Because learning changes everything.®

McGraw-Hill Education

Q2-2018 Investor Update

August 10, 2018

Final

Important Notice

Forward-Looking Statements

This presentation includes statements that are, or may be deemed to be, “forward-looking statements.” These forward-looking statements can be identified by the use of forward-looking terminology, including the terms “believes,” “estimates,” “anticipates,” “expects,” “intends,” “plans,” “may,” “will” or “should” or, in each case, their negative or other variations or comparable terminology. These forward-looking statements include all matters that are not historical facts. They appear in a number of places throughout this presentation and include statements regarding our intentions, beliefs or current expectations concerning, among other things, our results of operations, financial condition, liquidity, prospects, growth, strategies and the industry in which we operate.

By their nature, forward-looking statements involve risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future. We caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate, may differ materially from those made in or suggested by the forward-looking statements contained in this presentation. In addition, even if our results of operations, financial condition and liquidity, and the development of the industry in which we operate are consistent with the forward-looking statements contained in this presentation, those results of operations, financial condition and liquidity or developments may not be indicative of results or developments in subsequent periods.

Any forward-looking statements we make in this presentation speak only as of the date of such statement, and we undertake no obligation to update such statements. Comparisons of results for current and any prior periods are not intended to express any future trends or indications of future performance, unless expressed as such, and should only be viewed as historical data.

Non-GAAP Financial Measures

Certain financial information included herein, including Billings, EBITDA and Adjusted EBITDA, are not presentations made in accordance with U.S. GAAP, and use of such terms varies from others in our industry. Billings, EBITDA and Adjusted EBITDA should not be considered as alternatives to revenue, net income from continuing operations, operating cash flows or any other performance measures derived in accordance with U.S. GAAP as measures of operating performance, debt covenant compliance or cash flows as measures of liquidity. Billings, EBITDA and Adjusted EBITDA have important limitations as analytical tools, and you should not consider them in isolation or as substitutes for analysis of our results as reported under U.S. GAAP. This presentation includes a reconciliation of certain non-GAAP financial measures to the most directly comparable financial measures calculated in accordance with U.S. GAAP.

Adjusted EBITDA, which is defined in accordance with our debt agreements, is provided herein on a segment basis and on a consolidated basis. Adjusted EBITDA by segment, as determined in accordance with Accounting Standards Codification Topic 280, Segment Reporting, is a measure used by Management to assess the performance of our segments. Adjusted EBITDA on a consolidated basis is presented as a debt covenant compliance measure. Management believes that the presentation of Adjusted EBITDA is appropriate to provide additional information to investors about certain material non-cash items and about unusual items that we do not expect to continue at the same level in the future as well as other items to assess our debt covenant compliance, ability to service our indebtedness and make capital allocation decisions in accordance with our debt agreements.

Business Review

McGraw-Hill Education First Half 2018 Results

Higher Ed H1 net sales growth more than offset by the anticipated cyclical winding down of the three year California K-12 ELA adoption, weaker than expected Open Territory market and unfavorable timing related to State sales mix

- Continued digital growth and lower product returns drove the Y/Y increase in Higher Ed net sales
- New rental program being made available to students across all of our major distributors including Barnes & Noble Education, MBS, Follett, Chegg, indiCo and Amazon
- CA English Language Arts (ELA) market cyclically declining by 80%+ in 2018 as anticipated
  - MHE is performing well YTD July 31st in each of the three largest opportunities: CA K-12 ELA, CA K-12 Social Studies and FL K-12 Science
- K-12 new adoption market expected to double in 2019
  - Early state feedback on MHE submissions in CA and TX is very favorable
- MHE used over $100M of cash to prepay and refinance 2019 Holdco debt
  - No material debt maturities until 2022
  - Seasonal revolver borrowing expected to be repaid in Q3

McGraw-Hill Education, Inc.

Total MHE Performance	YTD 6/30/18	Y/Y%
MHE Billings	$574M	*-18.4%*
MHE Digital Billings	276M	*-6.9%*
% Digital Billings	48%	*42% in YTD-17*
EBITDA Before Pre-Pub. Investment	-$36M	*n/m*
Pre-Publication Investment	46M	*-5.9%*
Adjusted EBITDA	-82M	*n/m*
Key Indicators		
***Connect/LearnSmart* Paid Activations**	1.9M	*+8.6%*
Cumulative Interactions	10.5B	
***ALEKS* Unique Users**	2.2M	*+8.1%*
Cumulative Interactions	7.7B	
Inclusive Access Net Sales	$18M	*+96.9%*
MHE Inc. Liquidity at 6/30/18		
Cash	$86M	
Credit Line Capacity	276M	
Total Liquidity	$362M	

Higher Education First Half 2018 Results

Stable performance in Higher Ed ahead of new rental program launch

- Net sales grew mid-single-digits in H1 with Billings flat vs. PY excluding rental impact
  - Front-list and back-list performed well
  - Returns continued to decline
  - Digital Billings would have grown 12% in the YTD period excluding a non-recurring prior period sale
  - Drivers of digital growth: Inclusive Access +97% Y/Y and direct-to-student e-commerce +6% Y/Y
  - Rental 'divot' forms as 2019© are consigned vs. sold
- Rental program launched through a number of partnerships
  - Consigned inventory has already begun to ship
  - Timing of Billings will shift in rental model (next page)
  - Continue to expect a rental 'divot' of 1-2% of total MHE Billings and ~5% of total MHE Adjusted EBITDA in 2018
- Continued to gain market share on both a YTD and LTM basis
  - No material financial impact YTD as a result of competitor go-to-market strategy

MHE Higher Education

Higher Ed Performance	YTD 6/30/18	Y/Y%
Billings (net of accrued returns)[1]	$222M	*-2.5%*
Net Sales (net of actual returns)[2]	$198M	*+4.5%*
Front-List Sales (net of actual returns)	52M	*+8.0%*
Back-List Sales (net of actual returns)	146M	*+3.3%*
Digital Billings	$169M	*+7.4%*
% Digital Billings	76%	*69% in YTD-17*
Direct-to-Student e-commerce Sales	$104M	*+5.7%*
Inclusive Access Net Sales	18M	*+96.9%*
Actual Product Returns Change	-16M	*-15.2%*
EBITDA Before Pre-Pub. Investment	$18M	*-9.6%*
Adjusted EBITDA	0.5M	*n/m*
MHE vs. Industry Performance per MPI[2,3]		
MHE Market Share Change (LTM 6/30/18)		*+~75 bps*
Industry Net Sales (net of actual returns) YTD 6/30/18		*-1.5%*
Key Indicators		
***Connect/LearnSmart* Paid Activations**	1.9M	*+8.6%*
Assignments Submitted	56M	*+8.4%*
***ALEKS* Unique Users**	1.0M	*+10.3%*

[1]Billings is gross sales net of accrued returns and is the measure of company performance; Billings metric lags net sales as a result of the timing of the returns accrual.
[2]Net sales is gross sales net of actual returns not adjusted for the impact of accruals and reversals and is the industry market share measure.
[3]Per Management Practice, Inc.

Timing of Higher Ed Billings Continues to Shift Significantly

Business transitioning to digital and print rental

	Q1	Q2	Q3	Q4
Billings	• Direct-to-student e-commerce continues to grow • Print rental revenue will move from Q4 to Q1	• Print sales previously booked in late June are transitioning to digital (inclusive access and e-commerce) and print rental in Q3 and Q4	• Q3 and early Q4 become more significant as a result of e-commerce (August/ September); rental revenue and inclusive access booked in arrears at the very end of Q3 and early Q4	• Early Q4 becomes more important from rental revenue and inclusive access • Late December print sales shift to Q1 rental and digital revenue
Actual Returns	• No changes in timing of returns but quantity of actual returns should decline over time as business transitions to digital and print rental • March/April and October/November remain largest actual returns seasons			
Accounts Receivable and Inventory	• Limited impact on working capital anticipated except perhaps timing • Inventory conversion to a sale/accounts receivable will shift from in advance of consumer transaction (bookstore stocking) to in arrears (after consumer rental) • At year-end, anticipate lower accounts receivable balance as sales transition to Q1 • Inventory levels may be marginally higher as a result of consigned inventory, particularly in launch years			

K-12 First Half 2018 Results

H1 impacted by expected significantly smaller CA ELA market in 2018, delayed purchasing in first year of CA K-5 Social Studies adoption and weaker than expected Open Territory market

- Third and final year of CA ELA market declined $320-340M, as anticipated, accounting for $80M of $109M Y/Y decline in H1 MHE Billings despite continued strong market share
- 2018 Billings decline concentrated in Q2
  - CA K-12 Social Studies market smaller than anticipated in first of three years; MHE is a market leader – purchasing mainly in Q3, but some K-5 purchasing decisions postponed
  - FL K-12 Science market size is in line with expectations, MHE is a market leader – also purchasing mainly in Q3
  - Anticipate Open Territory full-year market to perform at low end of the -3% to +3% long-range guidance as districts await new programs to be sold in the larger 2019 and 2020 adoptions - purchases typically concentrated in Q3
- Estimating K-12 Billings in FY 2018 to be -10 to -15% Y/Y, largely driven by anticipated 80%+ CA ELA market decline
- 2019 and 2020 K-12 new adoption market expected to be double the size of 2018
  - Early state feedback on MHE submissions in CA and TX is very favorable
- New partnership with Sesame Street Workshop integrates award winning content and brand into MHE's literacy content
  - Launched for 2019 TX ELA adoption

