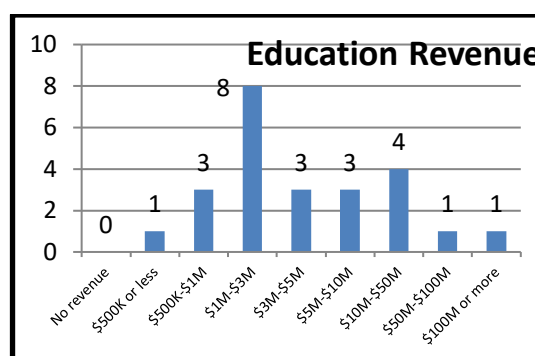
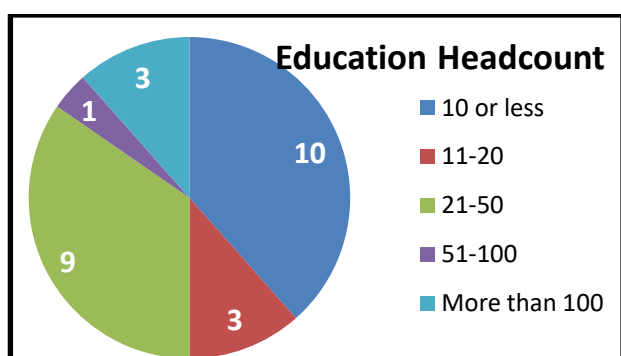
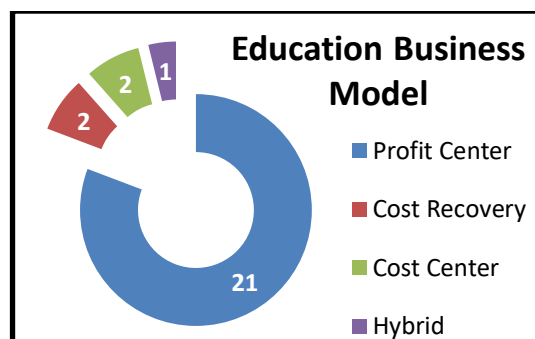
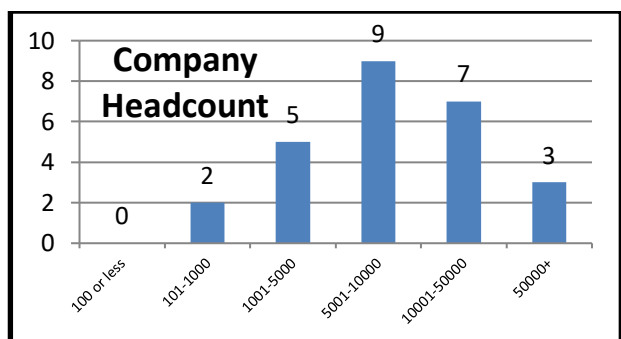
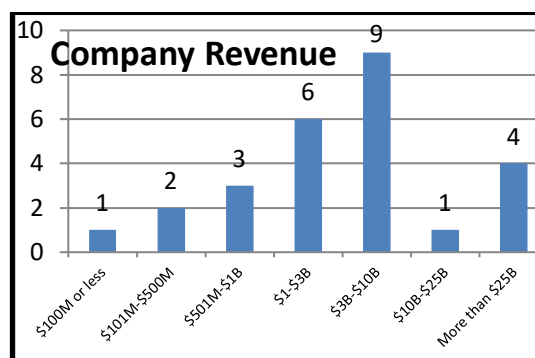
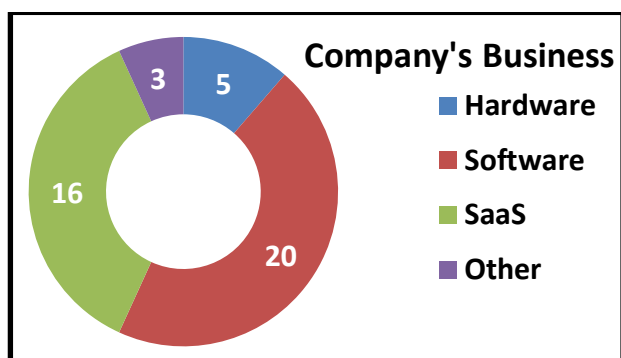


CEdMA Europe Market Barometer 4th Quarter 2018

Introduction

This report is compiled by CEdMA Europe for its members from input for their EMEA businesses. It is based around a series of absolute growth or decline percentages in the range $\pm 12.5\%$. Revenue refers to training services delivered in the quarter and not future bookings. Note that in this report, u/f/d is the number of members reporting up/flat/down, respectively. This report for 18q4 actuals is based on input from 26 companies.



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 revenue value, so larger companies have a bigger impact.

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

Total Revenue is defined as all recognized revenue. Having been down to negative 2% in 2014, the trend recovered to positive 2% increase in 2016, and is now positive 1-2% for 2018.

Operating Profit is revenue minus all fixed and variable costs, excluding allocations, divided by revenue. The trend has recovered from a low of negative 2% during 2013 to a 2% increase in 2016 and is now holding at positive 2-3% for the 2018.

Live Classroom (ILT) is all revenue when the instructor is in the same physical location. It fell to negative 2% during 2014, recovered to flat in 2015, showed a 2% decrease in 2016, but now is now flat in 2018.

Virtual Classroom (VILT) is all revenue for instructor-led training via the web, with or without virtual labs. The trend dropped from 6% during 2013 to 1% in 2014, rose to 3-4% in 2016 but is now back to 5-6% for 2018.

Public (scheduled) classes is revenue for ILT and VILT and the trend is now negative 1% for 2018, having been negative 3-4% in 2016/17.

Private (one-customer) classes is revenue for ILT and VILT, and showing an increase of 3%, down from 4% in 2016.

Self-paced is all revenue generated by training students without instructors, such as eLearning, video, and can be paid per use or by subscription. It's now showing an increase of 10% in 2018 having been as low as negative 4% during 2014.

