



Through the
looking glass: Are
IT and ITeS SMEs
geared for the next
growth wave?

Key trends in the technology sector:

Technology big bets

- AI, Blockchain, Drones, Internet of Things (IoT), 3D Printing, Robotics, Virtual Reality, Augmented Reality

New stakeholders

- >68% of IT investments are outside the IT department
- New technology buyers– chief digital officers, chief experience officers, chief marketing officers – are forcing technology companies to rethink their sales operations and relationship networks

Industry 4.0

- IoT-enabled operations maintenance
- Driverless cars
- 3D printing
- Industrial product companies expect digitisation levels to increase from 32% to 70% in the next 5 years¹

1. <https://www.pwc.in/assets/pdfs/publications/2016/industry-4-0-building-the-digital-enterprise.pdf>

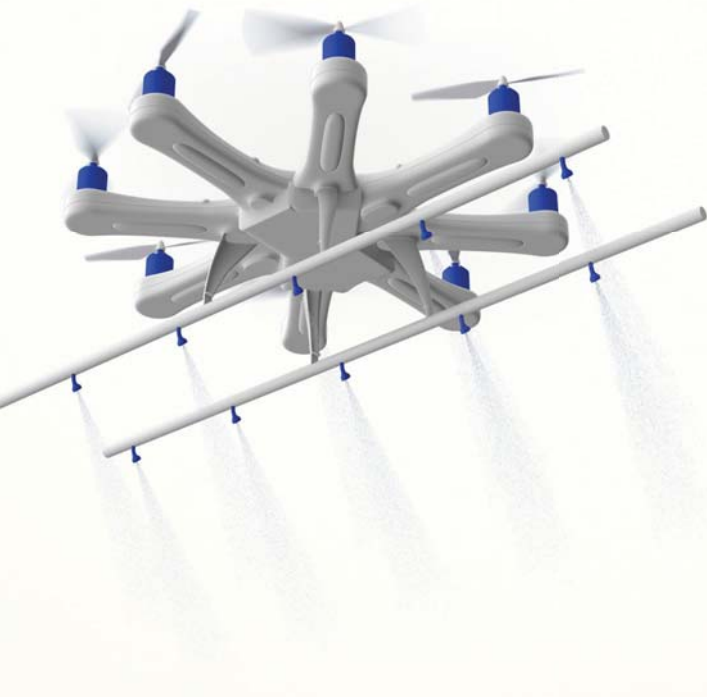


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Message from NASSCOM

India's IT-BPM industry is a USD 167 billion industry (FY 2018) and is made up of over 16,000 firms. The industry is representative of an entire spectrum of players ranging from multi-billion dollar businesses to start-ups. The small and medium players in this industry account for close to 20% of industry revenues – no small achievement.

The IT-BPM industry has seen disruptions in recent times with the emergence of digital technologies. Tech small and medium-sized enterprises (SMEs) are well placed to quickly adapt to these changes because of their small team size and agile mindset.

Many SMEs being set up are also digital natives and carry no baggage of legacy systems or products. With their niche products and service offerings that address specific white spaces, they have now attracted the attention of large players who are increasingly partnering with SMEs for innovation, agile processes and faster time-to-market. Thus, SMEs are playing a crucial role in enabling a competitive edge for larger players.

While digital technologies are throwing up many business opportunities for SMEs, they continue to face many challenges. Primary challenges include access to capital, talent availability and market conditions.

NASSCOM, jointly with PwC, conducted a survey of IT SMEs in India to understand their growth plans, challenges faced, maintenance of competitiveness, etc. This report is the outcome of the survey and it also includes recommendations to build a business-friendly ecosystem that offers a level playing field to tech SMEs in India.

I hope you find this report useful. Please share your feedback at research@nasscom.in.



Debjani Ghosh
President
NASSCOM

Message from PwC

Businesses today are being impacted by disruption in the economy, geopolitical sphere and, of course, the technology space. Emerging technologies, the 'new windows of opportunity', have accelerated this 'disruptive' pace. In fact, emerging technologies have become a core part of any company's corporate strategy, necessary to sustain revenue growth and enhance business performance.

Most companies, including SMEs, have laid a foundation for emerging technologies with investments in social, mobile, analytics and cloud (SMAC). New and emerging technologies such as Blockchain, Drones, the Internet of Things, 3D Printing, Robotics, Artificial Intelligence, Virtual Reality and Augmented Reality are being adopted more out of necessity rather than by choice.

Technological evolution and digital innovation have been instrumental in the success of SMEs in recent years. IT and information technology enabled services (ITeS) SMEs in particular are now readily adopting new and emerging technologies. However, even as SMEs embrace technology, disruption is rendering solutions obsolete long before their expected life cycle. Innovation and development of products and services long before the need for them is felt has become the new normal. Prediction of needs has begun to overshadow proactive or even reactionary development.

It is important, however, to view the changing market dynamics as an enabler that will allow technology companies to identify more opportunities for sustainable growth. And this is possible only if technology companies identify, accept and overcome their challenges and streamline their processes, structures and systems to take their businesses to the next level of growth.

PwC and NASSCOM conducted a survey and focus group discussions with technology companies and business leaders in October and November 2018. The objective was to examine the growth enablers for IT/ITeS SMEs and understand the current sectoral trends. This report discusses the findings, with a special focus on technological disruptions and the importance of innovation in creating a business-friendly ambience for IT/ITeS SMEs. It also addresses some of the key concerns – such as funding and lack of talent with relevant skill sets – that small and medium-sized technology companies face as they prepare their businesses for growth.

We hope you enjoy reading this report, and that our findings and analyses support you in your growth journey.



Ganesh Raju K
Partner and Leader
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Methodology



Our conversations and survey were structured around the principal business drivers shown below.

Business drivers

Growth and strategy	People and organisation	Technology and innovation	Risk and compliance
What are the challenges stalling your growth ?	Do you invest in leadership, people and culture ?	Are you investing in emerging technologies ?	How exposed are your systems and data to threats ?
Do you have sufficient access to funds ?	How SMART* are your goals ?	What differentiates you ?	Are you welcoming processes and standardisation ?
Are you strategising the right way ?		Are you following the next wave of digitisation ?	



The survey was conducted between 30 October 2018 and 30 November 2018.

The survey was supplemented by focus group discussions PwC and NASSCOM held with 90 leaders across five cities – Delhi, Mumbai, Kolkata, Bengaluru and Hyderabad – in November 2018.