MHE K-12

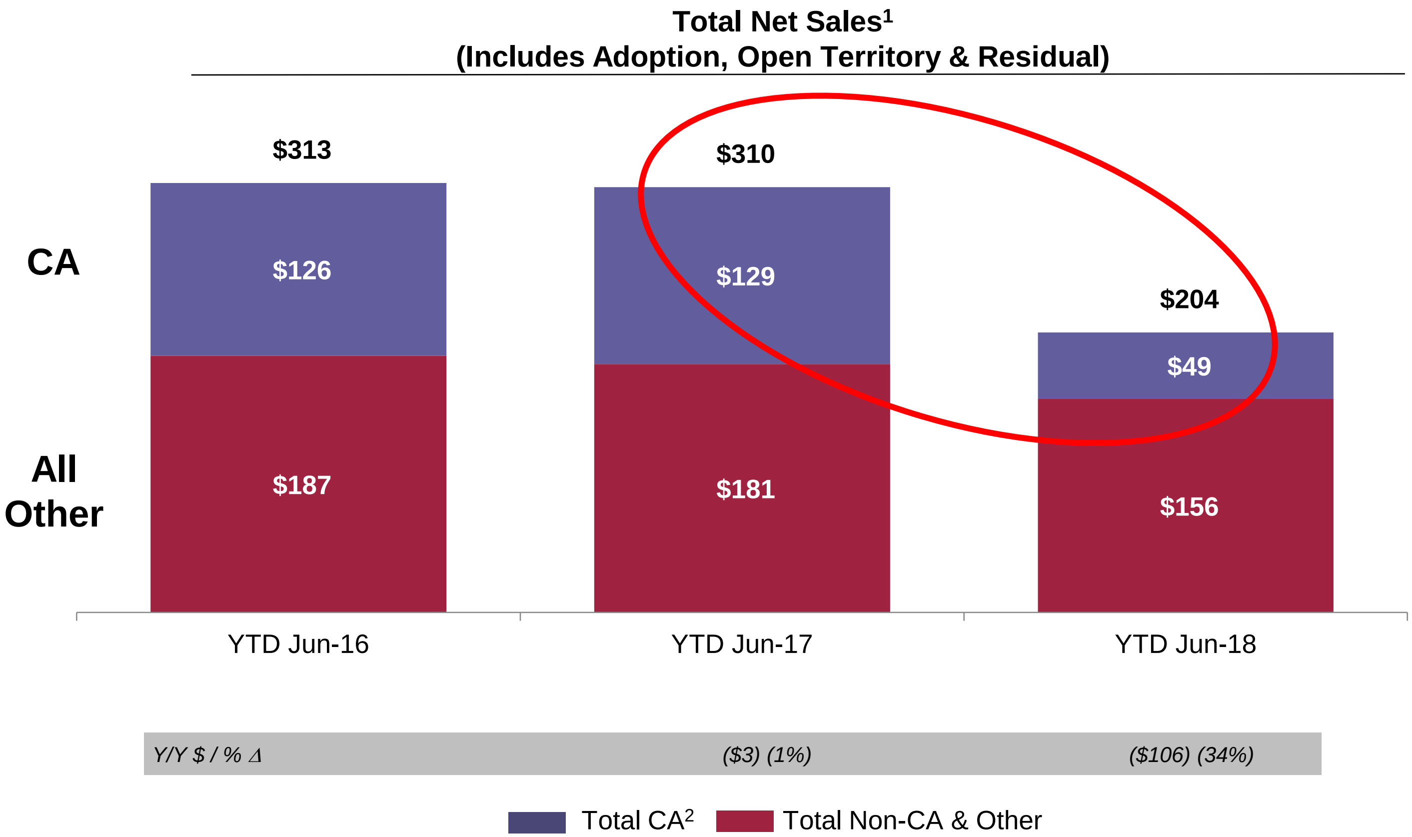
K-12 Performance	YTD 6/30/18	Y/Y%
Billings (net of accrued returns)	$211M	*-34.1%*
Digital Billings	67M	*-31.2%*
% Digital Billings	32%	*30% in YTD-17*
MHE Total Adoption Billings	$109M	*-43.4%*
MHE Open Territory/Other Billings	102M	*-19.7%*
EBITDA Before Pre-Pub. Investment	-$42M	*n/m*
Adjusted EBITDA	-64M	*n/m*
New Adoption Market Size[1]		
2017 New Adoption Market	~$700M	
CA Market (ELA)	~$400M	
2018 New Adoption Market	$420-520M	*-26 to -40%*
CA Market (ELA & SS)	$110-145M	*-64 to -72%*
2019 New Adoption Market	$900-1,100M	*~+100%*
2020 New Adoption Market	$900-1,000M	*~ Flat*
Key Indicators		
***ConnectED* Unique Users**	4.8M	*+19.7%*
***ALEKS* Unique Users**	1.2M	*+6.3%*

[1]*MHE estimate without adjustment for participation or share.*
ELA = English Language Arts

K-12 First Half 2018 Results

Driven largely by 80%+ anticipated cyclical market decline in CA ELA

($ in Millions)



H1 2018 decline largely driven by the anticipated, smaller CA ELA market in which MHE had captured outsized market share in 2016 and 2017

[1] MHE K-12 total net sales excludes the impact of shipping, handling and accounting adjustments which is included in Billings. Totals may not sum due to rounding.
[2] Total CA net sales includes both K-8 and 9-12.

K-12 New Adoption Market Update

Significant opportunity in 2019-2020; 2018 CA ELA market drops by 80%+ vs. 2017

	2017	2018E	2019E	2020E
California K-8 *CA 9-12 classified within Open Territory*	**Reading (yr 2)** **~$400M**	**Reading (yr 3)** **~$60-80M**		
	+30% vs. 2016	***-80 to -85% vs. 2017 for K-8 ELA***		
		Social Studies (yr 1) **NEW: ~$50-65M** **Previous: ~$60-80M**	**Social Studies (yr 2)** **NEW: ~$70-100M** **Previous: ~$85-115M** **Science (yr 1)** **~$100-125M**	**Social Studies (yr 3)** **Science (yr 2)**
	+30% vs. 2016	***-64 to -72% vs. 2017 for Total CA***		
Florida	**Social Studies** **>$100M**	**Science** **~$125-150M**	**Math** **~$150-200M**	**Reading**
Texas			**Reading (K-8)** **~$300-350M**	**Reading (9-12)**
Big-3 State New Adoption Estimated Total Market	**>$500M**	**NEW: ~$235-295M** **Previous: ~$245-310M**	**NEW: ~$625-765M** **Previous: ~$635-790M**	
Total New Adoption Estimate	**~$700M** **(vs. anticipated range of ~$600-650M)**	**NEW: ~$420-520M** **Previous: ~$500-600M** ***-26 to -40%***	**~$900-1,100M** ***~+100%***	**~$900-1,000M**

Open Territory (new and residual) total market estimated to fluctuate -3% to +3% per annum over the next several years. **For 2018, we now expect the market to be at the low end of the range** as large New Adoptions historically stimulate Open Territory growth.

Source: MHE estimate of total market without adjustment for participation or market share. Adoption market data above is new adoption only and does not include off-list / residual sales that fluctuate but can be as large as new adoption sales in a given year. Market size ranges driven by several factors including 1) applicable enrollment, 2) potential use of core instructional funds for off-list purchases (e.g. supplemental), and 3) other factors that may influence or defer purchase decisions.

International and Professional First Half 2018 Results

Repositioning the businesses for growth in 2019 and beyond

International

- New president of international business named and new regional managing directors put in place in H1
- Refocusing the business toward regional decision making closer to the customer, increasing front-list publishing to maximize print sales and increasing digital penetration
- YTD Billings declined vs. prior year on a constant FX basis primarily due to weaker print Billings
  - Billings declined 9% excluding the Canadian K-12 business which was sold in May 2017
  - Billings adversely impacted by stronger controls on sales to distributors to prevent international student editions from returning to the U.S. to be sold in the secondary market

Professional

- YTD Billings declined vs. prior year but subscription renewal rate remained strong at 93%
  - Digital Billings affected by a large number of multi-year renewals (paid upfront) in 2017
- Focused on maximizing global sales of the new edition of *Harrison's Principals of Internal Medicine*, along with growth in *Access* platform sales

MHE International

International Performance	YTD 6/30/18	Y/Y%
Billings (as reported)	$94M	*-11.0%*
Billings (on constant FX)	$92M	*-12.9%*
Digital Billings	14M	*-6.1%*
% Digital Billings	15%	*14% in YTD-17*
EBITDA Before Pre-Pub. Investment	-$18M	*n/m*
Adjusted EBITDA	-22M	*-40.1%*
Key Indicators		
***Connect/LearnSmart* Paid Activations**	>205K	
***ALEKS* Unique Users**	>89K	

MHE Professional

Professional Performance	YTD 6/30/18	Y/Y%
Billings	$47M	*-6.7%*
Digital Billings	25M	*-4.6%*
% Digital Billings	54%	*53% in YTD-17*
EBITDA Before Pre-Pub. Investment	$9M	*-26.1%*
Adjusted EBITDA	5M	*-41.0%*
Key Indicators		
***Access* Platform Renewal Rate[1]**	93%	

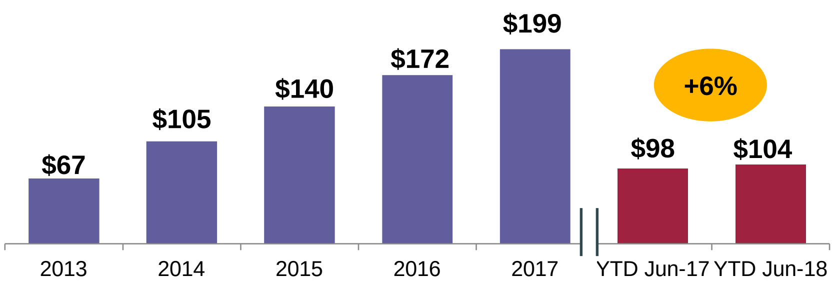
[1]As of December 2017 and updated on an annual basis.

