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Using the head and heart at work

A business case for soft skills

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FOREWORD

Since Daniel Goleman published his popular work on *Emotional Intelligence* in 1995, placing the issue of soft skills firmly at the heart of the learning and talent agenda, appreciation of the importance of these key skills has increased. It is generally acknowledged that soft skills are crucial to business and to life. They help us to connect as human beings, maintain relationships, understand and influence others and manage and control ourselves. They are also pivotal to how people learn and develop, and for the future, high-skills knowledge economy presaged by globalisation. Whereas previously the possession of technical skills offered protection against globalisation, the emerging world requires 'high touch as well as high concept' (Pink 2005). Because of an excessive emphasis on technical skills, many students leave university without the soft skills that connect those job skills to employers and customers. Employers are aware of the challenge, as BT's Retail Group Director explains:

One of the most crucial roles for universities is to enable graduates to learn how to learn. The majority of technical skills being taught in schools and universities will be defunct by the time young people are ten years into their careers.
Council for Industry and Higher Education (CIHE) 2010

The soft skills deficit is also judged to be one of the main barriers to employability for those currently locked out of the labour market. CIPD surveys show a deficiency in 'employability skills' for many students and school-leavers unable to deal effectively with customers, to manage their interactions and emotions and to engage as productive members of the workforce. More worryingly, some young people have not developed the skills that would help them to hold down jobs. Some are even unable to manage the task of turning up at work on time, which has, to some derision, been identified as a 'skill'. Yet for people who cannot do it, that's precisely what it is. Soft skills are also an essential component of leadership and management skills. Poor management is as much about poor behaviour and attitude as it is about poor delivery and implementation. Sadly, as our report shows, many management education programmes spend little time on this crucial and cost-efficient area for improvement. These skills can be seen as touchy/feely and ephemeral, when in fact the latest neuroscience shows that the emotional and rational sphere are highly interconnected (Lehrer 2009). Helping managers to give appropriate feedback, to listen and to reflect before reacting could be major drivers of employee engagement and motivation, for example.

Thus all of these issues suggest a major deficit in non-technical skills but they also indicate a slightly muddled and confusing debate. This debate needs to be clarified or the value of soft skills will be lost in a conceptual fog.

What precisely do we mean by 'soft skills' and how do we cut through the welter of definitions to get clarity?

- Is having soft skills the same or different from employability?
- Are soft skills innate, meaning some people have them and some don't?
- Do soft skills enhance performance more than technical skills?
- How should people and organisations be helped to learn and develop 'soft skills'?
- How can we evaluate the impact of such skills?

These are all questions that we think need to be answered if we are to have a coherent agenda for soft skills. The CIPD has been pursuing this agenda for some time in the learning and talent development area. We wanted to help HR professionals to become more savvy about soft skills and to use these to build knowledge and capability for organisations. The need for these skills is more crucial than ever. Having tested the appetite for guidance and insight on these skills from

our forums and conferences, we decided to commission this report. While psychologists and management researchers have continued to add to the evidence base, little of this insight has made its way into HR or into organisational learning. The importance of these soft intelligences has increased, though we should also be mindful that the short-term focus of recession means that anything not seen to add to short-term task capability is going to be called into question. For the CIPD, the skills of listening, empathy, self-management and relationship-building are critical, not optional. While many people have these in abundance, a lot of people do not. We know that there is a dividend in productivity, performance and engagement from the ability to deploy softer skills and, more importantly, to link these with the technical and task skills in a compelling mix.

We hope that by reviewing the evidence, building the case and mapping the territory of soft skills, we will provide a new and enduring insight into learning and development, and into HR. We also wish to put these skills firmly at the heart of the skills agenda, but in a meaningful and productive manner linked to organisational performance. This report is the product of that endeavour. We have called it *Using the Head and Heart at Work: A business case for soft skills.* We selected Professor Eugene Sadler-Smith of the University of Surrey, a leading expert on learning and skills and an authority on soft skills, to help us:

- review the evidence on soft skills and bring CIPD members up to date
- investigate how soft skills link with other key skills to drive business performance
- map and explain the different capabilities and behaviours that define soft skills
- place soft skills in the context of learning and talent development practice
- provide advice to the CIPD on the public policy dimension to soft skills
- provide a comprehensive definition and description of soft skills.

Professor Sadler-Smith has provided CIPD members with all of that and more, including an exhaustive evidence base on the issue and a comprehensive list of references. The task and the test of our own key soft skill influencing will be whether we can use this resource to inform the implementation of learning and talent development strategy, and take forward a compelling new case for soft skills in these times of challenge and opportunity.

Dr John McGurk
CIPD Learning and Talent Development Adviser
November 2010

INTRODUCTION

There is much more to effective performance in the workplace than can be captured by cognitive intelligence, academic qualifications or hard technical skills alone. None of these things offer any guarantee of success, either to employees or employers, and the exhortations of politicians, professors, policy-makers and practitioners all urge us to look elsewhere.

More than IQ

More than 25 years ago, Harvard Professor of Education Howard Gardner challenged the hegemony of intelligence quotient (IQ) and in doing so dismantled the prevailing monolithic view of academic intelligence (that is, 'intelligence is whatever intelligence tests happen to measure'). In its place he helped establish a new, more eclectic and egalitarian vision of human capabilities – 'multiple intelligences' (Gardner 1983; Gardner and Hatch 1987).[1]

In the same decade, in a similar vein but looking towards the field of business, Robert Sternberg and his colleagues asked, if it's not IQ, 'what is it that accounts for managerial success?' (Wagner and Sternberg 1985). From the starting point of intelligence defined as 'purposive or successful adaptation in a real-world context', Sternberg declared that:

1. Intelligence includes whatever characteristics lead to the capability to adapt to the demands and challenges of the real world.
2. Adaptation includes changing the environment or selecting a new one if necessary.
3. Within occupations there are non-cognitive attributes of intelligence (that is, things other than IQ) that single out employees who are more successful from those who are less so (see Klemp and McLelland 1986, p31).

Sternberg and his colleagues mooted the idea of a 'practical intelligence' (PI) based on 'street smarts' (that is, creating the 'best fit' with your environment) and tacit knowledge (that is, knowledge usually not openly expressed, or inexpressible) acquired not in the classroom (as 'book smarts') but in 'learning by doing'. PI manifests itself as 'professional intuition' or business 'instinct' (Sternberg and Hedlund 2002, p145) and 'common sense', and is one of the 'hallmark[s] of managerial success' (Wagner and Sternberg 1987, p311).

At around the same time as Sternberg and colleagues were proposing PI, *The McKinsey Quarterly* (Watson 1983) ventured to suggest that companies led by individuals who have an inclination to use the 'soft Ss of style, skills, staff, and shared goals' will outperform, by virtue of their energy, focus and motivation, those manager-run companies who tend towards a traditional reliance on strategy, structure and systems, and the associated bureaucracies and ponderous decision-making systems.

It's been 15 years since Daniel Goleman claimed in the international bestseller *Emotional Intelligence* that EI 'can be as powerful, and at times more powerful than IQ' (Goleman 1995, p38). In presenting a 'hard case for soft skills', Goleman (1998) claimed that 67% of abilities 'deemed essential for effective performance were emotional [that is, soft[2]] competencies' (p31). He also claimed, not uncontroversially, on the basis of Hay/McBer research that soft emotional competencies were '*twice* as important in contributing to excellence as pure intellect and expertise' (Goleman 1998, p31, original emphasis retained).

If Gardner's, Sternberg's and Goleman's messages had fallen on any deaf ears, in 2005 in *A Whole New Mind: Why right-brainers will rule the future*, Daniel H. Pink challenged the business orthodoxy of reductive and analytical forms of thinking (which he referred to as 'L [that is, 'left-hemisphere'] -directed'[3]). According to Pink, the forces of 'Asia' (for example lower labour costs) and

'automation' (that is, machines, especially computers, being able to do what only people were once able to do) in a post-Industrial 'age of abundance' (that is, with material abundance comes a seeking for 'deeper' meanings) mean that in the 'information/conceptual-age' societies of the West there is an imperative and *Zeitgeist* to be re-animated by a new 'R-directed' frame of mind that cherishes abilities such as 'forging relationships rather than executing transactions, tackling novel challenges rather than solving routine problems, and synthesizing the big picture rather than analyzing a single component' (2005, p34). For Pink, we in the West appear to have found ourselves wanting, and he suggests that R-directed thinking could be our salvation.

'Soft aptitudes', claimed Pink, are now the only way for individuals and firms to stand out in a crowded marketplace and make themselves 'offshore-proof' (see Stanger 2007) by 'do[ing] at home what workers abroad cannot do equally well for much less money' (Pink 2005, p40). What Pink and others, such as Malcolm Gladwell (2005), have alluded to in their writings is another, and as yet unexploited, type of intelligence, an 'intuitive intelligence' (perceiving, interpreting and acting on the hunches and gut feelings that come with a sense of 'knowing without knowing how or why we know').

Changing the meaning of 'skill'

Alongside these developments in psychology and related areas, changes in the nature of work and workplaces have meant that what counts as a 'skill' has also evolved. The view that 'formal knowledge may play only a small portion of what enables workers in many fields to successfully confront the ambiguities of practice' (Statz 2001, p391) has gained currency to the extent that practical intelligences (including soft skills) have come to represent a new orthodoxy in education and business.

In a comprehensive review of how the term 'skill' had changed in UK educational, business and policy discourse, Payne (2000) observed that from the mid-1970s onwards policy-makers and other stakeholders endeavoured to maximise the employability of people, particularly the young, through exhorting that they acquire not only 'hard' knowledge and technical skills, but also the capability to display the 'softer' personal qualities needed to be 'flexible', 'employable' and 'adaptable' in the face of labour market changes.

The idea of what constitutes a skill has widened to the extent that it is now 'broader and more equivocal than it has ever been' and includes the 'galaxy' (Payne 2000, p354) of 'soft', 'generic', 'core', 'transferable', 'social', 'employability' and 'personal effectiveness' skills that in the past might not have even been considered skills at all (see Keep 1998). Skill has come to mean whatever 'employers and policy makers want it to mean' (Payne 2000, p361), or whatever capabilities or whichever 'smarts'[4] are needed to navigate purposively and successfully through the dynamics of real-world contexts (see the 'new kinds of smarts', Lucas and Claxton 2010[5]).

Not surprisingly, the UK Government has over the past decade played a primary role in fostering skill discourses, commissioning reports that offered a variety of views on the questions of 'what are skills?' and 'which of them are relevant?' A significant milestone in this debate was the publication in December 2006 of the Leitch Review of Skills. According to Leitch's[6] report, the UK's primary natural resource is 'our people', representing an asset that is both 'vast and untapped' (p1). However in developing and deploying this resource, Leitch's view was that in recent decades the UK has only managed to 'run to stand still' (p2). Notably, as well as lagging behind countries such as France and Germany in terms of intermediate and technical skills, UK employers also were voicing serious concerns about the lack of 'soft skills', such as 'team working and customer-handling skills', 'oral communication, problem solving, and written communication skills' (p41). The CIPD/KPMG *Labour Market Outlook* concurred: employers were placing increased emphasis on interpersonal skills and also a 'work ethic'.

