

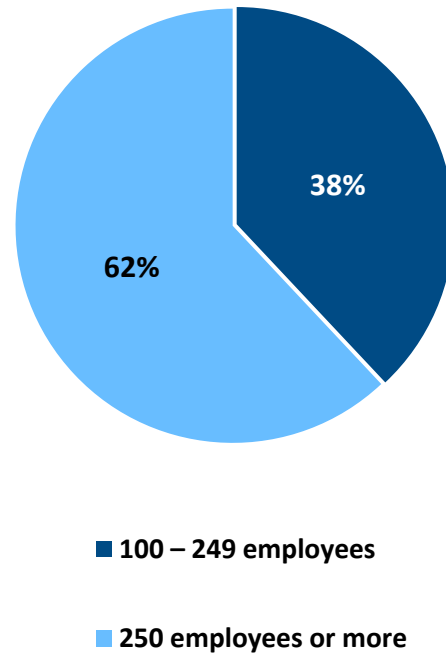


**Future of Work Skills**  
**Research Findings**  
**- ISRAEL -**  
*November 2019*

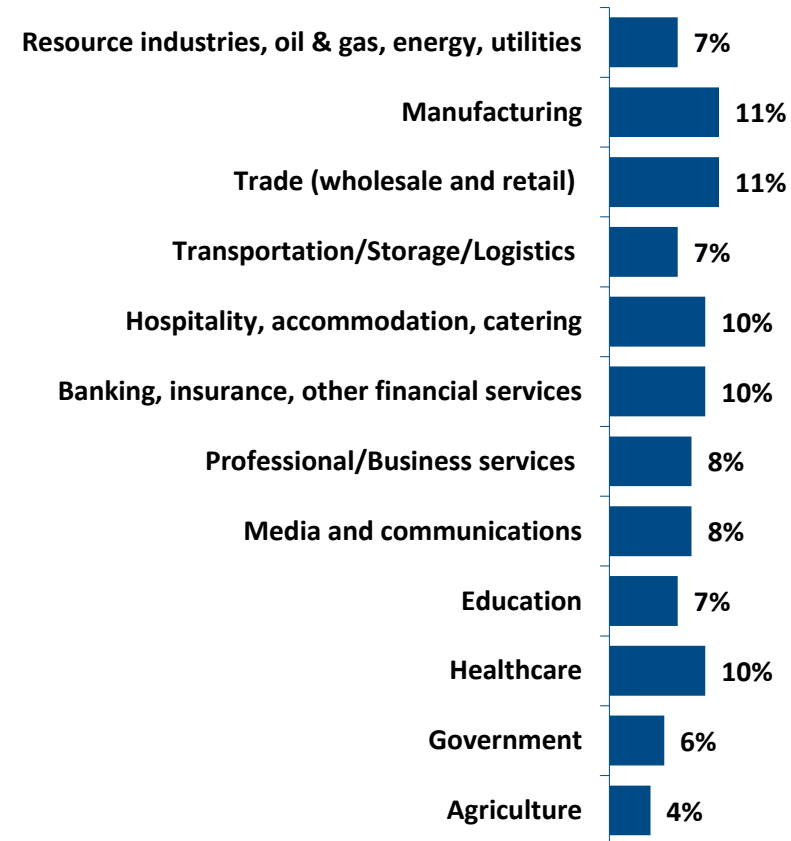


- Demand for digital skills will grow in Israel. This will be across departments and areas. Most of the IT Services providers and channel partners have improved their DX portfolio in order to being able to support ongoing DX journey.
- There is growing difficulty in recruitment of digital skills, especially around the new technologies such as AI, blockchain, RPA, and AR/VR cannot have people with much experience.
- Cloud, Analytics, Mobility and Security are the current skills shortage areas in Israel.
- Organizations find hiring experienced workforce from other organization within the same industry as an extremely effective approach. Balancing technology expertise and industry experience is behind the shortage of skills.
- Improved digital skills are equated with better business performance and ultimately attaining greater customer experience.
- There is a strong focus on re-tooling efforts of existing staff. Industry & professional bodies are major driver of digital skills development. The technology sector in Israel fuels much of the activity in this regard.

### Organization Size



### Verticals



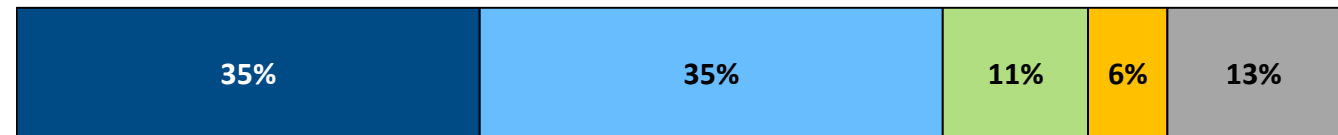
Base (Israel): 71

# State of Digital Transformation



- With some 87% of the organizations already embarking on the digital transformation (DX) journey, it is definitely on the table of most customer facing verticals in Israel, both private and public.
- Many of the IT Services providers and other channel partners have improved their DX portfolio increasingly able to assist both users and vendors in their DX journey. This fuels demand as users increasingly understand the impact of DX on their industries.
- DX strategy is an ongoing effort with trial and error evolution cycles. Islands of businesses that remain obstinately non-digital will center on small sized businesses in trade and manufacturing verticals.

