# An



# White Paper

# Understanding the business benefits of introducing an LMS

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# **Executive Summary**

Much has been written about the benefits of elearning and how it can provide organisations with genuine Return on Investment (ROI). But less attention has been paid by elearning authorities to the business benefits of implementing a Learning Management System (LMS). This may seem strange because, for many training departments, it is the LMS which requires the largest single investment and the greatest leap of faith. This is probably due in part to the misapprehension that an LMS and e-learning are irrevocably linked. This is not necessarily the case – indeed some organisations deploy an LMS specifically to track and arrange their classroom training and resources.

This white paper therefore considers how an LMS provides real business benefits in a broader sense of the business. To do this, we shall look at some at the generally accepted role of an LMS and the core reasons for purchasing one. Inevitably that means understanding the ROI that occurs from e-learning projects and the management of their results using an LMS. But it also considers how an LMS can help a business to:

- Improve its performance by managing resources more effectively
- Manage and meet essential regulatory requirements
- Connect knowledge and competencies to business objectives
- Make employees and managers accountable for completing training

The white paper also considers how business objectives may be linked directly to training programs using the functionality of an LMS, providing senior executives with reports and recording the contribution made by the programmes to these objectives. To this we shall map the functions of an LMS against business objectives and training plans. We will also consider how we can measure the effectiveness of training programmes using an LMS, with particular reference to Donald Kirkpatrick's four stage model of training effectiveness.

#### 2. Introduction

Organisations that base their services and products on the supply or adoption of knowledge almost always recognise that investing in learning programs is essential for business advantage. But this is not always the case in other companies. Manufacturing companies will recognise the importance of making investments in new equipment or processes to achieve product performance improvements, but they are less likely to perceive learning as anything but a cost.

It is in these organisations that the greatest opposition to investing in what may be perceived to be an expensive software package such as an LMS may be found. Yet in many cases, this opposition can be met simply by demonstrating that more and better management of that training can provide direct business benefits. That doesn't just mean demonstrating an improvement in the quality and management of the training programmes. It also demands that trainers link their solutions to business objectives and, where possible, measure these programmes for effectiveness.

It would seem only fair that training leaders can and should justify, execute, and measure their initiatives the same way as other departments. In justifying those expenditures many issues should be taken into account. Clearly classroom training is labour-intensive and expensive. Costs can be incurred for:

- · travel and facilities
- updating, printing and shipping of course manuals and documentation, and
- opportunity costs of employees' time away from their work

But E-learning also demands expenditure. Typically it may mean:

- Investment in additional desk top technology
- Costs to create bespoke learning content
- Purchase of off the shelf content
- Software for managing and creating courses

This demands therefore not only a change of mindset for the senior executive officers but for trainers as well. It is here that the LMS comes into its own as a tool for recording and measuring costs, achievements and progress of training.

#### Role of an LMS

Most Learning Management Systems offer a core role of functionality designed to enable the training experts to manage the training and learning processes throughout their cycle.

A good LMS will provide functions which will include:

- A method for assigning and tracking classroom, resource centre and webbased learning
- Management reports to evaluate learning performance
- Online collaboration tools, including forums, chat rooms and e-mail tutor
- A flexible structure that allows different combinations of user groups to be created e.g. location, job role
- An Intuitive and user friendly interface for learners

If you are fortunate in your choice, your LMS will also enable you to run and report on assessments, measure competencies and other personal development solutions

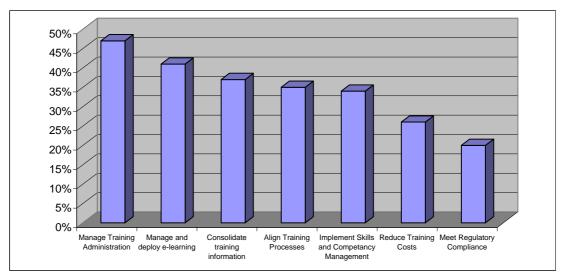
The key benefits that this will provide will include:

