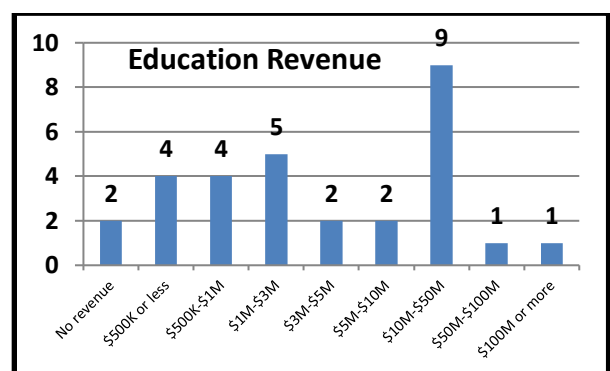
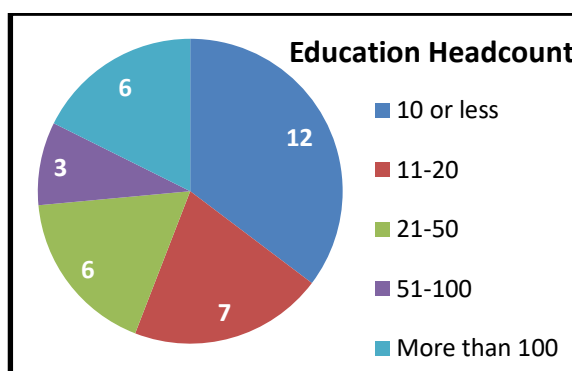
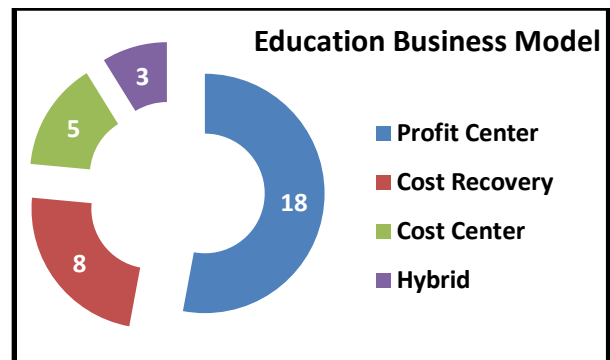
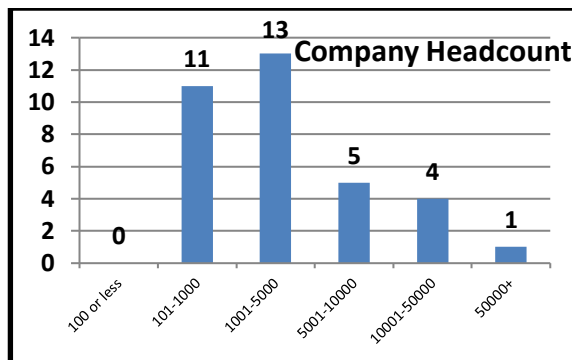
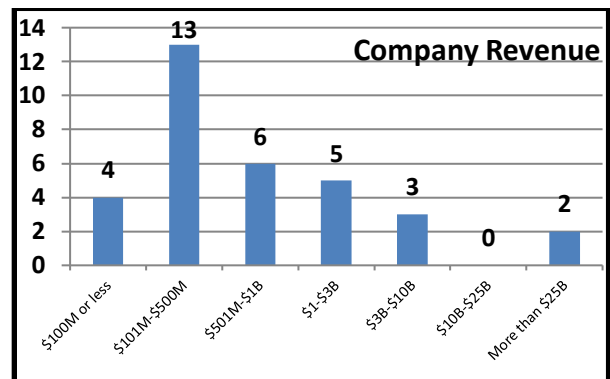
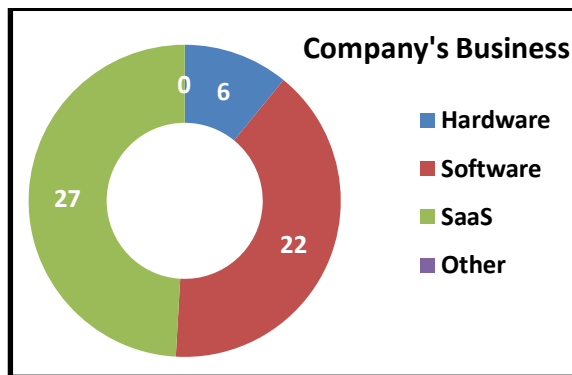




## CEdMA Training Market Barometer 4<sup>th</sup> Quarter 2018 Actual

### Introduction

This report is compiled by CEdMA for its members about their Education businesses. It is based around a series of absolute growth or decline percentages in the range  $\pm 12.5\%$ . Revenue and volumes refer to training services delivered in the quarter and not future bookings. Members were asked to indicate whether their data was for the global business or that for North America. Note that in this report, u/f/d is the number of members reporting up/flat/down, respectively. There were 29 responses for global and 5 for North America so the combined 34 profiles are as follows:



# Changes to the Barometer

In response to member suggestions, we have changed the survey in the following ways from 16Q1:

1. We only collect data **about the quarter just ended**, not the "current" quarter
2. All questions **ask about revenue** (but some about **volumes** added back in 18Q4)
3. We ask about the major modalities such as ILT, VILT and eLearning, plus additional services.

## Summary

The unweighted average uses all responses as entered, whereas the weighted average uses the size of the revenue, taking the relevant education value, so larger companies have a bigger impact.

These observations are weighted and based on trendlines of 4-period moving averages.

**Total Revenue** is defined as all recognized revenue. The trend was 4-5% in 2016, dropped to 2-3% in 2017 and is now back to 3-4% for 2018.

**Operating profit** is revenue minus all fixed and variable costs, excluding allocations, divided by revenue. The growth trend is 3% during 2018, down from 4% in 2016, but up from 2% in 2017.

**Live Classroom (ILT)** is all revenue when the instructor is in the same physical location. Growth was flat in 2013-14, 2% in 2015-17 but has now dipped to -1% in 2018.

**Virtual Classroom (VILT)** is all revenue for instructor-led training via the web, with or without virtual labs. Growth dropped to 1-2% during 2013, was 6% in 2015-16, but is now just under 1% in 2018.

**Public (scheduled) classes** is revenue for ILT and VILT and the trend has dropped to negative 2-3% in 2018, having peaked at 1-2% in 2014, and been flat in 2015-16.

**Private (one-customer) classes** is revenue for ILT and VILT, and now showing a trend of flat for 2018, having been 3% in 2014, 2% in 2015 and 3% in 2016.