Soft skills in management education

Business and management degrees, both at bachelors and masters levels, are among the most popular programmes at universities in the UK and worldwide. University business schools are making a significant contribution to an increasingly well-educated supply of knowledge workers. But are business schools delivering the skills needed by employers?

The question goes beyond the scope and remit of this report but, for example, as far as business education in the US is concerned, in a 2007 article headlined 'The

trouble with MBAs', *Fortune* magazine reported that US business schools have produced 'freshly minted' quantitative geniuses but consistently failed to deliver the softer skills that employers value most (Fisher 2007). Indeed, soft skill development is one of half a dozen features of an 'idealised' MBA curriculum and considered to be as important as 'sound data analysis and the rigorous application of analytical management tools' (Navarro 2008, p108).

So why aren't they in most MBAs? Soft skills get much less emphasis in the business school curriculum than do the traditional functional 'silos' of accounting, finance, marketing, HR, and so on. Most business schools strongly favour the hard end of the skills continuum and give short shrift to the softer stuff. The Management Education Task Force of the Association to Advance Collegiate Schools of Business (AACSB) (whose accreditation has been achieved by a small number of business schools in the UK, and is aspired to by many others) called for more communication, leadership and interpersonal skills in business school curricula, and that business school offerings be more relevant to the needs of organisations and give students the 'soft skills that set exemplary managers apart from their typical peers' (Myers and Tucker 2005, p44).

However, this picture is complicated by a number of issues (Rubin and Dierdorff 2009) and isn't as straightforward as it sounds:

1. Even though recruiters place significant value on soft skills (there is without doubt a soft skills rhetoric), when push comes to shove they tend to make selection decisions based on technical skills.
2. MBA students themselves tend to be quite instrumental with regard to which skills they see as important, and they also harbour negative attitudes towards learning soft skills (as do some faculty members), and are too willing to dispense with anything that is not perceived as 'useful' at the time (Rynes et al 2003).

Many MBA graduates come to recognise the importance of soft skills only when they gain employment (Rubin and Dierdorff 2009). The situation is not unique to management; for example, in medical education anatomy, physiology and pharmacology are seen by most students as 'hard' (and therefore more 'valuable'), while medical ethics and physician–patient relationships are 'soft'; however, a decade or so after graduation there tends to be an 'inversion' and 'soft subjects – especially those that have to do with intangibles – turn out to be of enduring value' (Cousins, cited in Crosbie 2005, p45). And perhaps surprisingly, a similar picture is found at the far end of the continuum in the field of information systems (IS): in a study of IS graduates in the USA, two years after they had left university IS graduates identified six non-technical (soft) skills (thinking skills, personal characteristics, desire to learn, personal attitude and motivation, teamwork and communication) as the most important skills for success in their workplaces (and ranked these higher than any technical skills).

Closer to home, an Association of MBAs (AMBA)-commissioned study found that MBA graduates from accredited programmes placed high value on the 'soft skills of leadership and interpersonal skills learned during their MBA as much as the more functional disciplines' (McGahern 2009, p22). The findings of a recent AMBA survey of MBA alumni speak for themselves: when asked to suggest ways in which the MBA could be changed to better prepare students for work after the economic downturn, the most frequently cited response was improvement in the soft skills content of programmes (34% of respondents). The responses of MBA alumni were somewhat at odds with the responses of business schools: when the latter were asked what key changes they were making to their MBA programmes to ensure they remain relevant to the changing economic climate, only 7% cited soft skills (the most frequently cited was 'sustainability' (18%)). The authors of the AMBA report[7] concluded that:

…if anything the MBA should be shifting away from the more functional areas of management teaching, towards the development of more rounded individuals with the soft skills to lead and the ability to integrate thinking to create sustainable, ethical, and stakeholder-focused management decisions (AMBA 2010, p54).

In a study across four European countries, Andrews and Higson (2008) found a uniformity of demands and expectations from employers with regard to the core components of graduate employability and the importance of soft business-related skills and

competencies. The researchers found that in an increasingly globalised business and business education marketplace, European business schools need to ensure that graduates are 'equipped with more than hard business-related knowledge and skill' if they are to be employable and mobile in a globalised economy (Andrews and Higson 2008, p420).

These findings resonate across the decades and across continents; for example studies in the USA came up with similar findings in the early 1990s. As Mintzberg (2004) noted, when graduates of business education are asked for one improvement in the MBA, they 'always' respond with 'soft skills'; to him this is unsurprising since managing *is* mostly about the 'soft stuff – working with people, doing deals, processing vague information'. The problem, as Mintzberg sees it, is that soft skills simply don't fit in at business schools for several quite good reasons:

1 Most professors can't teach them and/or don't care about them.
2 Most of the younger students aren't ready to learn them.
3 Soft skills aren't compatible with the rest of the programme (Mintzberg 2004, p41).

Summary

A soft skills rhetoric emanates from within university departments of psychology, education and business (for example Sternberg, Gardner, Mintzberg, and so on), government (for example the UK Council for Education and Skills, BIS), employee and employer bodies (for example the CBI), professional bodies (for example the CIPD), and learning and development (L&D) providers (for example the Mind Gym[8]):

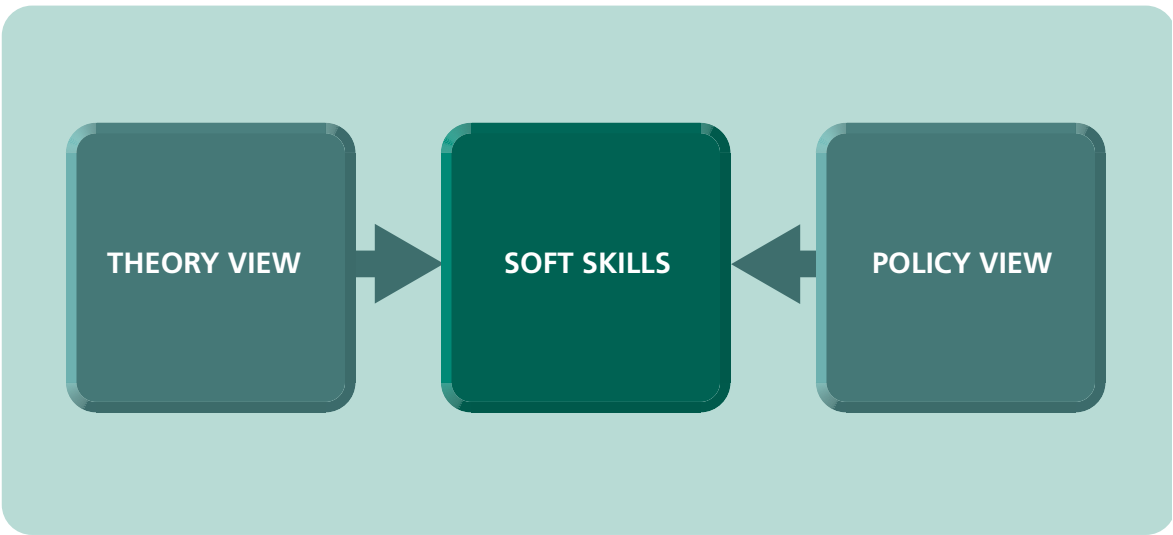
Soft skills count – they are vital to the success not only of individuals (personally and professionally) and organisations (locally and globally), but to the competitiveness of nations.[9]

Two fundamental questions are raised: first, 'What are soft skills?'; and second, 'What does the soft skills landscape look like?' The answer to the second question depends on the vantage point one adopts (Figure 1).

When viewed from the theoretical perspective of the various 'intelligences' (see above), the soft skills landscape has three relevant domains: 'practical intelligence' (PI), 'emotional intelligence' (EI), and 'intuitive intelligence' (II). When viewed from the policy vantage point, the landscape looks somewhat different (see below). In adopting these complementary perspectives, this report aims to:

- promote greater clarity of thinking in the area of soft skills
- provoke further discussions around the development and deployment of soft skills tools, techniques and interventions.

Figure 1: The two perspectives adopted in this report



SOFT SKILLS AND 'INTELLIGENCES'

The past quarter of a century has witnessed radical changes in the meanings attached to the term 'intelligence'; 'softer' intelligences have emerged to complement the 'harder' cognitive intelligence embodied in the traditional IQ measure. As well as the well-documented practical and emotional intelligences, other types of intelligence have been proposed, including 'social intelligence' (Albrecht 2006; Goleman 2006), 'ecological intelligence' (Goleman 2009), and 'spiritual intelligence' (Zohar and Marshall 2001).

In this report three types of 'intelligence' will be considered (that is, practical intelligence, emotional intelligence and intuitive intelligence) on the grounds that they:

- have accumulated enough research evidence to warrant their inclusion ('ecological' is excluded as it is relatively new and under-researched at present; 'spiritual' is excluded as its assumptions are quite unique; 'social' is excluded as it overlaps substantially with people-related soft skills)
- were developed with business applications in mind (Gardner's 'multiple intelligences' are excluded as they were developed primarily with education in mind, even though they have demonstrable business relevance, for example *Five Minds for the Future* [Gardner 2006]).

Practical intelligence (PI)

Practical intelligence (also referred to as 'street smarts' or 'common sense', as opposed to 'book smarts') has been described as an individual's ability to find the best fit between themselves and what the environment demands of them. In essence, practical intelligence (PI) is the context-specific knowledge (most often tacit) acquired experientially and which is needed to solve practical problems and succeed in everyday working life (Sternberg and Hedlund 2002). Book smarts, by contrast, are based on the highly questionable assumptions that real-world business and management problems are similar to academic-type puzzles and tasks, and that the generalised approaches taught in the formalised setting of the business school lecture hall or the company training room can be applied to all problems, irrespective of context (Wagner 2002).

As most managers know, management is above all else a *practice*, and 'there is no one best way to manage; it all depends on the situation' (Mintzberg 2004, p10). Situations in the real world tend to be ill defined, formulated as much by the problem-solver as by the problem, lack complete information and have multiple possible solutions (Wagner 2002). Given that managers are pragmatic people who prefer action and intuition over reflection and analysis, it's hardly surprising that the 'book smart', rationalist approach has been found wanting and that PI turns out to be an important factor that distinguishes between high- and low-performers. Sternberg and his colleagues offered hard evidence for this assertion:

1. PI is positively related to managers' experience, job level, salary, merit-based salary increase and whether the manager works for a top *Fortune 500* company or not (Wagner and Sternberg 1985, 1990).
2. Amongst salespeople, PI was related to sales volume and sales awards (Wagner et al 1993).
3. For military leaders, PI was positively related to subordinates', peers' and superiors' ratings of leadership effectiveness (Sternberg et al 2000).

