



AI skills report

The gap between AI investments and worker readiness



How to use AI securely...|

Executive summary

AI isn't only the future—it's already the present. In fact, 81% of executives have formally deployed or plan to formally deploy AI-related tools and technologies. But to actually innovate, drive more value, and stay competitive, organizations need more than AI technology. They need AI skill development, too.

We surveyed 1,200 executives and IT professionals across the US and the UK to better understand the rapidly evolving AI landscape and how organizations are preparing for the future.

Our main finding? **Even as organizations accelerate AI adoption, the majority don't understand what, if any, AI skills their employees possess or have an upskilling strategy to develop them.**

This report dives into the AI landscape, how it's impacting organizations, and what you need to do to drive lasting value with your AI investments.

Main takeaways

87%

of organizations plan to **increase** AI spending in the next 12 months.

95%

of executives and **94%** of IT professionals believe AI initiatives will fail without staff who can effectively use AI tools.

81%

of IT professionals feel confident they can integrate AI into their roles right now—**but only 12%** have significant experience working with AI.

74%

of IT professionals worry that AI tools will make many of their day-to-day skills obsolete.

Both executives and IT professionals believe investing in talent, training, and culture is the first step organizations should take to prepare for emerging AI technology and tools.

But only
40%

of organizations have formal structured training and instruction for AI.



Table of contents

- 02** Executive summary
- 04** AI adoption on the rise
- 07** The AI skills gap impedes success
- 09** Preparing the workforce to use AI
- 12** Conclusion
- 13** Methodology