- **Company-wide DX strategy in place; good progress in implementing it**
- **Company-wide DX strategy in place, but at an early stage of implementing it**
- **Do not have a company-wide DX strategy, but have several DX initiatives at the department level (functions)**
- **DX not a high priority for us, but have had some limited DX initiatives**
- **Digitization is not relevant for us, and have not conducted any DX initiatives**

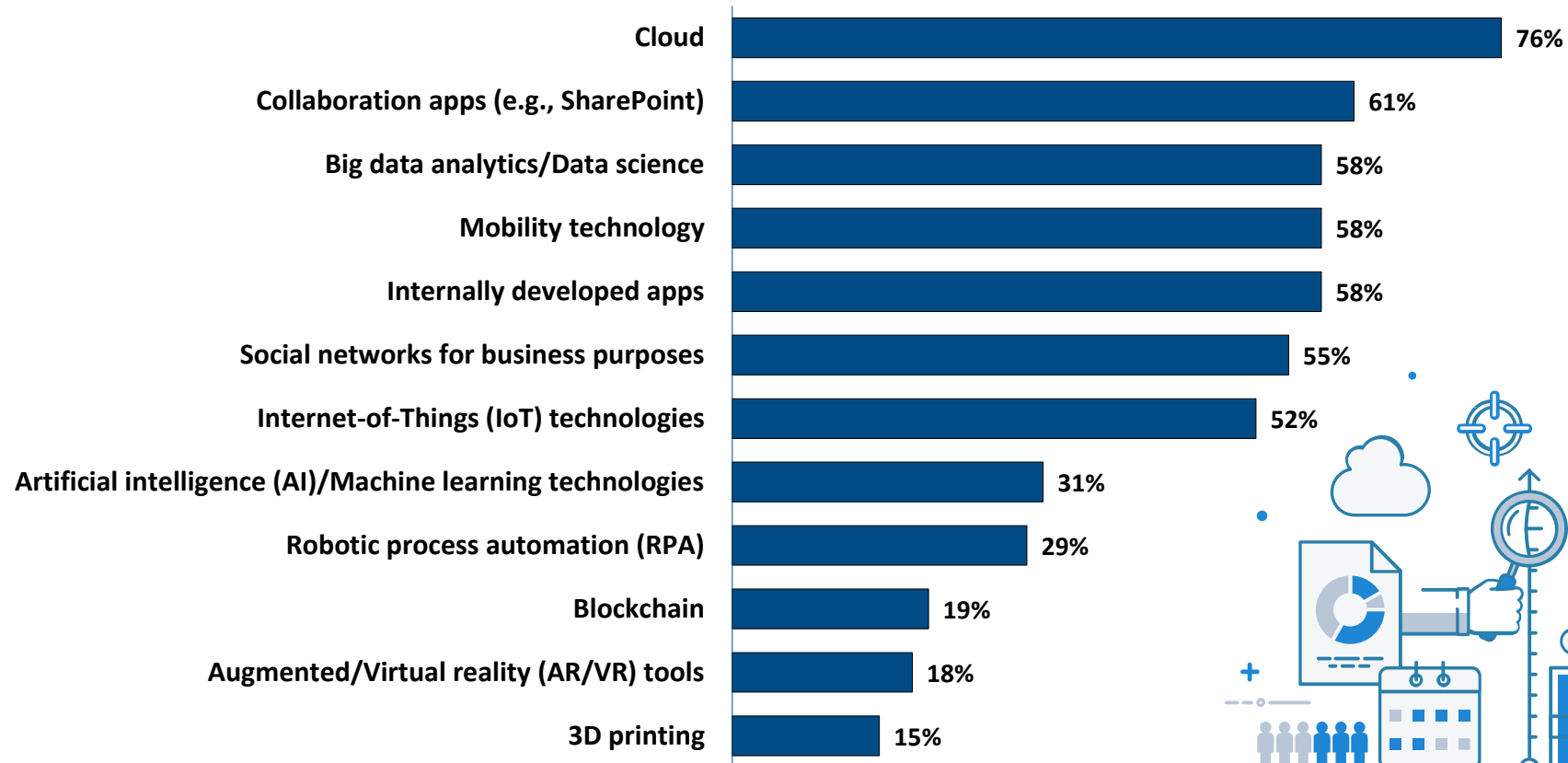


Base (Israel): 71

# Technologies/Solutions Deployed



- Cloud (76%) is the most mature, dynamic and accessible DX field. Public cloud initiatives are not always part of a comprehensive DX strategy, but many organizations are gaining experience in a growing number of workloads on cloud.
- Collaboration (61%), Analytics and Mobility (58% in both) have been major initiatives (especially at enterprise level). Cloud platform has made these initiatives relevant for smaller organizations
- Demand for the more advanced DX technologies depends on easily identifiable business use cases and service partner knowhow. Current reality in Israel is that both these areas need to evolve to fuel demand.

