

AN IDC INFOBRIEF



DIGITAL FITNESS FOR START-UPS AND SMBs

How Cloud Enables and Accelerates Start-Up and SMB Success

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START-UPS AND SMBS ARE UNIQUELY POSITIONED TO DISRUPT THEIR INDUSTRIES AND GRAB GLOBAL OPPORTUNITIES — BUT THEY NEED THE RIGHT TOOLS TO OVERCOME COMMON CHALLENGES

- Digital design and engineering tools enable global collaboration around projects and help to attract and retain talent. Design and engineering teams engage in experimenting, conceptualizing, designing, and modeling application blueprints using computer-aided design and computer-aided engineering tools to enhance collaborative product data management, production planning, and manufacturing — giving start-ups and SMBs a competitive edge. Start-ups and SMBs we surveyed use digital design applications (CAD, CAM, CAE, etc.) with 20% using these for almost all or for a high portion (>50%) of their workforce. The user experience that design teams get from using these modern digital design tools can help start-ups and SMBs to motivate staff, boost productivity, and encourage innovation.

- In this InfoBrief, we will present what we learned from start-ups and SMBs that are leaders in digital transformation, according to IDC's Digital Fitness Index:



How they are overcoming challenges and meeting their objectives




How they are leveraging innovative IT tools and modern strategies to move their business forward

- The InfoBrief also explores how start-ups and SMBs are using the latest technologies to increase efficiency, deliver exceptional customer experiences, facilitate instant and global collaboration, and attract and retain their greatest asset — talent.

AFTER ALL, TODAY'S SUCCESSFUL START-UPS AND SMBS ARE TOMORROW'S LARGE AND INFLUENTIAL MULTINATIONALS.

CLOUD IS THE LAUNCHPAD FOR INNOVATION AND LEVELS THE PLAYING FIELD FOR START-UPS AND SMBS



IDC sees cloud (and the API-based platform model) as the foundation for digital innovation in virtually every industry.

IDC's Digital Fitness Index shows that Digital Leaders increasingly utilize cloud services to reach their business goals and meet their profitability and growth targets.

66%

of Digital Leaders take a balanced approach to running applications in the cloud or in-house.

26%

of Digital Leaders tend to run applications in the cloud, but do run applications in-house if necessary.

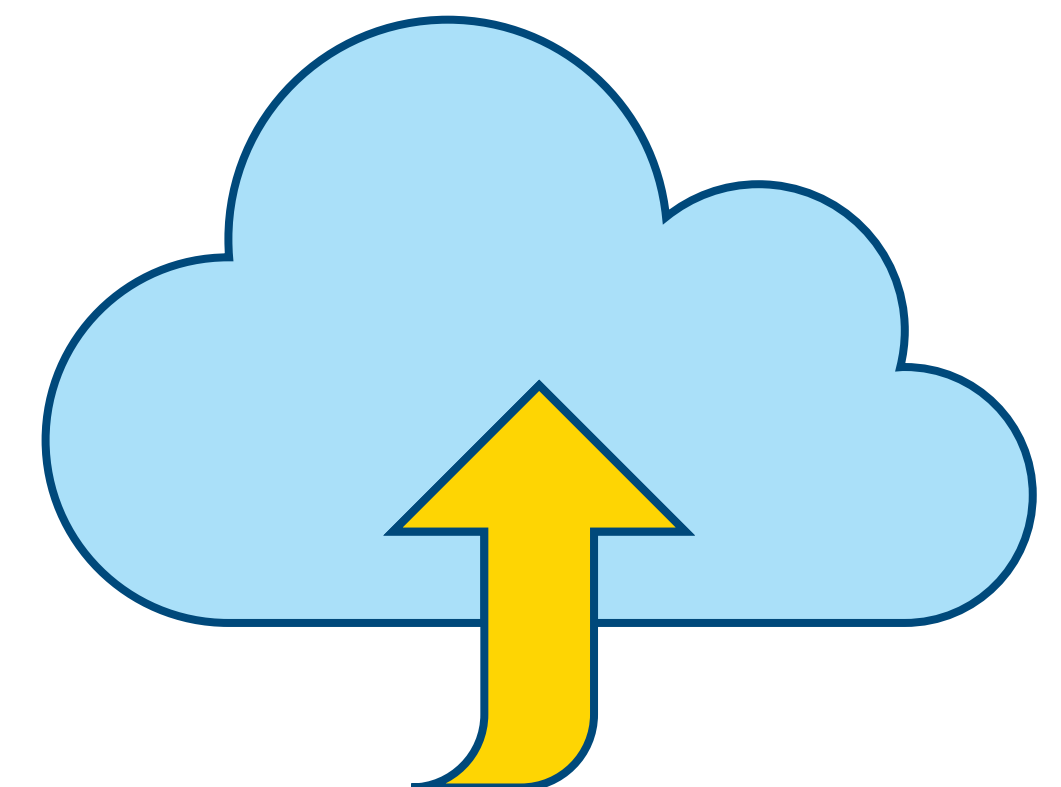
Source: IDC Digital Fitness Index, 2019, n = 400

INNOVATION IS THE STRONGEST BUSINESS DRIVER FOR CLOUD ADOPTION:

Innovation initiatives are dependent on the cloud — for instant scale, access to key technologies (e.g., AI services), and access to the ecosystem.

Cloud accelerates growth with capabilities previously out of reach for start-ups and small businesses:

- ✓ Global scale on-demand
- ✓ Instant access to feature-rich software
- ✓ Consumption-based pricing
- ✓ Modern collaboration and productivity features
- ✓ Ecosystem integration
- ✓ Easy to use and self-service access



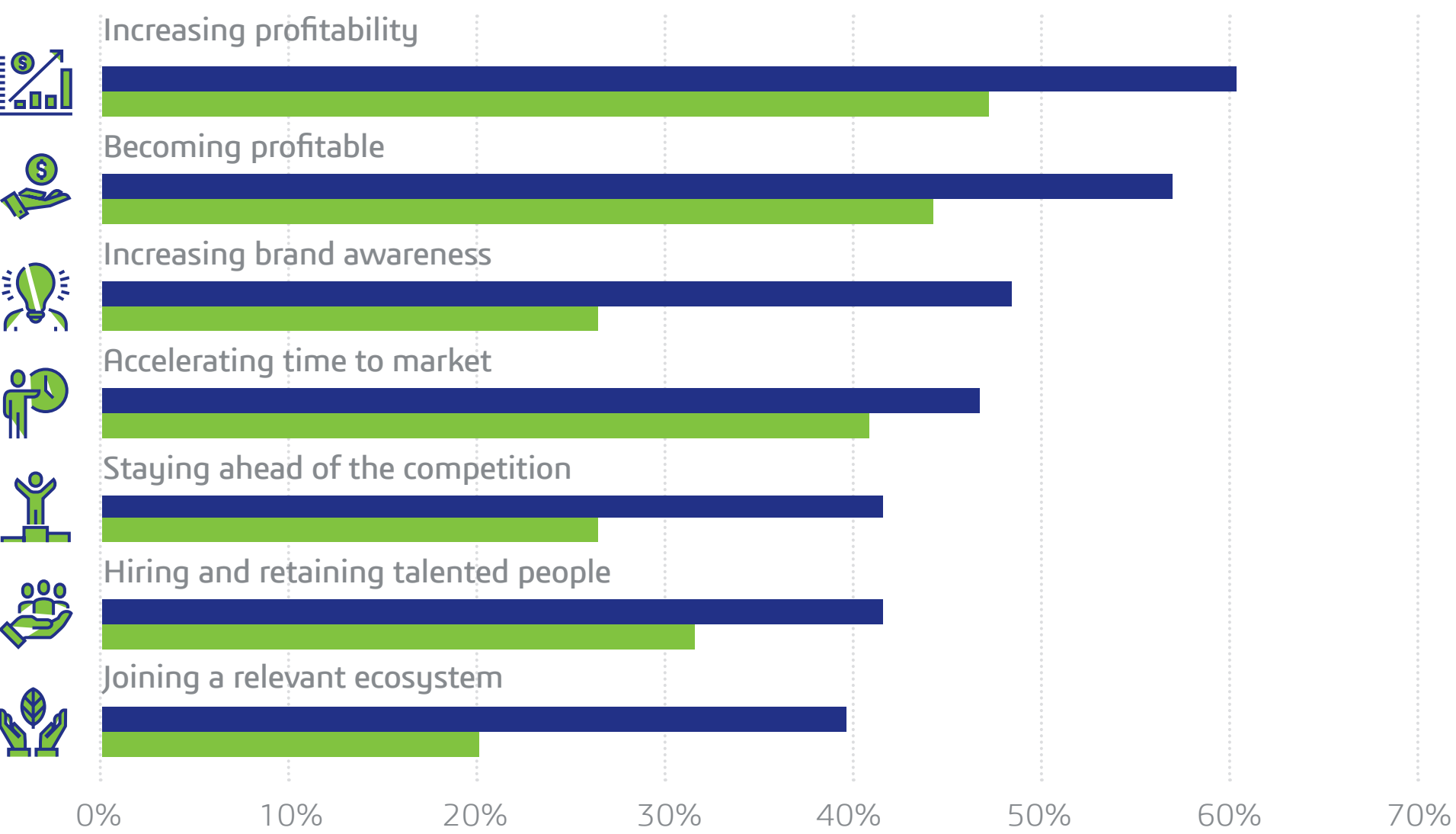
BUSINESS PRESSURES FOR DESIGN AND ENGINEERING COMPANIES IN THE SMB AND START-UP SPACE