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/VILT/self-paced. The trend is now 2% for 2018, down from a high of 4% in 2014-15.

Learning Consulting is all revenue generated by non-training education business like learning needs analysis, customization of material assessments, and mentoring/coaching after training. While the trend was flat for 2016, it dipped to negative 3% in 2017 but is now showing positive 3%. (But only 10 members reported revenue.)

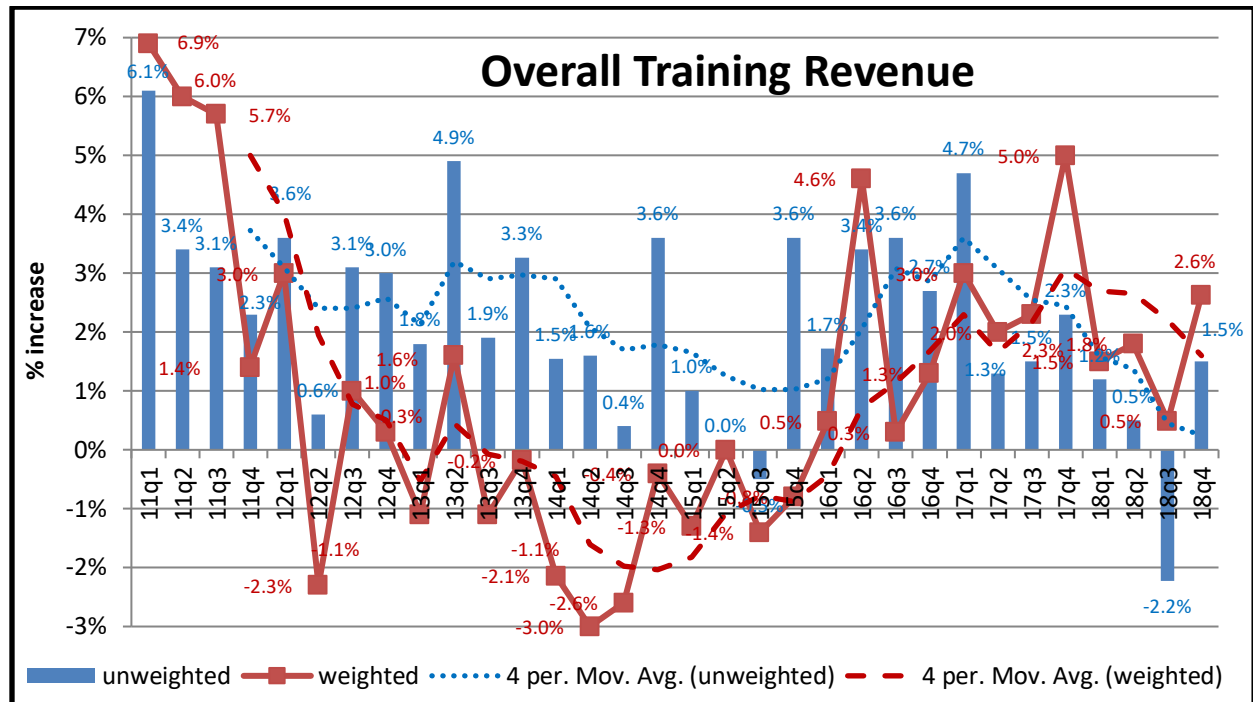
Learning Technologies is all revenue generated by learning tools, infrastructure, courseware and directly related training and learning consulting for these technologies. After dipping to flat in 2016/17, the trend is now 2% in 2018. (But only 6 members reported revenue.)

New Learning Modalities is all revenue for social learning, gamification, microlearning, mobile. The trend of 8% increase across 2016 has not been maintained and has now fallen to 1% for 2018. (But only 5 members reported revenue.)

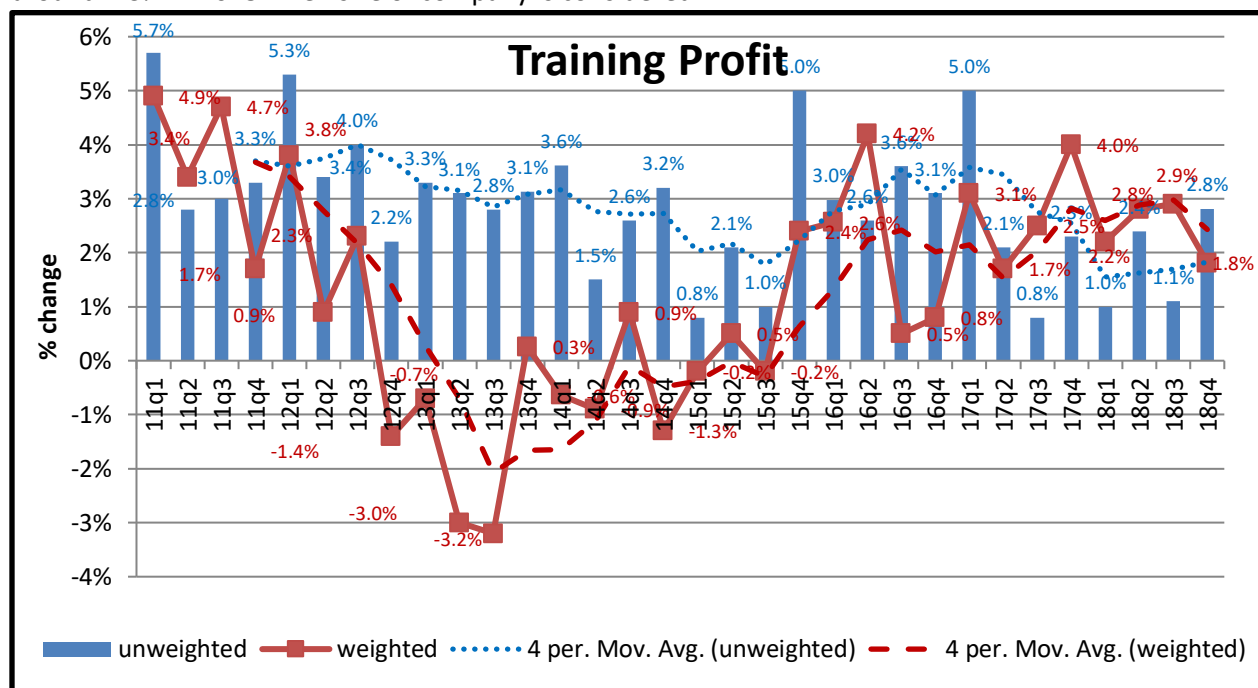
Subscriptions include all revenue from any of the above modalities included in subscriptions. With many companies starting subscriptions in 2015/16, the increase was 8% over 2016, but is now 9% in 2018.

