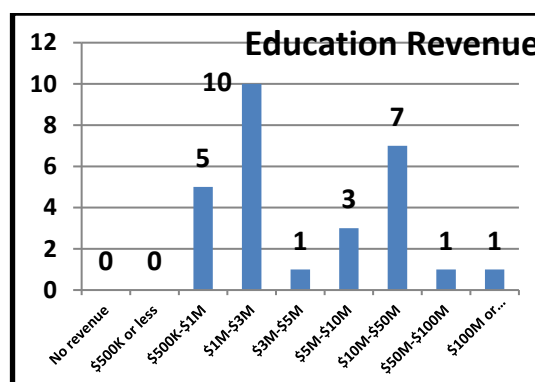
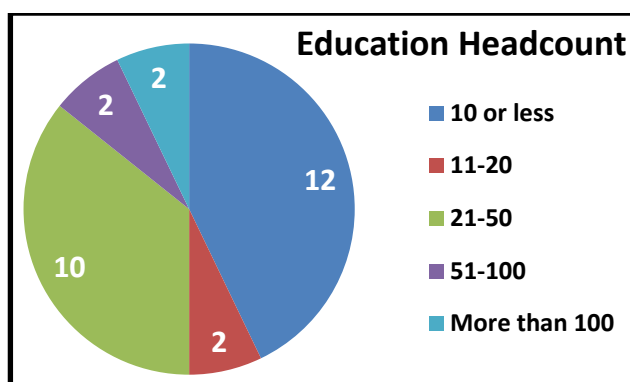
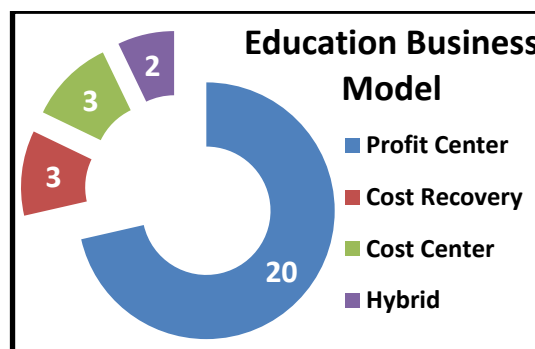
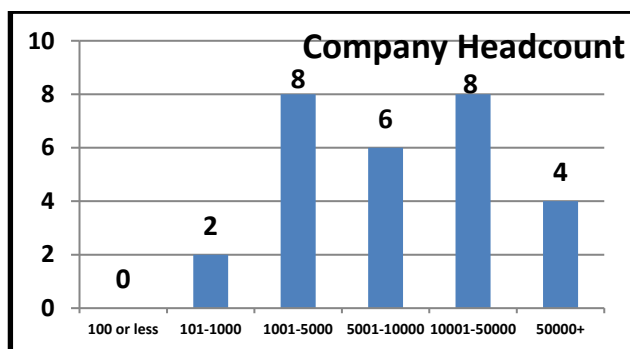
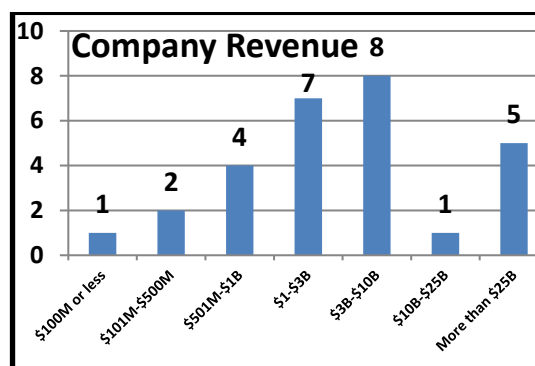
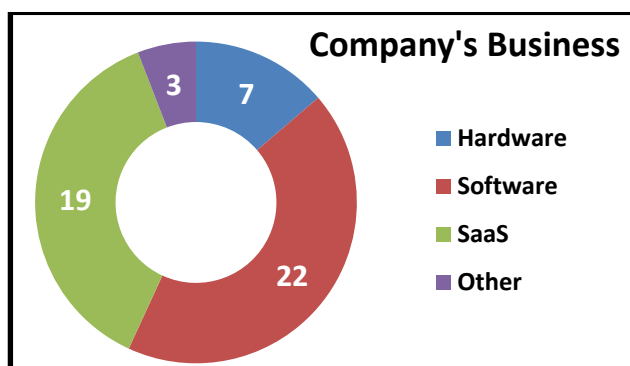


CEdMA Europe Market Barometer 1st Quarter 2019

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 19q1 actuals is based on input from 28 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 19q1)
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 2% to 19q1.

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% to 19q1.

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 to 19q1.

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 7% to 19q1.

Public (scheduled) classes is revenue for ILT and VILT and the trendline now shows negative 1% to 19q1, having been negative 3-4% in 2016/17.

Private (one-customer) classes is revenue for ILT and VILT, and showing an increase of 4%, down from 4% in 2016 to 2% in 2017.

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 11% to 19q1 having been as low as negative 4% during 2013-14.

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% to 19q1, 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 1-2%. (But only 11 members reported positive revenue.)