- Reduce costs of delivering and managing learning
- Optimise training expenditure and usage for all learning resources
- Rapidly deploy targeted learning across widely distributed organisations
- Provide learning that is 'just-in-time' not 'just-in-case'
- Train, assess and report on compliance requirements more cost efficiently

#### Core reasons for purchasing an LMS

A recent survey in the US (Bersin & Associates, August 2004), a number of core reasons were identified which encouraged organisations to purchase an LMS. These included:

- Managing training administration
- To manage and deploy e-learning
- Consolidate training information within a single system
- Align training processes with general business and HR processes
- Implement skills and competency management programmes
- Reduce training costs (usually through introducing an elearning programmes)
- Meet regulatory compliance



Core reasons for purchasing an LMS compared

In the US, the most popular reason for purchasing an LMS was listed as managing training administration with more than 47% citing it as significant. Meeting regulatory compliance was placed down the list though with greater regulatory demands of the UK and EC authorities, it may be safe to assume that this is a greater business driver than in the US.

## 4. Understanding Return on Investment (ROI)

When considering the return on investment of implementing an LMS, most organisations take into account the cost benefits of exchanging their classroom training for the elearning programmes they are about to introduce. There are other cost benefits attached to introducing an LMS. But, as is the case with many software solutions, actually calculating those benefits remains a difficult task. Most trainers will reasonably argue that they would not be able to manage an effective elearning programme without the support of their LMS. We will therefore look at three different approaches to calculating ROI. Each is based on the assumption that the LMS has enabled a new range of elearning solutions to be introduced. Note that each of these examples is based around the introduction of the e2train Kallidus LMS.

#### **ROI Summary - example 1**

In our example 1, a leading retailer needed to satisfy two key business objectives through the introduction of an LMS. The retailer needed to have an automated method to measure the amount of learning undertaken by employees and then cross reference this against learning expectations for their particular level. The ROI figures are calculated by subtracting the costs of investing in an LMS and its course content and provision against the assumed costs of running the training without the benefits of an LMS, which in this case would be classroom training. As in all these examples, in order to calculate a useful measure of ROI, a number of assumptions must be made. Specifically, these concern costs such as the value of delegate days, classroom trainers and normal delegate costs. Assumptions must also be made concerning the system usage.

When each of these figures had been taken into account, it became apparent to the retailer that, in fact the cost savings were sufficient in the first year alone to justify the investment in the LMS. Moreover the retailer enjoyed other business benefits from the change in strategy. These included an increase in the number of courses delivered, improved staff competencies and better customer service and faster roll-out for subsequent projects. They also gained the ability to measure individual's learning levels and cross reference them against the expectations for their particular level leading to better controls and training management.

#### **ROI Summary - example 2**

Example 2 offers a similar situation. Here, a financial services company had a specific business objective to deliver compliance training within a limited time period. Once again, they made a number of reasonable assumptions which would embrace the delivery of the compliance courses compared to delivering them without implementing the learning management system. In this example the cost savings were even more significant based on the project alone. But they were also clear on the other business benefits that would accrue – specifically a reduction in reliance on subject matter experts which would improve the speed of delivery of new projects and the manner in which the reporting solutions within the LMS would enhance the way they would be able to meet the regulatory demands of the FSA.

#### **ROI Summary - example 3**

Finally, in *example 3*, we see how a Police force identified a requirement to train staff on a operational system and improve operational efficiencies. The size of the project and diversity of the teams being trained meant that, by introducing an LMS, the cost savings would be significant – over £500,000 on the project alone. Because more staff could be trained concurrently, the project was completed far more quickly. But the other business benefits that accrued were also significant. Refresher training

would subsequently be available on a 24/7 basis. The LMS has also reduced dependency on physical training resources which means faster roll-out for subsequent projects. The Police are better able to meet their compliance training requirements by using the LMS's clear reporting on courses completed and passed.

#### **Alternative ROI choices**

In each of these examples, the organisation has been able to justify the purchase of the LMS against cost savings made within the first year of implementation. This is despite writing off the full purchase cost of the LMS within the first year. However if first year ROI had been the primary target of these organisations, they could have increased the saving even further.