Training Revenue and Profit

The unweighted total training revenue decrease was a 1.5% in 18q4 (u=12, f=4, d=9). When considering the weighted numbers, it was 2.6%. However, the weighted trendline shows an increase of 1-2% in 2018 when size of company is considered.

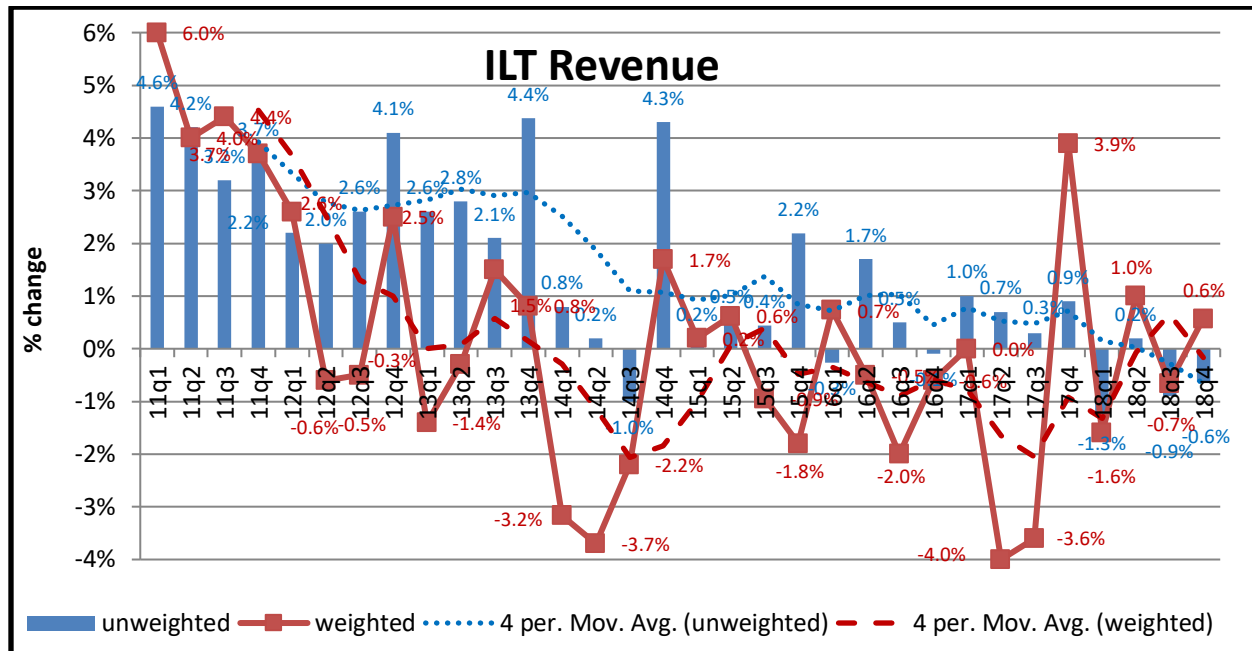


The unweighted total training profit grew 2.8% in 18q4 (u=12, f=7, d=5). And, with the weighted numbers, there was an increase of 1.8%. The weighted trendline shows an ongoing profit increase of around 2-3% in 2018 when size of company is considered.



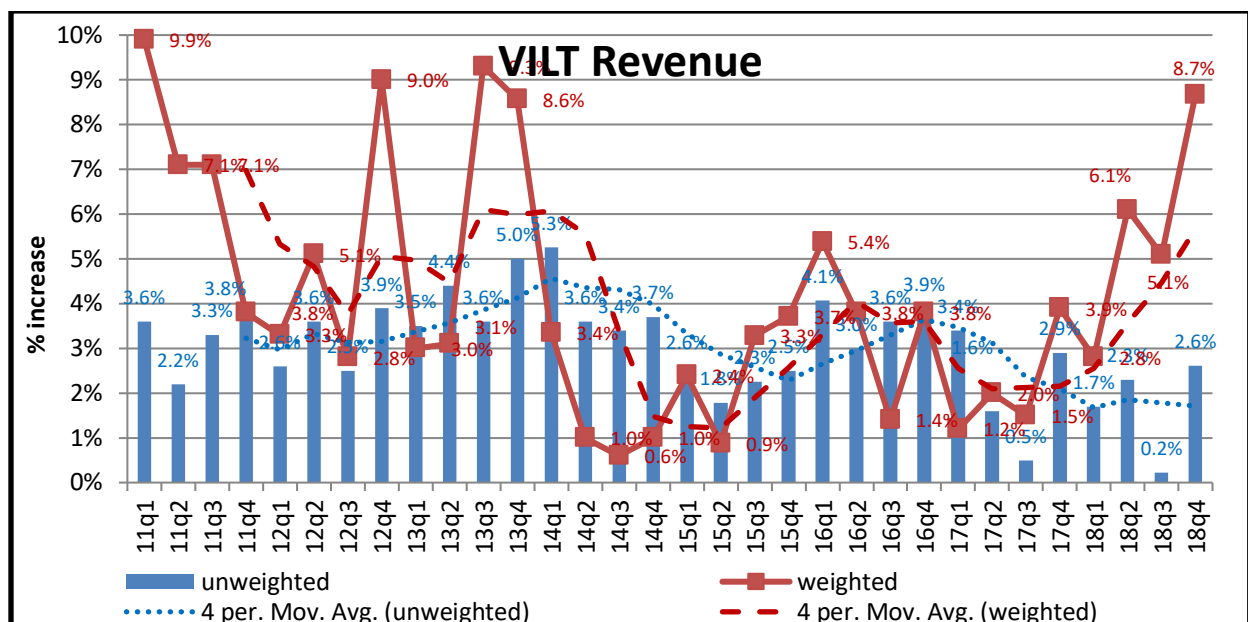
Live Instructor-led Training

This chart below suggests that ILT **revenue** for the larger companies has been the main cause of lower overall training revenue increases. The unweighted 18q4 **revenue** decrease was 0.6% (u=8, f=6, d=10) but the weighted number an increase of 0.6%. The decrease in **volume** was 0.3%. The weighted trendline shows ILT revenue in 2018 as flat when size of ILT revenue is considered.

