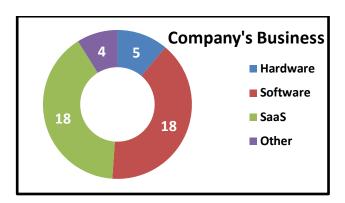
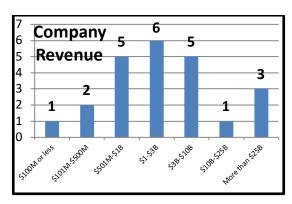
Computer Education Management Association Europe

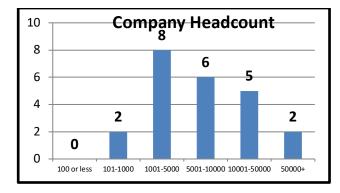
CEdMA Europe Market Barometer 3rd Quarter 2019

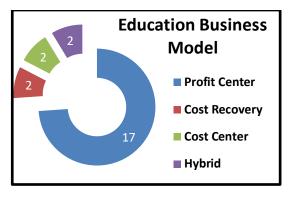
Introduction

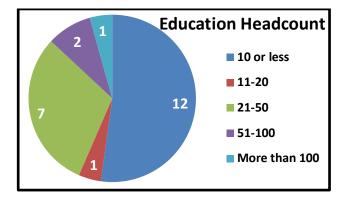
This report is compiled by CEdMA Europe for its members from input for their EMEA businesses. It is based around a series of absolute growth or decline percentages in the range +- 12.5%. Revenue refers to training services delivered in the quarter and not future bookings. Note that in this report, u/f/d is the number of members reporting up/flat/down, respectively. This report for 19q3 actuals is based on input from 23 companies.

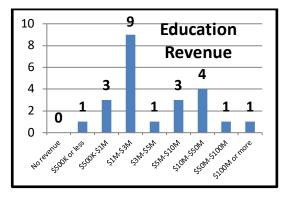












Changes to the Barometer

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 up to positive 3% to 19q3.

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 19q3.

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 19q3.

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 7-8% YoY.

Public (scheduled) classes is revenue for ILT and VILT and the trendline now shows negative -3% to 19q3, having been flat in 2017-18.

Private (one-customer) classes is revenue for ILT and VILT, and showing an increase of 3%, 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 19q3 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 under 1% to 19q3, 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 flat. (But only 8 members reported positive revenue.)

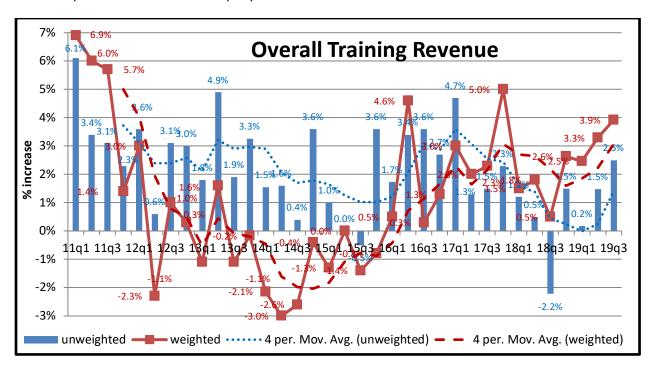
Learning Technologies is all revenue generated by learning tools, infrastructure, courseware and directly related training and learning consulting for these technologies. Having been 4% in 2017, the trend is now 2% to 19q3. (But only 5 members reported positive revenue.)

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.)

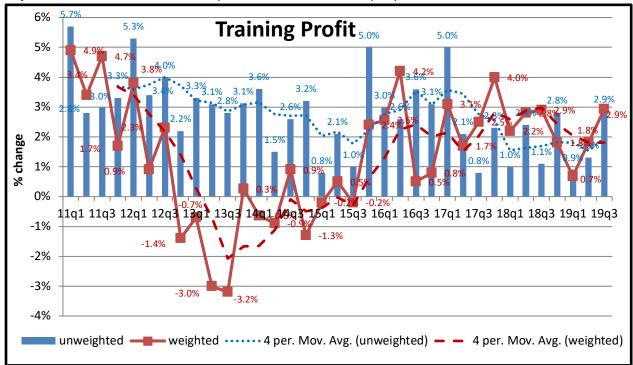
Subscriptions include all revenue from any of the above modalities included in subscriptions. With many companies starting in 2015/16, the increase was 8% over 2016, 3% over 2017, but is now 11% to 19q3.

