

Cost of Revenues and Gross Margin

	Years Ended December 31,		Change	
	2019	2018	\$	%
	(dollars in thousands)			
Cost of revenues	\$ 22,843	\$ 27,154	\$ (4,311)	(16) %
Gross profit	26,193	31,477	(5,284)	(17)
Gross margin	53 %	54 %		

Cost of revenues in 2019 decreased by \$4.3 million, or 16%, as compared to 2018. The decrease was primarily driven by a reduction in the number of global services and cloud infrastructure personnel, which led to a decrease of \$2.2 million in compensation and benefits expense, including stock-based compensation expense, as compared to 2018. This reduction in headcount also contributed to a decrease in allocated facilities and information technology costs of \$0.5 million in 2019. We also experienced a decrease of \$0.9 million in hosting costs in 2019, due to a decline in the usage of our hosted platform as compared to 2018. Additionally, depreciation decreased \$0.5 million in 2019, due to the nature and timing of capital expenditures and internal projects as compared to 2018.

Our gross margin decreased to 53% during 2019, as compared to 54% during 2018. This was primarily due to our revenues, net declining during the year at a slightly faster rate than the corresponding decrease in costs.

Sales and Marketing

	Years Ended December 31,		Change	
	2019	2018	\$	%
	(dollars in thousands)			
Sales and marketing	\$ 15,836	\$ 23,425	\$ (7,589)	(32) %
Percent of revenues, net	32 %	40 %		

Sales and marketing expenses in 2019 decreased by \$7.6 million, or 32%, as compared to 2018. This decrease was primarily due to a reduction in the global sales support and marketing headcount, including reductions that were part of our restructuring activities during 2019 (refer to Note 4 of the accompanying consolidated financial statements), contributing to net decreases of \$4.8 million in personnel-related costs, and \$1.0 million in allocated facilities and information technology costs as compared to 2018. Restructuring costs in 2019 decreased \$0.4 million, as there were additional restructuring activities in 2018, including a headcount reduction of approximately 13% of our workforce and the closure of certain leased facilities. The remaining decrease during 2019 was primarily the result of lower marketing costs of \$0.6 million, as we eliminated or shifted the timing of certain of our marketing activities.

Research and Development

	Years Ended December 31,		Change	
	2019	2018	\$	%
	(dollars in thousands)			
Research and development	\$ 17,845	\$ 22,450	\$ (4,605)	(21) %
Percent of revenues, net	36 %	38 %		

Research and development expenses in 2019 decreased by \$4.6 million, or 21%, as compared to 2018. The decrease was primarily due to a reduction in the number of full-time research and development personnel, resulting in a decrease of \$3.1 million in compensation expense and \$0.6 million in allocated facilities and information technology costs as compared to 2018. We did not incur restructuring costs in 2019, as compared to 2018 when \$0.1 million was incurred as part of the 2018 Restructuring Plan (refer to Note 4 of the accompanying consolidated financial statements). Finally, the decrease was further driven by lower professional fees of \$0.6 million, as we reduced the number of research and development contractors as compared to 2018.

General and Administrative

	Years Ended December 31,		Change	
	2019	2018	\$	%
	(dollars in thousands)			
General and administrative	\$ 10,446	\$ 13,113	\$ (2,667)	(20) %
Percent of revenues, net	21 %	22 %		