PART ONE

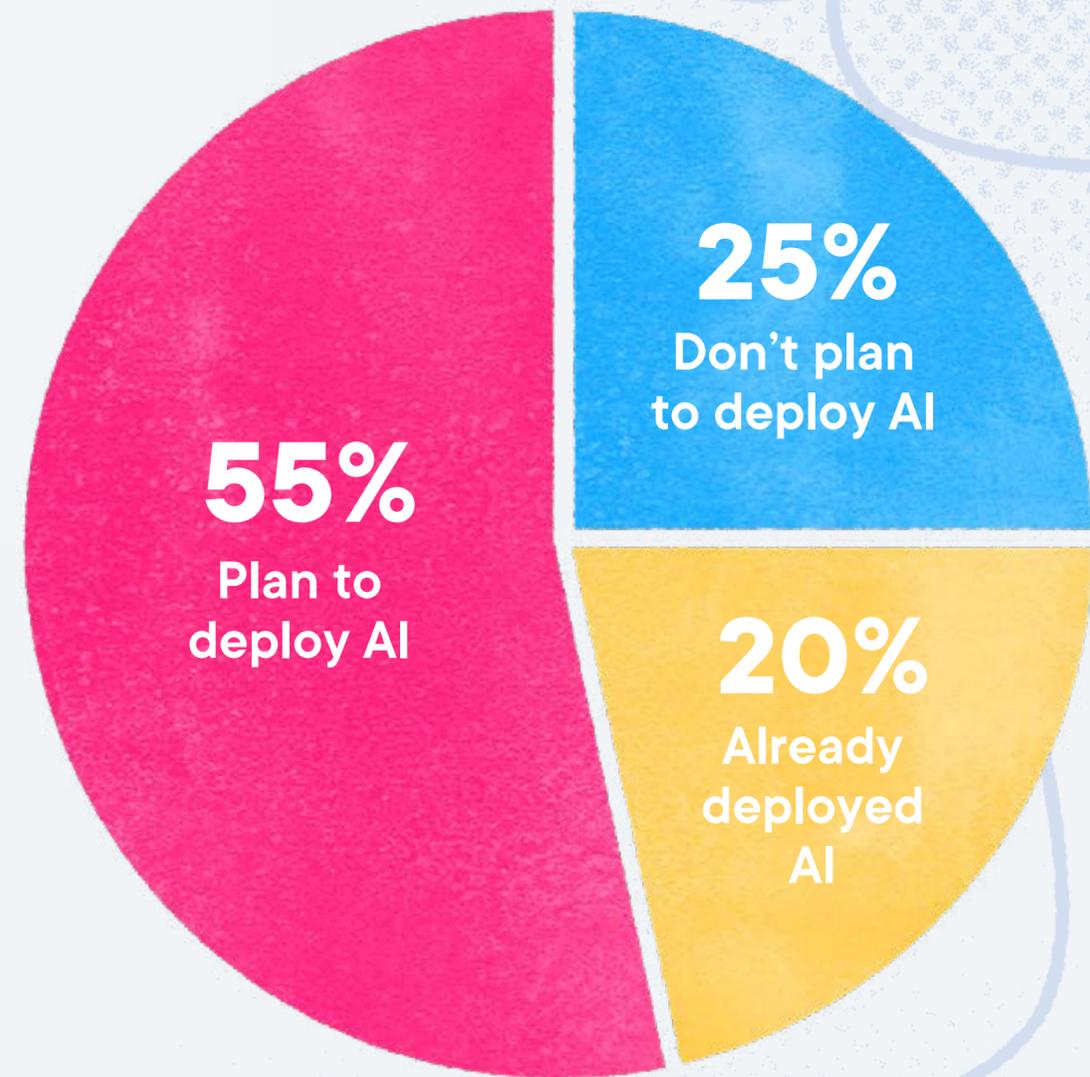
AI adoption on the rise

Organizations are already using AI: We found that 20% have formally deployed AI-related technologies and tools, and 55% plan to soon. And even if they don't have formal deployment plans right now, 46% allow employees to use AI tools on their own.

The surge of generative AI has only sped up AI adoption. In fact, 92% of organizations that have adopted or plan to adopt AI have accelerated their AI initiatives in the past 12 months.

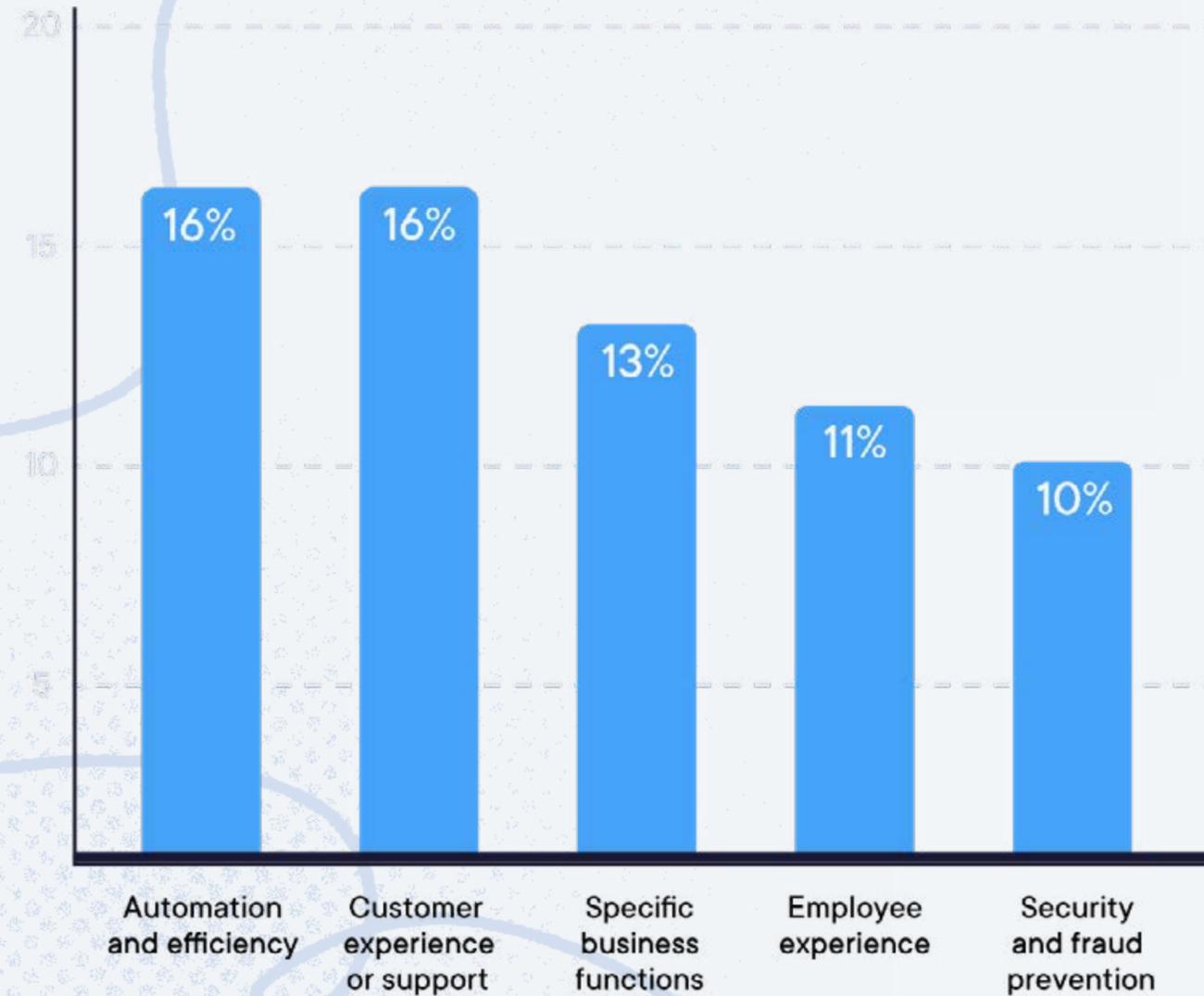
With that acceleration comes an increase in spending for more than 4 in 5 organizations in the next year. On average, these organizations plan to allocate an additional 17% to AI in the next 12 months.

