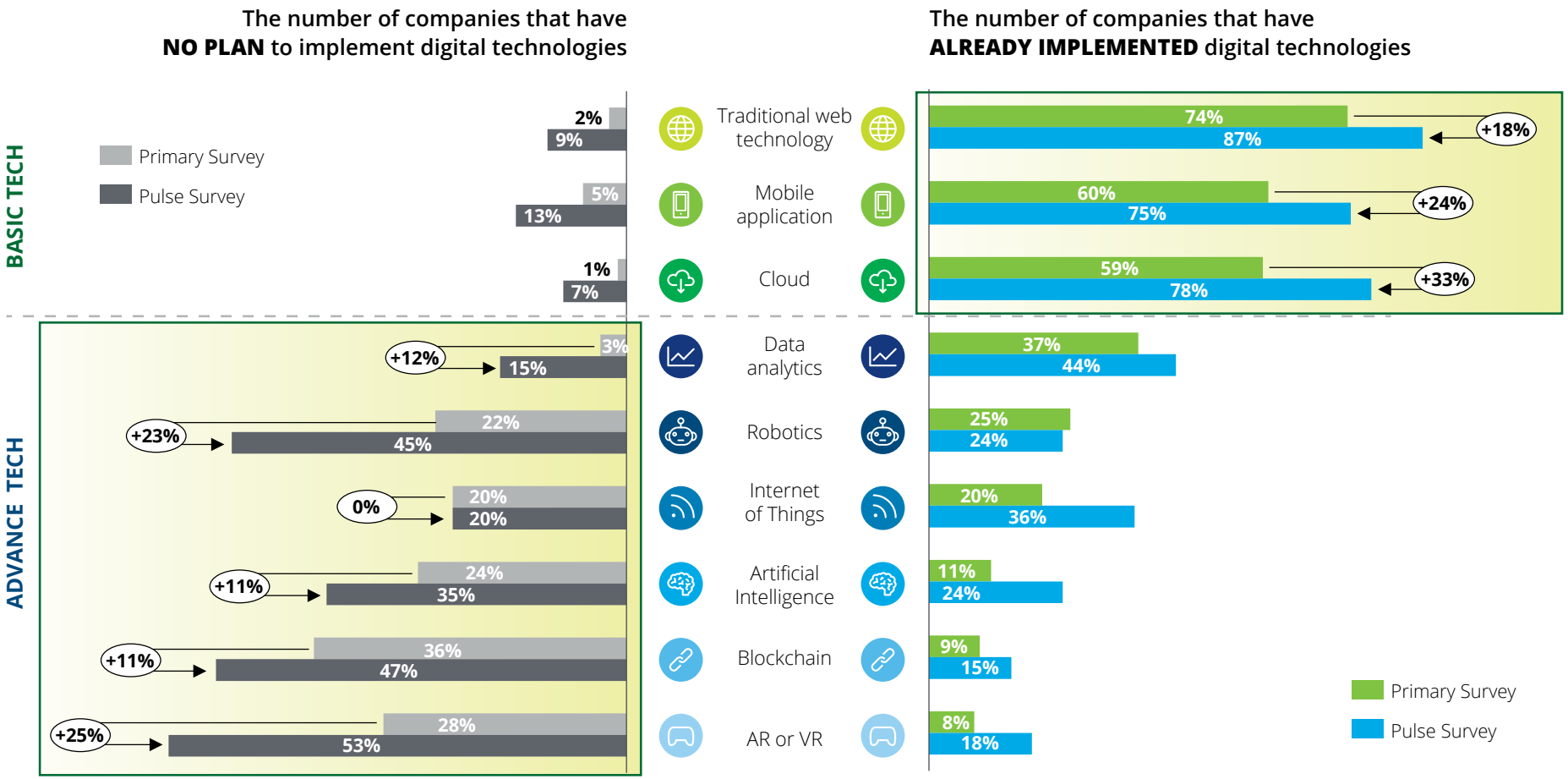
Consistent with results before COVID-19, basic technologies have already been deployed while only few companies have implemented advanced technologies

Digital technologies implemented or plan to invest (Pulse survey)
(% of respondents, n=55)



Source: Deloitte analysis based on Digital Transformation and Technology Survey in October 2019

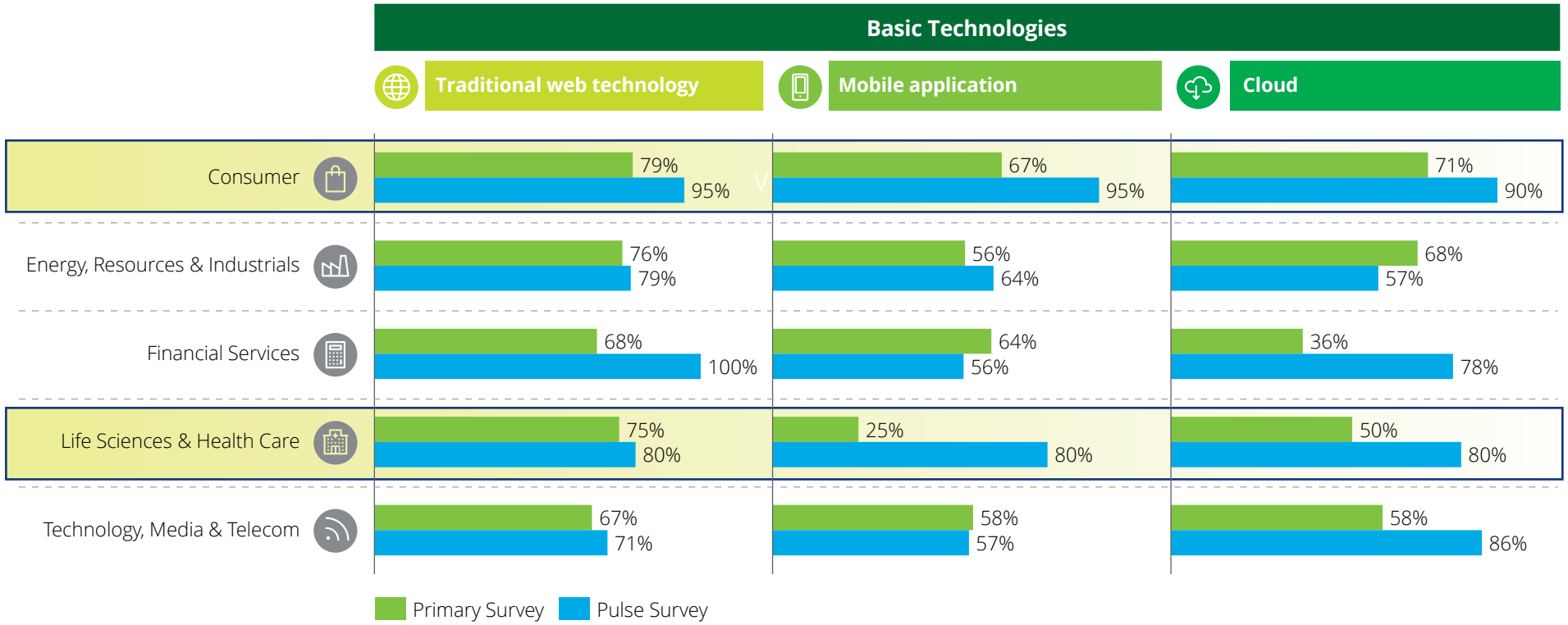
Companies escalate plans to implement digital transformation while others deviate



Comparison between the Primary and Pulse Survey displays an increase in all technological advancements apart from Robotics. Significant increases can be seen in Traditional Web Technology, Mobile Application, and Cloud. Despite this increase, the opposite phenomenon can also be observed from the right figure. Not only does it show a counter viewpoint, but also an increase in the number of companies that have no plans to implement digital technologies.

