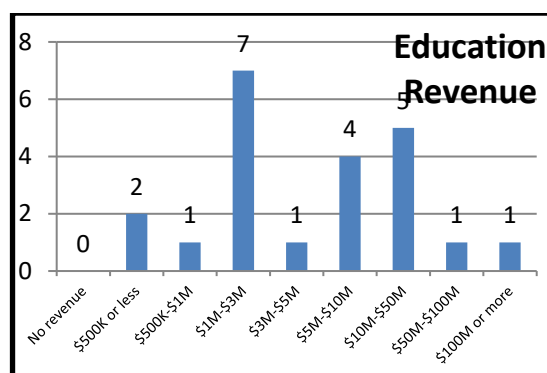
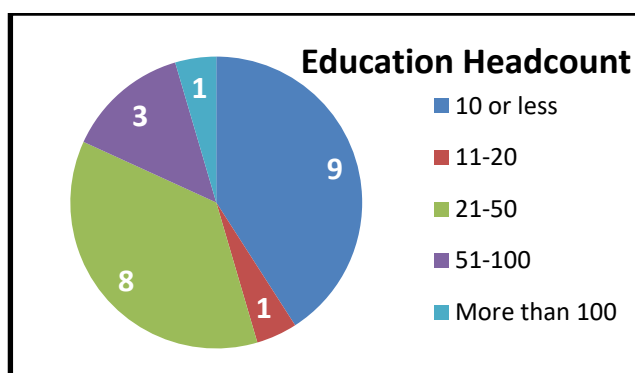
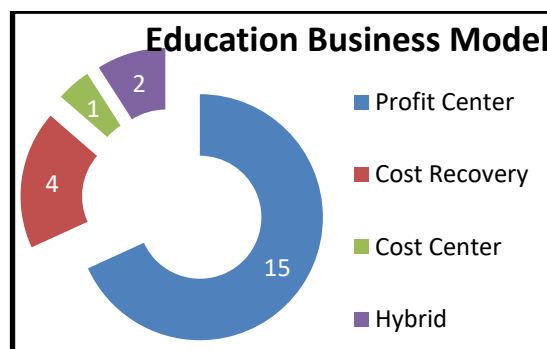
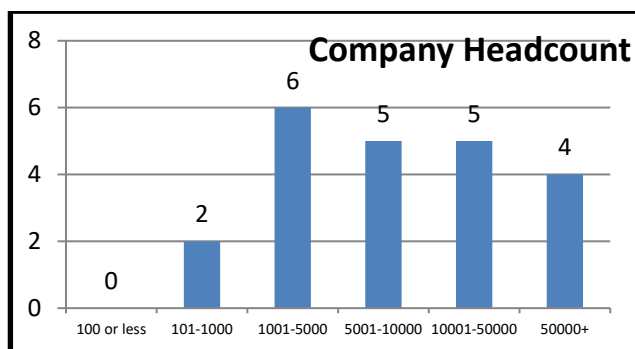
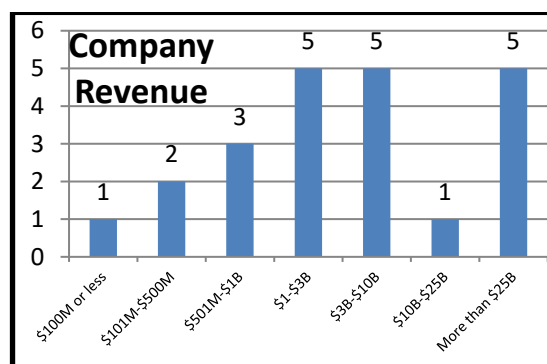
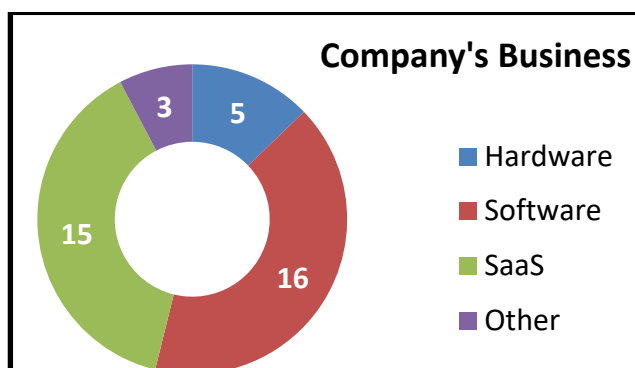


CEdMA Europe Market Barometer 2nd Quarter 2019

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 19q2 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 18q2)
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 19q2.

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 just under positive 2% to 19q2.

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, was flat in 2017-18 but is now back to negative 2% to 19q2.

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 but has risen steadily to over 7% YoY.

Public (scheduled) classes is revenue for ILT and VILT and the trendline now shows negative 3% to 19q2, having been flat in 2017-18.

Private (one-customer) classes is revenue for ILT and VILT, and showing an increase of 5-6%, up from 4% in 2016 and 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 19q2 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 2-3% to 19q2, 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 negative 1%. (But only 8 members reported positive revenue.)

