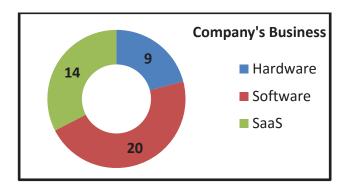


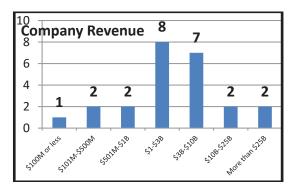
Computer Education Management Association Europe

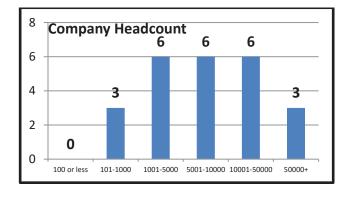
CEdMA Europe Market Barometer 4th Quarter 2015 and forecast for 1st Quarter 2016

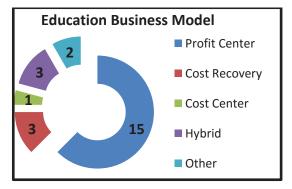
Introduction

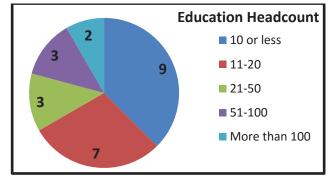
This report is compiled by CEdMA Europe for its members from input for their EMEA businesses. It is based around a series of absolute growth or decline percentages in the range +- 12.5%. Please note that was changed for 11Q4 and so the quarter numbers prior to that have been adjusted accordingly to be consistent with 11Q4 and going forward. 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 15Q4 actuals and 16Q1 forecast is based on input from 24 companies.

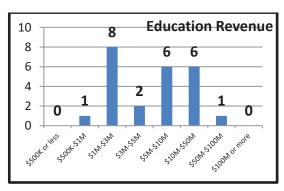












Summary

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.

Revenue: Having been down to negative 2% in 2014, it's now "better" at negative 1%.

Profit: Recovered from a low of negative 2% during 2013 to half-a-point over flat now.

ILT: Fell to negative 2% during 2014 but now showing half-a-point under flat.

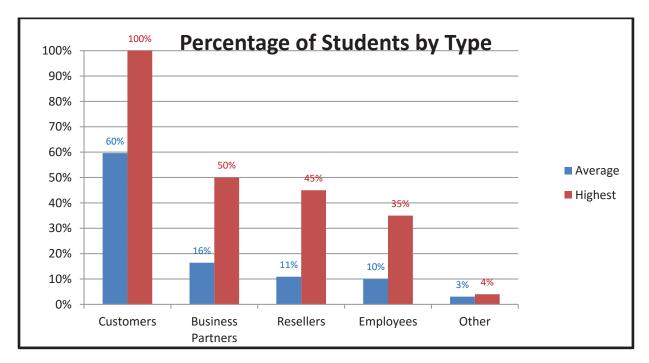
VILT: Dropped from 6% during 2013 to 1% in 2014 but is 3% now.

Learning Technologies: Recovered from a decrease of 3% in 2014 to 1% increase now.

Training Support Services: It's now negative 1% having been negative 3% in 2013.

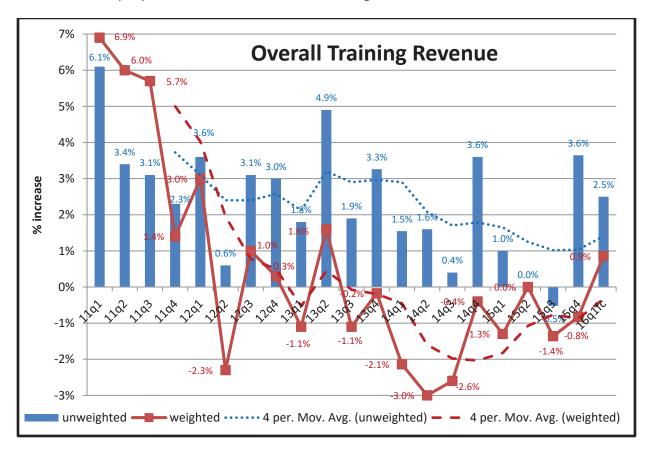
Certification: The trendline is now 3% increase, having been in the 2-4% range for the last two years.

