## 4) Professional Service and Other:

Professional service and other revenues consist of revenues from consulting contracts and contracts to provide implementation, training and integration services (professional services). Other revenues consist of hardware revenues, which are grouped within the "Professional service and other" category because they are relatively immaterial to our service revenues. Professional services are typically performed after the purchase of new software licenses. Professional service and other revenues can vary from period to period based on the type of engagements as well as those implementations that are assumed by our partner network.

Cost of professional service and other revenues consists primarily of the costs of providing integration, configuration and training with respect to our various software products. The most significant components of these costs are personnel-related expenses, travel costs and third party subcontracting.

(In thousands)	Year Ended June 30,											
	2019		Change increase (decrease)		2018		Change increase (decrease)		2017			
Professional Service and Other Revenues:												
Americas	\$	132,426	\$	(19,045)	\$	151,471	\$	39,872	\$	111,599		
EMEA		122,861		(8,982)		131,843		29,601		102,242		
Asia Pacific		29,649		(3,294)		32,943		11,468		21,475		
Total Professional Service and Other Revenues		284,936		(31,321)		316,257		80,941		235,316		
Cost of Professional Service and Other Revenues		224,635		(28,754)		253,389		58,435		194,954		
GAAP-based Professional Service and Other Gross Profit	\$	60,301	\$	(2,567)	\$	62,868	\$	22,506	\$	40,362		
GAAP-based Professional Service and Other Gross Margin %	21.2%				19.9%					17.2%		
% Professional Service and Other Revenues by Geography:												
Americas		46.5%				47.9%				47.4%		
EMEA		43.1%				41.7%				43.4%		
Asia Pacific		10.4%				10.4%				9.2%		

Professional service and other revenues decreased by \$31.3 million or 9.9% during the year ended June 30, 2019 as compared to the prior fiscal year; down 7.4% after factoring the impact of \$8.1 million of foreign exchange rate changes. Geographically, the overall change was attributable to a decrease in Americas of \$19.0 million, a decrease in EMEA of \$9.0 million and a decrease in Asia Pacific of \$3.3 million.

Cost of Professional service and other revenues decreased by \$28.8 million during the year ended June 30, 2019 as compared to the prior fiscal year as a result of a decrease in labour-related costs of approximately \$29.0 million resulting primarily from a reduction in the use of external labour resources, partially offset by an increase in other miscellaneous costs of \$0.2 million.

Overall, the gross margin percentage on Professional service and other revenues increased to approximately 21% from approximately 20%. This is the result of effectively executing our strategy of optimizing margins by being selective about the professional service engagements we accept.

Professional service and other revenues under proforma Topic 605 were not materially different from those under Topic 606 as discussed above.

## Amortization of Acquired Technology-based Intangible Assets

	Year Ended June 30,									
(In thousands)		2019		Change increase (decrease)		2018		Change increase decrease)		2017
Amortization of acquired technology-based intangible assets	\$	183,385	\$	(2,483)	\$	185,868	\$	55,312	\$	130,556

Amortization of acquired technology-based intangible assets decreased during the year ended June 30, 2019 by \$2.5 million, as compared to the same period in the prior fiscal year. This was due to a reduction of \$20.6 million, relating to intangible assets from certain previous acquisitions becoming fully amortized, partially offset by an increase in amortization of \$18.1 million, relating to newly acquired technology-based intangible assets from our recent acquisitions of Catalyst and