In today’s digital world, start-ups can disrupt their industries and go global instantly, but they are facing challenges such as increasing profitability, increasing brand awareness, and accelerating time to market, as highlighted in IDC’s 2019 Digital Fitness Index research on start-ups and SMBs.

The challenges of meeting their business priorities are holding companies back and limiting their success. For Digital Leaders, increasing profitability is the single biggest challenge, suggesting that traditional IT processes and operations are a serious impediment to cost-efficiently scaling the business in the digital world. IT cost takes a large share of the operating budget, so moving from a capex to an opex model frees up cash flow and helps to improve profitability. Taking advantage of modern applications delivered through the cloud helps to scale IT tools aligned with business needs while keeping costs under control and improving profitability.

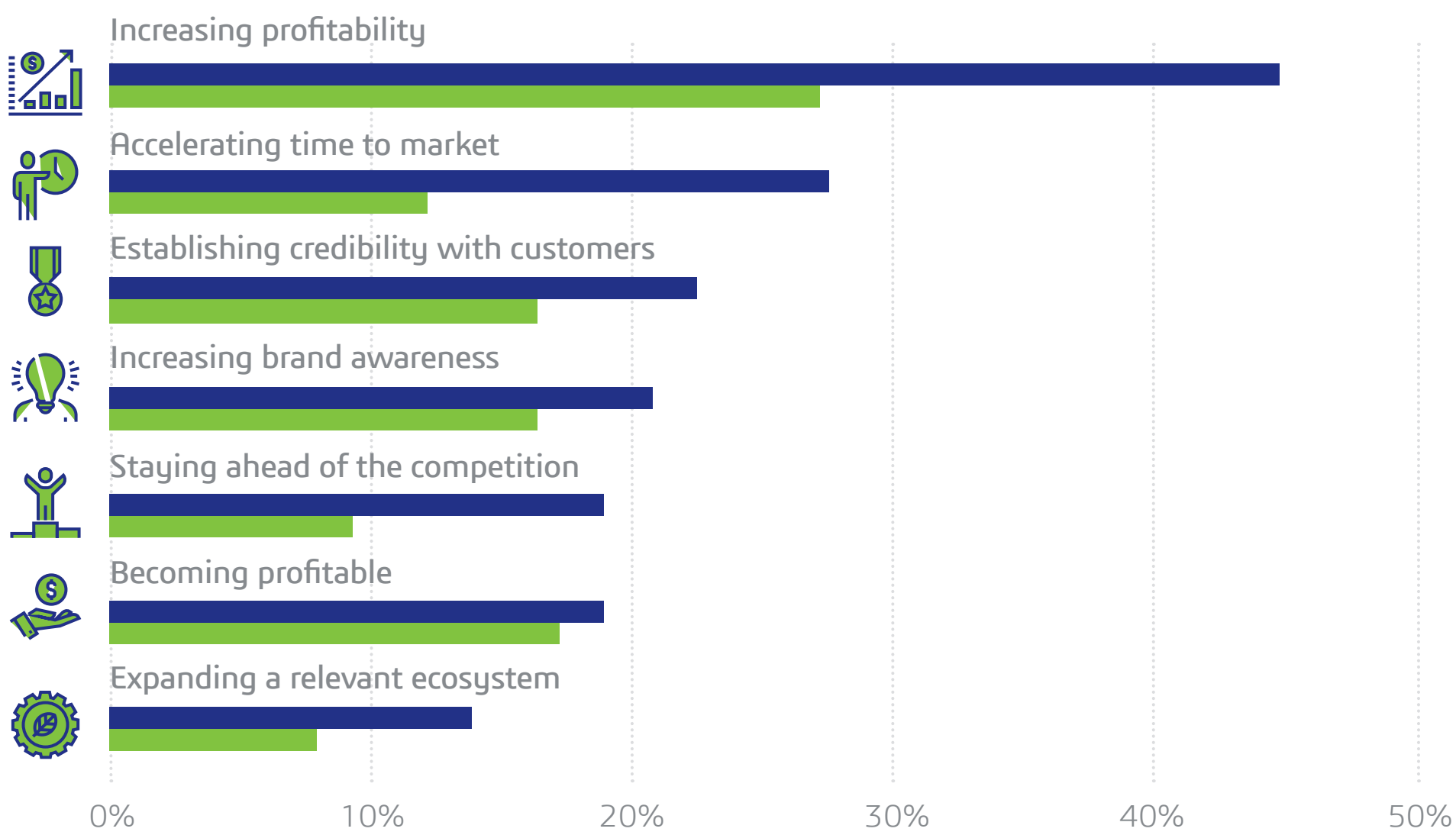
Business priorities

● Leaders ● Followers



Most challenging business priorities

● Leaders ● Followers



SMB DESIGN COMPANIES AND START-UPS EXPERIENCE CONTINUOUS VARIABILITY IN SALES AND STAFFING – SUCCESS DEPENDS ON HOW THEY COPE WITH THIS DYNAMISM

One of the key challenges for SMBs and start-ups is to adapt efficiently to variability in business patterns and staffing levels. This has a direct impact on profitability and business growth.

Being able to adjust IT resources and IT cost in a timely manner to changes in customer demand and staffing levels improves business agility and profitability.

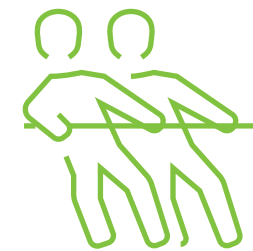
IDC's Digital Fitness Index research shows that Digital Leaders utilize cloud services to closely align their IT resources and costs to their business needs in the most cost-efficient way.



24%

HAD SIGNIFICANT DEGREE OF VARIABILITY IN BUSINESS.