For instance, each organisation chose to implement the LMS using internally-based web and database servers. However greater project based savings across the first year alone could have been made by having the LMS hosted externally and buying usage. Hosting offers a number of both cost and operational benefits over usage periods of up to around a year. They include

- Speedy implementation no need to install hardware first
- No need to involve IT people within the decision making process
- Budgeting is easy charges can be made for short periods and extended as needed.
- No need to worry over scalability or security issues most hosted environments are engineered specifically to handle the task in hand rather than being a 'jack of all trades' and so tend to be inherently more reliable.

Despite these considerable benefits, most users would prefer to implement their software internally. In many cases this is simply because hosting usually becomes less cost effective after the first year. Most LMS's such as e2train Kallidus do not incur other license costs after the initial purchase price. Support is comprehensive and reasonable in price.

It is also worth noting that each organisation has noted down wider business benefits including better management of resources, faster implementation of projects and better information to help meet business critical regulatory requirements. It is therefore worth considering some of these in more detail.

# ROI Analysis - example 1

#### Organisation

A Leading UK High Street Retailer

#### Background

This well know retailer wished to establish a training programme by deploying a robust, easy to install, cost effective LMS to manage a portfolio of off-the-shelf e-learning courseware, as well as internally produced courseware.

#### **Business Objectives**

- To ensure individuals had the skills required to maximise their performance and contribute to overall business performance.
- To have an automated method to measure the amount of learning undertaken by an individual and cross reference this against learning expectations for their particular level.

#### **Assumptions**

- Target usage of online learning is 540 hours per month
- One delegate day adds £150 value to the business
- Five hours online learning is equivalent to one classroom day.
- A classroom trainer costs £200 per course per day, with design and preparation at £50 per course day and travel and subsistence an additional £75 per course per day.
- Daily delegate costs are worked out as follows: travel and subsistence £25, consumables £5, training administration £10, lost productivity £30, delay on training given £15.

e2train Cost Analysis				
Item	Cost			
Software licence for Kallidus LMS and Authoring Tool Internal project management Internal Administration	£49, 950 £5,000 £5,800			

£60,750

#### **Total Cost Savings**

- The benefits are based on 540 hours on online learning equating to 108 delegate days.
- This will add £16200 value to the business per month
- Comparing classroom training with online learning at the place of work, the breakeven point for online learning is 140 hours per month as opposed to 164 hours per month for classroom based training (assuming 8 people attend each time).
- Almost immediately, the monthly benefit for online learning has been projected at £12,000 with a projected annualised benefit based on targets of £144,000. This is further projected to rise dramatically in coming years.

#### **Benefits**

**Total** 

- Saving have been accumulated within the first months of implementing Kallidus LMS.
- The increase in the number of courses delivered has improved staff competencies and customer service.
- The LMS has reduced dependency on physical training resources which means faster roll-out for subsequent projects
- The retailer is now able to measure individual's learning levels and cross reference them against the expectations for their particular level leading to better controls and training management.
- LMS enables retailers to identify underperforming stores and to link resources to that performance

# ROI Analysis - example 2

#### Organisation

A leading financial services company

#### Background

As one of the world's leading insurance companies, this organisation employs 1300 people throughout Europe. With the increasing demands of regulatory training from the FSA and a general need to improve the management of its training activities, this organisation decided to implement a learning management system.

#### **Business Objectives**

- The initial objective was to deliver two compliance training course to all 1,300 staff in 25 European offices
- Implement the courses as quickly as possible, using pre- prepared courses and track the results.

#### Assumptions

- Introducing the new system would reduce the time needed to train from two days to one. At an average salary of £130 per day, for 1300 people, this would produce a cost saving of around £84,500.
- Accommodation for training would be required for around 100 days. At £160 per day, this would save £16,000.
- Trainers would also be needed over 100 days. At a rate of £200 per day, this would cost around £20,000
- Course administration and reporting costs would amount to 26 days at £130 per day, totalling £3250.