**Self-paced** is all revenue generated by training students without instructors, such as eLearning, video, and can be paid per use or subscription. It's showing a 7% increase for 2018, having grown steadily from a 5% increase in 2013. Note that 23 reported revenue for self-paced.

**Certification** is all revenue for certification business, such as exam fees and exam prep services, but excluding any exam prep training which is accounted under ILT/VLT/self-paced. The trendline is 1-2% for 2018, having dipped to flat in 2016-17, falling from 5% in 2015. 21 reported revenue.

**Learning Consulting** is all revenue generated by non-training education business like learning needs analysis, customization of material assessments, and mentoring/coaching after training. There were increases of 1% in 2016, but the trendline for 2018 is showing negative 3%. (But only 14 members reported revenue.)

**Learning Technologies** is all revenue generated by learning tools, infrastructure, courseware and directly related training and learning consulting for these technologies. After showing negative 2% in 2016 and positive 2% in 2017, the trend is now negative 6% for 2018. (But only 5 members reported revenue.)

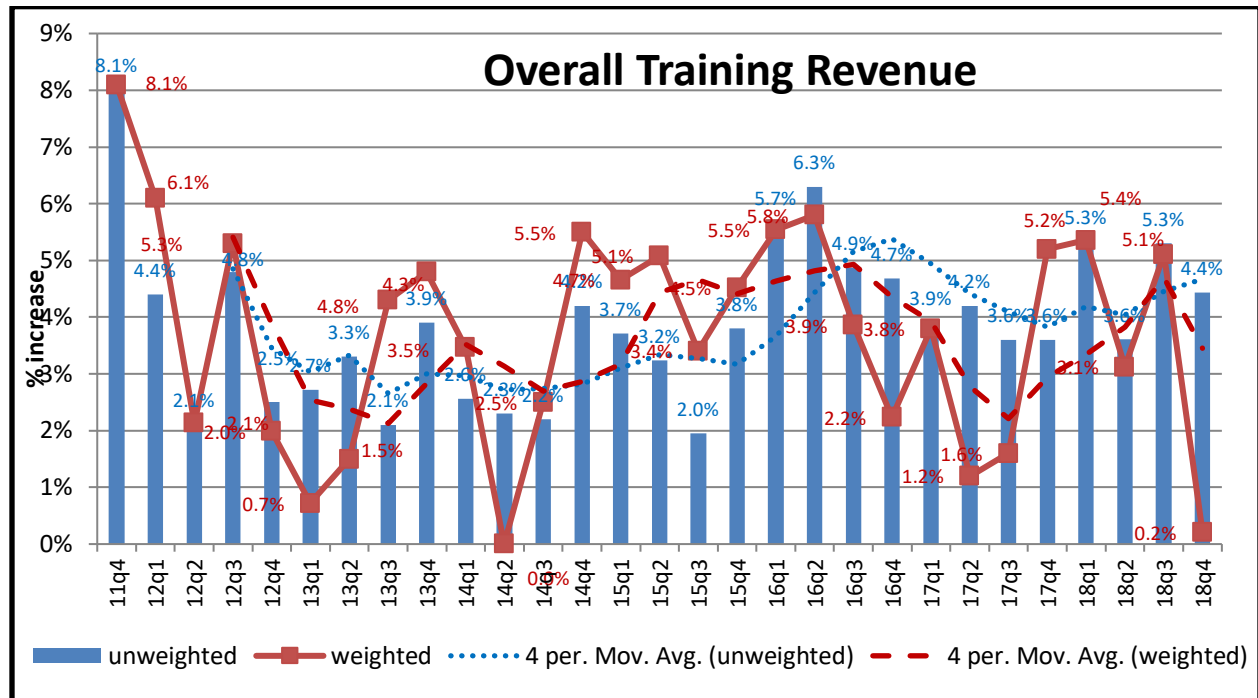
**New Learning Modalities** is all revenue for social learning, gamification, microlearning, mobile. 2016 showed the trendline at 7%, but it's now bounced back to 5% in 2018 from flat in 2017. (But only 3 members reported revenue.)

**Subscriptions** include all revenue from any of the above modalities included in subscriptions.

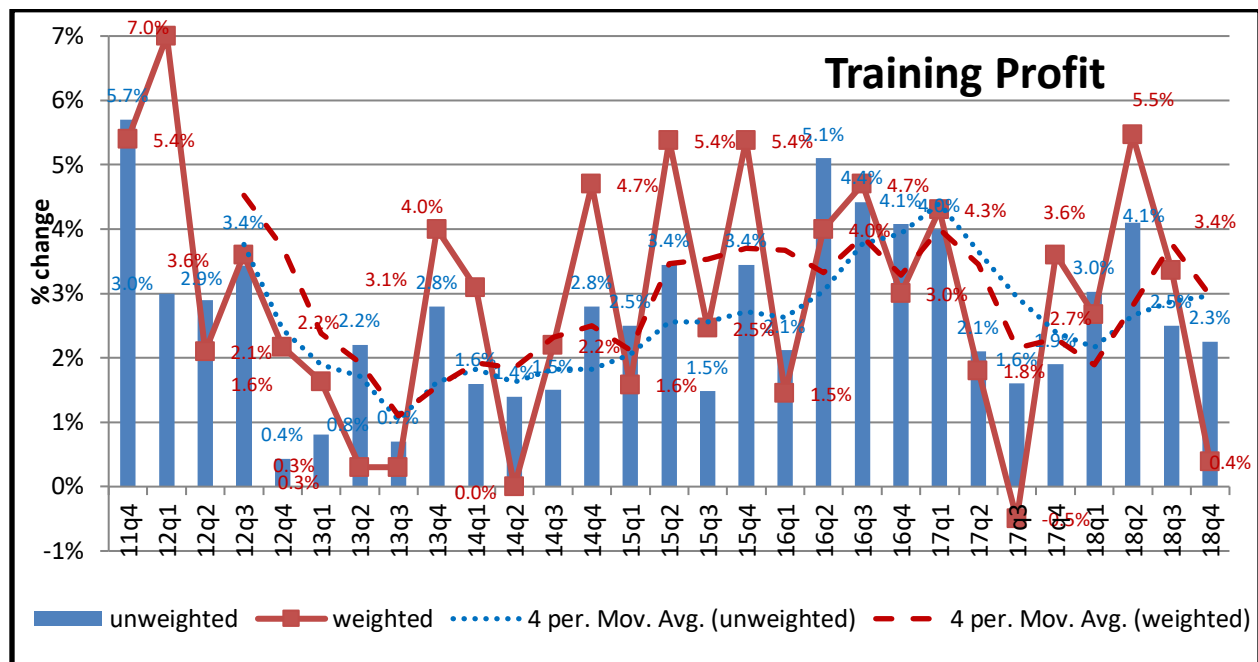
Subscription revenue grew on average 8% during 2016, with the trend in 2018 at 7%. 17 reported revenue.