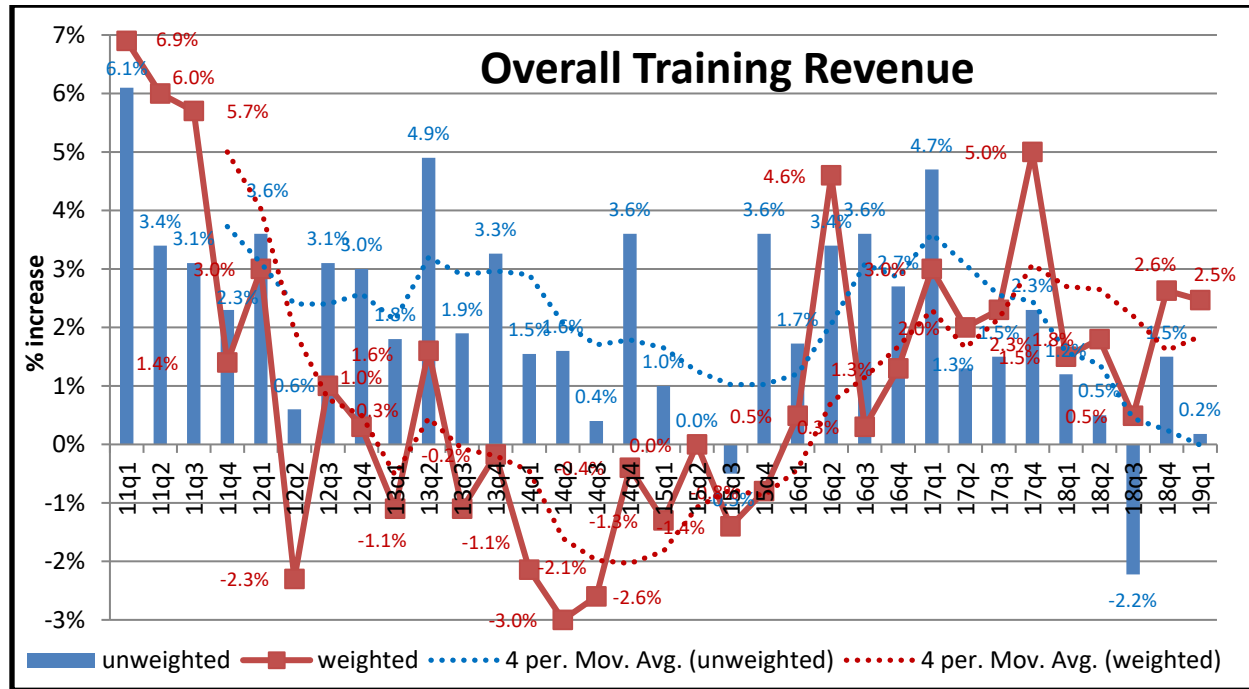
Learning Technologies is all revenue generated by learning tools, infrastructure, courseware and directly related training and learning consulting for these technologies. Having been 4% in 2017, the trend is now flat to 19q1. (But only 6 members reported positive revenue.)

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 the last 2 years. (But only 5 members reported positive revenue.)

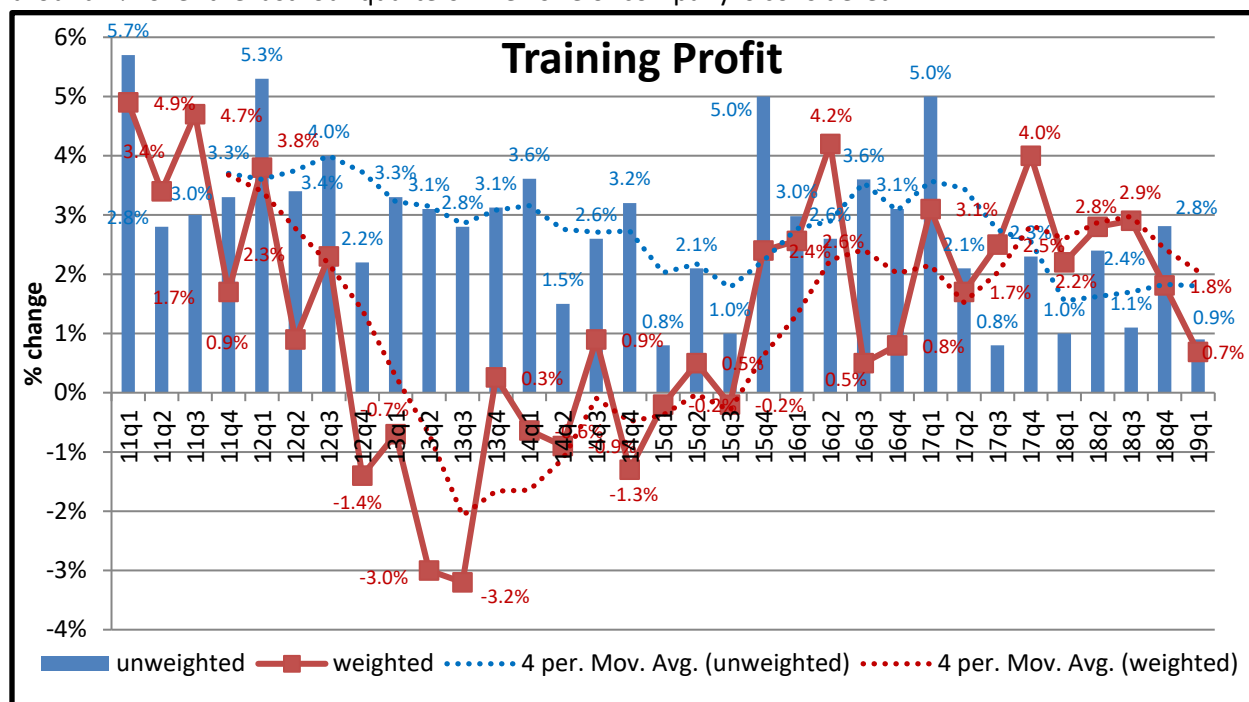
Subscriptions include all revenue from any of the above modalities included in subscriptions. With many companies starting subscriptions in 2015/16, the increase was 8% over 2016, but is now 10% to 19q1.

Training Revenue and Profit

The unweighted total training revenue increase was a 0.2% in 19q1 (u=13, f=4, d=11). When considering the weighted numbers, it was 2.5%. However, the weighted trendline shows an increase of just under 2% over the last four quarters when size of company is considered.