#### E2train cost analysis

Item	Cost
Software licence for Kallidus LMS	£40,000
Compliance course licences (2):	£20,000
Internal project management:	£1,000
Internal administration:	£4,000
Total	£65,000

#### **Total Cost savings:**

Based on the above assumptions, delivering the training via conventional methods would cost in the region of £123,750. Instead e2train completed the project at a cost of £65,000.

As a result the cost savings on this project alone were estimated to be £58,750.

#### **Benefits**

- On this project alone, the insurance company will be saving £58,750.
- Kallidus's reporting tools provide the evidence required for compliance training, making it easier for the insurance company to meet its regulatory requirements with the FSA.
- With the LMS system now implemented, future elearning projects are projected to provide even greater cost savings.
- There is less reliance on subject matter experts to deliver training, which improves the speed of delivery of new projects.

# ROI Analysis - example 3

#### Organisation

#### A Leading UK Police Force.

#### Background

One of the largest Police Forces wished to improve the way it delivered its training. The training issue focused on the rollout of the new Enterprise IT System.

#### **Business Objectives**

- All 5,000 officers and support staff needed to be trained in some aspect of the new Enterprise IT System
- To meet tight deadlines for the rollout, and achieve subsequent significant operational efficiencies offered by the rollout of the new system.

#### **Assumptions**

- The elearning would reduce the time associated with training from one day to half a day. At an average salary of £130 per day, this provides a saving of £325,000 for training all 5000 officers.
- 2000 of the trainees are based at the training centre. For the remaining 3000, travelling would average around 80 miles per person. At 40p per mile for 3000 people, the cost would be approximately £96,000.
- Training venues would be needed it is estimated that five rooms would be required for 100 days. At £160 per day, the cost would be approximately £80,000.
- At £200 per day, trainer costs over 5 months would be in the region of £100,000.

e2train		

Item	Cost
Software licence for Kallidus LMS and Authoring Tool	£60,000
Development of WBT course	£30,000
Internal project management	£5,000
Internal administration	£5,000
Total	£100,000

#### **Total Cost Savings**

Based on the above assumptions, delivering the training via conventional methods would cost in the region of £601,000. Instead e2train assumed the burden of the whole project at a cost of £100,000.

As a result the cost savings on this project alone were estimated to be £501,000.

#### Benefits

- Based on the initial project alone, the Police Force saved an estimated £500,000
- Because more staff could be trained concurrently, the project was completed far more quickly.
- Refresher training is now available 24/7
- LMS system now in place supporting future learning projects providing on-going cost savings
- The LMS has reduced dependency on physical training resources which means faster roll-out for subsequent projects
- The Police are better able to meet their compliance training requirements by using Kallidus's clear reporting on courses completed and passed.

## 5. Managing resources more effectively

As the name would suggest, there is no question that a Learning Management System is a powerful ally to help trainers manage resources more effectively and more easily. Typically training demands a wide range of company resources which might include:

- Classrooms either internally or externally
- Trainer or subject matter experts to deliver courses
- · Books, CD's or other materials which form part of a course
- 'Live Time' in work environments
- Online content
- Proiectors

Poor management of these resources can delay projects, incur additional costs and reduce the quality of the training being provided. Conversely good management will see better utilisation of budgets and the opportunity to deliver more and more effective training where it is needed. The LMS enables users to allocate resources more effectively by keeping track and helping to distribute them where they are most needed.

#### **LMS Tool Description - Managing Resources**

Like most LMS's, Kallidus LMS can allocate physical resources to events, such as training rooms and equipment. The Learning Management System can then keep track of your resources and ensure they are not double booked.