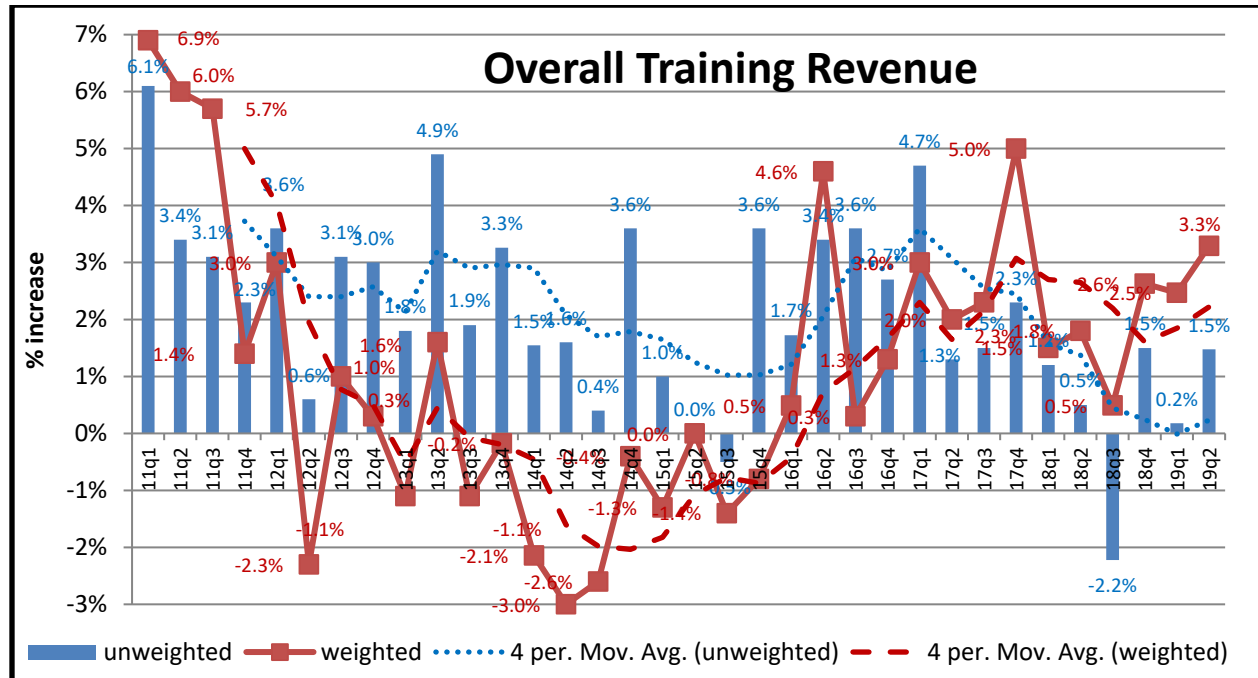
Learning Technologies is all revenue generated by learning tools, infrastructure, courseware and directly related training and learning consulting for these technologies. Having been 4% in 2017, the trend is now flat to 19q2. (But only 5 members reported positive revenue.)

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 4 members reported positive revenue.)

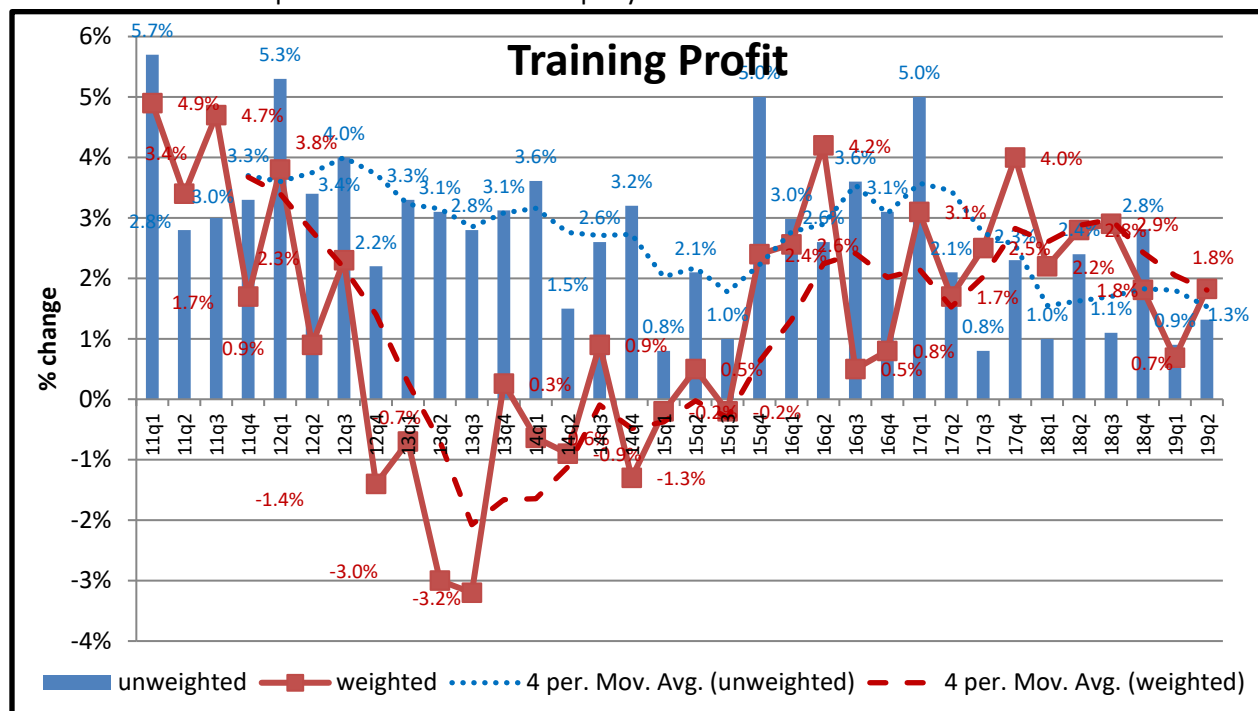
Subscriptions include all revenue from any of the above modalities included in subscriptions. With many companies starting in 2015/16, the increase 8% over 2016, 3% over 2017, but is now 10% to 19q2.

Training Revenue and Profit

The unweighted total training revenue increase was a 1.5% in 19q2 (u=12, f=1, d=9). When considering the weighted numbers, it was 3.3%. However, the weighted trendline shows an increase of 2% over the last four quarters when size of company is considered.