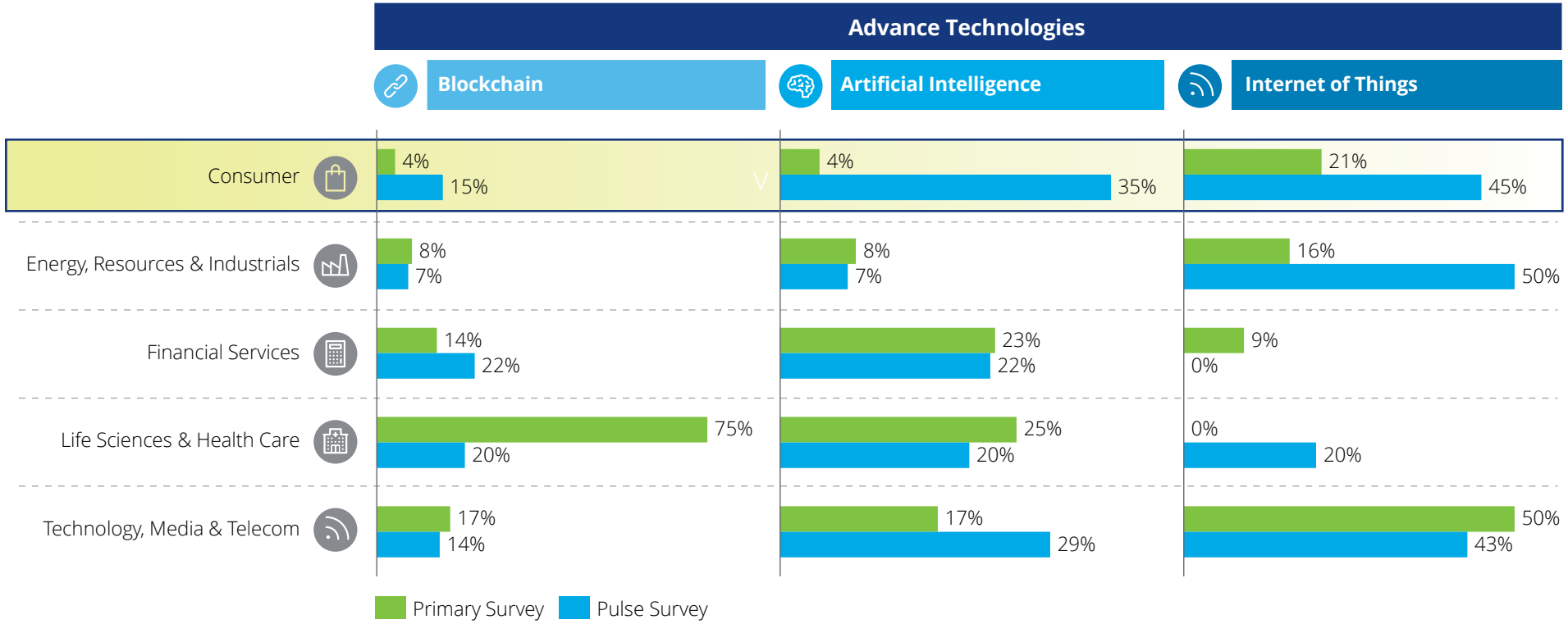
Proportion of companies that have implemented basic technologies by sector

Results from both the Primary and Pulse Survey suggests that basic technologies are becoming increasingly popular among Consumer and Life Sciences & Health Care sectors.



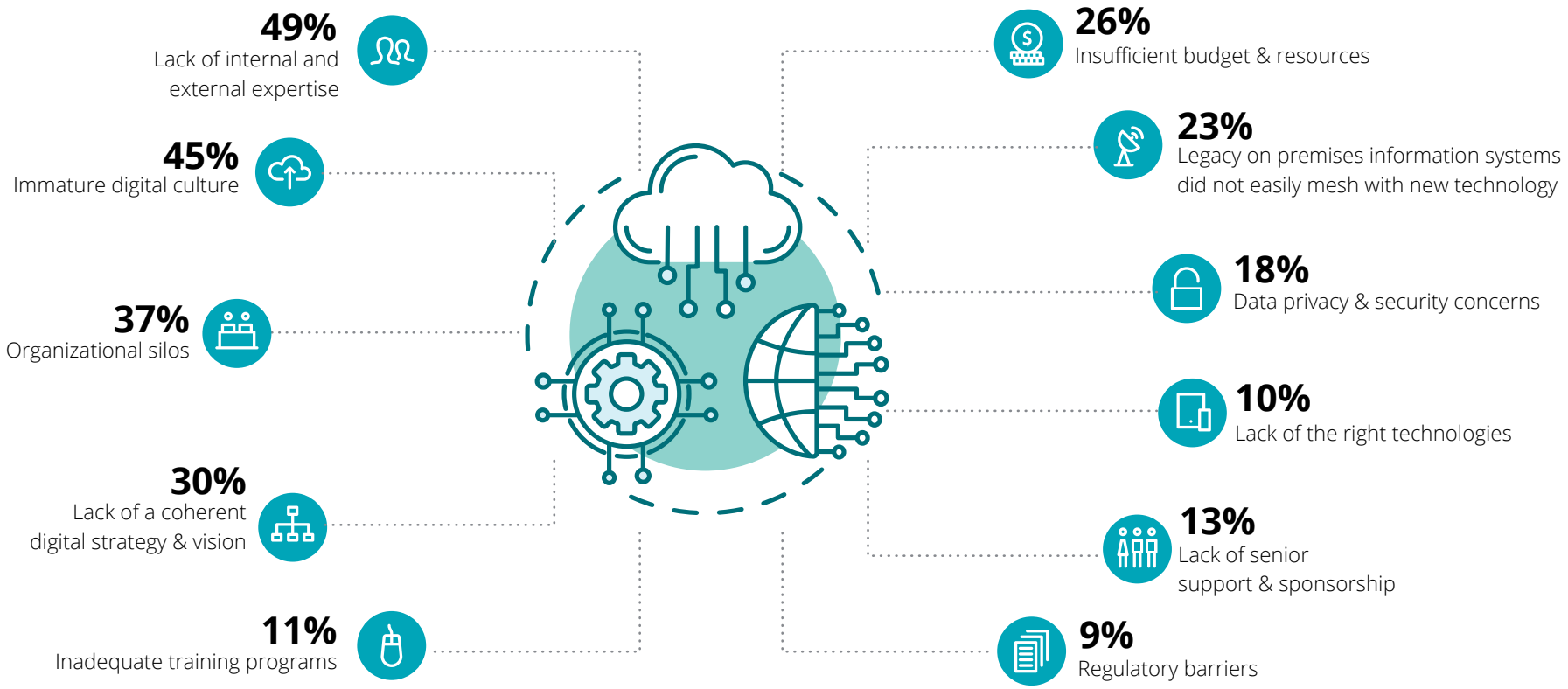
Proportion of companies that have implemented advance technologies by sector

The Consumer industry exhibits the greatest change in advanced technology implementation percentage from the Primary to Pulse Survey.



Challenges to achieve digital transformation implementation

Challenges to achieve digital transformation implementation
(% of respondents, n=87)

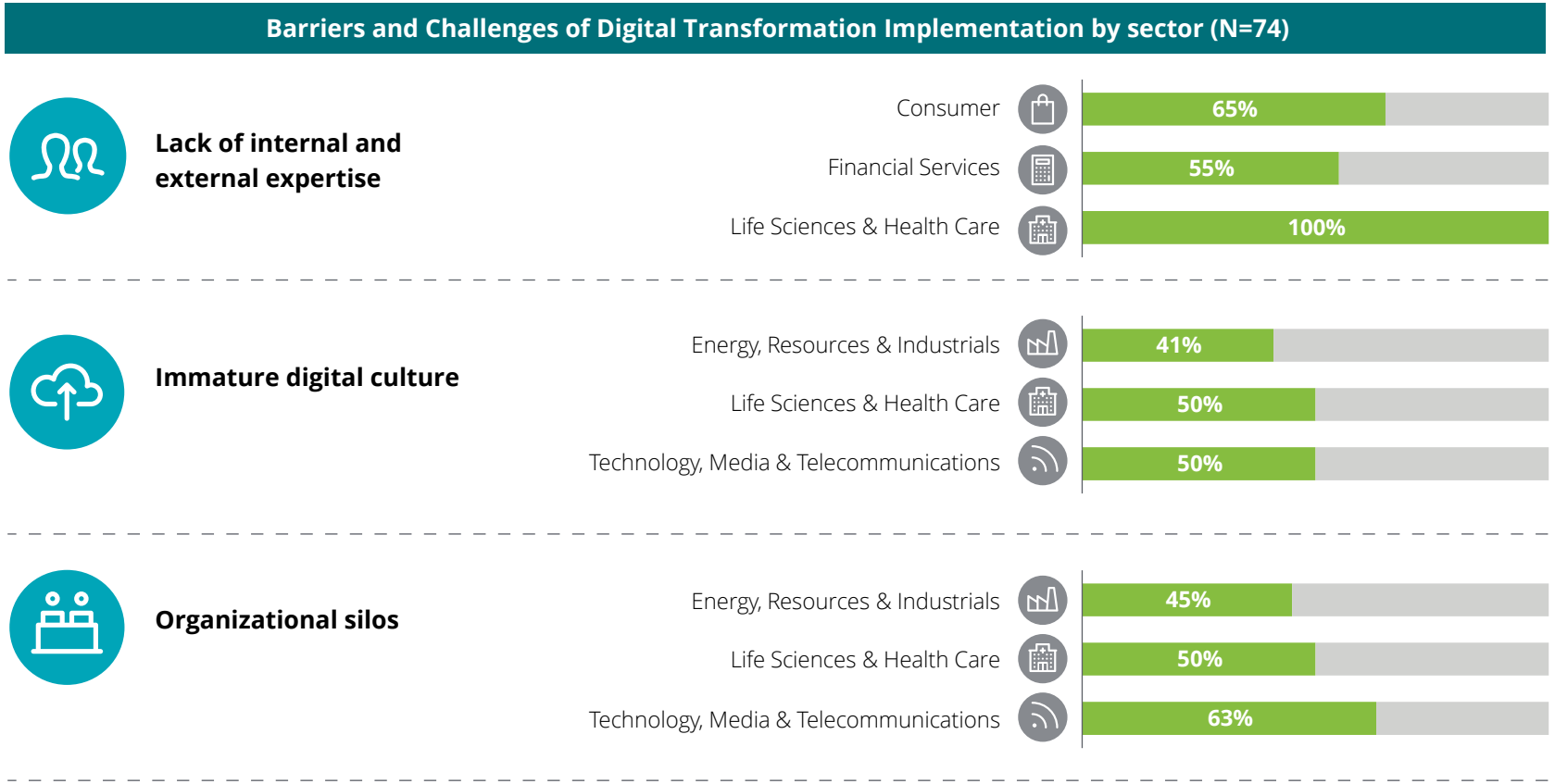


Notably, technology is not a major challenge in implementing digital transformation. Rather, challenges arise from a lack of internal and external expertise in the relevant fields. Thai corporates reveal the three main challenges they are facing include talent gap, digital culture, and organization silo. All of which have almost nothing to do with technology but revolve around recruiting people with the right skills to get the job done.