Smaller and newer businesses experience "very unpredictable business" or significant variability. Digital Leaders have a more stable business pattern.



9 OUT OF 10

Companies admitted that coping with changes in business patterns was difficult or moderately difficult.

THE CHALLENGE WAS EVEN MORE PRONOUNCED FOR DIGITAL FOLLOWERS, WHILE ONLY 8 OUT OF 10 DIGITAL LEADERS FOUND IT DIFFICULT TO COPE.



93%

Of businesses experienced changes in staffing levels due to changing business patterns.

82% OF DIGITAL FOLLOWERS ADMITTED THAT ADAPTING TO VARYING STAFFING LEVELS WAS A CHALLENGE, COMPARED WITH ONLY 55% OF DIGITAL LEADERS.

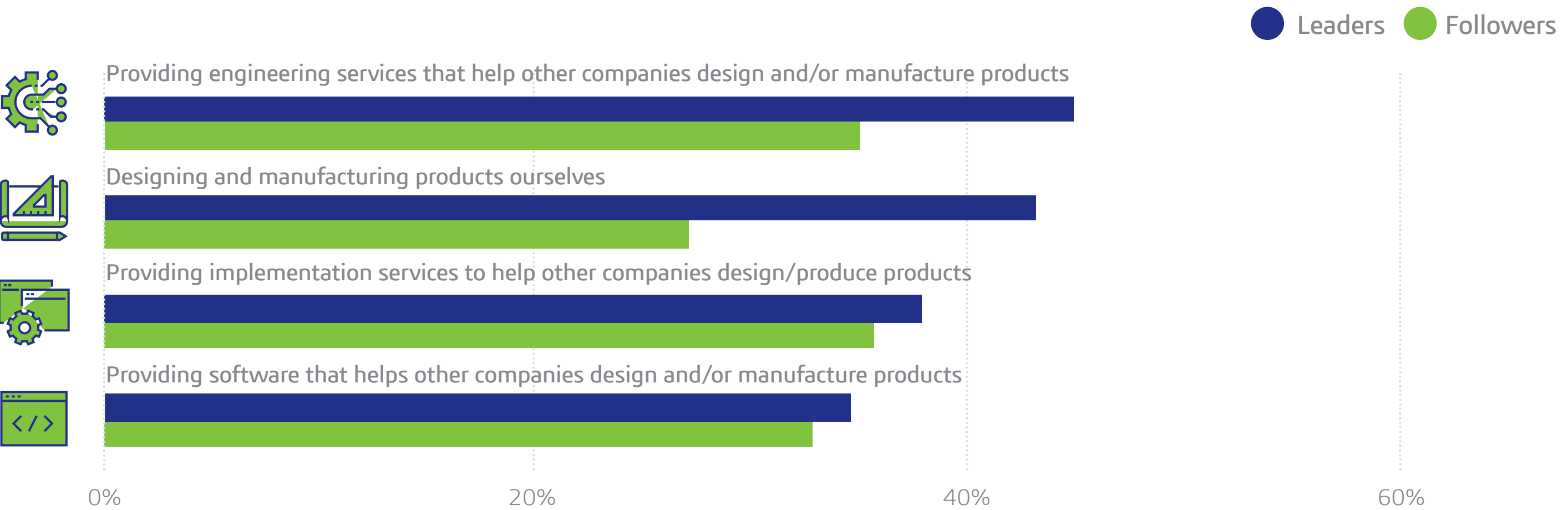


LESS THAN 2% OF BUSINESSES ARE CONFIDENT that they can

successfully adapt to dynamic business patterns and staffing. A similar number of companies (<5%) saw their revenues in the last financial year grow at a healthy 10%–19%. This indicates a tight correlation between using IT and cloud to adapt to business, sales, and employee variability quickly and cost-efficiently.

HIGH DEPENDENCY ON DESIGNERS AND ENGINEERS REQUIRES A MODERN APPLICATION LANDSCAPE

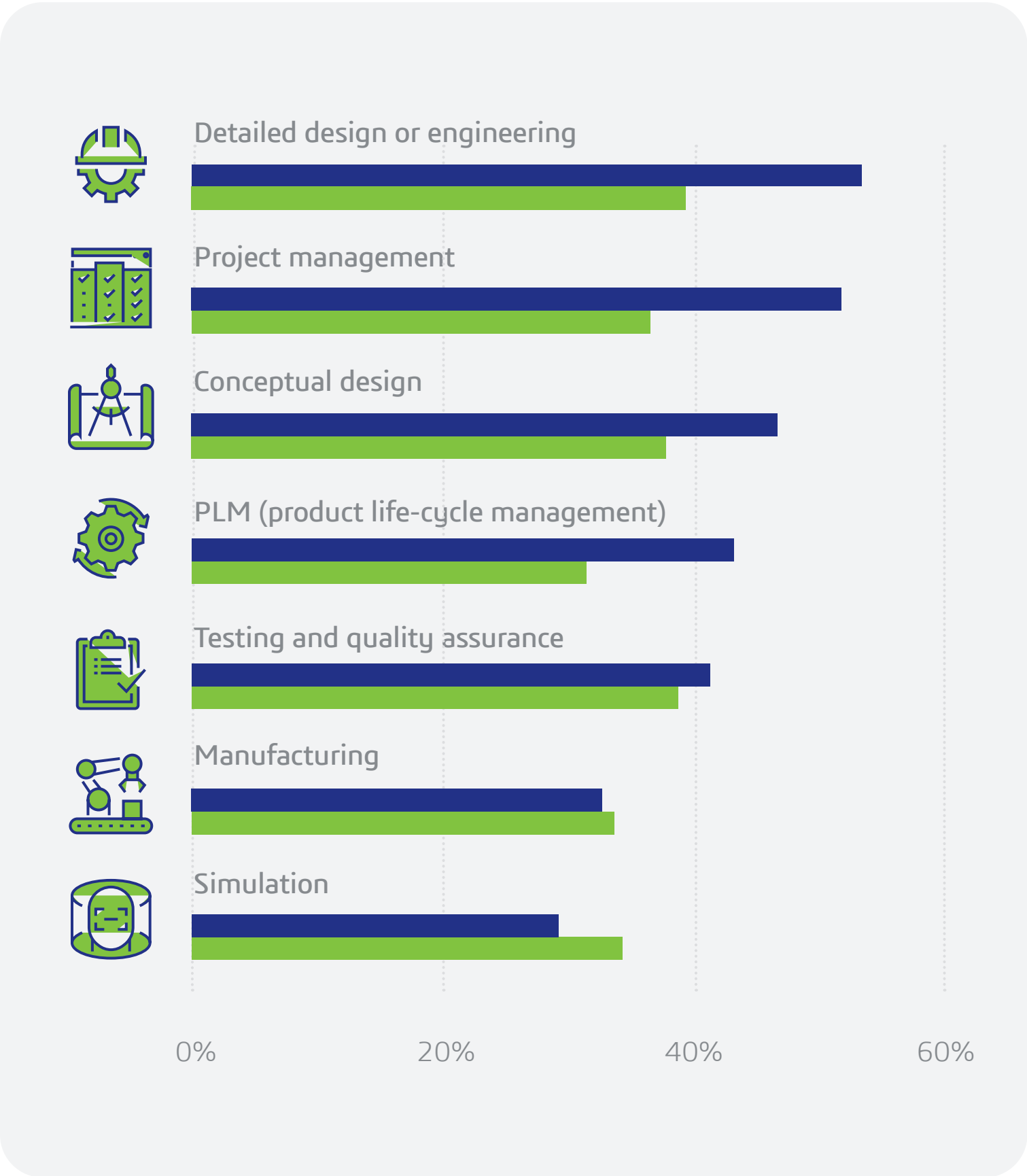
88% of Digital Leaders primarily provide engineering services that help other companies design and/or manufacture products or design and manufacture products themselves. Digital Leaders focus more on functions such as detailed design and engineering, project management, and conceptual design.