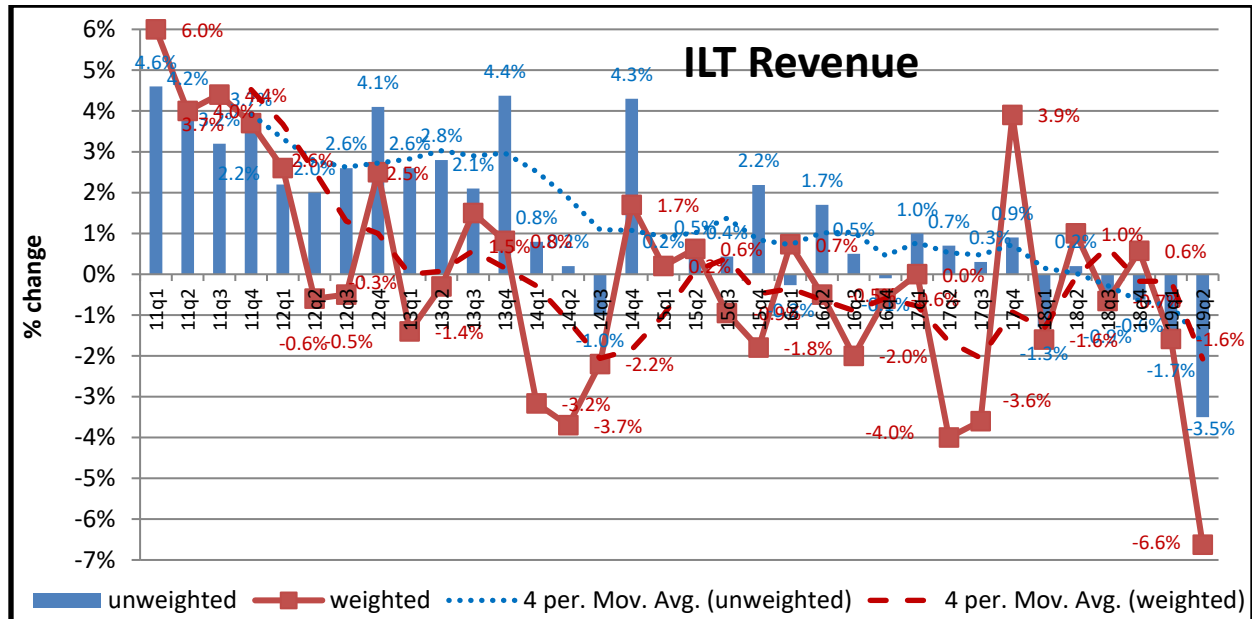


The unweighted total training profit grew 1.3% in 19q2 (u=7, f=5, d=7). And, with the weighted numbers, there was an increase of 1.8%. The weighted trendline shows an ongoing profit increase of just under 2% over the last four quarters when size of company is considered.



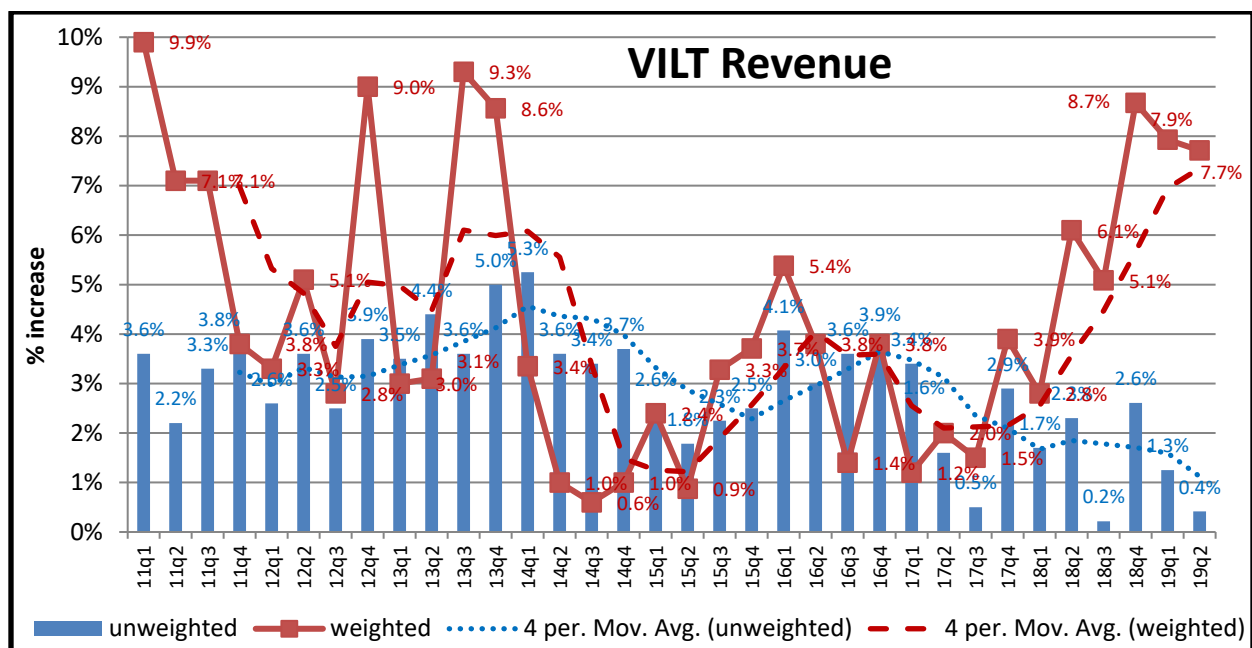
Live Instructor-led Training

This chart below suggests that ILT **revenue** for the larger companies has been the main cause of lower overall training revenue increases. The unweighted 19q2 **revenue** decrease was 3.5% (u=5, f=2, d=13) but the weighted number a decrease of 6.6%. The decrease in **volume** was 0.9%. The weighted trendline shows ILT revenue over the last four quarters decreasing by 2% when size of ILT revenue is considered.