Source: Deloitte analysis based on Digital Transformation and Technology Survey in October 2019

Challenges to achieve digital transformation implementation

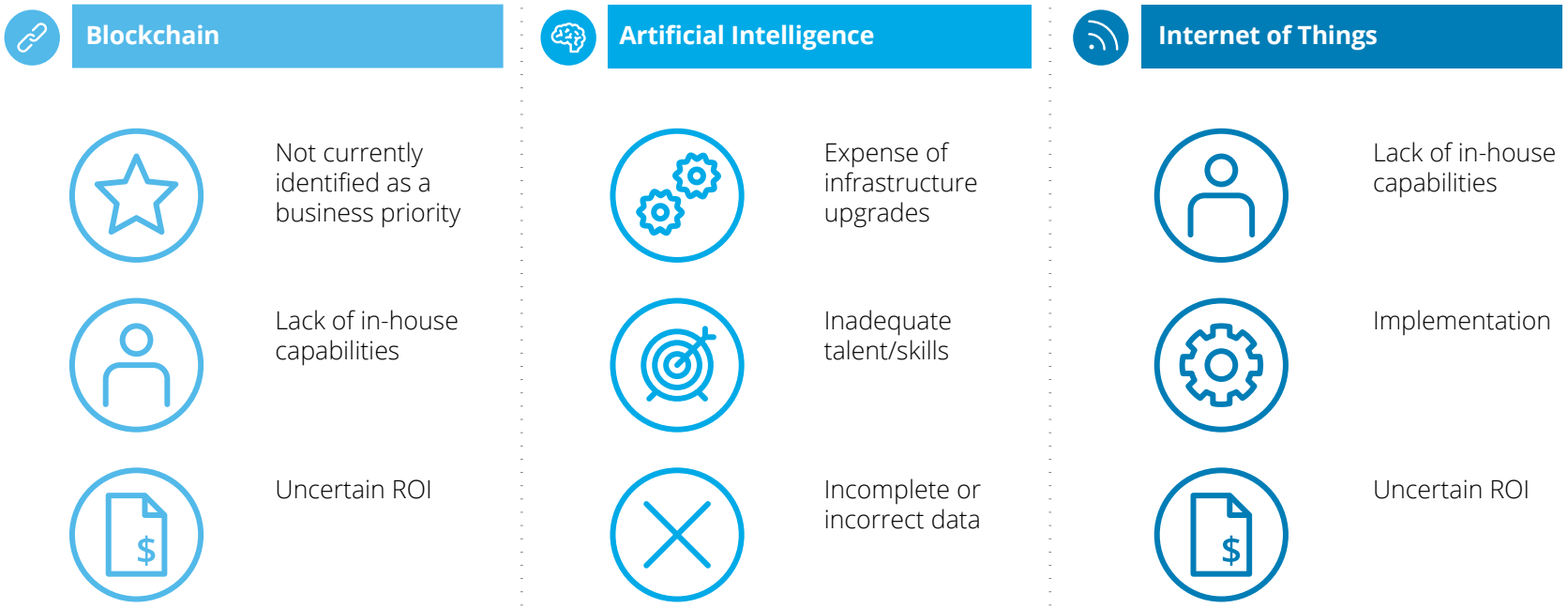
Life Sciences & Health Care and Technology, Media & Telecommunications appear to have faced all the top three challenges.



Source: Deloitte analysis based on survey in October 2019

Setbacks in digital transformation can be credited to concerns about low ROI and lack of internal talent

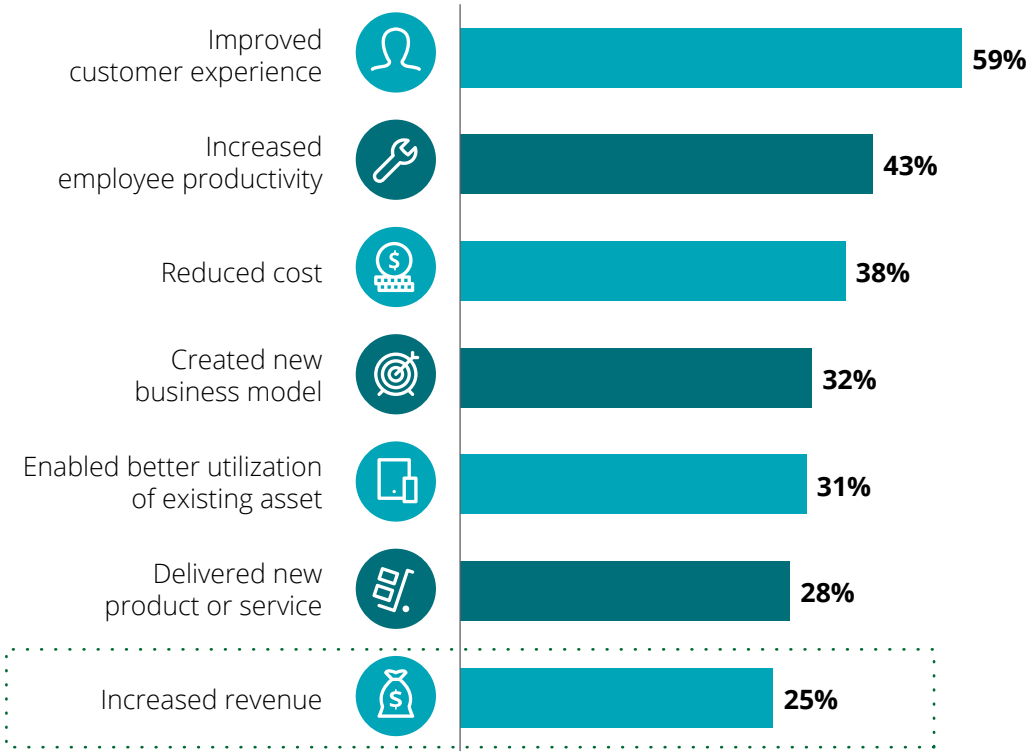
Barriers and Challenges by technology



Source: Deloitte analysis based on Digital Transformation and Technology Survey in October 2019

Digital transformation has shown to improve customer experience, employee productivity, and reduce costs

Successful results
(% of respondents, n=87)



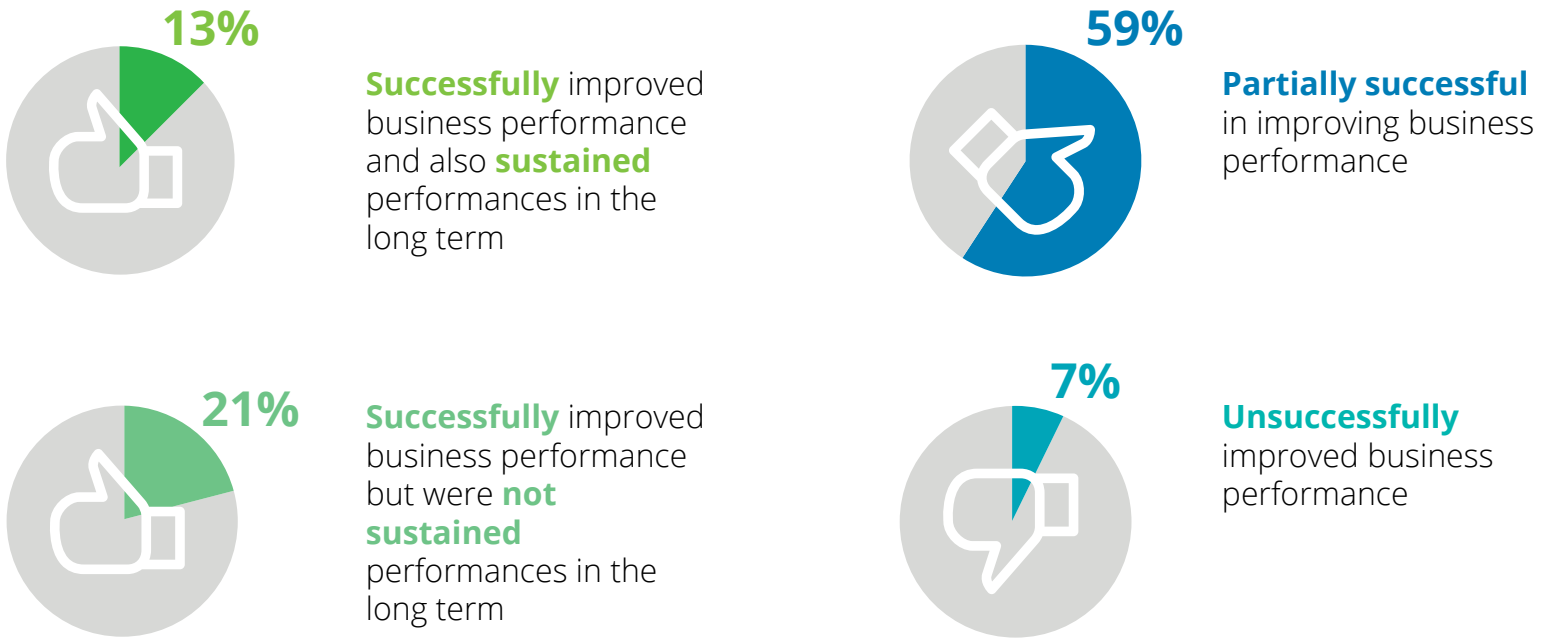
- Data suggests that digital transformation improved customer experience, increased employee productivity, and reduced cost.
- Only 25% of respondents noted an increase in revenue due to digital transformation, ranking lowest out of all the results.
- The sectors that reported increase revenue were Technology, Media and Telecommunications, and Life Sciences and Health Care.

