

2019 Construction Outlook Survey Results Tennessee Results

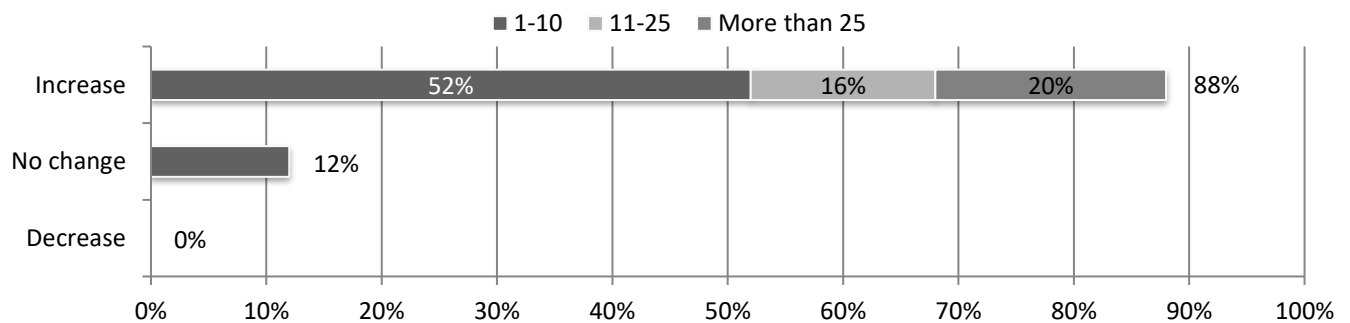
Total Responses: 30. Responses varied for some questions. Percentages are based on responses to each question and may not sum to 100 due to rounding.

1. Compared to 2018, do you expect the available dollar volume of projects you compete for in 2019 to be (answer for all market areas in which your business operates):

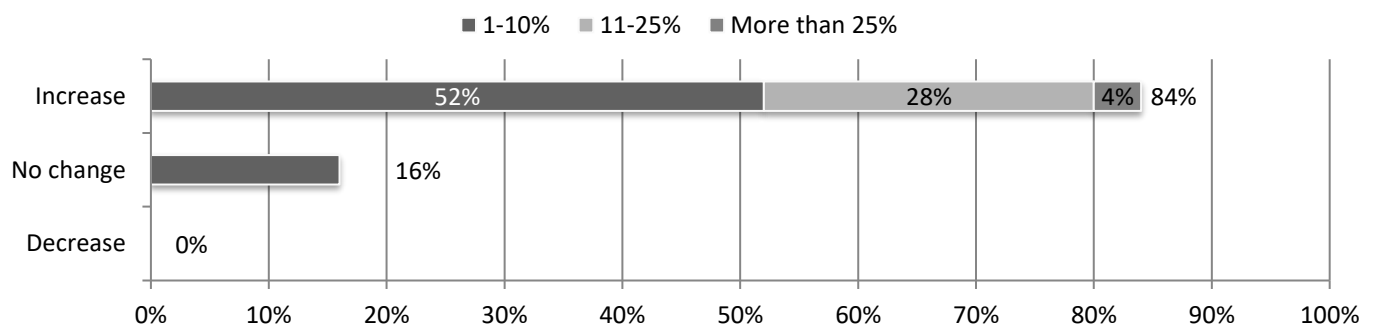
Market	Higher	Lower	Same	Net*
Federal (e.g., VA, GSA, USACE, NAVFAC)	23%	5%	73%	18%
Multifamily Residential	25%	10%	65%	15%
K-12 School	27%	14%	59%	14%
Retail, Warehouse, Lodging	26%	13%	61%	13%
Manufacturing	24%	12%	64%	12%
Hospital	18%	9%	73%	9%
Water/Sewer	13%	6%	81%	6%
Private Office	20%	16%	64%	4%
Power	13%	13%	75%	0%
Highway	13%	13%	75%	0%
Higher Education	8%	12%	80%	-4%
Transportation (e.g., transit, rail, airport)	11%	16%	74%	-5%
Public Building	10%	20%	70%	-10%
Other	33%	33%	33%	0%

**Net equals difference between number of "Higher" and "Lower" responses as percent of total.*

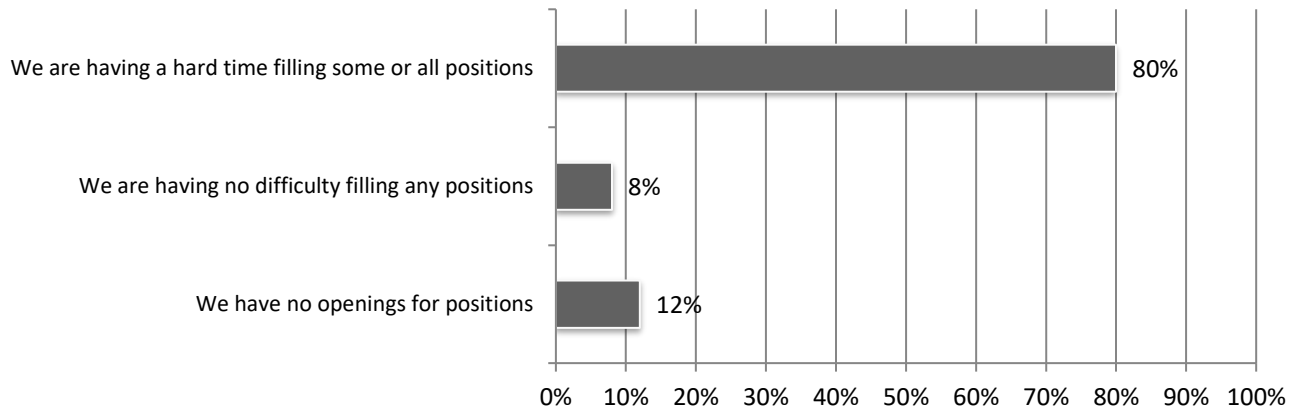
2. What numerical change do you expect in your headcount in 2019?



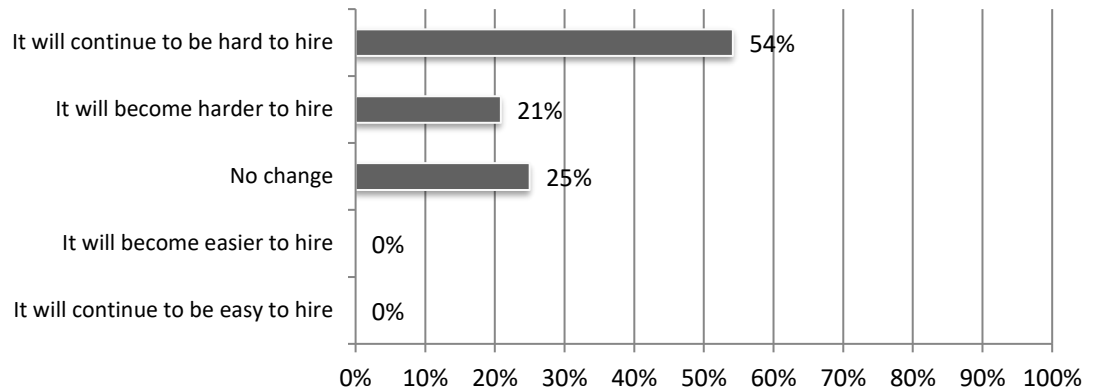
3. What percentage change do you expect in your headcount in 2019?