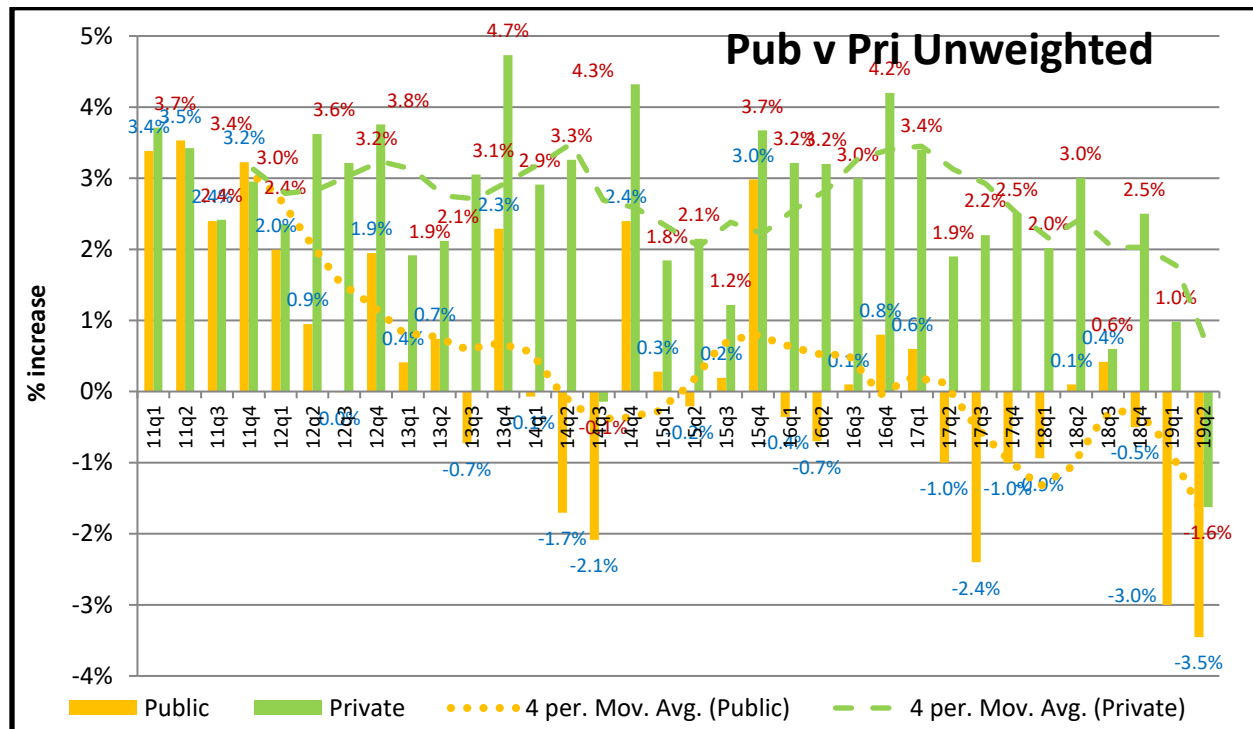


Virtual Instructor-led Training

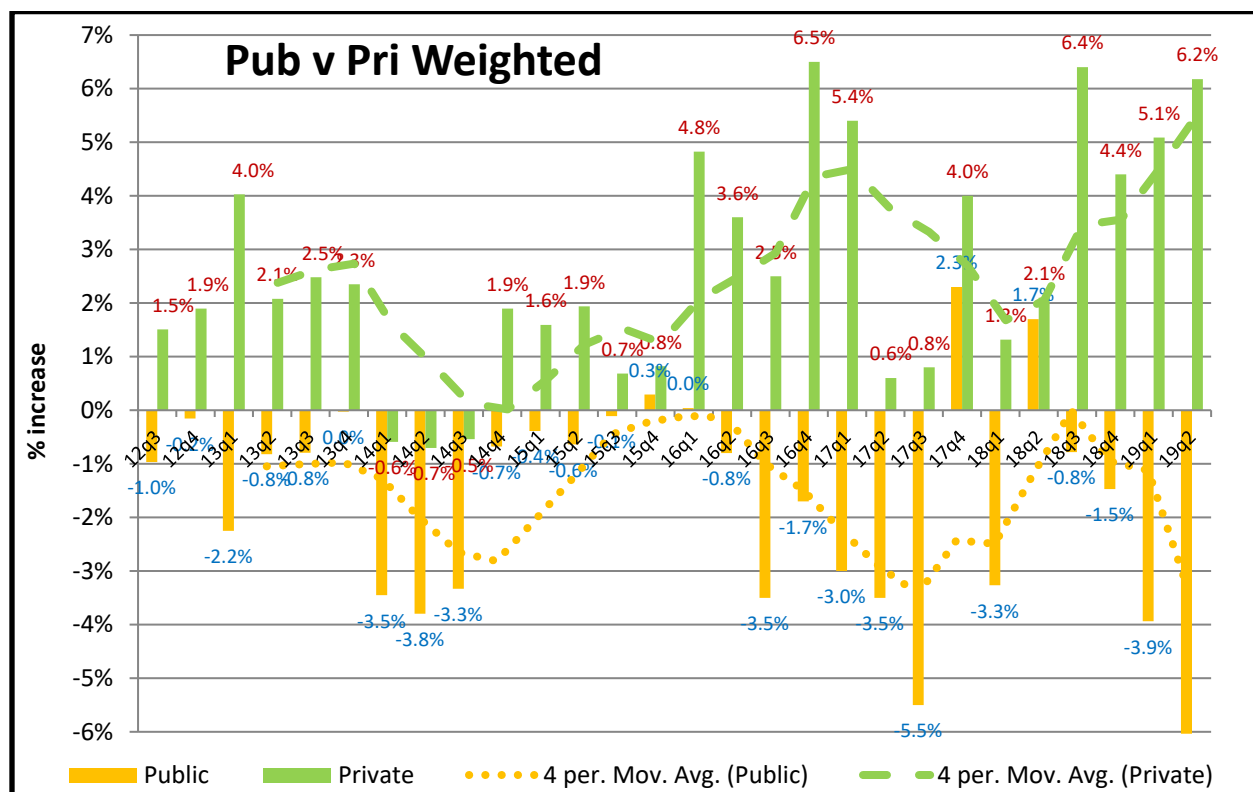
On the other hand, the VILT increase fell badly in 2014 but recovered. The unweighted 19q2 **revenue** increase is 0.4% (u=8, f=3, d=7) and the weighted increase is 7.7%. The increase in **volume** was 0.3%. The weighted trendline shows an ongoing VILT increase of 7-8% when size of VILT revenue is considered, but it was 3-4% in 2016, having been 1% in 2014. 16 members reported revenue, 2 no revenue.