Source: Deloitte analysis based on Digital Transformation and Technology Survey in October 2019

Digital transformation initiatives results

More than half of respondents credited digital transformation for successfully improving their business performances.

Digital transformation initiatives result
(% of respondents, n=76)



- Only 13% of total respondents stated that digital transformation improved their respective company's business performance which they were able to sustain long term. Most of these companies were from the Financial Services and Technology, Media, and Telecommunications sectors.
- On the contrary, 7% of total respondents, particularly from the Life Sciences and Health Care sector, stated that digital transformation did not improve their business performance.
- Nonetheless, almost 60% of total respondents regarded their company as partially successful in improving business performance. This aligns with previous data that only one-fourth of total respondents saw an increase in revenue.

Source: Deloitte analysis based on survey in October 2019

Deloitte's recommendations to overcome these challenges

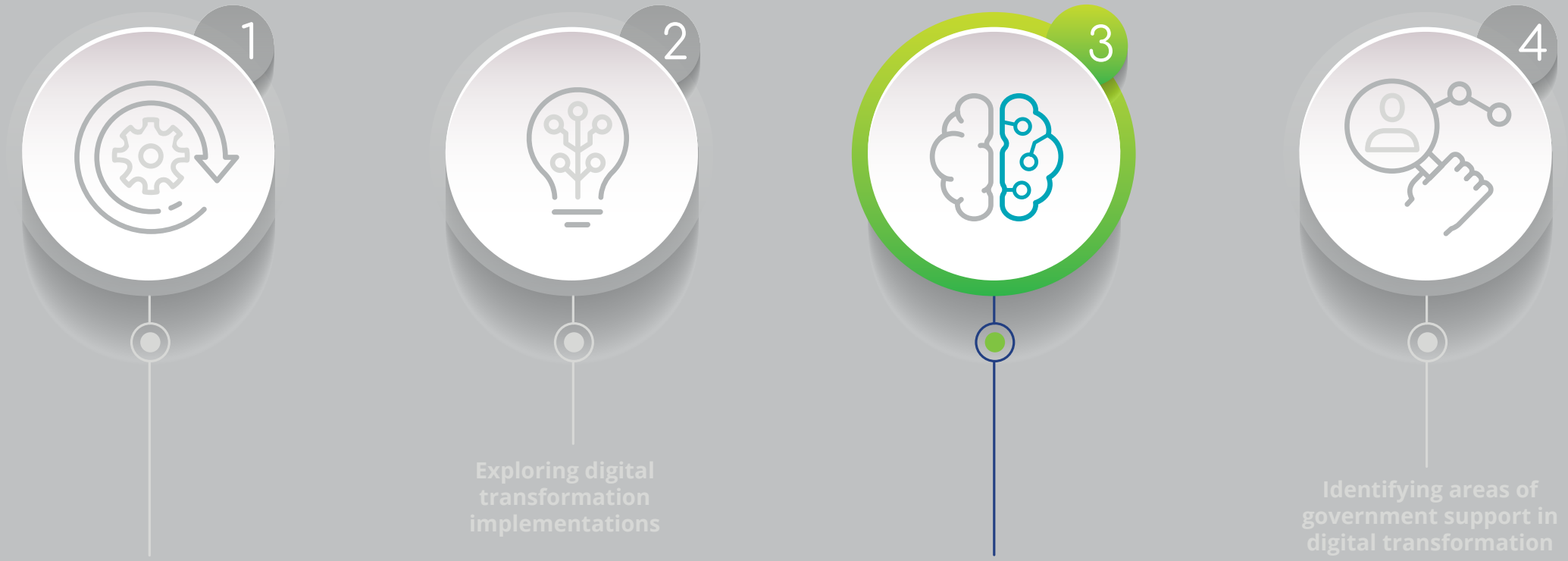
To overcome these challenges businesses should consider the following suggestions.

Breaking down functional silos and focusing on cross-functional collaboration or cross-functional team is considered crucial to success in digital environments.

Build digital mindset by shifting cultural mindsets to learn cheap, learn fast and fail fast.

Technology is not the only most important element for conducting digital transformation but also talents.

Source: Deloitte analysis



Interpreting perceptions towards digital disruptions

How do the companies perceive digital transformation?

Exploring digital transformation implementations

How have companies initiated digital transformation?

Pinpointing digital transformation skill demands

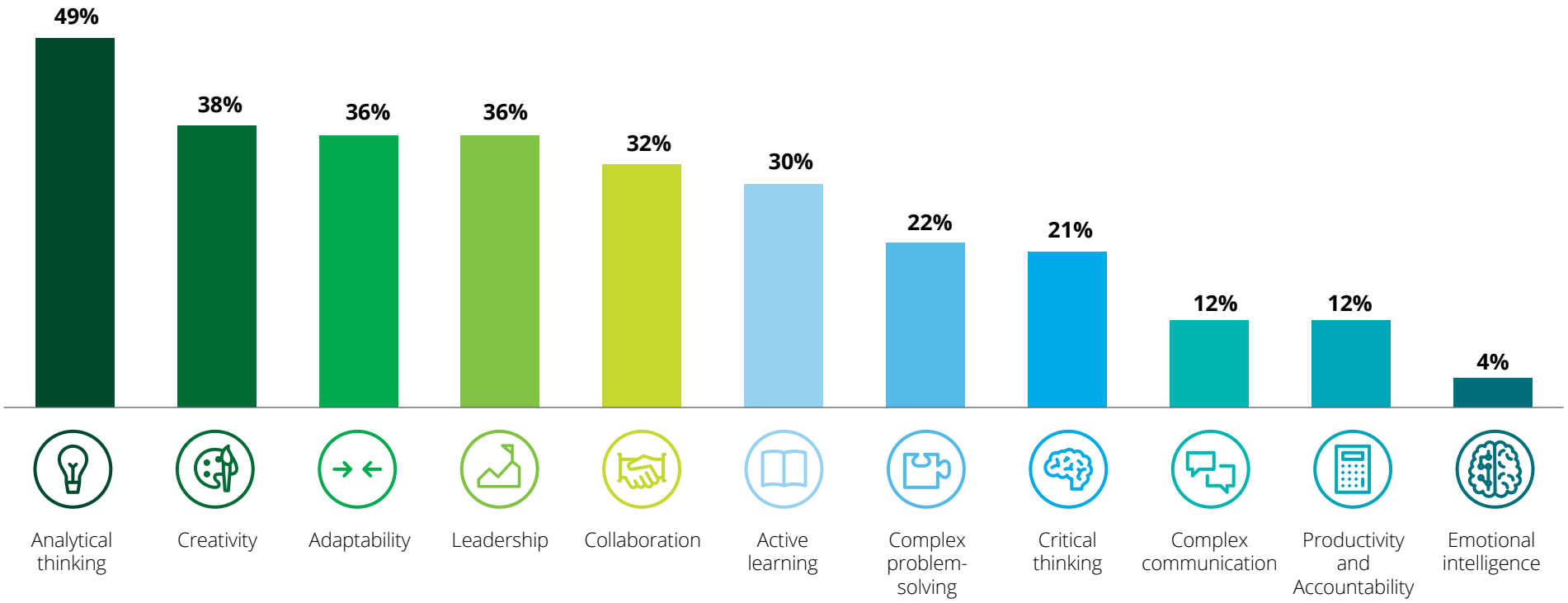
What are the skill set that companies look for?

Identifying areas of government support in digital transformation

How can the government assist these companies towards their digital transformation journey?

Thai companies are seeking out for individuals with analytical thinking, creativity, adaptability and leadership skills

Soft skills requirement
(% of respondents, n=77)



Survey results show that analytical thinking is the top soft skill requirement. This is followed by creativity, adaptability, and leadership skills. The top four skills suggests that there is a growing demand for individuals who have learning agility and hold strong emotional intelligence.