Public versus Private: For ILT, the trendline for private classes is 1-2%, while public classes are recovering to flat, having been as low as negative 3%. For VILT, the increase for public is 3-4%, up from 2% in 2014 but down from 7% increase two years ago. Private has risen to 2% increase, up from flat in 2014 but down from 7%.



Training Revenue

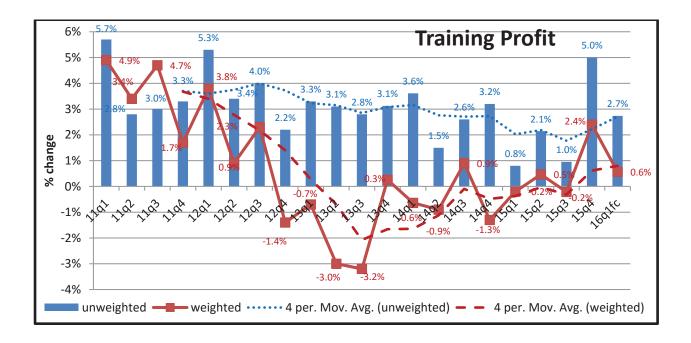
The unweighted total training revenue increase was a 3.6% in 15Q4 (u=15, f=1, d=8) against a forecast in the last report of -0.1%. When considering the weighted numbers, it was a 0.8% negative against a forecast of 0.2% decrease last time. The forecasts for 16Q1 (u=12, f=6, d=6) show an increase of 2.5% for unweighted and 0.9% for weighted. The unweighted trendline shows an ongoing increase of 1%, but when size of company is taken into account, it's around negative 1%.



Training Profit

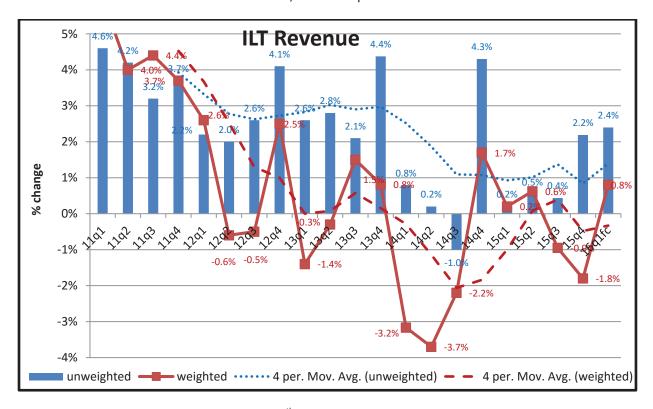
The unweighted total training profit grew 5.0% in 15Q4 (u=14, f=3, d=4), against the forecast in the last report of 2.1%. And, with the weighted numbers, there was an increase of 2.4% against a forecast of 1.6% last time. The unweighted forecast for 16Q1 (u=12, f=6, d=3) is 2.7% increase and the weighted forecast is an increase of 0.6%. The unweighted trendline shows an ongoing profit increase of 2-3% over the last year but when size of company is taken into account, it is half a point over flat.

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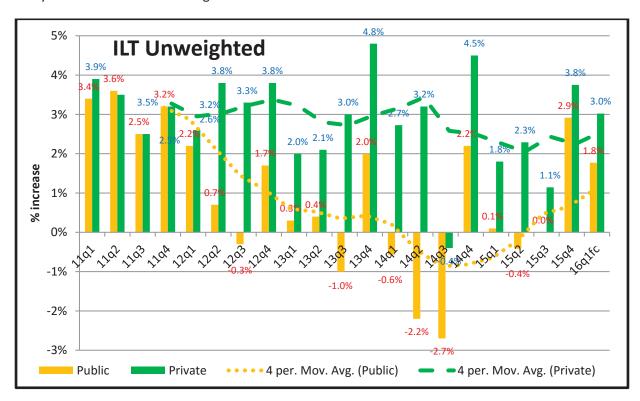