We are now asking you to forecast both public (u=7, f=2, d=12) and private (u=8, f=3, d=9) classes and have enough history to show that private classes show a **revenue** increase of just under 1% over the last four quarters. **Volumes** decreased 3.5% for public and even 1.6% for private. Public classes decreased 1-2% over the last four quarters. This shows unweighted values.

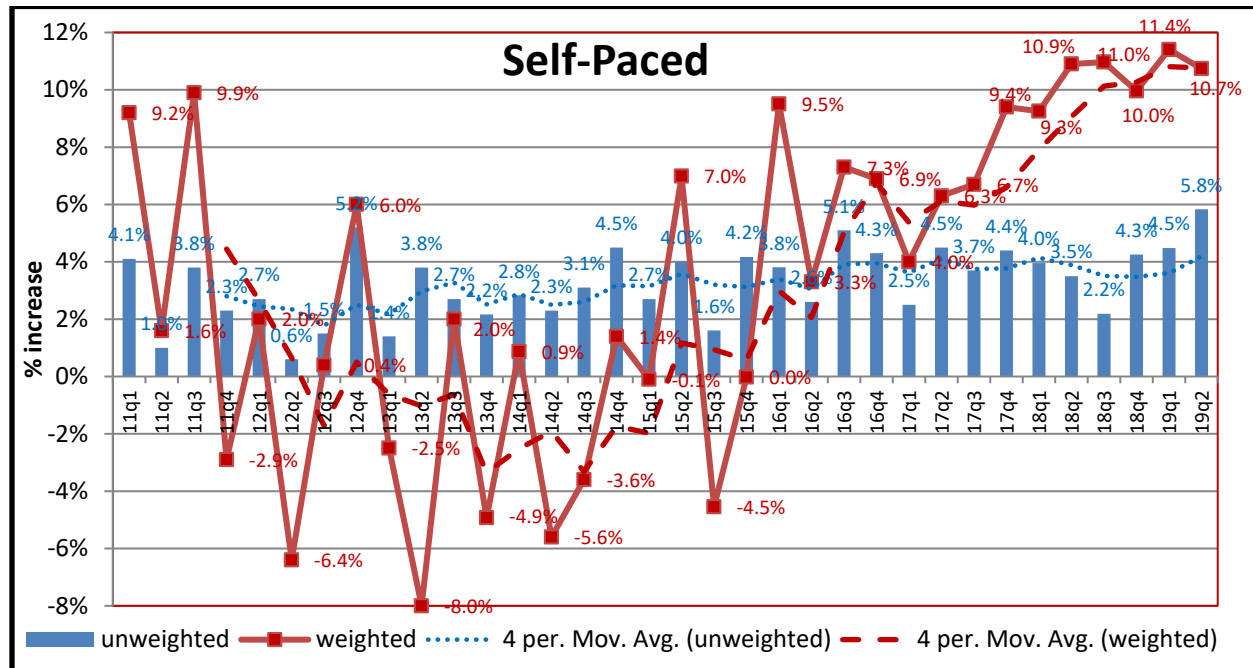


With weighted values, the **revenue** trendline for public is showing -3% with private a 5-6% increase.



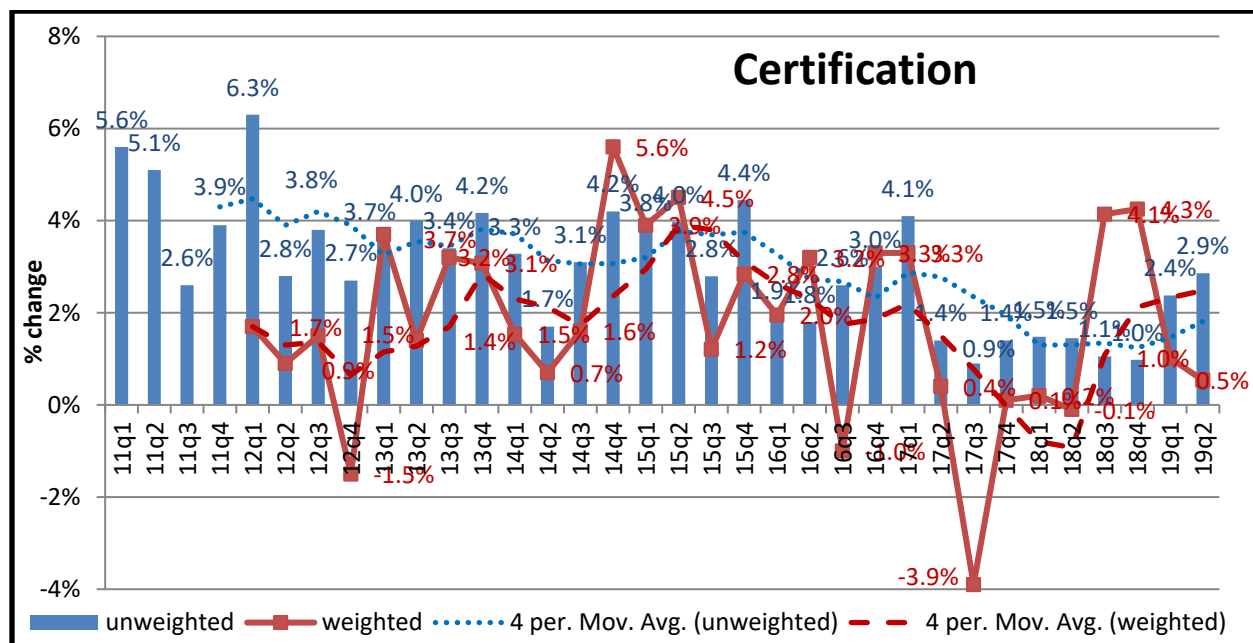
Self-Paced

The results for 19q2 (u=13, f=4, d=1) were 5.8% increase unweighted and 10.7% increase weighted. The increase in **volume** was 5.3%. This shows how larger companies can have a significant effect on these averages. The 4-period moving average shows an 11% increase for weighted. 16 members reported revenue, 1 no revenue.