Training Revenue and Profit

The unweighted total training **revenue** increase was a 2.5% in 19q3 (u=11, f=4, d=8). When considering the weighted numbers, it was 3.9%. However, the weighted trendline shows an increase of 3% over the last four quarters when size of company is considered.

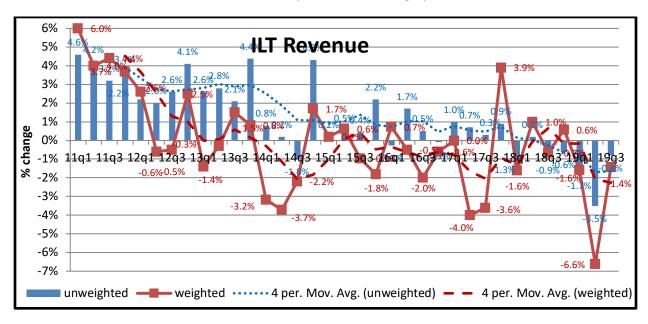


The unweighted total training profit grew 2.9% in 19q3 (u=10, f=9, d=2). And, with the weighted numbers, there was also an increase of 2.9%. The weighted trendline shows an ongoing profit increase of just under 2% over the last four quarters when size of company is considered.



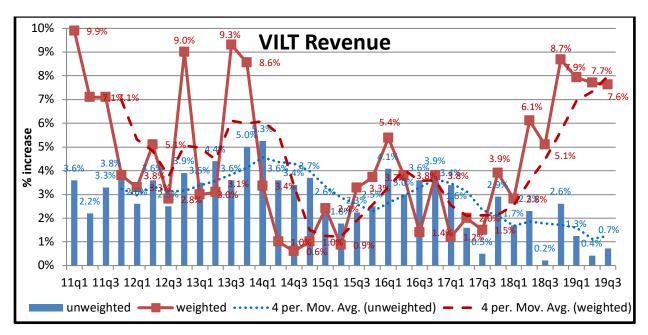
Live Instructor-led Training

This chart below suggests that ILT **revenue** for the larger companies has been the main cause of lower overall training revenue increases. The unweighted 19q3 **revenue** decrease was 0.8% (u=8, f=3, d=11) but the weighted number a decrease of 1.4%. But the increase in **volume** was 0.5%. The weighted trendline shows ILT revenue over the last four quarters decreasing by -2%.