Instructor-led Training

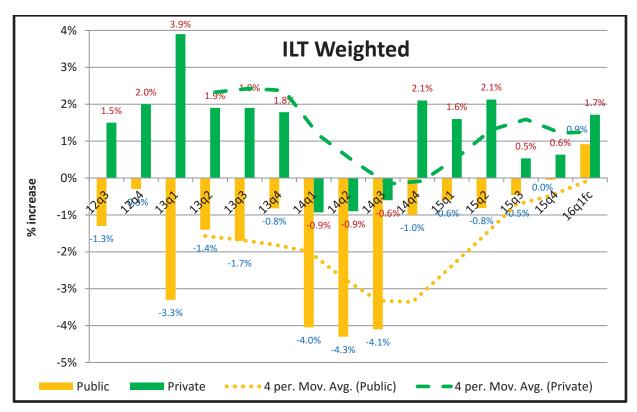
This chart below suggests that ILT revenue for the larger companies has been the main cause of lower overall training revenue increases. The unweighted 15Q4 increase of 2.2% (u=12, f=3, d=9) was higher than that predicted in the last report (increase of 1.7%). The weighted number was a decrease of 1.8% against a forecast decrease of 0.1%. The forecast unweighted increase for 16Q1 (u=11, f=7, d=6) is 2.4%, with weighted an increase of 0.8%. The unweighted trendline shows an ongoing ILT increase of 1% but when size of ILT revenue is taken into account, it is half a point under flat.



We are now asking you to forecast both public and private classes and so have enough history to show that while private ILT classes show an increase of 2-3%, public ILT classes are showing an increase of nearly 1%. This shows the unweighted values.

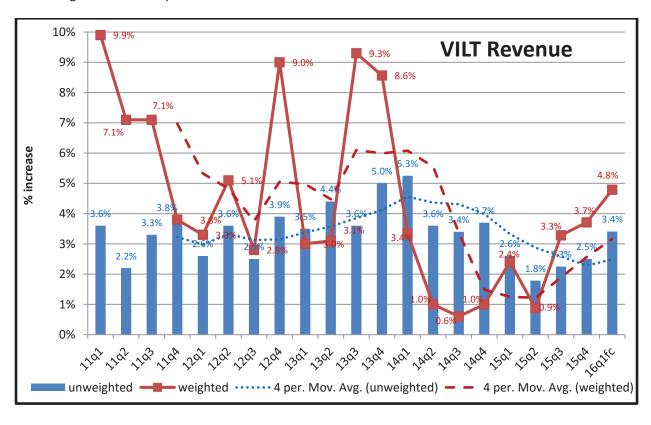


When weighted values are calculated, private classes have risen to a 1-2% increase, while public classes are recovering to flat, having been as low as negative 3%.

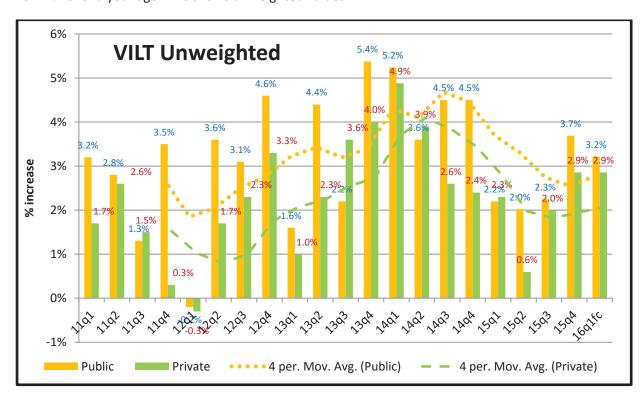


Virtual Instructor-led Training

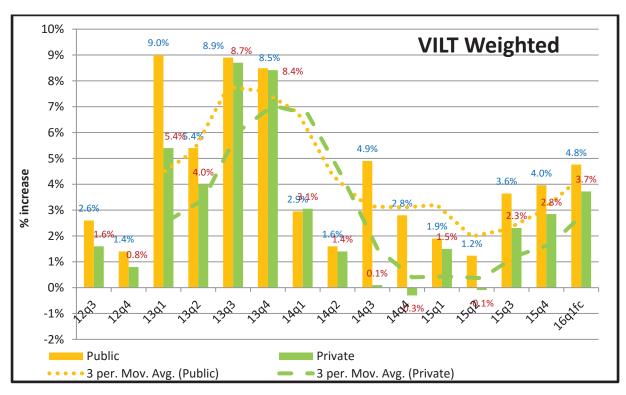
On the other hand, the VILT increase fell badly in 2014 but is now recovering. The unweighted 15Q4 increase of 2.5% (u=11, f=4, d=7) was higher than the 1.9% forecast in the last report. The weighted increase of 3.7% also exceeded the forecast of 3.3%. The forecasts for 16Q1 (u=12, f=8, d=2) are higher, with increases of 3.4% for unweighted and 4.8% for weighted. The unweighted trendline shows an ongoing VILT increase of 2-3% but when size of VILT revenue is taken into account, it was 6% in 2013 but now rising to 3% currently from 1% in 2014. Note that 2 of the 24 don't use VILT.