PI is not only related to performance. It accounts for aspects of performance that traditional measures of IQ apparently cannot account for; it therefore helps to explain why some people are more successful in the real world than others who have equal or higher cognitive intelligence (Sternberg and Hedlund 2002).

Emotional intelligence (EI)

EI is a popular developmental and consulting tool and has without doubt had a major impact both on management practice and self-development amongst the populace in general (Lam and Kirby 2002). EI has been incorporated into in-company L&D programmes and business school curricula (Boyatzis et al 2002; Cote and Miners 2006).

The debates within and between the scientific community, consultants and practitioners about the status and value of EI show few signs of abating (Locke 2005), and this report is not the place for any recapitulation of the arguments 'for' and 'against'. Suffice to say that the anti-EI lobby claim that there is a lack of independent, systematic analysis to substantiate the claims that EI is positively related to performance and productivity in any significant way.

A fundamental precept of EI is that emotions tend to occur involuntarily based on the responses of the limbic system, but once they have happened, and have been recognised by the higher-level cognitive systems, it becomes possible not only to guard against potentially distracting emotions but also to build on enhancing emotions in ways that facilitate individual as well as team performance (Lam and Kirby 2002, p140). EI skills can help individuals to consciously perceive, identify, understand and manage their own emotions as well as those of others.

There are a number of relatively recent studies that have examined the relationships between EI and performance and that are relevant to the soft skills debate.

Lam and Kirby (2002) looked at the relationships between general intelligence, three components of EI (perceiving, understanding and regulating emotions) and performance on cognitive reasoning problems administered under conditions of time pressure (this was to simulate 'typical' workplace conditions). The researchers found that perceiving emotions, regulating emotions and overall levels of EI were positively related to performance on cognitive reasoning tasks.

Carmeli and Josman (2006) looked at the relationships between EI and organisational citizenship behaviours (OCB) (that is, altruism and compliance), and supervisors' ratings of employees' job performance. The researchers found positive relationships between EI and performance, altruism (for example 'helps others who have heavy workloads') and compliance (for example 'never takes long lunches or breaks').

EI can also assist in graduate employability. In a study of the number of job offers made by accounting firms to accounting graduates, Chia (2005) found that the number of interviews and subsequent job offers an individual receives are positively related to levels of EI; consequently he recommended promoting 'the relevance of soft skills for potential accounting professionals' (Chia 2005, p88).

Rode et al (2007) found that in order for EI to have an impact on performance, employees must not only possess EI, they must also be motivated to use their EI in ways that support their work. Job design and performance management systems should take into account the fact that the skills of EI and the motivation to use it are both necessary in order to leverage better performance, that is, the skills of EI on their own may not be enough.

Notwithstanding these general observations, it's worth bearing in mind that EI is context-specific, that is, the emotional demands of the job should not be ignored when using EI in areas such as recruitment and selection:

1. In jobs where emotions are important (for example where positive emotional displays are necessary, such as customer service roles), EI has an important role to play and is positively related to performance.
2. In jobs where emotions are not important, the usefulness of EI becomes more dubious; it may even harm job performance to bring EI into the equation (Joseph and Newman 2010; Newman et al 2010).

Adding further fuel to the idea that the link between EI and performance is not as straightforward as previously thought, Cote and Miners (2006) found that there was a 'compensatory' relationship between cognitive intelligence and EI (that is, some people can use EI to make up for a lack of IQ). These researchers found that the relationship between EI and task performance is stronger as cognitive intelligence decreases – in other words, 'employees with low[er] cognitive intelligence perform tasks correctly … if they are emotionally intelligent' (Cote and Miners 2006, p19).

Cote and Miners did not rule out the possibility that EI helped individuals with low cognitive intelligence to manage the impressions they give and thereby get good performance ratings from their supervisors. They also noted that EI may also help individuals with lower cognitive intelligence 'develop links to friends and co-workers that provide assistance that, in turn, contributes to high[er] performance' than would otherwise be the case (Cote and Miners 2006, p21). These intriguing findings raise the possibilities that:

1 Employees with higher levels of other 'soft skills' might also be able to perform effectively even if they have lower levels of cognitive intelligence; for example, by managing impressions or developing social networks they can make up for a lack of IQ.
2 Organisations may be able to leverage success by attracting and retaining not only people with high cognitive intelligence, but also by employing individuals who, even though they may lack IQ, have high levels of soft skill and hence are able to make a different but equally valid contribution.

The evidence in support of EI, while not unequivocal, is considerable and growing; moreover, the relationship between EI and performance is more nuanced and less straightforward than originally depicted by early advocates of EI such as Goleman.[10] In the final analysis, the combination of EI and IQ is a more powerful predictor of success than either measure alone (Dulewicz and Higgs 2000) and, in summary, a balanced view is that EI:

- enables employees to perceive, identify, understand and manage emotions in themselves and in others
- varies between people, that is, some have more of it, others less
- is distinct from other 'intelligences', for example it's not the same as practical intelligence or intuition (see below)
- develops over the lifespan and is 'trainable' (see Ashkanasy and Daus (2005) for an objective and balanced account of these issues).

Intuitive intelligence

Intuitions are 'affectively charged judgements that arise through rapid, non-conscious and holistic associations' (Dane and Pratt 2007, p40). There is a growing body of intuition research in business and management which has shown that:

1 Intuition is related to job level (senior managers are more intuitive than junior managers) and job type (for example actors are more intuitive than accountants).
2 Intuitive employees are more satisfied in occupations that are relatively unstructured (and vice versa).
3 Intuitive entrepreneurs excel in identifying business opportunities, but are less adept at implementing their ideas.
4 There are only very small differences between men and women in their levels of intuition.

There is also some evidence to suggest that under particular sets of circumstances (for example in unstable business environments) an intuitive decision-making style is positively associated with firm performance (for example Khatri and Ng 2000; Sadler-Smith 2004; Ritchie et al 2007).[11]

A number of authors have proposed the term 'intuitive intelligence' (for example Dreyfus and Dreyfus 1986; Sadler-Smith and Shefy 2004), and it has been suggested that intuitive intelligence has three attributes (Sadler-Smith and Shefy 2010):

- **Expertise:** informed intuitions (as opposed to naïve guesses) are based on an in-depth knowledge of a domain (for example nursing, fire-fighting, banking, and so on) and draw on tacit knowledge built up over many years of learning, experience and feedback (Nobel Laureate Herbert Simon once referred to intuitions as 'analyses frozen into habit and the capacity for rapid response through recognition', Simon 1987, p63).
- **Understanding:** to be intuitively intelligent requires a knowledge, understanding and appreciation of what intuition is, how it differs from instinct and insight, how it works and when it is likely to help or hinder (Hogarth 2001).
- **Self-awareness:** being intuitively self-aware involves recognising intuitions when they occur, distinguishing between intuitive feelings and emotional feelings, having a feel for how often one's intuition 'hits' the target and how often it 'misses', learning how personal biases, prejudices and wishful thinking can 'contaminate' intuitions, and so on (Sadler-Smith and Shefy 2004).

As well as emphasising the importance of being aware of and intelligent about one's intuitions, recent research also suggests that there is more than one type of intuition, several of which have soft skills relevance:

- **Expert intuition:** an expertise-based response, activated automatically in response to complex problems in familiar areas; based on non-conscious matching of information received from the environment against patterns and prototypes stored in long-term memory (that is, 'analyses frozen into habit').
- **Social intuition:** a quick, automatic assessment of what someone might be feeling or thinking, and their motives or intentions; arrived at through perception and non-conscious processing of 'thin slices' of verbal and/or non-verbal information (metaphorically speaking this is 'intuitive mind reading').
- **Creative intuition:** a gut feel that occurs in advance of, and which can help to signpost the way towards, a creative idea or insight; it does no more or less than suggest a promising direction that might be followed; the creative outcome (revealed as an insight in a 'Eureka!' moment) combines knowledge in novel ways not previously thought of.
- **Moral intuition:** an automatic, rapid, gut feeling that comes about in response to an ethical dilemma, it offers an emotional signal as to whether or not a particular course of action is morally correct; but we are not slaves of our intuitive mind and whether we follow our moral intuition is a matter of free will and personal choice.

Intuition is powerful and perilous, and a number of caveats are in order:

1. In the right hands, intuition is a powerful soft skill; in the wrong hands, it's potentially dangerous.
2. Most intuitions are 'bets' that may or may not be accurate or 'pay off' (the more experience we have the better the chance of intuition hitting the target).
3. Intuitive 'hits' tend to get remembered and reported, whereas intuitive 'misses' tend to get overlooked or buried.
4. The soft skill of 'intuitive muscle power' (Klein 2003) can be built, but it takes time and the right conditions need to be in place for this to happen (see 'Soft skills and learning', page 24).

Understanding the softer intelligences

Even though 'there is nothing so practical as a good theory',[12] the area of soft skills has been dogged by unhelpful theoretical models, often based on popular 'neuromyths' and 'neo-phrenologies' (for example intuition is 'in' the right brain). Modern cognitive neuroscience reveals a much more complex picture than this view suggests, and theories from psychology provide useful frameworks that help us to make sense of the softer intelligences.

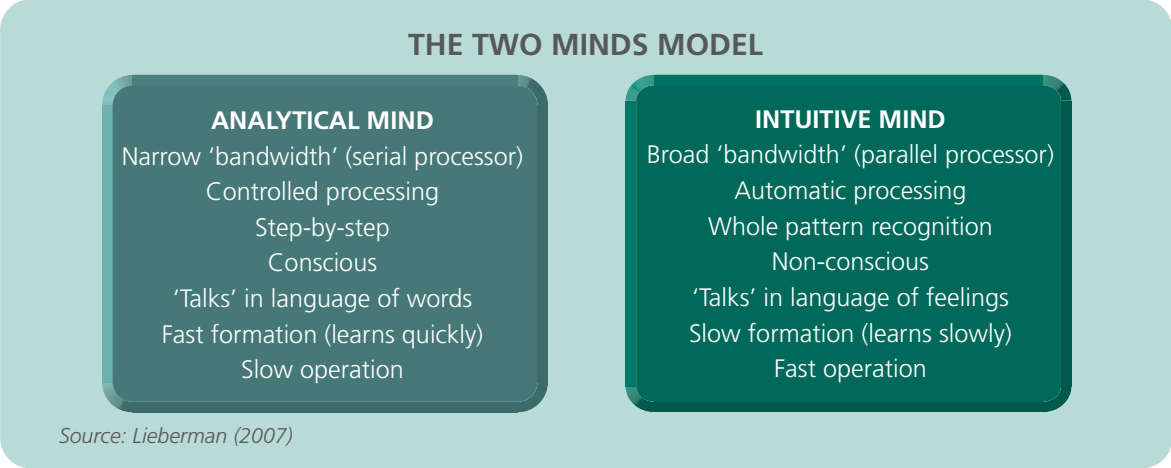
EI is often explained in terms of the interaction between the brain's limbic system ('the brain's alarm centre…located in the ancient emotional brain' (Goleman 1998, p74)) and cortical areas such as the prefrontal cortex (that is, working memory and attention), the sensory cortex (that is, perception and short-term storage), the hippocampus (that is, long-term memory) and the higher-level thought processes that these make possible (Le Doux 1996, p287).