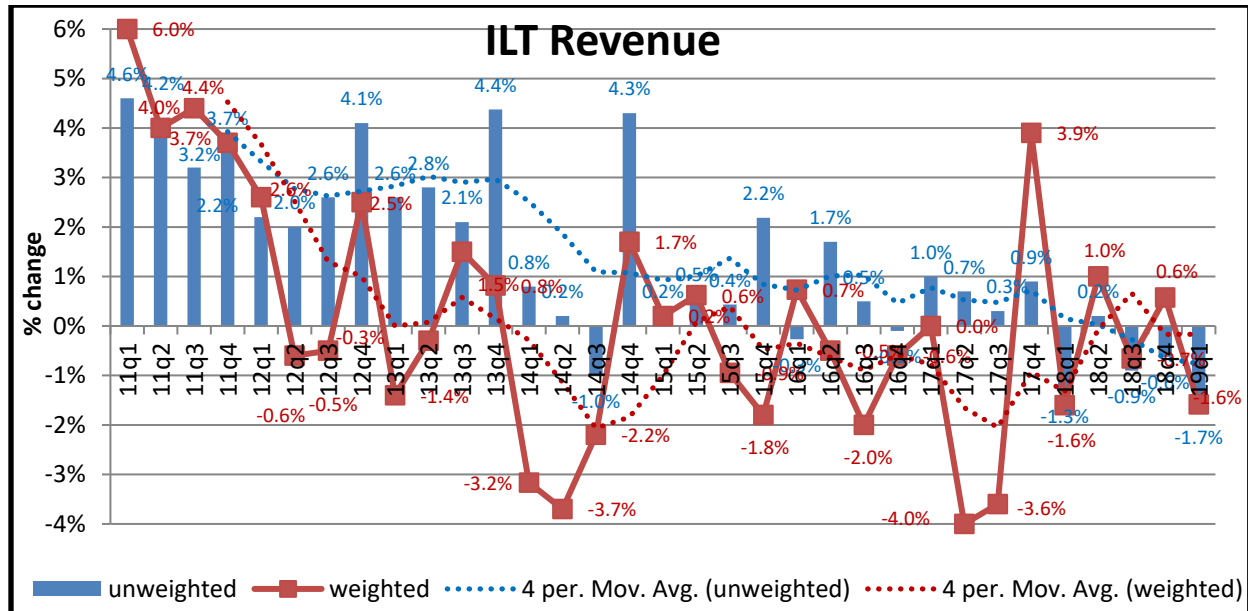


The unweighted total training profit grew 0.9% in 19q1 (u=11, f=8, d=6). And, with the weighted numbers, there was an increase of 0.7%. The weighted trendline shows an ongoing profit increase of around 2% over the last four quarters when size of company is considered.



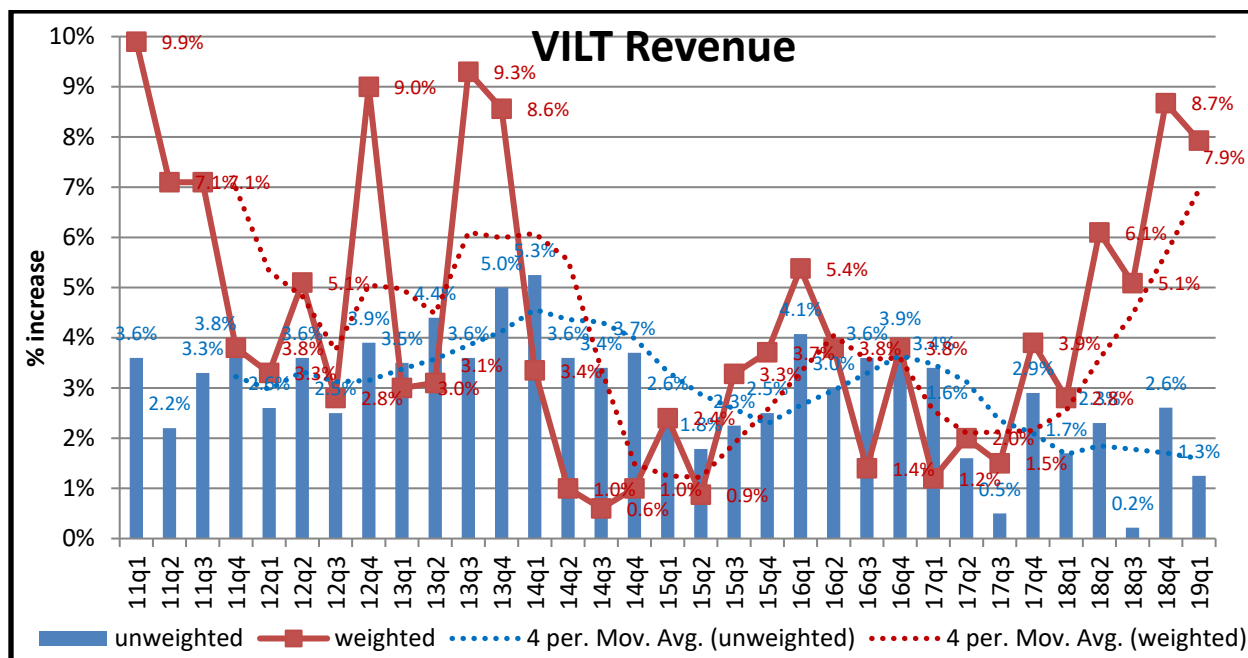
Live Instructor-led Training

This chart below suggests that ILT **revenue** for the larger companies has been the main cause of lower overall training revenue increases. The unweighted 19q1 **revenue** decrease was 1.7% (u=7, f=6, d=13) but the weighted number a decrease of 1.6%. The decrease in **volume** was 0.3%. The weighted trendline shows ILT revenue over the last four quarters as flat when size of ILT revenue is considered.