# Training Revenue and Profit

The unweighted total training revenue increase for 18Q4 (u=20, f=4, d=7) was 4.4%. The weighted total training revenue increase was 0.2%. The 4-period moving average is currently showing an increase of 4-5% for unweighted and 3-4% weighted, the same as 2017.

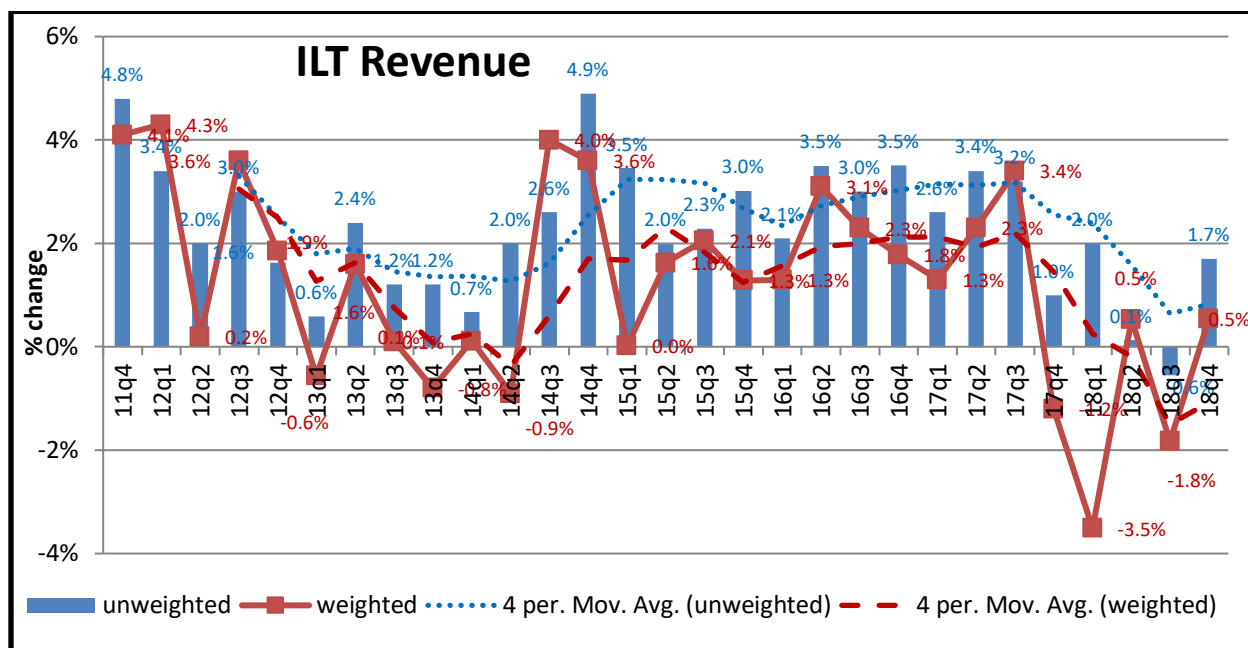


Training profit in 18Q4 (u=16, f=7, d=7) was a 2.3% increase unweighted, and 0.4% weighted. The training profit weighted trendline currently shows a 3% increase, up from 2% in 2017.



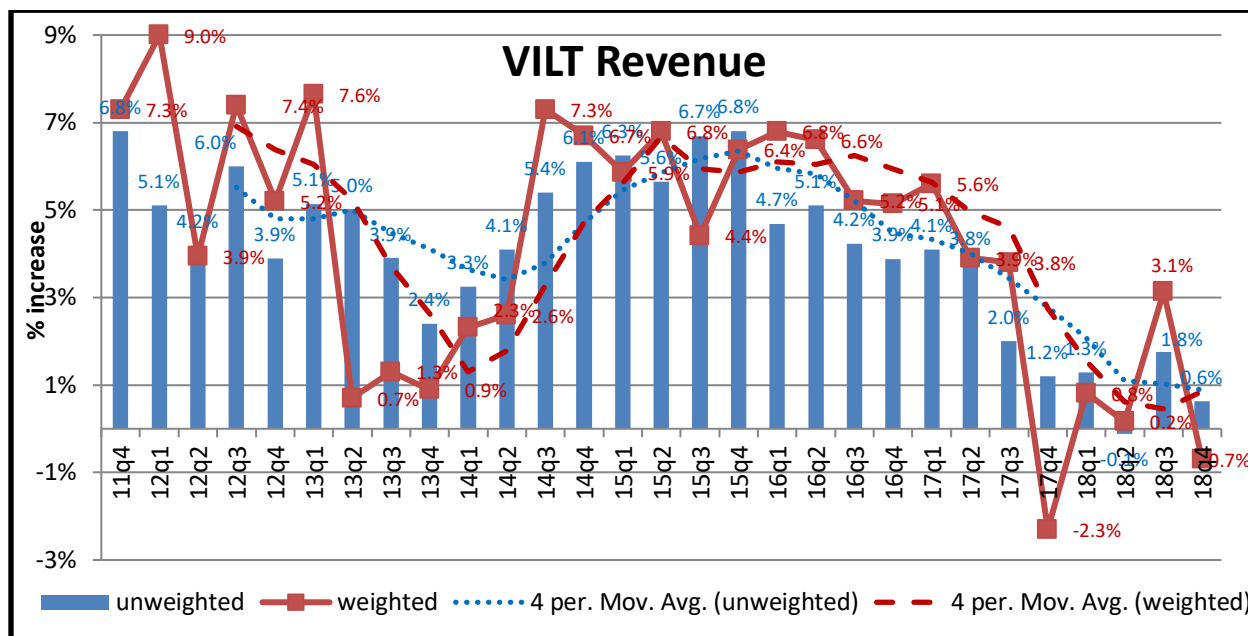
## Live Instructor-led Training

The unweighted live classroom **revenue** increase for 18Q4 (u=12, f=2, d=11) was 1.7% with weighted 0.5%. The increase in **volume** was 1.6%. The weighted 4-period moving average is now -1%.