The critical asset for SMBs and start-ups in the digital design and engineering space is designers and engineers. Digital Leaders have a higher dependency on designers and engineers than Digital Followers. For 28% of Digital Leaders, designers and engineers are between 20% and 60% of their entire workforce, compared with 2% of Digital Followers.

Digital designers and engineers are hard to attract and retain, and move around the industry, and are often geographically dispersed. Having a modern cloud-based design and engineering application setup helps to overcome these challenges and to connect your internal staff with your customers and partners for increased collaboration on the same software platform.

In addition, 27% of engineering and design staff are contractors who need to be integrated seamlessly into the business while they are working for your organization. Delivering a great user experience and access to the newest design applications to these professionals is critical for business success, staff productivity, and talent retention.

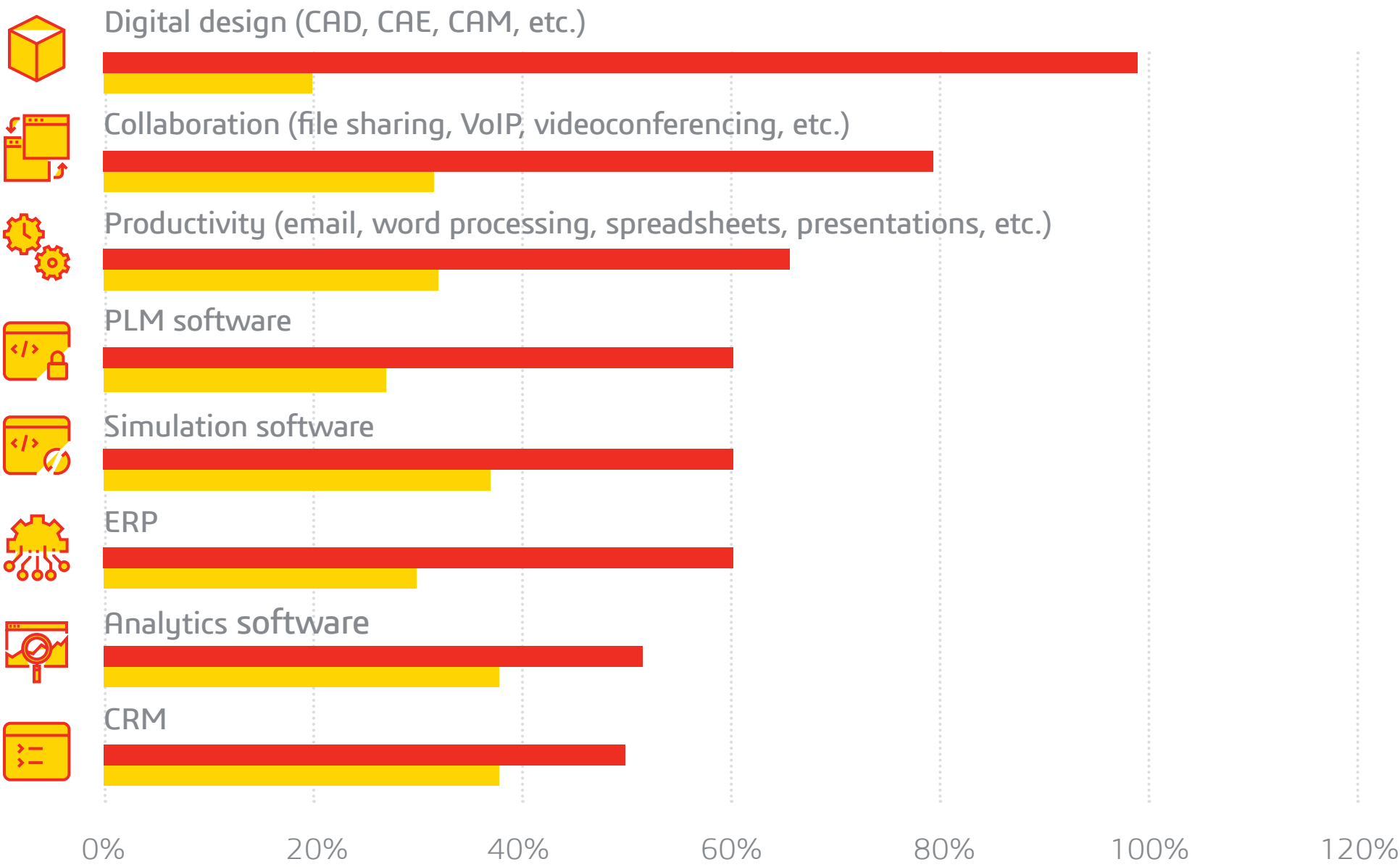


DIGITAL LEADERS INVEST IN A MODERN APPLICATION LANDSCAPE

Digital design and engineering tools enable global collaboration around projects and help to attract and retain talent. Digital design is the creation of solutions through software for viewing on a screen, including applications for computer aided design (CAD), mechanical computer aided engineering (CAE), other engineering, collaborative product data management, production planning, and manufacturing. To create a productive and modern application setup for designers and engineers, businesses need to both modernize their general applications and their design and engineering applications. Digital Leaders have invested significantly more in modern applications than have Digital Followers and are more successful in deploying them. Users are not always satisfied with the implementation of the applications they are using, with 7 in 10 businesses relying on internal IT departments to roll out CAD/CAM apps and updates. 40% of Digital Leaders used modern tools such as automation to deploy and update applications, compared with 25% of Digital Followers.