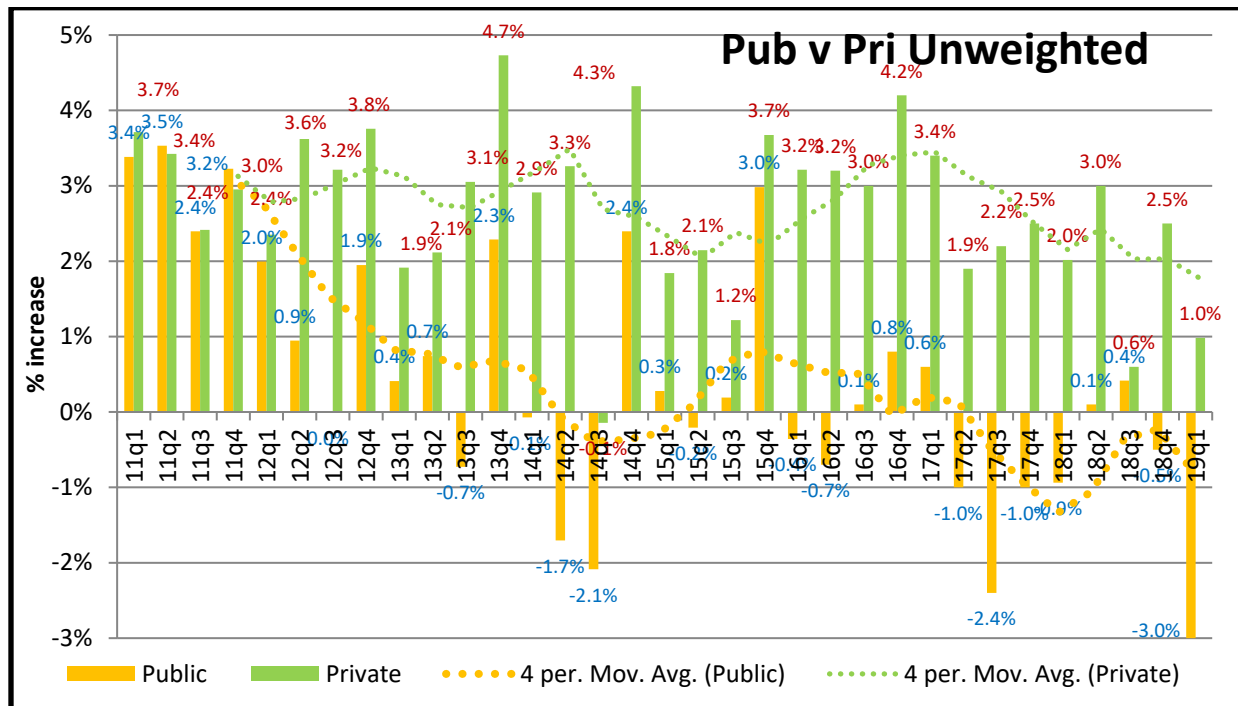


Virtual Instructor-led Training

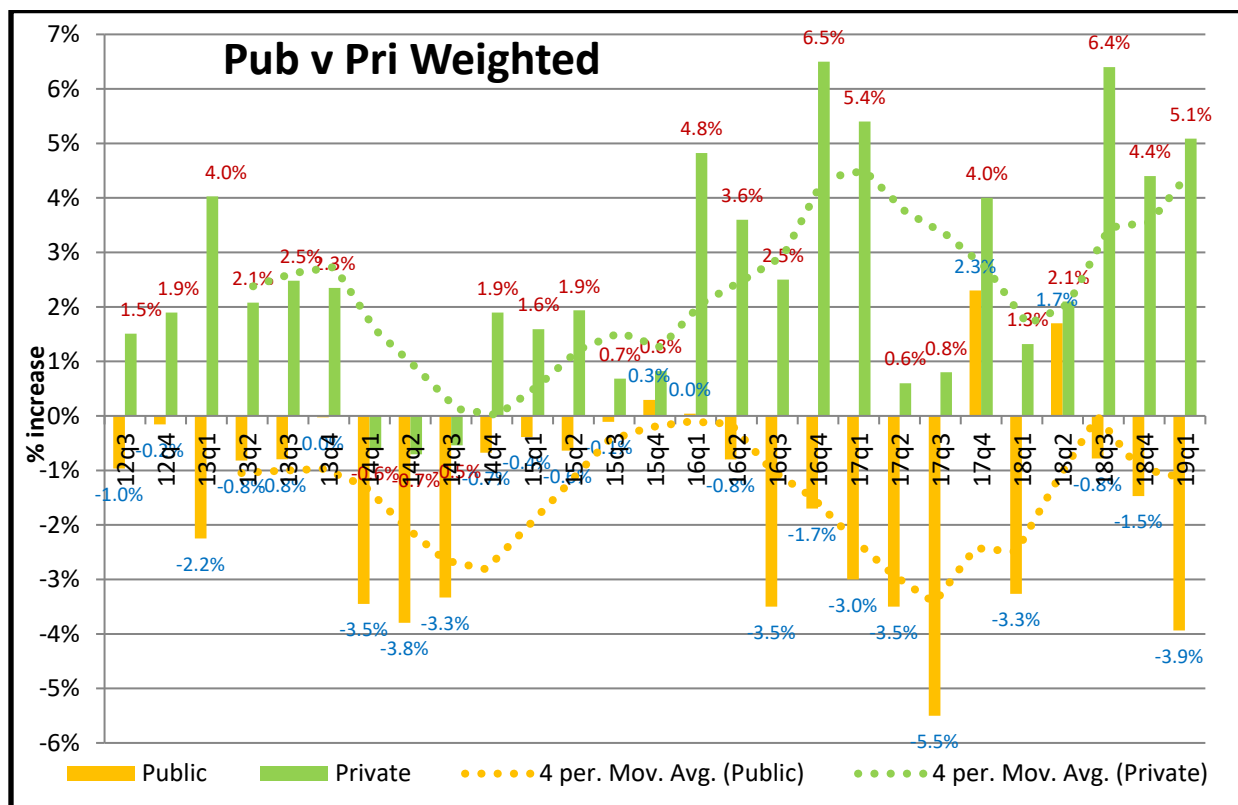
On the other hand, the VILT increase fell badly in 2014 but recovered. The unweighted 19q1 **revenue** increase is 1.3% (u=9, f=10, d=5) and the weighted increase is 7.9%. The increase in **volume** was 0.3%. The weighted trendline shows an ongoing VILT increase of 7% when size of VILT revenue is considered, but it was 3-4% in 2016, having been 1% in 2014. 21 members reported revenue, 4 no revenue.



We are now asking you to forecast both public (u=8, f=4, d=15) and private (u=13, f=5, d=10) classes and have enough history to show that private classes show a consistent steady **revenue** increase of just under 2% over the last four quarters. **Volumes** decreased 1.7% for public and with a 1.3% increase for private. Public classes decreased 1% over the last four quarters. This shows unweighted values.