Source: Deloitte analysis based on survey in October 2019

Thailand and Global market seeks out for those with analytical thinking and innovation skills

Comparing skills demand, 2020 vs. 2025, top ten

Skill demand in Thailand market in 2020

1. Analytical thinking and innovation
2. Active learning and learning strategies
3. Critical thinking and analysis
4. Leadership and social influence
5. Complex problem-solving
6. Creativity, originality and initiative
7. Technology use, monitoring and control
8. Technology design and programming
9. Reasoning, problem-solving and ideation
10. Resilience, stress tolerance and flexibility

Expected skill demand in Global market in 2025

1. Analytical thinking and innovation
2. Active learning and learning strategies
3. Complex problem-solving and ideation
4. Critical thinking and analysis
5. Creativity, originality and initiative
6. Leadership and social influence
7. Technology use, monitoring and control
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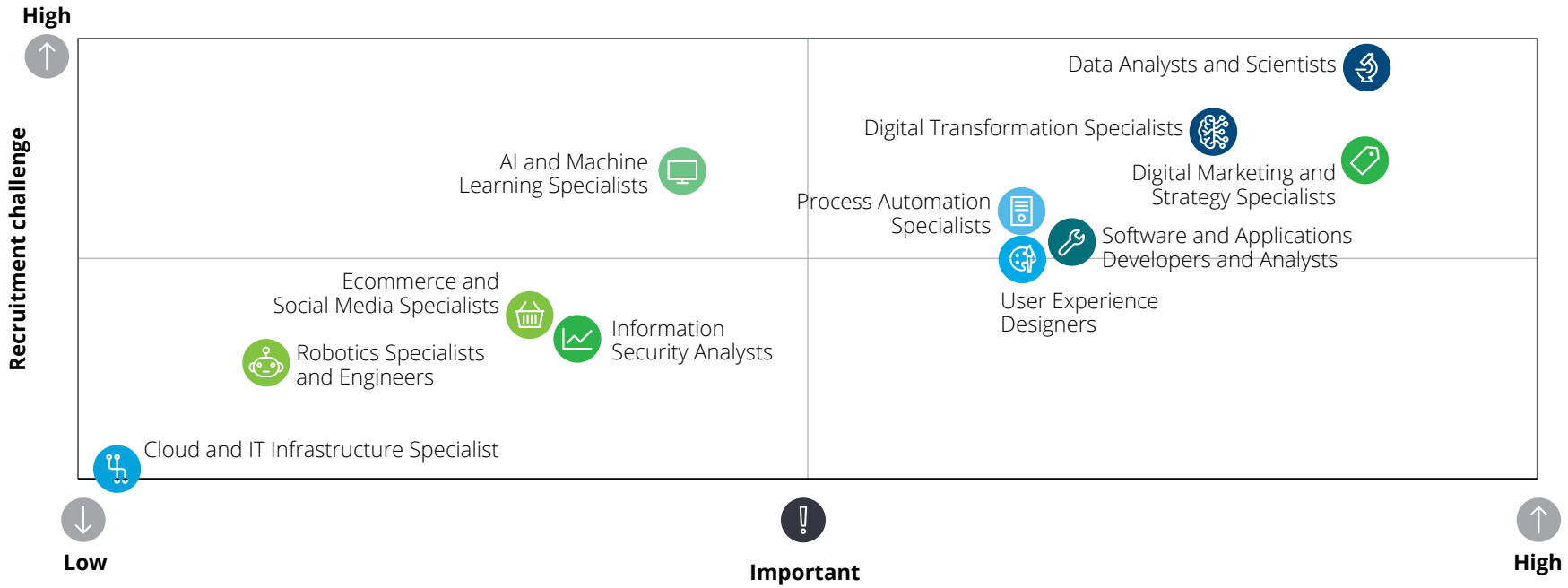
9. Resilience, stress tolerance and flexibility
10. Reasoning, problem-solving and ideation

Source: Future of Jobs Survey 2020, World Economic Forum

According to the survey from World Economic Forum, skills that were most in-demand in Thailand in 2020 were analytical thinking and innovation, active learning and learning strategies, and critical thinking and analysis. This aligns with the expected skillset demand in the global market in 2025 which are also topped by analytical thinking and innovation, active learning and learning strategies.

Talent gap prior to the COVID-19 pandemic

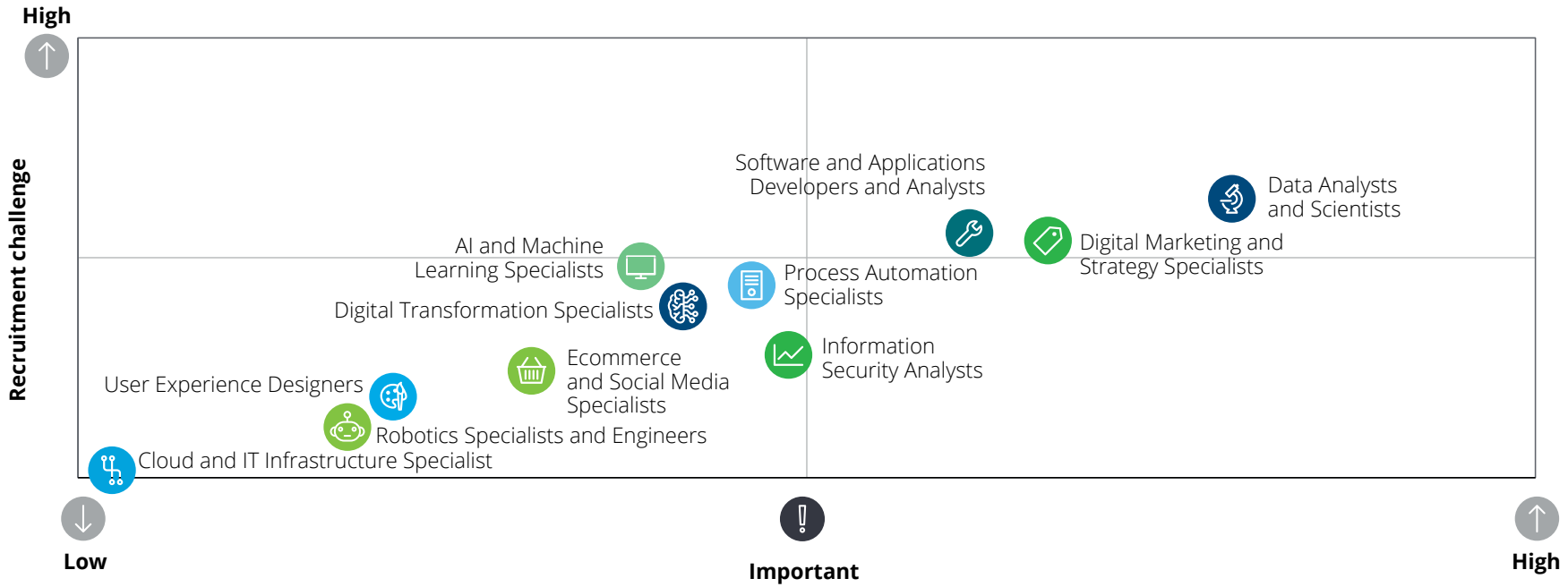
Talent gap for digital skills (Primary Survey)
(% of respondents, n=77)



This graph shows a cluster in the top-right quadrant, which are considered to most important yet most challenging to recruit roles including Data Analysts and Scientists, Digital Transformation Specialists and Digital Marketing, and Strategy Specialists.

Talent gap after the start of the COVID-19 pandemic

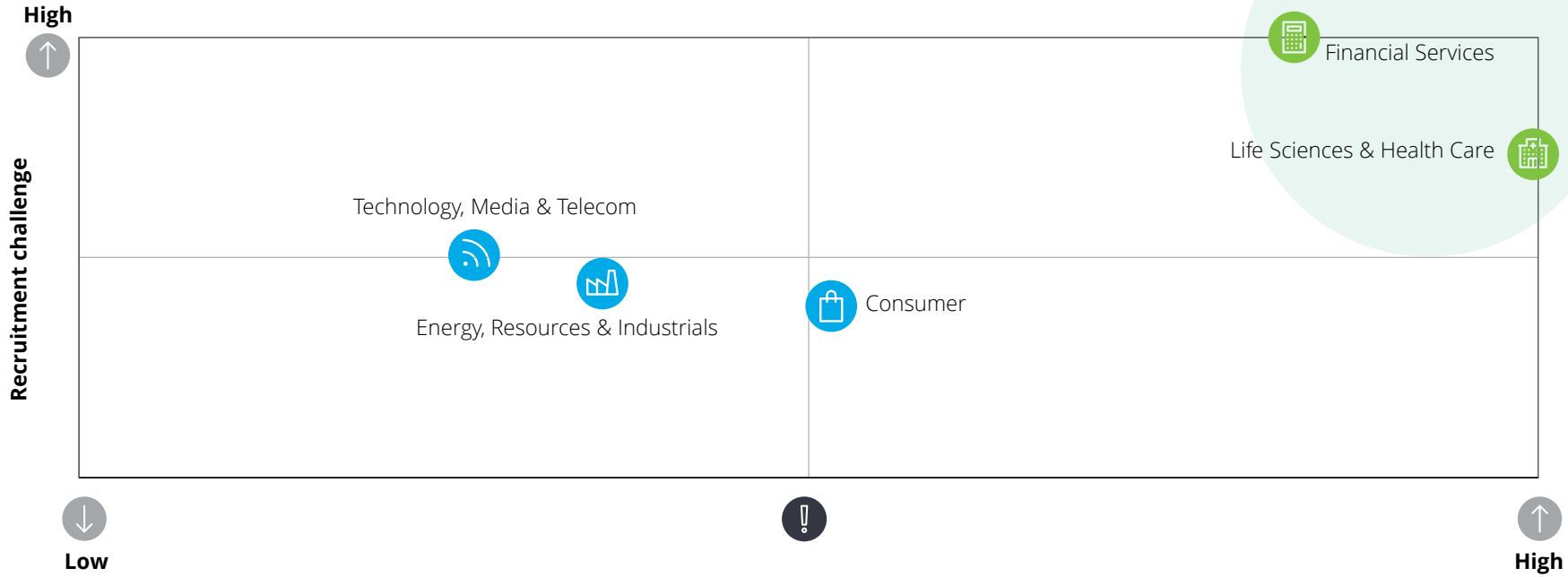
Talent gap for digital skills (Pulse survey)
(% of respondents, n=77)