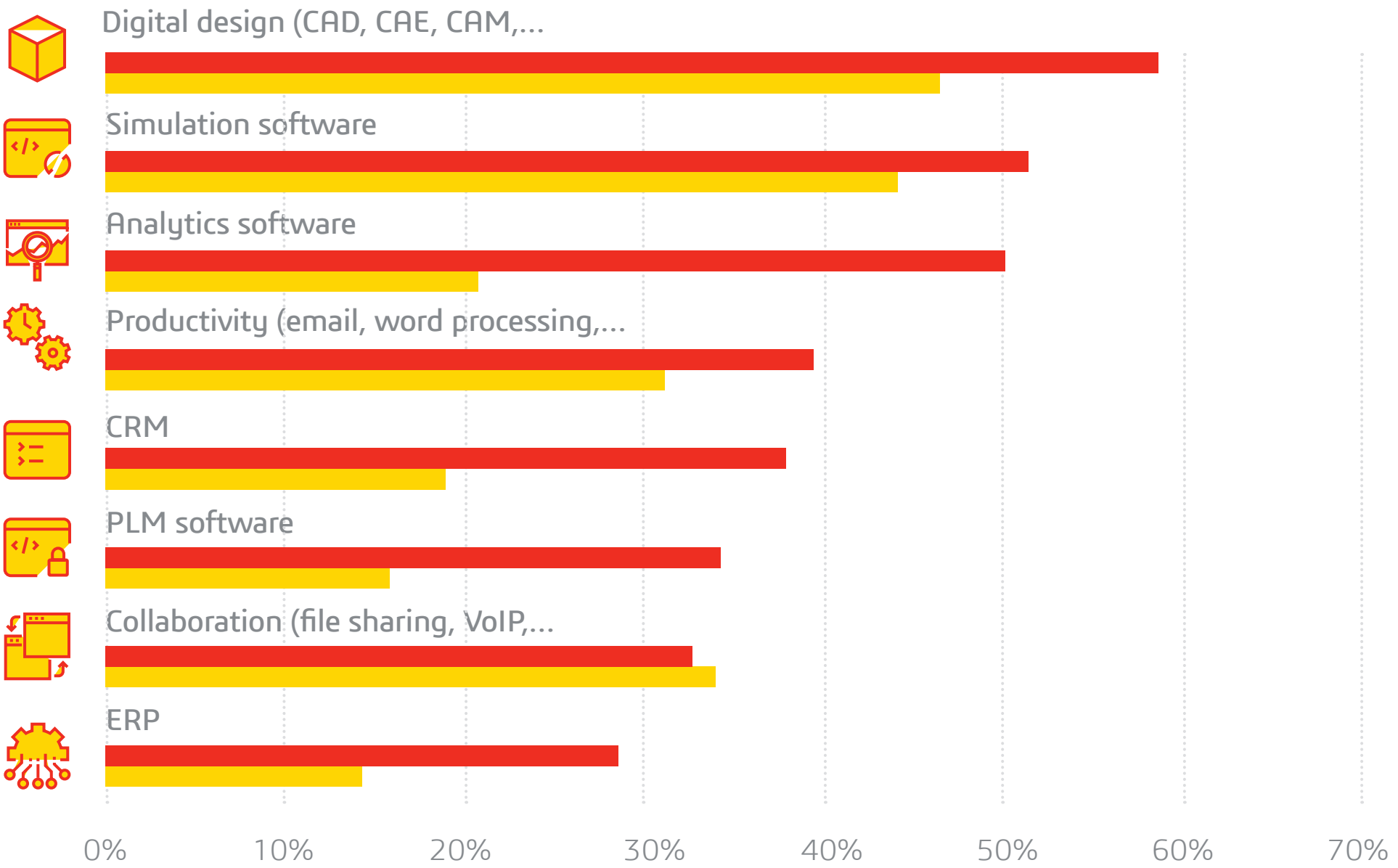
Application Usage

● Leaders ● Followers



Satisfaction with Application Implementation

● Leaders ● Followers

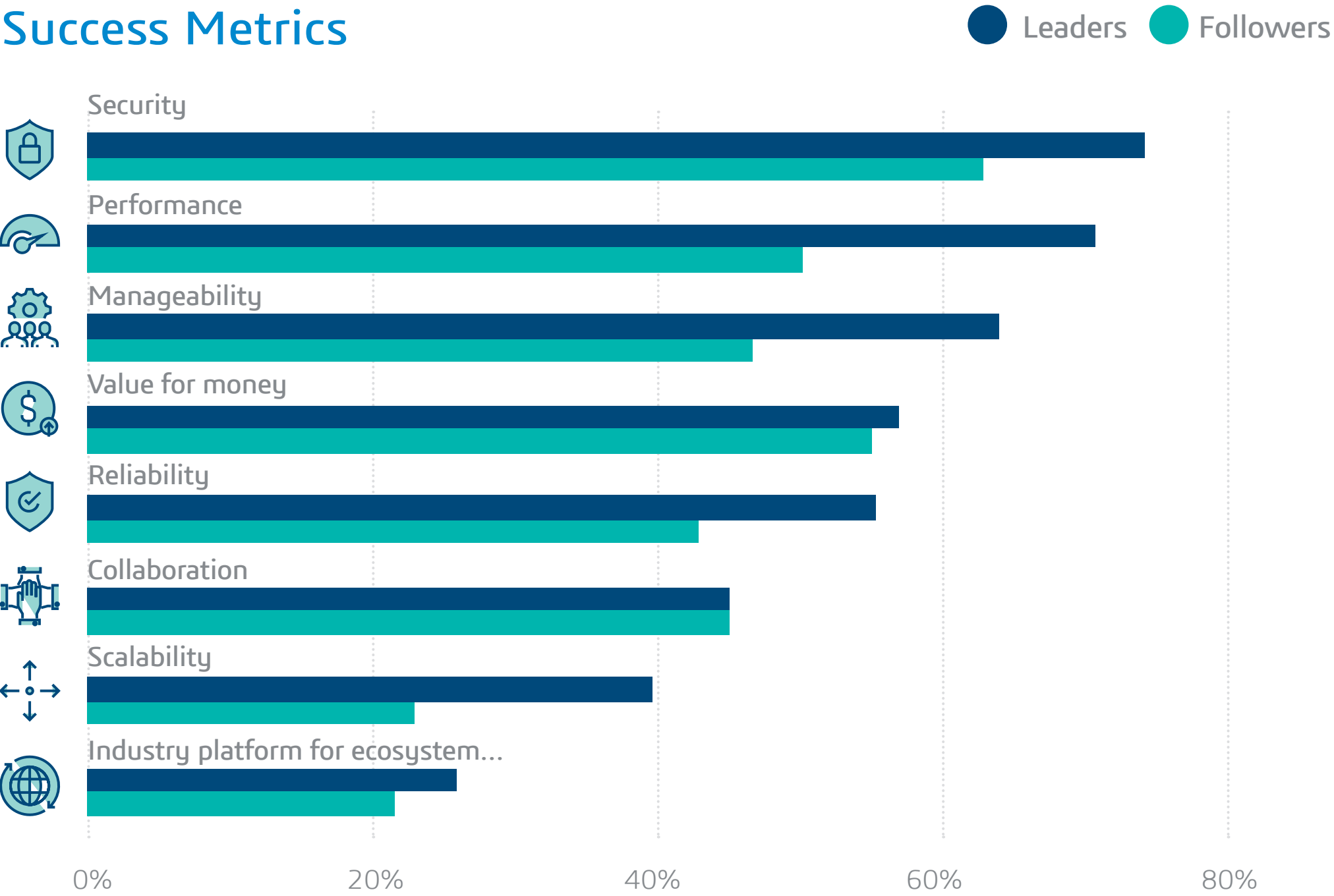


SECURITY, PERFORMANCE, AND MANAGEABILITY ARE SUCCESS METRICS FOR DIGITAL DESIGN AND ENGINEERING APPLICATIONS

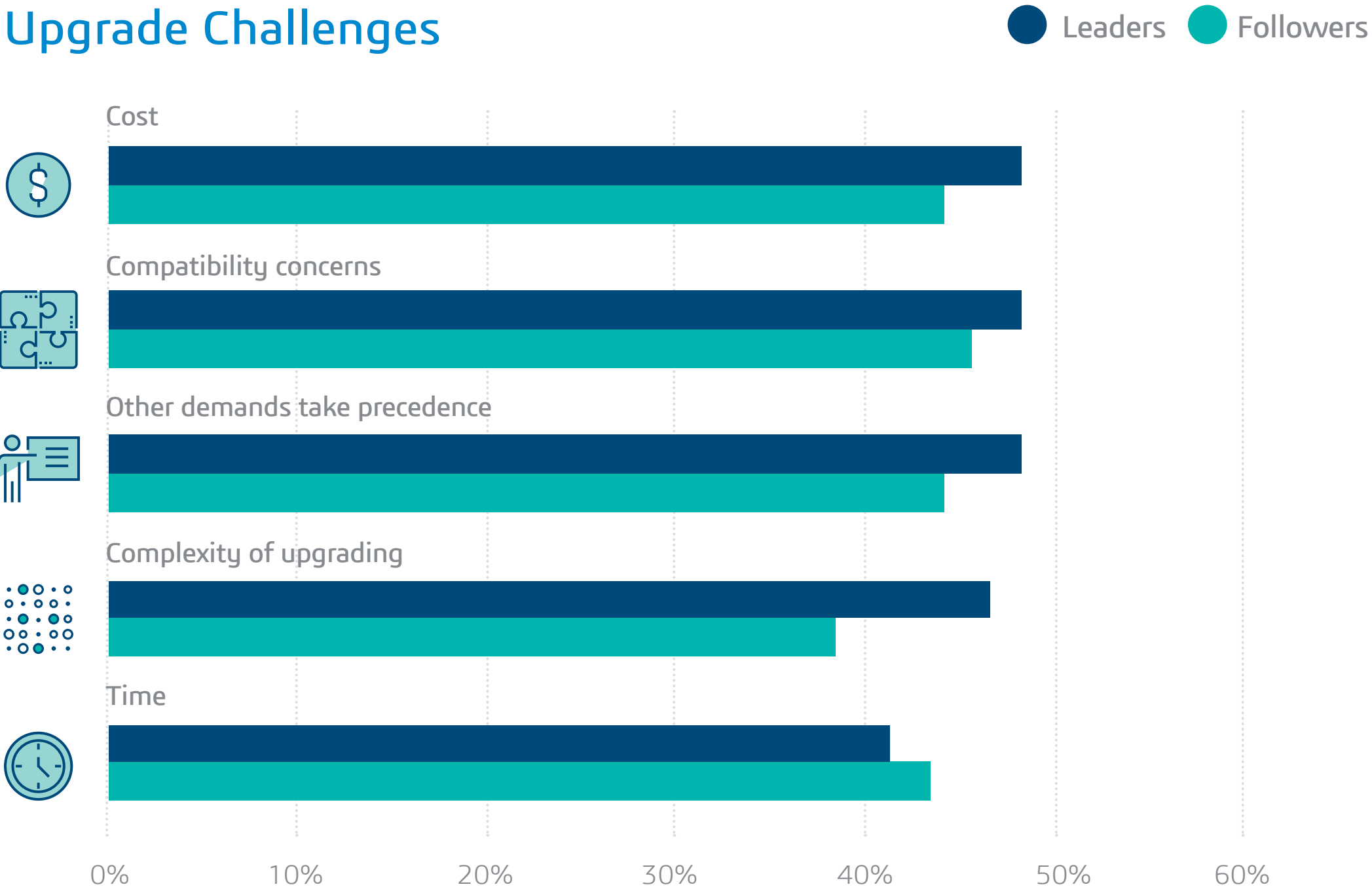
Having access to innovative features and modern digital design and engineering applications is key for productivity and motivation.

For 68% of Digital Leaders their digital design application estate is under a year old, with a further 16% having an application estate for under two years. As digital design and engineering apps are a critical part of the business, security, performance, and manageability of this estate are essential for business continuity and productivity for start-ups and SMBs. Most organizations, however, are having only “moderate success” with their own solutions and application estate, indicating huge room for improvement. Because they are so focused