

LEARNING TO SUCCEED

IN BUSINESS, WITH INFORMATION TECHNOLOGY

*Computer skills
strategies for
the Internet age*

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FOREWORD BY THE RT HON MICHAEL HESELTINE CH MP

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Chapter 4 - Business attitudes to IT education

Despite the fact that there is an obvious and commonsense link between skills and productivity, IT training is undervalued by most organisations.

It would be fair to point out that IT training does tend to get the lion's share of an organisation's overall training budget, but this success is only comparative - almost all organisations under-invest in IT training; being able to say that it is (for example) 80% of the total training budget doesn't make the actual investment any better for the business.

IT skills - tactical or strategic to the business?

IT training has yet to get on most organisations' strategic agenda. In the annual business-planning process, it gets a budget line (usually as part of an overall 'training' catch-all), but, in many cases, this is a euphemism for 'contingency'. It is usually the first budget line item to be cut during the approval process and is, equally frequently, the first item to be cut back during the year, should the rest of the business not be 'on plan'. During the budgeting process, there is seldom any link from the amount on the line item to a strategic training plan. Beginning life as budgeting sport for the financial director, the IT training budget is absorbed throughout the year to meet a succession of tactical requests. Major IT implementations of new technology do tend to receive training attention, but this is frequently too little, planned too late.

. As we have said, most tactical training is as a result of employees' requests - not as part of a strategic plan. These requests may result from frustration at not being able to use the tools supplied and may be highlighted during the employee's appraisal process. The most self motivated to learn, the IT professional, will generally recognise when the organisation is moving into a new technology area and will request training in order to carry out his/her role properly.

If you accept the argument that IT skills form a major factor in the efficiency, competitiveness and success of an organisation, then having a disorganised first-come, first served method of identifying training needs is nothing short of surreal.

We have even heard of business managers 'deferring' dealing with IT skills issues, in the belief that forthcoming generations will be computer-literate enough to make the issue obsolete. True, the level of computer skills in school and college leavers is on the rise, but don't bank your business strategy on it - there's still a long way to go. As US Vice-President Al Gore said in his speech to the Lifelong Learning Summit, in January 1999: "Right now, our skills needs and our workplaces are changing quickly - yet 75% of the people who will be working in the year 2010 are already in the workforce." [12]

Rob Clarke is marketing director with Informatics CTEC, one of the UK's largest technology skills consultancy companies and providers of IT training. Informatics CTEC provides training to all types of staff, including management, computer users and technical teams. Informatics CTEC is part of the Informatics Group - one of the world's largest IT education organisations. According to Clarke, the way in which many organisations buy training means that, although they get what they want, they don't necessarily get what they need. "Many' people buy on price. I've even had one organisation say flatly that it wants only the cheapest training. In some ways,

this is the fault of the IT training industry, which has commoditised its services. This has led to IT training moving from being a service, which is where it belongs, to being a product, which benefits the 'lesser able' IT training firms, at the expense of the customer. Such training firms don't develop the same level of 'skills consulting' ability - effectively, everyone gets the same course, irrespective of what the customer really needs. Not surprisingly, many companies just don't give training the amount of attention which it needs and, as a result, don't get as much benefit from it as they might. We find that those organisations with a dedicated person managing the IT skills requirements of the business can see beyond the sales pitch of these lower-grade firms. For these people, IT training is their vocation, remit and job. Their focus ensures that the organisation for which they work receives much more relevant training."

Informatics CTEC finds that, by establishing a strong relationship with a customer and investing in highly skilled training consultants and project managers, far more training dialogue and debate are initiated, leading to a better solution for the business. Clarke told us: "Although many organisations undervalue training, there are some which make a real success of it. One great example is BT - it has an ongoing commitment to developing the skills of its workforce; this shows in the company's success. When BT implements a new system, it ensures that everyone receives the right skills. It spends a lot of time planning, and that really pays off. It also undertakes a lot of awareness sessions for management, so that the company is technology-aware from the top down. While this has typically been in contrast to many companies, Informatics CTEC has evidence that the e-commerce 'wave' might be changing this. It has noted that a higher proportion of management is attending its e-commerce courses than has done in the past with other IT-related subjects. It believes the reason for this to be that, while not a core activity for most companies today, e-commerce will become so (many believe) in future. As a result, there is a trend (within both the management team and the implementation team) to build in-house e-business skills. Clarke reported: "Demand for our e-commerce planning seminars is high and we, along with the other major IT consulting and training firms, are busy up-skilling and reallocating staff as our clients move staff with business experience into their Web teams. One of our clients has increased its in-house e-business team from four to sixty staff. We recommend that all senior and business management professionals get themselves, now, onto e-commerce awareness sessions, so that, while getting their Web strategies in place, they are able to decide when to outsource and when to build internally."

So, how does Informatics CTEC see the future of IT training developing? Clarke concluded: "From the supplier's point of view, we need to deliver the exact skills needed for workforces to exploit IT for competitive advantage. As that is unlikely to occur through standard 'everyone-gets-the-same' training, there needs to be a greater level of partnership, more focus on long-term goals & results and more communication. To help with this, we recently launched a free on-line faculty for our customers - the Informatics Institute - to make the required level of communication more easily achievable."

Considering the importance of IT to the success of today's organisations, you would expect that all levels of an organisation would be provided with the IT skills which they need to maximise the company's profit.

