

of new products and increased headcount, partly resulting from the Blue Microphones Acquisition, and an increase of \$5.8 million in third-party costs.

During fiscal year 2018, research and development expenses increased \$13.2 million, compared to fiscal year 2017. The increase was primarily due to an increase in higher personnel-related costs for the development of new products and increased headcount from the ASTRO Acquisition.

### **General and Administrative**

General and administrative expenses consist primarily of personnel and related overhead and facilities costs for the finance, information systems, executives, human resources and legal functions.

During fiscal year 2019, general and administrative expenses increased \$2.4 million, compared to fiscal year 2018. The increase was primarily due to an increase of \$2.8 million in personnel-related costs and an increase of \$1.4 million in third-party costs including consulting costs, partially offset by a decrease of \$1.9 million in infrastructure costs.

During fiscal year 2018, general and administrative expenses decreased \$3.9 million, compared to fiscal year 2017. The decrease was primarily due to a decrease of \$6.8 million in third-party costs, including mainly consulting costs, partially offset by an increase of \$2.6 million in personnel-related costs.

### **Amortization of Intangibles and Acquisition-Related Costs**

Amortization of intangibles included in operating expense and acquisition-related costs during fiscal years 2019, 2018 and 2017 were as follows (in thousands):

	Years Ended March 31,		
	2019	2018	2017
Amortization of intangible assets	\$ 12,594	\$ 7,518	\$ 4,352
Acquisition-related costs	1,696	1,412	1,462
<b>Total</b>	<b>\$ 14,290</b>	<b>\$ 8,930</b>	<b>\$ 5,814</b>

Amortization of intangible assets consists of amortization of acquired intangible assets, including customer relationships and trademarks and trade names. Acquisition-related costs include legal expense, due diligence costs, and other professional costs incurred for business acquisitions.

The increase in amortization of intangible assets from fiscal year 2018 to 2019 was primarily due to the Blue Microphones Acquisition and the ASTRO Acquisition. The increase in amortization of intangible assets from fiscal year 2018 to 2017 was primarily driven by the ASTRO Acquisition.

### **Change in Fair Value of Contingent Consideration for Business Acquisition**

The change in fair value of contingent consideration for business acquisition during fiscal years 2018 and 2017 is primarily due to lower-than-expected sales of Jaybird products, and revised projected sales of Jaybird products during the remaining Jaybird Acquisition earn-out period, primarily driven by supply constraints, an evolving product portfolio and changes in the competitive target market.

In October 2017, Logitech and the sellers of Jaybird entered into an agreement fully, irrevocably and unconditionally releasing Logitech from the earn-out rights and payments in exchange for \$5.0 million in cash.