Digital Ed Tech Highlights

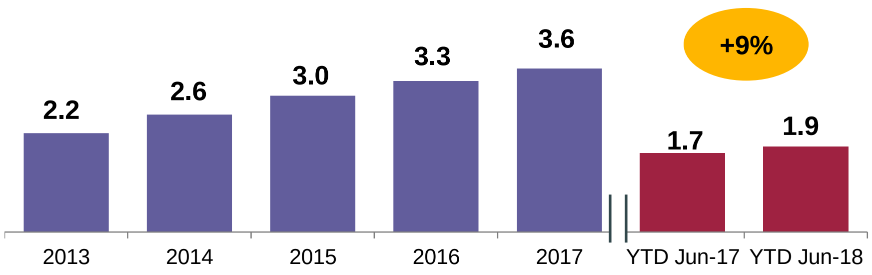
Strong digital growth continued across MHE

All numbers are in millions

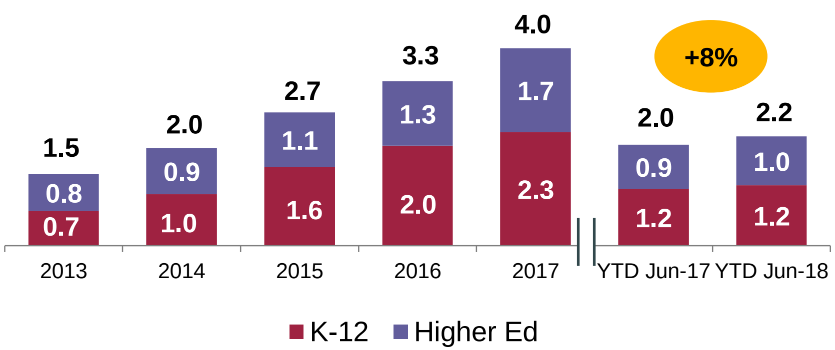
E-COMMERCE NET SALES



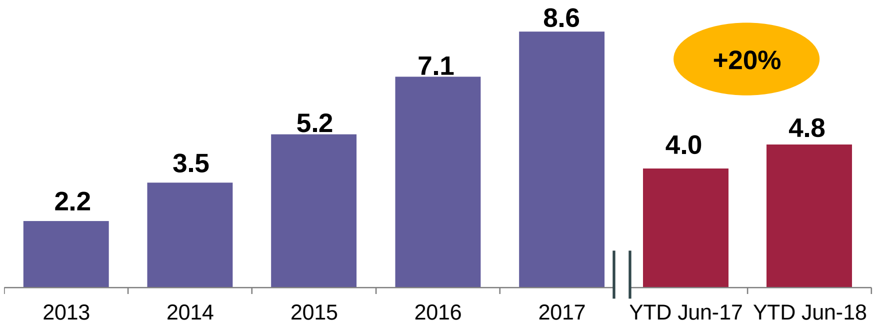
CONNECT/LEARNSMART PAID ACTIVATIONS[1] (US HIGHER ED)



ALEKS Unique Users[2] (Global Higher Ed, K-12)



ConnectED Unique Users (K-12)



[1]*Connect/LearnSmart paid activations exclude >205K of international paid activations.*
[2]*ALEKS Unique Users include >89K international unique users.*

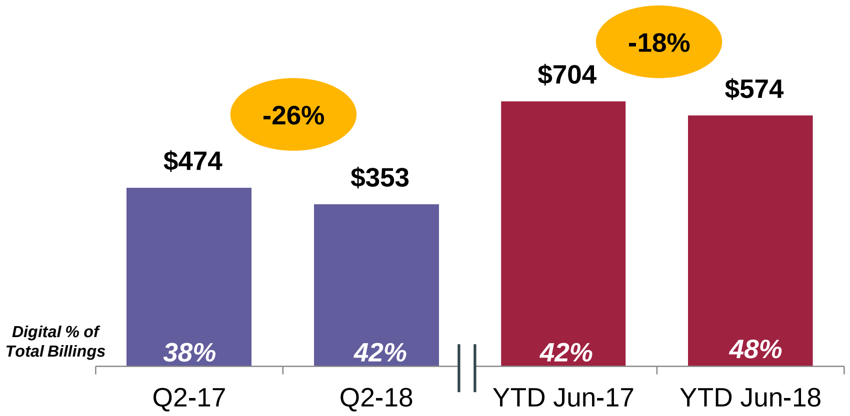
Financial Review

MHE Financial Review

Billings impacted by K-12 market opportunity; Higher Ed concentrated in H2

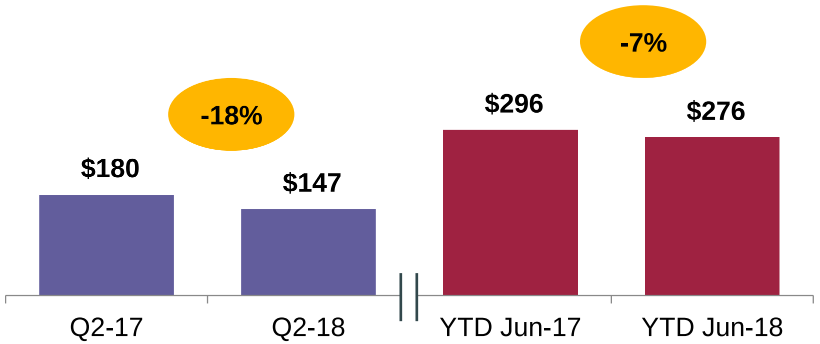
($ in Millions)

TOTAL BILLINGS



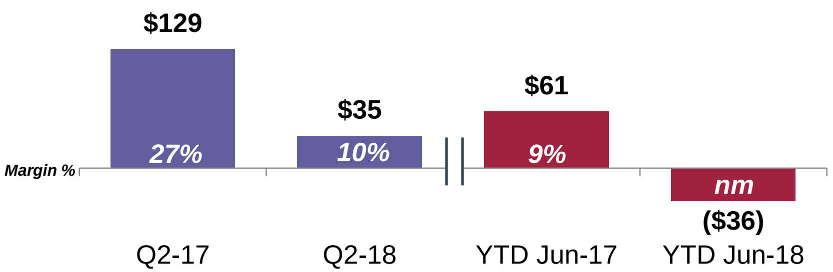
Constant FX	*-26%*	*$353*	*-19%*	*$572*

DIGITAL BILLINGS



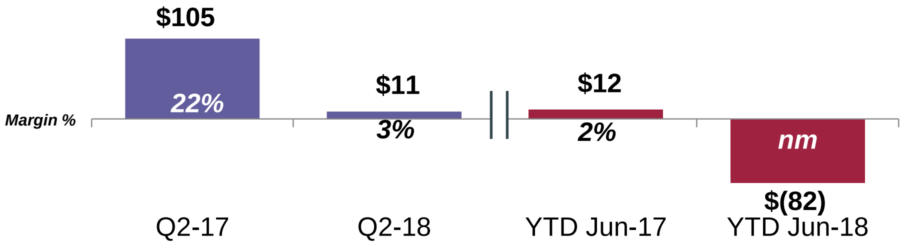
EBITDA BEFORE PRE-PUBLICATION INVESTMENT