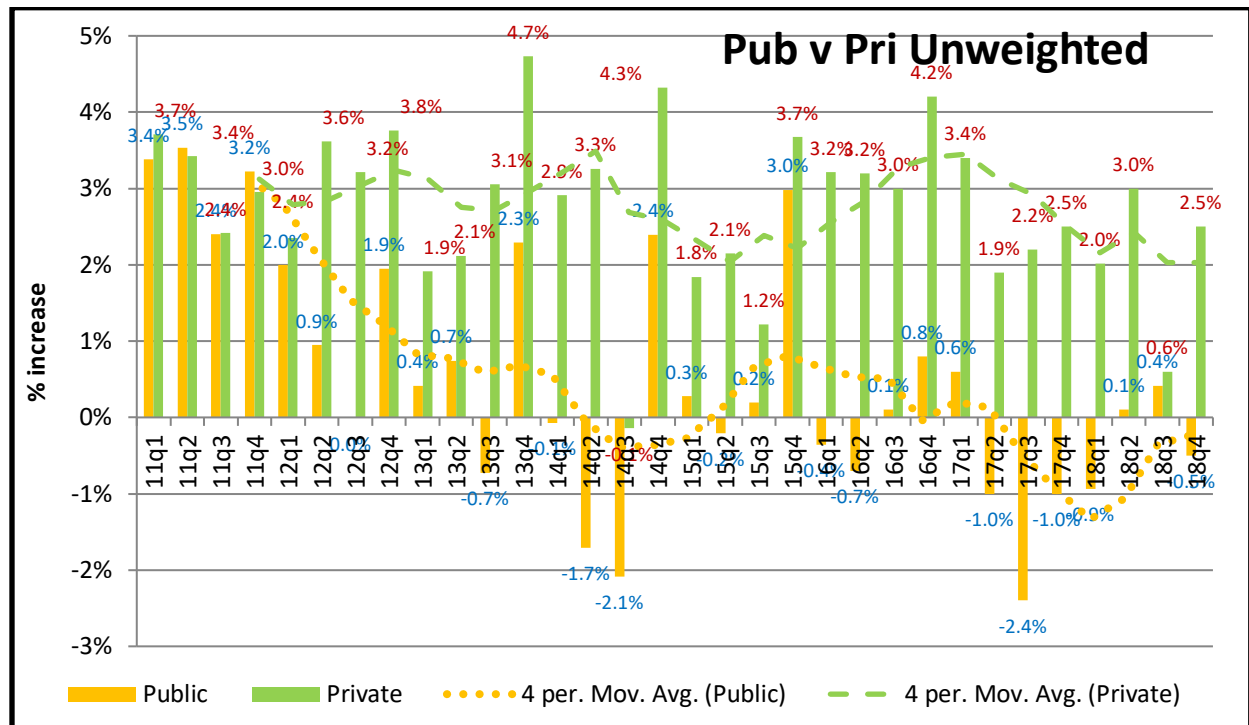


Virtual Instructor-led Training

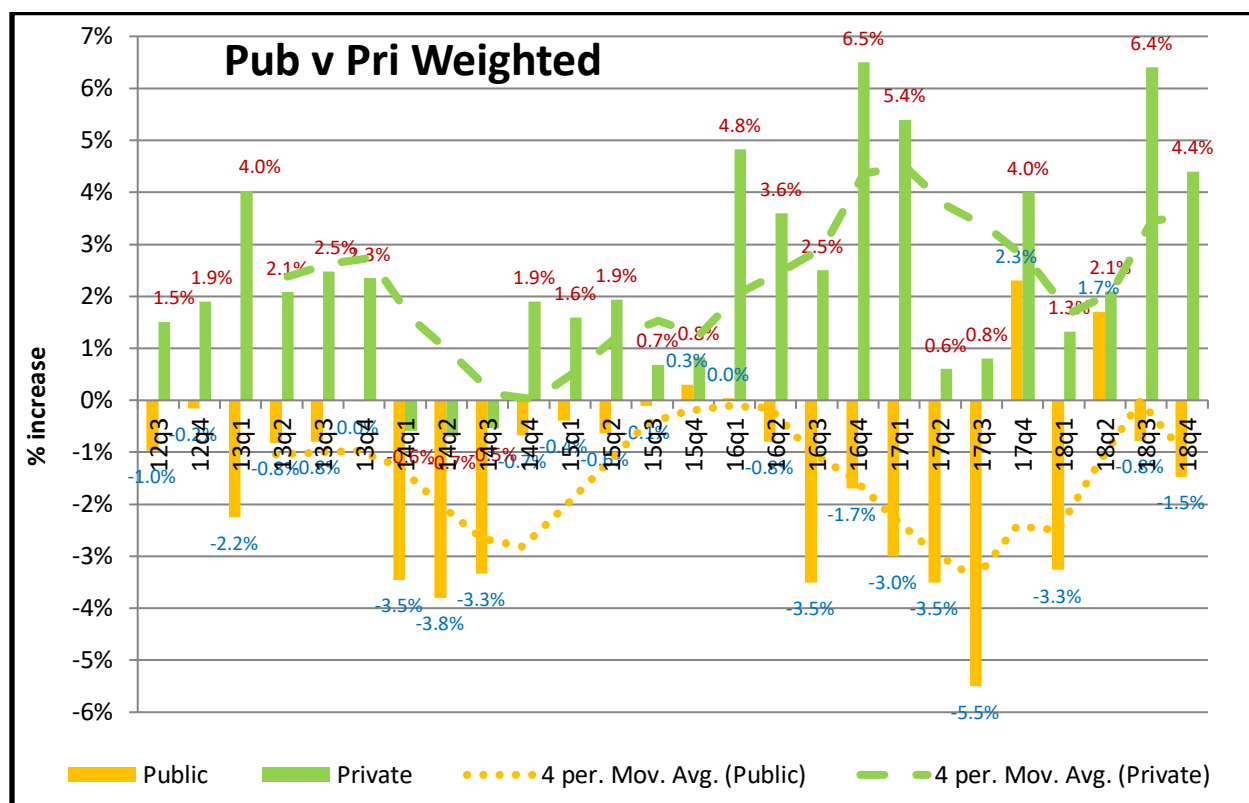
On the other hand, the VILT increase fell badly in 2014 but recovered. The unweighted 18q4 **revenue** increase is 2.6% (u=11, f=6, d=3) and the weighted increase is 8.7%. The decrease in **volume** was 0.3%. The weighted trendline shows an ongoing VILT increase of 5-6% when size of VILT revenue is considered, but it was 3-4% in 2016, having been 1% in 2014. 20 members reported revenue.