Kallidus LMS provides full management of resources

The LMS provides an "Event Resources" page which lists all the resources and times that are booked for the event. The booking times for a resource do not have to match the schedule periods for the event. This allows you to book resources outside event times. For example, you may want to book a training room an hour before the event starts to prepare it



Events can also be scheduled via the event resources page

The "Event Resource Booking" page allows you to book a resource for all or part of the event, and to reserve the resource for times outside the event schedule. The table on the left shows the event schedule, while the table on the right shows the times that the resource is booked for this event

## 6. Manage and meet regulatory requirements

Today in the UK, more and more industries are becoming affected by the demands of compliance. Industries that are required to train, assess and report for compliance purposes include:

- Financial industries of insurance, banking and building societies which must meet FSA compliance requirements
- Communications industries which must comply with Ofcom and other legal frameworks for business principles, competition law, security, safety and data protection.
- Building and construction which must adhere to COSE and other health and safety regulations

#### Case Study: Yorkshire Building Society deploys LMS for FSA Compliance

#### **Business Requirements**

With incoming FSA compliance requirements intended for the sale of mortgage and insurance, Yorkshire Building Society needed a system that could deploy and manage all elements of training in this area. The Yorkshire already used a training administration system, but greater functionality was needed to meet the increasing training demands of its workforce. The new system had to be able to compile data from both classroom and e-learning to give a full analysis of results.

Explained Gary Marlow, Training Manager, Yorkshire Building Society: "With FSA regulatory demands dominating our industry, we're finding that Kallidus LMS enables us to offer the perfect blend of training and effectively track and report on the progress"

#### The LMS Solution

The LMS, supplied by e2train system had to integrate with the Society's Oracle HR System; any historical training data would also need to be transferred to the new system. The system was installed onto the Society's server, and licensed to manage the learning of 2200 users nationwide. Any IT issues were pre-empted because YBS were proactive in getting e2train's technical specialists together with the Society's IT people. In particular the Society needed the input of:-

- Their Desktop Services Team (responsible for everything from commissioning the dedicated servers to ensuring end user PCs were capable of accessing the LMS).
- Their Network Services team (to ensure bandwidth demands would not adversely affect crucial customer service and teller systems and
- Their Database Administration Team to ensure that a live and back-up database were efficiently set up and maintained.

#### **Continuous Support and Development**

The LMS enabled YBS to meet the FSA compliance regulations even easier. An even wider range of reports has been provided in relation to training undertaken by Mortgage Advisors. These enable the Society's 40 or so Development Coaches to have an easily accessible record of the status and other accreditations of the mortgage advisers they support. Each Development Coach has a Span of Control – these spans have been created as groups on the LMS. The Development Coach can actively manage their Span from any location across the branch network (all branch PCs have intranet access).

The LMS is specifically being used as a record-keeping tool for FSA compliance. In addition to the training records of individuals, the Society commissioned customisation work so that all authorised staff (approximately 350) would be assigned a 'Training & Competence' status (T&C Status). This meant that anyone in an advisory role would have a visible record indicating what level of supervision they would be subjected to, within the terms of the overarching T & C Scheme.

- Oil and gas industries which face regulatory pressures from environmental and health and safety standards
- Pharmaceutical industry must meet a wide range of regulatory demands required by the Ministry of Health's Medicines Control Agency (MCA)
- Retail industry which is now being affected by the Insurance Mediation
  Directive which governs (amongst other things) sales practise of store card
  and associated card insurance packages.
- Legal, accounting and other professional practices face stringent legal regulatory pressures to ensure they uphold the highest standards

#### LMS Tool Description - Accreditation Module

For regulatory reporting, an accreditation module within an LMS is critical to demonstrate to regulatory authorities the state of an organisation's learning, skills and knowledge. In the Kallidus LMS, the accreditation module shows a list of all the users for which the accreditor can perform the accreditation. In the module, a user can view the accreditations assigned to them, their details and perform an accreditation review



e2train Kallidus Accreditation Module

The accreditation module lists users based on the group administration assignments for the accreditor. The members of the groups that the accreditor administers appear in the list. Accreditors have access to the standard accreditation reports which only shows users that they have permission to see. An accreditation forum is available to all accreditors that use the module. Accreditors can post new messages and view existing messages from other accreditors. A user with the "Accreditation Administrator" role can also edit and delete existing messages in the forum. The external links for the navigation bar defined in the application settings also appear in the accreditation module contents menu