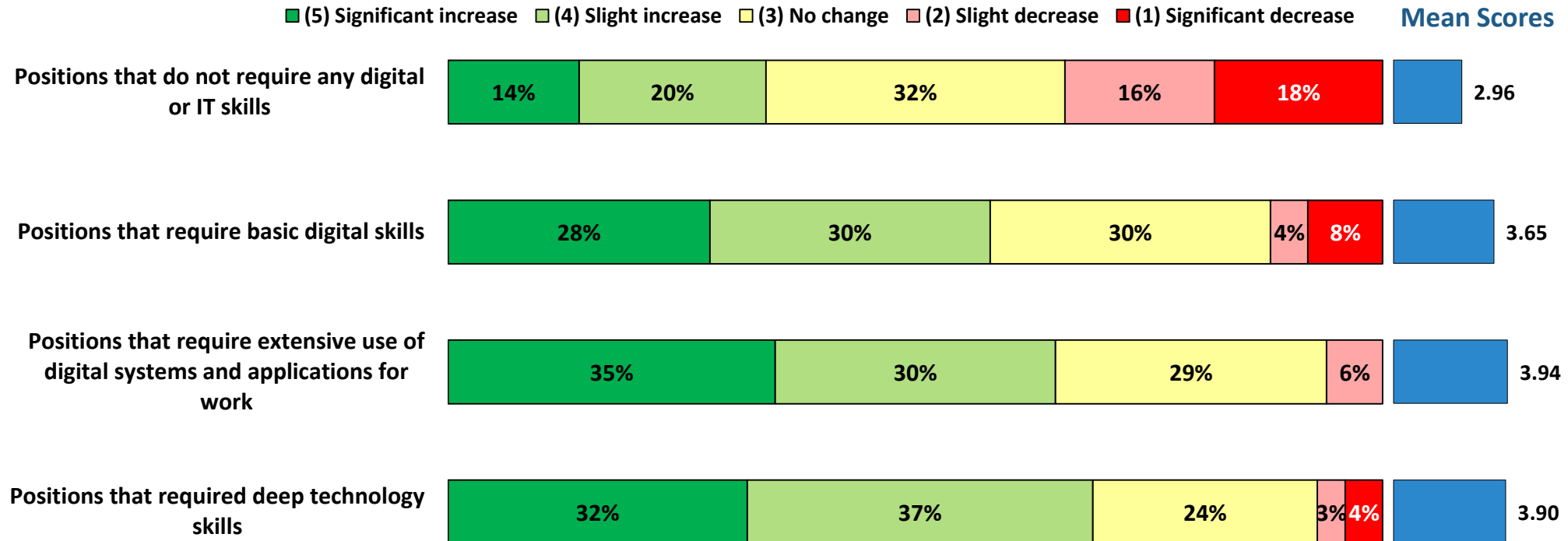


Base (Organizations that have DX initiatives in place): 62

# Demand for Positions in Near Future



- Respondents from all verticals indicated that digital skills are key to most KPIs and consequently, demand for these skills will grow as opposed to non-digital positions which will decrease (possibly as a result of automation or business shift)
- Trying to balance industry specific skills and digital skills will remain a challenge with respondents reporting that demand for positions requiring extensive or deep technology skills will grow the most.
- Growth of demand for digitally skilled employees reflects a clear understanding of the overall DX shift in Israel. Translating this perception into management decisions requires that senior executives recognize the business impact of these skills



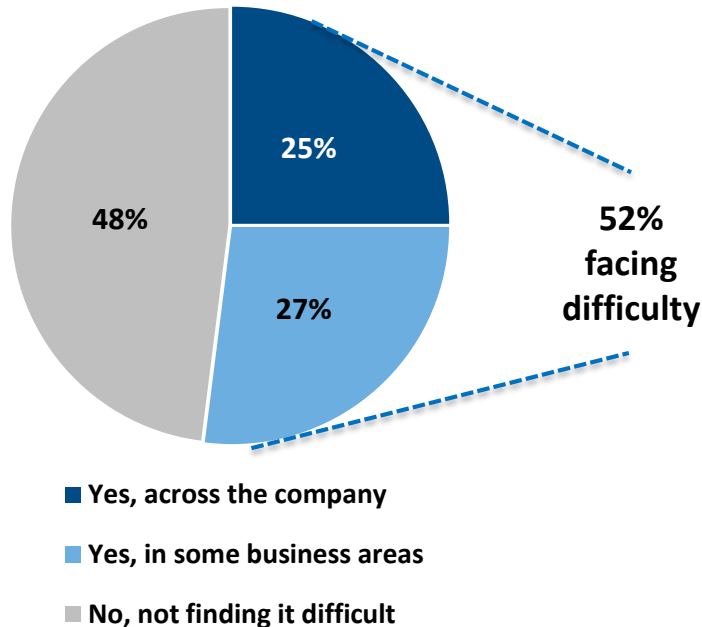
Base (Israel): 71

# Difficulties and Growing Departmental Challenges

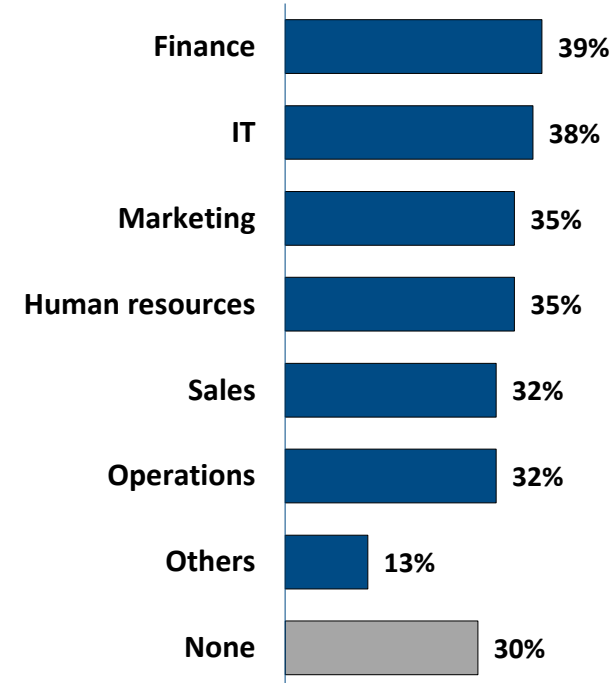


- Over half of the participants indicated some difficulty in recruitment of staff with digital skills. Challenges emerge not only from supply shortages, but also from existing staff management and transformation (what to do with staff not skilled for the DX challenge).
- In those organizations already in the DX journey, it quickly becomes clear that demand for digital skills comes from all departments, where especially finance (39%), IT (38%), and marketing (35%) emerges as the top three line of businesses (LoBs) which indicated their challenges due to the lack of digital expertise.
- CEOs and other corporate leaders are the engine fueling DX. Some of the difficulties in getting the right skills reflect the scale of management DX commitment