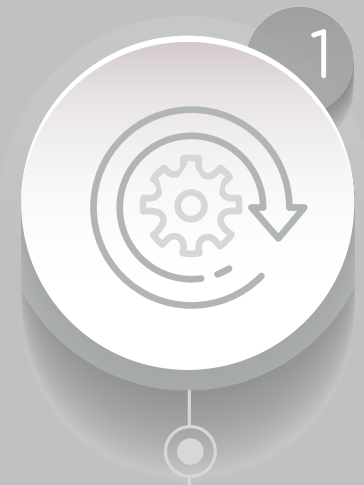
This graph indicates that while some positions have become less important since the start of the COVID-19 pandemic, positions such as Data Analysts, Software and Applications Developers and Analysts and Digital Marketing and Strategy Specialists remain in high demand. This could be attributed to the limited size of workforce available in the market during these unprecedented times. Notably, Digital Marketing and Strategy Specialists gained more importance since the COVID-19 outbreak.

Demand for Data Analyst and Scientists after COVID-19 pandemic by sector

Talent gap for digital skills (Pulse survey)
(% of respondents, n=77)



Data from the Pulse Survey shows the Financial Services and Life Sciences & Health Care sectors in top-right quadrant, which indicates a high demand in these industries to recruit Data Analysts and Scientists. This further denotes that in order to make digital transformation initiatives during the COVID-19 pandemic, these two sectors must accelerate their plans to seek out talent with digital skills.



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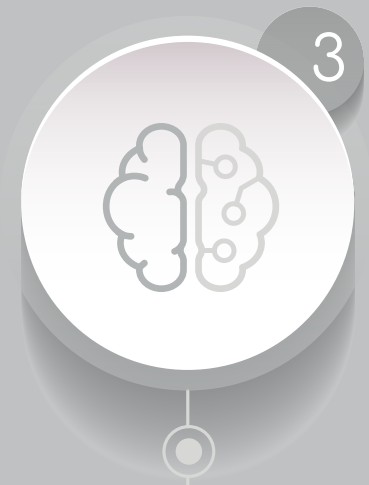


Pinpointing digital transformation skill demands

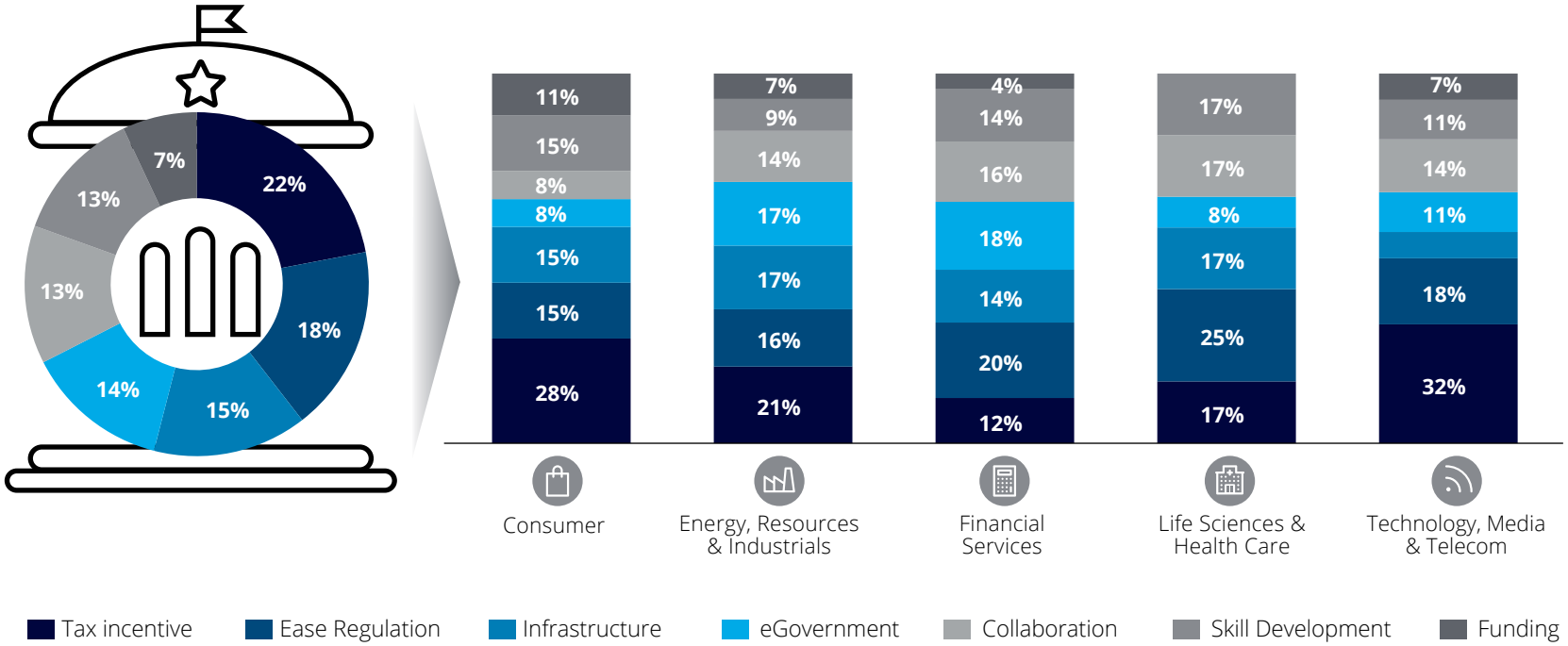
What are the skill set that companies look for?

Identifying areas of government support in digital transformation

How can the government assist these companies towards their digital transformation journey?

Tax incentive, ease regulation and infrastructure are the most popular requirements from companies

Requirement from companies to government
(% of respondents, n=76)



Source: Deloitte analysis based on Digital Transformation and Technology Survey in October 2019

- Tax incentives, easing regulations, and well-established infrastructure are the most popular demands companies wish they had from the government. According to our survey, of the total respondents regardless of their industries, respondents argued that tax incentives, easing regulations and well-established infrastructure are the demands they wish they had from the government with 22%, 18%, and 15% of total respondents, respectively.
- At the industry level, the majority of respondents in Technology, Media, and Telecom admitted they would like to receive tax incentives. Also, a similar story is seen in Consumer and Energy, Resources and Industrials with tax incentives receiving the highest percentage. Meanwhile, Life Science and Health Care and Financial Services prefer easing regulation the most. For financial institutions, their business model is strictly regulated by policymakers i.e., Ministry of Finance, Bank of Thailand, etc. As a result, unsurprisingly, reducing or easing regulations has become the top priority for Financial Services.

Thai Government Initiatives for Digital Transformation

Tax incentive
The Board of Investment (BOI) is currently promoting the digital industry through a corporate income tax exemption of 5-8 years with a focus on four groups;

- Software
- Infrastructure
- Technology development and startups through software development
- Digital services such as software applications, games, IoT, Big Data, and AI

Ease regulation
Over the past few years, the Thai government has launched various new laws and regulations to support the implementation of its digital economy policy.

The goal is to enhance convenience, reduce obstacles, and increase efficiency in online activities and transactions.

Example of Thai laws and regulations

- Electronic Transactions Act
- Computer Crime Act
- Digital Development for Economy and Society Act
- Data Privacy Act
- National Cyber Security Act

Infrastructure
The government aims to provide infrastructure to ensure high- speed internet access, internet connectivity, as well as the connection of submarine cables and clusters for the digital industry.