on profitability, Digital Leaders are very cost-conscious. They are also struggling with compatibility concerns and are prioritizing digital design and engineering applications with other priorities.

Success Metrics



Upgrade Challenges



HOW TO CHOOSE THE RIGHT DIGITAL DESIGN AND ENGINEERING APPLICATION

HOW IT IS PERCEIVED BY THE BUSINESS LEADERSHIP DETERMINES INVESTMENT LEVELS IN MODERN IT TECHNOLOGIES.



45%

of Digital Leaders see IT as an enabler for competitive advantage, compared with only 21% of Digital Followers.

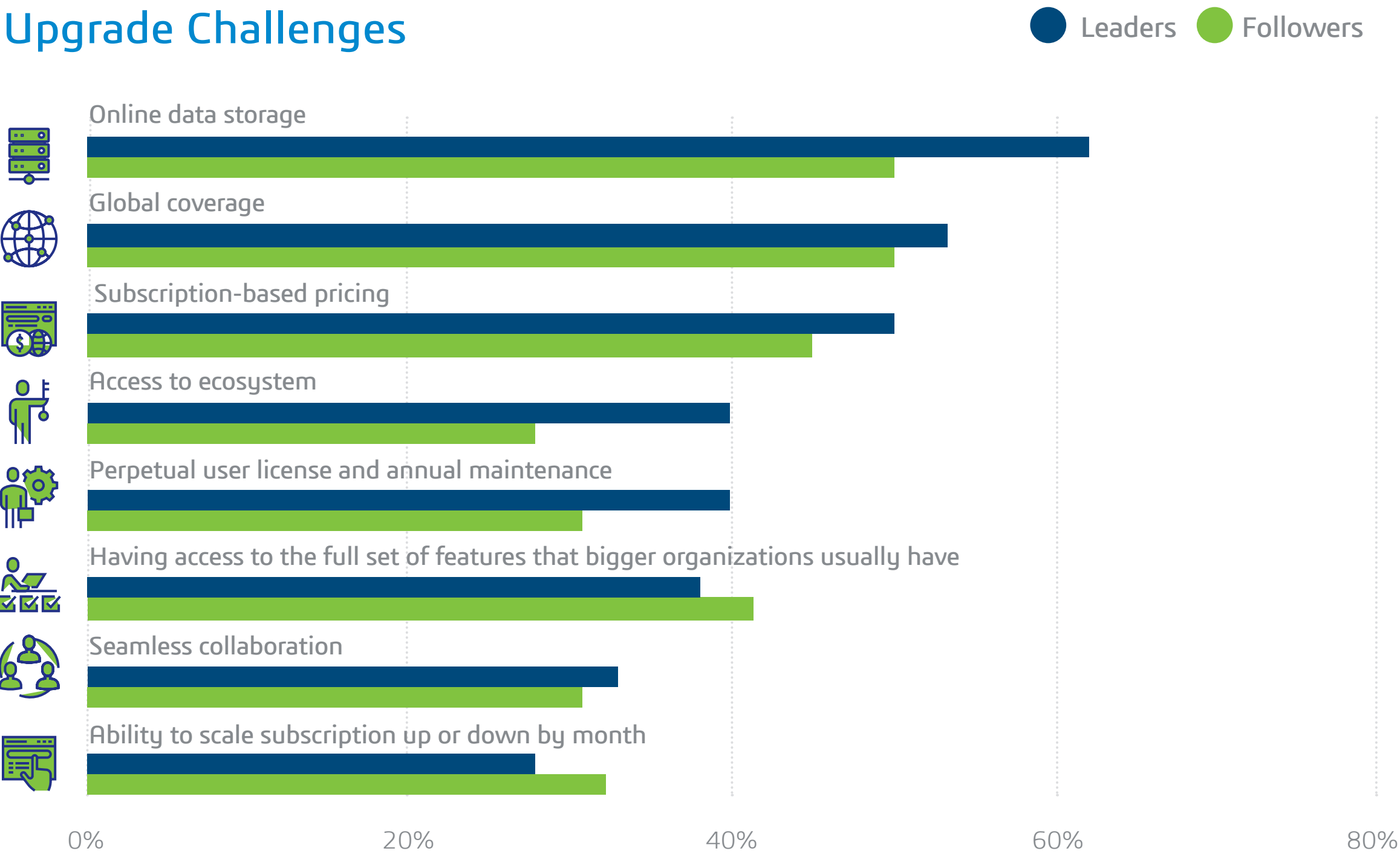


9%

Of Digital Leaders see IT as necessary cost, compared with 34% of Digital Followers.

Getting the IT setup right and choosing the optimal digital design and engineering applications is critical for success for start-ups and SMBs. Digital Leaders are focusing on online data storage to offload IT operations and share data easily, global coverage for customer reach, and subscription-based pricing to scale IT cost aligned with business demands.