Are organizations deploying AI technologies?



*Note: AI-related technologies include machine learning, automation, generative AI, etc.

Organizations' top 5 reasons for using AI



Only the top five responses are recorded in this chart; numbers will not add up to 100%.

The promise of improved efficiency drives AI adoption

Organizations are primarily adopting AI to boost efficiency, improve the customer experience, and enhance specific business functions, including fraud prevention, data analysis, and forecasting. Despite the prevalence of generative AI, only 6% of organizations plan to leverage AI technology for generative AI capabilities.

Not sure where to start using AI in your business?

Start here



Getting Started with Artificial Intelligence for Business

by Pratheerth Padman

50+ min | Business

Orgs foregoing AI cite budget and talent concerns

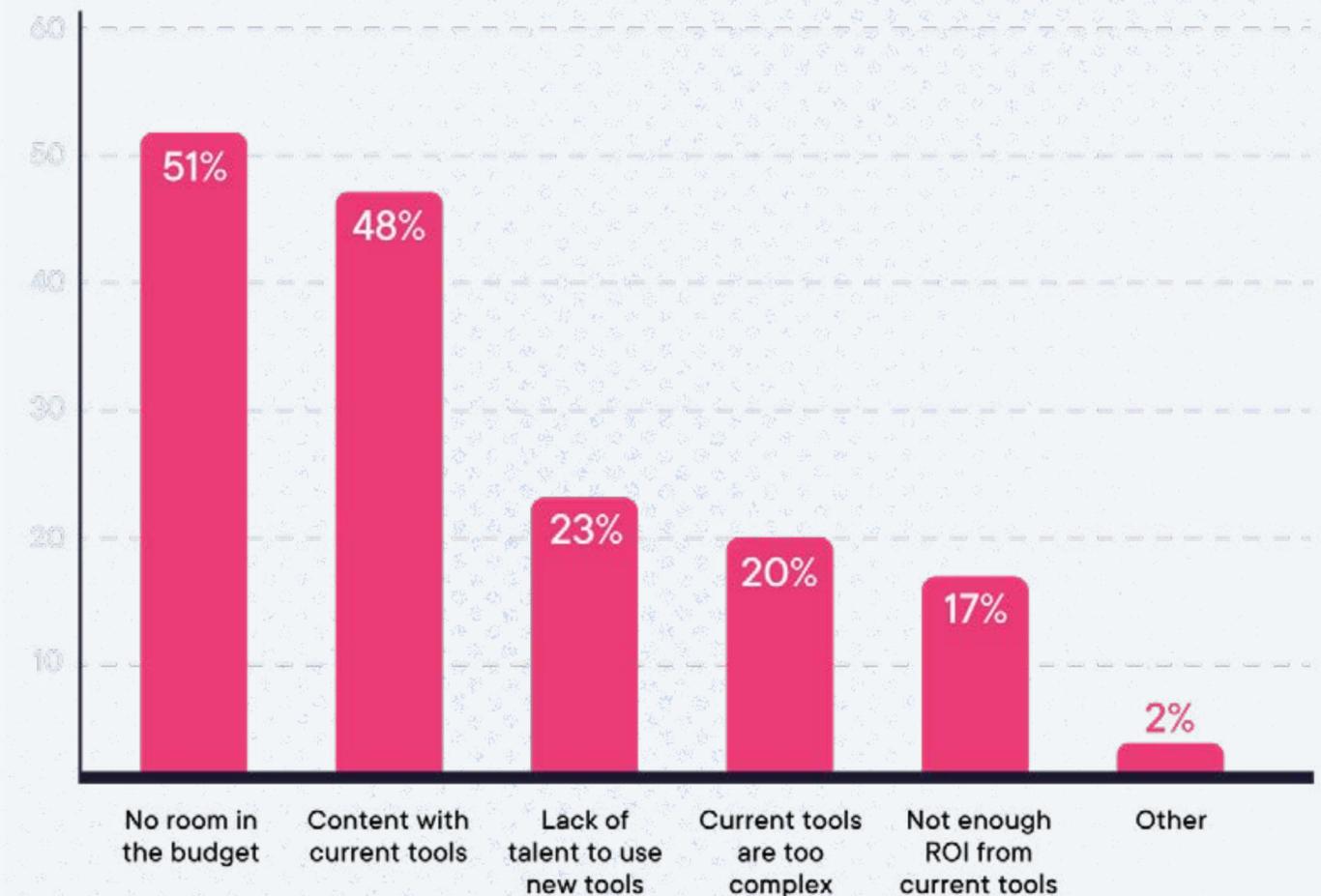
But not everyone is jumping right in—at least, not yet. 25% of organizations don't plan to deploy AI technology within the next year, and 12% aren't increasing their AI spend.