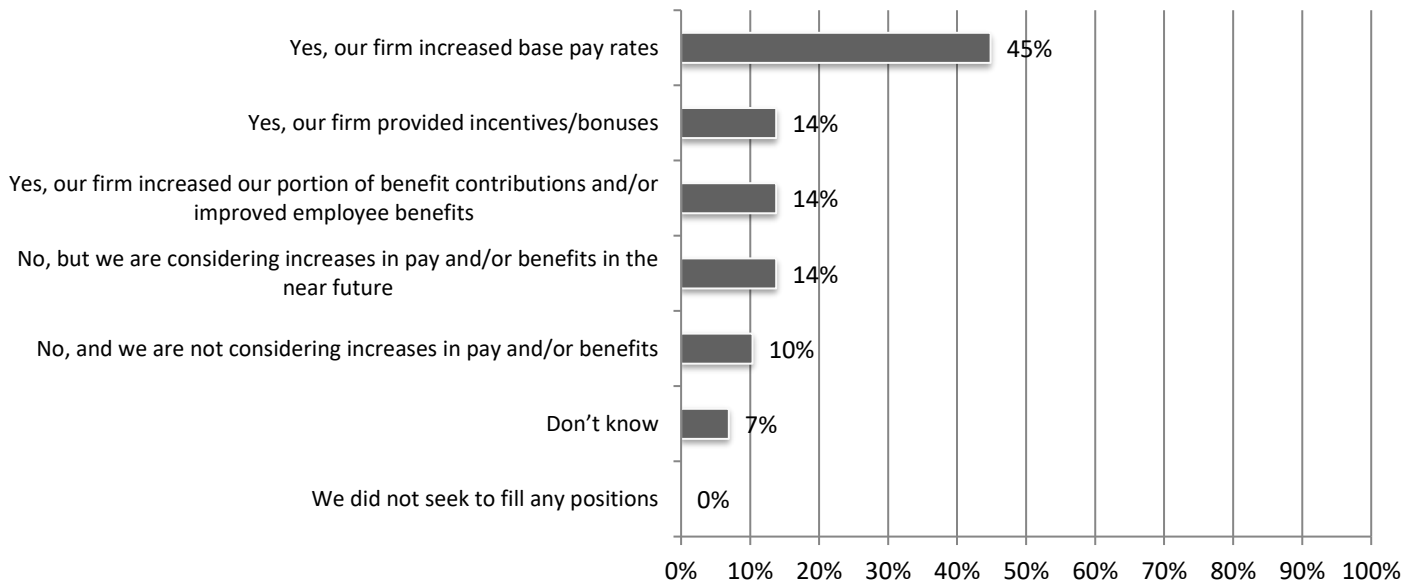
4. How would you describe your current situation in filling salaried and hourly craft positions?



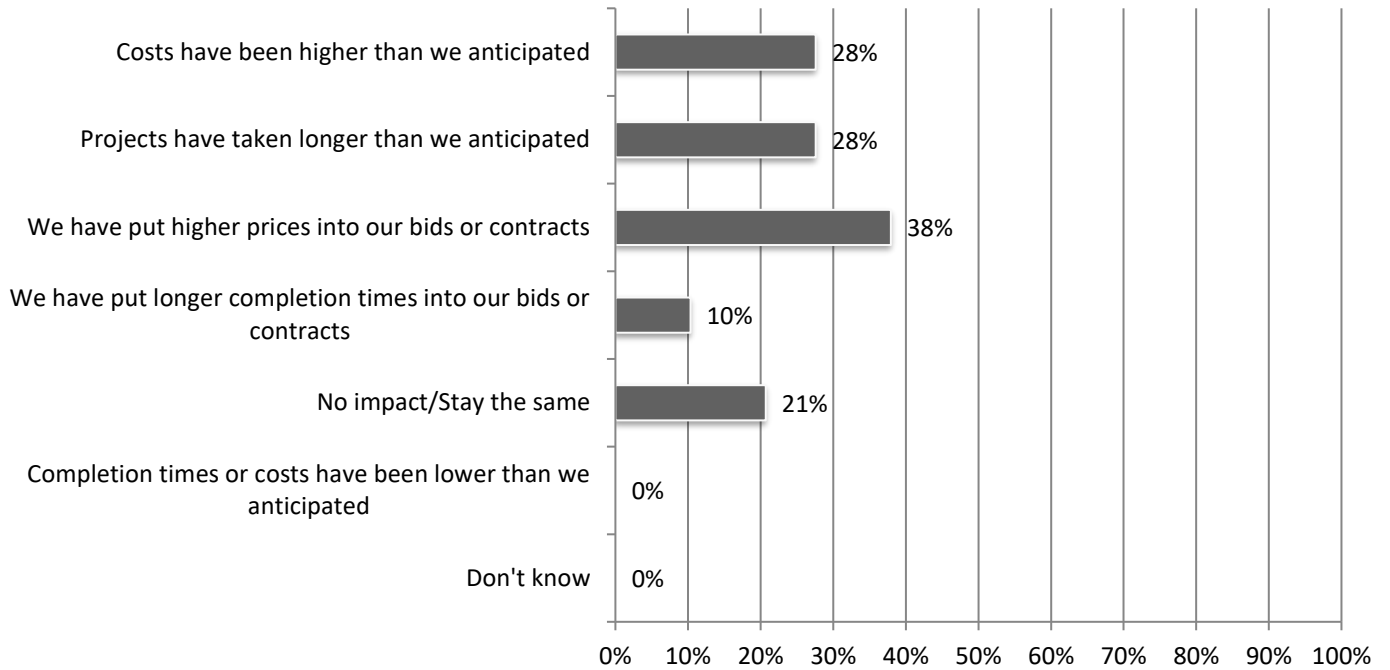
5. Do you expect any changes in the availability of hourly craft or salaried personnel over the coming 12 months?



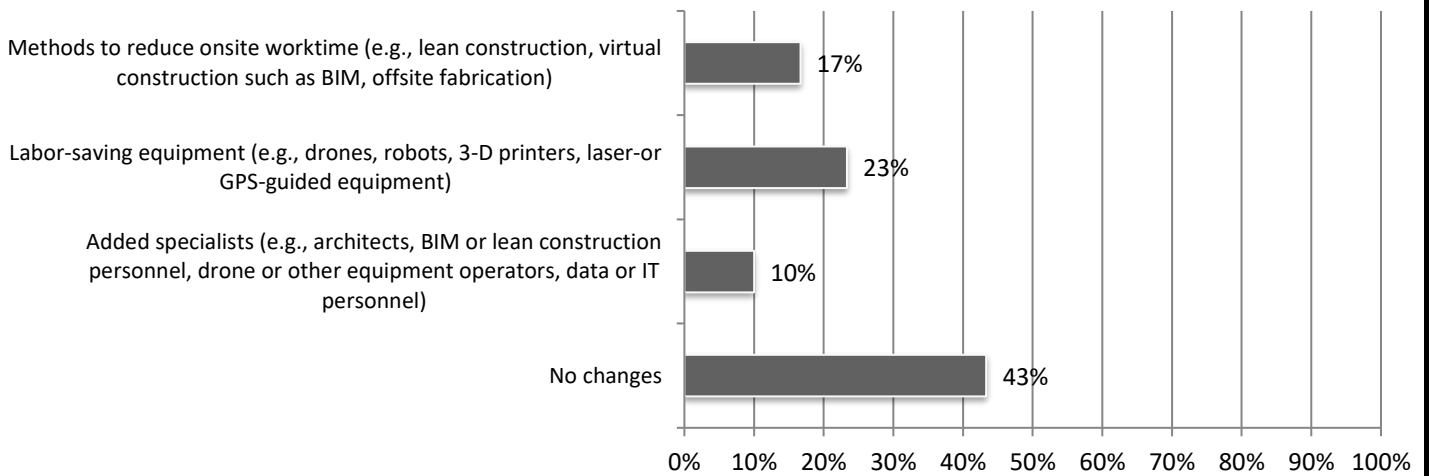
6. Did your firm increase pay or benefits for salaried or hourly craft personnel in 2018 because of difficulty filling positions? (mark all that apply)