Top-down Inertia in IT skills Investment

Any major strategic and long-term initiative for IT training really needs to 'come from the top', but there is evidence that many business leaders are simply not well enough informed about IT. Research by the UK's Institute of Directors, along with IT giants Cisco and Oracle, found that 'half of UK directors fail to grasp the impact of technology, while the other half forges ahead'. Much more worrying, the report found that '50.5% of UK directors have never had a technology briefing and 48% never intend to have one'. Although we think of IT education as 'classroom learning', it actually needs to take many forms, technology awareness being one of the most vital. For their own future success, it is imperative that the leaders of organisations take an active interest in the developments of IT. How can you make important strategic decisions, with global implications, without the relevant data? Yet, that is exactly what is happening: in the same survey, 31.6% of directors 'help to specify technology developments without being briefed on their company's technology'. If you're a company shareholder, we suggest that you raise this topic at the next annual general meeting. George Cox, director-general of the Institute of Directors commented on the survey: "The survey's findings add to the mounting evidence that too many businesses, large and small, are still not properly positioned to exploit information technology. Directors do not have to understand IT per se; they do have to understand what it might do for their business, how it might reshape its operations and change the competition. There are major changes being ushered in by e-commerce, and too many people just do not see them coming." [13]

We can see a reflection of this lack of buy-in to the relevance of IT skills in the readership of IT Training magazine. This magazine is distributed 'on request' only, so is a reasonable indicator of where responsibility for IT training lies within an organisation. The figures break down as follows: [14]

chairman, managing director, IT director, head of IT	2,000
IT manager	11,000
IT training manager (or equivalent)	2,000
human resources director/manager	1,500
members of the Institute of IT Training	2,500

Karen Velasco is IT training manager at the AA - the UK's leading motoring organisation, with 9.7 million members. She has extensive experience of IT training, having worked within local government and a health authority as both manager and deliverer of IT training. She has worked for the AA, now part of the Centrica plc group, since 1990, when she joined to set up its internal training department. Velasco is a Member of the Institute of Personal Development and a Fellow of the Institute of IT Training. She is also a director of the Forum for Technology in Training. She believes that organisations don't have enough board-level sponsorship for IT training: "From my experience of other organisations, the AA is fairly exceptional in its commitment to, and the amount which it has invested in, training and development, at both an end-user and an IT professional level. Investment in IT skills, particularly at end-user level, is rarely budgeted for (in major IT projects) from the start. In my experience, it is usually added as an afterthought, and then budgets have to be scraped together from various sources." According to Velasco, the

situation frequently isn't helped by the training organisations themselves - they are rarely able to differentiate themselves from their competition. Velasco continues: "Most companies offer a broadly similar range of courses and appear to stick to similar course content. In some ways, this is due to the vendor-specific nature of the curricula on offer - particularly if based on qualifications, such as CNA, MCSE or MOUS. In order to differentiate among these companies, it is important to look beyond the course content or syllabus to more important factors, such as their ability to understand company culture, the needs of the training manager, line manager & individuals working in the company, their flexible & open approach and, most importantly, the quality of their trainers. Rather than selecting companies for their vendor-specific accreditations, we would rather choose a company which is accredited by an impartial body, such as the Institute of IT Training."

Miles Corbett, managing partner at on-line learning specialist Transition Associates, believes that it is too simplistic to say that companies have a lack of commitment to education. He believes that organisations have no problem with training when it supports their core product or service. Corbett told us: "Within organisations which are producers, there is an immense value seen in training and education _ these companies rate the training related to their core activity very highly. Take the use of a telephone as an example - and I mean from both a technology point of view and a customer service skills perspective. Most companies assume that employees can use the telephone, but, from a technology point of view, they are lucky to get a manual and some help from the person sat nearest to them to master the features of the voice-messaging system. From a customer service perspective, it's highly unlikely that they would get any training in telephone skills. However, if the company has a call centre, things are different - very different. Since the call is the company's 'product', extensive training will be provided on both aspects of using the telephone - and there will be continuous measurement.

Does this mean that only call-centre companies need higher-level telephone skills or that only those companies will benefit from that level of customer service? Of course not. This type of training is valuable across the board, providing immediate benefits. IT training is like this: although it supports all major businesses in a fundamental way, it is perceived as being non core. Therefore, it is underinvested in because it is not seen to be involved in producing things which deliver margin. This isn't true: IT is now an extremely important part of an organisation's ability to be profitable. The conclusion is that what organisations don't do is to take an organisational performance view of how they can invest in IT skills. Organisations may believe that IT is important to them and may say that they recognise that IT skills unlock the power of technology, but how many companies have a director responsible for IT training?" Does Corbett believe, in this respect, that things are improving or getting worse? "The perspective for the future is that the cost of formal IT training is currently low and becoming lower. It is continually reducing, except in the arena of technical training, where it is a necessity. Most IT training will continue to be focused on business change - although this is a positive, not a negative, thing. In terms of the future, I believe that, because the Web changes constantly, people expect technology-based training to be part of a continuum. Where functional training is needed, it will be incorporated in technology-based training. Just-in-time training modules will become so highly available that learning will be reduced to minuscule training incidents. People will ask an intelligent agent on the PC, and an

animated trainer will appear. These won't be like the counter-productive helpers at the moment which are really just a cartoon stuck onto a help file. The new helpers will be pervasive and will eliminate a lot of formal technology-based training programmes."

Finding reasons not to provide adequate training

When there would seem to be such a strong connection between improved ability and business success, this wholesale lack of sponsorship does seem illogical. So, what are the underlying reasons for this?