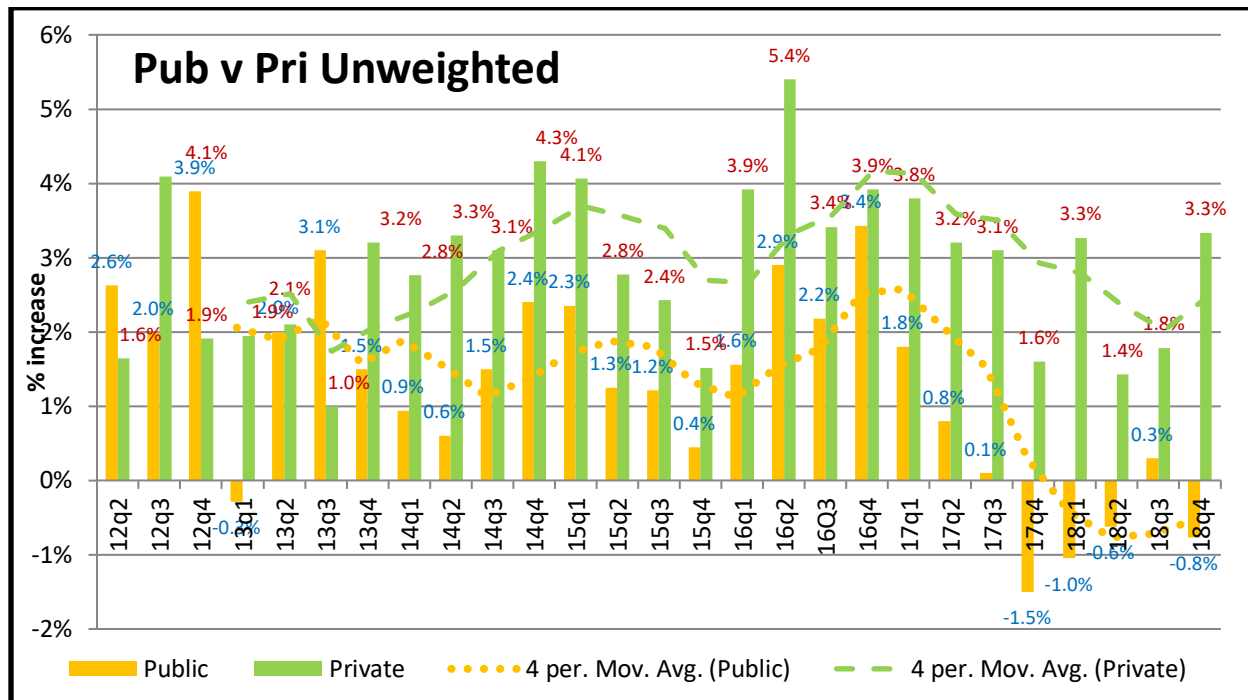
## Virtual Instructor-led Training

Virtual classroom is still trending downwards. The unweighted virtual classroom **revenue** increase for 18Q4 (u=11, f=3, d=11) was 0.6%. The weighted virtual classroom **revenue** decrease was 0.7%. The increase in **volume** was 1.9%. However, the 4-period moving average for weighted has dropped to nearly flat, down from 3% in 2017 and 6% in 2015-16. Note that 25 reported revenue.

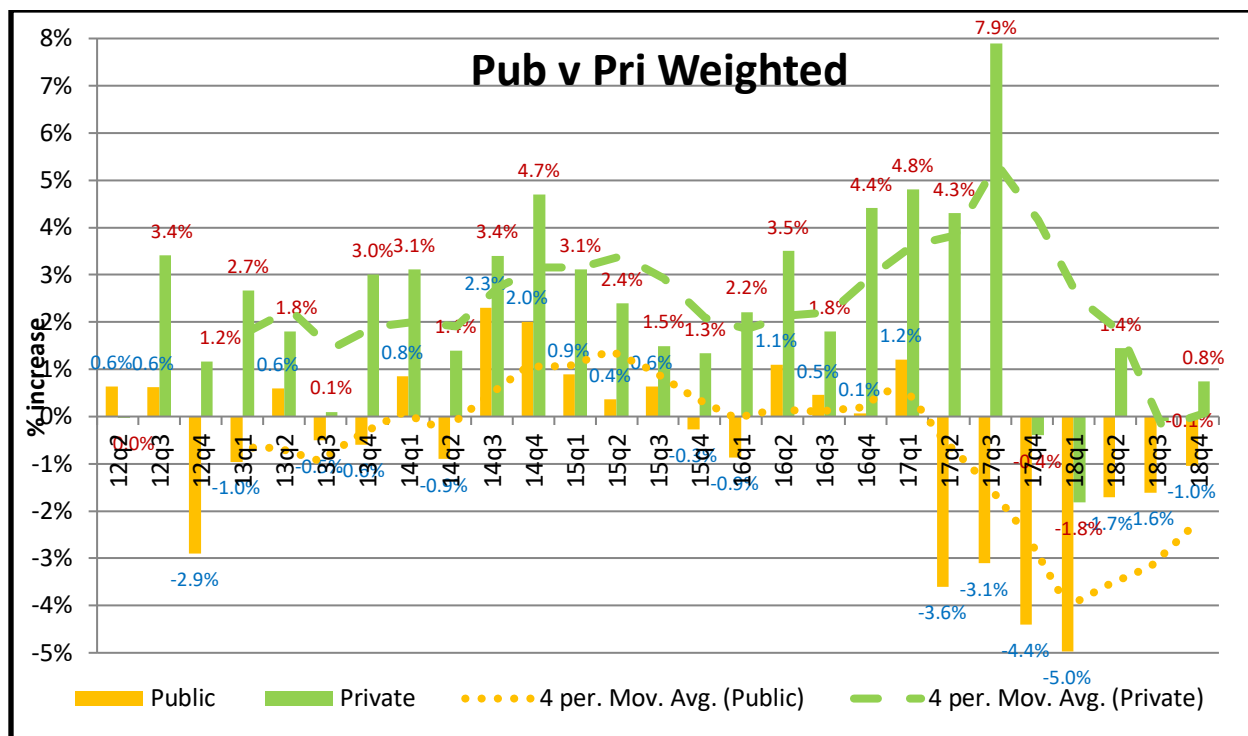


We now include questions on public classes and private classes. Unweighted public **revenues** have decreased in 18Q4 by 0.8% and private increased by 3.3%. The increase in **volume** was -1.1% for public but 3.2% for private. The trendline for public has dropped to negative 1% and for private to positive 2%.

(Note that public is u=9, f=4, d=13 and private u=19, f=2, d=9.)