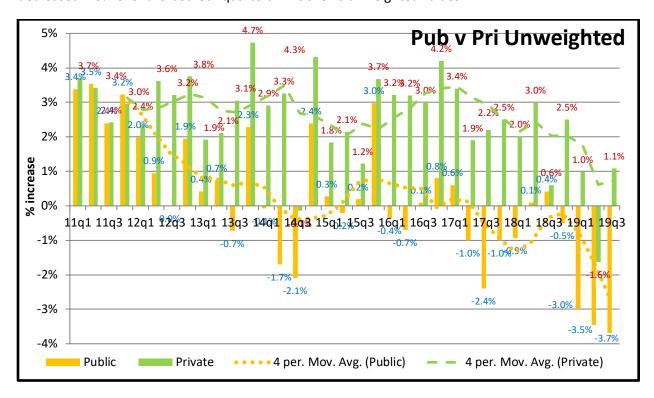


Virtual Instructor-led Training

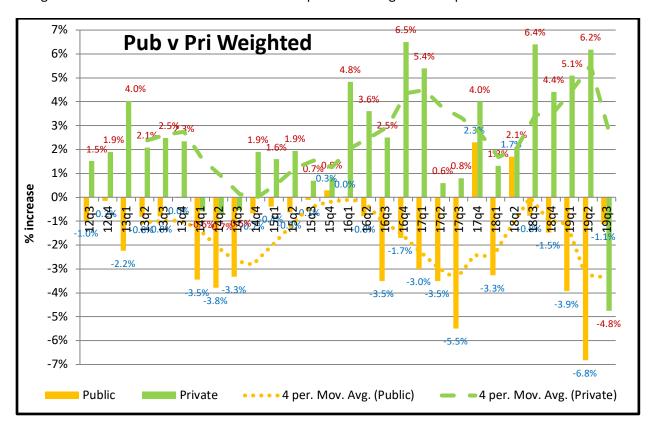
On the other hand, the VILT increase fell badly in 2014 but recovered. The unweighted 19q3 **revenue** increase is 0.7% (u=9, f=3, d=8) but the weighted increase is 7.6%. The increase in **volume** was 1.2%. The weighted trendline shows an ongoing VILT increase of 7-8% when size of VILT revenue is considered, but it was 3-4% in 2016, having been 1% in 2014. 20 members reported revenue.



We are now asking you to forecast both public (u=6, f=3, d=14) and private (u=12, f=3, d=8) 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 1.8% for public but increased 1.0% for private. Public classes decreased 2-3% over the last four quarters. This shows unweighted values.

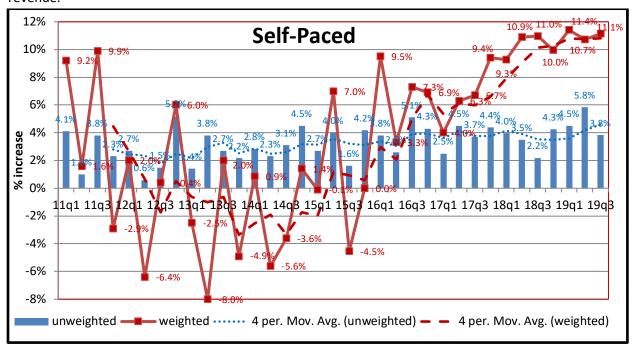


Weighted values have the revenue trendline for public showing -3% with private a 3% increase.



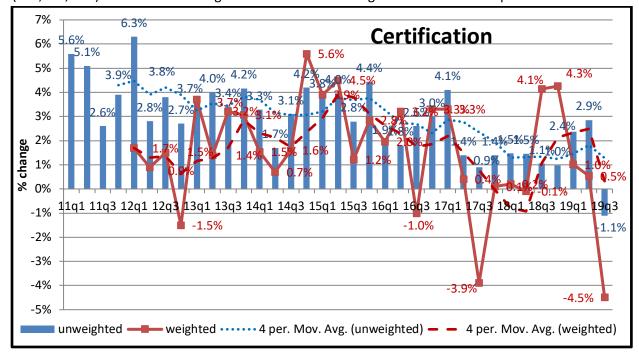
Self-Paced

The results for 19q3 (u=11, f=3, d=3) were 3.8% increase unweighted and 11.1% 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. 15 members reported revenue.



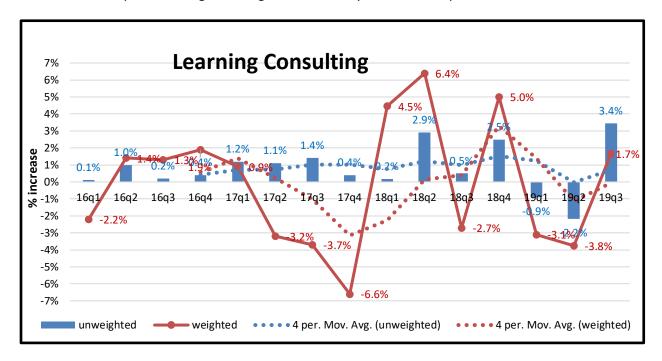
Certification

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 is now under 1%. The increase in **volume** was 0.1%. The **revenue** decreases for 19q3 (u=5, f=6, d=7) are 1.1% for unweighted and 4.5% when weighted. 18 members reported revenue.