Intuition can be understood in terms of a 'two minds' model, that is, 'we have two minds (one analytical, the other intuitive) in one brain'. This is not the same as the 'split brain' and the old-fashioned idea of intuition and creativity 'housed' in the right hemisphere and analysis and rationality in the left; instead a variety of different regions distributed across the brain are involved in these processes (Lieberman 2007) (see Figure 2 on page 12).

Having 'two minds' gives us 'two mental gears' and hence the potential to be cognitively ambidextrous, that is, to think, problem-solve and decide using hard analysis *or* soft intuition depending on circumstances. Neither 'hard' nor 'soft' is intrinsically 'better' than the other – they are good at different sorts of things.

In so far as the 'neural geography' of 'soft' intuition and 'hard' analysis is concerned and the question of whether these functions are in the left or right, top or bottom, or back or front of brains, as Nobel Laureate Herbert Simon once noted, it is 'the differences in behaviour and not the difference in hemispheres that are important' (Simon 1987, p59). And to paraphrase Simon the important questions for us are 'what *are* the softer intelligences and soft skills, and how do they affect behaviours in the workplace?' not 'in which cubic centimeter of brain tissue do they take place?'

Figure 2: The 'two minds' model



Source: Lieberman (2007)

Summary

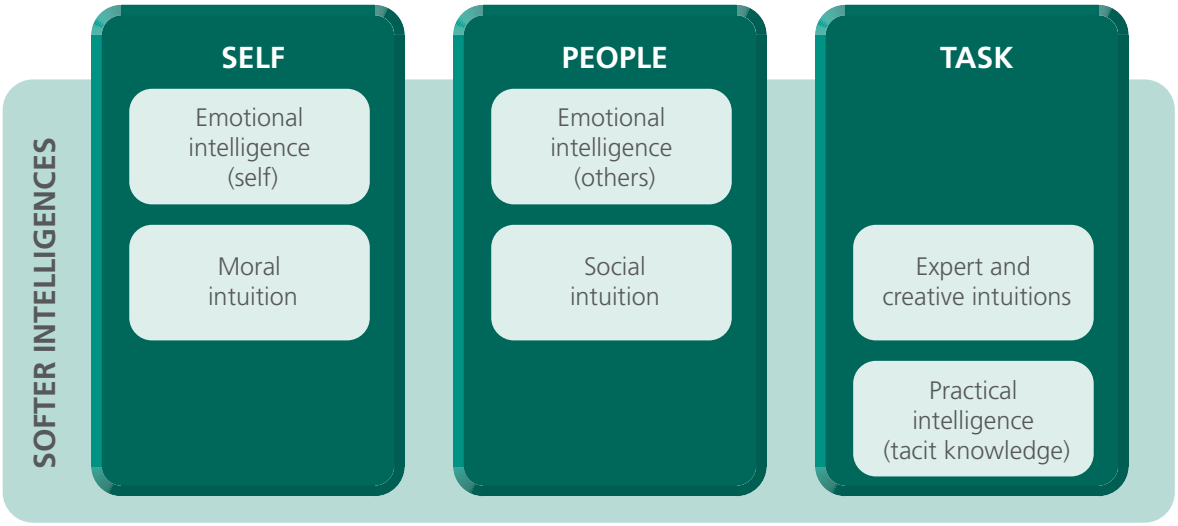
The softer intelligences of PI, EI and II have their roots in education and psychology and provide a particular perspective on soft skills. One of the biggest strengths of these ideas is that they have drawn on recent scientific developments in biology, psychology and cognitive neuroscience. The softer intelligences outlined above apply to many different and important aspects of behaviour, for example decision-making, creativity, ethics, entrepreneurship, business strategy, interpersonal functioning, and so on:

1. Practical intelligence is concerned with the successful execution of complex, judgemental tasks, that is, it is a task-focused intelligence.
2. Emotional intelligence is mainly concerned with the skills of perceiving, understanding and managing emotions in the self and in others, that is, it is an intrapersonal and interpersonal intelligence.
3. The different types of intuition are concerned with the self (moral intuition, 'doing right things'), the task (expert intuition, 'doing things right'; creative intuition, sensing novel connections), and interactions with other people (social intuition, for example reading others' motives and intentions).

These various softer intelligences are mapped against 'self', 'other' and 'task' in Figure 3.

The 'intelligences perspective' provides only a partial view of the soft skills landscape. Labour market, skills and training policies did not figure highly in the considerations of Goleman, Sternberg and others, yet they are highly relevant to the business case for soft skills.

Figure 3: Three 'softer' intelligences



SCOPING SOFT SKILLS

In looking at soft skills from the policy angle, the term 'skill' (rather than intelligence) comes to the fore, and begs two fundamental questions: first, 'what is a skill?'; and second, 'what does it mean to say that a skill is "soft"?'

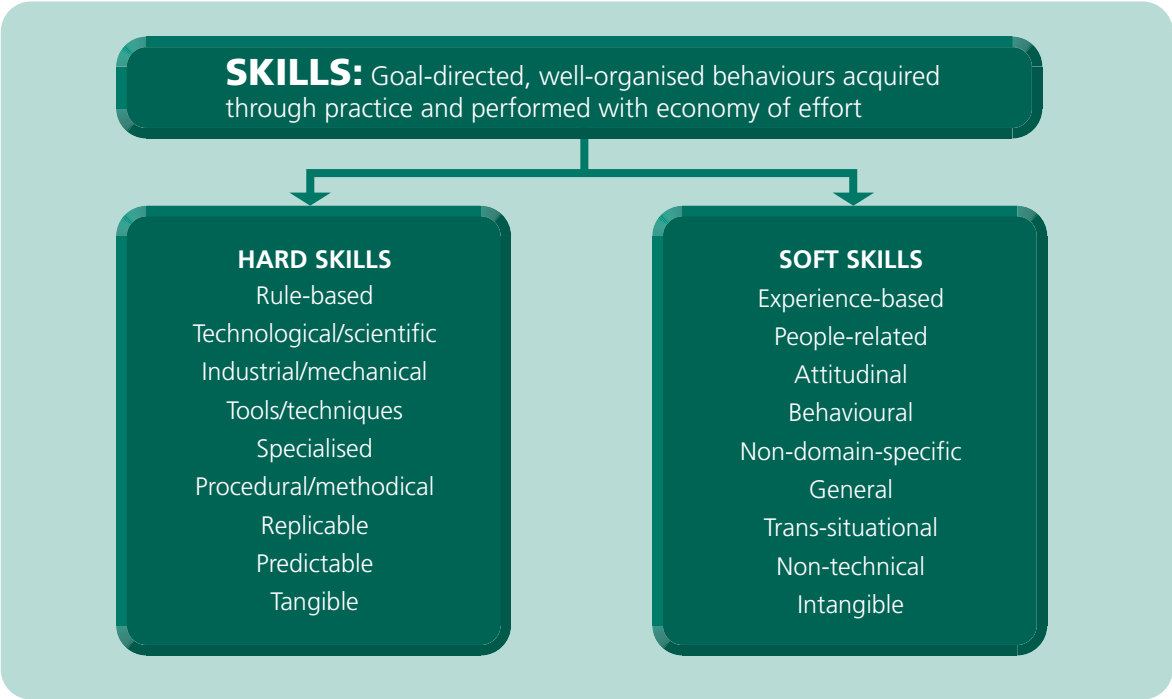
Soft and hard skills

Skill is 'goal-directed, well-organized behaviour that is acquired through practice and performed with economy of effort' (Proctor and Dutta 1995, p18). There are a variety of perspectives on the different types of skill;[13] for example, in the policy and practice literatures the distinction between 'hard (technical) skills' and 'soft (human) skills' (for example Klaus et al 2007; Pant and Baroudi 2008)[14] is often used. Hard and soft skills differ in a number of significant ways.

Hard (technical) skills are goal-directed behaviours that draw on well-established and clearly discernable rules and principles, they:

- have technological or scientific bases (for example surgical procedures), are typically thought of as industrial, mechanical or technical (for example operation of equipment)
- involve the application of specific tools and techniques (for example project planning), are specialised and/or industry-specific (for example a company's standard operating procedures)
- tend to be procedural and methodical (for example checkout operation), as well as replicable (for example fast food preparation)
- aim towards outcomes that are relatively predictable (for example software programming).

Figure 4: Definition of skills, and some general characteristics of the domains of 'hard' and 'soft' skills



Soft skills, on the other hand, are not necessarily founded on a widely accepted or formalised scientific basis (for example there is no generally accepted theory of leadership that can offer any definitive guide to leader behaviour). Soft skills are:

- resistant to being reduced to formulaic rules and routines or procedures and prescriptions (for example resolving conflict cannot be reduced and 'de-nuanced' to a step-by-step process)
- hard to standardise or 'script' given the uncertainty and ambiguity of the situations in which they are likely to apply
- goal-directed but tend to involve judgements and ambiguities (for example the skill of being able to assess a customer's state of mind)
- less replicable and/or predictable than their harder counterparts and may have multiple (that is, diverging) acceptable solutions (for example creative problem-solving).

Soft skills are both self- and other-oriented. For example, Gardner's concept of 'personal intelligence' looks outwards and inwards simultaneously:

- 'Interpersonal intelligence' is an ability to understand other people, that is, 'what motivates them and how they work, how to work cooperatively with them'.
- 'Intrapersonal intelligence' is a capacity to 'form an accurate model of oneself and to be able to use that model to operate effectively in life' (Gardner 1993, p9).

In the same vein Whetten et al (2000) distinguished between:

- **intrapersonal skills:** self-awareness, managing stress and effective problem-solving
- **interpersonal skills:** communication, motivation and conflict management
- **people management:** empowerment, delegation, teamworking, leadership and management.

Soft skills exist in a symbiotic relationship with hard skills, that is, soft skills are necessary complements to harder job-specific knowledge (for example product knowledge) and skill (for example web design) to the extent that relevant softer skills (for example negotiating skills) can transform technical skills ('mere' intellectual commodities) into 'intellectual capital' (Jackson 2009, p30).

A distinctive feature of soft skills is that they facilitate the effective and efficient application of hard skills in workplace settings (Kantrowitz 2005; Klaus et al 2007), but this does not imply that soft skills are secondary or subservient to hard skills.