The most common reasons given for under-investing in training:

1. When you train staff, they want more money.
2. When you train staff, they go elsewhere for more money.
3. The business can't afford the lost time and opportunity-costs of training.
4. We could recruit someone with the right skills faster and with more chance of success.
5. The effects of training can't be measured (ergo, it can't have much effect) - so, why bother?

Let's look at these 'reasons' for lack of investment, one by one.

1. When you train staff, they want more money.

This statement isn't true of training across the board - it does depend on the type of training provided, and there's a greater belief that people will demand more money if their training leads to some kind of professional qualification. However, what certainly is true across the board is that if someone has been trained and has enhanced or extended his/her skill set as a result of this training, he/she is probably worth more. In terms of remuneration, companies value people's skills in two ways: higher if they are recruiting; lower if it is a long-term employee asking for a raise. There aren't many companies which don't adjust salaries to suit the skills of the individual role - at the point of employment. When you're recruiting, you expect different roles and different levels of experience to come at a different price. So, if you provide training which increases someone's value, it's natural for him/.her to expect it to be recognised.

A survey by IDC shows that about 20% of companies pay more to their Microsoft-certified IT staff than to non-certified staff performing the same function. The average premium was 15% in the United Kingdom and 11 % in Germany. It's by no means a one-way street remember that you're getting much more in return and certainly a greater return than the original investment. Even though it's the same employee, you are enabling him/her to do more for you - so, where's the issue with rewarding that?

The same survey by IDC showed that companies investing in professional certification benefit directly through increased server uptime. 'If we assume that demonstrated savings were made possible only by providing training and certification to all NT support staff members in companies with MCPs, the potential savings of MCP certification are as follows:

1. United Kingdom

savings	\$183,422
number of NT support staff members (mean)	11
savings per staff member	\$16,675
cost of certification per member	\$4,263

2. Germany

savings	\$123,926
number of NT support staff members (mean)	9
savings per staff member	\$13,770
cost of certification per member	\$6,204

3. France

savings	\$35,005
number of NT support staff members (mean)	6
savings per staff member	\$5,834
cost of certification per member	\$8,399

The survey also measured savings through efficient help-desk and desktop support operations and determined that 'using a certified employee to [take] support calls can save companies in the United Kingdom \$0.79/call and in France \$1.61/call over using an uncertified employee'. [15]

If they were to look elsewhere for a job, they would almost certainly find that increasing their skills had increased their value. Sure, you don't want to invest in people so that other companies can benefit - so, make it part of your strategy to keep them.

2. When you train staff, they go elsewhere for more money.

Another great argument against training is that when you train someone, he/she will simply take the new skills somewhere else to earn more money. Although there must be instances of this happening, an IDC report for Novell, 'Evaluating the benefits and market perceptions of Novell Certification', indicates that this is not the case. It noted that 'attrition of Novell-certified employees was not perceived as a particularly significant issue among these organisations'. In fact, 'over half the companies with Novell-certified employees (61%) believe that it is not any more difficult to retain certified employees than it is to retain employees that are not certified'. [16] Larger companies suffer higher staff turnover rates. A report by the Bathwick Group, 'The Productivity Myth', noted that, in small companies, 'the difference between those who said that staff turnover had increased and those who said that it had decreased was 7% of the total. This rises dramatically to a difference of 40% in larger companies'. However, the report does not attribute this to those who had gained skills and wished to attain higher salaries.

The survey also says that the implementation of technology itself can lead to stress in the workplace: 'Between 73% and 90% of respondents agreed that the introduction of computers had rapidly increased the productivity expectations of senior managers. This demonstrates faith in the power of IT at senior management levels, but also an expectation of an early benefit, which may not necessarily accrue. This expectation puts pressure on the business to perform and increases stress in the workplace.' The report continues: 'Most businesses report a significant increase in the number of staff members who use a computer as part of their everyday work. So, productivity expectations are up, IT skills requirements are up, revenues are static, and processing times are down. It is therefore not surprising that levels of staff turnover and stress have increased.' [17] If anything, a key contributor to people changing jobs is the opposite of what their employers think: that a lack of skills is leading to stress in the workplace and driving people to seek a different employer. To further support this argument, a 1999 Emerging Workforce Study found, among workers with poor training opportunities, that 41% were looking for a new job within a year. In comparison, where staff considered that they had excellent training opportunities, just 12% were looking for a new job. [18] The bottom line: staff who are treated fairly, rewarded at market levels, have good career paths open to them, have an enjoyable place to work and who are given the training needed to perform their role without frustration simply lack reasons to go elsewhere. Although some people do leave after acquiring new skills in some circumstances, we contend that this argument is both a myth and a scapegoat.

3. The business can't afford the lost time and opportunity costs of training.

Have you ever stopped to calculate just how much not having the right skills is costing your business? There is a massive companywide overhead, in many organisations, where the right IT skills are *not* provided - which is a cost in itself. It just happens that, since no one is measuring it, it's an 'invisible cost', but it's there nevertheless. According to research by US training company Computer Services and Training Inc and Booth Research, on average, people use just 24% of a software package's features before training, compared with 61% after formal training. [19] That's a massive increase in skills, but, if you look at how much longer each task is taking before training, imagine how much more it is costing you. If every IT task is taking almost three times as long as it ought to, it's costing your company massive amounts of money not to train - it's just that you don't have the mechanism for measuring this kind of inefficiency. Companies are good at measuring many types of cost, but typically only those which you can readily grasp, such as the cost of vending machines, salaries, cars and so on. Just because a cost is 'hidden' doesn't mean that it isn't real - it just means that you're not measuring it yet. This is really reminiscent of that old cartoon which shows an archer firing his bow during a huge battle, while someone is trying to sell him guns. "Come back later," says the archer. "Can't you see "that I've got a battle to fight?" When you're in the thick of it, it's hard to see the benefits of a different approach, but that doesn't mean that such benefits don't exist. Not having skills could well be costing you dearly.