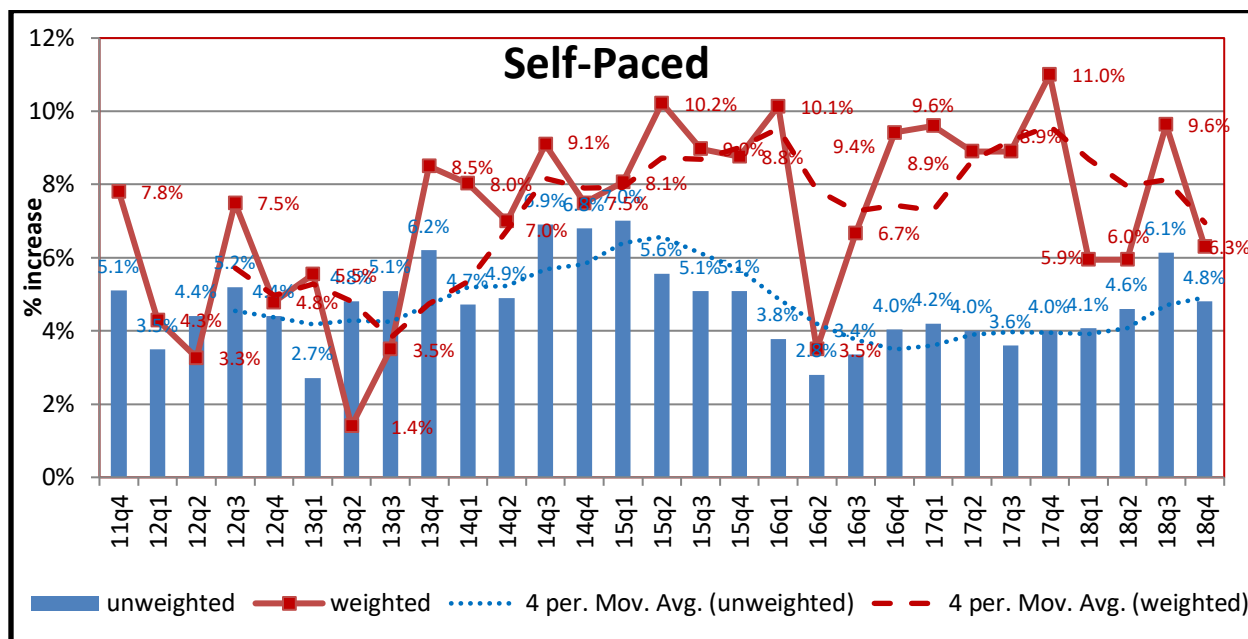


When weighting is considered, the changes are less dramatic, except during 17. In 18Q4, public **revenue** has decreased 1.0% and private **revenue** increased 0.8%. The 4-period moving average is negative 2-3% for public but remains flat for private.



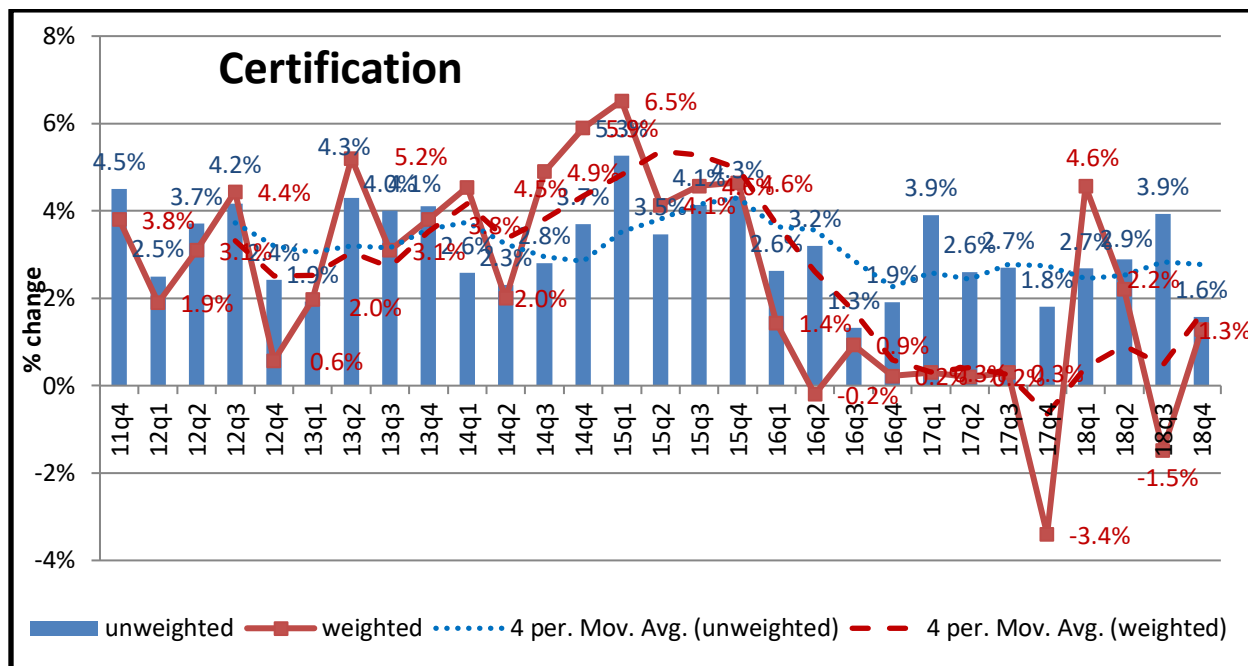
## Self-Paced

The unweighted self-paced **revenue** increase in 18Q4 (u=17, f=3, d=3) was 4.8 %. However, the weighted self-paced **revenue** increase was 6.3%. The increase in **volume** was 6.8%. The 4-period moving average shows 7% for weighted. Note that 23 reported revenue.