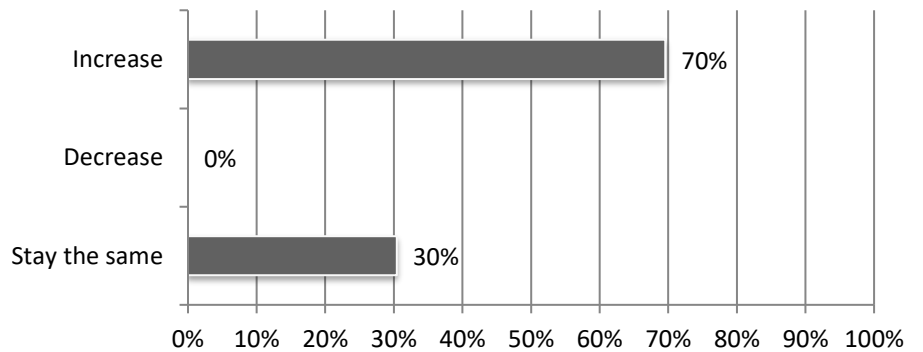
7. If your firm is experiencing staffing challenges, how would you describe the impact on your projects? (mark all that apply)



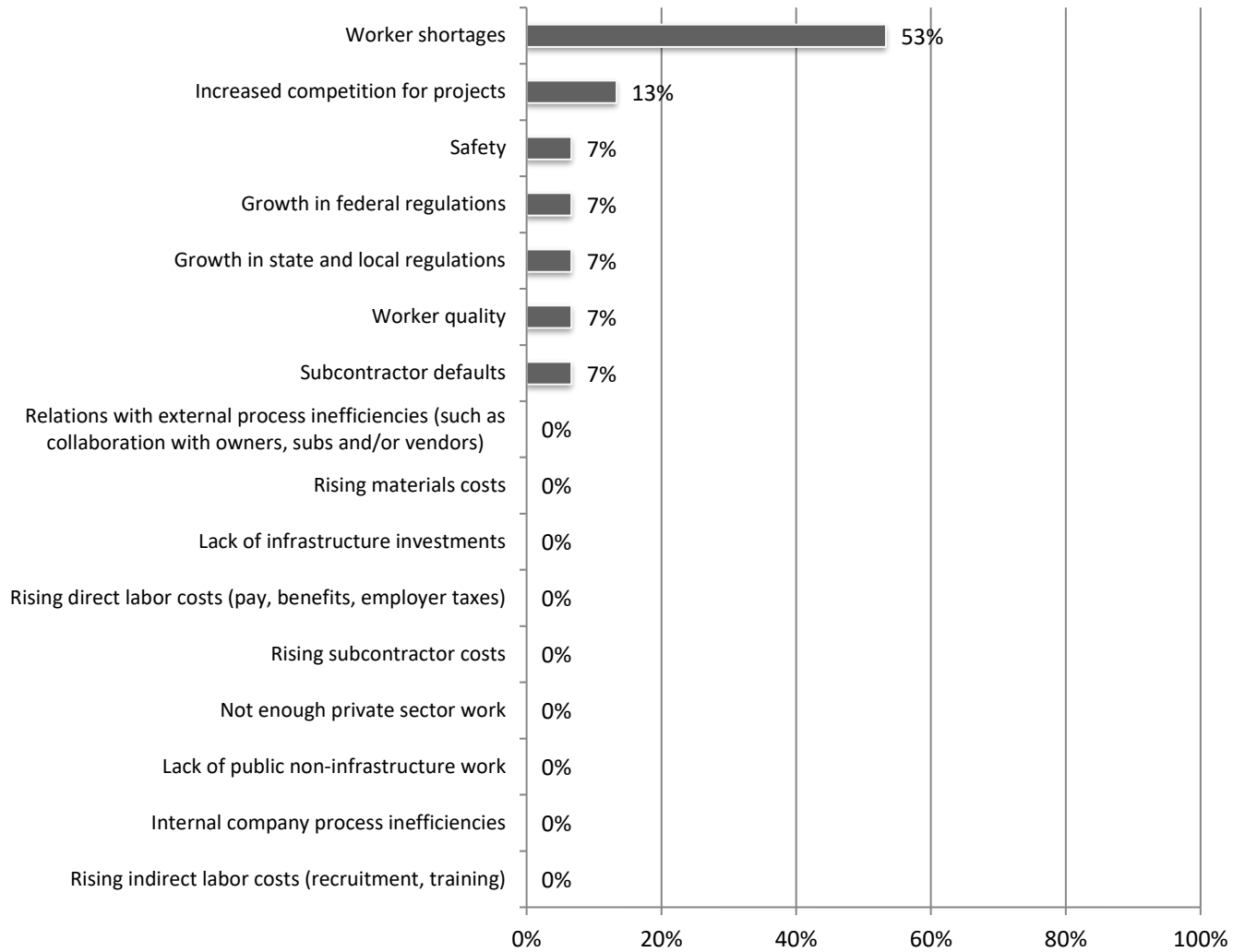
8. Has your firm adopted or increased use of the following to replace workers or skills? (mark all that apply)