Acquiring skills is a fact of life and it makes complete sense to plan for it. A strategic training plan should outline the number of days' training per year required by each employee, along with

the cost of that training. These numbers should be built into each employee's 'utilisation' figures - so that you understand what you're investing and what you're getting back. *It is only when you don't plan for training that you think you can't afford it.*

4. We could recruit someone with the right skills faster and with more chance of success.

It has to be said at the outset that it's fairly hypocritical to accuse employees of job-hopping when they're provided with a higher level of skills and then to recruit in preference to investing in growing such skills internally.

As we mentioned previously in this chapter, the value of an employee is frequently measured differently when recruiting and when he/she has been in long-term employment. This is probably largely to do with bargaining power - a person's bargaining power is strongest before he/she is recruited.

Recruitment is not without a serious set of costs. You'll be familiar with these:

1. advertising, perhaps in more than one publication
2. recruitment agencies taking a significant percentage of commission on every new hire
3. sheer management time required to sift through resumes and interview the selected candidates
4. final selection time
5. opportunity-cost of bringing in a new employee - few employees are productive immediately, so they start life as a cost

What recruitment is perceived to provide is a 'fast track' to a particular skill set. However, even this is limited. The process of recruitment, including internal administration, advertising, using an agency or head-hunter, followed by narrowing down the list of applicants and finally interviewing and offering the job, is hardly fast. Realistically, it can take two to three months to bring in a new hire. In many cases, training - especially if there is a strategic training plan - can be a real alternative. Even with a good new hire, it will take that person several months to integrate with your company culture, learn your processes and 'the ropes'. A current employee has only the new skills to learn, not a new way of life. There may well be instances in which a company needs to recruit, but providing training to current employees shouldn't be the second option.

5. The effects of training can't be measured so, why bother?

Although last in our list, this is frequently seen as the biggest issue especially today, when companies demand fast and obvious returns on investment.

It has to be said return-on-investment (ROI) for training is not easy to measure. Why is this the case? The measurement of skills, including IT skills, is complex because it permeates through all parts of an organisation; it's an interwoven, embedded facet of your company. Another factor is that when you measure something, the very act of measurement changes the thing being measured. Known as the Heisenberg Uncertainty Principle (formulated in 1927 by German physicist Werner Heisenberg), this is more usually applied to quantum mechanics, but

the principle also applies to other forms of measurement. In training terms, this means that if we measure a person's task performance before he/she is trained, the act of measuring that performance will actually change it. However, this is really just an intellectual diversion; since there is no way around this issue, we have to accept that the altered measurement statistics are still consistent enough to be useful. Even taking these into account, training is no more difficult to measure than many other business investments, such as marketing or even a new IT system. The fact is that most companies have established processes for measuring other such investments, yet few understand how to measure the gains from training. Yet, it can be done. The few companies which have measured the effects of training have uncovered some very positive statistics indeed.

What is really tough - and probably impossible without a significant investment in a companywide reporting system - is measuring the net benefit to the bottom line. However, this isn't because the benefit isn't there - it's because the measuring process needs to take account of so many other business variables. In this context, it's not much different from other business investments.

Motorola is one company which measures the results of its training. It certainly seems to believe that investing in training is worthwhile. According to 'Update and Outlook on the Education and Training Market' from Dataquest, Motorola spent \$120 million on training in 1992 (on sales of \$13 billion, equivalent to 3.6% of the payroll). Motorola calculates that every \$1 spent on training realizes around \$30 in productivity gains within a three-year period. Since 1987, Motorola has managed to reduce costs by over \$3 billion - through training which has resulted in streamlined procedures. Sales per employee have doubled in the past five years, and profits have increased by 47%. [20]

Training *can* be measured. This does require that processes and procedures be created and set in place, and these won't be without their own costs, but a measuring process should not be a significant overhead in itself. Typically, the measuring process will work best if it focuses on efficiency before and after training. From that information, the benefits to the business can be extrapolated.

Return-on-Investment for IT training

United Kingdom-based training consultancy company Fastrack Consulting places a great deal of emphasis on evaluating the benefits of training. It provides detailed guidelines on evaluation: why bother evaluating training, what to measure and so on. Fastrack Consulting provides a simple formula to enable organisations to measure ROI:

$$\frac{\% \text{ ROI} = \text{benefits} \times 100}{\text{costs}}$$

In this formula, ROI relates to a specified period of time, typically one or two years (less time is not enough to create meaningful statistics, while more time is unrealistic in terms of average employee retention/technology upgrades and life cycle). The first thing to measure is the cost associated with the training programme over the period, including the following:

1. analysis, design and development costs

2. promotion costs
3. administration costs
4. tutor costs
5. delegate costs (including time, expenses and lost productivity)
6. equipment and facilities costs
7. evaluation costs

Then, and with considerably more difficulty, you measure the financial benefits obtained over the same period, including the following:

1. labour-savings
2. productivity increases
3. cost-savings

Using this information and applying the Fastrack Consulting formula, calculation of ROI is actually a simple matter. Let's imagine that you have been running a training programme and want to calculate the ROI for the first year. You measure the costs as \$100,000 and the benefits as \$130,000. Your ROI is $130,000/100,000 \times 100$ or 130%. However, while companies have mechanisms for measuring costs, few have developed such good mechanisms for evaluating benefits, and this remains the toughest part of providing empirical evidence for the effectiveness of training.