Soft skills and job types

Soft skills apply to a wide range of jobs (Kantrowitz 2005), nonetheless there are likely to be significant differences between jobs not only in terms of their absolute skill content (some jobs are high skill, others are low skill), but also the relative contribution of hard and soft skills to the job role, for example:

- **low soft skill occupations:** for example assemblers, car washers, data entry keyers, garbage collectors, machine operators, packers, postal mail carriers, typists, and so on
- **high soft skill occupations:** for example CEOs, funeral directors, receptionists, salespersons, secretaries, social workers, teachers, therapists, and so on (Bacolod et al 2009, p239).[15]

Given that soft skills are both self- and other-oriented (Gardner 1983), even those jobs where interpersonal (people) skills are minimally required (for example data entry), intrapersonal skills (knowing yourself) are likely to be important (for example self-monitoring and self-regulation) (Kantrowitz 2005).

Similarly, occupations that are predominantly soft-skills-based (for example therapists) have significant hard components (for example 'relating the skills and knowledge of personal and interpersonal dynamics to the therapeutic context'[16]). Moreover, as work becomes more interconnected and relationally oriented, little work gets done nowadays in isolation, hence there are few occupations where an employee can legitimately claim that he or she does not require interpersonal skills (Crosbie 2005, p47).

Finally, it is almost universally the case that soft skills are portrayed in a positive light; however as well as being deployed productively (for example develop rapport with subordinates), soft skills may also be used counterproductively (for example undermine another's authority) (Kantrowitz 2005).[17] Leadership is a typical case in point; leaders' soft skills are rarely if ever neutral, for example they have the power to influence

employee behaviour and organisational ethics in negative as well as positive directions (Schermerhorn and Dienhart 2004).

Defining soft skills

Soft skills present significant challenges to practitioners, policy-makers and researchers alike because of a lack of precise definitions or a conceptual framework for understanding soft skills (Giloth 2000, p348). As a result a number of problems and inaccurate perceptions have dogged the area 'soft skills', for example:

- questions about exactly what they are (for example 'junk category' of anything that isn't hard)
- unhelpful theoretical models and 'neuromyths' (for example they are in the 'right brain')
- suspicion that soft skills are 'woolly' and indistinct (for example 'nice-to-have' add-ons that are either unlearnable, or not worth learning).

To try and gain greater clarity and correct conceptual weaknesses, various definitions of 'soft skill' were identified from a search and review of the skills literature[18] (see Table 1).

Table 1: Definitions and descriptions of soft skills

Definition/description	Source
'Acquired through experience, are concerned with managing and working with people, ensuring customer satisfaction and creating a conducive environment for the team to deliver high quality products within budget and on time, and exceeding stakeholder expectations.'	Sukhoo et al 2005, p691*
'Skills, abilities and traits that pertain to personality, attitude, and behaviour rather than to formal technical knowledge.'	Moss and Tilly 1996, p253*
'Skills related to critical thinking, oral communication, personal qualities, and interpersonal and/or teamwork…many of these skills are shaped by structural changes in the economy, technology and new forms of work organization.'	Giloth 2000, p348
'The range of general education skills that are not domain- or practice-specific, which include communication and interpersonal skills, problem solving skills, conceptual/analytical and critical skills, visual, aural and oral skills, judgement and synthesis skills.'	Boyce et al 2001, p37*
'Goal-directed behaviours used in face-to-face interactions in order to bring about a desired state of affairs.'	Hayes 2002, p3*
'Career attributes that individuals may possess such as team skills, communication skills, leadership skills, customer service skills, and problem solving skills.'	James and James 2004 (cited in Mitchell et al 2010)
'Personal qualities, attributes, or the level of commitment of a person that sets him or her apart from other individuals who may have similar [technical] skills and experiences.'	Perrault 2004 (cited in Mitchell et al)
'Interpersonal skills, intrapersonal skills, stress management and thinking skills, communication skills; factors that provide indications of the potential suitability of candidates to work in the [accounting] firms.'	Chia 2005, p81
'[Trans-situational] intra- and inter-personal work skills that facilitate the application of technical skills and knowledge.'	Kantrowitz 2005, p2
'Non-technical traits and behaviours needed for successful career navigation, [which] allow you to more effectively use your technical abilities and knowledge.'	Klaus et al 2007, pp1–2

Continued

Table 1: Definitions and descriptions of soft skills (continued)

Definition/description	Source
'"Micro-social" skills…leadership, team building, planning, and managing tasks.'	Muzio et al 2007, p31
'Cluster of personality traits, social graces, facility with language, personal habits, friendliness, and optimism that mark each of us to varying degrees.'	Anju 2009, p8
'Worker skills needed for effective and productive interpersonal interactions.'	Bacolod et al 2009, p227*
'Skills deemed essential for enhanced productivity and innovation in the workplace.'	Jackson 2009, p29
'[Soft skills] allow a person to better understand his or her own actions, how to work better with others, and most importantly, how to be more productive and successful.'	Muzio and Fisher 2009, p26
'Interpersonal skills are also referred to as "soft skills", and discipline-specific technical skills as "hard" skills.'	Skulmoski and Hartman 2010, p62
'Hard skills are associated with the technical aspects of performing a job. These skills usually require the acquisition of knowledge, are primarily cognitive in nature and are influenced by an individual's IQ source. Soft skills are defined as the interpersonal, human, people or behavioural skills needed to apply technical knowledge and skills in the workplace.'	Weber et al 2009, p354
'Soft skills may be viewed as the communication and interpersonal skills required to elicit the activities [and processes] performed by different stakeholders…all of which need to be accomplished through dialogue with stakeholders.'	Jeyaraj 2010, p254
'Managerial, intra-personal, and interpersonal skills that are used to resolve… workplace problems.'	Joseph et al 2010, p149
'Soft knowledge is intangible knowledge, which is difficult to quantify, codify, store, and transmit, because it relates to more personal characteristics and includes judgement and experience…internalised skills acquired with experience and practice.'	Kajnc and Svetlicic 2010, p86
'Employees who can forge partnerships, build relationships, communicate effectively with the business, and find creative ways to manage costs are the most valuable to the organization.'	Pratt et al 2010, p78
'Skills or behaviours that make employees effective in their roles and distinguish some candidates for leadership positions.'	Ranade et al 2010, p31
'Skills of punctuality, teamwork, customer relations, and working under supervision that many employers claim young workers lack to a sufficient degree…learned by doing real world work for sustained periods of time.'	Sum et al 2010, p104

In analysing the content of these definitions (Table 1), soft skill was unpacked into a number of 'personal behaviours', 'attributes' (those of the person and those of the 'domain' in which soft skills operate), and 'outcomes' as a means to synthesize a definition of 'soft skill' (see Table 2, this is indicative rather than exhaustive):

- **Behaviours:** soft skills are interpersonal, intrapersonal and task-related behaviours exercised in a 'goal directed manner' (cf. Perrault 2004).
- **Personal attributes:** soft skills are supported by personality characteristics (for example conscientiousness) or virtues honed through practising (for example integrity, respect and other

Table 2: Definition and attributes of soft skills	
Definition: Soft skills are experientially acquired self-, people- and task-related behaviours that complement the use of technical knowledge and skills in the workplace that enable individuals to navigate successfully the requirements, challenges and opportunities of their job role in pursuit of personal, team or organisational goals.	
Experientially acquired	Based on tacit knowledge (that is, knowledge usually not openly expressed or inexpressible) acquired in 'learning by doing' in environments that give opportunities for practice and ongoing and constructive feedback.
People-related	Relationally oriented (that is, interpersonal); have potentially significant effects on others through verbal and non-verbal channels of communication, for example relieving anxiety or establishing a trusting relationship (Duffy et al 2004, p495).
Self-related	Intrapersonal, enabling individuals to develop self-awareness and understand how to survive and grow through challenges and pressures of occupational settings (for example by resolving issues and solving problems, appraising and judging ourselves and situations objectively (including emotional states)), applying appropriate modes of thinking and reasoning (for example convergent or divergent), reflecting on achievements and failures.
Task-related	Deployed (effortfully or non-effortfully) in response to the demands of a task, often in order to support the application of a harder skill in ways that enable the completion of the task and obtaining desired results.
Complement hard skills	Exist in reciprocal relationship with hard skills; soft skills facilitate the application of technical skills and knowledge.
Navigate requirements, challenges, opportunities of job roles	Goal-directed, facilitate the resolution of problems encountered or decisions faced in the workplace either of themselves or in combination with hard skills in a manner appropriate to the goal (for example finding a novel solution to a problem, negotiating an agreement with a supplier, satisfying a customer, and so on).
Enhance performance of individuals/teams	Workplaces are relational and collaborative; effective and efficient performance relies on co-operation between individuals and subordinates, peers and superiors.
Support the goals of the individual, team or organisation	Delivers task-related outcomes and enhances individuals' standing/employability in labour markets.
Leadership and management	Facilitate, support and enhance effective leadership/management behaviours; the latter are composite domains, possession of requisite soft skills is a necessary but insufficient condition for effective leading/managing.

relevant aspects of 'character') that support the acquisition and deployment of soft skills.

- **Domain attributes:** these are helpful in distinguishing soft skills from hard skills (see Figure 2).
- **Outcomes:** there are specific overall goals towards which soft skill behaviours, supported by relevant personal attributes, are directed, for example leading and managing a team, developing a new product, delivering excellent service quality, and so on.

On the basis of the attributes, behaviours and outcomes shown in Tables 1 and 2, soft skills are defined as follows:

Soft skills are experientially acquired self-, people- and task-related behaviours that complement the use of 'hard' technical knowledge and skills in the workplace, and enable individuals to navigate successfully the requirements, challenges and opportunities of their job role in pursuit of personal, team or organizational goals.