* Specific, measurable, achievable, realistic and time-bound

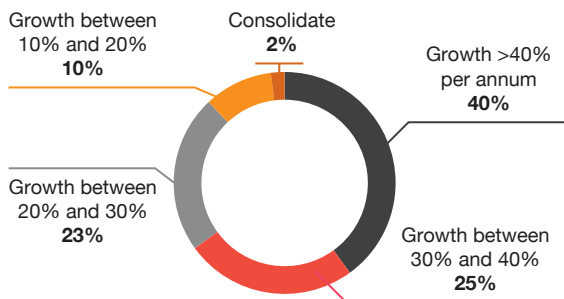


Growth preparedness: Are ITeS companies ready?

India continues to remain the fastest growing major emerging economy in the world according to the World Bank's Global Economic Prospects report, June 2018,² with an expected growth rate of 7.5% in FY19/20. Technology companies are optimistic about riding this growth wave and 40% of tech SMEs anticipate to grow at over 40% per annum in the coming 2 years, with another 25% expecting growth between 30% and 40%.

Growth trajectory

Which of the following best describes your growth aims for the coming two years?



Base: All respondents (108)

The aggressive growth ambitions, however, raise the following questions: What is the value proposition which will drive this growth? Is this growth through the organic route or through crucial tie ups which will facilitate access to new and/or different technology? Is the company introducing new products or exploring growth in new markets? Is the company embracing technological changes and riding the innovation wave to boost growth? And does the company have a suitable work force which will guide it towards accelerated growth? An equally pertinent aspect to consider is whether the companies are prepared to handle growth.

Let's look at our findings on each of the business drivers in detail.

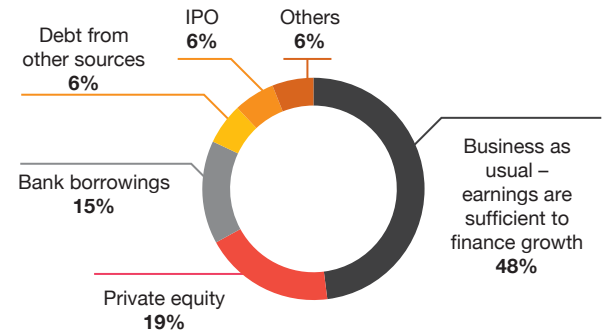


2. <http://www.worldbank.org/en/publication/global-economic-prospects>

Challenges to the growth agenda

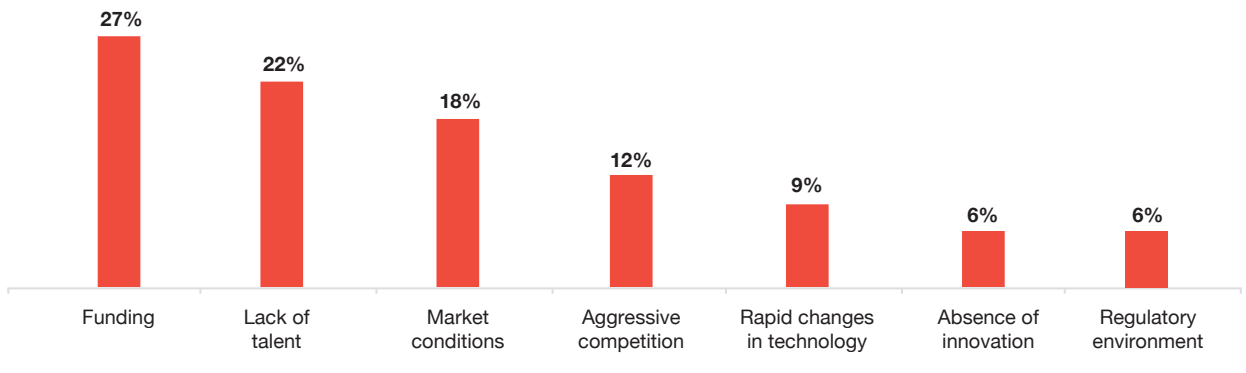
As the graph below shows, for 27% of businesses, funding growth is a challenge. The ability to procure funds, at reasonable rates and when needed, particularly during scale-up, is a concern for technology companies. Compliances are numerous, and a number of technology leaders told us they often felt they missed opportunities not due to lack of ability but on account of timely availability of funds. In terms of source of funding for growth (where available), nearly half indicated that business earnings would be sufficient to allow aggressive growth, while another 19% were open to private equity funding. However, several technology companies noted that the main challenge with PE funding was the investor preference for start-ups rather than for established SMEs.

How do you plan to finance future growth?



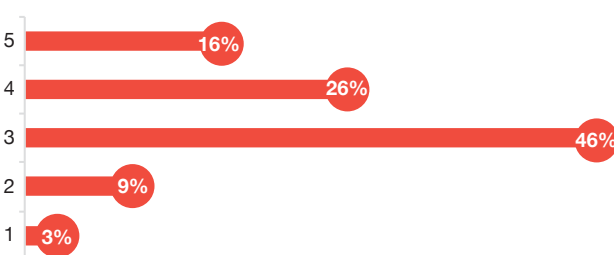
Base: All respondents (108)

What is the biggest challenge to your growth agenda?



Base: All respondents (108)

How likely are you to face a challenge in attracting and retaining talent?



5: Very likely, 1: Not likely
Base: All respondents (108)

In addition to funding, lack of talent, especially talent necessary to propel sales growth, is a concern for 22% of the businesses. Leaders of technology companies we spoke to mentioned that access to the right talent,

at the right time and at the right cost, was an issue for companies in the SME space. When specifically quizzed on talent 42% (16%+26%) of the companies surveyed mentioned that they faced issues in attracting and retaining talent.

The challenges related to talent vary: At times, it is the lack of a well-trained and qualified sales team; at times, it's the lack of fit between the aspirations of new employees and the organisation's culture; and sometimes it is the lack of employee or company access to the latest technology that results in attrition. A related challenge faced by technology SMEs is skilling and re-skilling resources which, coupled with difficulties in accessing trainers, hinders the growth momentum. Talent models need to be transformed as people are increasingly drawn towards non-traditional IT jobs. A majority of SME owners are wary of 'letting go' and of delegation, which prevents collaborative decision making. This in turn hinders the ability to build successful businesses and complicates succession planning.