According to Fastrack Consulting, another way of looking at ROI is to calculate how many months it would take before the benefits of training match the costs, and the training pays for itself. This is called the payback period, and Fastrack Consulting provides a formula for understanding it:

$$\text{payback period} = \text{costs!}/\text{monthly benefits}$$

Fastrack Consulting believes that payback period is a powerful measure for ROI. It's also something which training purchasers can grasp more easily and relate to their departmental budgets, because if the payback figure is low (perhaps only a few months), the client will be more inclined to make the investment in training. Unlike Fastrack Consulting's ROI calculation, it has the advantage of not requiring an arbitrary benefit period to be defined first. [21]

Here's an example of the final results for a ROI analysis:

duration of training	33 hours
estimated number of students	750
period over which benefits are calculated	12 months

Costs	
design and development	£40,930
promotion	£4,744
administration	£12,713
faculty	£86,250

material	£15,000
facilities	£40,500
students	£553,156
evaluation	£872

Total cost £754,165

Benefits

labour-savings	£241,071
productivity increases	£675,000
other cost-savings	£161,250
other income generation	£0

Total benefits £1,077,321

ROI 143%

Payback period 8 months

However, once you start to measure training in this way, it soon becomes clear that a huge number of calculations is required to make a thorough analysis. Certain areas, such as opportunity-costs and productivity benefits are extremely tricky to calculate accurately. Fastrack Consulting has developed a 'training ROI calculator' to support the Institute of IT Training's one-day course on 'assessing the ROI of training'. [22] If you are interested in the calculator or the course, you should contact the Institute of IT Training at info@iitt.org.uk.

According to Karen Velasco, IT training manager for the UK's AA, IT training companies rarely provide services to measure either ROI or the benefits of training. She says: "Many companies appear to pay lip service to this. To measure ROI on one-off courses is very difficult, while doing it correctly on major courses takes time and can cost a lot - a cost which adds to the overall course cost. Training companies appear to be trading at very low margins and do not seem prepared to pass on the costs of real ROI or evaluation, for fear of appearing too expensive. Also, measuring trainers' performance is not done consistently. The AA uses companies which comply with the Institute of IT Training's code of conduct and which have permanent, not freelance, trainers."

How IT training can add to the bottom line

Recovering costs is one thing, and very laudable too, but the real benefit of training is what it can deliver to the bottom line. US-based Computer Services & Training Inc is confident about the kind of ROI which their clients could expect as a result of instructor-led training. First of all, it says, even a pretty minor increase in productivity (such as 2%) delivers almost a 200% ROI. (According to three years' independent research, Computer Services & Training's clients consider that they get a 30%, or better, increase in productivity from just one day's instructor-led training.)

Computer Services & Training demonstrates how training contributes to the bottom line in the following way: [23]

The cost of training

employee's annual salary	\$30,000
employee's benefits	\$6,000
Total employee cost per annum	\$36,000
employee cost per day	\$153
(\$36,000/235 working days pa)	
training investment per day	\$95
(typical course price per day)	
Total training investment per day	\$248

Increase in Productivity	Direct annual return on annual employee cost*	Investment for one day's training	Net return	Percentage return on investment
2%	\$720	\$248	\$472	190%
10%	\$3,600	\$248	\$3,352	1,352%
25%	\$9,000	\$248	\$8,752	3,529%

* percentage increases multiplied by annual employee cost

The calculations are as follows:

Training investment

employee's salary + employee's benefits/number of working days per year + cost of training day = total investment in training

return on training investment

(percentage increase in productivity x annual employee cost) - total investment in training = net return

There's no escaping this fact: training means spending money, but this spend is not without return. There's a commonsense attitude which needs to be applied here; will the benefits of training outweigh the investment? It just doesn't make sense to suppose that learning won't payoff - if that's really the way you feel, don't send your children to school, college or university - an extreme example, maybe, but one which strikes a commonsense chord.

We firmly believe that the five 'reasons' given for which companies under invest in training are really excuses. This may seem a little strong (and we wouldn't want to give the impression that organisations don't subscribe to the concept of investing in people), but, for whatever reason, IT training isn't given the priority or funding which it needs if employees are to be as effective as possible.

How important are IT skills to your organisation?

Here's another acid test of your sponsorship of IT skills. Does your organisation have a financial director? Of course. A sales director? An IT director? These roles all exist because they are all perceived to be vital to the business. Now ask yourself who is responsible for your IT skills strategy (not IT training procurement or administration). Is it someone at board level? Is someone on the senior management team of your organisation tasked with planning and managing an IT training strategy which supports the long-term strategic skills of the business?

Usually, IT training is managed at a much lower level. If there is someone at board level with 'responsibility' for it, then it is not usually part of his/her core remit - in many organisations, there is not a strategic remit, just a reporting line. This is not the same thing!