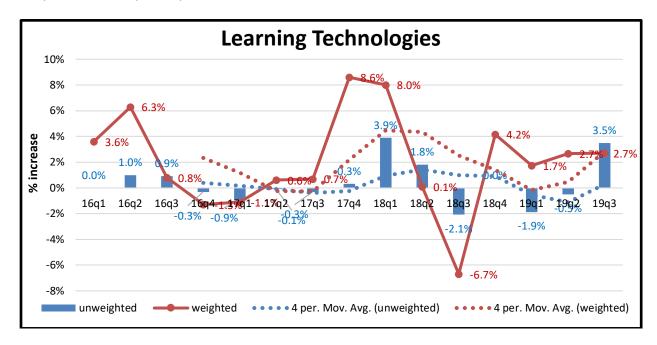
Learning Consulting

We now have over 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 19q3 (u=5, f=1, d=2) are 3.4% for unweighted and 1.7% when weighted. The increase in **volume** was 0.6%. The current four-period average for weighted is flat. Only 8 members reported revenue.



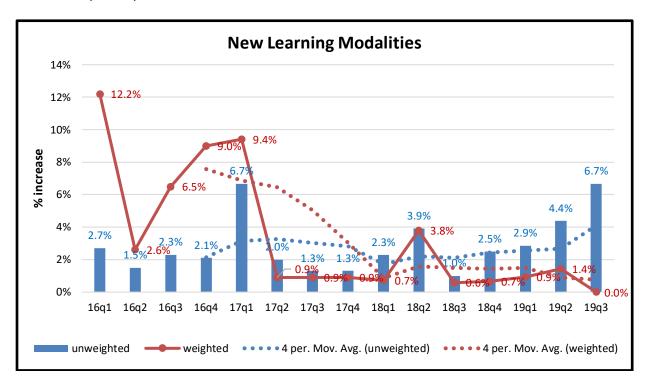
Learning Technologies

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** increase for 19q3 (u=3, f=2, d=0) is 3.5% for unweighted and a 2.7% increase when weighted. The trendline for weighted is just above 2%. Only 5 members reported positive revenue.



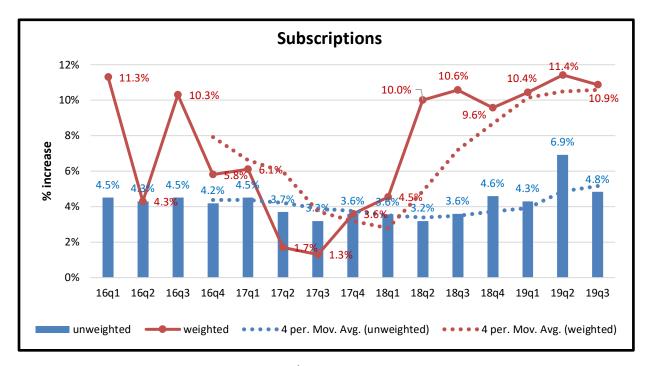
New Learning Modalities

The unweighted trendline is just over 4%, while the weighted trendline shows 1%, but falling from 7%. The **revenue** increase for 19q3 (u=4, f=2, d=0) is 6.7% for unweighted and flat when weighted. 6 members reported positive revenue. The increase in **volume** was 3.1%.



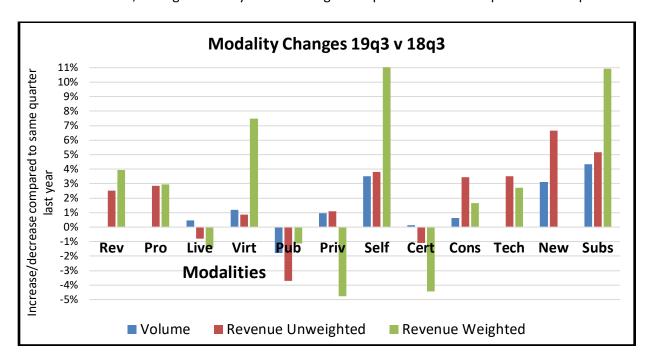
Subscriptions

The unweighted trendline is 5% whereas the weighted trendline is now showing 11% increases. The **revenue** increases for 19q3 (u=7, f=7, d=0) are 4.8% for unweighted and 10.9% when weighted. The increase in **volume** was 4.3%. 14 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 19q3.