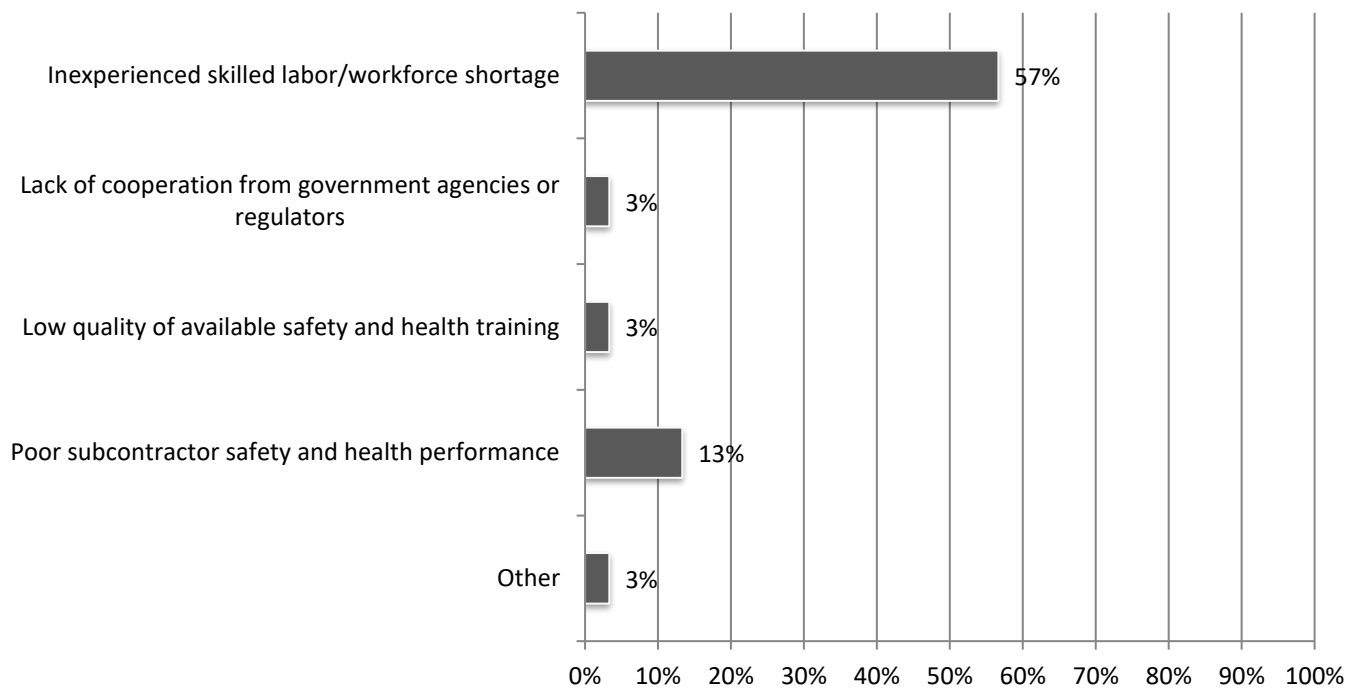
9. Compared to 2018, how will your firm's 2019 investment in training and development change?



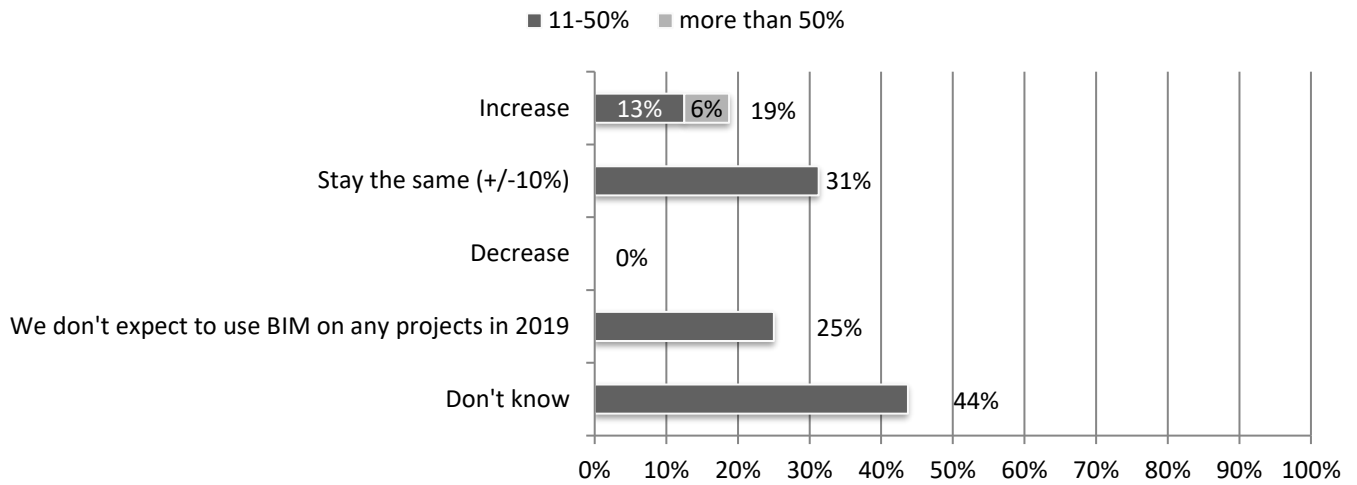
10. Which of the following issues is the biggest concern to your firm?



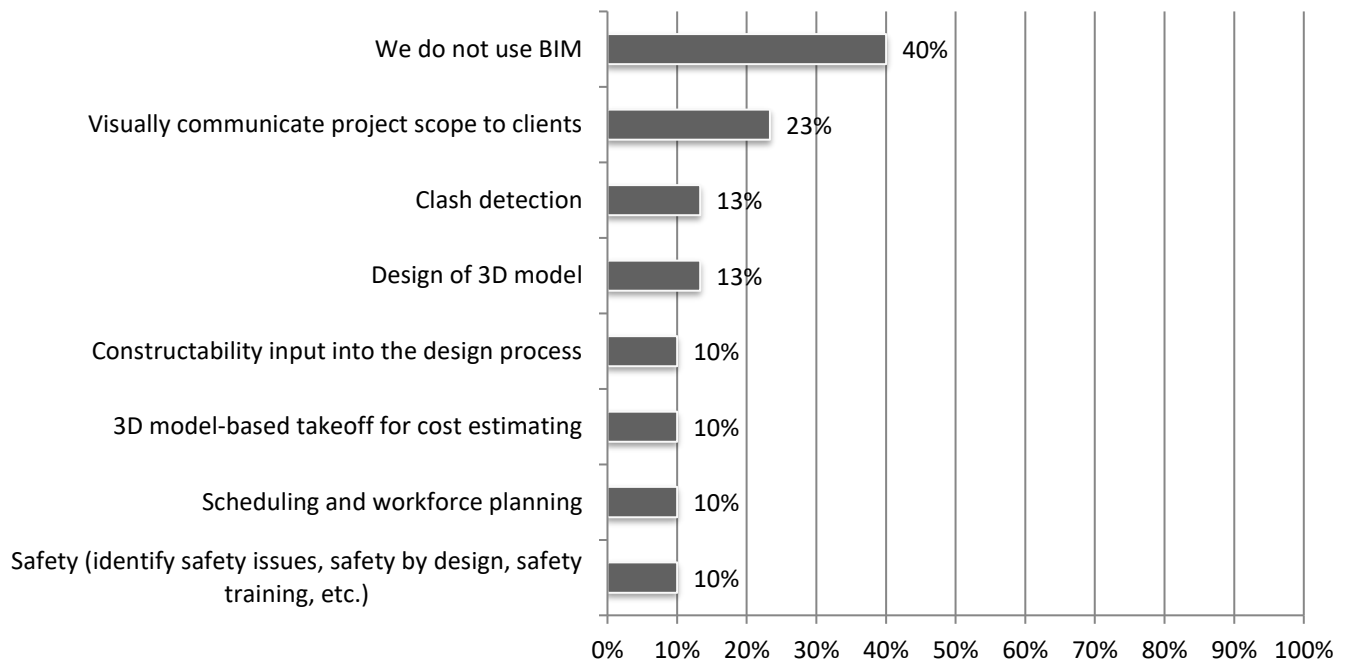
11. What challenges, if any, do you see regarding the safety and health of your firm's workers? (mark all that apply)



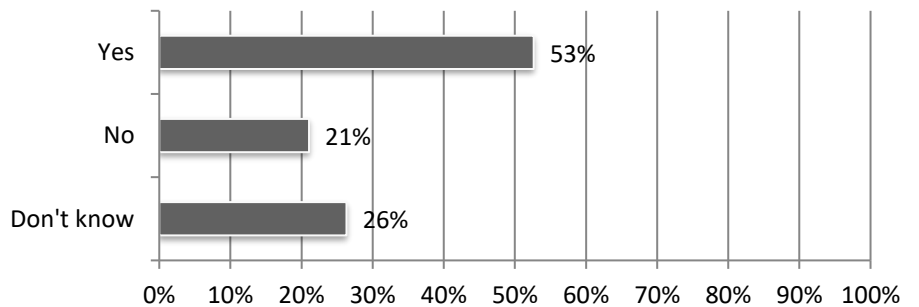
12. What change do you expect in 2019 in the number of your firm's projects that involve Building Information Modeling (BIM)?