We are now asking you to forecast both public and private classes and have enough history to show that both public and private VILT classes show a consistent steady increase of around 2-3%, although falling from 4% over a year ago. This shows unweighted values.



When weighted values are used, the increases for public are rising to 3-4% with private around 2%, but down from 7% two years ago.



Learning Technologies Revenue

We are no longer breaking out the various components within learning technologies, but members are asked to include the following when considering their input.

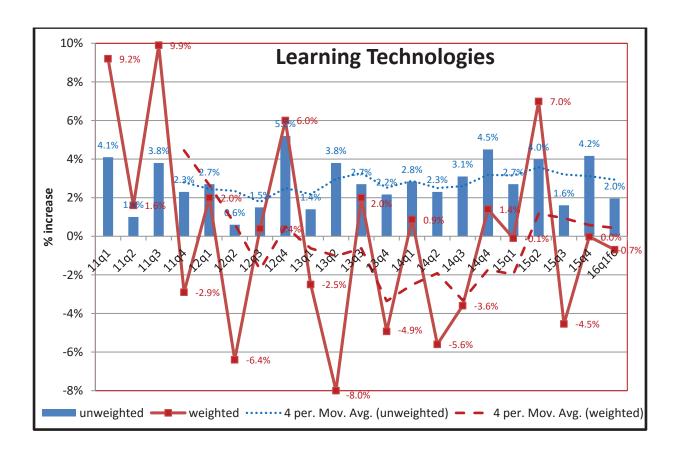
Generic Content includes generic courseware, templates, and models.

Tools include authoring, performance support, virtual labs, simulation, collaboration, modelling, and assessment tools.

Infrastructure includes LMS/ LCMS/CLS, enterprise content management, performance management, competence management, e-skills portfolio management, social networks **Development**: the facilitation of client content and bespoke development of solutions using learning technologies

Consultancy: services that support the client in the application of learning technologies - includes strategy, vision and direction, engagement models, advice and guidance.

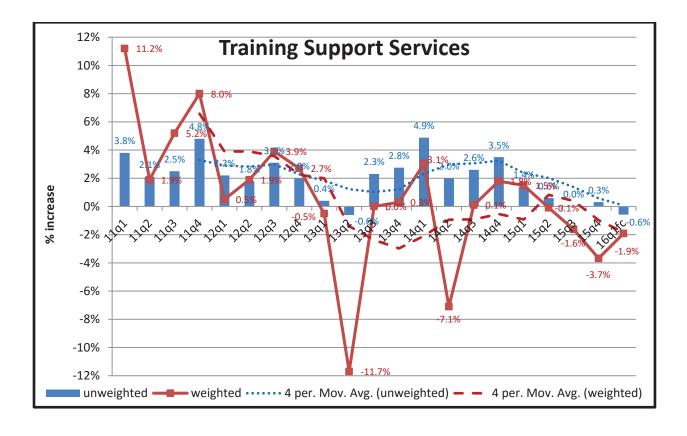
15 of the 24 companies reported activity in this area. The forecasts in the last report were 3.2% increase and 0.6% increase for unweighted and weighted, respectively, and the results for 15Q4 (u=8, f=4, d=3) were positive 4.2% and flat. The forecast for 16Q1 (u=7, f=5, d=2) is an increase of 2.0%, with weighted a decrease of 0.7%. This shows how large projects within larger companies can have a significant effect on these averages. The unweighted trendline shows an ongoing Learning Technologies increase around 3% over the last three years but when size of revenue is taken into account, it has just recovered to positive 1% from negative 3% in 2014, again reflecting the volatility in this area.



Training Support Services

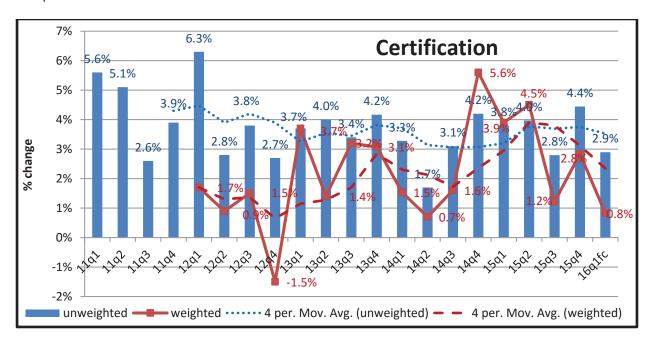
Again, we are no longer breaking out the various components within this area of Training Support Services, but members are asked to include Outsourcing/managed training services, TNA and pretraining consultancy, and evaluation and post-training consultancy.