For administrators, the Accreditation module provides them with:

- Accreditation performance report showing a breakdown of a user's progress through the
  accreditation, including who approved the element and the comments from the
  accreditation review form.
- Accreditations achieved and the date that the accreditation expires.
- Accreditations detail report shows all accreditations for a user (or group of users).
   Together with the accreditation title, elements for the accreditation, reviewer comments, the status of the accreditation, date of completion and expiry.
- Accreditations in progress which shows incomplete accreditations
- Accreditations updated that shows all the accreditations where the user has performed some or all of the review.
- Users which have no accreditations

Today, a fully specified LMS such as Kallidus provide Accreditation Modules and other tools which are specially geared towards meeting these regulatory pressures. They provide comprehensive reports and summary data in a format suitable for display to regulatory authorities which not only reduce the time needed for meeting regulatory requirements. They also ease the management of these processes by flagging training requirements and providing snapshots of achievements and shortcomings of the learning and scheduling new training as needed.

# 7. Making employees and managers accountable for completing training

One of the often cited drawbacks of elearning is that learners frequently do not complete or even start courses which are available to them. As a result, all the carefully estimated business benefits fall by the wayside.

Setting up an LMS will both mitigates this issue and make learners accountable for their own learning plans. In most companies, employees appreciate that the more skills they can demonstrate, the more opportunity they will have for promotion. Conversely, not taking up learning opportunities may suggest that they are disinterested in progressing their careers further. An LMS such as Kallidus can be set up to enable employees and line managers to view the progress of individuals and groups through the courses that are available to them. There are real business benefits that accrue from doing this. It will enable training to be provided more quickly and learners to be more specific and honest about what training they need

A good LMS will also provide other tools that enhance this process. These include:

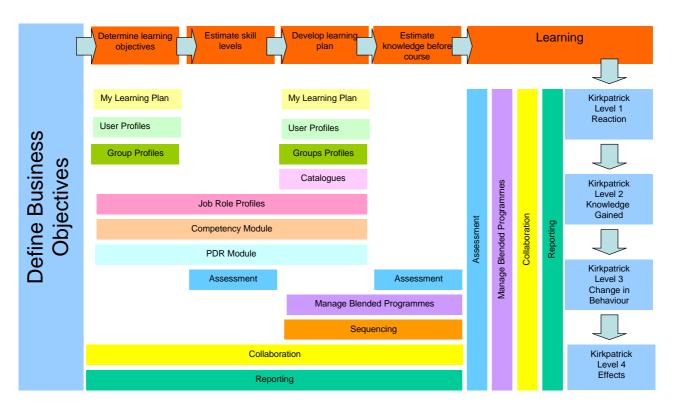
- Collaboration tools that enable learners to communicate directly about their experiences which can reveal shortcomings and misunderstandings within training programmes. These are especially useful when (as is increasingly the case) employees are working from diverse locations and may not know others in a similar position
- Self service training which learners can personally subscribe to without intervention from trainers or line managers
- Learning plans which help learners understand the paths they must take to improve their performance
- 24x7 self service learning which enables learners to work on independently away from the workplace
- Deadlines to encourage and help learners understand the importance of completing a piece of training
- Accreditation to prove success and capabilities.

By shifting the process of learning from the hands of the trainer and into those of the learners themselves, organisations can encourage high performing employees to take on more responsibility and make a greater contribution to organisation effectiveness.

# 8. Connect knowledge and competencies to business objectives

One of the key benefits of the LMS is its ability to provide tools that can connect an organisation's business objectives to the knowledge and competencies of its employees.

In the diagram below, the processes have been mapped against the functionality provided within an LMS showing how, at each stage of the process an LMS will support the progress of the programme.



Using an LMS through the learning process

We have identified four typical steps which trainers usually deploy to map business objectives to learning plans and the ultimate training itself.

#### Step 1 – Determine learning objectives

What do we need to achieve with the learning – these may be linked to specific cost savings, regulatory requirements, the introduction of new technology etc. LMS's such as Kallidus enable trainers to create profiles of individuals and groups, job roles, competencies and personal development which will help them understand how courses can be created to achieve the learning objectives.