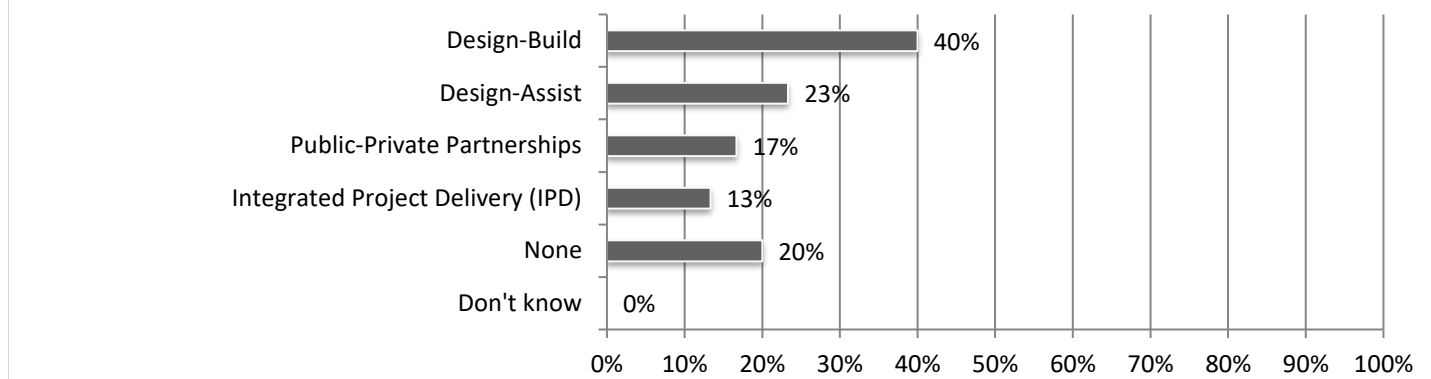
13. What is your firm using BIM for? (mark all that apply)



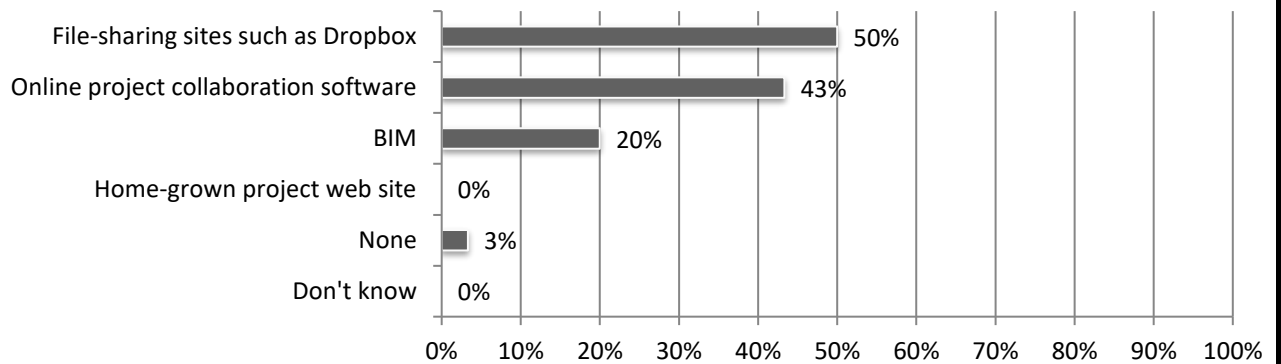
14. Does your firm utilize lean construction principles on its projects and/or in its operation?



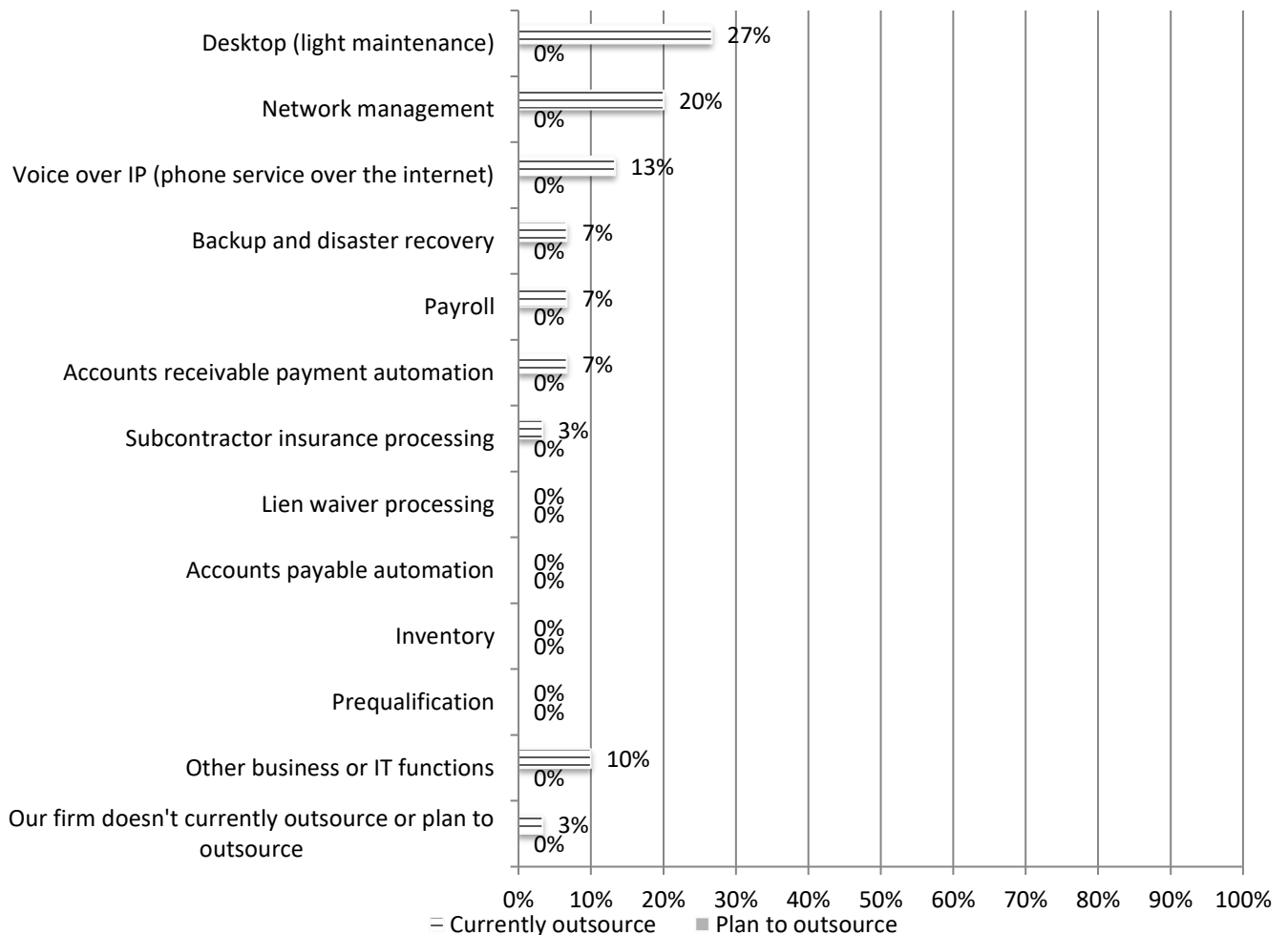
15. Does your firm use any of the following collaborative project delivery methods? (mark all that apply)