There are only 16 companies reporting activity in this area and so the quarterly figures may be affected significantly by a single input. The forecasts in the last report were decreases of 1.9% and 2.2% for unweighted and weighted, respectively. The results for 15Q4 (u=4, f=6, d=6) were 0.3% increase and 3.7% decrease, respectively. The forecasts for 16Q1 (u=4, f=6, d=3) show decreases of 0.6% for unweighted and 1.9 % for weighted. The unweighted trendline currently shows flat. When size of revenue is taken into account, it is now negative 1-2%.



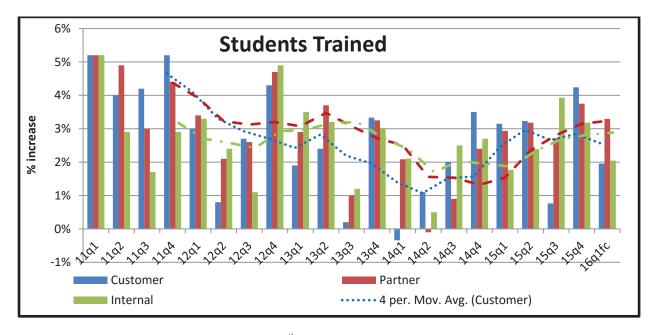
Certification Tests Administered

Overall, certification has averaged an increase of 3-4% year-on-year when unweighted. In that four-year period, the weighted scores have grown from a 1% increase to 3%, too, showing a resurgence in the larger companies. The increases for 15Q4 (u=10, f=6, d=2) are 4.4% and 2.8% for unweighted and weighted, respectively. For 16Q1 (u=11, f=5, d=3) the forecasts are 2.9% and 0.8%. 19 out of the 24 companies offer certification.

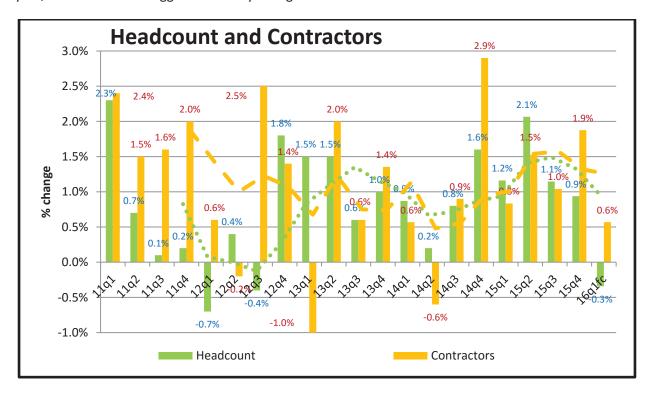


Miscellaneous

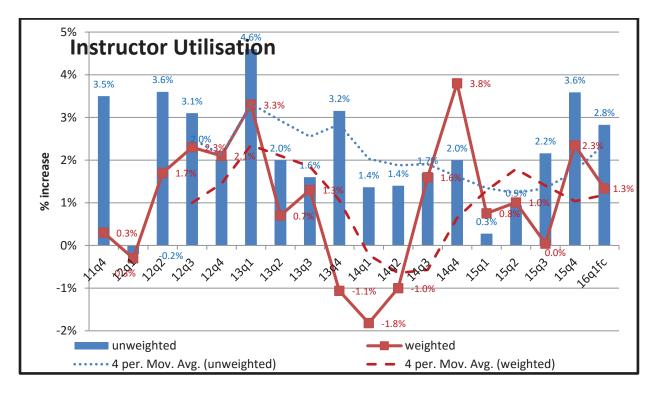
"Students trained" is broken out into customers, partners and employees. The trendlines are all showing increases just under 3% range over the last year.



The trendlines for both permanent headcount and contractors have hovered just over 1% for the last year, but the forecast suggests that may change downwards.