Things are improving slowly. According to Lotus, in the US: '11% (55) of the Fortune 500 companies have a chief knowledge officer today; in 1994, there were none.' While an improvement, this is still not enough - especially when you consider that these US figures are among the best worldwide and way ahead of the average.

So, who is looking after the IT training needs of most companies? At one time, the role of IT training manager was common - and this at least ensured that the issue had someone's full-time attention, even if not at board level. Research from IT Skills Research shows that responsibility for the training budget sits with a dedicated individual in only around 10% of cases. When asked 'who is responsible for the IT training budget?', the answer broke down as follows:

Budget responsibility

other IT manager	79%
IT training manager	10%
HR/personnel	8%
Business unit manager	3% [24]

This shows that IT training budgets are typically not managed by an IT training manager. In fact, IT Skills Research believes the role of the IT training manager to have all but disappeared within most organisations, with the responsibility for budget being held by a manager for whom this is not his/her core role. Interestingly, IT skills are largely the responsibility of IT managers, rather than of the more logical human resources or personnel departments. Shouldn't IT skills planning be supporting the needs of the business, not the needs of the technology? Lindsay Tulloch, the training and education service manager for the Cable & Wireless College, believes that IT managers are not the right people to be the main holders of IT training responsibility. "IT people have no problem with computers and view most application software as simple to use. They fail to understand why less skilled users struggle with tasks which they find easy - so they don't provide enough training. They also expect their senior management to be as well versed on technology trends as they are which is seldom true. However, they frequently provide technical training for their own IT staff, using a great deal of the overall training budget."

Organisations frequently view IT training as hassle - a short-term problem to be resolved. This was borne out by a comment from an IT training sales manager who told us: "We have realized that, to most organisations, IT training is not dealt with strategically. It is a chore, given

to someone who already has his/her own job to do. Training within many organisations isn't planned; it is dealt with reactively. When a request for training reaches the desk of the person responsible, it is viewed as hassle. Once we understood this, we also realized that the company which responds to a training enquiry the fastest would probably win the business - so, we set in place a twenty-minute response time to requests for quotes. Our sales soared instantly. It didn't matter whether we were good, just that we happened to solve the problem the fastest."

While organisations may understand the importance of IT to their business, they dramatically undervalue the importance of IT skills.

This was demonstrated by a survey of the readership of the UK's IT Training magazine. This magazine has a fully requested circulation of training budget holders - so you would expect that, since you are asking the most training-aware companies, you are going to get the most favourable results. However, the survey showed that most UK organisations' training budgets are low. Remember that this readership is enlightened to the issues of IT training - the readership of a more general business publication could be expected to deliver lower numbers.

Size of IT training budget within UK organisations

Under £25K	44%
£25K to £50K	17%
£50K to £100K	12%
£100K to £250K	10%
£250K to £500K	5%
£500K to £1m	4%
More than £1m	8% [25]

It's worth noting that almost half of the above companies have a training budget of under £25K. This is a very low amount to allocate for IT training - it equates to putting just five IT professionals through a mainstream IT training programme for certification, for example. Governments and professional institutions have tried to highlight to industry the dangerous course which it is running, but with little effect. According to a report by the UK's Department of Trade and Industry and the Confederation of British Industry, learning is one of the key ingredients for success within winning UK companies. When listing the five key attributes of winning companies in their document 'Competitiveness - how the best UK companies are winning', the second was 'unlocking the potential of their people', with training playing a key role in this process. The report noted that, within winning companies, 'not only is "training the epicentre of empowerment", with as much as 10% of employees' (within winning companies) time being spent on it, but successful companies "use education as a competitive weapon". The aim is to provide employees with the necessary skills to allow them to meet the multiple challenges of the tasks facing them in order to satisfy the customer'. [26]

Governments around the world are keenly aware of the need for more skills in business. As US Vice-President Al Gore said in his speech to the Lifelong Learning Summit, in January 1999:
An Excerpt

"Higher skills is one of the best investments a company can make. According to our new report, a 10% increase in education investments leads to an average productivity gain of 8.6% - nearly three times the return on capital investments." [27] In addition, logic dictates that good training will have the effect of increasing productivity and therefore decreasing your headcount requirement.

Howard Kornstein, one of the founding directors of QA Training, says that he knows of few companies with an IT learning strategy fully matched to their business goals. "People like to believe in training, but frequently don't understand the benefits. The pace of business is such that, even when they have the cash, companies have difficulty in letting employees go for training - because of interruption to their workflow. Instead, companies seem to encourage people to learn in their own time. It is a rare company which analyses its business objectives, performs a skills audit on where it is now and plans properly, in terms of the IT skills required to achieve its delta plan - companies don't seem to realise quite what a vehicle IT training can be for corporate success. Senior executives are horribly busy and don't think about that; so, training carries on beneath them in a haphazard way. Real policy needs to come from the top."

Kornstein clearly feels strongly about training and also considers that there is another trick which companies are missing: "Training can go beyond the formal institutions. Within organisations, people work in groups: some are PC literate; some are not; there are some in between. These people help one another as best they can. Today, there are no apprenticeships - yet people used to become skilled and time-served as a result of what you can only call structured long-term coaching. Learning was part of the work process." Kornstein considers that, today, informal training takes place as a kind of osmosis, without company' remit or career structure. As a result, knowledge-transfer is haphazard and slow. "Nowadays, companies don't tell people that part of their job is to help others, by passing on their hard-won skills. A training strategy should be twinned with a strategy to 'train the trainers' - to coach people to be able to learn and pass on skills, cascading them through an organisation. A learning culture isn't just training - it's teaching people how to teach."