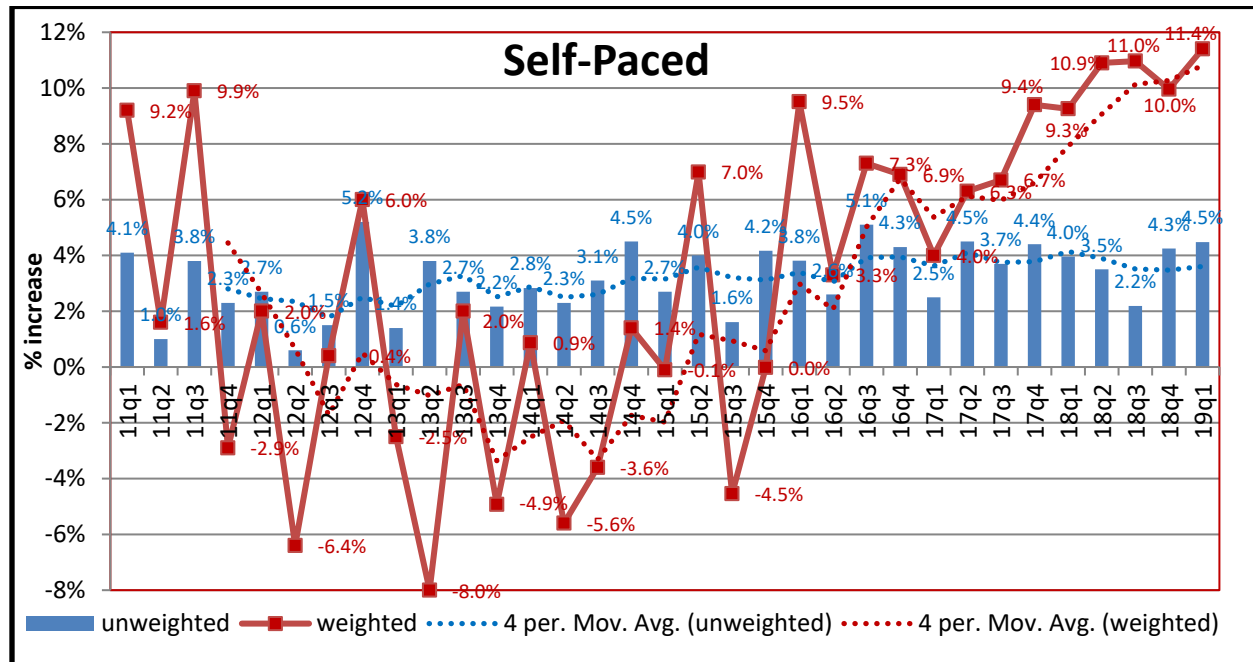


With weighted values, the **revenue** trendline for public is showing -1% with private a 4% increase.



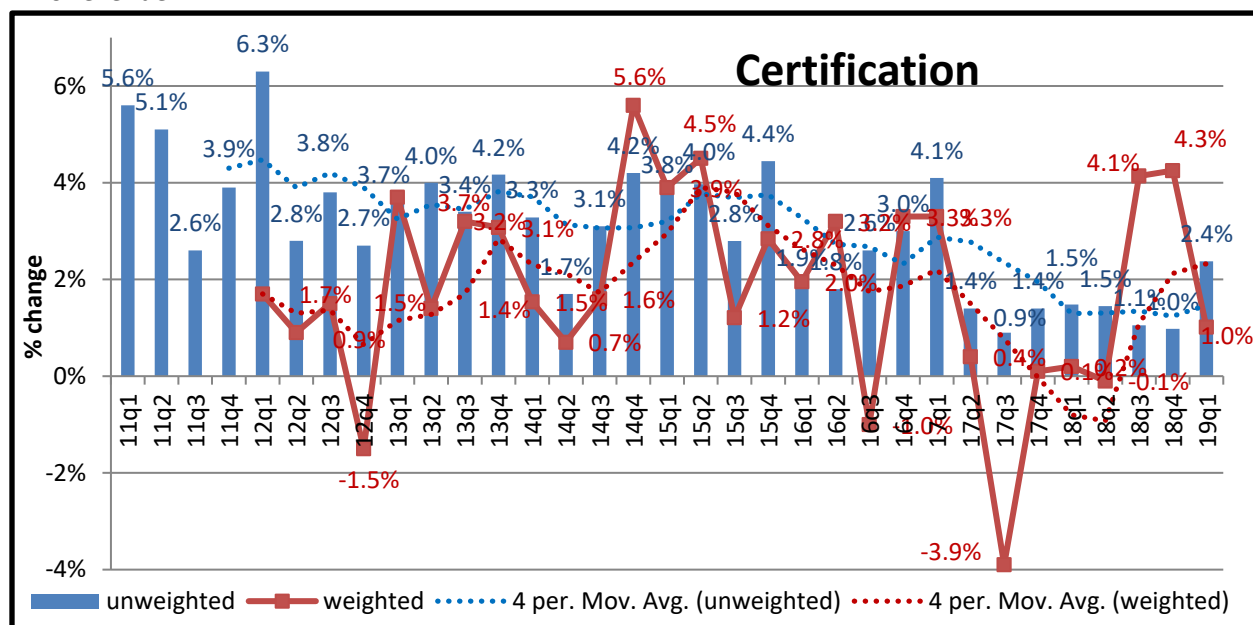
Self-Paced

The results for 19q1 (u=13, f=11, d=0) were 4.5% increase unweighted and 11.4% increase weighted. The increase in **volume** was 3.5%. This shows how larger companies can have a significant effect on these averages. The 4-period moving average shows an 11% increase for weighted. 19 members reported revenue, 4 no revenue.