We introduced a question on instructor utilisation (billable time versus overall working time) in 11Q4. The unweighted forecast in the last report was a 2.3% increase, weighted being 0.5%. The 15Q4 result (u13, f=8, d=2) was increases of 3.6% and 2.3% for unweighted and weighted, respectively, while the 16Q1 (u=12, f=11, d=0) forecasts are 2.8% and 1.3%. The trendlines are now showing an increase of just over 1%.



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

- 1. Online Self-Study (eLearning) Subscription
- 2. Onsite courses the shift from classroom to onsite continues
- 3. Attendance in public virtual
- 4. Private /On-sites
- 5. Security; Storage
- 6. In % terms PLM. Interest in Internet of Things is growing.
- 7. SaaS solutions new product training.
- 8. Technical Support
- 9. ILT & VILT revenue
- 10. Security
- 11. Onsites
- 12. Customized End User Training Services; Private Workshops covering combination of Admin courses
- 13. Identity management training
- 14. Virtualisation and combined infrastructure
- 15. OnDemand; VILT
- 16. Online content
- 17. Onsite Training for end customers (mainly private ILT)
- 18. Public schedule
- 19. Training-related new product launches

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

- 1. eCommerce
- 2. Scheduled continues to decline
- 3. Attendance in public ILT...we are offering fewer and doing more public classes virtually
- 4. End-user training on Microsoft
- 5. Public Scheduled classroom ILT
- 6. Servers; Networking
- 7. Decrease in large learning projects (but in line with our strategy to reduce accelerated deployments); Pressure increasing on transactional business.
- 8. On Site bespoke Customer training. This is cyclical.
- 9. Old products coming to end of life
- 10. High end storage
- 11. Public ILT
- 12. Public classes
- 13. ILT of public classes was down across the EMEA countries
- 14. Partner delivered courses
- 15. VILT Public Classroom; Public ILT
- 16. Current products are starting to reach training saturation
- 17. Older product training

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

- 1. Managing Growth globally; HIRING!!!
- Delegates are booking courses later and later which causes issues as courses could have ran which
 had been cancelled. Also trying to accommodate late bookings is a challenge had a booking at
 6pm on a Sunday evening for the following day. Constantly re allocating courses to different
 trainers to accommodate onsite requests
- 3. Translations; Transitioning to new way of selling and reporting on the business due to globalization of Education
- 4. Profitability and organisational change
- 5. Getting attach rate to product sales
- 6. Supporting the company split; Returning to a revenue generating business
- 7. Internal acquisition integration; Marketing customer databases. Big company big issue
- 8. Adapt to fewer larger learning projects by securing more opportunities. managing utilization on transactional training. Competitive threat on pricing in certain markets.
- 9. Internal demand for product enablement exceeding capacity.
- 10. Keeping course content up to date with level of resources available due to teach commitments; Gaining meaningful marketing support
- 11. Hiring, LMS
- 12. Euro still down 23%, trying to grow training alongside an ATC program
- 13. Capacity to deliver; Customers looking for more tailored onsites
- 14. Aligning and internal/external positioning with supplemental free "Training" tools provided by other divisions.
- 15. Focusing a new sales team to sell training; Selling certification
- 16. Change management with new organisational structure.
- 17. Timely content, for both new products and updates
- 18. Expanding certifications; growing tests at customers
- 19. Outsourcer after 5 years still requires too much handholding; getting customer interest up for VILT in EMEA; hiring and onboarding the net new people took way longer than expected; new LMS did not yet bring the desired level of automation
- 20. Attaching to major deals
- 21. Change in company strategy/direction; High turnover of sales staff; product sales decrease
- 22. Demand creation of VILT in a market that never had VILT before
- 23. Education attachment to product sales, as always. Free training under special partner programme schemes

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

- 1. It's all about subscription selling models.
- 2. Onsites increased in comparison with q42015 and q42014
- 3. EMEA now far exceeds the Americas in size. New areas such as DevOps are looking to be potential growth areas.
- 4. Year over year comparisons due not really reflect a trend. A year ago we had a spike in the business due to a number of large projects.

- 5. Extremely busy Learning Technologies event in London. This was the largest and best attended yet. Most of the interest is in 70-20-10 and ePSS.
- 6. Definitely more demand last quarter and this quarter
- 7. Shorter timeframe for bookings and more customer specific expected.
- 8. Certification is a hard sell at the moment.
- 9. Discounting pressure
- 10. We have launched our Learning Subscription offering back in July last year in EMEA and we are seeing a VERY nice growth pattern! However, renewing them will be a complete new challenge...