% Y/Y change not meaningful



ADJUSTED EBITDA

% Y/Y change not meaningful



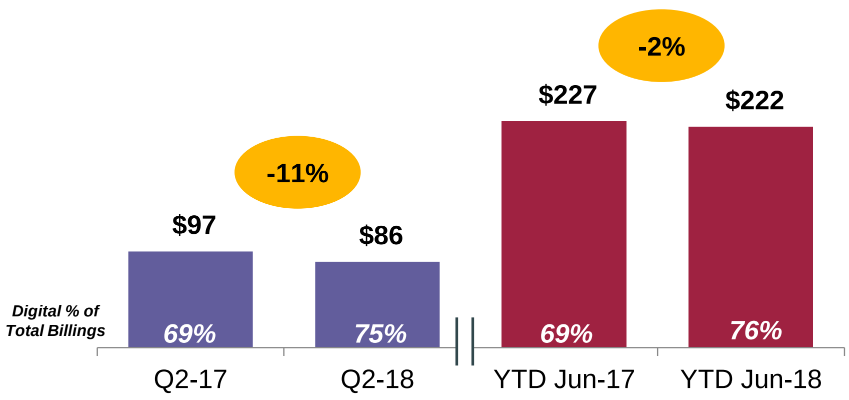
Constant FX	*nm*	*$13*	*nm*	*($80)*

Higher Education Financial Review

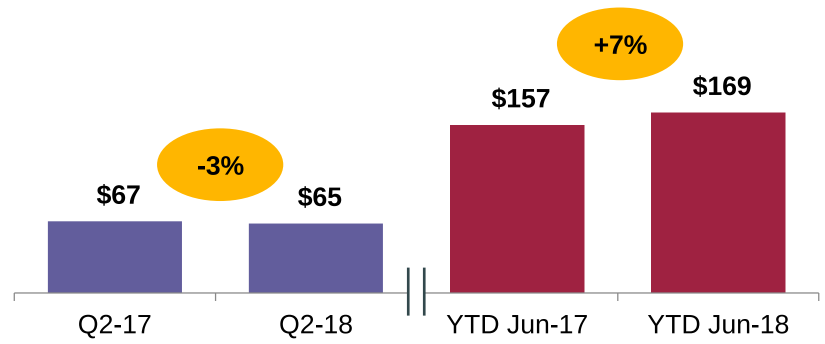
Digital Billings +12% YTD excluding non-recurring sale in prior period

($ in Millions)

TOTAL BILLINGS

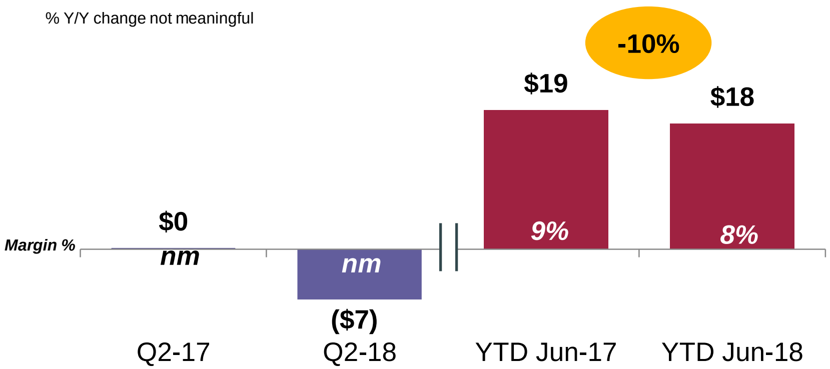


DIGITAL BILLINGS



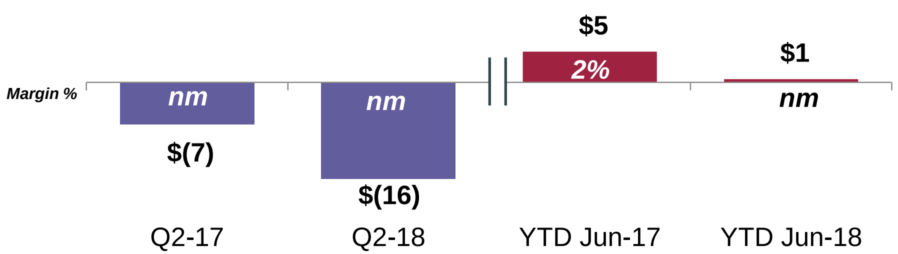
EBITDA BEFORE PRE-PUBLICATION INVESTMENT

% Y/Y change not meaningful



ADJUSTED EBITDA

% Y/Y change not meaningful

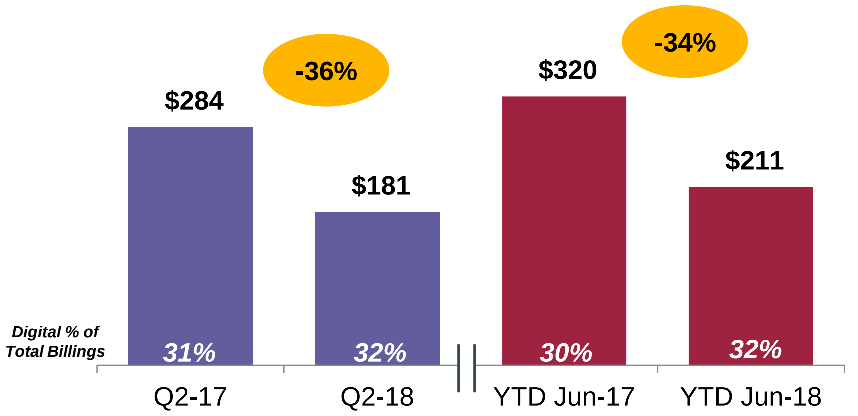


K-12 Financial Review

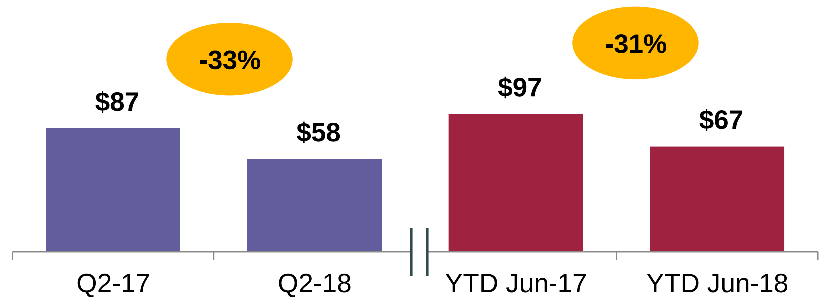
Performance impacted by anticipated decline in CA ELA market and sales timing

($ in Millions)

TOTAL BILLINGS

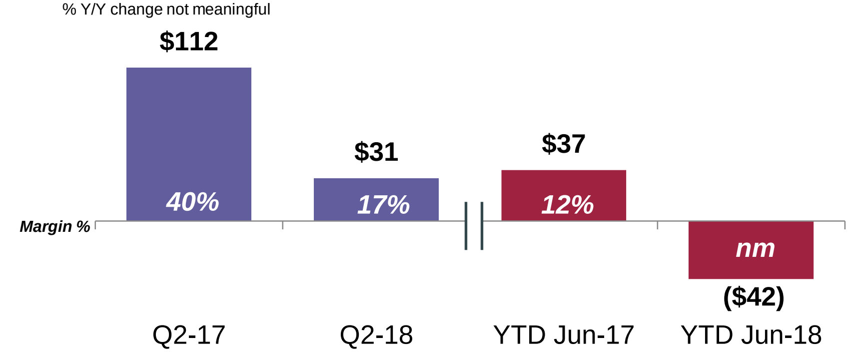


DIGITAL BILLINGS



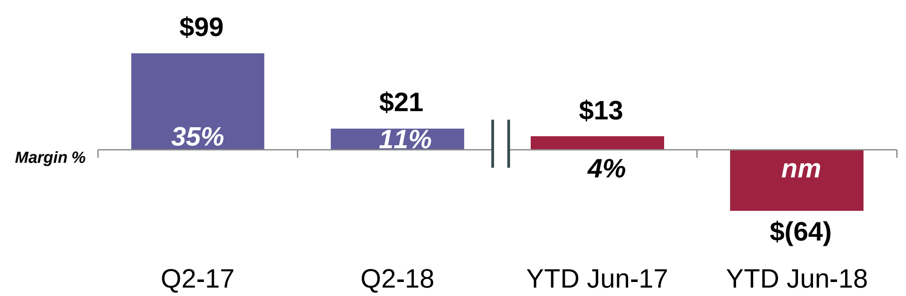
EBITDA BEFORE PRE-PUBLICATION INVESTMENT

% Y/Y change not meaningful



ADJUSTED EBITDA

% Y/Y change not meaningful

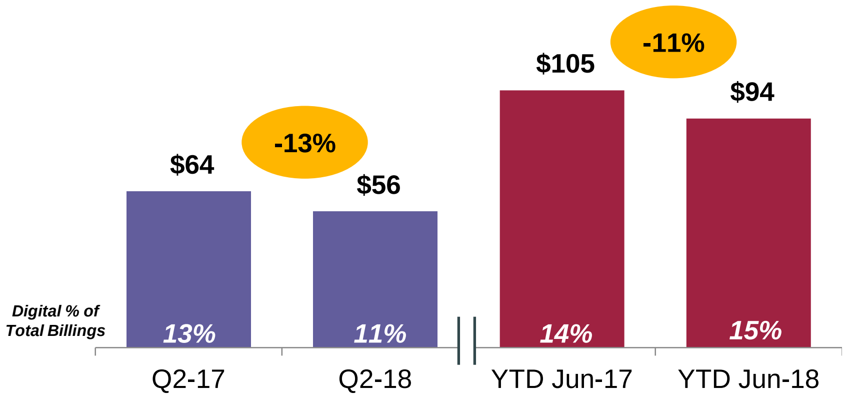


International Financial Review

Repositioning the business for growth opportunities

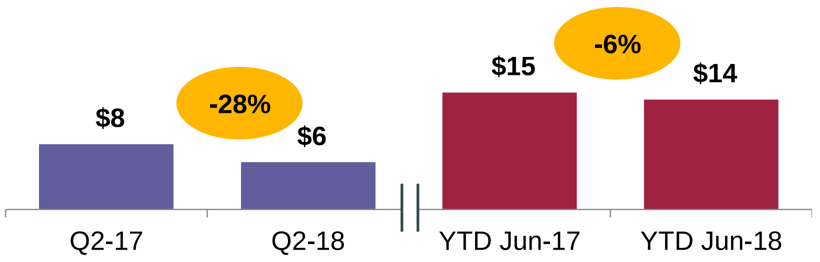
($ in Millions)