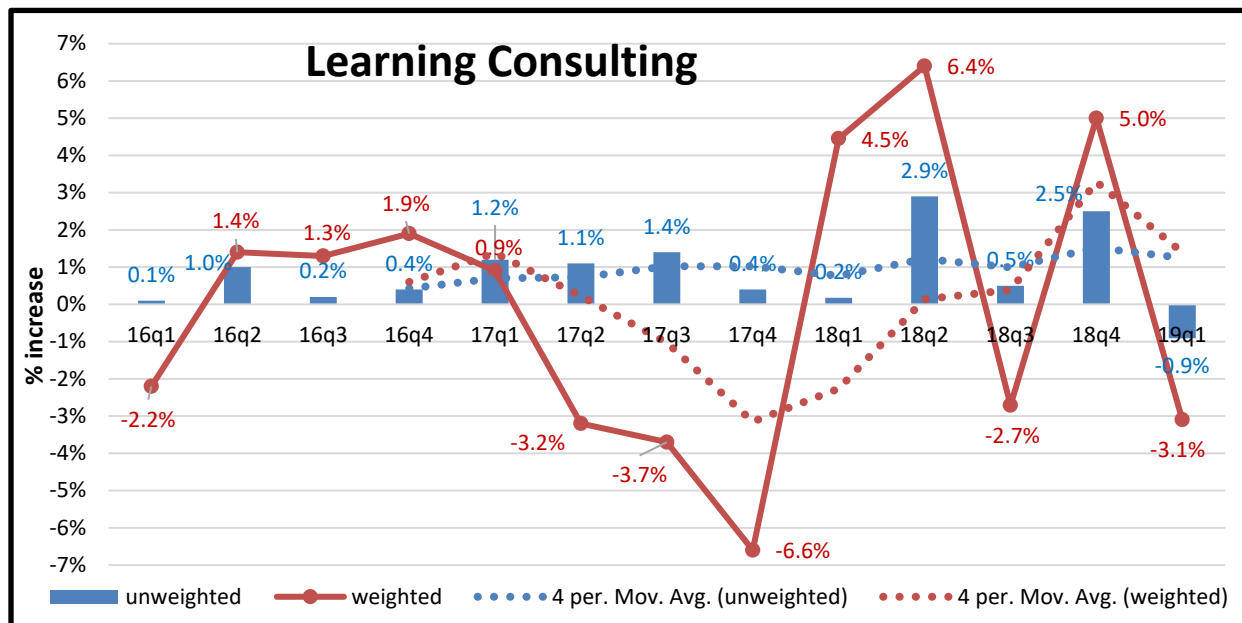
Certification

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 increase in **volume** was 1.5%. The **revenue** increases for 19q1 (u=9, f=9, d=2) are 2.4% for unweighted and 1.0% when weighted. 18 members reported revenue, 4 no revenue.



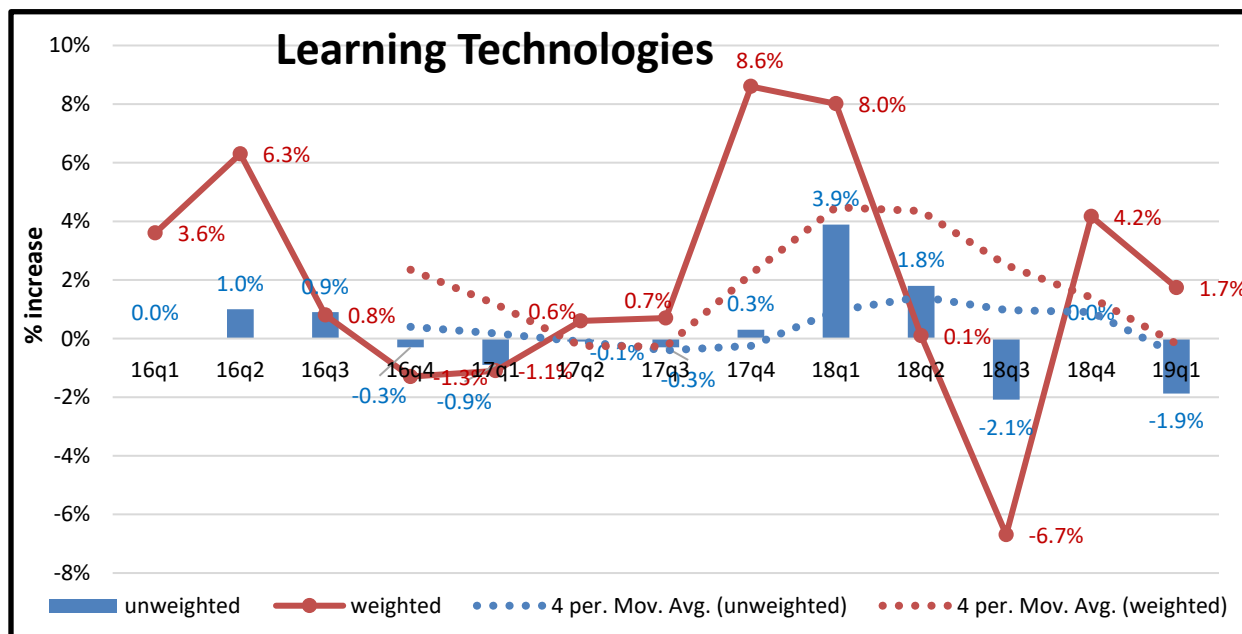
Learning Consulting

We now have just over three years reporting this area. In that period, the unweighted scores have largely remained flat. However, weighted scores have moved dramatically. The **revenue** decreases for 19q1 (u=4, f=3, d=4) are 0.9% for unweighted and 3.1% when weighted. The increase in **volume** was 1.0%. The current four-period average for weighted is 1-2%. 11 members reported revenue.