Figure 5: Attributes, behaviours and outcomes of soft skills

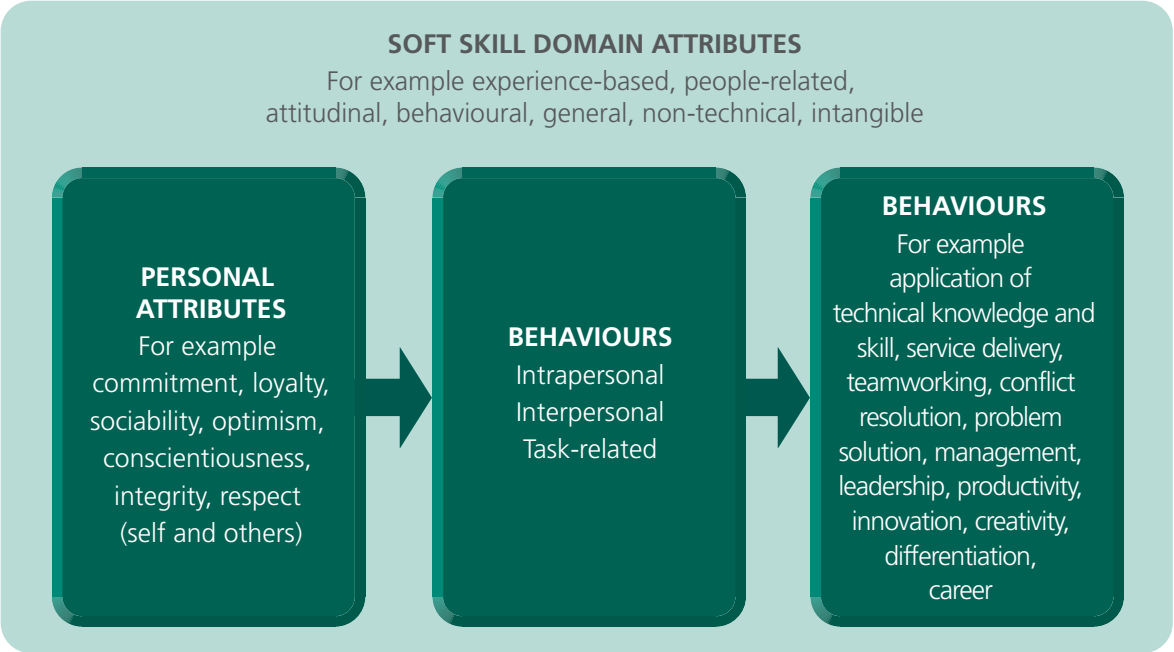


Figure 5 illustrates the relationship between soft skills attributes, behaviours and outcomes.

Summary

In summary, soft skills:

- **Enable individuals to manage successfully the requirements, challenges and opportunities of their job role:** they are goal-directed and facilitate the resolution of problems encountered or decisions faced in the workplace either by themselves, or in combination with hard skills, for example finding a novel solution ('create'), negotiating an agreement ('resolve'), and so on (Hayes 2002; Perrault 2004).
- **Enhance the performance of individuals or teams:** modern workplaces are inherently relational and collaborative; effective and efficient performance (for example the generation and implementation of new ideas) relies on co-operation between individuals and subordinates, peers and superiors (Whetten et al 2000).
- **Support the goals of the individual, team or organisation:** the effective use of soft skills not only delivers task-related outcomes (for example service delivery or productivity), but also increases an individual's value in the labour market (for example through differentiation from other job candidates) (see Martin et al 2008).
- **Facilitate, support and enhance effective leadership and management behaviours:** the possession of relevant soft skills is a necessary but insufficient condition for effective leadership and management.[19]

Having said what soft skills are, the next section will further unpack soft skills by asking the question, 'which soft skills?'

MAPPING SOFT SKILLS

Many managers and HR professionals are likely to agree with the view that having the right skills and deploying them effectively is the basis for the competitiveness of employees, firms, regions and national economies (Grugulis 2003; Tamkin 2005; Tamkin et al 2007). The UK's Coalition Government maintains that skills and training are a 'central component' of creating the conditions needed to reduce the fiscal deficit and stimulate growth (BIS 2010). The mantra 'economic competitiveness and national well-being depend crucially on the skills, adaptability and motivation of the workforce' (Payne 2000, p353) is axiomatic in the skills policy arena but it begs the question, 'which skills are required?'

The question is a needs assessment exercise (see Goldstein and Ford 2002) that seeks to identify the best overall skills mix for 'maximizing economic growth, productivity and social justice' in order that the policy and practice implications of the identified skill needs may be then considered and addressed (Leitch 2006, p143).

The policy perspective

It is justifiable to specify 'which soft skills' from a policy perspective for two reasons:

1. The policy view provides a practical alternative to the more theoretical 'intelligences' perspective considered earlier.
2. More importantly, since espoused policies are likely to bear relevance to the perceived needs of UK businesses, the policy view is expected to represent a fair assessment, or at least a 'best guess', of the business case for soft skills.

Five documents were reviewed and formed the basis for a policy/research-based mapping of the soft skills landscape (*National Employer Skills Survey for England 2009; Skills for Jobs: Today and Tomorrow (National Strategic Skills Audit for England 2010); Skills at Work, 1986 to 2006; The Employability Challenge; Employability Skills Explored*). The soft skills content of these documents are summarised in Appendices 1 to 5.

To ameliorate biases in the specification of the soft skills domain (since a number of these reports interleave and cross-reference), the inventory of soft skills derived from them was supplemented with additional items from Kantrowitz's (2005) authoritative and systematic study of soft skills.

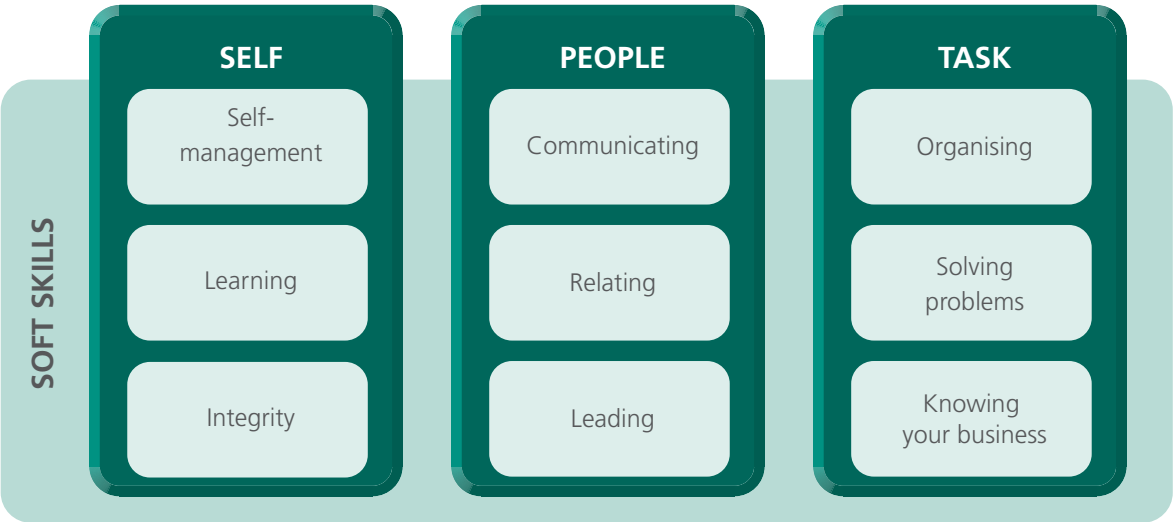
A skills-policy-based map

The analysis of the content of the various key documents (Appendices 1 to 5) generated 103 soft skills (for example 'knowing the tacit rules'). These were subjectively categorised on the basis of similarity (for example 'listening' and 'asking' were placed in the communication sub-category). A three-stage categorisation procedure was adopted (endnote 16 describes the process).[20] On the basis of the review and analysis described above, three categories and nine sub-categories of soft skill were identified (see Figure 6 on page 20).

The detailed classification and unrefined inventory derived from the analysis of the policy documents is contained in Appendices 6a to 6c. The specific elements within each of the sub-components (the right-hand column of the Appendices) have been reduced, simplified and refined by merging similar items in the soft skills map shown in Table 3 on page 21.

This report set out to address two main issues (that is, defining soft skills and scoping the extent of soft skills) and also to consider some of the L&D implications. In this final section of the report the two main themes of the report will be recapitulated and extended with the aim of building a composite map of the soft skills landscape.

Figure 6: Policy-based soft skills map (components and sub-components only)



Soft skills were defined as experientially acquired self-, people- and task-related behaviours that complement the use of technical knowledge and skills in the workplace. They enable individuals to navigate successfully the requirements, challenges and opportunities of their job role in pursuit of personal, team or organisational goals.

In relation to hard skills, soft skills were depicted as more experience-based rather than rule-based, more people-oriented rather than technically oriented, less specialised and more transferable and their outcomes less predictable (Figure 1). However, there are two points (one reiteration and one addition) with regard to the relationship between hard and soft skills:

1 Soft skills and hard skills exist in a reciprocal relationship (for example, without hard skills soft skills exist in a partial vacuum, and vice versa).
2 Task-related soft skills are 'harder' than people-related and self-related soft skills. Task-related soft skills (which are more technical and less transferable than other soft skills) may be seen as a bridge between the soft and hard skill domains as part of a skills continuum (see Figure 7 on page 22).

A composite soft skills map

In response to the issue of scoping soft skills, two views of soft skills have been presented – the theory (intelligences) view and the skills policy view.

The dimensions of self, other and task provided a useful frame within which to classify the practical, emotional and intuitive intelligences.

In the skills policy arena no clear and compelling overarching framework appeared to be employed. The self, people and task frame offered a valid means to classify and make sense of the large number of skills that emerged from the analysis of the soft skills content of the various government-sponsored reports and research documents.

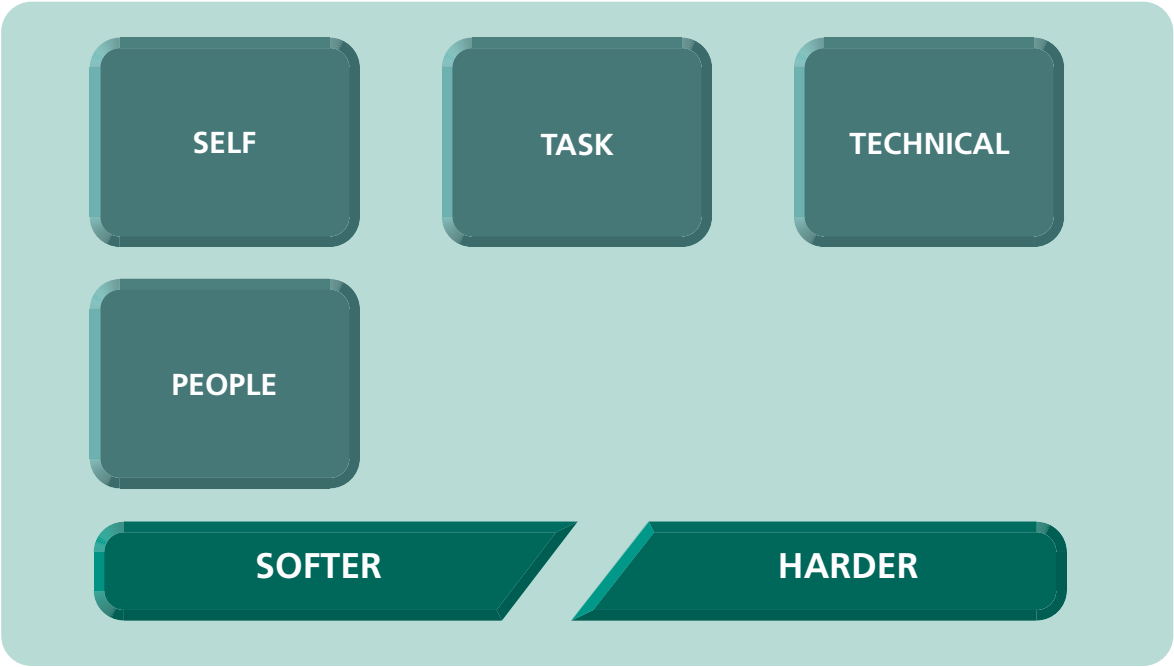
Moreover, resonances of this distinction may be found in the self-development literature and provided further support for its face validity, for example the intrapersonal and interpersonal dimensions are to be found in Goleman (1998) and Whetten et al (2000), and were implicit in a number of other sources (for example Hayes 2002; Klaus et al 2007); Whetten et al (2000) also included task as a third dimension alongside the intrapersonal and interpersonal aspects of soft skills.