TOTAL BILLINGS

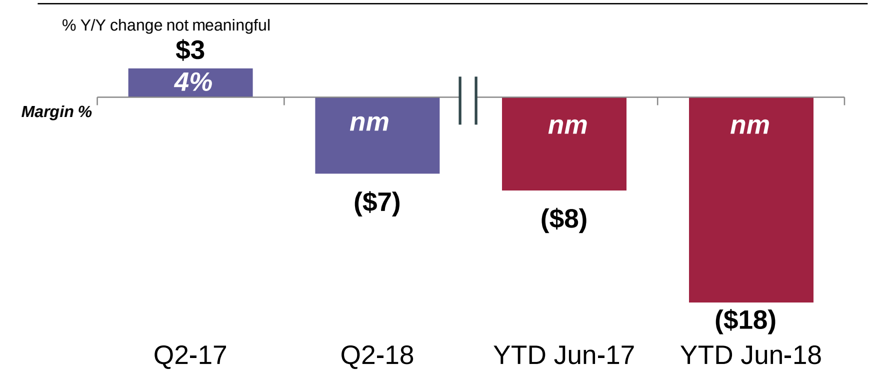


Constant FX	*-13%*	*$56*	*-13%*	*$92*

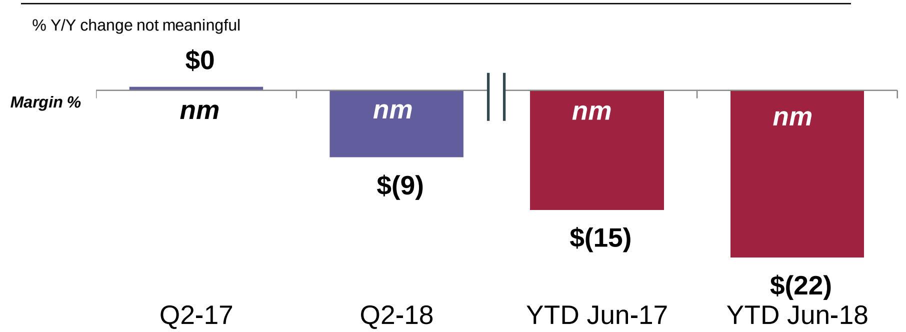
DIGITAL BILLINGS



EBITDA BEFORE PRE-PUBLICATION INVESTMENT



ADJUSTED EBITDA



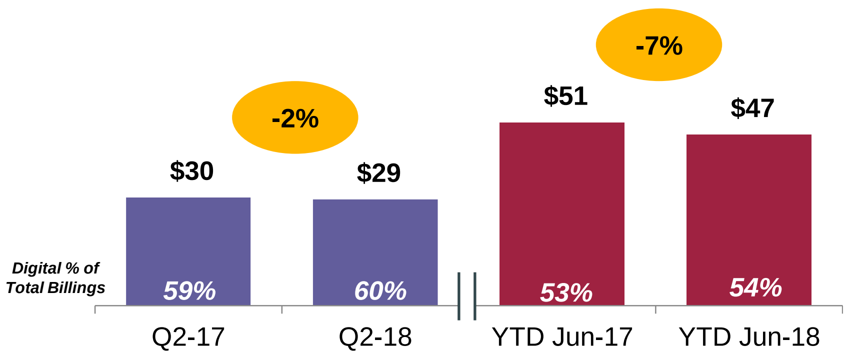
Constant FX	*nm*	*-$7*	*nm*	*-$20*

Professional Financial Review

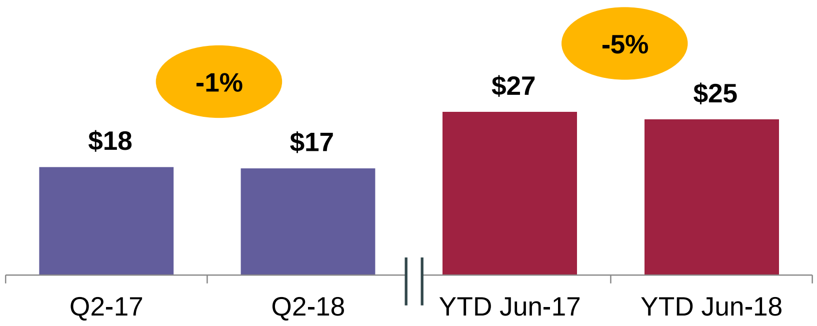
Business impacted by timing of multi-year renewals

($ in Millions)

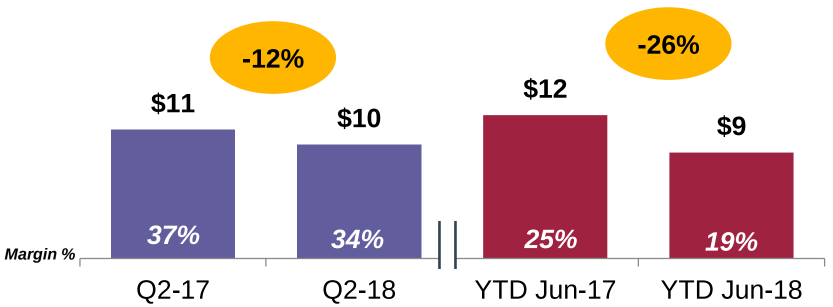
TOTAL BILLINGS



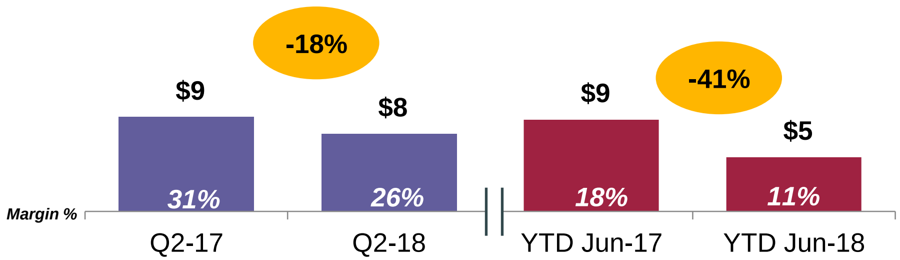
DIGITAL BILLINGS



EBITDA BEFORE PRE-PUBLICATION INVESTMENT



ADJUSTED EBITDA



Capital Structure and Liquidity

Continued to de-lever while addressing near-term HoldCo maturity in H1

- MHE efficiently managed cash through the seasonal trough in H1 and will start building cash during the third quarter
- Used $103M of cash to partially reduce Holdco debt due in 2019 and refinanced the remainder into $180M of new Holdco debt due in 2022
- June 30th revolver balance of $70M* expected to be fully repaid in Q3
  - Revolver would not have been utilized at quarter-end if not for the refinancing transaction
- Term Loan Restricted Payment capacity was fully utilized as part of the refinancing and will begin to rebuild in H2
- EBITDA impacted by K-12 timing shift and Higher Ed rental divot; LTM expected to grow in H2

**$70M revolver borrowings at June 30th does not include $4M of long-term letters of credit issued.*

MCGRAW-HILL EDUCATION LIQUIDITY: 6/30/18

($ in Millions)

Cash and Cash Equivalents	
McGraw-Hill Global Education Holdings	**$86**
Available under Credit Facilities at June 30, 2018	**276**
Total Liquidity	**$362**

MCGRAW-HILL EDUCATION DEBT PROFILE: 6/30/18

($ in Millions)

Senior Secured Term Loan due 2022	$1,692
Revolving Credit Facility due 2021 ($350M)*	70
Total First Lien Indebtedness	**$1,762**
Less: Cash and Cash Equivalents	(86)
Net First Lien Indebtedness	**$1,676**
Last Twelve Months Adjusted EBITDA	$306
(seasonally low due to sales mix and initiative changes)	
Net First Lien Indebtedness / Adjusted EBITDA[1]	**5.5x**
(covenant not required to be tested – seasonal high)	
Senior Unsecured Notes Due 2024	400
Net Total Indebtedness-MHE Global Education	**$2,076**
MHGE Parent Notes Due 2022	**180**
Net Total Indebtedness – MHE Inc.	**$2,256**

[1]Net First Lien Leverage covenant in respect of our revolving credit facility is tested if 30% of the revolving credit facility was drawn at quarter-end. Usage was less than 30% at June 30, so covenant did not apply. The Net First Lien Leverage covenant levels, if required to be tested, would be 5.25x in Q2 and 4.8x in Q1,Q3 and Q4 EBITDA used to calculate the Net First Lien Leverage covenant ratio would be Adjusted EBITDA plus pro-forma adjustments that are permitted under the credit agreement and indenture.