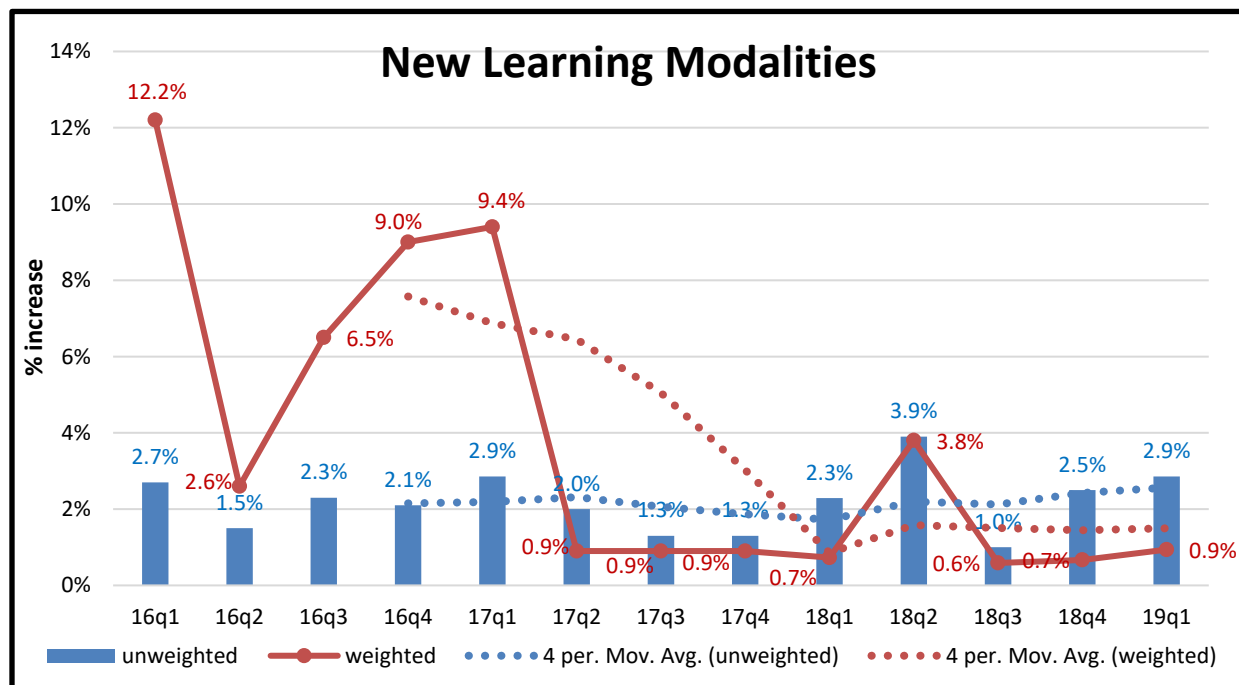
Learning Technologies

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** decrease for 19q1 (u=2, f=4, d=2) is 1.9% for unweighted and a 1.7% increase when weighted. The trendline for weighted has dropped back to flat. Only 5 members reported positive revenue.



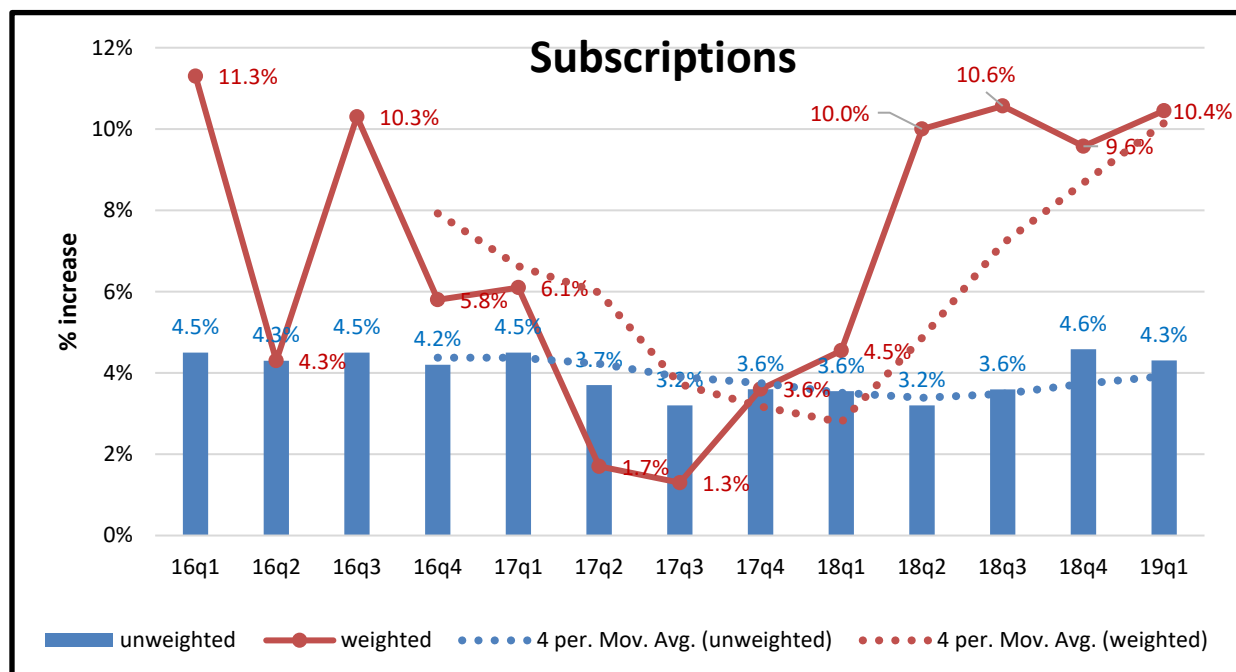
New Learning Modalities

The unweighted trendline is just over 2%, while the weighted trendline shows 1-2%, but falling from 7%. The **revenue** increases for 19q1 ($u=4, f=3, d=0$) are 2.9% for unweighted and 0.9% when weighted. 5 members reported positive revenue. The increase in **volume** was 1.5%.