We are now asking you to forecast both public (u=10, f=6, d=9) and private (u=13, f=6, d=7) classes and have enough history to show that private classes show a consistent steady **revenue** increase of around 2% in 2018. **Volumes** were flat for public and 2.8% increase for private. Public classes recovered to flat in 2018. This shows unweighted values.

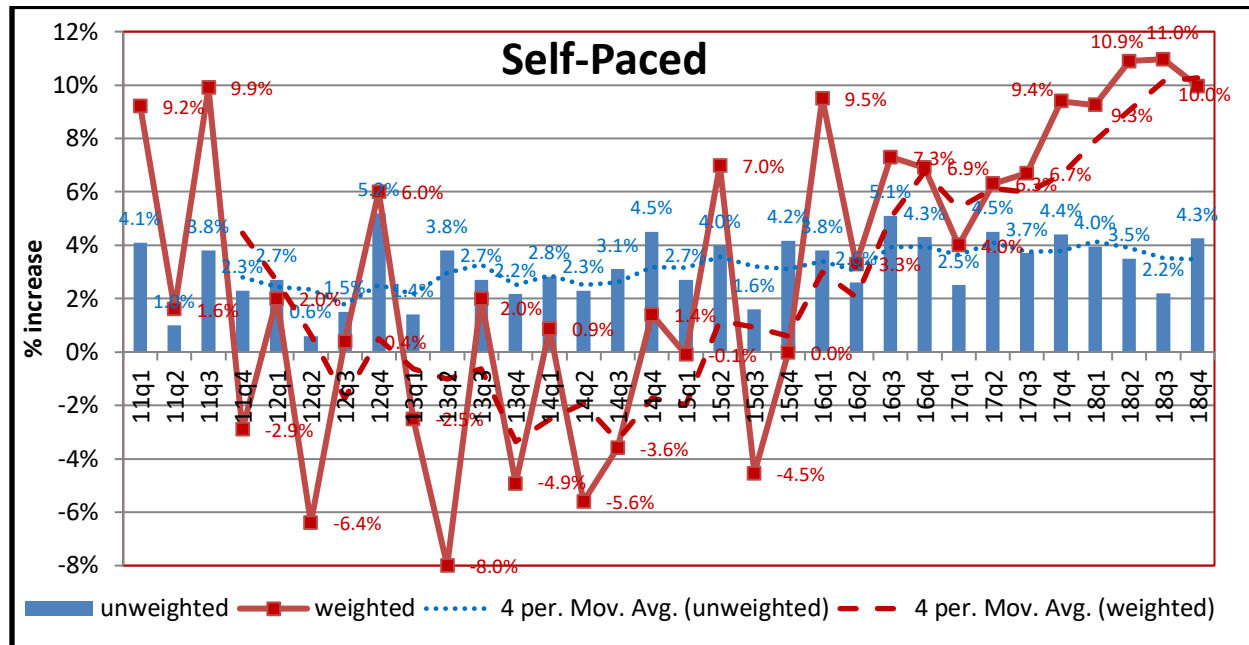


When weighted values are used, the **revenue** for public is showing -1% with private a 3% increase.