Source: BOI

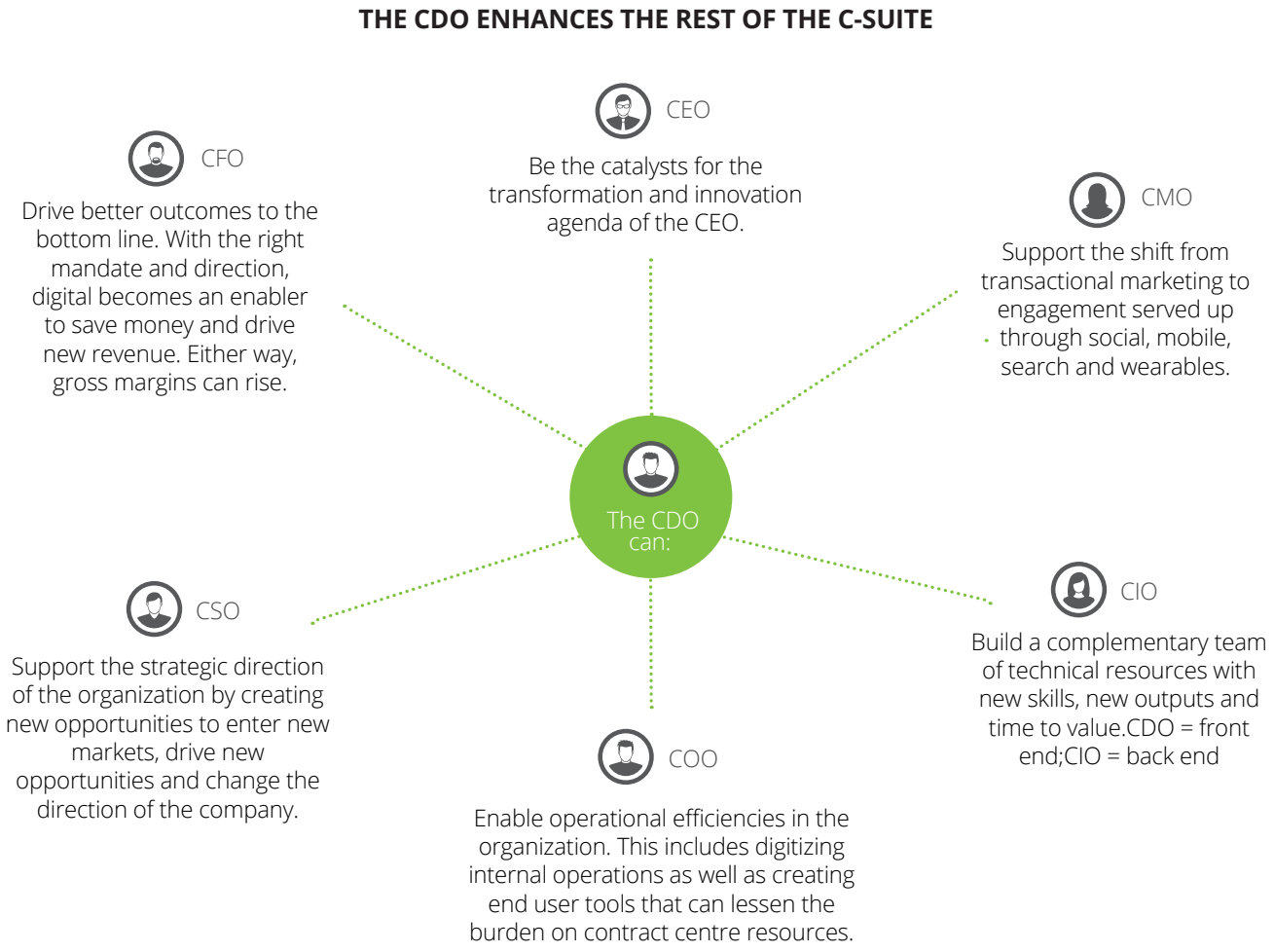
The Secret Sauce of Driving Successful Digital Transformation

The roles and characteristics of Chief Digital Officer (CDO) and how CDO can help orchestrate the digital transformation journey

As information technology has dramatically reshaped all industries, many companies are pursuing and driving the digital transformation initiatives, in an effort to capture the benefits of these trends or simply catch up their peers. Yet, success in these transformations is not guaranteed, and in fact, facing a highly challenging as being observed from Deloitte's Thailand Digital Transformation survey.

The Secret Sauce of Driving Successful Digital Transformation

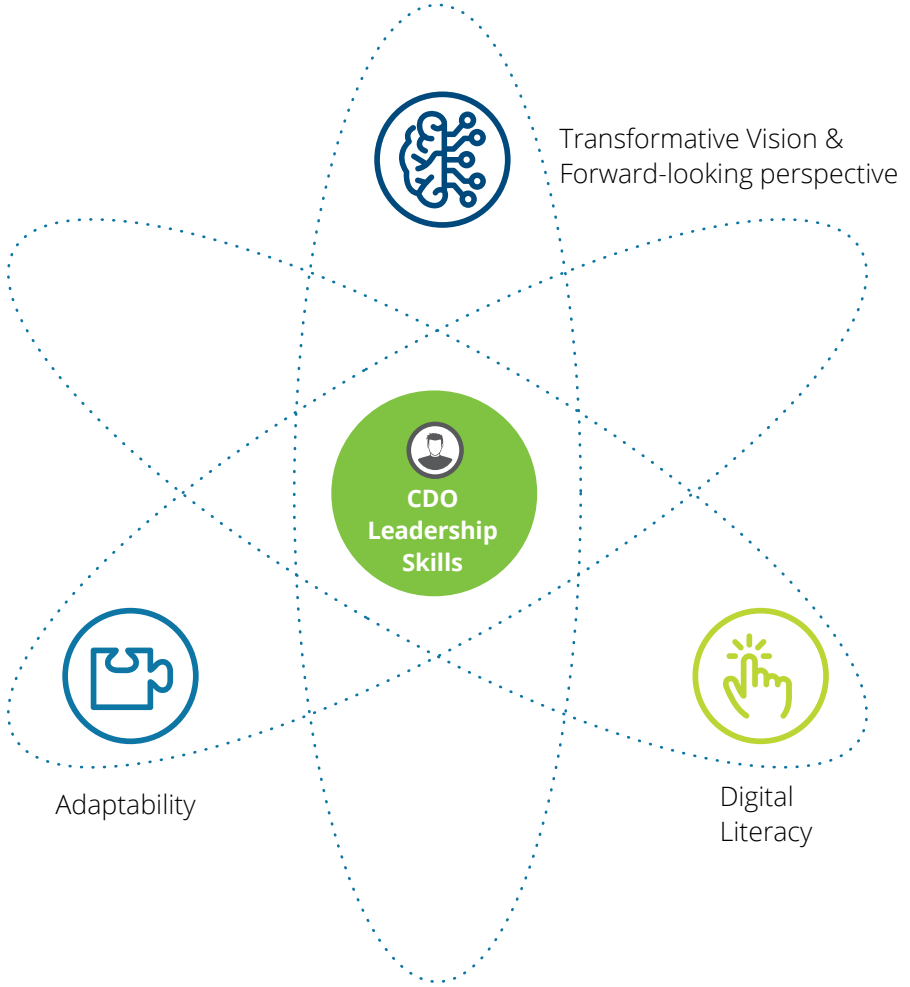
The roles and characteristics of Chief Digital Officer (CDO) and how CDO can help orchestrate the digital transformation journey



- To make digital industrial transformation a reality, a company needs both a nerve center and a dedicated digital function.
- Creating an operational structure with digital leader is key to drive the transformation successfully.
- The organization would need to appoint so-called a *chief digital officer* (CDO), a senior leader responsible for the organization's long-term digital vision and the subsequent execution of the transformation efforts.
- CDO think holistically about how a company's strategy is executed across all digital channels. They own and drive digital strategy throughout the organization to help business unit leaders unlock value.

Core leaderships skills for CDO

Many required core leadership skills remain the same whether it is a business or digital leader, there are some demands of digital disruption call for certain new skills.



- **Transformative vision and forward-looking perspective** - the most important skill which includes the ability to anticipate markets and trends, make savvy business decisions and solve tough problems in turbulent times.
- **Digital literacy** - a must-have skill, the leader needs to have general digital literacy, as opposed to hard-core technical skills. It is often much easier and more effective to equip the business leaders become digitally literate than it is to teach technologists the strategic and business knowledge.
- **Adaptability** - as the pace of change in digital world, a leader must also be change oriented - that is open-minded, adaptable, and innovative.

Chief Digital Officer Archetypes

Digital Leaders are categorized into one of the four archetypes, with each driving distinct strategic objectives

The disrupter

ARCHETYPE DESCRIPTION

CDO has mandate to **transform existing business models** and ways of working

REPORTING INTO

CEO

PROS

- High **decision efficiency**
- Very **agile and responsive** to customer demands

CONS

- Too many changes at once **may overwhelm the organization**
- Accountability falls all on the CDO

The innovative integrator

ARCHETYPE DESCRIPTION

CDO **integrates customer sensing** and insights with **operational capability improvements**

REPORTING INTO

CEO

PROS

- Focused on **highest-priority innovations**
- Able to **respond with agility** to customer need

CONS

- May not have full control over all digital execution (e.g., product RandD)

The market-minded maven

ARCHETYPE DESCRIPTION

CDO drives new digital solutions for **customer-facing channels and routes to market**

REPORTING INTO

CMO/CRO

PROS

- Digital **initiatives prioritized on customer and growth impact**
- Accountability for **end-to-end ustomer experience**

CONS

- Removed from CEO, which could **restrict large investments**
- Disconnected from business units, which may **limit adoption**

The technology integrator

ARCHETYPE DESCRIPTION

CDO is **technology-centric** and uses digital innovation to accelerate change

REPORTING INTO

CIO/CTO

PROS

- Stable demands and work plans **increase development efficiency**
- Focus on single outcomes can result in **optimized operations**