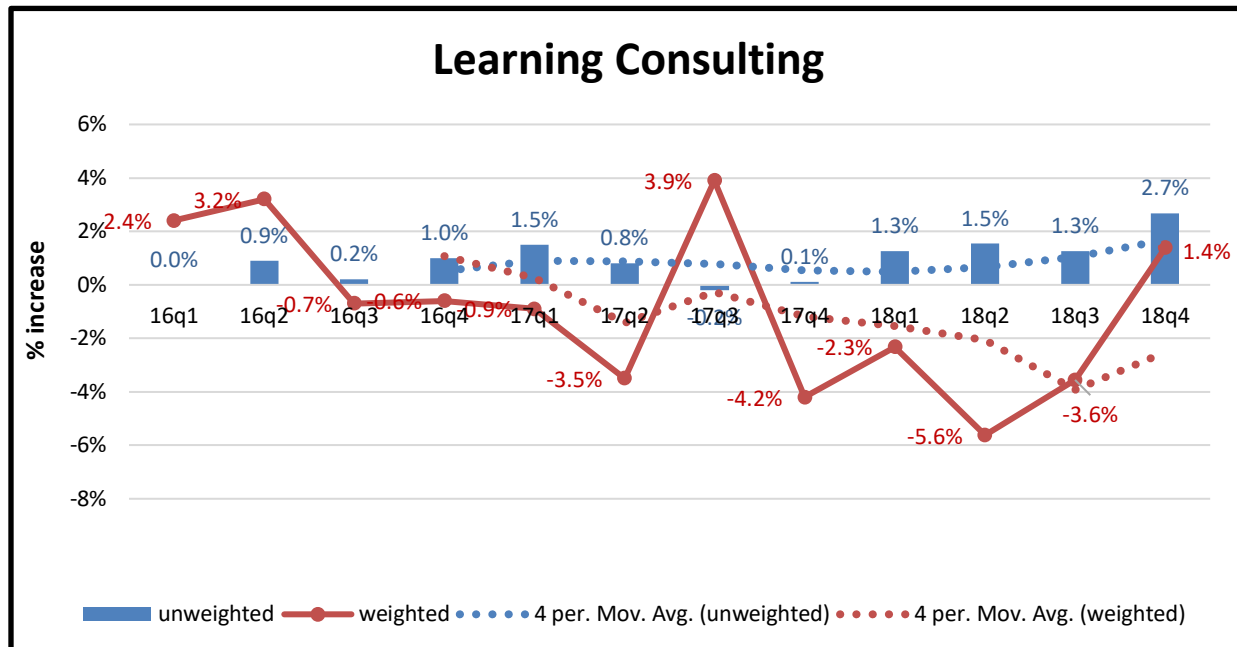
## Certification

The unweighted certification **revenue** increase for 18Q4 (u=11, f=5, d=5) was 1.6%, but the weighted certification **revenue** jumped by 1.3%. The increase in **volume** was 1.1%. The weighted 4-period moving average is showing a 1% increase. Note that 21 reported revenue.



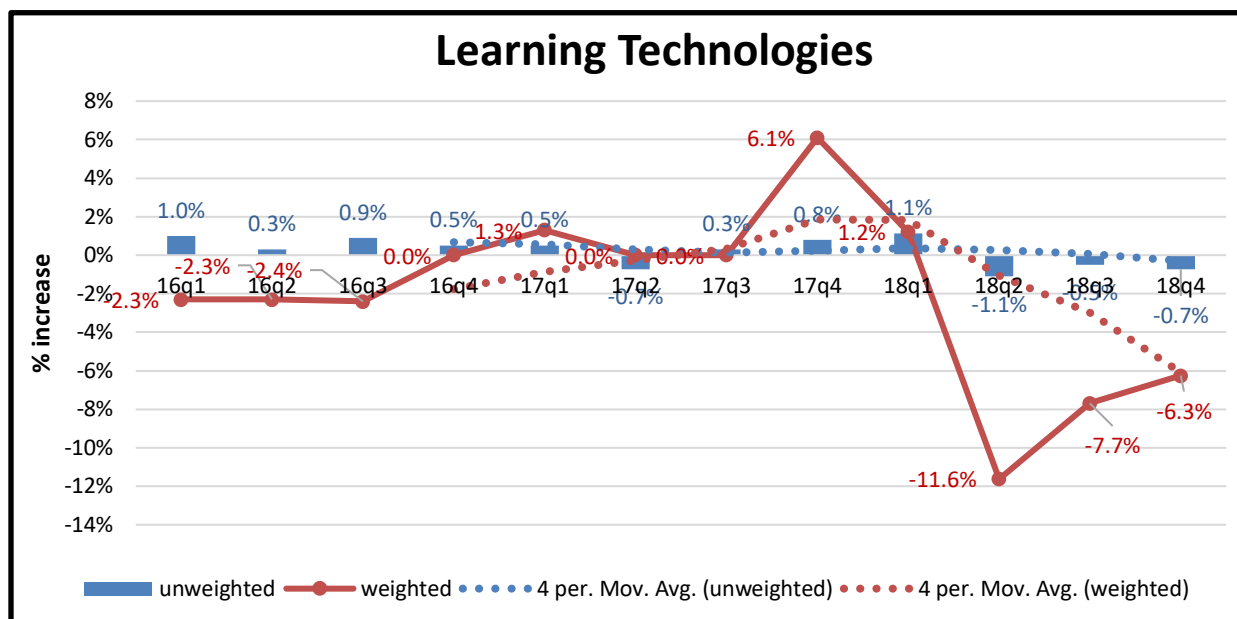
## Learning Consulting

We now have three years reporting this area. In that period, the unweighted scores have largely remained flat. Weighted scores have been volatile and show a moving average of negative 3%. The increase in **volume** was 2.5%. The **revenue** changes for 18Q4 (u=7, f=3, d=4) are 2.7% for unweighted and 1.4% when weighted. Note that only 14 reported revenue.



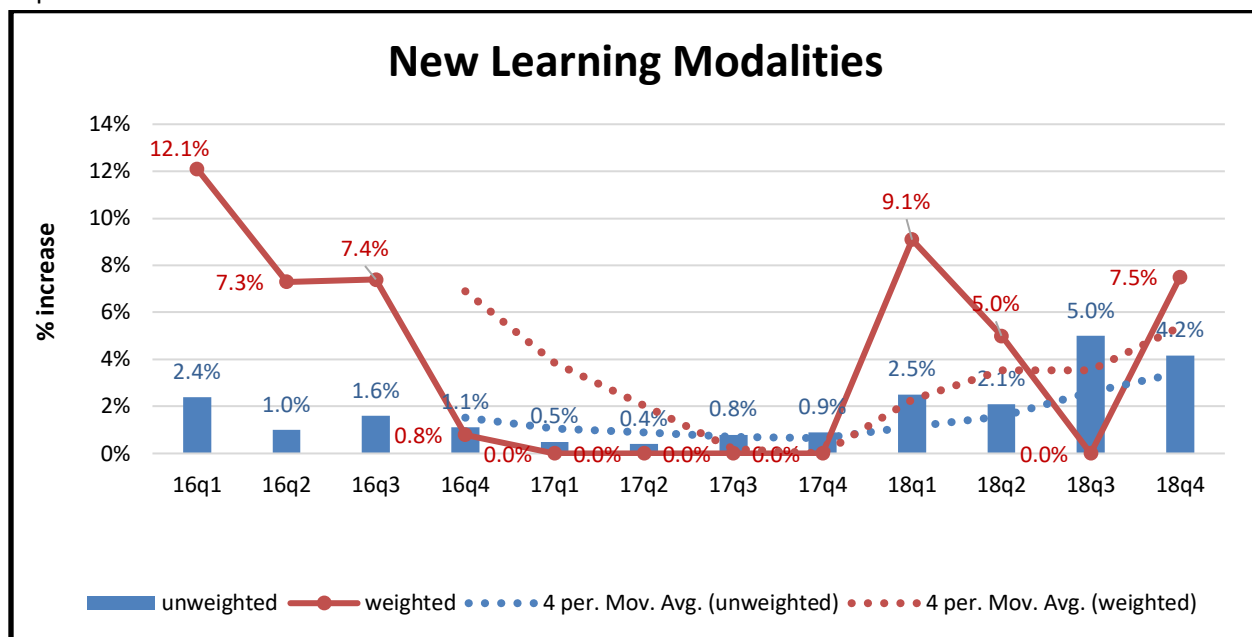
## Learning Technologies

We also now have three years reporting this area. In that period, the unweighted scores have hovered just above flat, but weighted scores now show 3% decrease. The **revenue** decreases for 18Q4 (u=0, f=3, d=2) are negative 0.7% for unweighted and negative 6.3% when weighted. Note that only 5 reported revenue.