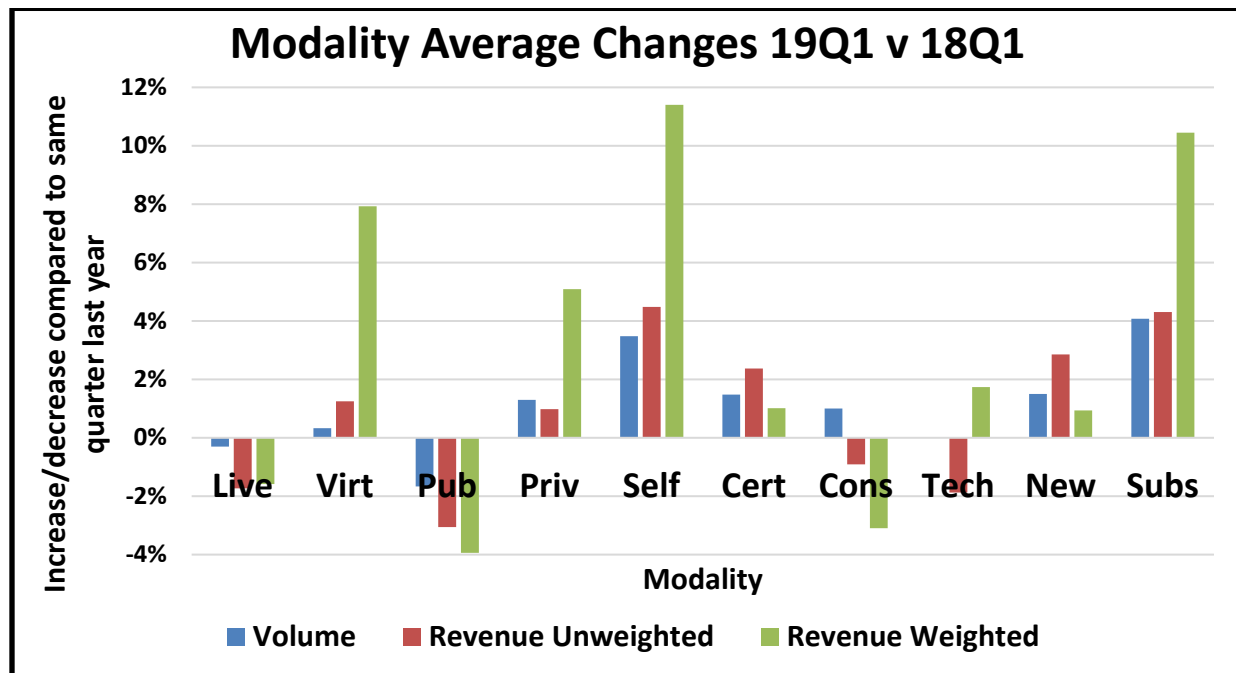
Subscriptions

The unweighted trendline is 4% whereas the weighted trendline is now showing 10% increases. The **revenue** increases for 19q1 ($u=10, f=7, d=1$) are 4.3% for unweighted and 10.4% when weighted. The increase in **volume** was 4.1%. 16 members reported positive revenue.



Volumes as well as revenue

We now ask for percentage movement of modalities by volume of students in addition to or instead of revenue. Of course, averages will only be for unweighted input. Here's the comparison for 19q1.



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

1. Learning Technology (User Adoption tool); User adaption services
2. DevOps
3. Big Data
4. Networking & Storage
5. Security, Data & Analytics, and Storage
6. Customised Onsite Training
7. None. Only addition was subscription
8. Learning Partner fees have grown over last 3-6 months. Good growth +10% seen in Q4 (YoY) but a tough Q1'19, Training kit sales and public growth Q4.
9. Private classes
10. Onsite Training (Instructor lead)
11. Data Loss Prevention / Proxy
12. Authorised Training Partner seats; Self-Paced Learning Labs
13. 3rd Party offerings. Scale out
14. Pre-Sales Training
15. Marketing Cloud & Commerce
16. ILT, VILT, Certification
17. Self-paced learning subscriptions
18. Slight improvement ion scheduled classes
19. Subscriptions

20. Partner Enablement
21. eLearning
22. On-demand and self-paced labs.
23. Instructor videos
24. Private Onsite

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

1. Private training and public training
2. Certification voucher purchase
3. PowerCenter (Legacy Data Integration)
4. The slowest growth is from server technologies
5. Networking
6. Public classes; Project-related enablement
7. Private and public classes
8. Tough Q1, EMEA business down around 20%; Drop in Private onsite training; Big project in Q1/2018, resulted in large Q1/18 private onsite, which was not seen this year. Also drop in public live courses in EMEA, Q1
9. ILT public schedule
10. Exams from a modality; Middleware from business line
11. Management Services
12. Virtual Classroom
13. Direct onsite Classroom Training
14. Public sessions decreased a lot globally
15. Public ILT
16. Less requests for private onsite training this year
17. Certification
18. Live Virtual Classroom
19. Live classroom (both private and public)
20. Public courses
21. Public

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

1. The right pricing model for customer subscriptions as it is too expensive
2. Needing to update courses on a quarterly basis; Margin reducing
3. My absence (maternity leave)!
4. Managing growth of mature products
5. Lack of dedicated sales resources - and the resulting declining technical training enrollments
6. Poor software performance; Reduction in Education sales headcount; Centralisation of Education to NEMEABREXIT
7. Lowering revenue, loss of instructors
8. Reduction in public live training ILT; Further staff reductions coming into 2019

9. 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.
10. Lost heads still not replaced, understaffed and little to no sales activity[.Company-wide re-organisation has resulted in lost momentum as training has been subsumed by larger professional services organisation
11. Define new training experiences; Build a real Certification plan
12. Hire new people; Make corporate sales team sell more training
13. Loss of Instructor difficult to find replacement with similar skills
14. Increasing Sales with a small team; Achieving balance of Outside Service Spend with Authorized Partners.
15. Big push to virtual training, high registrations, high % no-shows.
16. Adding a 2nd delivery partner in France; Meeting the expectations of the license business to supporting training for audiences not able to fund training to the same level as Enterprise business
17. Hiring
18. Internal changes in the training operation; Getting courses updated to newest features
19. Getting the sales team to actively sell training; rebranding to learning services
20. Resourcing challenges
21. Uncertainty with corporate mergers, leading to attrition; Incorporating 50% more products into portfolio, and combining multiple systems.
22. Resourcing for multiple language requirements for resources and content.
23. Self-paced vs ILT; General weakness on classes with no clear picture on the reasons (competition, product maturity, DIY, etc.)
24. Attracting the right caliber of authorized training partners and scaling the business (depth and breadth).
25. Decreasing overall volume of students; free training offers
26. 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

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

1. Digital badging is taking over!
2. Training revenues are seeing a 60-70% drop in classroom delivered training in the UK. Germany is increasing. Brexit?
3. The drive to Digital continues and remains our sole focus for Cloud products
4. 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 as 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
5. Increased demand for dedicated onsite classes
6. Moving towards a (more) focused partner model.
7. The business in the UK reduced dramatically
8. Corporate merger leading to internal disruption. Lots of (expected) challenges.
9. We are in the process of transforming our training offerings into a subscription model
10. We are a hyper growth division growing faster than the overall organisation.