Technology leaders also pointed out that external market forces, including price sensitivities and the regulatory environment, coupled with the absence of reform-driven policies for small and medium-sized technology companies, were hampering growth aspirations. For example, a few leaders mentioned that although the market appeared to be ready for software as a service (SaaS), it was difficult to sell in India. Similarly, a few leaders felt it was easier to procure clients outside the country as a number of Indian business houses did not have a chief information officer (CIO) or chief technology officer (CTO) as part of their organisation, and this hindered the sales process for technology SMEs. Moreover, compliance requirements are complex, and a lot of time and money is spent in understanding and meeting these requirements. Companies underlined the need for platforms which could keep the technology community abreast with the latest changes, within India and globally, and help them to assess their impact on business, certifications, processes, rules and so on.

Competition from large and established players is as much of a challenge as executing joint business relationships with them to secure clients. A number of leaders told us that they often found it difficult to showcase expertise in the stringent price-driven environment where large players were able to leverage scale and relationships to secure work.

Technological changes and innovation are also areas of concern, specifically in the fields of deep technology (namely Artificial Intelligence (AI)/Machine Learning (ML), Deep Learning, Augmented Reality (AR)/Virtual Reality (VR), Robotics). Technology SMEs felt that these two key aspects tended to get ignored as investments were often directed towards procuring new customers.

There is often a lack of awareness on the latest trends and products. On the one hand, certificates and patents get obsolete fast, and on the other, protection of patents and intellectual property (IP) is a concern. Below are a few questions technology SMEs should ask themselves in the context of technological changes and innovation:

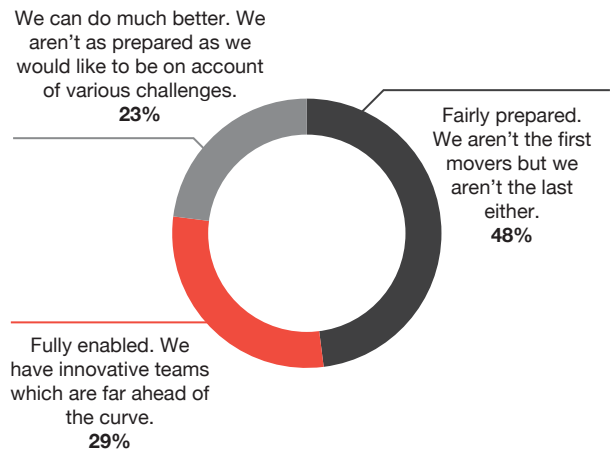
1. Are we investing in emerging technologies?
2. How are we following the next wave of digitisation?
3. Are we leveraging social, mobile, analytics, cloud (SMAC)?

4. How can disruptive technologies help us transform our business?
5. Who are the new players with new technologies who are challenging the incumbents?

While some (rightly) view technological changes as a disruption, technology companies are advised to secure the wherewithal to identify potential opportunities arising from these changes. Working with retail stores as they design 'stores of the future', designing products for hospitals that use robotics or developing programmes for auto companies as they automate large sections of the production cycle – all of these are examples which will ensure technology companies are prepared for the future based on not only what their customers want but also what their customers' customers are looking for.

As part of the survey, we asked companies whether their business was capable of handling technological disruption. Unfortunately, less than one-third felt they were fully equipped and 48% felt they were just fairly prepared. There is no way to avoid the rapid impact of Industry 4.0. It is up to each company to adapt itself, gear up for change and use it to its advantage.

To what extent is your business enabled to handle technology disruptions, especially in view of the changes faced by your key clients?



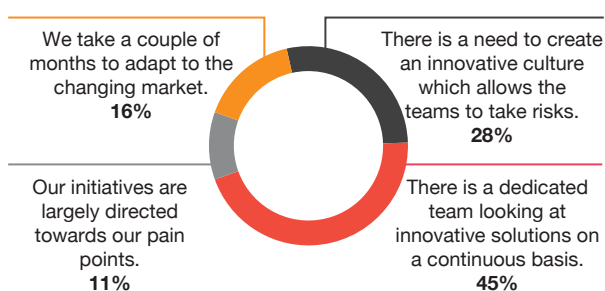
Base: All respondents (108)



Staying ahead of the curve

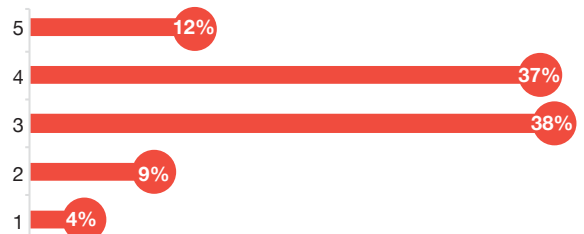
About 45% of the companies surveyed mentioned they had a dedicated team for innovation. However, it is worrying that 28% of the companies expressed the need for establishing a culture and an ecosystem which supported innovation and allowed teams to take risks. Co-creating and collaborating have helped technology leaders move ahead on the innovation curve. Hiring college graduates and interns enables them to bring in insights, and a simpler organisational structure can aid the process of innovation. In terms of the larger ecosystem, the entrepreneurial climate in India encourages innovation and allows for start-ups to be set up. However, in a few years, growth becomes a challenge, particularly when it comes to scaling up. It is important that tech SMEs remain focused on what distinguishes them from the competition and continuously assess the sustainability of a competitive advantage.

What are the company's views on innovation?



Base: All 108 respondents

How equipped is the business to handle a cyberattack?



5: Completely equipped, 1: Not equipped at all
Base: All respondents (108)

PwC's 21st CEO Survey³ highlighted that cyber threats and the speed of technological changes were key business challenges for organisations worldwide. Nearly half the companies surveyed mentioned that they were fairly equipped to deal with cyberattacks. In our experience, however, cyber threats are often not understood fully. They are assumed to be restricted to data leakage, and the impact on businesses, employees, customers and reputation is underplayed. For instance, how many companies today are General Data Protection Regulation/India Data Protection Regulation compliant? Have technology SMEs assessed the exposure of their systems and data to insider threats? As with other technological disruptions, companies are advised to ramp up their systems and processes to ensure that cyber threats do not impede their aggressive growth ambitions.

3. <https://www.pwc.com/gx/en/ceo-survey/2018/pwc-ceo-survey-report-2018.pdf>

Scaling up for growth

So, what is it that companies can do as they look to scale up?