Their primary reasons for waiting? They either lack the budget and/or talent to properly use AI technology or are satisfied with their current tools.

It's easy to assume these organizations will fall behind the early adopters. But that isn't necessarily true. Organizations that develop a strategy and upskill their teams before adopting AI will drive value faster than organizations that adopt AI without a plan or the people to use it.

The takeaway? Even though the vast majority of executives and IT professionals believe organizations that don't invest in AI will fall behind the competition, AI alone doesn't guarantee future success. Organizations need an [AI deployment and skill development strategy](#) to improve efficiency, enhance the customer experience, and otherwise drive value from their investments.

Why organizations aren't investing in AI



94% of executives and 92% of IT professionals believe organizations who do not invest in AI in the near future will fall behind the competition.

PART TWO

The AI skills gap impedes success

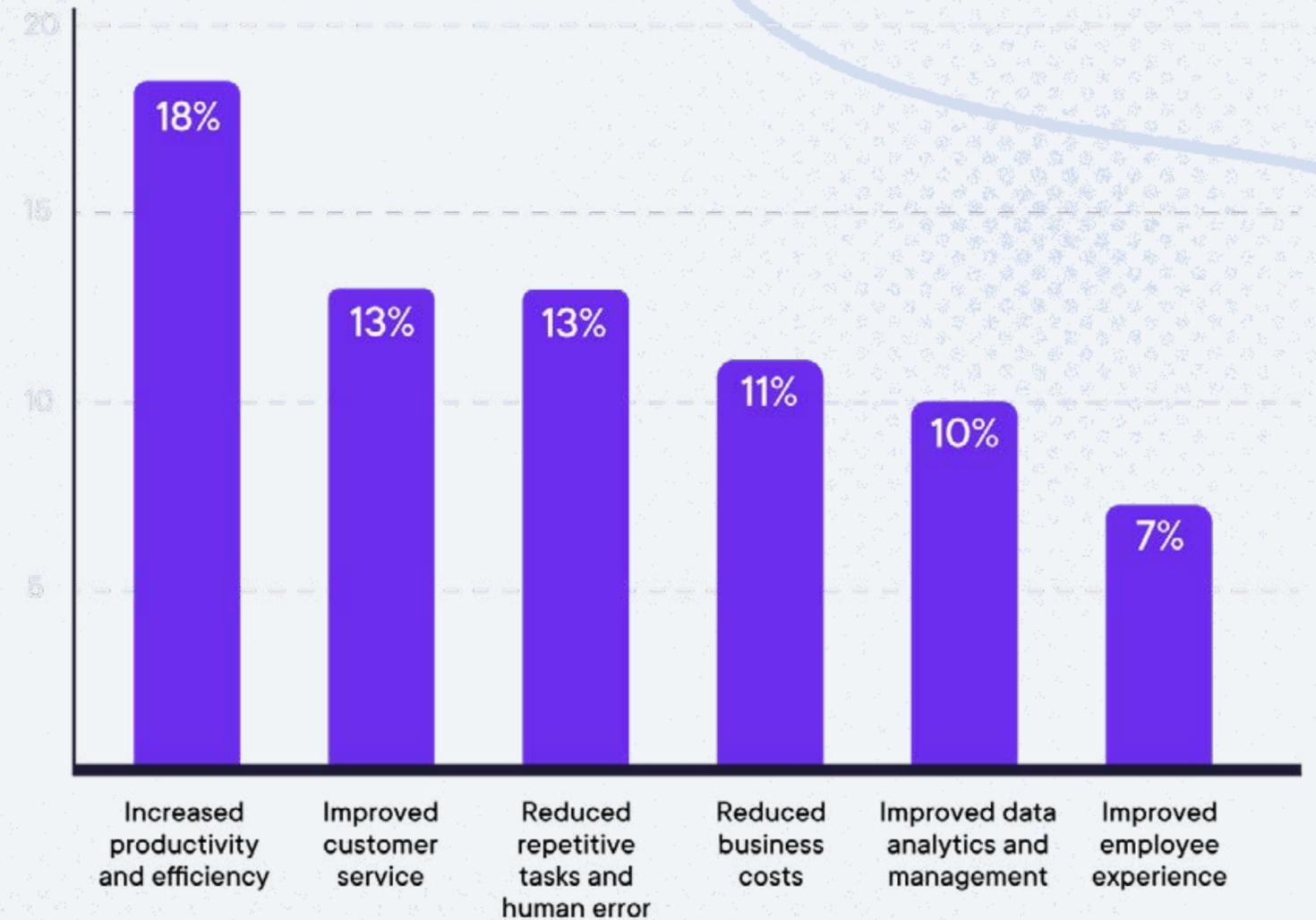
Among the organizations that have already deployed AI technologies, 97% have benefited, citing increased productivity and efficiency, improved customer service, and reduced human error.