Table 3: Components, sub-components and elements of soft skills

Component	Sub-component	Element
SELF	Self-management	Balance and cope with the competing demands of work and life. Take initiative and rise to a challenge when it is appropriate to do so. Maintain personal appearance, self-esteem, resilience, confidence and control.
	Learning	Reflect on and learn effectively from one's experiences. Give and take constructive feedback and criticism. Show inquisitiveness and mindfulness.
	Integrity	Committing to and acting in accordance with professional and moral principles and values. Speaking out when it is appropriate to do so. Being honest with oneself and holding oneself accountable.
TASK	Organising activity	Prioritising goals, actions and resources. Co-ordinating own and others' actions. Planning, monitoring, reviewing progress and reflecting on outcomes.
	Solving problems	Creating and innovating novel and practical solutions. Judging risks and taking decisive action where necessary. Achieving an acceptable solution by being pragmatic, being prepared to compromise or resolving competing demands.
	Knowing your business	Recognising opportunities and being intra-/entrepreneurial. Behaving in accordance with the unwritten (tacit) rules where appropriate. Showing cultural and political awareness and acting accordingly.
PEOPLE	Communicating	Sending messages (verbally and non-verbally). Receiving messages (listening and asking, responding and clarifying). Negotiating and bargaining. Convincing and persuading.
	Relating	Being approachable and accessible and developing rapport. Creating a positive impression and earning respect. Empathising with others and eliciting their opinions, emotions and needs. Asserting oneself and influencing others.
	Leading	Coaching and developing others. Acting with authority, instructing and delegating. Enthusing and inspiring others. Holding others accountable when necessary.

For these reasons, allied to the fact that they are intuitively appealing, the three categories of self, people and task have been used to integrate the intelligences and the skills policy views. The two views complement rather than conflict:

Figure 7: A soft–hard skills continuum



1 The intelligences view is primarily derived from psychological and educational theories (for example emotional intelligence, role of the limbic system in emotional processing; practical intelligence, role of tacit knowledge in human performance; intuitive intelligence, dual-processing theories of human cognition).
2 The skills policy view (the basis of the soft skills area of the map) is derived primarily from a needs assessment exercise conducted by government-funded bodies (for example UKCES, National Employer Skills Survey and the Learning and Skills Council) or researchers in universities (for example Felstead et al 2007).

The composite map, shown in Figure 8, offers a comprehensive picture of the soft skills landscape.[21]

Summary

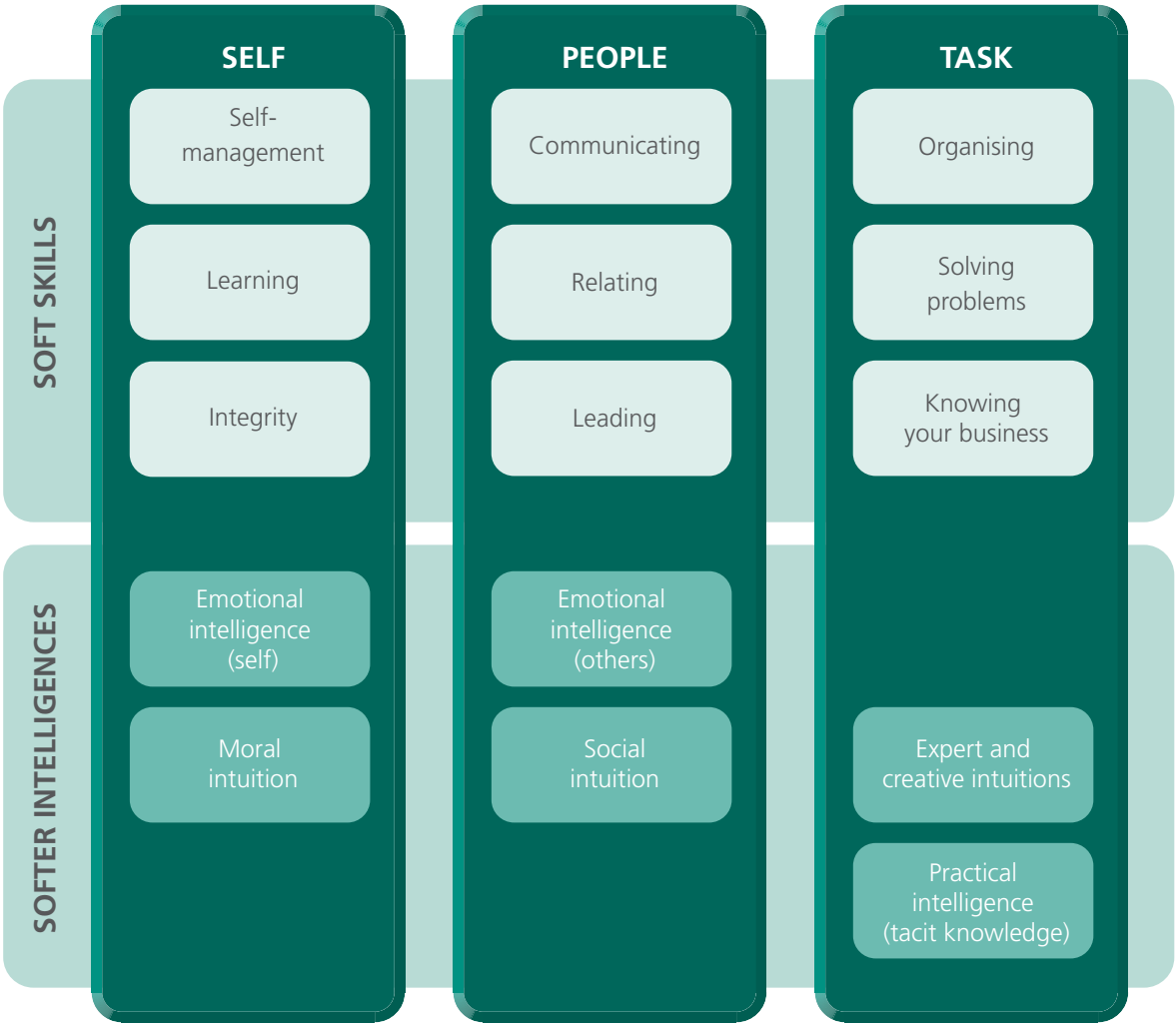
This section of the report sought to answer the question, 'which soft skills are seen to be required by UK businesses?' From a review and analysis of several key skills policy documents, the policy-based soft skills map (Figure 4) was derived.

After various refinements, a total of 26 soft skill elements were identified, comprising nine subordinate categories and three superordinate categories (self, people and task).

The skills identified in the map resonate with the currently stated BIS position that generic problems exist in areas such as general employability skills, leadership, management and customer service (BIS 2010).

The skills also complement rather than duplicate the softer intelligences discussed in the previous section and the two perspectives are combined in the composite skills map.

Figure 8: Composite map of soft skills and softer intelligences



SOFT SKILLS AND LEARNING

There is the perception, and perhaps misapprehension, that soft skills are innate and cannot be learned or that they are not really worth learning compared with hard skills.

Soft skills are worth learning

Soft skills are worth learning: there is ample evidence from the soft skills policy literature that managers, practitioners and policy-makers are of one voice on this matter (see Appendices 1 to 5 for a summary of the evidence and justification for this view). The softer intelligences and the softer skills mapped in the previous section are based on the perspectives of theory and skills policy and offer a comprehensive and compelling case for soft skills.

Distinguishing hard from soft is a useful categorisation, but at the end of the day as far as learning the skills is concerned, it's not a question of 'hard' versus 'soft'. The need to balance hard *and* soft skills in most job roles is widely acknowledged and increasingly so in jobs that have been seen stereotypically as 'hard'. In work that is technical, scientific and professional, hard skills by themselves are necessary but insufficient for effective performance. Hard skills need to be supplemented by non-technical, job-related skills in order that the hard skills can be applied effectively, for example:

- **Information technology:** there is an increased demand for soft skills in the IT professions (Beard et al 2009); being able to manage tasks, career, self and others are 'the managerial, intrapersonal, and interpersonal skills that are needed to resolve IT-related work problems' (Joseph et al 2010, p149; see also Bailey and Mitchell 2006–07).
- **Engineering:** Morris and Watson (2004) observed that engineers are often considered to have 'a very limited knowledge of soft skills' (p26) and argued that it is 'too easy for us [engineers] to just be technicians' (p29) and ignore or overlook the vital role that soft skills play in deploying technical know-how effectively (see also Thilmany 2004 for a discussion of the stereotypical view of engineers, for example 'If we wanted to be involved with people we would be therapists [not engineers]', p5). Recent research suggests that engineering students' education in terms of the soft skills they acquire has a significant influence on their employability in campus recruitment drives (Gokuladas 2010).
- **Biotechnology:** a significant mismatch has been identified between the scientific training received in universities and research labs and the soft skills required by biotechnology firms. Current training tends to be overly individualistic and competitive and does not develop the teamwork skills necessary to reach out to others, share expertise and develop solutions collaboratively, nor does it develop the ability to solve business problems that are often ill-defined (for example how risky a drug might be), or an understanding of the broader context of science (Hilton 2008).
- **Law:** in the legal profession soft skills need to be employed in relating to existing or potential clients, superiors and colleagues. Moreover, to be successful in their careers and profitable in their firms, lawyers need professional, technical and soft skills; 'any lawyer who denies the importance of soft skills will generally experience difficulties and setbacks in their career' (Giusti 2008, p2).
- **Accounting:** the traditional view of the accountant is as a dispassionate 'bean counter' (Sharma and Jones 2010, p1), a stereotype supported by Bay and McKeage (2006, p451), who found that 'accounting students do not have high levels of emotional intelligence'. However, in accounting, as in most other service professions, soft skills and hard skills exist symbiotically. There is an increased demand for soft skills in accountancy as a result of

competition, marketplace changes, generational differences and the need for accountants to engage in relationship-building and act as internal consultants (Wolosky 2008). The soft skills required by accounting professionals are likely to include: leadership; facilitation; communication; negotiation and change management (Sharma and Jones 2010). But it seems that accounting education is, in the main, leaving students ill prepared for a future in which skills such as EI are likely to have a central role (Bay and McKeage 2006, p451).

