

Corporate and Other operating loss decreased \$2.0 billion, primarily due to an \$8.9 billion reduction in impairment, integration, and restructuring expenses, driven by prior year goodwill and asset impairment charges related to our phone business, offset in part by lower revenue.

Fiscal year 2015 compared with fiscal year 2014

Corporate and Other revenue increased \$613 million, primarily due to the timing of net revenue deferrals compared to the prior year. During fiscal year 2015, we recognized a net \$303 million of previously deferred revenue related to Bundled Offerings. During fiscal year 2014, we deferred a net \$349 million of revenue related to Bundled Offerings.

Corporate and Other operating loss increased \$9.3 billion, primarily due to higher impairment, integration, and restructuring expenses, offset in part by increased revenue.

OPERATING EXPENSES

Research and Development

(In millions, except percentages)	2016	2015	2014	Percentage Change 2016 Versus 2015	Percentage Change 2015 Versus 2014
Research and development	\$ 11,988	\$ 12,046	\$ 11,381	0%	6%
As a percent of revenue	14%	13%	13%	1ppt	0ppt

Research and development expenses include payroll, employee benefits, stock-based compensation expense, and other headcount-related expenses associated with product development. Research and development expenses also include third-party development and programming costs, localization costs incurred to translate software for international markets, and the amortization of purchased software code.

Fiscal year 2016 compared with fiscal year 2015

Research and development expenses decreased \$58 million, primarily due to a reduction in phone expenses, driven by the change in strategy for the phone business, offset in part by increased strategic investments and acquisitions to drive cloud innovation.

Fiscal year 2015 compared with fiscal year 2014

Research and development expenses increased \$665 million or 6%, mainly due to increased investment in new products and services, including \$739 million higher phone expenses, offset in part by reduced headcount-related expenses.

Sales and Marketing

(In millions, except percentages)	2016	2015	2014	Percentage Change 2016 Versus 2015	Percentage Change 2015 Versus 2014
Sales and marketing	\$ 14,697	\$ 15,713	\$ 15,811	(6)%	(1)%
As a percent of revenue	17%	17%	18%	0ppt	(1)ppt

Sales and marketing expenses include payroll, employee benefits, stock-based compensation expense, and other headcount-related expenses associated with sales and marketing personnel and the costs of advertising, promotions, trade shows, seminars, and other programs.