How are they gearing up for growth?

PwC's report 'Turbocharging growth: Going from 100 to 1,000 crores!⁴' notes that the journey of a company from INR 0–100 crore is very different from its journey from INR 100–1,000 crore. In order to truly unlock its potential, a company will need to evolve its business model, which relates to its strategies around pricing, product/service, market, channel and promotion. At the same time, the operating model will need to undergo changes – that is, processes and structures will need to be established and infrastructure, systems and IT systems will need to be ramped up.

To assess where technology companies are in terms of their preparedness and abilities, we asked companies to rank themselves on different fronts.

4. <https://www.pwc.in/publications/2017/turbocharging-growth-going-from-100-to-1000-crores.html>

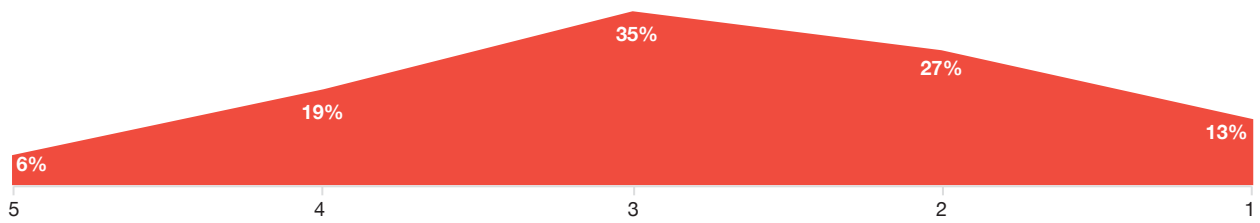
People vs process

We asked leaders of technology companies whether they felt their businesses were more people dependent or process dependent. For instance, a company is considered to be people dependent if most of its business collapses following the departure of its key employees. However, in a situation where business carries on uninterrupted, it may be said to be more process driven. Technology SMEs are clearly divided when it comes to people and processes. While 13% felt they were completely process driven, another 27% believed that they were process driven to a large extent. However, for 25% of businesses, people dependency was high, signifying that there was a need to establish policies, structures and processes to ensure seamless

business operations where technology and practices guided business operations. As with any organisation, the dependence on people is higher at the time of conceptualising the business idea, setting up the company and getting teams on-board who believe in the entrepreneurs' vision. However, as companies scale up, it is advisable to have systems in place which reduce people dependency and to work towards a combination of both, eventually focusing more on systems and processes.

We recommend that SMEs be open to processes and standardisation as they scale up. For example, to start with, they should look at putting in place an ownership and responsibility matrix, if one does not exist.

Is your company people dependent or process dependent?



Base: All respondents (108)
5: More people dependent, 1: More process dependent

Processes and standardisation to propel growth

How would you rank your business in terms of openness towards setting up and enforcing processes and standardisation?



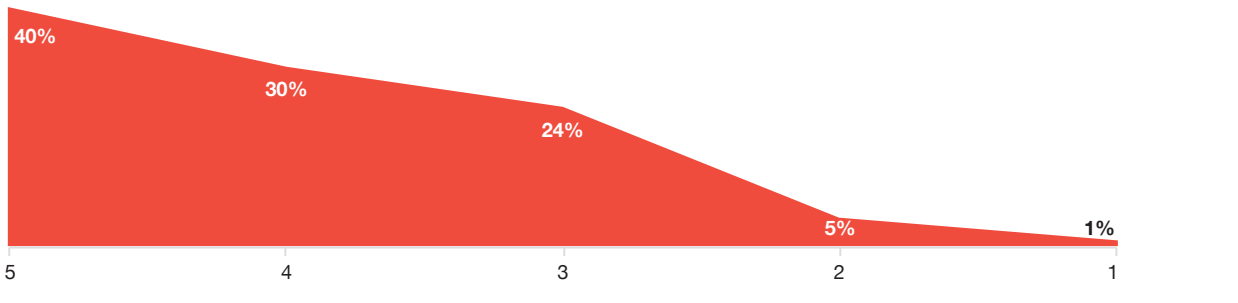
Base: 82 respondents
5: Highest, 1: Lowest

In line with what we discussed under people vs process, nearly half the technology SMEs mentioned that they welcomed, established and enforced processes and standardisation. Which means that the rest do not. SMEs should ask themselves: Can the business achieve the

next level of growth on the basis of what it has done so far? Or, is there a need to streamline operations and systems to achieve economies of scale, build in efficiencies and improve margins along with revenue?

Exploring new frontiers

Where would you rank your business in terms of exploring new strategies – markets, clients, geographies and products?