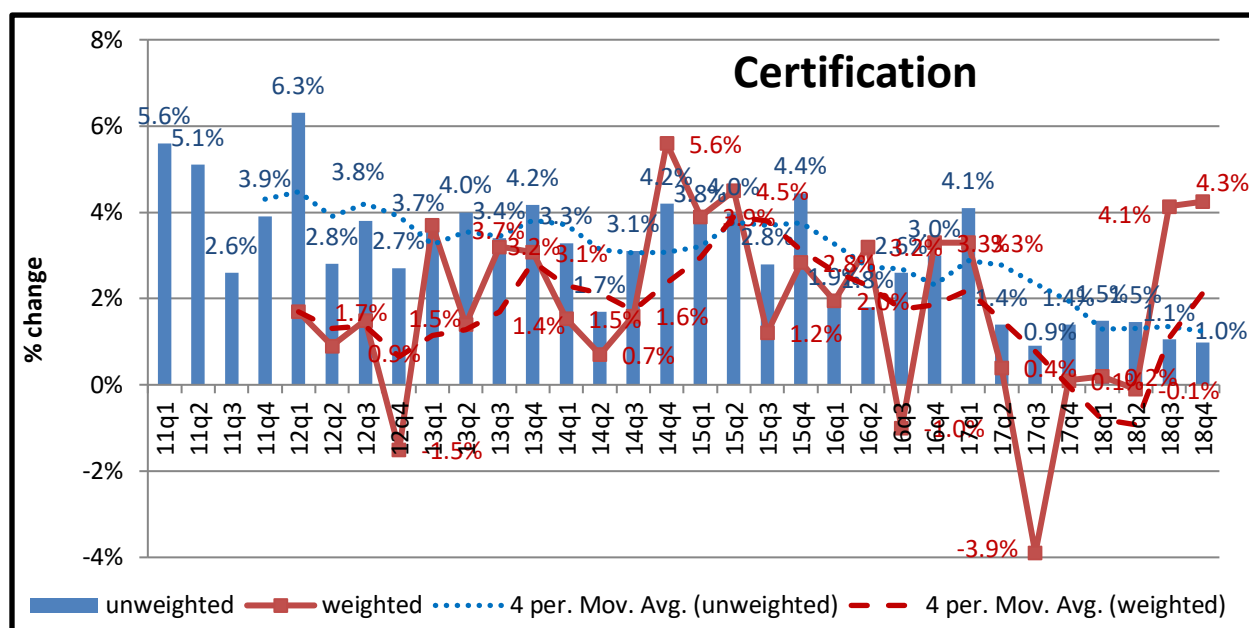
Self-Paced

The results for 18q4 (u=10, f=10, d=0) were 4.3% increase unweighted and 10.0% increase weighted. The increase in **volume** was 2.8%. This shows how larger companies can have a significant effect on these averages. The 4-period moving average shows an 10% increase for weighted. 20 members reported revenue.



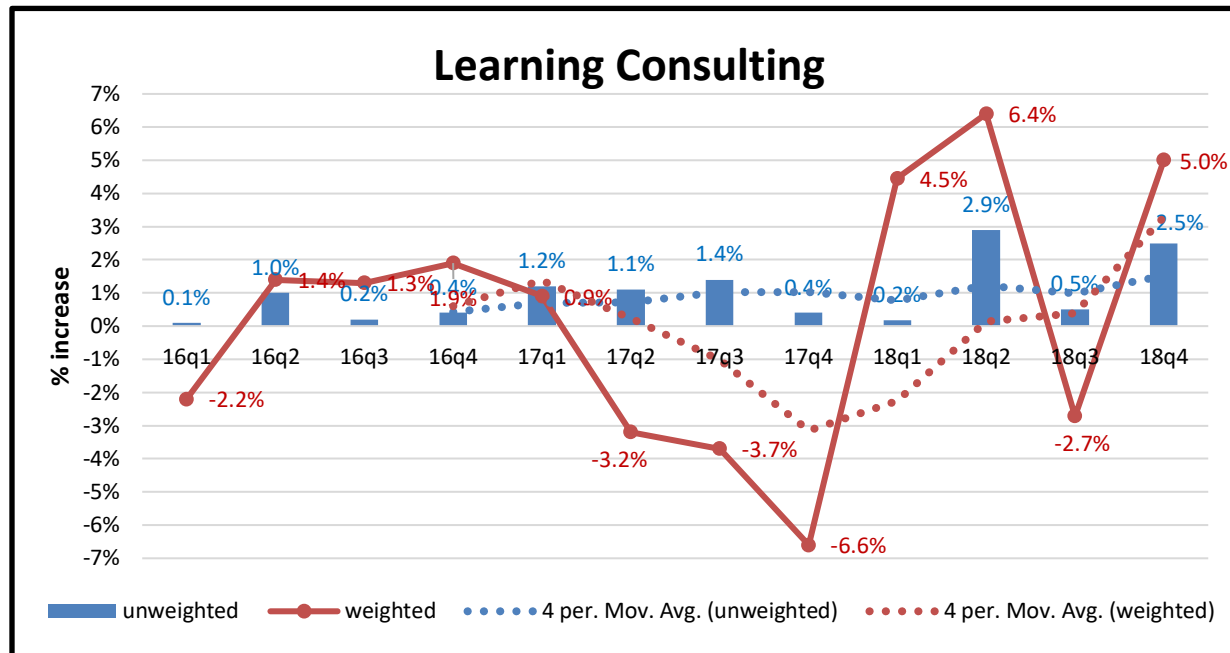
Certification

Up to 2015, certification reported an increase of around 3% year-on-year when unweighted. In that four-year period, the weighted scores grew from a 1% to 4%, too, showing a resurgence in the larger companies, but has now fallen back to 2%. The decrease in **volume** was 0.5%. The **revenue** increases for 18q4 (u=8, f=10, d=1) are 1.0% for unweighted and 4.3% when weighted. 19 members reported revenue.