Summary

- Higher Ed continued to experience strong digital growth (net sales and paid activations) and continued declines in actual returns
  - MHE rental program launched across all major distributors and made available to students
  - Continue to expect a small rental ‘divot’ of 1-2% of total MHE Billings and ~5% of total MHE Adjusted EBITDA in 2018
- K-12 performing well in the available, but significantly smaller California market in 2018 and is very well positioned to compete and grow sales in the significantly larger 2019-2020 adoption markets
  - K-12 performance will be down Y/Y given the significantly smaller California market size vs. 2017
  - Estimating K-12 Billings in FY 2018 will be -10 to -15% Y/Y, largely driven by the anticipated 80%+ CA ELA market decline, but also due to the continued weakness in Open Territory
  - Positioned well for major 2019 new State Adoptions and rebound of Open Territory as new products are introduced – MHE programs submitted to States, early positive feedback received
- International is better positioned to capitalize on print and digital sales opportunities beginning in 2019 through more robust front-list publishing and more focused execution under new leadership
- Capital structure is well positioned as we successfully refinanced last of the near-term debt maturities and navigated through annual working capital cash trough

Appendix:
Supplemental Disclosure and Financial Tables

Financial Terms and Acronyms

Financial Terms	Description
Adjusted EBITDA	Non-GAAP financial measure that includes adjustments required or permitted in calculating covenant compliance under our debt agreements. Adjusted EBITDA is a non-GAAP financial measure defined as net income from continuing operations plus net interest, income taxes, depreciation and amortization (including amortization of pre-publication investment cash costs) and adjusted to exclude unusual items and other adjustments required or permitted in calculating covenant compliance under our debt agreements less cash spent for pre-publication investment in addition to the change in deferred revenue and deferred royalties.
Billings (formerly referred to as Adjusted Revenue)	Non-GAAP financial measure that we define as U.S. GAAP revenue plus the net change in deferred revenue excluding the impact of purchase accounting. Billings, a measure used by management to assess sales performance, is defined as the total amount of revenue that would have been recognized in a period if all revenue were recognized immediately at the time of sale.
Change in Deferred Revenue	The Company receives cash up-front for most product sales but recognizes revenue (primarily related to digital sales) over time recording a liability for deferred revenue at the time of sale. This adjustment represents the net effect of converting deferred revenues to a cash basis assuming the collection of all receivable balances.
Change in Deferred Royalty	Royalty obligations are generally payable in the period incurred with limited recourse. This represents royalties primarily associated with digital sales which are deferred and amortized over the subscription period. It is the net effect of converting deferred royalties to a cash basis assuming the payment of all amounts owed in the period incurred.
Deferred Commissions	Commissions are generally payable in the period incurred. This represents sales commissions that are incremental direct costs to obtaining a contract which are deferred and amortized over the period of contract performance. It is the net effect of converting deferred commissions to a cash basis assuming the payment of all amounts owed in the period incurred.
Digital Billings (formerly referred to as Digital Adjusted Revenue)	Represents standalone digital sales and, where digital product is sold in a bundled arrangement, only the value attributed to the digital component(s) is included. The attribution of value in bundled arrangement is based on relative selling prices (inclusive of discounts).
EBITDA	Earnings before interest (net), income tax, depreciation and amortization.
Front-list and Back-list	Front-list represents brand new titles and new revisions of existing titles previously published. For example, the 2017 front-list represents 2018 and 2017 copyrights sold in 2017. Back-list represents copyrights from 2016 and prior sold in 2017.
Net Sales	Gross sales less actual returns; net sales are not adjusted for the impact of accruals / net change in deferred revenue.
Pre-publication Investment	Pre-publication costs reflect the costs incurred in the development of instructional solutions, principally design and content creation. These costs are capitalized when the title is expected to generate future economic benefits and are amortized upon publication of the title over its estimated useful life of up to six years.
Sell-through	Represents the percentage of students in a class purchasing MHE materials – new or through the MHE rental program.

KPI Terms	Description
Paid Activation	A user who accesses a purchased digital product for the first time. Access can be through a physical access card purchased from a bookstore or directly over MHE's e-commerce channel.
Unique User on a platform	An individual who authenticates a product at least once during a given period of time.

Billings and Adjusted EBITDA

Billings is a non-GAAP sales performance measure that provides useful information in evaluating our period-to-period performance because it reflects the total amount of revenue that would have been recognized in a period if we recognized all print and digital revenue at the time of sale. We use Billings as a sales performance measure given that we typically collect full payment for our digital and print solutions at the time of sale or shortly thereafter, but recognize revenue from digital solutions and multi-year deliverables ratably over the term of our customer contracts. As sales of our digital learning solutions have increased, so has the amount of revenue that is deferred in accordance with U.S. GAAP. Billings is a key metric we use to manage our business as it reflects the sales activity in a given period, provides comparability from period-to-period during this time of digital transition and is the basis for all sales incentive compensation. In the K-12 market where customers typically pay for five to eight year contracts upfront and the ongoing costs to service any contractual obligation are limited, the impact of the change in deferred revenue is most significant. Billings is U.S. GAAP revenue plus the net change in deferred revenue.

EBITDA, a measure used by management to assess operating performance, is defined as net income from continuing operations plus net interest, income taxes, depreciation and amortization (including amortization of pre-publication investment). Adjusted EBITDA is a non-GAAP debt covenant compliance measure that is defined in accordance with our debt agreements. Adjusted EBITDA is a material term in our debt agreements and provides an understanding of our debt covenant compliance, ability to service our indebtedness and make capital allocation decisions in accordance with our debt agreements.

Each of the above described measures is not a recognized term under U.S. GAAP and does not purport to be an alternative to revenue, income from continuing operations, or any other measure derived in accordance with U.S. GAAP as a measure of operating performance, debt covenant compliance or to cash flows from operations as a measure of liquidity. Additionally, each such measure is not intended to be a measure of free cash flows available for management's discretionary use, as it does not consider certain cash requirements such as interest payments, tax payments and debt service requirements. Such measures have limitations as analytical tools, and you should not consider any of such measures in isolation or as substitutes for our results as reported under U.S. GAAP. Management compensates for the limitations of using non-GAAP financial measures by using them to supplement U.S. GAAP results to provide a more complete understanding of the factors and trends affecting the business than U.S. GAAP results alone. Because not all companies use identical calculations, our measures may not be comparable to other similarly titled measures of other companies.

Management believes Adjusted EBITDA is helpful in highlighting trends because Adjusted EBITDA excludes the results of decisions that are outside the control of operating management and can differ significantly from company to company depending on long-term strategic decisions regarding capital structure, the tax rules in the jurisdictions in which companies operate, and capital investments. In addition, Billings and Adjusted EBITDA provides more comparability between the historical operating results and operating results that reflect purchase accounting and the new capital structure post the Founding Acquisition as well as the digital transformation that we are undertaking which requires different accounting treatment for digital and print solutions in accordance with U.S. GAAP.

Management believes that the presentation of Adjusted EBITDA is appropriate to provide additional information to investors about certain material non-cash items and about unusual items that we do not expect to continue at the same level in the future as well as other items to assess our debt covenant compliance, ability to service our indebtedness and make capital allocation decisions in accordance with our debt agreements.

Note: In compliance with SEC interpretative guidance, we now refer to 'Adjusted Revenue' as 'Billings' throughout the presentation.

Higher Ed Front-List / Back-List Net Sales[1]

($ in Millions)