For IT professionals, job security drives interest in AI skill development

But AI isn't without its challenges, especially for technologists worried about job security. Nearly 3 in 4 IT practitioners worry the skills they use in their daily role will become obsolete very quickly because of AI tools. And 69% think they're at least somewhat at risk of being replaced by AI.

With 35% of executives investing in AI technology and tools to eliminate unnecessary positions, their concerns aren't unfounded. Despite these concerns, or perhaps because of them, IT professionals know they'll need to learn AI skills to secure their careers. In fact, 96% say staying up to date with AI skills is the best way to ensure their job security in a competitive market.

Benefits of using AI for organizations



Only the top six responses are recorded in this chart; numbers will not add up to 100%.

Leaders lack visibility into AI skills and literacy

IT professionals' desire to learn means they'll be more receptive to any upskilling opportunities their organization provides. There's just one problem: The vast majority of executives lack insight into their teams' AI skills and expertise. And until leaders understand the skills their teams *have*, they won't be able to develop the skills they *need*.

90% of executives don't completely understand their team's AI skill and proficiency.

Even IT practitioners seem unsure of their AI skills: **While 81% of IT professionals feel confident they can integrate AI into their roles right now, only 12% have significant experience working with AI.**

In other words, leaders can't rely on employee self-assessment as an accurate measure of AI skills. If they do, they open themselves to risks down the line.

Employees who are confident in their AI skills but lack formal training and experience won't build and deploy AI technology with [best practices](#), data security, and privacy concerns in mind.

The AI skills gap doesn't only apply to advanced technical skills, either. To make the most of AI, organizations need an accurate way to benchmark AI skills across their organization and use their insights to create a plan for skill development. This should include [basic AI literacy](#) as well as hands-on experiences where employees can apply what they learn, experiment, and make mistakes in a safe environment.

Having trouble navigating generative AI's security risks and privacy concerns?