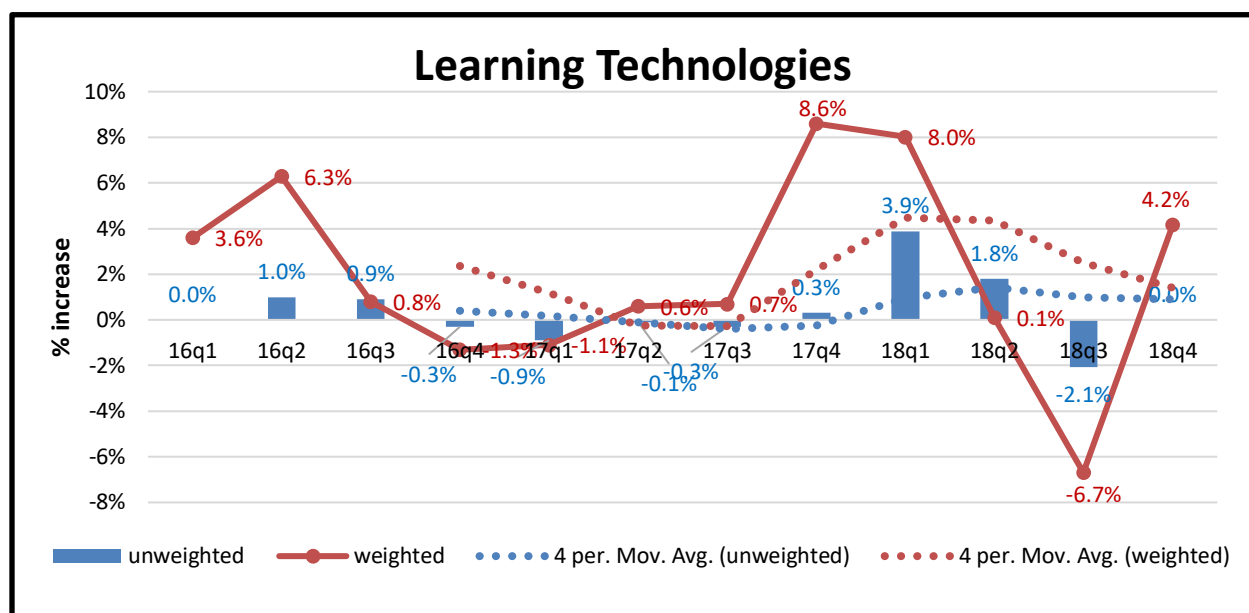
Learning Consulting

We now have three years reporting this area. In that period, the unweighted scores have largely remained flat. However, weighted scores have moved dramatically. The **revenue** increases for 18q4 (u=6, f=2, d=2) are 2.5% for unweighted and 5.0% when weighted. The increase in **volume** was 0.3%. The four-period average for weighted is 3% for 2018. 10 members reported revenue.



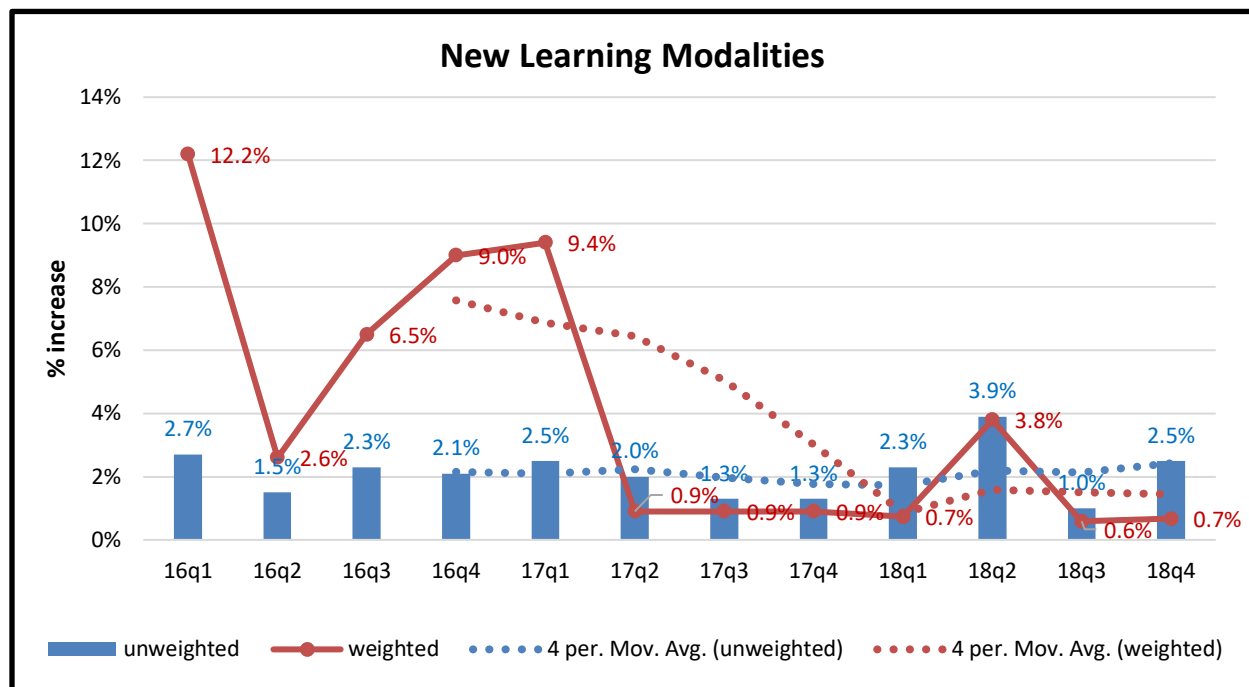
Learning Technologies

We also now three years reporting this area. In that period, the unweighted scores have recently showed volatility, but weighted scores even more so. The **revenue** decreases for 18q4 (u=1, f=3, d=1) are flat for unweighted and 4.2% when weighted. The trendline for weighted has dropped back to 2%. Only 5 members reported revenue.