	Twelve Months Ended December 31						Six Months Ended	
	2012	2013	2014	2015	2016	2017	June 2017	June 2018
Digital Net Sales								
Front-list	$100	$126	$132	$156	$149	$166	$31	$42
Back-list	137	153	194	220	263	281	126	127
Total Digital Net Sales	**$237**	**$278**	**$326**	**$376**	**$411**	**$447**	**$157**	**$169**
Y/Y %								
Front-list	*(6.0%)*	*25.1%*	*5.2%*	*18.2%*	*(4.7%)*	*11.9%*	*(10.9%)*	*36.6%*
Back-list	*53.7%*	*11.8%*	*27.1%*	*13.4%*	*19.2%*	*7.0%*	*24.1%*	*0.5%*
Total Digital Net Sales	*21.1%*	*17.4%*	*17.2%*	*15.3%*	*9.3%*	*8.8%*	*15.2%*	*7.4%*
Print Net Sales								
Front-list	$317	$323	$291	$233	$149	$145	$17	$10
Back-list	205	215	233	178	152	125	15	19
Total Print Net Sales	**$523**	**$538**	**$524**	**$411**	**$302**	**$270**	**$32**	**$29**
Y/Y %								
Front-list	*(23.9%)*	*1.9%*	*(9.9%)*	*(20.0%)*	*(35.9%)*	*(2.7%)*	*(25.3%)*	*(42.7%)*
Back-list	*0.6%*	*4.7%*	*8.5%*	*(23.6%)*	*(14.6%)*	*(17.8%)*	*27.0%*	*28.9%*
Total Print Net Sales	*(15.9%)*	*3.0%*	*(2.6%)*	*(21.6%)*	*(26.7%)*	*(10.6%)*	*(7.9%)*	*(9.9%)*
Total Net Sales								
Front-list	$418	$449	$423	$389	$298	$311	$48	$52
Back-list	342	368	427	398	415	406	141	146
Total Net Sales [2]	**$760**	**$817**	**$851**	**$787**	**$713**	**$717**	**$189**	**$198**
Y/Y %								
Front-list	*(20.3%)*	*7.5%*	*(5.7%)*	*(8.1%)*	*(23.4%)*	*4.5%*	*(16.7%)*	*8.0%*
Back-list	*16.7%*	*7.5%*	*16.2%*	*(6.8%)*	*4.1%*	*(2.2%)*	*24.4%*	*3.3%*
Total Net Sales	*(7.0%)*	*7.5%*	*4.2%*	*(7.4%)*	*(9.5%)*	*0.6%*	*10.5%*	*4.5%*
Other (Accounting Accruals/Reversals)	2	(1)	4	5	(2)	1	1	(2)
Total Net Sales[3]	**$762**	**$816**	**$855**	**$793**	**$711**	**$718**	**$190**	**$196**
Y/Y %	*(7.5%)*	*7.1%*	*4.8%*	*(7.3%)*	*(10.3%)*	*1.0%*	*11.1%*	*3.3%*

[1] 2018 front-list represents 2019 and 2018 copyrights sold in 2018; they do not begin to impact current year until very late Q2.
[2] Gross sales less actual returns; net sales are not adjusted for the impact of accruals / net change in deferred revenue.
[3] Reflects the impact of accounting related to accruals / deferrals.

Higher Ed Industry and MHE Higher Ed Sales Trend

($ in Millions)

	Twelve Months Ended December 31							Six Months Ended	
	2011	2012	2013	2014	2015	2016	2017	June 2017	June 2018
Higher Ed Industry per Management Practice, Inc.[1]									
Higher Ed Market									
Gross Sales	$5,726	$5,420	$5,453	$5,465	$5,302	$4,695	$4,390	$1,442	$1,332
Returns	1,323	1,311	1,262	1,214	1,377	1,250	982	519	425
Net Sales	**$4,403**	**$4,110**	**$4,191**	**$4,251**	**$3,925**	**$3,446**	**$3,408**	**$923**	**$908**
Y/Y %									
Gross Sales	*n/a*	*(5.3%)*	*0.6%*	*0.2%*	*(3.0%)*	*(11.4%)*	*(6.5%)*	*(5.5%)*	*(7.5%)*
Returns	*n/a*	*(0.9%)*	*(3.7%)*	*(3.8%)*	*13.5%*	*(9.2%)*	*(21.4%)*	*(25.2%)*	*(18.1%)*
Net Sales	*n/a*	*(6.7%)*	*2.0%*	*1.4%*	*(7.7%)*	*(12.2%)*	*(1.1%)*	*11.0%*	*(1.5%)*
McGraw-Hill Education Return Detail									
Actual Returns	$263	$276	$257	$252	$277	$237	$208	$108	$91
Reserve for Returns Adjustment	(3)	(13)	9	16	(31)	(23)	2	(37)	(25)
Reported Returns	**$260**	**$263**	**$266**	**$268**	**$246**	**$215**	**$210**	**$71**	**$66**
Return Accrual %	**24.4%**	**25.8%**	**25.1%**	**24.4%**	**23.4%**	**22.7%**	**22.8%**	**20.9%**	**19.7%**

[1] MPI data reflects gross and net sales on an actual returns basis and includes other adjustments, eg. Advanced Placement products, which are reported in the K-12 business. Annual MPI data is on an unrestated basis; prior period YTD data has been restated as per the 6/30/18 MPI report. Amounts may not sum due to rounding.

K-12 New Adoption Market Overview

	New State Adoptions by Purchase Year[1]								
	2012	2013	2014	2015	2016	2017	2018E	2019E	2020E
Largest Adoption States									
California (K-8)		Reading Math	Math	Math*	Reading	Reading*	Reading* Social Studies	Science Social Studies*	Science* Social Studies*
Florida	Social Studies	Reading (K-5) Math (K-5)	Reading (6-12) Math (6-12)			Social Studies	Science	Math	Reading (K-12)
Texas	Science		Math (K-8) Science	Math (9-12) Social Studies Science*				Reading (K-8)	Reading (9-12)
All Other Adoption States									
Alabama	Math	Reading	Social Studies		Science				Math
Arkansas		Math							
Georgia		Math	Math* Reading	Reading*					
Idaho	Science		Reading		Math		Social Studies	Reading	Science
Indiana		Reading	Reading*						
Louisiana		Reading	Math						
Mississippi	Reading	Math (K-8) Social Studies	Math (9-12)			Reading	Science [2]	Social Studies[2] Math[2]	
North Carolina				Math	Science	Social Studies		Math K-8[3]	
New Mexico	Science	Math			Reading	Social Studies		Science	Math
Oklahoma		Social Studies		Science	Reading		Math		Social Studies
Oregon	Social Studies		Reading	Reading*	Math	Science		Social Studies	
South Carolina	Reading	Math Social Studies (6-12)	Social Studies (K-5)		Science				
Tennessee	Reading (9-12)	Reading (K-6)	Social Studies	Math			Science	Social Studies	Reading
Virginia	Science					Social Studies	Math Social Studies*	Reading[4]	Science[4]
West Virginia		Social Studies Math		Reading	Science		Math	Social Studies	Reading

[1]Excludes new state adoptions in non-core disciplines such as career & technical education, music, art, world languages, health, etc. Purchases from AR & IN classified as open territory effective 2015.
[2]Mississippi swapped Science (now 2018) with Social Studies (now 2019); Math to be purchased in 2019 instead of 2020.
[3]North Carolina adopted new K-8 Math standards and is purchasing Math instead of ELA in 2019.
[4]Virginia updated their adoption schedule for Reading in 2019; Science is on track for 2020.
**Disciplines reflect 2nd and 3rd year of major purchasing.*

K-12 Industry and MHE K-12 Sales Trend

2017 industry data finalized

($ in Millions)

	Twelve Months Ended December 31					
	2012	2013	2014	2015	2016	2017
K-12 Industry per Association of American Publishers (AAP)						
AAP U.S. Net Sales [1]						
Total Adoption	$1,311	$1,391	$1,860	$1,621	$1,250	$1,250
Open Territory	1,423	1,563	1,425	1,431	1,467	1,361
Total Net Sales	**$2,734**	**$2,954**	**$3,285**	**$3,052**	**$2,717**	**$2,611**
Y/Y %						
Total Adoption	*n/a*	*6.2%*	*33.6%*	*(12.8%)*	*(22.9%)*	*0.0%*
Open Territory	*n/a*	*9.8%*	*(8.8%)*	*0.4%*	*2.5%*	*(7.2%)*
Total Net Sales	*n/a*	*8.1%*	*11.2%*	*(7.1%)*	*(11.0%)*	*(3.9%)*
McGraw-Hill Education K-12						
McGraw-Hill Education Billings [2]						
Total Adoption	$292	$282	$348	$452	$415	$405
Open Territory / Other	405	396	386	345	343	328
Total K-12 Billings	**$697**	**$677**	**$734**	**$798**	**$758**	**$733**
Y/Y %						
Total Adoption	*n/a*	*(3.5%)*	*23.6%*	*30.0%*	*(8.2%)*	*(2.5%)*
Open Territory / Other	*n/a*	*(2.4%)*	*(2.3%)*	*(10.7%)*	*(0.6%)*	*(4.9%)*
Total K-12 Billings	*n/a*	*(3.0%)*	*8.5%*	*8.6%*	*(4.9%)*	*(3.3%)*
MHE Adoption Participation %	96%	79%	67%	76%	87%	96%

[1] AAP annual data reflects unrestated net sales on an actual returns basis submitted by 5 publishers; data reflects U.S. sales & includes AP products, software & platforms, etc. AAP includes front-list and back-list net sales.
[2] MHE Billings reflect an accrued returns basis and will not reconcile to AAP submission due to classification of revenue; total adoption includes new adoption and residual.
MHE Billings have been restated for the shift of AR and IN in prior periods.
Amounts may not sum due to rounding.