Get expert tips



PART THREE

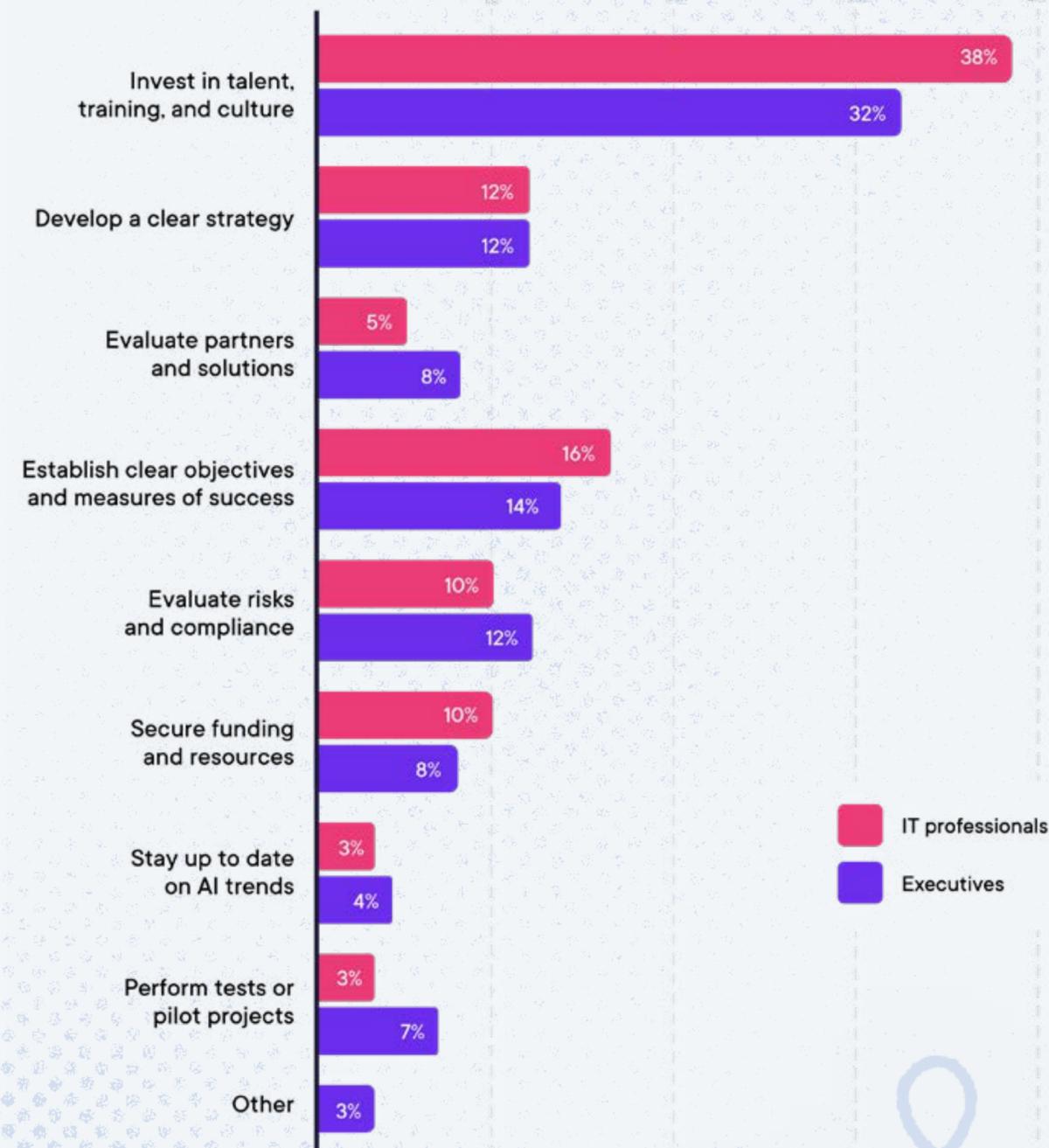
Preparing the workforce to use AI

[IDC research](#) indicates that about two-fifths (41%) of global organizations say that investments in skills and digital training of employees will be their most enduring technology investment in 2023 and 2024, even outpacing pressing investments in generative AI solutions such as OpenAI's ChatGPT and Google's Bard.

In other words, when it comes to long-term value, training trumps tech. And with AI, we found both leaders and IT practitioners know this: 95% of executives and 94% of IT professionals believe AI initiatives will fail without staff who can effectively use these tools.

On top of that, executives and IT professionals agree investing in talent, training, and creating the right culture are the most important steps an organization should take to prepare for emerging AI technology. But only 40% of organizations have formal structured training and instruction for AI.

What should orgs do to use AI technology effectively?



IDC Skills Forward: Staying Competitive Amid the Worsening IT Talent Shortage, Doc #US51248323, September 2023

Common barriers to AI upskilling

If everyone is aligned, why haven't most organizations implemented AI upskilling programs? Our research found three primary reasons.



Organizations adopt **technology first** and train **employees later**

80% of executives and 72% of IT practitioners agree their organization often invests in new technology without considering the training employees need to use it. Without a skill development strategy for their tech investments, organizations struggle to achieve their goals and drive customer value.



Organizations believe they can **outsource AI skills**

91% of executives are at least somewhat likely to replace or outsource talent to successfully deploy AI initiatives. But outsourcing is only a stopgap solution. Because AI is still relatively new, there's a limited number of AI experts, and the ones available on the market may not possess the right skillset.



Organizations encounter **general upskilling challenges**

Even if organizations decide to upskill their employees, they often [encounter barriers](#) that prevent them from implementing successful skill development programs. The most common challenges they face? Finding the right training (42%), ensuring training is the right fit for the AI tool (49%), and procuring budget (48%).

Creating an upskilling program that (actually) solves the AI skills gap

To clear these hurdles, close the AI skills gap, and drive value from their AI investments, organizations need to:



Reconsider outsourcing vs. upskilling

Finding AI experts in the market is a gamble. Organizations that develop AI talent from their existing workforce will build the exact AI skills they need while providing valuable professional development opportunities to their teams.



Provide hands-on learning opportunities

Technologists find it easier to learn and retain new information with hands-on activities. Labs and sandboxes give them a risk-free way to learn new AI tools while navigating the myriad [ethical, security, and privacy concerns](#).



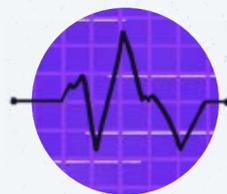
Create an AI skill development strategy before adopting AI technology

Organizations that want to take advantage of emerging technologies don't always have time to train their employees first. But if they can implement an upskilling strategy before deploying AI technology, their teams can start driving value from day one.



Track AI upskilling success and build a continuous learning culture

Once organizations have implemented an upskilling program, they need to measure its impact. Course completion and employee satisfaction are useful metrics, but skill improvement and impact on ROI provide a better understanding of long-term AI success.