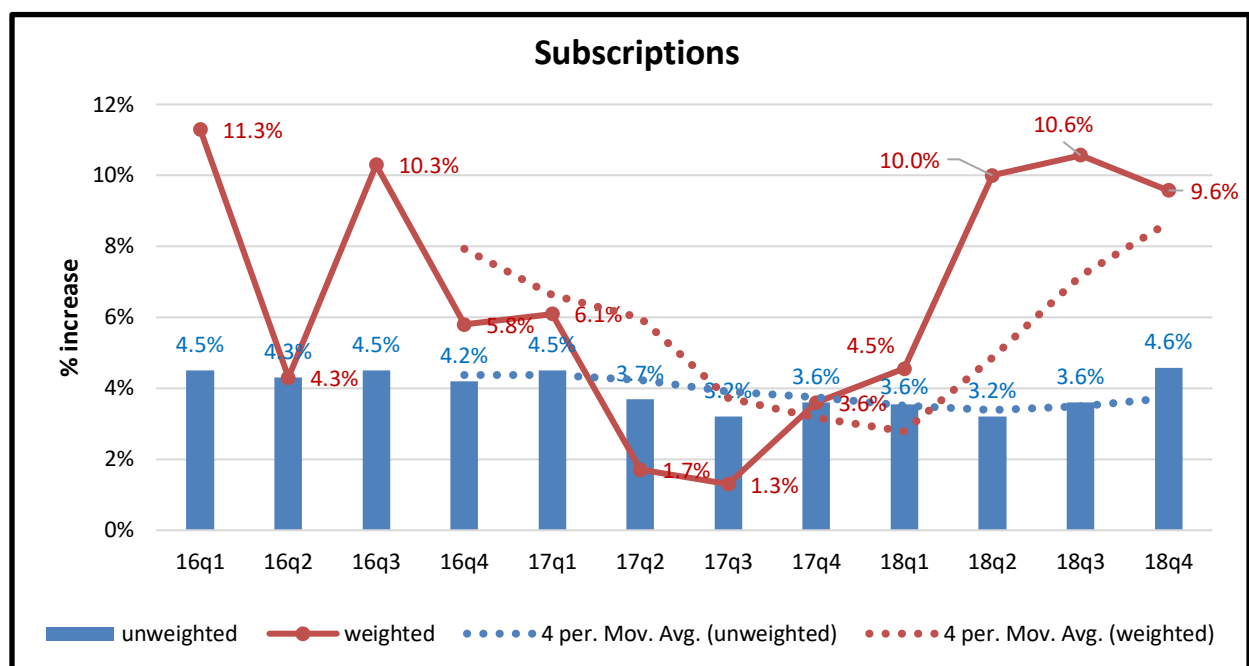
New Learning Modalities

The unweighted trendline for 2018 is 2%, while the weighted trendline shows 1%, but falling from 7%. The **revenue** increases for 18q4 ($u=3, f=4, d=0$) are 2.5% for unweighted and 0.7% when weighted. 7 members reported revenue. The increase in **volume** was 1.3%.



Subscriptions

The unweighted trendline is 4% whereas the weighted trendline is now showing 9% increases. The **revenue** increases for 18q4 ($u=10, f=7, d=1$) are 4.6% for unweighted and 9.6% when weighted. The increase in **volume** was 4.1%. 18 members reported revenue.



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

1. Data Loss Prevention Proxy
2. All of our classes were upgraded to the new product level so we saw an increase in attendance in our top 3 courses.
3. ILT, VILT, Certification
4. Marketing Cloud & Commerce
5. Devops, Automation, Cloud
6. Learning Technology (User Adoption tool); User adaption services
7. None. Only addition was subscription
8. All areas
9. VILT; Authorised Training Partner seats
10. Private events continue the ongoing upward trend.
11. Customised Onsite Training; Learning Subscriptions
12. Pre-Sales Training
13. Onsite Training (Instructor lead)
14. Security, Data & Analytics
15. instructor videos
16. Self-paced learning subscriptions
17. On-demand and self-paced labs.
18. Private Onsite
19. Networking & Storage
20. Mainly decrease all round
21. Partner Enablement
22. Private training is up
23. Scheduled numbers are improving!

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

1. Management Services
2. Certification Voucher purchase
3. None
4. Private training
5. Private and public classes
6. Live Classroom
7. Flat still.
8. Public classes; Project related enablement
9. Direct onsite Classroom Training (somewhat seasonal)
10. Exams from a modality; Middleware from business line
11. ITSM
12. Public courses
13. Public ILT

14. We have seen decreases across the board ILT, VILT, Private and Public
15. Public
16. The slowest growth is from server technologies
17. Public classes, but mainly decrease all round
18. Live Virtual Classroom
19. Public training
20. We had a large one-off project in 2017 that explains our much lower revenue this year for private courses. Less requests for private onsite training this year

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

1. Loss of Instructor difficult to find replacement with similar skills
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. Hiring
4. Internal resources to support the scale of Instructor Development
5. Organization re-structuring; Software release cycles
6. Transitioning our training programs from on premise or single tenant SaaS to a strategy to support multi-tenant systems poses both technical challenges as well as other issues related to keeping up with more frequent changes. The right pricing model for customer subscriptions
7. Lowering revenue, loss of instructors
8. Resourcing challenges
9. Increasing Sales with a small team; Reducing Catalogue
10. General flattening out of revenue/activity without clear indicators as to cause. Instructor utilisation difficult to manage due to wide variation of activity week to week E.g. some weeks, all scheduled classes run, the next week only a handful.
11. Poor software performance; Reduction in Education sales; headcount; Centralisation of Education to NEMEA; BREXIT
12. Big push to virtual training, high registrations, high % no-shows.
13. Hire new people. Make corporate sales team sell more training
14. Lack of dedicated sales resources - and the resulting declining technical training enrollments
15. Decreasing overall volume of students
16. 4 heads lost from a team of 5 within last 6 months, resulting in almost no active selling outside of software deals.. No new courses added to the portfolio which is now looking very tired.
17. Attracting the right calibre of authorized training partners and scaling the business (depth and breadth).
18. Define new training experience
19. Declining net new customer base. Consulting services to educate customers. New technologies will not grow as fast as expected. Partner training moving to freemium instead of fully paid
20. Managing growth of mature products
21. Sales headcount and operational issues
22. Resourcing for multiple language requirements for resources and content.
23. Uncertainty with corporate mergers, leading to attrition risks. Incorporating 50% more products into portfolio, and combining multiple systems.
24. Getting the sales team to actively sell training; Keeping up with our ever-changing software

Please add any other comments or observations you have on the state of the IT training market

1. Increased demand for dedicated onsite classes
2. That digital badging is changing the landscape and increased interest in achieving learning and specialization on our products.
3. Overall the market appears buoyant for us in EMEA; Due to consistent engagement and improved sales efforts; Globally growth occurred but at a lower rate
4. Training revenues are seeing a 40-50% drop in classroom delivered training in the UK. Germany is increasing. Brexit?
5. The drive to Digital continues and remains our sore focus for Cloud products
6. Moving towards a (more) focused partner model.
7. In general, the market seems to be moving towards training as a driver of software adoption and customer success. This is not currently our approach, we are still driven by revenue targets. We have seen a much smaller business in terms of volume and revenue with demand moving from public to private and ILT to VILT.
8. We are a hyper growth division growing faster than the overall organisation.
9. Customers are willing to spend on training still - good market
10. Looks quite stable
11. EMEA outperformed US for bookings and revenue for the first time.