

stock-based compensation expense due to the modification of certain equity awards and new grants. Additionally, 2014 was impacted by a \$3.9 million benefit related to the expiration of the statute of limitations for a non-income tax matter.

Non-dating general and administrative expense increased \$26.5 million, or 185.0%, driven by the acquisition of The Princeton Review.

Product development expense

	Nine months ended September 30,			%
	2014	2015	change	
	(dollars in thousands)			
Product development expense	\$ 36,614	\$ 50,740		38.6%
Percentage of revenue	5.6%	6.7%		

Product development expense increased \$14.1 million, or 38.6%, in 2015 versus 2014, driven primarily by \$4.0 million in severance expense and costs in the current year related to our ongoing consolidation and streamlining of technology systems and European operations at Dating, increased salaries and wages at existing businesses at Dating, and \$3.2 million related to acquisitions.

Depreciation

	Nine months ended September 30,			%
	2014	2015	change	
	(dollars in thousands)			
Depreciation	\$ 17,122	\$ 19,804		15.7%
Percentage of revenue	2.6%	2.6%		

Depreciation increased \$2.7 million, or 15.7%, in 2015 versus 2014, driven by the acquisition of The Princeton Review, partially offset by a decline in depreciation of Dating.

Adjusted EBITDA

Adjusted EBITDA is a non-GAAP measure and is defined in "—Principles of financial reporting." Refer to Note 5 to our combined interim financial statements for reconciliations of Adjusted EBITDA to operating income and net earnings attributable to Match Group, Inc.'s shareholder.

	Nine months ended September 30,			%
	2014	2015	change	
	(dollars in thousands)			
Adjusted EBITDA	\$ 188,021	\$ 179,355		(4.6)%
Percentage of revenue	29.0%	23.8%		

Adjusted EBITDA decreased \$8.7 million, or 4.6%, in 2015 versus 2014.

Dating Adjusted EBITDA decreased \$13.5 million, or 6.8%, despite higher revenue, primarily due to \$14.8 million of costs in the current year across our expense categories related to our ongoing consolidation and streamlining of technology systems and European operations, an increase in cost of revenue and a \$3.9 million benefit in the prior year related to the expiration of the statute of limitations for a non-income tax matter.

Non-dating Adjusted EBITDA loss declined \$4.8 million, or 45.8%, primarily due to reduced losses from The Princeton Review.

Table of Contents

Operating income

	Nine months ended September 30,			%
	2014	2015	change	
	(dollars in thousands)			
Operating income	\$ 161,029	\$ 125,918		(21.8)%
Percentage of revenue	24.8%	16.7%		

Operating income decreased \$35.1 million, or 21.8%, in 2015 versus 2014.

Dating operating income decreased \$32.6 million, or 18.6%, primarily due to the decrease of \$13.5 million in Adjusted EBITDA described above and increases of \$14.6 million in stock-based compensation expense. The increase in stock-based compensation expense is due to the modification of certain equity