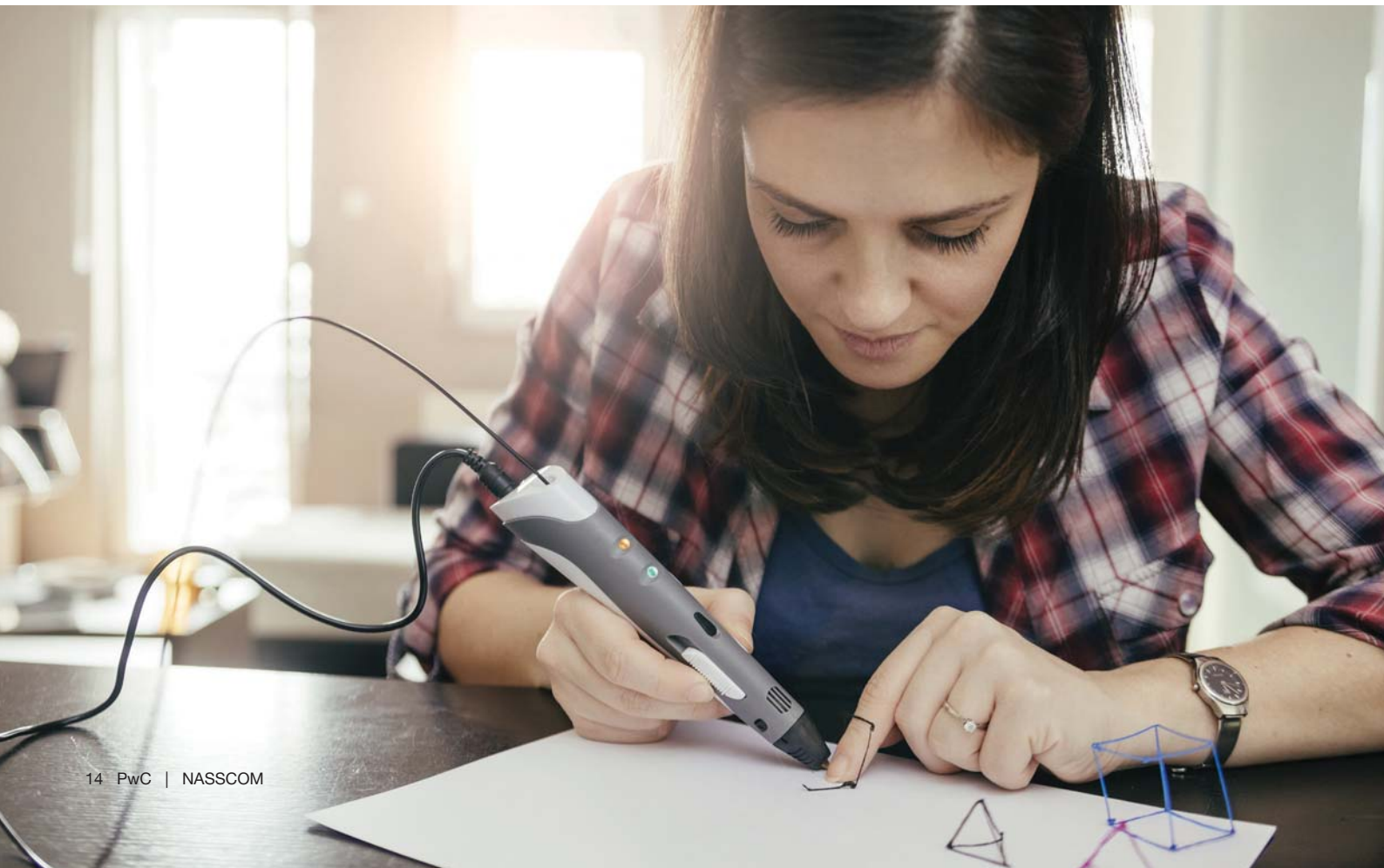
Base: 82 respondents
5: Highest, 1: Lowest

Seventy per cent of technology SMEs ranked their businesses high when it came to exploring new strategies for markets, clients, geographies and products. This is not surprising given

- the need for technology companies to explore overseas clients who are ahead on the technology adoption curve
- the absence of CIOs and CTOs in a number of Indian businesses and

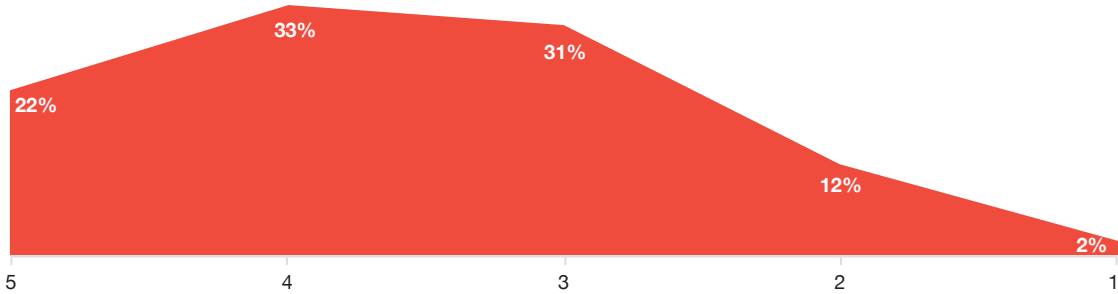
- stiff competition from larger established companies.

The question that SME business owners should ask themselves as they look at growing over 40% is, are they geared to leverage the latest technologies available, both within and outside India, in order to develop new solutions that sustain growth in diverse markets? And what constraints do they expect on their operations given the rising protectionist sentiments across different countries, in particular the US and the UK (viz. Brexit)?



Investing in soft infrastructure

Where would you rank your business in terms of investing in soft infrastructure – leadership, people and culture?



Base: 82 respondents
5: Highest, 1: Lowest

As the workforce expands, it is critical that companies invest in what is known as 'soft infrastructure'. It would be in the interest of SMEs to consider whether they have designed and/or established

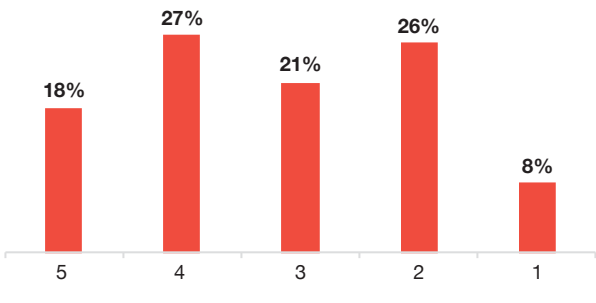
- leadership development programmes
- employee welfare schemes
- people skilling initiatives
- recreational activities and retreats
- committees to handle diversity, ethics or harassment issues
- specific, measurable, achievable, realistic and time-bound (SMART) employee goals. (Refer to the graph below to see what technology SMEs say on this front.)

Where would you rank your business in terms of developing SMART employee goals?



Base: 82 respondents
5: Highest, 1: Lowest

Where would you rank your business in terms of protecting your IP?



Base: 82 respondents
5: Highest, 1: Lowest

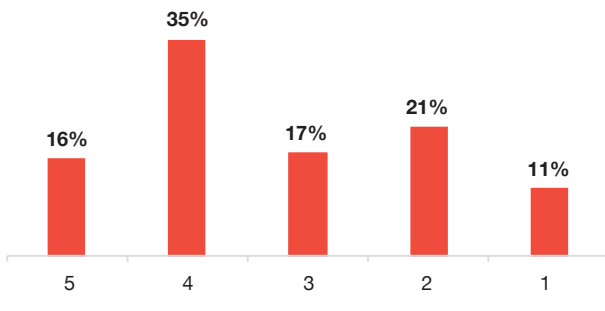
Protecting your IP

While the entrepreneurial spirit in the country is high and companies are quick to cash in on new technologies as they develop, a worrying trend among Indian technology SMEs is that they don't do enough to protect their IPs. The business case for protecting the biggest asset of the company cannot be emphasised enough, and we therefore recommend that technology SMEs undertake measures to patent and register their products and prevent knowledge theft.