#### Step 2 - Estimate current skill levels and deficiencies

Given our learning objectives, how far do our existing employee's skills match up to these? These may be determined via needs analysis surveys or by evaluating the historical records and data in an LMS. Once again, LMS profiles will provide an understanding of skill levels and deficiencies.

#### Step 3 – Develop a learning plan

Linked to the learning objectives, LMS's enable you to manage blended programmes within the learning plan and effectively sequence them. They enable trainers to identify and catalogue suitable courses and lessons to create the learning plan. Learners will be able to visualise their learning plans and understand the requirements to achieve them

#### Step 4 – Estimate knowledge before a course

May be done by a pre course assessment, but once again, LMS historical records, reporting and collaboration tools will enable a trainer to gain a fuller picture of existing knowledge, which can be later compared to the improvements derived from the learning plans.

Throughout these processes, an LMS will underpin the process via reporting records and the use of collaboration tools to informally work with the learners to understand attitudes and expectations within the learning programmes.

The LMS will of course manage the learning process itself. But it is also important to measure the effects of that learning if we are to demonstrate that the business objectives have been achieved. One of the most common methodologies to achieve this is through the Kirkpatrick model. This can be summarised as follows

#### **Level 1 Evaluation - Reactions**

Evaluation at this level measures how participants in a training program react to it. This type of evaluation is often called a "smilesheet." According to Kirkpatrick, every programme should at least be evaluated at this level to provide for the improvement of a training program. In addition, the participants' reactions have important consequences for learning (level two). Smilesheets can be run from within an elearning programme or as stand alone assessments where results will automatically be recorded for reporting.

#### **Level 2 Evaluation - Learning**

To assess the amount of learning that has occurred due to a training program, level two evaluations often use tests conducted before training (pre-test) and after training (post-test). Assessing at this level moves the evaluation attempts to assess the extent students have advanced in skills, knowledge, or attitude. Measurement at this level is more difficult and laborious than level one. An LMS will provide tools to enable formal and informal testing, team assessment and self-assessment. Collaboration tools can form a valuable informal solution. LMS reporting is critical to determine the amount of learning that has occurred.

#### Level 3 Evaluation - Transfer

This level measures the change in learners' behaviour due to the training program. We are trying to understand if the newly acquired skills, knowledge, or attitude is being used in the everyday environment of the learner. For many trainers this level represents the truest assessment of a program's effectiveness. Measuring at this level can be difficult. It is therefore important to have as clear a picture as possible of the learner's progress. However some LMS's offer quite comprehensive tools to

record user progress both through assessment but also by integrating directly with HR systems which will provide an even broader picture of employees attitudes and activities.

#### **Level 4 Evaluation - Results**

Level four evaluation attempts to assess training in terms of business results. Frequently thought of as the bottom line, this level measures the success of the programme in terms that managers and executives can understand - increased production, improved quality, decreased costs, reduced frequency of accidents, increased sales, and even higher profits or return on investment. From a business and organisational perspective, this is the overall reason for a training program, yet level four results are not typically addressed. Determining results in financial terms is difficult to measure, and is hard to link directly with training. But comparing the success of a department's achievements with group LMS records and training records can often provide quite comprehensive reports which can demonstrate overall improvements mapped to learning successes.

#### 9. Conclusions

It is obviously important to provide training which is connected to the overall business objectives to an organisation. In these competitive times, trainers are increasingly being required to demonstrate that what they are doing provides this together with clearly identified business benefits. Introducing an LMS will not only enhance those business benefits, it will also allow trainers to demonstrate and measure them.

In some areas, notably ROI, the benefits of elearning as a tool are clear. Using an LMS to manage that elearning enhances that ROI and provides the bedrock for running and managing the training programmes.

But the other benefits offered by LMS's – managing resources, meeting regulatory requirements, the increase in speed of learning, helping learners to take responsibly for their training and mapping learning to business objectives are as, if not more important in many cases.