Digital vs. Print Billings Detail

($ in Millions)

Q2-2018 Billings Detail by Component

	Q2 Digital Billings				Q2 Print Billings				Q2 Total Billings			
	2016	2017	2018	*%Δ vs 2017*	2016	2017	2018	*%Δ vs 2017*	2016	2017	2018	*%Δ vs 2017*
Higher Ed	$69	$67	$65	*-3.0%*	$40	$30	$21	*-28.5%*	$109	$97	$86	*-10.8%*
K-12	79	87	58	*-33.2%*	196	197	123	*-37.4%*	275	284	181	*-36.1%*
International	7	8	6	*-27.8%*	58	56	50	*-10.7%*	65	64	56	*-12.9%*
Professional	17	18	17	*-1.2%*	15	12	12	*-3.0%*	31	30	29	*-1.9%*
Other	-	1	1	*38.6%*	0	0	-	*n/m*	0	1	1	*38.6%*
Total MHE	**$172**	**$180**	**$147**	***-18.4%***	**$309**	**$294**	**$206**	***-30.0%***	**$481**	**$474**	**$353**	***-25.6%***
% of Total												
Higher Ed	63%	69%	75%		37%	31%	25%		100%	100%	100%	
K-12	29%	31%	32%		71%	69%	68%		100%	100%	100%	
International	11%	13%	11%		89%	87%	89%		100%	100%	100%	
Professional	53%	59%	60%		47%	41%	40%		100%	100%	100%	
Total MHE	**36%**	**38%**	**42%**		**64%**	**62%**	**58%**		**100%**	**100%**	**100%**	

YTD June 2018 Billings Detail by Component

	June YTD Digital Billings				June YTD Print Billings				June YTD Total Billings			
	2016	2017	2018	*%Δ vs 2017*	2016	2017	2018	*%Δ vs 2017*	2016	2017	2018	*%Δ vs 2017*
Higher Ed	$150	$157	$169	*7.4%*	$86	$70	$53	*-24.4%*	$236	$227	$222	*-2.5%*
K-12	92	97	67	*-31.2%*	229	223	144	*-39.8%*	321	320	211	*-34.1%*
International	14	15	14	*-6.1%*	93	90	80	*-11.8%*	108	105	94	*-11.0%*
Professional	26	27	25	*-4.6%*	27	24	22	*-9.0%*	53	51	47	*-6.7%*
Other	-	1	1	*35.4%*	1	0	-	*n/m*	1	1	1	*35.2%*
Total MHE	**$283**	**$296**	**$276**	***-6.9%***	**$436**	**$408**	**$299**	***-26.7%***	**$719**	**$704**	**$574**	***-18.4%***
% of Total												
Higher Ed	63%	69%	76%		37%	31%	24%		100%	100%	100%	
K-12	29%	30%	32%		71%	70%	68%		100%	100%	100%	
International	13%	14%	15%		87%	86%	85%		100%	100%	100%	
Professional	49%	53%	54%		51%	47%	46%		100%	100%	100%	
Total MHE	**39%**	**42%**	**48%**		**61%**	**58%**	**52%**		**100%**	**100%**	**100%**	

Free Cash Flow

($ in Millions)

	Six Months Ended		
Cash Flow Comparison	**June 2017**	**June 2018**	**Y/Y $**
Adjusted EBITDA	**12**	**(82)**	**(94)**
Δ in Accounts Receivable, net	(78)	(74)	3
Δ in Inventories, net	(34)	(36)	(2)
Δ in Prepaid & Other Current Assets	8	3	(5)
Δ in Accounts Payable and Accrued Expenses	(62)	(73)	(11)
Δ in Other Current Liabilities	(3)	92	94
Δ in Reported Working Capital Accounts	**(168)**	**(89)**	**79**
Adjustments to Derive Operational Working Capital[1]	(20)	4	24
Δ in Adjusted Working Capital Accounts	**(188)**	**(85)**	**103**
Adjusted EBITDA less Δ in Adjusted Working Capital Accounts	**(176)**	**(167)**	**0**
Pre-publication Investment	49	46	(3)
Restructuring and Cost Savings Implementation Charges	(6)	(9)	(3)
Sponsor Fees	(2)	(2)	-
Cash Paid for Interest	(79)	(84)	(5)
Net (loss) from Discontinued Operations	(0)	-	0
Operational Working Capital Adjustments and Other[2]	(2)	(12)	(10)
Cash (used for) provided by operating activities	**(216)**	**(227)**	**(11)**

Adjusted EBITDA less Δ in Working Capital Accounts per above	(176)	(167)	9
- Capital Expenditures & Payment of Capital Lease Obligations	(25)	(41)	(16)
Operating Free Cash Flow[2]	**(201)**	**(208)**	**(7)**

Δ in NWC including Adjustments to Derive Operational Working Capital			
	June 2017	**June 2018**	**Y/Y $**
Δ in Accounts Receivable, net	(91)	46	137
Δ in Inventories, net	(35)	(34)	1
Δ in Prepaid & Other Current Assets	6	(3)	(10)
Δ in AP and Accrued Expenses	(68)	(74)	(7)
Δ in Other Current Liabilities	(0)	(19)	(18)
Total	**(188)**	**(85)**	**103**

	Six Months Ended		
	June 2017	**June 2018**	**Y/Y $**
Cash Balance at Beginning of Period	**419**	**408**	**(11)**
Cash (used for) provided by operating activities	(216)	(227)	(11)
Dividends	(3)	(3)	(0)
Net Debt (Payments) / Receipts	52	236	184
Repurchase of MHGE PIK Toggle Notes	(48)	(243)	(195)
Pre-publication Investment	(49)	(46)	3
Capital Expenditures	(22)	(36)	(15)
Investments, Acquisitions & Divestitures, net	7	1	(6)
Payment of Capital Lease Obligations	(3)	(5)	(2)
Equity transactions, net	(6)	5	10
Other	2	(3)	(5)
Cash Balance at End of Period	**133**	**86**	**(47)**

.
[1]Includes the impact of certain non operational, Cash EBITDA or capital structure working capital items (i.e., purchase accounting, accrued interest, deferred royalties, income taxes, available for sale assets, etc.).
[2]Includes adjustment for deferred royalties and sales commissions included in calculation of Adjusted EBITDA.

Adjusted EBITDA Reconciliation & Operating Expense Bridge

($ in Millions)

Adjusted EBITDA Reconciliation

	Three Months Ended		Six Months Ended		Year Ended	LTM
	June 2017	June 2018	June 2017	June 2018	December 2017	June 2018
Net Income	($37)	($50)	($161)	($171)	($66)	($76)
Interest (income) expense, net	44	48	87	90	179	182
Provision for (benefit from) taxes on income	6	1	6	1	(7)	(13)
Depreciation, amortization and pre-pub. amortization	57	50	107	95	232	221
EBITDA	**$70**	**$48**	**$40**	**$15**	**$338**	**$313**
Change in deferred revenue (a)	69	(31)	18	(88)	147	41
Change in deferred royalties (b)	(12)	6	(6)	12	(22)	(4)
Change in deferred commissions (c)	-	(1)	-	0	-	0
Restructuring and cost saving implementation changes (d)	4	5	6	9	14	17
Sponsor fees (e)	1	1	2	2	4	4
Other (f)	(3)	7	2	15	18	31
Pre-pub. investment (g)	(24)	(24)	(49)	(46)	(99)	(96)
Adjusted EBITDA	**$105**	**$11**	**$12**	**($82)**	**$400**	**$306**

Adjusted Operating Expense Bridge

	Three Months Ended		Six Months Ended		Year Ended	LTM
	June 2017	June 2018	June 2017	June 2018	December 2017	June 2018
Total Reported Operating Expenses	$300	$283	$594	$578	$1,199	$1,184
Less: Depreciation & amortization of intangibles	(33)	(32)	(67)	(64)	(133)	(131)
Less: Amortization of pre-pub. investment	(24)	(18)	(40)	(31)	(99)	(90)
Less: Restructuring and cost savings implementation charges	(4)	(5)	(6)	(9)	(14)	(17)
Less: Other adjustments	(11)	(8)	(17)	(16)	(35)	(34)
Adjusted Operating Expenses	**$228**	**$220**	**$465**	**$458**	**$918**	**$912**

Adjusted EBITDA Footnotes

(a) We receive cash up-front for most sales but recognize revenue (primarily related to digital sales) over time recording a liability for deferred revenue at the time of sale. This adjustment represents the net effect of converting deferred revenues to a cash basis assuming the collection of all receivable balances.

(b) Royalty obligations are generally payable in the period incurred with limited recourse. This adjustment represents the net effect of converting deferred royalties to a cash basis assuming the payment of all amounts owed in the period incurred.

(c) Commissions are generally payable in the period incurred. This adjustment represents the net effect of converting deferred commissions to a cash basis assuming the payment of all amounts owed in the period incurred.

(d) Represents severance and other expenses associated with headcount reductions and other cost savings initiated as part of our formal restructuring initiatives to create a flatter and more agile organization.

(e) Beginning in 2014, $3.5 million of annual management fees was recorded and payable to Apollo.

(f) For the three and six months ended June 30, 2018, the amount represents (i) non-cash incentive compensation expense and (ii) other adjustments required or permitted in calculating covenant compliance under our debt agreements.

For the three months and six months ended June 30, 2017, the amount represents (i) non-cash incentive compensation expense and (ii) other adjustments required or permitted in calculating covenant compliance under our debt agreements.

For the year ended December 31, 2017 the amount represents (i) non-cash incentive compensation expense (ii) elimination of a $5.8 million gain on disposal of the K-12 Canadian business (iii) elimination of a $4.9 million gain related to the sale of an equity method investment and (iv) other adjustments required or permitted in calculating covenant compliance under our debt agreements.

(g) Represents the cash cost for pre-publication investment during the period.