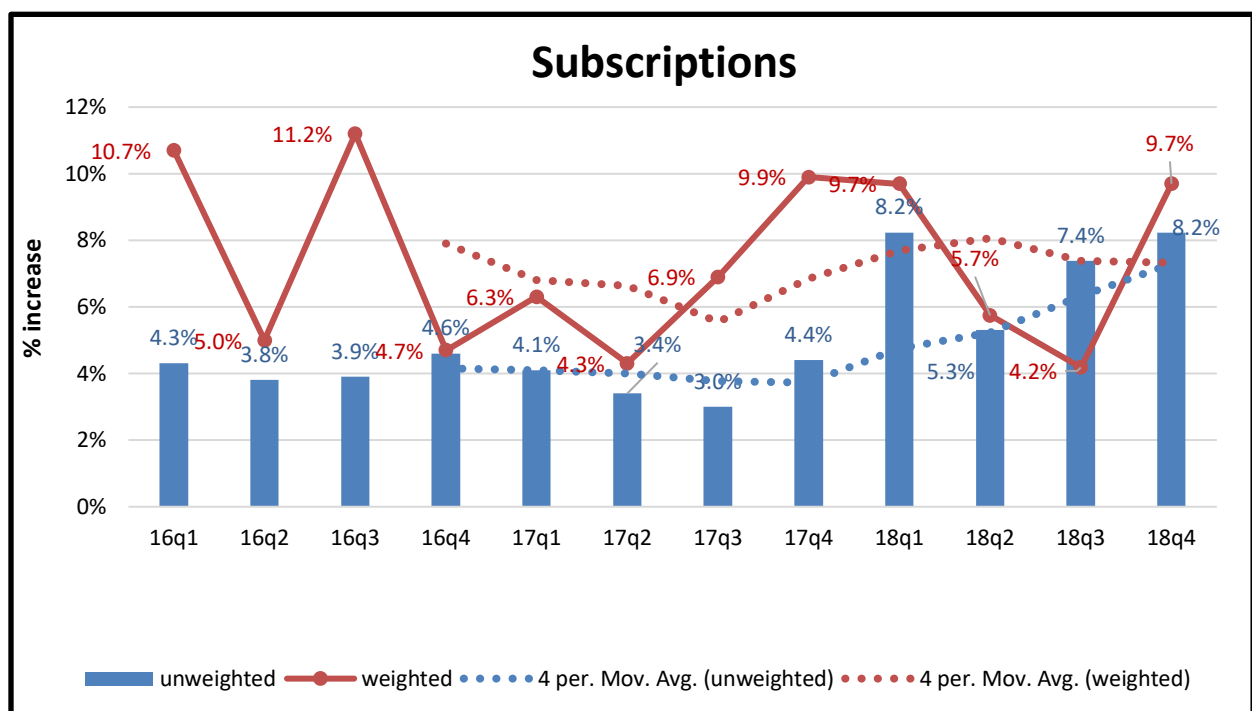
## New Learning Modalities

We now have 12 quarterly reports. In that period, the unweighted scores are increasing 3%, while the weighted scores are 5%, falling from 7% in 2016. The increase in **volume** was 1.3%. The **revenue** increases for 18Q4 (u=1, f=2, d=0) are 4.2% for unweighted and 7.5% for weighted. Note that only 3 reported revenue.



## Subscriptions

We also have three years reporting this area. In that period, unweighted scores show a 7% increase and weighted scores 7%, too. The **revenue** increases for 18Q4 (u=15, f=1, d=1) are 8.2% for unweighted and 9.7% for weighted. The increase in **volume** was 5.5%. Note that 17 reported revenue.



## Which subject areas saw the biggest increases in your training volumes in the last 3-6 months?

1. Private training
2. All our classes were upgraded to the new product level so we saw an increase in attendance in our top 3 courses.
3. Webinars and custom one on one web training
4. Private classes are spiking in our business as a result of larger enterprise business coming in the door. Certification interest is also up.
5. Subscriptions and customer certification
6. Online Subscriptions
7. Subscriptions are growing quickly, these are new for this year, we did not have subscriptions last year. These will help to drive our ILO and Assisted Self-Paced business.
8. Our subscription program launched in 2017 and we see that growing. 96% of our education sales are subscriptions. Our subscription program includes our entire portfolio, e-learning, ILT, VILT, customer conference and pre-conference education.
9. New features
10. Cloud
11. Data center, Network automation, SDN and DevOps
12. Data Science/Machine Learning
13. We see a significant increase in attach for our flagship product that aligns with product sales
14. EU pharmaceutical supply chain software (important law going into effect in 2019)
15. Self-paced
16. Subscription is now over 75% of total revenue
17. Core technology Database, Search, Analytics,
18. New training course launches that we had.
19. Online course attendance increased by over 90%.
20. Self-Study courses saw the biggest increase.
21. Virtual
22. Steady consumption over last quarter +
23. Customized onsite training.
24. Private classes
25. Training classes sold with Support Contracts ("Support Contract Attach") grew significantly; ILT/VILT in new technology areas grew well
26. Subscriptions
27. Custom training with customers
28. Network Video Fundamentals
29. Classroom, technical training. Technical aspects of our SaaS product line. Customers are wanting more than features and functions.
30. Learning consulting and change management services
31. Self-paced sold as a subscription
32. Subscriptions
33. We have reduced the barrier and so have seen a significant increase in learners self-serving whether it be self-signup to appropriate scheduled/public learning sessions to increased demand for on-demand delivery options.