Towards better governance

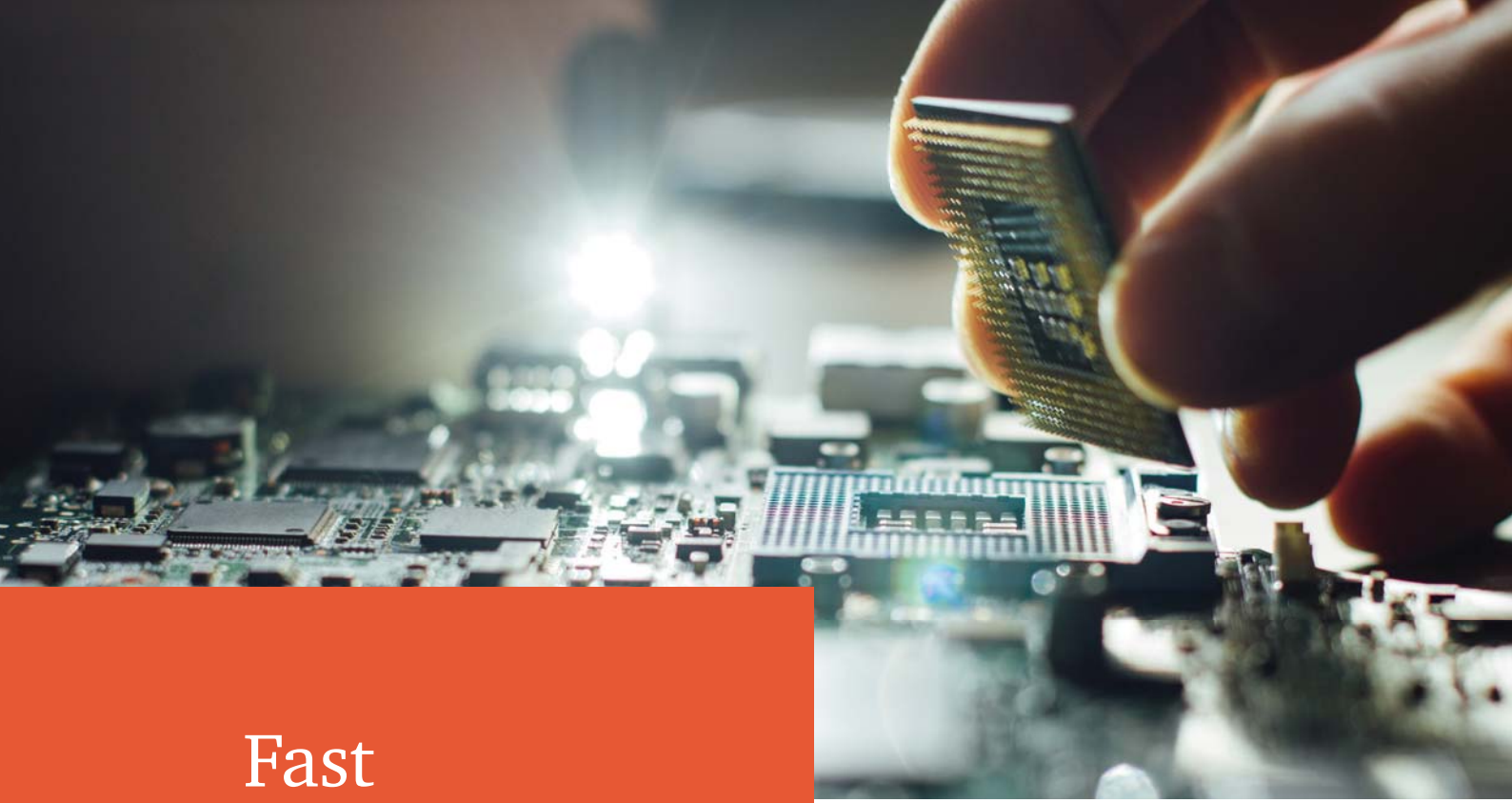
More and more companies are voluntarily adopting governance measures that underlie their operations and also impact their reputation, both internally with employees and externally with customers and other stakeholders. In some cases, regulatory changes are also mandating the adoption of stringent corporate governance measures. One-third of the companies we surveyed felt that there was scope for improvement on this front. Our suggestion to technology SMEs is that they build their businesses on strong governance structures that allow them to grow fast while complying with best business practices.

Where would you rank your business in terms of corporate governance structure?



Base: 82 respondents
5: Highest, 1: Lowest





Fast forward

Emerging technologies can be used to generate better business results. Our report clearly indicates that SMEs are interested, aware and excited about the current technological disruptions. There is evidently a strong correlation between greater technology use, performance and growth. This correlation between emerging technologies and business success was visible across various sectors among SMEs.

An interesting trend which emerged from our survey is that when we asked businesses to rank themselves, those businesses that ranked themselves high on, say, welcoming processes and standardisation also tended to rank themselves high on investing in people and culture and developing employee goals. The converse is also true, perhaps reflecting that best practices transcended different aspects of the business.

Technology SMEs are aware of their growth prospects as well as challenges that can hinder their potential. Overcoming challenges by organising necessary resources, strategising for disruption, creating a system that supports innovation, building a strong workforce and

culture, and streamlining structures and processes will enable technology SMEs to ride the next growth wave.

In a nutshell, here are our key recommendations:

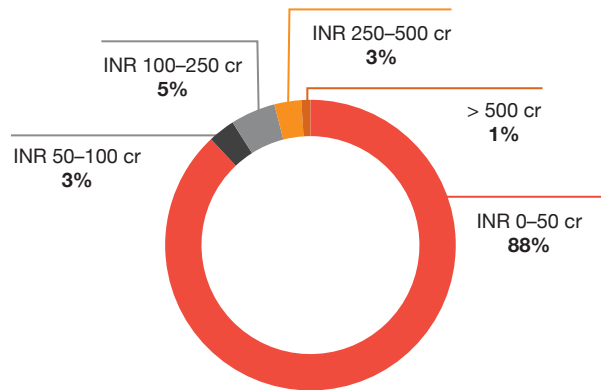
- The majority of IT/ITeS SMEs are aware of technological disruptions, but budget is a constraint. A clear demonstration of a potential use case has to be in place to ensure a good return on investment (RoI) on emerging technologies. This will help organisations predict customer needs, deliver on their demands and generate revenue.
- With Central Government programmes such as Make in India, Skill India and Startup India in place, the integration of emerging technologies, specifically with SMEs in the technology space, must be prioritised. The government could play an important role in structuring grants to support technology advancements.
- An amalgamation of SMAC technologies should be adopted by IT/ITeS SMEs to bring in operational efficiencies and transform customer experience, thus increasing revenue in the process.