Upgrade Challenges



AS SMBS AND START-UPS GROW, SO TOO DOES THEIR INVESTMENT IN IT. DIGITAL LEADERS GENERALLY INVEST MORE IN IT SOLUTIONS THAN DIGITAL FOLLOWERS, AND PLAN TO INCREASE THEIR IT SPENDING IN THE NEXT YEAR. TOP OF THE LIST ARE PCS, LAPTOPS, AND WORKSTATIONS, AS WELL AS SAAS SOLUTIONS.

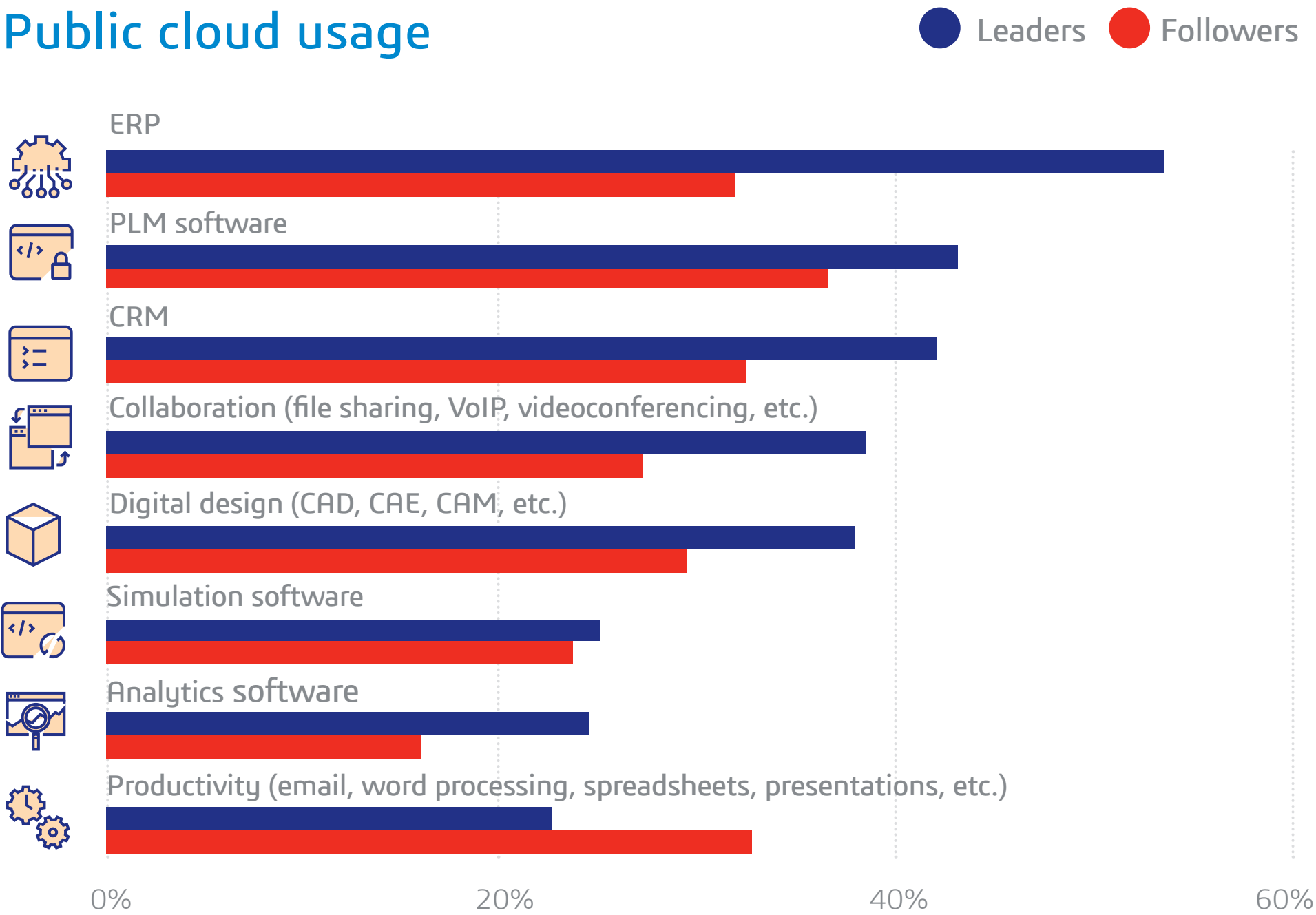
CLOUD IS THE FOUNDATION FOR NEXT-GENERATION IT FOR START-UPS AND SMBS

Cloud plays a key role as a delivery model for IT for SMBs and start-ups, with Digital Leaders adopting a cloud-also or cloud-first posture.

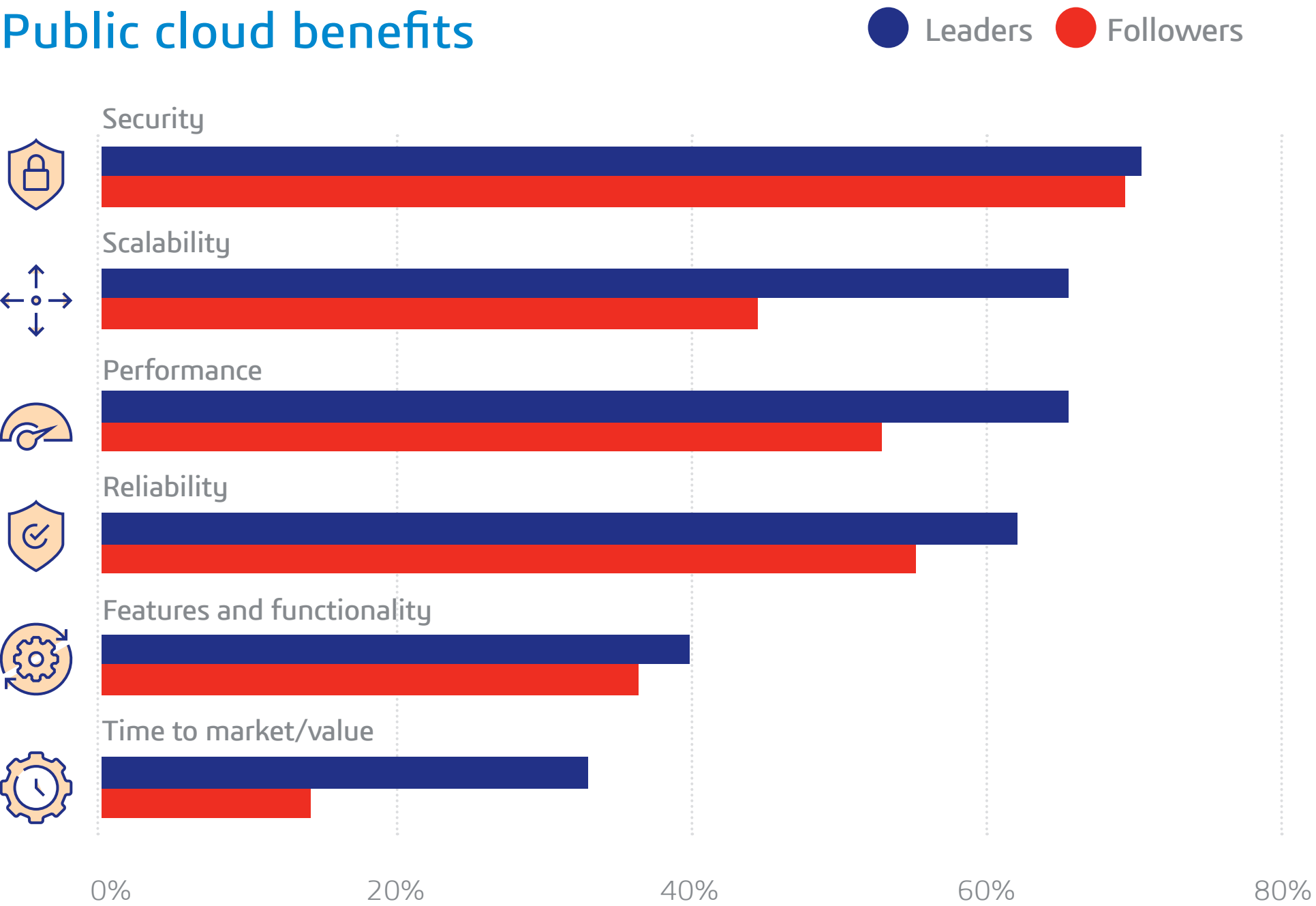
Digital Leaders run their ERP, PLM, and CRM software in the public cloud to modernize and transform their business, have access to the newest functionality faster, and provide IT agility and execution speed. Use of cloud services enables SMBs and start-ups to innovate and keep pace with change in the digital economy. IDC's Digital Fitness Index shows that expected revenue growth accelerates for those start-ups and SMBs that deploy cloud applications.