**Whether Facing Difficulty in Recruiting Staff with Digital Skills**



**Challenges Faced in Departments Due to Lack of Digital Skills**



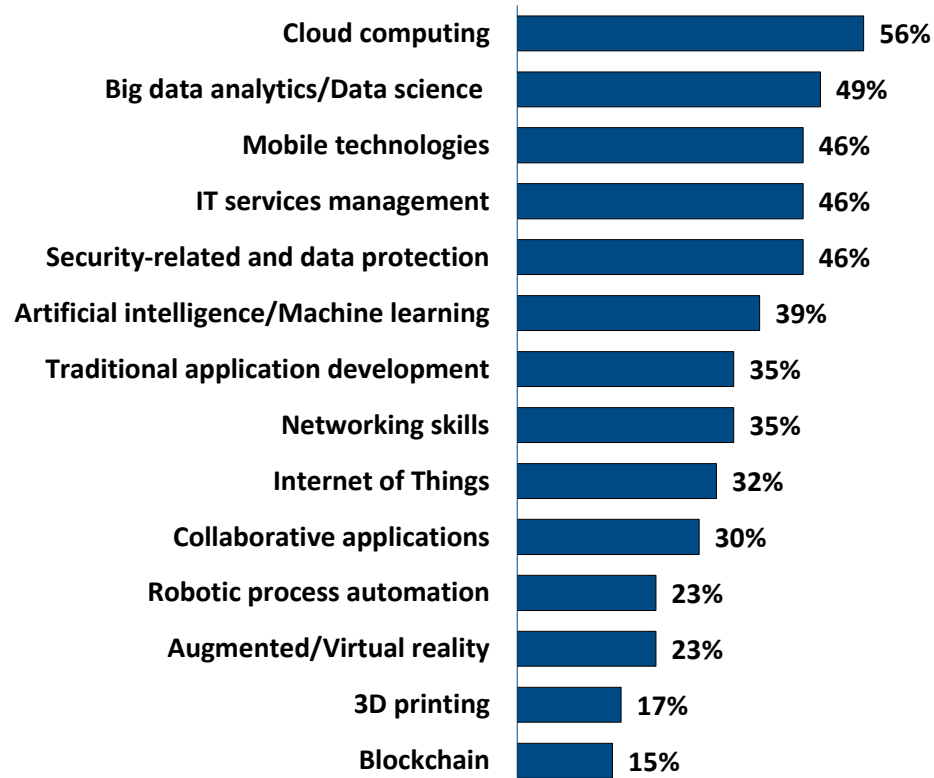
Base (Israel): 71

# Currently Lacking and Future Skills Needed

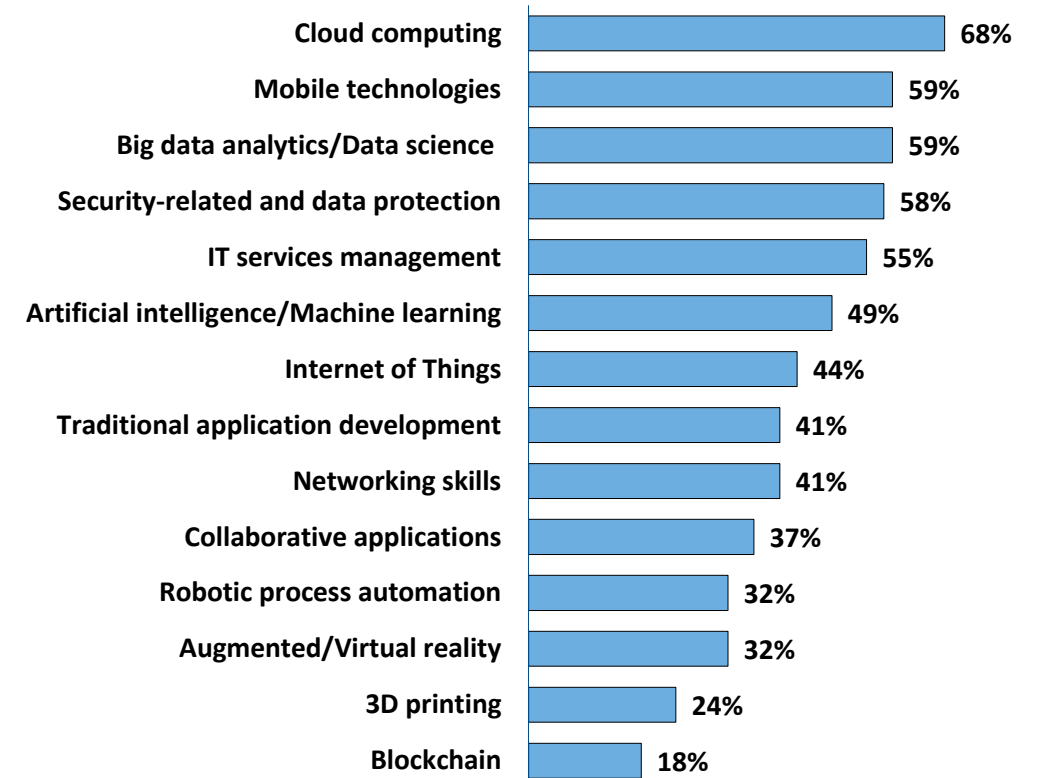


- Highly technical areas remain the bulk of the challenge. Participants in Israel reported that Cloud (56%), Analytics (49%), Mobility (46%) and Security (46%) are the current skills shortage areas, namely because those areas are driving much of the DX effort.
- Participants report that mature fields such as application development, networking and collaborative apps reflect a relative balance between demand and supply of skilled staff.
- New fields such as robotics, AI, Blockchain, AR/VR and 3D printing are currently either not relevant, or that respondents do not yet see clear business value resulting from them. Consequently, there are less recruitment issues with them. Key skills that are currently lacking, will continue to be in demand in future.