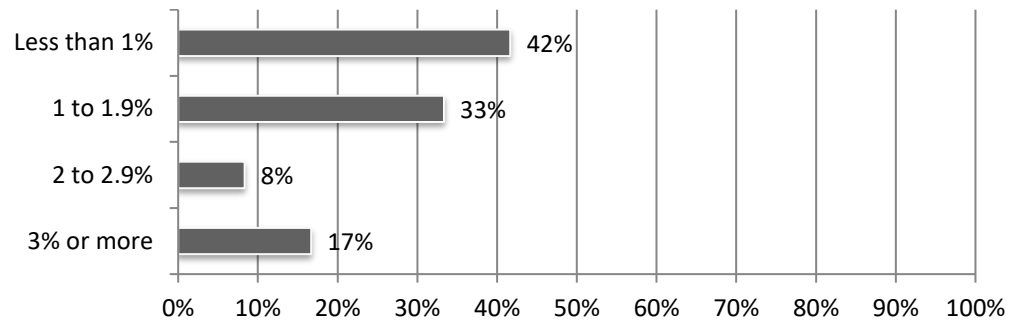
16. Does your firm use any of the following to collaborate with project partners? (mark all that apply)



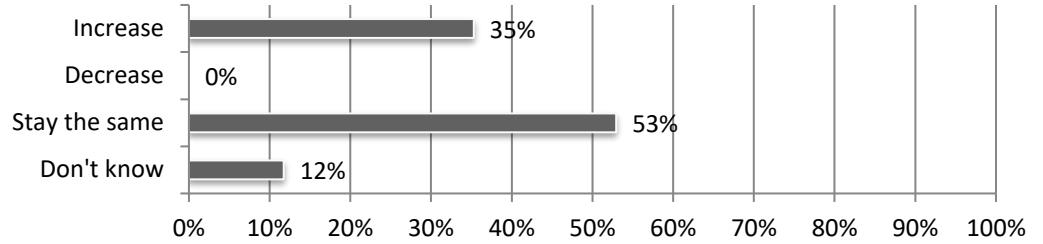
17. What business of IT functions does your firm outsource or plan to outsource to a technology provider? (mark all that apply)



18. Approximately what percent of your firm's gross annual revenue is spent on IT?



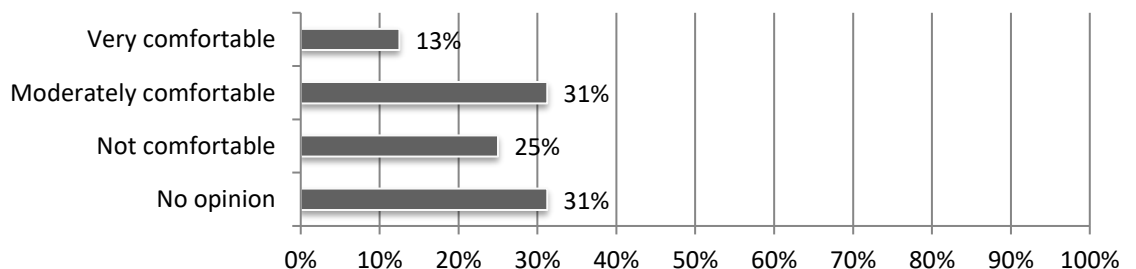
19. Compared to 2018, how will your firm's 2018 investment in IT change?



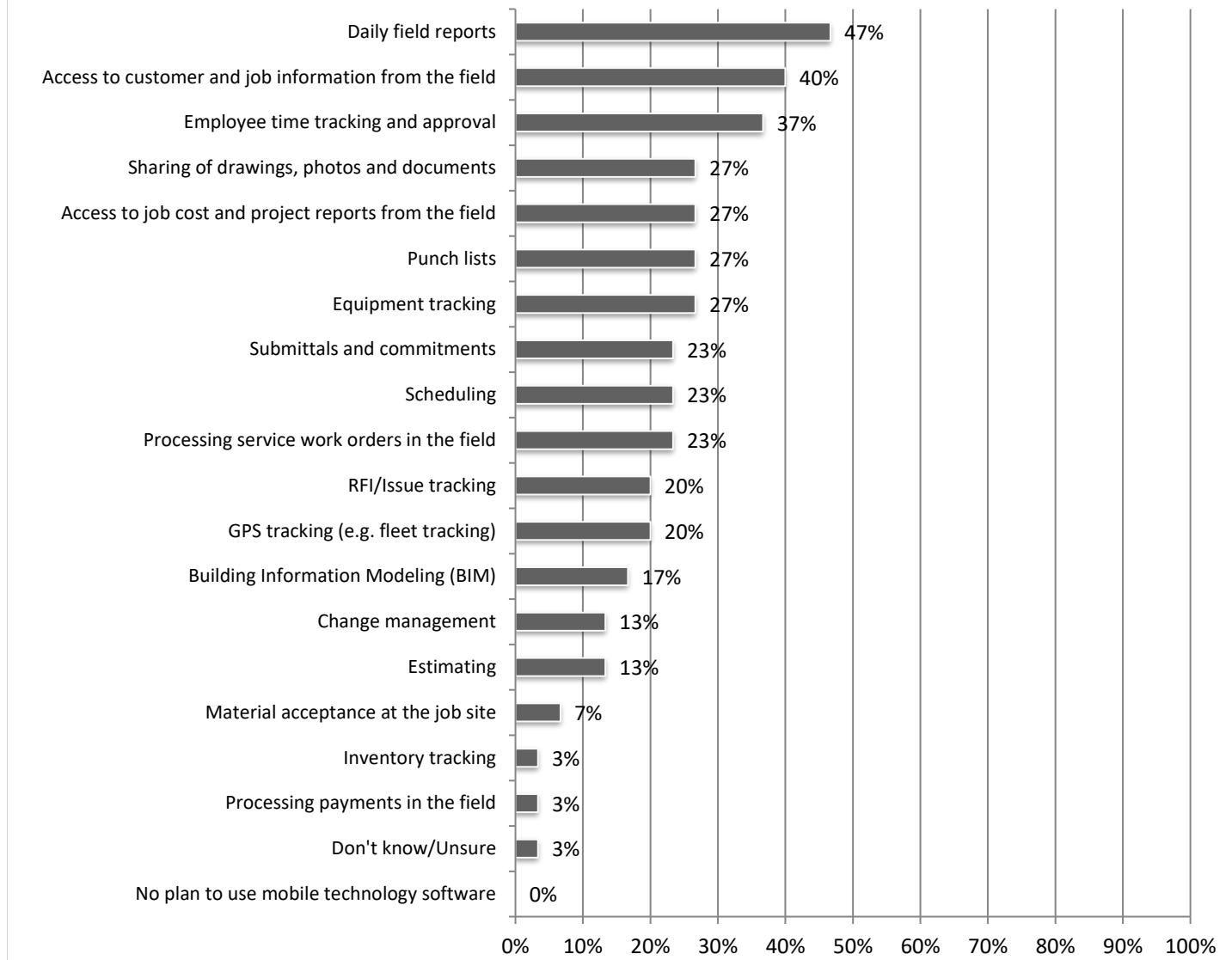
20. Compared to 2018, how will your firm's 2019 investment in the following technologies change? (mark all that apply)