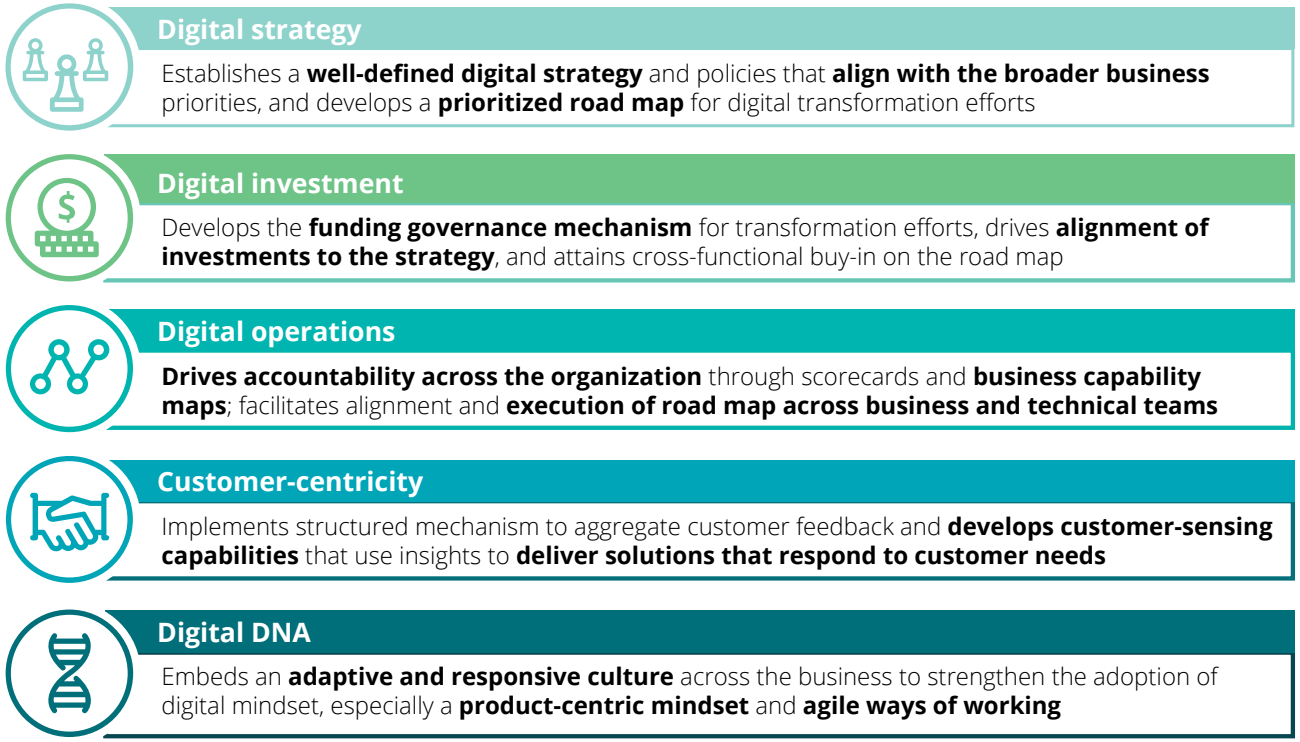
CONS

- **Less adaptable** to changing business needs
- Key components of business **strategy may be overlooked**

- **The Disrupter** - focus on transforming existing business models and ways of working who typically reporting to the CEO
- **The innovative integrator** - integrates customer sensing and insights with operational capability improvements. Primarily focus on the highest-priority innovations and may lack of full control over all digital execution.
- **The market-minded maven** - drives digital initiatives for customer-facing channels and routes to market. Focus on customer growth and customer experience, downsides may be disconnected from other 'non' front-end business units.
- **The technology integrator** - technology-centric and uses digital innovation to accelerate change in the organization. Usually report to CIO or CTO with single-outcome initiatives and highly stable workplans, might be limit perspective and not quick enough to adapt to the changing business needs.

Digital Function

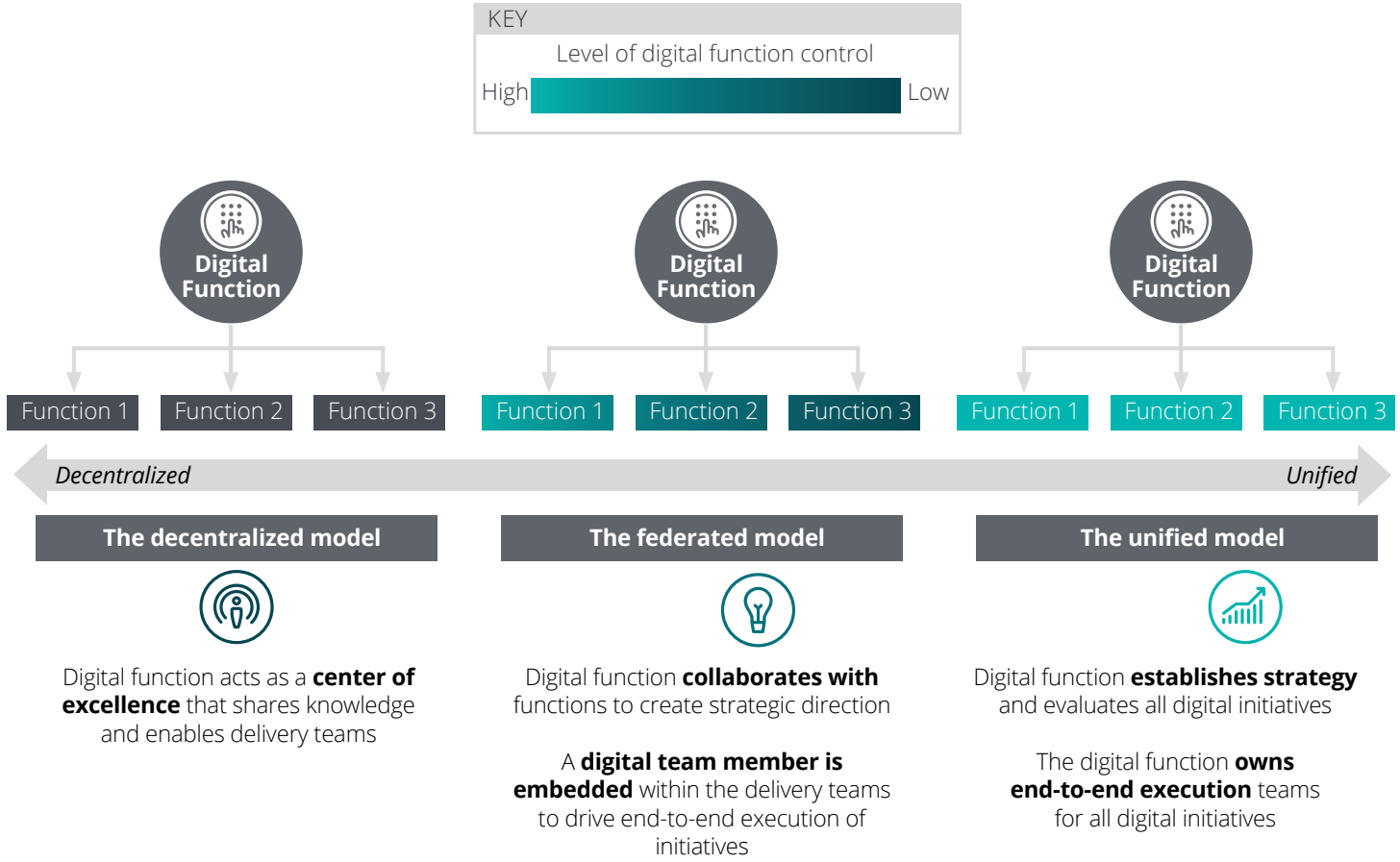
The key elements that will help CDOs achieving their vision and goals delivery of transformation initiatives across the company.



- **Digital strategy** - acts as a digital North star to help better communicate and guide all digital initiatives across the enterprise. Organization should seek inputs from various stakeholders (customers, partners, shareholders, communities), prioritize and schedule the plan and finally get validated.
- **Digital investment** - CDO should oversee the investment governance model to help creating influence across the organization.
- **Digital operations** - served as a backbone of all digital activities. It must be clearly lay out governance, accountability and metrics to consistently monitor digital initiatives' efficiency and execution.
- **Digitalization of customer journey** - may begin with the development of a sense-and-respond capability to gather customer information and leverage feedback to take action to deliver business capability improvements.
- **Digital DNA** - which is centered around embedded a digital-first mindset and ways of working into an organization. It can serve as a blueprint for bringing a digital transformation to life, to help companies to organize, operate and behave in digital ways.

Digital Operations

Three primary operating models are used during digital transformations



- **The decentralized model** – for well-communicated and relatively high maturity of digital literacy in an openness and trusted environment. CDO team acts as a center of excellence that shares knowledge and enables delivery teams.
- **Federated model** – for organizations that executives in other units are mandated to deliver sustainable operational change plus the initiatives that affect and require multiple or cross-functional collaboration team for success. In this model, digital team member is embedded within the business unit's delivery teams.
- **Unified model** – for organizations that has relatively low levels of digital capability maturity or the digital strategy is focused on specific and limited scope in less complex organizational structure. The CDO team will owns end-to-end execution teams for all initiatives.

Source: Deloitte analysis.

Contributors

Thailand Digital Transformation Survey Report 2021: *The Impact of COVID-19*

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