## Currently Needed Lacking Skills



## Skills Likely to be Needed in Near Future



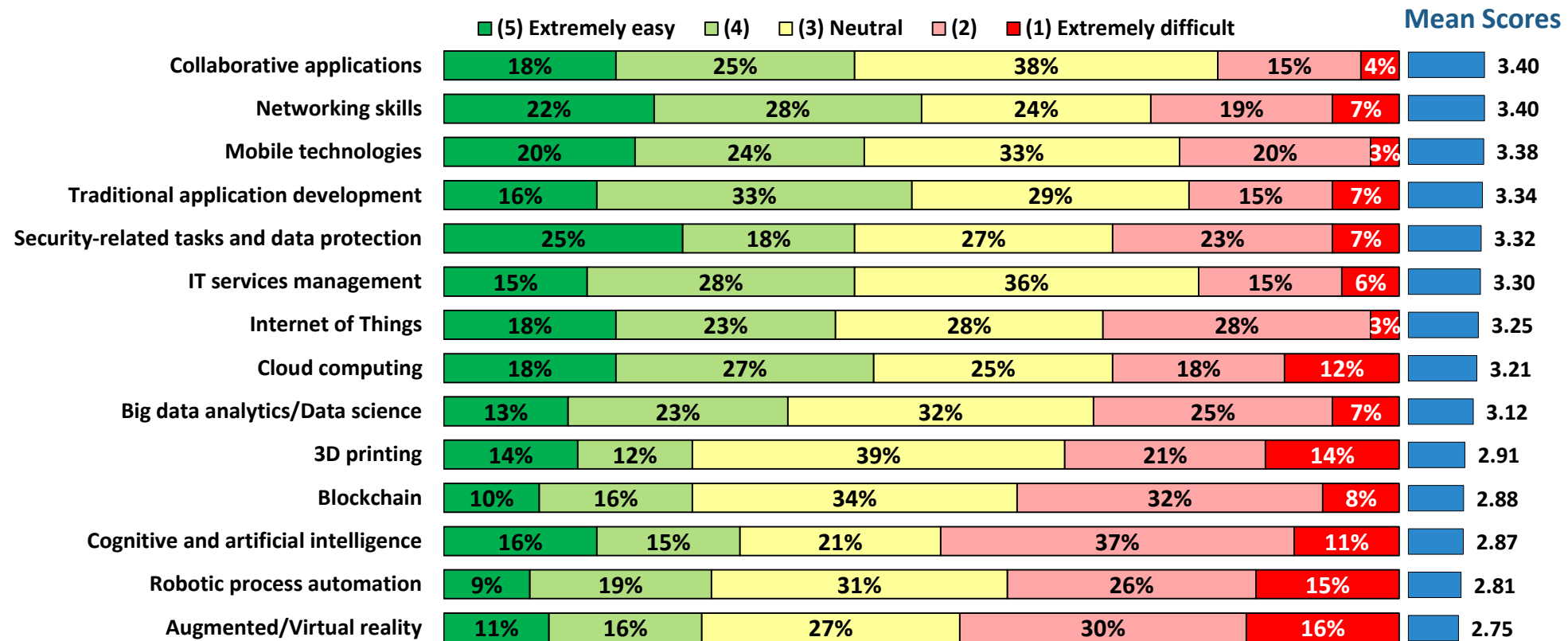
Base (Israel): 71



# Ease of Acquiring Digital Skills



- With skills sources coming from the military, high-tech sector and other organizations, the more mature fields such as collaborative apps, traditional apps development, and networking skills experience a relative ease of getting the right people. The more senior and experienced the position, the higher the cost, but these skills are by and large available in Israel.
- This is not the case with more novel fields where it is less a question of cost and more of lack of right people in general (although as these skills become more available, the transition period makes for very high employment costs).
- Although it is already clear from what respondents report, the real shortage of newer digital skills (AR/VR, RPA, AI, Blockchain etc.) is much higher as many of the respondents do not yet fully understand business use cases and consequently less involved in associated recruitment efforts.