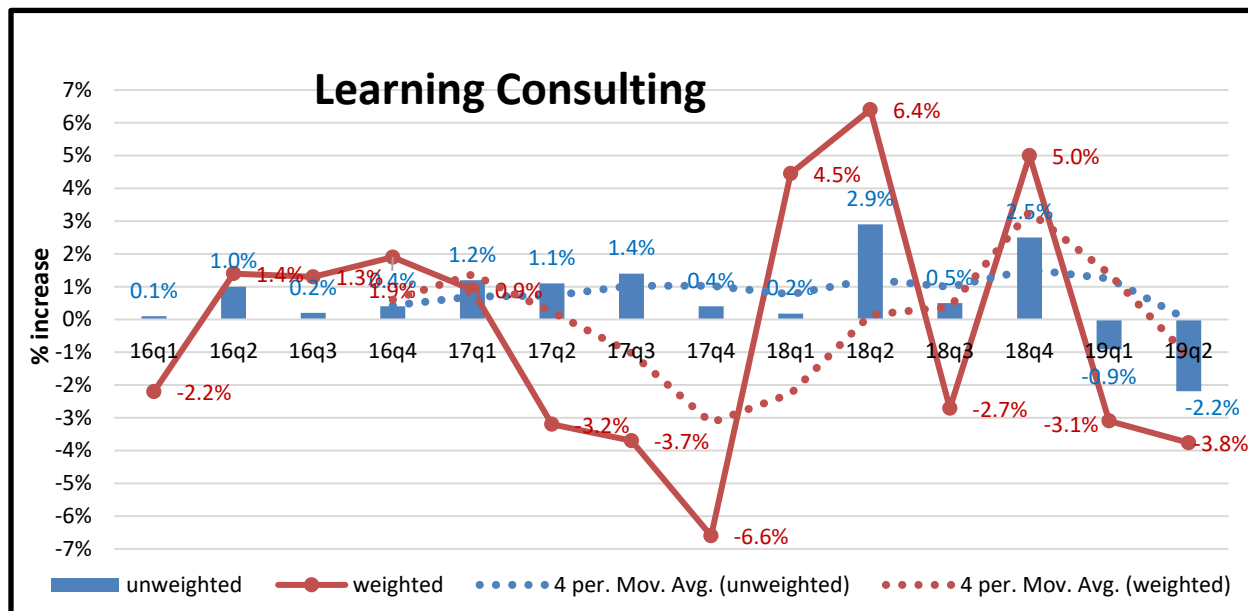
Certification

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 1.9%. The **revenue** increases for 19q2 (u=6, f=6, d=2) are 2.9% for unweighted and 0.5% when weighted. 14 members reported revenue, 3 no revenue.



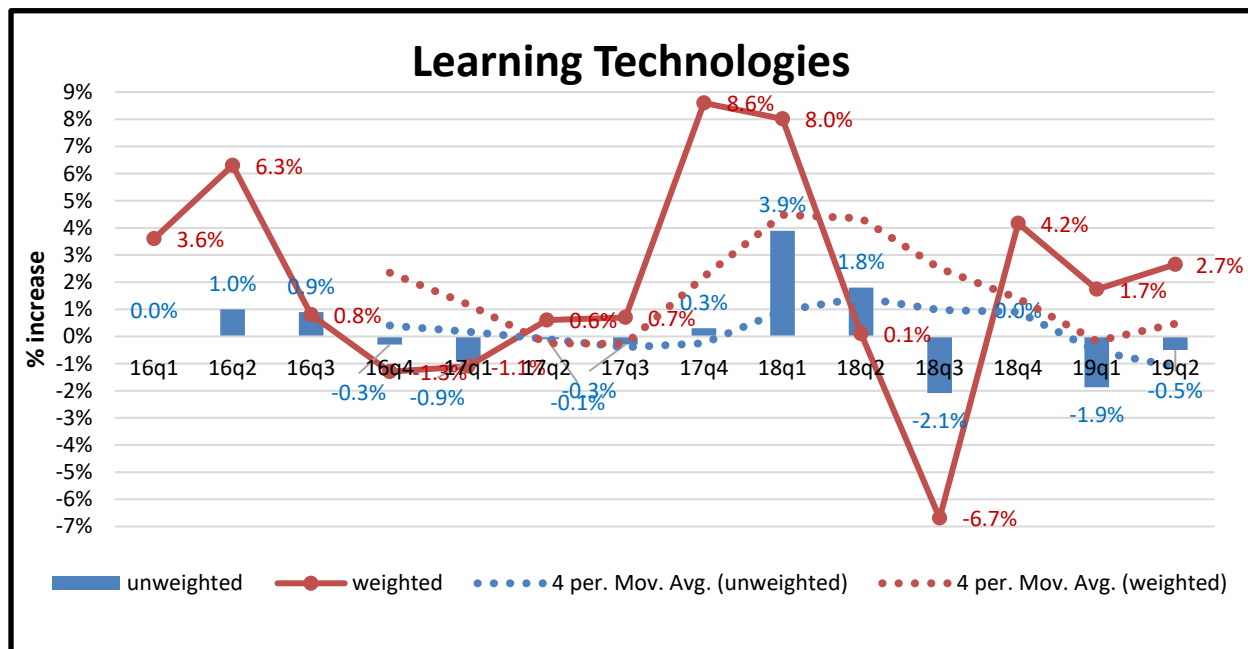
Learning Consulting

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 19q2 (u=3, f=1, d=4) are 2.2% for unweighted and 3.8% when weighted. The increase in **volume** was 1.3%. The current four-period average for weighted is -1%. Only 8 members reported revenue.