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Chapter 11 - Thirteen recommendations for the IT training industry

Although this book has been written primarily for medium- and large-sized organisations worldwide, one of the threads within the book is that of success through partnership. Therefore, we've included some recommendations for your partners: the IT training providers. We believe that, to have a really successful IT training strategy, organisations need to work more closely with IT training providers. In this way, the fates of the two communities are intertwined. We've also said that, although it's doing a good job, the IT training industry could undertake several improvements, if it wants to be considered a serious partner of industry.

1. Become a standards-driven industry

The IT training industry, until recently, has not only been self-regulating, but also had different standards of training delivery from company to company. While some variation is only to be expected (and, in fact, constitutes choice), this is undesirable if a large proportion of training is not delivered well. Fortunately, this situation has been changing, driven by standards introduced by the Information Technology Training Association (ITTA) and the Institute of IT Training (IITT), both of which provide accreditation to IT trainers and IT training providers. These organisations are increasing in sponsorship at a rapid rate. According to the IITT, around 75% of the UK's IT training (by volume) is now delivered by IITT-accredited training providers. (What 'by volume' means in this context, is that the seventy training companies which deliver 70% of the market's training are independently assessed by the IITT and accredited to its standards.) In addition, a substantial proportion of training is delivered to the IITT's Trainer Activity Profile (TAP) standards. TAP is designed to provide high-quality skills among trainers, specifically IT tutors. This process needs to continue and be driven globally, so that organisations worldwide can be assured of the same high standards of training delivery, standards which are independently assessed. Like the professional associations for marketing, accountancy and law, the IITT provides the customer with independent arbitration, assessment of standards and setting of best practice - not in terms of courses' content, but in terms of training methods. The vendors' certifications in training are not enough - they are based mainly around technology and, at best, 'show/tell' teaching. While the vendors are in an excellent position to provide technical course content, the standard of training should be managed as an independent process. This is a win-win-win situation: good for the software providers (saving them the trouble of developing a teaching methodology and ensuring that, whichever vendor's products are being taught, the standard and methods of training are the same); good for customers (owing to the assurance of quality and consistency across the industry); good for the training companies (saving them the overhead of developing their own

methodology).

2. Help to drive global standards

It's increasingly important that standards be set globally. We've seen the success of vendor certification programmes. Companies want this level of assurance and qualification, but it's up to the IT training industry to recognise the need for other global standards and to drive this. This is 'important in the area of trainers' skills and especially vital in vendor-neutral IT education, where global standards are currently not as well established.

3. Take the lead in closing the gap between academia and the IT training industry

The current state of affairs between academic education institutions and the IT training industry is particularly unhelpful to the customer. There's no point in arguing about who is 'right' - one group has to take the lead to work with the other, to the customer's benefit. We believe that the IT training industry should take the lead - for a couple of reasons. First, someone has to do it! Next, the IT training industry sees more of commercial life at the sharp end and is more accustomed to change. If we wait until governments intervene, they are likely to fall down on the side of the academic institutions; in our view, to fall down on anyone side alone is not in the customer's best interests. This is especially true when the customer wants those vendor-specific courses provided by the IT training industry to which academic institutions do not subscribe. What's the end game? If both sides can learn to partner, they can both deliver what the customer needs: more rounded IT skills.

4. Be proactive about ROI

We've clearly stated that it is in the interest of customers to invest in ROI processes – just as they have with marketing and other parts of their business. However, too many IT training companies cannot talk meaningfully about ROI and have no tools or processes in place to help customers. In many cases, there is no expertise within training companies to develop an ROI plan or to measure the benefits of even a single training programme. This is wrong. It may be the customer's responsibly, but if they want to work as closer partners, IT training companies are going to have to tackle these issues head on. What's more, developing this expertise creates a chargeable service in its own right. IT training companies have to learn to create and run ROI models and use ROI tools. The excuse of 'it's impossible to measure the effect of training' is not going to hold water forever.

5. Develop a broader outlook

There is training beyond vendor certification. There are training programmes which go beyond the five-day training course model. There are training services and methods of training delivery

which would provide more flexibility than does a single approach. We believe that the IT training industry is holding itself back with preconceptions about what IT training should, and can, be. Learning can take many forms. For instance, there is great scope for vendor-neutral training programmes, such as NCC Education's International Diploma in Business Information Systems (IDBIS), International Advanced Diploma in Computer Studies (IAD) and International Certificate in Computer Studies (ICCS). All are popular and proven worldwide. (As two of the authors of this book are from NCC Education, we realise that there is a vested interest here, but it is true nevertheless!)

Many IT training companies have little experience of IT learning beyond their own product set. This experience needs to be broadened, so that they fully understand all of the major products and services available, including those provided by academic education institutions.

6. Learn to consult

The word consultancy appears on many IT training companies' brochures. Scratch the surface and you find that what is really provided is some advice from a sales person or trainer about which the best courses in their catalogue are or perhaps that they can deliver a basic training needs analysis. A consultant should be impartial and have a broad range of solutions to recommend, some of which may be delivered by another company. A training consultant has to understand and embrace the concepts of training project management, use a mix of training media, demonstrate payback & ROI and, above all, should have solid business management experience, so that a real understanding of the customer's needs can be formed. If an IT training provider can't do this and offer an integrated training approach which mixes classroom, lecture, TBT, Web and self-paced learning, then it's not consulting - it's selling. Just like ROI, this is something which companies will pay for, if there are the skills to deliver.