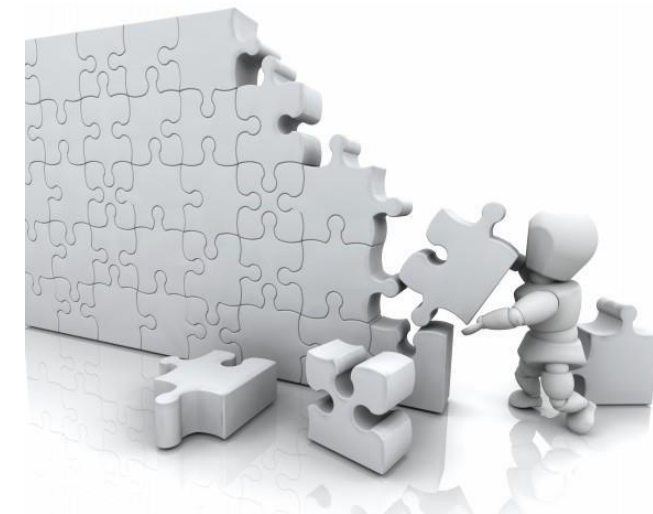
Base (Israel): 71

Q8. Based on your experience, and regardless of whether your company requires these skills or not, how easy or difficult do you think it will be for companies to acquire (by recruiting or training existing staff) these skills over the next 2 or 3 years? Please use a 5-point scale on which 1 = extremely difficult and 5 = extremely easy.

# Challenges in Acquiring Digital Skills



- One of the big challenges of technology transitions is that by definition, new technologies cannot have people with much experience. Add to that the need to merge business/industry specific skills and technology skills and the challenge looms large (stated by 48% of the respondents).
- An increasing number of decision makers understand that experience and business/technology skills are critical in the short term, employees will need to deal with rapidly changing business and technology reality. So soft skills are also becoming a substantial part of the challenge, as highlighted by 41% of the respondents.
- New tech skills and their cost are also a major part of the skills shortage particularly in some of the more advanced areas. Employee retention does not seem to concern respondents at this point, despite the fact that recruiting employees from other businesses is considered a more effective strategy

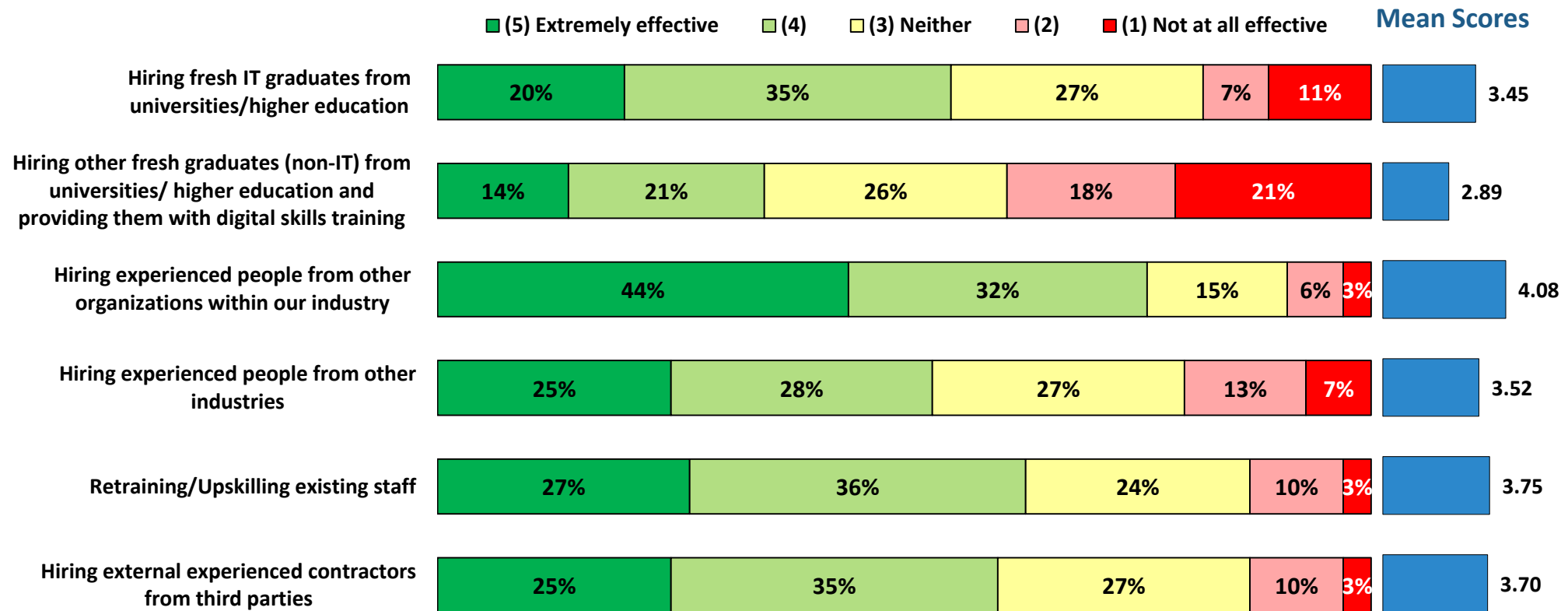


Base (Israel): 71

# Effective Approaches to Acquire Digital Skills



- Organizations do not see themselves as the locus of technology training and much prefer to enjoy the fruits of those trained elsewhere. This holds for new recruits, but retooling existing staff is considered by respondents as a relatively effective approach.
- This was rightly highlighted by 44% of the organizations that hiring experienced workforce from other organization within the same industry is extremely effective approach. Recruiting from the same industry (competitors) is by far the most effective recruitment strategy as higher costs are mitigated by industry and technology expertise
- In general, respondents in Israel opt for experience as a major determinant of recruitment effectiveness.