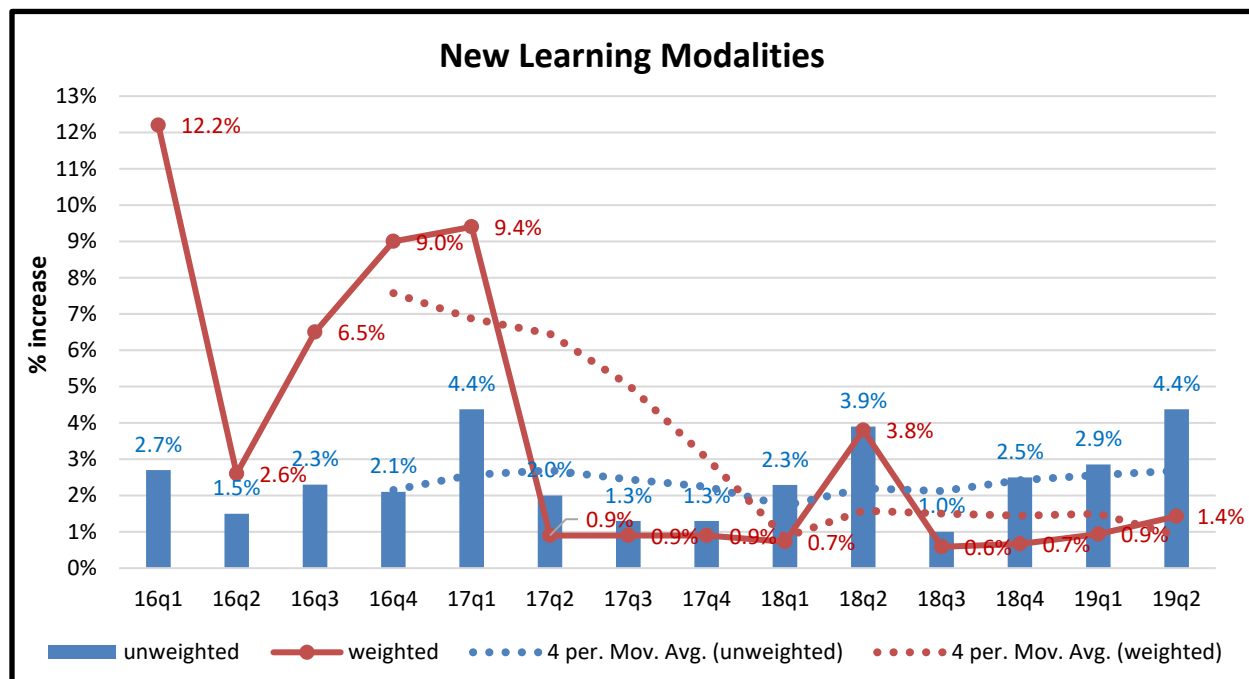
Learning Technologies

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 19q2 (u=2, f=2, d=1) is 0.5% for unweighted and a 2.7% increase when weighted. The trendline for weighted is just above flat. Only 5 members reported positive revenue.



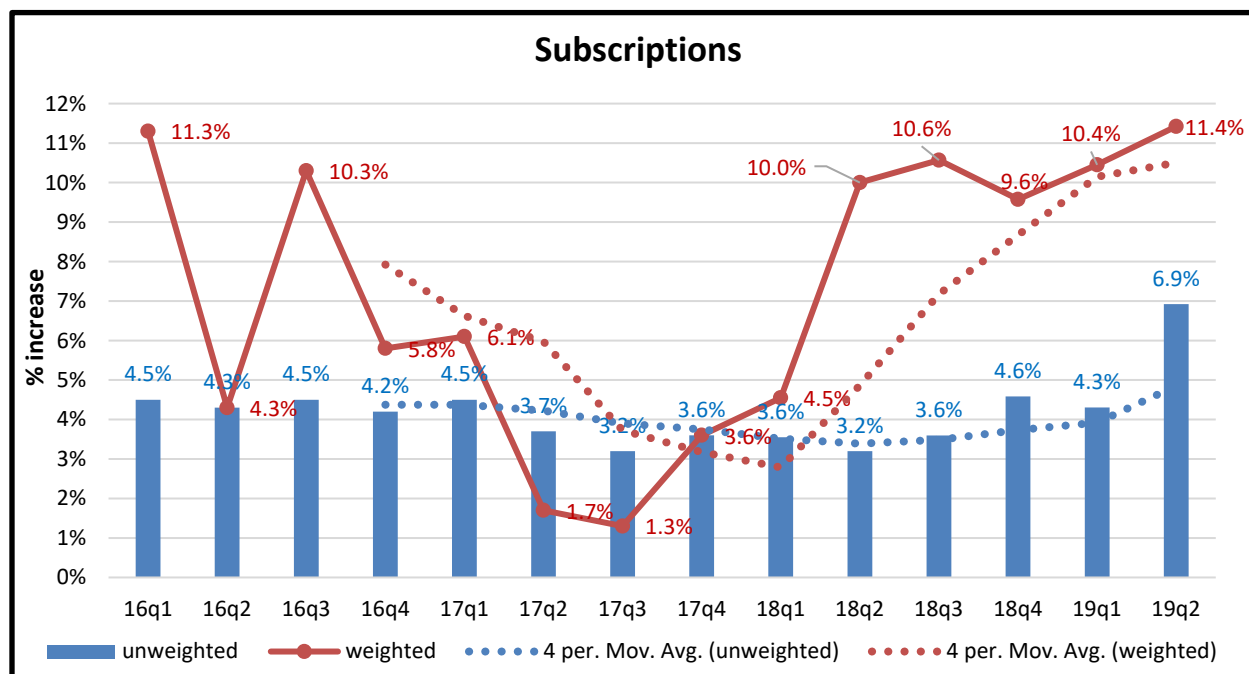
New Learning Modalities

The unweighted trendline is just over 2-3%, while the weighted trendline shows 1%, but falling from 7%. The **revenue** increases for 19q2 ($u=3, f=1, d=0$) are 4.4% for unweighted and 1.4% when weighted. 4 members reported positive revenue. The increase in **volume** was 2.5%.