7. Go beyond 'filling seats'

A great deal of the IT training industry today acts as merely a reseller for vendor-certification programmes. Many training companies operate as a distribution business, with no perceivable value added beyond the (probably excellent) training course. Is this all that their customers want? Hardly. Moving beyond this model takes vision, investment and commitment, but organisations really need services which deliver a higher level of value to their business than certification programmes alone can: soft skills (or complementary skills), such as telephone techniques for help-desk staff; project-management skills for application developers; e-commerce skills for business managers; training provided in a variety of ways. IT training providers must be able to listen to the customer's business plans and issues and come back with recommendations which are more meaningful and relevant than 'buy four certification programmes'. If training companies can help to provide long-term support, they'll win long-term customers.

8. Develop accurate budgeting tools and reporting processes for projects

Part of the territory of working more closely with customers over a longer period is being able to analyse and support what both parties are doing. Many training budgets are constructed without being based on a real plan or business needs, and many training programmes run without enough reporting or management. Our view is that IT training companies need to get in control of these areas and provide these as services to customers. Initially, it should be a process of helping the customer, probably working with tools and processes which the training company has created. Then, as the customer becomes more involved in longer-term training plans, the tools can be adapted to suit the customer's needs before finally passing the tools and processes over to that customer for ongoing management. There will be some finding-of-feet and hand-holding on both sides, but, with honest interaction, the customer will end up with some great training administration tools and processes, and the training company will have a solid unbeatable relationship. (It may also be that the customer will want to continue to outsource this type of work, in which case, again, everyone wins.)

9. Invest time in Influencing government thinking

IT skills are not at the top of many governments' agendas. When they are, they frequently don't have the most realistic view of what's going on, now, within industry - and rarely do they understand what the IT training industry offers. There's only one way to change this, and it's not by complaining about it. Involvement is required which must be persistent, at a high level and over a prolonged period. Governments do understand what skills mean to businesses and their economy. However, they also tend to have a greater degree of faith in the academic institutions of their countries than in the IT training industry probably because the IT training industry is perceived as a less objective commercial business. There's only one way to change that, but it will take an investment in time and effort. If the IT training industry wants governments to see it in the same light as they do academia - it's the only option.

10. Understand education - don't just sell courses

There's one area where academic education institutions are 'head and shoulders' above the IT training community: educational theory. Remember that IT training companies are typically 'deliverers', not 'developers' of content. It doesn't hurt to be an expert on one's profession, and these skills are needed to balance the inevitably business-orientated view of the customer in terms of cost/benefit. If a training company doesn't understand the process of education and how people learn in theoretical terms, then the only measure for the value of the training which you provide will be one without intelligent interpretation. There is a big lesson to learn here and a need to invest in the more theoretical education skills.

11. Provide more flexible learning solutions

People learn in many ways, so there is great opportunity for IT training companies to extend their services to embrace and promote other forms of learning. In this book, we've made several recommendations for corporate organisations. Most organisations would welcome help in implementing these recommendations. Take setting up an internal library or learning centre - an IT training company is well placed to help with these processes, and the ongoing management of such facilities (such as keeping the most up-to-date tools there, within an agreed budget) could be outsourced to an IT training company very effectively. A training company could even establish and share such a resource across numerous customers. IT training companies need to think beyond the course and meet their customers' many and varied educational needs. What's in it for the IT training company? Well, these services are all revenue-earning. What's more, they will help to create a far closer working relationship than will selling five-day courses. IT training companies can also provide other educational services, such as on-line tutoring & support and training at weekends or evenings, to deliver a broader, more relevant IT skills service.

12. Reduce vendor-dependence

Although vendor certification has been good, it's had one serious drawback for IT training companies: most IT training companies have become dependent on the distribution-based model of vendor certification and, since the market is strongly competitive, don't earn enough margin to enable them to innovate. This is a downwards spiral, and the only logical end game is a market which has only one buying criterion: price. We urge training companies to broaden what they offer, in order to reduce their vendor-dependence - not because vendors' curricula 'are bad, far from it, but because customers need more. Also, IT training companies need services which generate a higher level of profit, if they are to invest more in a broader approach. Without the profit to invest in other services, training companies will have no differentiator, with the buyer unable to distinguish between one company and the next. This would be bad for the entire industry and a criminal waste when you consider the range of vendor-neutral courses and consultancy services which could be offered to corporate organisations.

13. Learn how to partner

We echo here what we said earlier about consulting. Training companies which want to 'partner' with their customers will have to offer more than just a range of courses, otherwise they're a preferred supplier, not a partner. To earn this coveted position, a company has to work really hard. What does it take? It takes being able to act on most of the recommendations, for training companies, which we've made in this chapter; offering more than just your core product (even if it means working with competitors); being impartial; thinking beyond vendor-certification

programmes; thinking about the long term; working within ROI models; being objective about results from training; being driven by standards. However close you think you are to a customer, if you can't work on its long-term strategic training plan as an objective consultant, you're not a partner.

“Any organisation which relies on computer technology should buy this book, read it and act on its recommendations – they will make a real difference to your business.”

Colin Steed, editor, IT Training magazine

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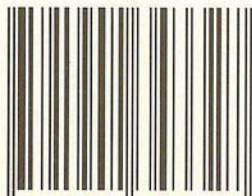
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