Assess employees' current AI knowledge and skills

Organizations need visibility into their teams' AI capabilities. Once they understand their strengths and weaknesses, they can develop an upskilling program that fills in the gaps and gives them the skills they need to use AI tools effectively.



CONCLUSION

AI skills drive AI success

While most organizations are adopting or planning to adopt AI, their teams lack the skills to use these tools and technologies effectively. **And the longer they wait to upskill their teams, the wider those skills gaps will grow.**

For the majority of organizations, this means rethinking their approach to AI. To drive lasting value from their AI investments, **they need a comprehensive AI upskilling strategy** with skills benchmarking, hands-on learning, and a continuous learning culture.

As AI advances, there will never be a shortage of new skills to learn. **You'll need to constantly build up your org's AI skills to leverage the latest tech** and keep your competitive advantage.

Build AI skills in your org with Pluralsight

```
22 queries_vacab_sql,  
23 vto_tag_vacab_sql,  
24 }  
25  
26 !!! airflow.models.variable: Variable !  
27 !!! airflow.providers.snowflake.hooks.snowflake: SnowflakeHook  
28  
29 logger = logging.getLogger("airflow.task")  
30  
31 queries_vacab_sql,  
32 vto_tag_vacab_sql,  
33 }  
34  
35 !!! airflow.models.variable: Variable !  
36 !!! airflow.providers.snowflake.hooks.snowflake: SnowflakeHook  
37  
38 logger = logging.getLogger("airflow.task")  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100  
101  
102  
103  
104  
105  
106  
107  
108  
109  
110  
111  
112  
113  
114  
115  
116  
117  
118  
119  
120  
121  
122  
123  
124  
125  
126  
127  
128  
129  
130  
131  
132  
133  
134  
135  
136  
137  
138  
139  
140  
141  
142  
143  
144  
145  
146  
147  
148  
149  
150  
151  
152  
153  
154  
155  
156  
157  
158  
159  
160  
161  
162  
163  
164  
165  
166  
167  
168  
169  
170  
171  
172  
173  
174  
175  
176  
177  
178  
179  
180  
181  
182  
183  
184  
185  
186  
187  
188  
189  
190  
191  
192  
193  
194  
195  
196  
197  
198  
199  
200  
201  
202  
203  
204  
205  
206  
207  
208  
209  
210  
211  
212  
213  
214  
215  
216  
217  
218  
219  
220  
221  
222  
223  
224  
225  
226  
227  
228  
229  
230  
231  
232  
233  
234  
235  
236  
237  
238  
239  
240  
241  
242  
243  
244  
245  
246  
247  
248  
249  
250  
251  
252  
253  
254  
255  
256  
257  
258  
259  
260  
261  
262  
263  
264  
265  
266  
267  
268  
269  
270  
271  
272  
273  
274  
275  
276  
277  
278  
279  
280  
281  
282  
283  
284  
285  
286  
287  
288  
289  
290  
291  
292  
293  
294  
295  
296  
297  
298  
299  
300  
301  
302  
303  
304  
305  
306  
307  
308  
309  
310  
311  
312  
313  
314  
315  
316  
317  
318  
319  
320  
321  
322  
323  
324  
325  
326  
327  
328  
329  
330  
331  
332  
333  
334  
335  
336  
337  
338  
339  
340  
341  
342  
343  
344  
345  
346  
347  
348  
349  
350  
351  
352  
353  
354  
355  
356  
357  
358  
359  
360  
361  
362  
363  
364  
365  
366  
367  
368  
369  
370  
371  
372  
373  
374  
375  
376  
377  
378  
379  
380  
381  
382  
383  
384  
385  
386  
387  
388  
389  
390  
391  
392  
393  
394  
395  
396  
397  
398  
399  
400  
401  
402  
403  
404  
405  
406  
407  
408  
409  
410  
411  
412  
413  
414  
415  
416  
417  
418  
419  
420  
421  
422  
423  
424  
425  
426  
427  
428  
429  
430  
431  
432  
433  
434  
435  
436  
437  
438  
439  
440  
441  
442  
443  
444  
445  
446  
447  
448  
449  
450  
451  
452  
453  
454  
455  
456  
457  
458  
459  
460  
461  
462  
463  
464  
465  
466  
467  
468  
469  
470  
471  
472  
473  
474  
475  
476  
477  
478  
479  
480  
481  
482  
483  
484  
485  
486  
487  
488  
489  
490  
491  
492  
493  
494  
495  
496  
497  
498  
499  
500  
501  
502  
503  
504  
505  
506  
507  
508  
509  
510  
511  
512  
513  
514  
515  
516  
517  
518  
519  
520  
521  
522  
523  
524  
525  
526  
527  
528  