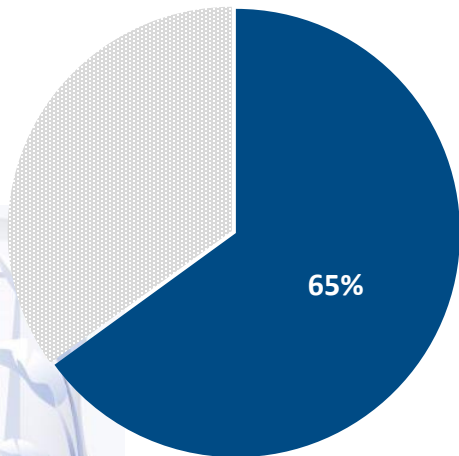
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# Effective Approaches to Acquire Digital Skills



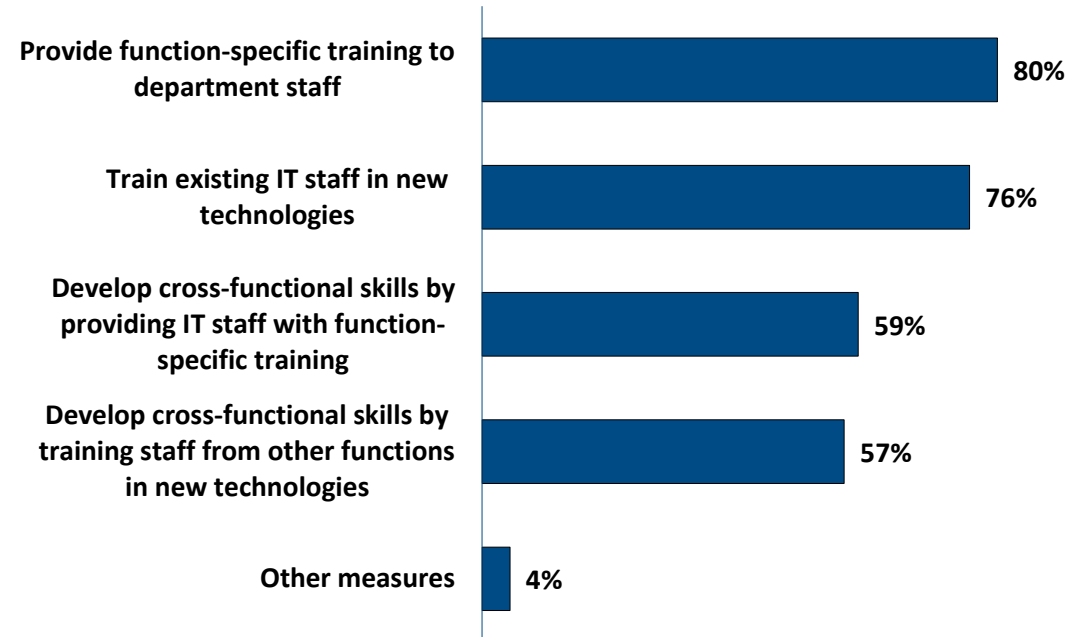
- Two thirds of respondents stated that they have retooling programs for employees. Given the high technology/business change rate, this is becoming increasingly necessary.
- Most of the retooling efforts are focused on either function-specific (80%) or technology-specific areas (76%) rather than a more profound wider scope effort.
- Organizations also need to evaluate the cost effectiveness of such retooling and the capability of staff to succeed in these efforts