## **Which subject areas saw the biggest decreases in your training volumes in the last 3-6 months?**

1. Certification Voucher purchase
2. Onsite
3. Nothing - metrics are up and to the right.
4. No material changes
5. Public Classes (at company facilities) - travel costs are the largest impediment
6. Private classes were down the largest amount, along with public ILT classroom classes.
7. Instructor-led classes one off seats in a class and onsite training at customer location.
8. Reporting
9. Firewall Basics
10. Data Analyst (SQL)
11. US pharmaceutical supply chain software (important law adopted in 2017)
12. Virtual, instructor-led
13. VILT / ILT - bundled as part of subscription program as per our strategy to drive 80% plus subscription. Moving traditional services revenue over to SaaS model
14. Open Enrollment classes outside the US.
15. Instructor led training is decreasing, especially in our public classroom training. We ran fewer classroom trainings than previous years
16. Live classroom training had the biggest decrease. Number of students attending Online training volume dropped over 20%.
17. Public training
18. Steady consumption over last quarter +
19. Public schedule classes in a classroom
20. Public (open) enrollments - F2F training - continues to degrade; Learning Consulting is up and down
21. VILT
22. None as we just launched our programs
23. End to End Solutions
24. Live Webinars. They want them recorded and watch them later.
25. Public and private classroom delivery
26. Public & Private ILT
27. Public Training
28. Private onsite training requests have significantly decreased over the past 3-6 months. Our partner/sales teams are completely onboard now with selling the 'scheduled/public' classes and they have learned the value of \$0 fee training.

## **What were the two greatest challenges you faced in running your business in the last 3-6 months?**

1. Traffic direction to content. Matching user requested guidance to content but keeping it open and explorable at the same time.
2. Engagement with internal sales and customer success managers to sell and promote training and collaborate with Authorized Training Partners in EMEA. Lack of a consistent onboarding process for new customers who purchased training. An initiative is in progress for 2019
3. Inability to keep up with agile programming changes in our online videos; producing new online materials to support new mini modules

4. Forecasting the business. we create a plan at beginning of the year using attach algorithms and they are turning out to be pretty accurate but trusting that data early in a quarter is challenging.
5. Building internal and external awareness of training offerings.
6. Sales Team's inability to sell training services; Hiring Qualified Trainers with our operational knowledge
7. Low and stale backlog; Signing/Sales growth
8. Getting customers to actually consume the training they purchased, both on-demand and instructor led. Renewing the education subscription the second year, we have been running roughly a 40-45% renewal.
9. Implementing new systems with not enough resources; Determining best training methods to resonate with Customers to increase product adoption
10. Attach rate; Past the adoption phase, now is sustainment phase
11. Declining business from our training partners - these lower margin services business are struggling to maintain competitiveness and profitability in competition against 3rd party OnDemand sites as well as our own OnDemand learning products.
12. Sales compensation models and non-focused marketing from HQ; Accelerating content development time
13. Developing a subscription model; transitioning from free content to fee-based training; Budget too tight to deliver required curriculum.
14. Operational inefficiencies in learning management registration and team capacity delivering curriculum on new features
15. Bandwidth and subscription churn
16. Lack of available talent for hiring instructors and sub-contractors
17. Updating eLearning and ILT classes around our SaaS product lines which change every two weeks.
18. Technology and content creation. Technology: finally began implementation of our new LMS after delays due to competing IT projects. Our cloud training environments in MS Azure have been increasing in cost and we have been tasked with reducing this by 30-40% (around \$1m per year). Content creation: eLearning is growing in demand and we have a challenge in creating and maintaining our video content to meet customer needs.
19. The biggest challenge is keeping course content in sync with the agile software development process. The second biggest challenge is getting Sales to understand the importance of selling education without discounting it.
20. Net new license sales; no major new product releases
21. Time away from the job to take training - even if customer has already purchased a training program.
22. Resource allocation in a growing market. Getting online learning pricing right.
23. Resources!!! Lack of efficiencies in reporting for sales team.
24. Sales - we don't have a dedicated Education sales force. Shifting our organizational mindset to "Digital Learning", and from traditional classroom delivery
25. Instructor depth of subject matter; Continuing decline in certifications (beyond partners, which is a mandatory component of their agreement, but for customers we are still struggling to establish certification as something they should obtain (value prop/meaning to their business)
26. Content creation for the variety of customers and sales training for salesforce to understand how to sell training and certification
27. Dynamic Private Training, Validated Learning Paths
28. I don't have the proper resources to deliver the training product that needs to be delivered. Change of my manager 3x this year (and the year isn't over!)
29. New product released that has a different, lower revenue generation model for EDU and declining sales of legacy product
30. Translation of material. The hiring of Instructors with appropriate languages for new countries.

31. Team capacity - the business and our product direction are changing rapidly, our team does not have the capacity to carry on providing training and generate brand new programs within the required timelines. Planning Discussions - with all the changes being discussed with our product (everything from re: architecture, to move to SaaS delivery) our team is not brought into the conversations in regards to these changes at the right time so we can be part of the planning discussions. We are always playing catch-up which makes us ineffective, and also puts the changes at risk for not being as successful as they could be (why don't people see this - training plays a large factor in a products success)

## **Please add any other comments or observations you have on the state of the IT Training market**

1. I think the revenue generation out of training for subscription business will erode more for start-up and private companies. Self-service enablement is becoming more of an expected part of a bundle product offering to customers
2. That digital badging is changing the landscape and increased interest in achieving learning and specialization on our products.
3. Moving our content to 3rd party platforms --where learners congregate (Coursera, Pluralsight, Cloud Academy, and so on). This is a direction we need to go.
4. More training organizations (like mine) are expanding their purview into the Customer Success/Experience arena (not really new).
5. Need to expand offerings into the world of 3D, VR, 360 Video and Emulation/Simulation Based Training to keep up with the technology race
6. We are considering making all our foundational/entry level content free to the Administrators of our software.
7. Our public training market has been eroding for a few years- OnDemand training consumption is not where we'd like to see it; adding in weekly ILT sessions to bolster blended models is our next step to help on this front. LMS vendors still don't seem able to put together a complete solution- Requirement for Training teams to tie into corporate goals more apparent than ever; but reporting on indirect influence is challenging.
8. Our company is requiring that as much of our training as possible be ARR, including certifications.
9. More demand for subscriptions
10. Generally steady, no major decline or growth
11. The market has shifted to customers wanting training accessible 24/7/365 for little to no cost. The need for on demand training has made it difficult to compete with competitors that have opened the door to everyone that wants to create learning videos for profit. This low cost subscription of pay as you go online learning has taken away from the vendors education delivery ability to compete and be profitable.
12. Customers outside North America are looking for certification, inside North America are indifferent.
13. More eLearning
14. For too long everyone thinks if I provide documentation that is all that is needed. So, they rush to get something out the door and as long as there is documentation then that is all that is needed. Training is a luxury (attitude). We are able to get buy in for contextual/inline learning which will fundamentally change how we deliver learning opportunities and documentation.