529  
530  
531  
532  
533  
534  
535  
536  
537  
538  
539  
540  
541  
542  
543  
544  
545  
546  
547  
548  
549  
550  
551  
552  
553  
554  
555  
556  
557  
558  
559  
560  
561  
562  
563  
564  
565  
566  
567  
568  
569  
570  
571  
572  
573  
574  
575  
576  
577  
578  
579  
580  
581  
582  
583  
584  
585  
586  
587  
588  
589  
590  
591  
592  
593  
594  
595  
596  
597  
598  
599  
600  
601  
602  
603  
604  
605  
606  
607  
608  
609  
610  
611  
612  
613  
614  
615  
616  
617  
618  
619  
620  
621  
622  
623  
624  
625  
626  
627  
628  
629  
630  
631  
632  
633  
634  
635  
636  
637  
638  
639  
640  
641  
642  
643  
644  
645  
646  
647  
648  
649  
650  
651  
652  
653  
654  
655  
656  
657  
658  
659  
660  
661  
662  
663  
664  
665  
666  
667  
668  
669  
670  
671  
672  
673  
674  
675  
676  
677  
678  
679  
680  
681  
682  
683  
684  
685  
686  
687  
688  
689  
690  
691  
692  
693  
694  
695  
696  
697  
698  
699  
700  
701  
702  
703  
704  
705  
706  
707  
708  
709  
710  
711  
712  
713  
714  
715  
716  
717  
718  
719  
720  
721  
722  
723  
724  
725  
726  
727  
728  
729  
730  
731  
732  
733  
734  
735  
736  
737  
738  
739  
740  
741  
742  
743  
744  
745  
746  
747  
748  
749  
750  
751  
752  
753  
754  
755  
756  
757  
758  
759  
760  
761  
762  
763  
764  
765  
766  
767  
768  
769  
770  
771  
772  
773  
774  
775  
776  
777  
778  
779  
780  
781  
782  
783  
784  
785  
786  
787  
788  
789  
790  
791  
792  
793  
794  
795  
796  
797  
798  
799  
800  
801  
802  
803  
804  
805  
806  
807  
808  
809  
810  
811  
812  
813  
814  
815  
816  
817  
818  
819  
820  
821  
822  
823  
824  
825  
826  
827  
828  
829  
830  
831  
832  
833  
834  
835  
836  
837  
838  
839  
840  
841  
842  
843  
844  
845  
846  
847  
848  
849  
850  
851  
852  
853  
854  
855  
856  
857  
858  
859  
860  
861  
862  
863  
864  
865  
866  
867  
868  
869  
870  
871  
872  
873  
874  
875  
876  
877  
878  
879  
880  
881  
882  
883  
884  
885  
886  
887  
888  
889  
890  
891  
892  
893  
894  
895  
896  
897  
898  
899  
900  
901  
902  
903  
904  
905  
906  
907  
908  
909  
910  
911  
912  
913  
914  
915  
916  
917  
918  
919  
920  
921  
922  
923  
924  
925  
926  
927  
928  
929  
930  
931  
932  
933  
934  
935  
936  
937  
938  
939  
940  
941  
942  
943  
944  
945  
946  
947  
948  
949  
950  
951  
952  
953  
954  
955  
956  
957  
958  
959  
960  
961  
962  
963  
964  
965  
966  
967  
968  
969  
970  
971  
972  
973  
974  
975  
976  
977  
978  
979  
980  
981  
982  
983  
984  
985  
986  
987  
988  
989  
990  
991  
992  
993  
994  
995  
996  
997  
998  
999  
1000
```



Methodology

For this report, we partnered with Wakefield Research to understand leaders' and technologists' perspectives on AI, uncover its current and future impact, and provide leaders with the actionable insights they need to leverage AI as a competitive differentiator.

To do this, we surveyed 1,200 executives and IT professionals across the United States and United Kingdom.

Position

Executive	600	50%
IT professionals	600	50%

Region

United States	700	58%
United Kingdom	500	42%

About Pluralsight

Pluralsight helps organizations around the globe advance their technology workforce. Because the hardest part of building a business isn't building software and technology. It's building up the people who grow your business. We're the only partner who helps leaders build better teams and better products, all at the same time.

Our upskilling and AI solutions help you create the talent you need, when you need it. From prompt engineering to creating AI models for the cloud and using generative AI techniques for cyber defense, Pluralsight Skills delivers expert-authored courses in the latest technologies paired with hands-on labs and sandboxes. Upskilling with Skills equips your team to execute on strategic investments that ultimately drive innovation, automation, and efficiency.

[Explore our AI solution](#)