Technologies	Increase	Stay the same	Decrease	Unsure
Estimating software	43%	50%	0%	7%
Project management software	36%	43%	0%	21%
Scheduling software	29%	57%	0%	14%
Fleet tracking/management software	27%	47%	0%	27%
Human resources (HR) software	27%	67%	0%	7%
Building Information Modeling (BIM)	27%	20%	0%	53%
Document management software	25%	56%	0%	19%
Project collaboration software	21%	50%	0%	29%
Client relationship management (CRM) software	19%	44%	0%	38%
Accounting software	14%	79%	0%	7%
Payroll software	8%	77%	0%	15%
Subcontractor bid management/ITB software	7%	64%	0%	29%
Service management software	0%	80%	0%	20%
Prequalification software	0%	67%	0%	33%

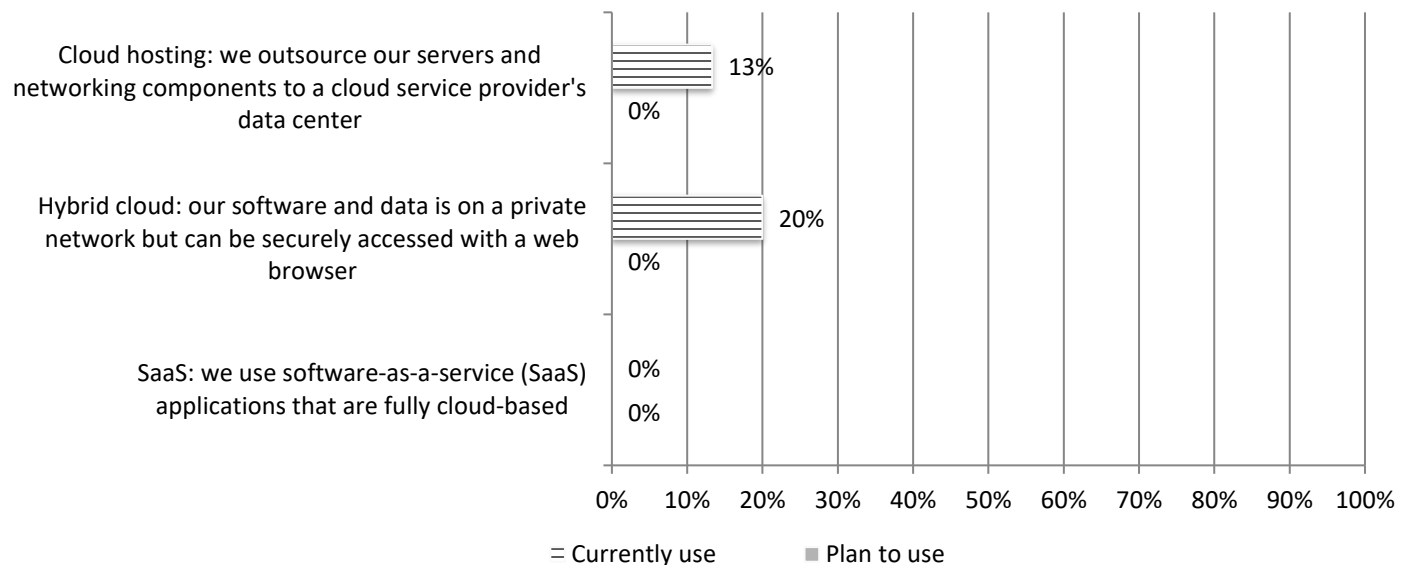
21. How comfortable is your firm with moving its data to the cloud?



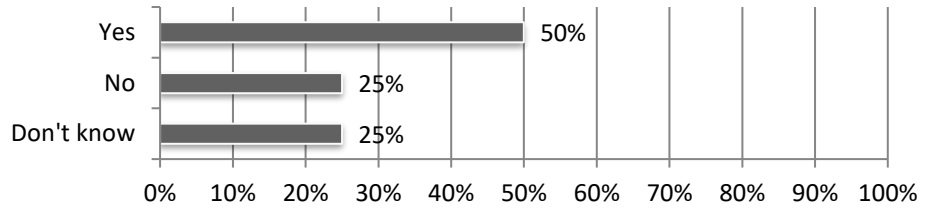
22. How does your firm plan to use mobile software technology? (mark all that apply)



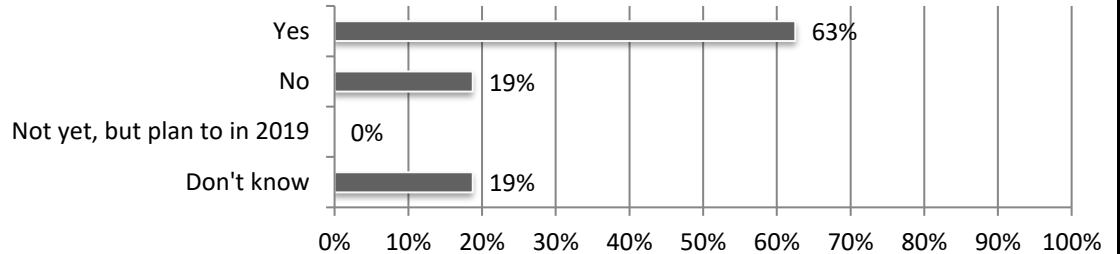
23. Which of the following cloud service models does your firm plan to use? (mark all that apply)