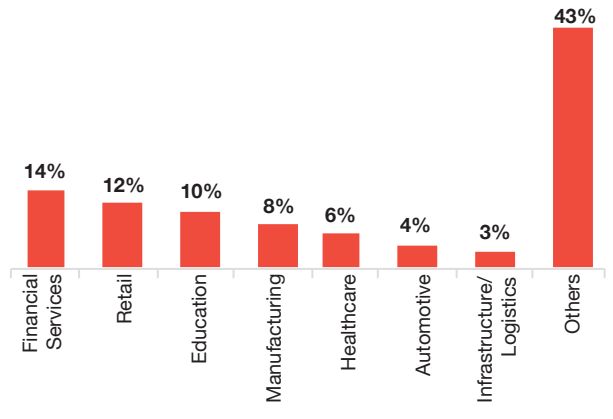
Appendix

Company profiles

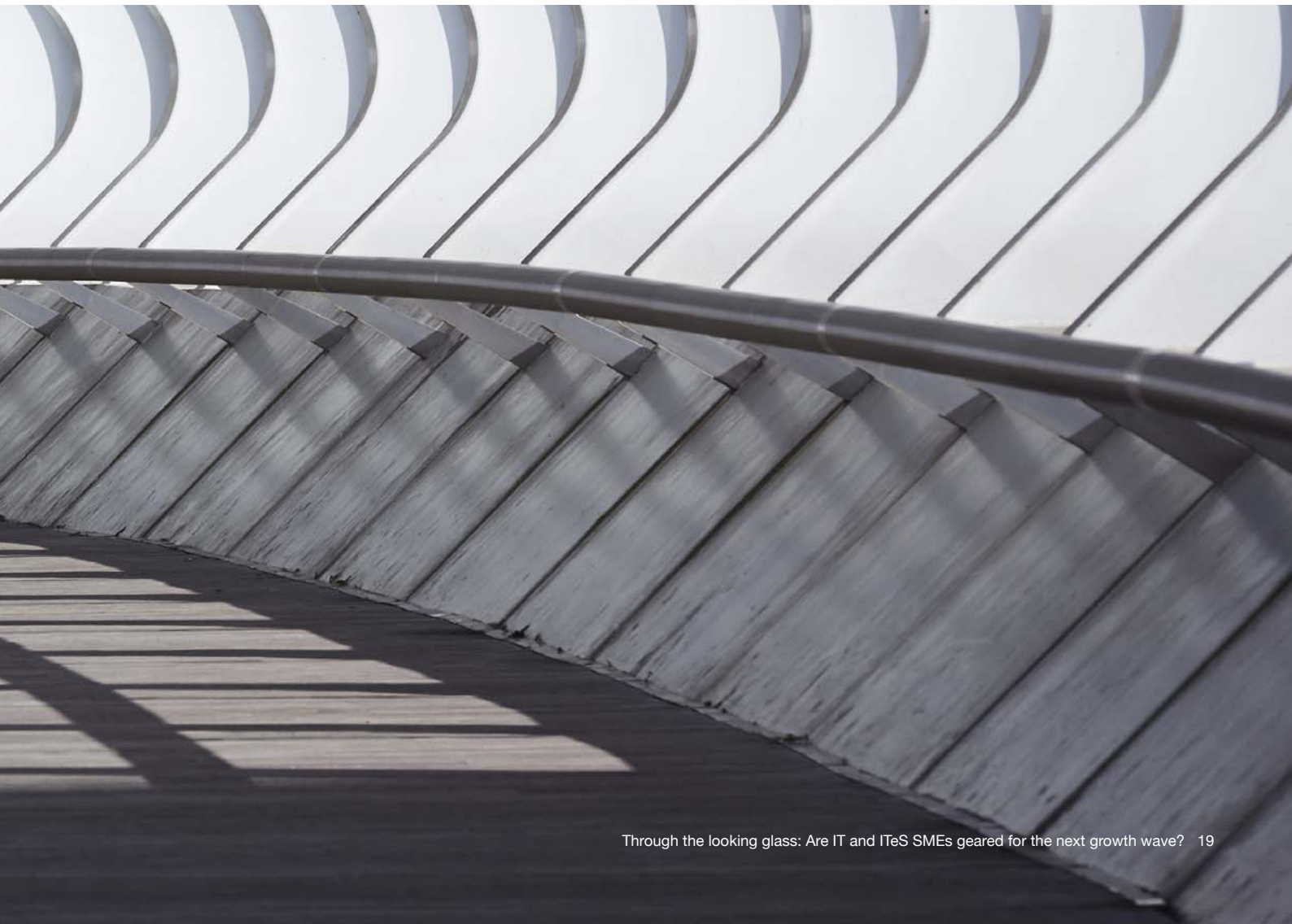
Turnover (%)*



Sector (%)*



Base: All 108 respondents



Acknowledgements

We would like to thank the 108 technology company leaders who took part in the survey.

In addition, we are grateful to the 90 technology business leaders we interacted with in the focus group discussions held in Delhi, Mumbai, Kolkata, Bengaluru and Hyderabad.

Your insights have been extremely valuable.