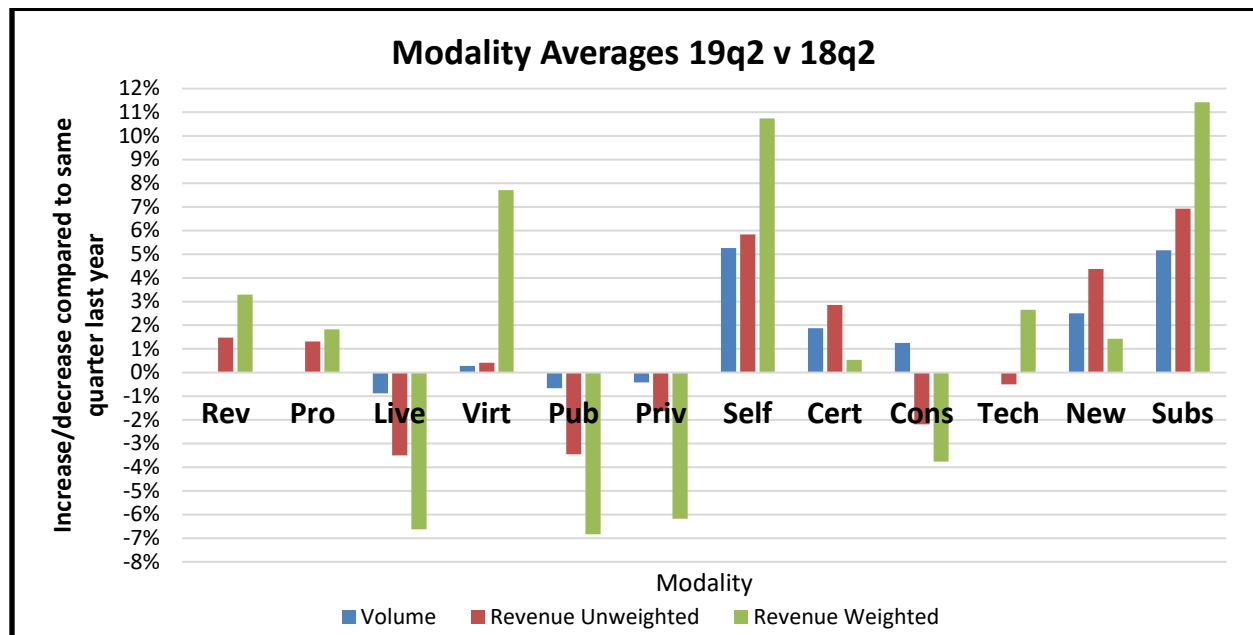
Subscriptions

The unweighted trendline is 4% whereas the weighted trendline is now showing 10% increases. The **revenue** increases for 19q2 ($u=11, f=3, d=2$) are 6.9% for unweighted and 11.4% when weighted. The increase in **volume** was 5.2%. 12 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 19q2.



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

1. Cloud and Axon
2. 3rd Party offerings.
3. Kubernetes and Cloud
4. ILT, VILT, Certification
5. Marketing Cloud & Commerce
6. None
7. On-demand and self-paced labs.
8. Good growth in Train-the-Trainer courses enabling Academic Learning Partners.
9. Converged Systems, Data & Analytics
10. None
11. Analytics and Core Storage
12. Self-paced learning subscriptions
13. Subscriptions - new product offering replacing existing business
14. eLearning
15. Subscription
16. Flat
17. Instructor videos
18. Subscription
19. Authorised Training Partner seats; Self-Paced Learning Labs
20. Partner Enablement

1. Learning Technology (User Adoption tool)
2. User adaption services

DevOps

Big Data

Networking & Storage

Security, Data & Analytics, and Storage

Customised Onsite Training

None. Only addition was subscription

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.

No change

Private classes

Onsite Training (Instructor lead)

Data Loss Prevention / Proxy

Authorised Training Partner seats Self Paced Learning Labs

3rd Party offerings. Scale out

Pre-Sales Training

Marketing Cloud & Commerce

ILT, VILT, Certification

none

Self paced learning subscriptions

slight improvement in scheduled classes

Subscriptions

None

Partner Enablement

eLearning

On-demand and self paced labs.

instructor videos

Private Onsite

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

1. PowerCenter (Legacy Data Integration)
2. High end storage
3. Certification voucher purchase
4. None
5. Certification
6. n/a to our business
7. Tough Q1 & Q2 for EMEA business; EMEA business down around 27%; Main drop caused by reduction in Private onsite training; A big project in Q1/Q2 2018, resulted in large Q1/Q2 18 private onsite, which was not seen this year; Also drop in public live courses in EMEA, Q1/Q2.
8. Networking
9. Scheduled courses are struggling; did try to promote virtual but with no success.
10. IOT
11. Public ILT
12. Learning Consulting
13. ILT public schedule

14. Flat
15. Public courses
16. Exams from a modality; Middleware from business line
17. Virtual Classroom
18. Live Virtual Classroom

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

1. Needing to update courses on a quarterly basis; Margin reducing
2. Hiring
3. Expanding training partnerships into Emerging Markets; Starting to explore relationships with digital content providers
4. Insufficient pipeline generation; Difficulties with hosting of certification system.
5. Attracting the right caliber of authorized training partners and scaling the business (depth and breadth).
6. Reduction in public live training ILT; Limited online offerings to compensate for reduction in public live ILT; Further staff reductions in Q1 2019
7. Lack of dedicated sales resources - and the resulting declining technical training enrollments
8. Customers wanting more bespoke approaches to training but not prepared to pay for the effort required; Getting the sales team to promote our learning offerings.
9. Local team not understanding the proper procedures on how to quote training
10. Languages; New product ramping
11. Self-paced vs ILT; General weakness on classes with no clear picture on the reasons (competition, product maturity, DIY, etc.)
12. Very little sales activity around services as company now has a strong focus on licence sales; Also increasing competition from partners offering bespoke training/knowledge transfer services
13. Revenues flat; Utilisation flat.
14. Decreasing overall volume of students; free training offers
15. Hire new people; make corporate sales team sell more training
16. Increasing Sales with a small team; Achieving balance of Outside Service Spend with Authorized Partners.
17. Define new training experiences; Build a real Certification plan
18. Resourcing for multiple language requirements for resources and content.

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

1. Digital badging is taking over!
2. Corporate merger leading to internal disruption. Lots of (expected) challenges.
3. We are a hyper growth division growing faster than the overall organisation.
4. We are in the process of transforming our training offerings into a subscription model
5. The drive to Digital continues and remains our soul focus for Cloud products