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

- 1. Cloud, EDC and Axon
- None. Only addition was subscription which is increasing.
- 3. Private classes
- 4. Networking & Storage
- 5. Private classes
- 6. Good growth in Train-the-Trainer courses enabling Academic Learning Partners. Some growth seen in Live Public Courses (scheduled & Private) in Q3 following poor Q1/2.
- 7. Digital Learning
- 8. Commerce and Marketing Cloud
- 9. Subscriptions new product offering replacing existing business
- 10. Online learning, Certification
- 11. DevOps
- 12. Microsoft, Storage, IT Service Management
- 13. Private Onsite
- 14. Robotics; AI
- 15. eLearning
- 16. Authorised Training Partner seats; Self-Paced Learning Labs
- 17. Subscription
- 18. Subscriptions
- 19. Private courses continue to be very popular, so popular that we have had to reduce the number of public scheduled courses to accommodate demand.

- 20. On-demand and self-paced labs.
- 21. Partner Enablement

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

- 1. PowerCenter (Legacy Data Integration)
- 2. Private classes
- 3. Certification
- 4. The slowest growth is from server technologies
- 5. virtual classes
- 6. 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.
- 7. Direct onsite Classroom Training Strategic decision.
- 8. Public training on old products
- 9. Developer training
- 10. Networking, Security
- 11. Public
- 12. Live classes
- 13. Virtual Classroom
- 14. Public ILT
- 15. VT from a modality; Middleware from business line
- 16. Public courses face to face
- 17. Scheduled courses are struggling average seat number dropped to 5.0 per class
- 18. Live Virtual Classroom

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

- 1. Finding customers willing to spend on training, predicting what courses to offer
- 2. Lowering revenue, loss of instructors
- 3. Difficulties with hosting of certification system. CDev coming up to speed on new products.
- 4. Managing growth of mature products Certification decline due to change of recert policy
- 5. Low headcount means we can only really cover operational tasks. Very little sales activity
- 6. Reduction in public live training ILT Q1/Q2Limited online offerings to compensate for reduction in live classroom
- 7. Backlog and development for acquisitions.
- 8. Balancing needs to enable Partners and achieve set goals; Starting a Training Provider network in LATAM
- 9. Languages; New product ramping
- 10. Hiring
- 11. Needing to update courses on a quarterly basis; Margin reducing
- 12. Lack of dedicated sales resources and the resulting declining technical training enrollments
- 13. 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

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- 14. Completing Train-the-Trainer programs for ATPs; Supporting growing demand for shorter custom courses
- 15. Self-paced vs ILT; General weakness on classes with no clear picture on the reasons (competition, product maturity, DIY, etc.)
- 16. Dealing with customer enquiries and bookings with a very small Operations team.
- 17. Hire new people; make corporate sales team sell more training
- 18. Decreasing overall volume of students; free training offers
- 19. Customers wanting more bespoke approaches to training but not prepared to pay for the effort required.
- 20. Attracting the right caliber of authorized training partners and scaling the business (depth and breadth).
- 21. 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. Training revenues are seeing a 30% drop in classroom delivered training in the UK. Germany is increasing. Brexit?
- 2. New platform launch following merger.
- 3. The market is moving away from P&L as a focus. We are just about to start on that journey
- 4. Now running a pure partner EDU model.
- 5. Digital badging is taking over!
- 6. We are in the process of transforming our training offerings into a subscription model
- 7. We are a hyper growth division growing faster than the overall organisation.