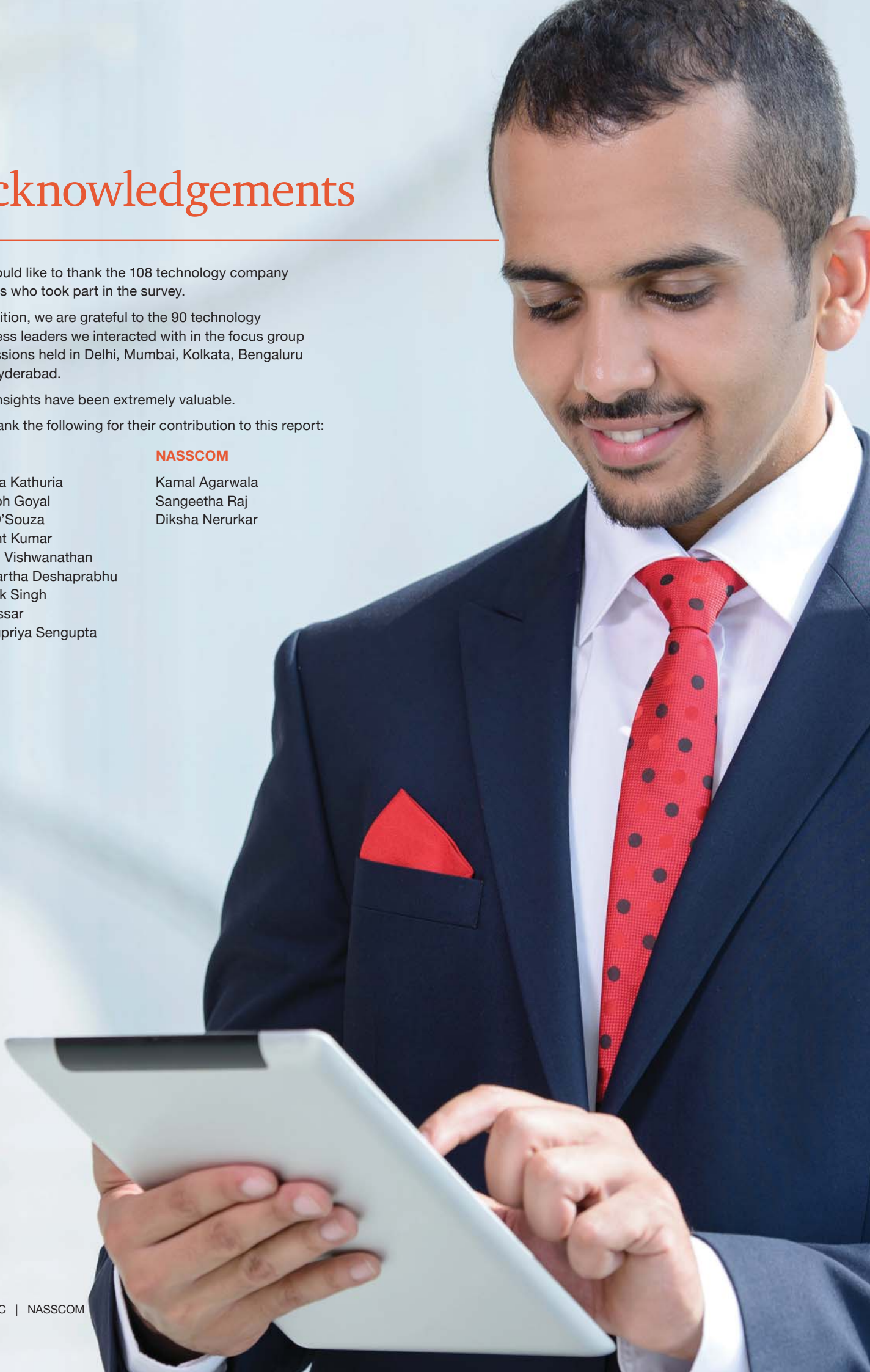
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About NASSCOM

NASSCOM is the industry association for the IT-BPM sector in India. A not-for-profit organisation funded by the industry, its objective is to build a growth led and sustainable technology and business services sector in the country. NASSCOM Research is the in-house research and analytics arm of NASSCOM generating insights and driving thought leadership for today's business leaders and entrepreneurs to strengthen India's position as a hub for digital technologies and innovation. NASSCOM Research, the most credible source of technology insights in India publishes an annual edition of its Strategic Review which analyses the key trends in IT-BPM industry and disseminates the latest status of the industry performance.

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PwC's Entrepreneurial and Private Business practice

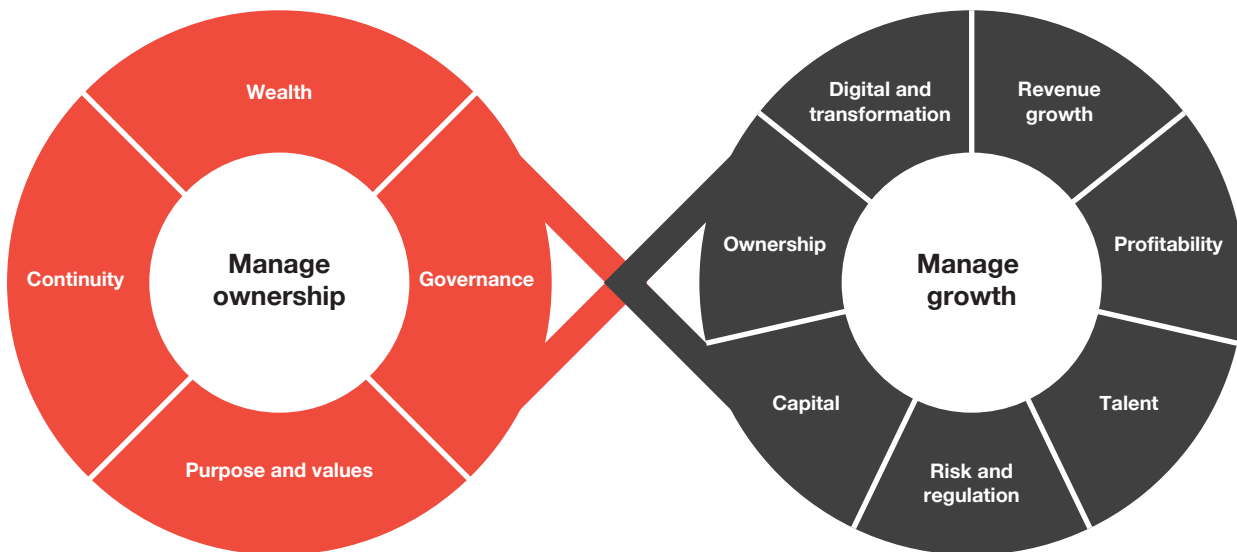
Our services

Our practice helps business owners and individuals achieve their personal and business ambitions. We provide a wide range of tax and advisory services.

Our solutions

Our mission is to help businesses and family wealth grow by bringing the necessary talent and skills to entrepreneurs, private companies and listed enterprises. We work on the Owner's Agenda and provide appropriate practical and commercial assistance for the two aspects of the company – ownership and growth. We build trusted advisor relationships and deliver solutions and ideas tailored to the needs of our clients.

The Owner's Agenda: Our integrated approach of working with entrepreneurs and their businesses



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