Digital Leaders turn to cloud solutions for increased security, instant global scalability, performance, and reliability, which are hard to achieve consistently with internal IT in a volatile high-growth business environment.

Public cloud usage



Public cloud benefits



The biggest challenges that need to be overcome to successfully adopt cloud solutions are:

1. Risk management
2. IT department time and attention
3. Regulatory compliance

IDC'S DIGITAL FITNESS INDEX — LEARN FROM DIGITAL LEADERS

For start-ups and SMBs to compete successfully in the global digital economy, they need to understand how they compare to their peers and what they need to improve to stay at the forefront of technological development. IDC's Digital Fitness Index provides this benchmark as well as guidance for the next steps on the digital journey. It shows what digital fitness looks like for start-ups and SMBS and what we can learn from Digital Leaders.

IDC's Digital Fitness Index is based on interviews with 400 decision makers from start-ups and SMBs from Germany, France, the U.K., and the U.S. They were interviewed on three topics: digital business, digital design, and digital delivery. Based on their responses, respondents are grouped into three categories: Digital Leaders, Digital Mainstream, and Digital Followers.

What can we learn from Digital Leaders?

1

Digital Leaders understand that they need to invest in applications to drive competitive differentiation and collaborate across their ecosystem.

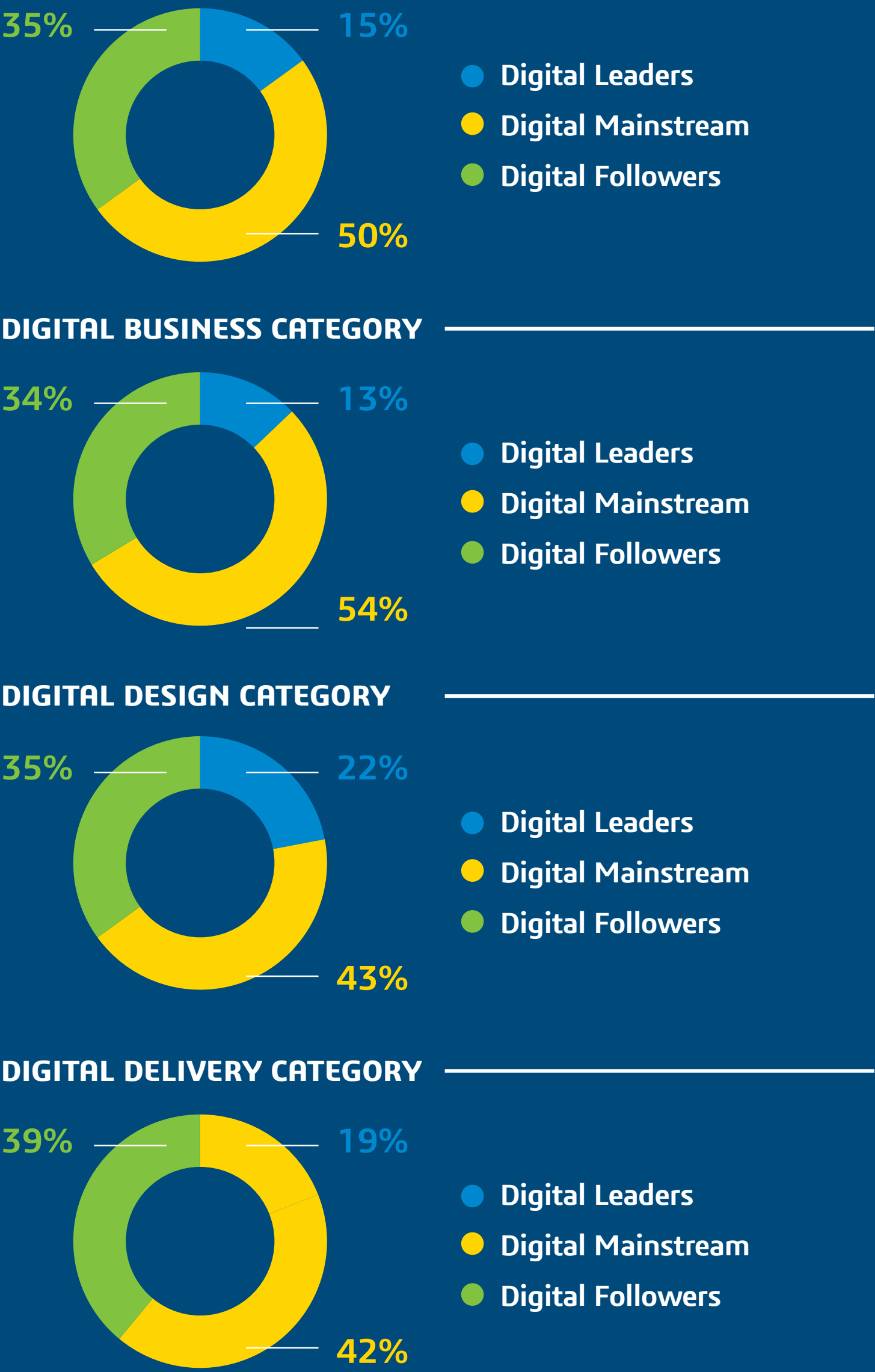
2

Digital Leaders have adopted a cloud-also or cloud-first approach to achieve higher levels of security, performance, scalability, and reliability.

3

Digital Leaders are better able to cope with variability in their business and staffing levels due to their agile IT and application setup.

If you'd like to take the test — and find out if you're better or worse prepared for digital transformation than your peers — follow this link <https://www.3ds.com/3dexperience/cloud/>



METHODOLOGY OVERVIEW AND DEMOGRAPHICS

Targeted audience: start-up and scale-up DD firms

Method: web survey

Sample: 400 interviews across Germany, France, U.K., and U.S.

Company size:

Q5. How many employees are there at your organization worldwide?

1	8.00%
2 to 9	9.25%
10 to 49	16.00%
50 to 99	16.50%
100 to 249	16.50%
250 to 499	16.75%
500 to 999	17.00%
1,000 or more	0.00%
Don't know	0.00%
TOTAL	400

Industry breakdown:

Banking/insurance/financial services	6.75%
Manufacturing	6.75%
Retail/wholesale	6.75%
Communication	6.75%
Media (TV, radio, press)	6.75%
Utilities	6.75%
Transportation	6.75%
Construction	6.75%
Personal services/leisure	6.75%
Professional services (real estate, accountancy, advertising, business consultancy, recruitment, etc.)	6.75%
IT/telecom service providers	6.75%
Education	6.75%
Healthcare	6.75%
TOTAL	400

Company age:

Less than one year	0.00%
1–2 years	15.50%
3–4 years	32.00%
5–9 years	34.25%
10 years or more	18.25%

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