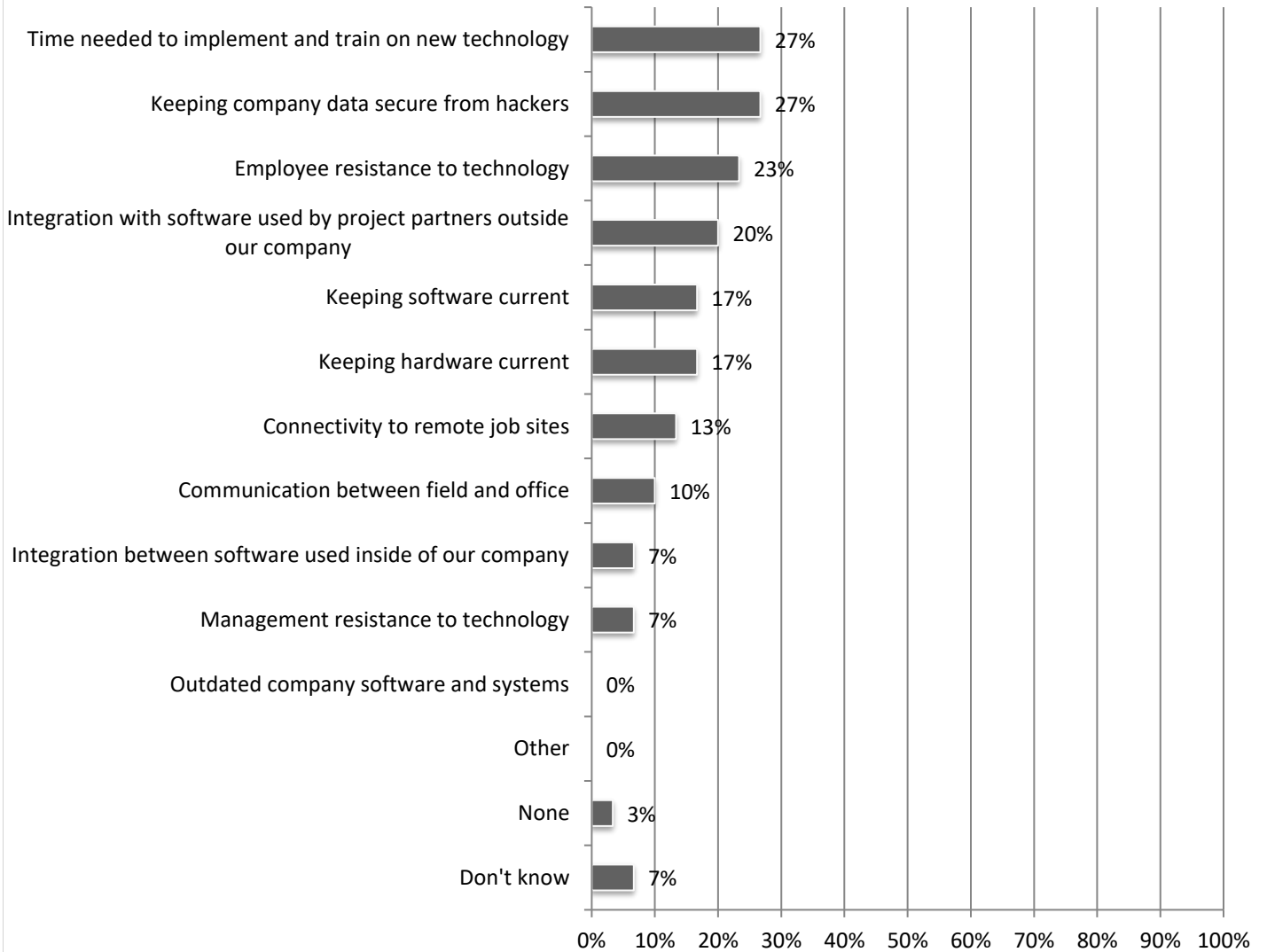
24. Does your firm currently have a mobile security plan in place?



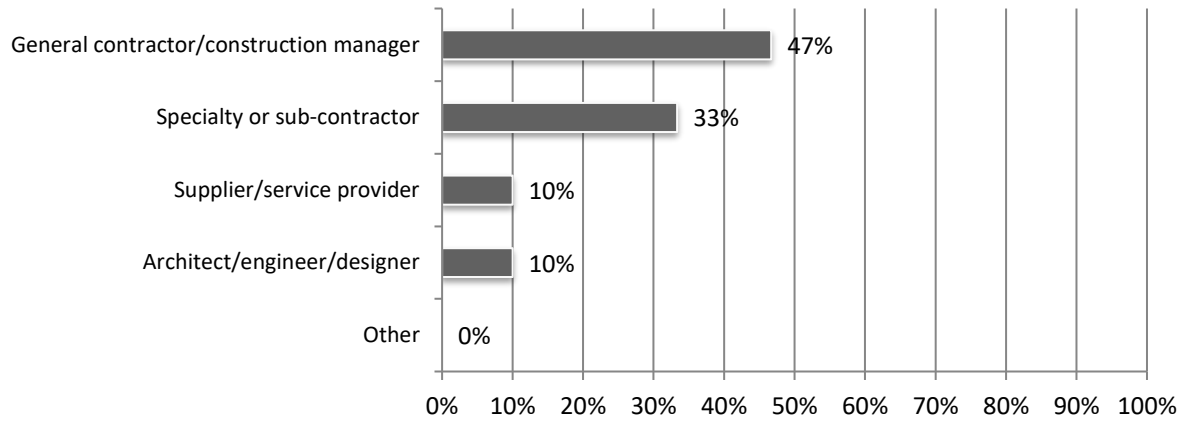
25. Does your firm currently have a formal IT plan that support your business objectives?



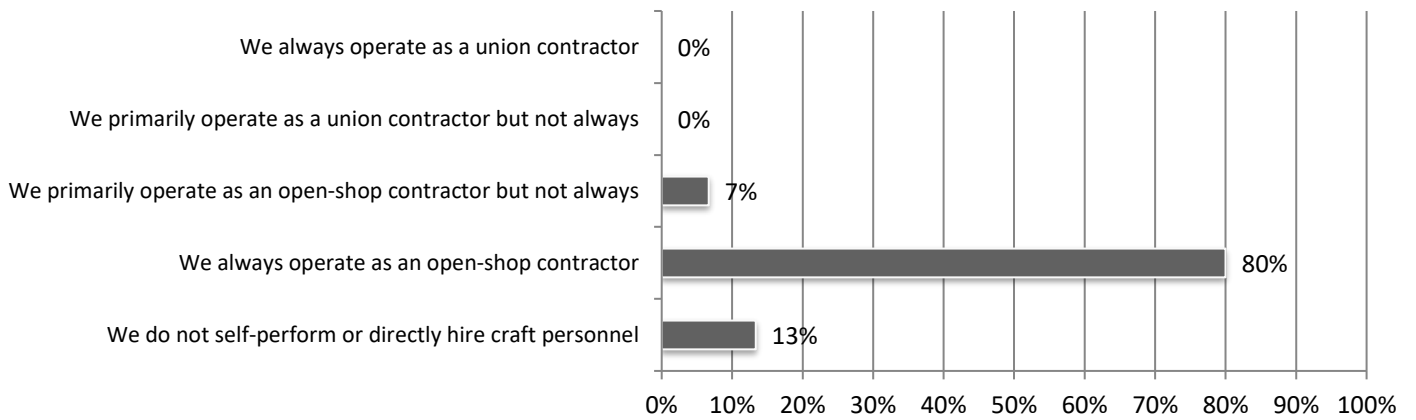
26. What are your firm's biggest IT challenges? (mark all that apply)



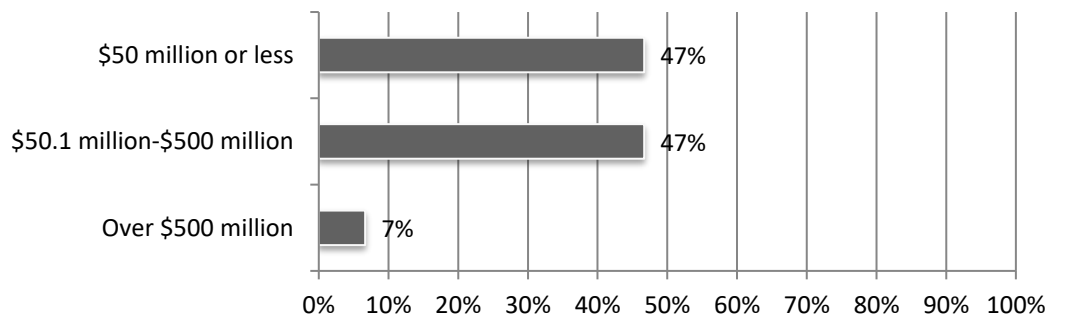
27. What best describes your firm:



28. When you self-perform construction work, do you operate as a union contractor or an open-shop contractor?



29. Estimate the total dollar amount of work your firm performed in 2018.



30. How many total employees does your firm employ at all of its locations?