## Organizations that Have Retraining/Reskilling Programs



Base (Israel): 71

## Methods of Retraining/Reskilling Existing Employees

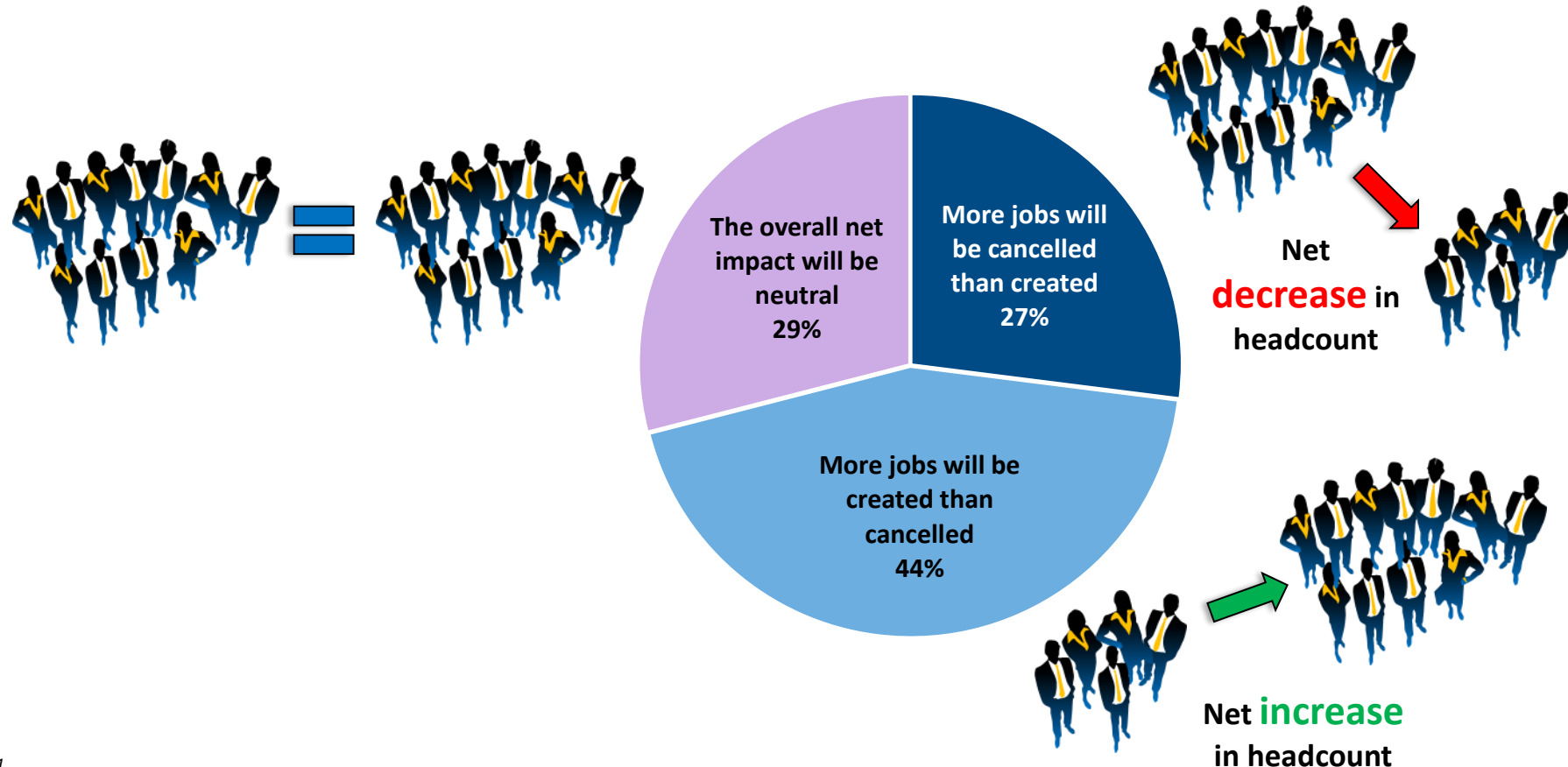


Base (Companies that have retraining/reskilling programs): 46

# Perceived Effect of Digital Transformation on Headcount



- Those in initial stages of DX or not started have a speculative view of overall impact on headcount that reflects the superimposition of digitalization and automation. To others (almost 44% of the respondents), it is clear that as the DX journey progresses, more novel job roles will be created.
- Again, the question of senior management involvement in DX will need to be addressed as managers impressed by DX benefits will balk at increased headcount and cost implications.
- Indeed even in those organizations where DX is on its way, headcount will see net growth despite the fact that certain position and skills will become redundant.



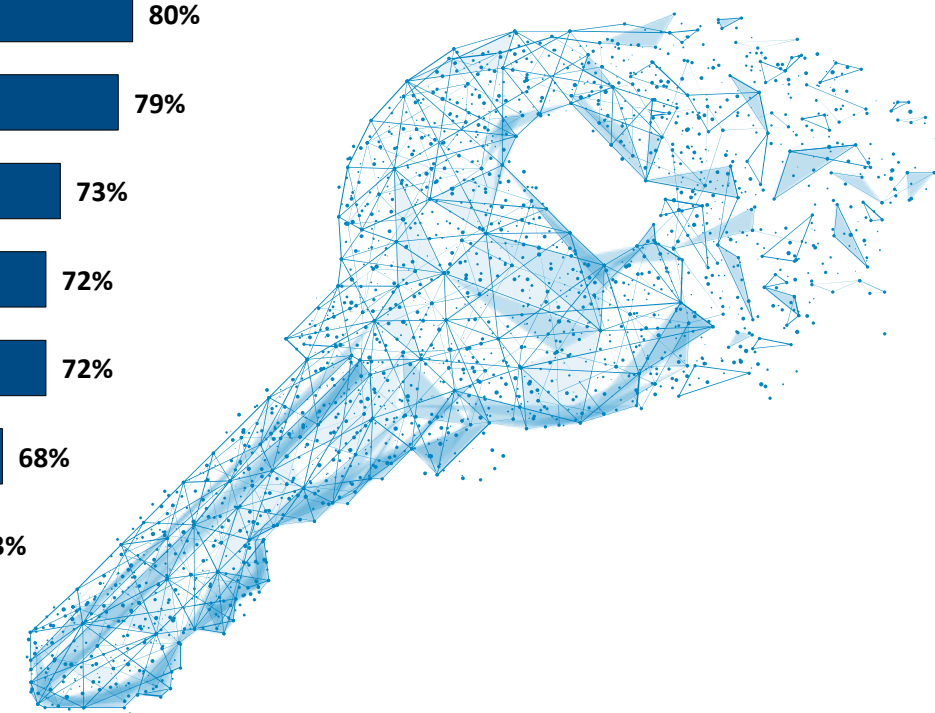
Base (Israel): 71

Q13. In your opinion, what impact will digital transformation have on headcount in your company in the near future?

# Benefits From Improved Digital Skills



- Some 80% of total respondents overall equate improved digital skills with better business performance. This seems to be an article of faith in the digital age, but realizing the potential requires the right deployment and management leadership.
- Interestingly, respondents in Israel placed improved customer experience (80%) as top benefit recognizing the shift of customer relations/journey to the digital realm.
- Retention of skills (63%) and better decision quality (61%) were not deemed a primary result of improved digitals skills as these are considered an overall management accomplishment.



Base (Israel): 71

# Organizations That Can Support with Digital Skills



- Respondents in Israel do not see public sector initiatives as overly effective in the effort to improve digital skills which is at the bottom with only 42% respondents opting for this, despite the fact that both government and international bodies are active in this field.
- In Israel, Industry & professional bodies (72%) include also the military which is a major driver of digital skills development. The technology sector in Israel fuels much of the activity in this regard.
- Academia and other education systems (both public and private) are also considered as a major driver of digital skills development. There are ongoing concerns as to the finetuning of educational efforts to match industry requirements.



Base (Israel): 71

Q15. Which of these organizations do you think should primarily work with companies to help them overcome their difficulties in recruiting digitally skilled employees?