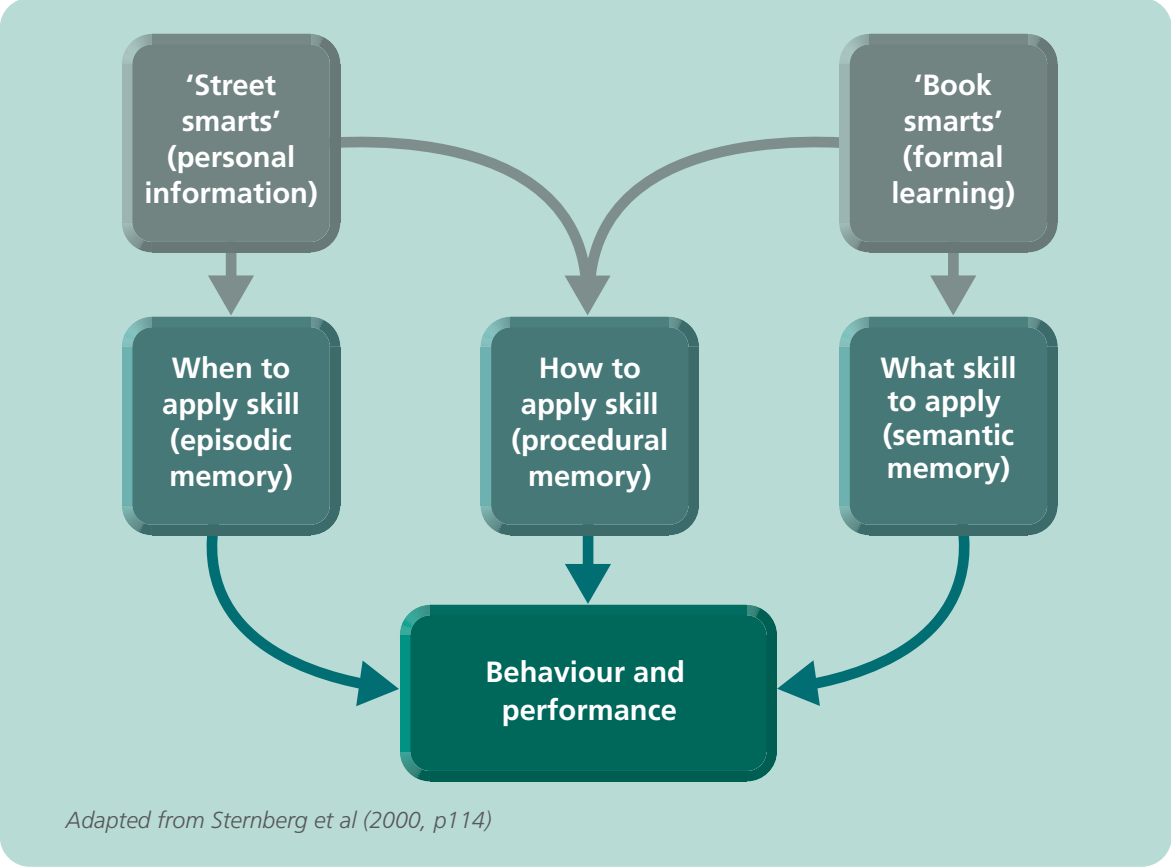
- **Project management:** experienced project managers claim that it is not necessarily the technical aspects of project management that lead to a project becoming 'unglued', rather it is the 'soft side' that often proves most difficult. People are the engines that drive projects towards successful completion, not tools, techniques and templates (Anderson 2010, p60). Furthermore, hard evidence for a positive relationship between soft skill levels and performance in project management was found by Muzio et al (2007) and by Muzio and Fisher (2009).

How soft skills are learned

Because they are inherently practical and real-world oriented (that is, their context is not the classroom), the soft skills and the softer intelligences are learned through personal experience, exposure, practice, feedback and reflection.

The foundation of practical intelligence is tacit knowledge ('street smarts') acquired through the experience of solving real-world problems in real time. But practical intelligence is also supported by technical knowledge ('book smarts') acquired in formal learning settings. In the world of work, being 'street smart' or 'book smart' is insufficient on its own; each needs the other (Sternberg and Hedlund 2002). The learning of 'street smarts' (for example from personal experience) and 'book smarts' (for example from formal learning) contribute in their different ways to the various types of knowledge (declarative, that is, the 'what'; procedural, that is, the 'how'; and episodic, that is, the 'where and when') held in long-term memory that help us decide 'when', 'where', 'how' and 'what' to do in real-world settings (see Figure 9).

Figure 9: The relationship between street smarts and book smarts



The processes shown in Figure 9 apply more generally. Being able to successfully navigate the opportunities and challenges of many job roles requires that a person:

- knows *what* knowledge and skills to use (for example what the disciplinary policy and procedures of an organisation are)
- knows *how* to use them (for example being able to carry out the organisation's disciplinary policy and procedures)
- knows *when* (and *when not*) to use them (for example judging when it might be better to take punitive action informally rather than formally) (see Figure 10).

Knowing *what* to do in a particular setting can be acquired directly through formal learning, but knowing *how* and *when* to apply the relevant knowledge and skill is more nuanced and is acquired experientially, as follows:

1 **doing:** engage in an experience in the real world, in real time
2 **reflecting:** observe events as they unfold, or as they unfolded, in (1)
3 **concluding:** interpret and make sense of the experience reflected on in (2)
4 **applying:** test out the interpretation arrived at in (3).

This is the classic experiential learning cycle (developed and used by Lewin, Kolb and others). It generates context- and situation-specific practical skills that are directly validated by personal experiences (Hayes 2002). The learning process need not be solitary (it can be, but equally it could, and arguably should, involve feedback from an observer/skilled performer), nor is it essential that it occurs in real time/real world (for example simulations, such as role-plays, are valid environments in which to learn the basics of how to apply relevant skills).

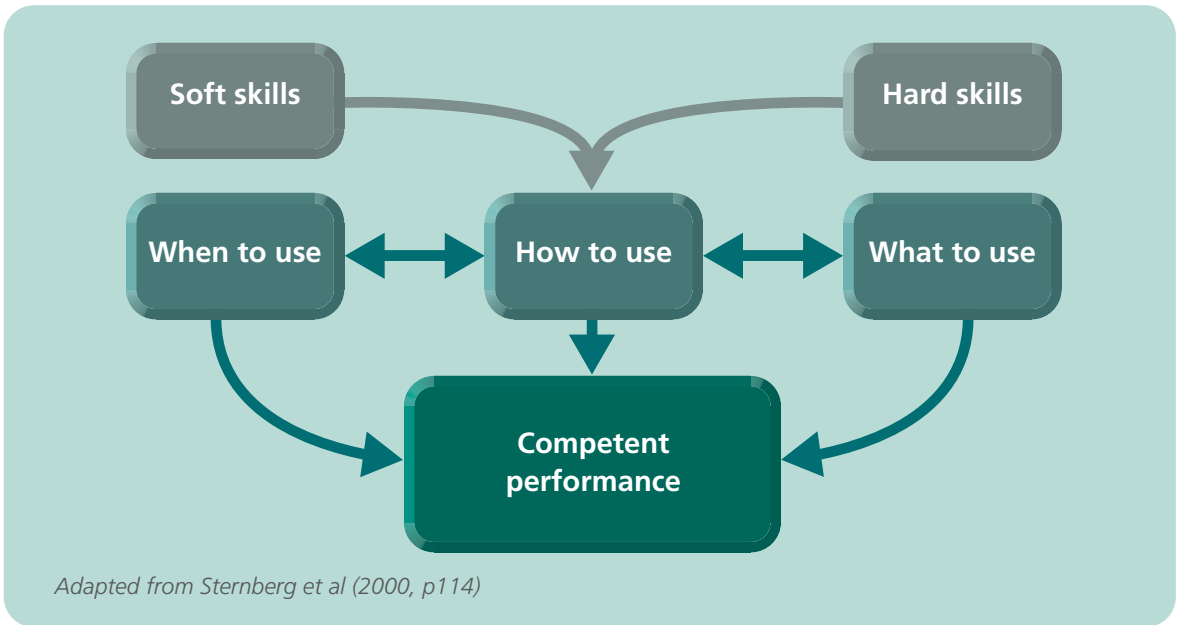
As well as being acquired through direct experiences, soft skills are also acquired socially. For example, where an apprentice learns and works together with a skilled co-worker on the job in a community of practice there is a 'hard' function (for example the learning of the skills of an electrician, plumber or hairdresser) and a 'soft' function (for example learning how to interact socially within and learn from others in the community of plumbers, electricians or hairdressers).

The vital ingredient in the process of learning soft skills is reflection, and this can be:

- reflection in action (RIA), that is, thinking about what we are doing while we are doing it
- reflection on action (ROA), that is, thinking about what we have done once we have done it.

Both types of reflective learning are essential for

Figure 10: The relationship between hard skills and soft skills



Adapted from Sternberg et al (2000, p114)

developing soft skills competence.

One of the things that distinguishes an expert from a novice (in any area of work, not just 'high-skill' jobs) is that experts have better developed capability to reflect in action (that is, 'in the heat of the moment') – through their experiences, certain behaviours have become automated (that is, they don't need to think hard to do them), which frees up scarce mental resources for dealing with situations as they evolve.

The example shown in Figure 11 is reflection in action in the soft skill of 'questioning'; the same process applies to other soft skills and to reflection on action. Feedback in reflection in action is an intrapersonal skill; in reflection on action it can be intrapersonal (that is, one can think back to or watch one's behaviours on video) or interpersonal (that is, with feedback from an observer).

Soft skills don't develop overnight; they're built up over the longer term by transforming experiences through the process of learning (cf. Kolb 1984), which is a soft skill in itself. While experiential learning is something that can occur naturally, leaving it to chance can be inefficient (Revans 1983); it's more efficient to help individuals understand how they learn and enable them to learn how to learn (Mainmelis et al 2002). The ability to reflect in action is a soft skill; it helps us to deal intuitively with situations that are uncertain, unstable, unique and value-laden.

There are also individual differences operating here. Some people are more predisposed towards intuition than others, while others are more predisposed towards analysis. However, it is not a question of 'analysis *or* intuition'; 'analysis *and* intuition' are both invaluable components of our mental toolkit. And while we all have preferences for one mental gear or the other (that is, intuition or analysis), we can develop the soft skill of 'cognitive versatility' by becoming more intuitive or more analytical (see Figure 12 on page 28 and also Hogarth 2001; Sadler-Smith 2010 for a discussion of how to educate intuition).

Figure 11: An example of combining the experiential learning model and reflection in action (RIA) to show how interviewing soft skills, for example, are learned and honed through personal experience

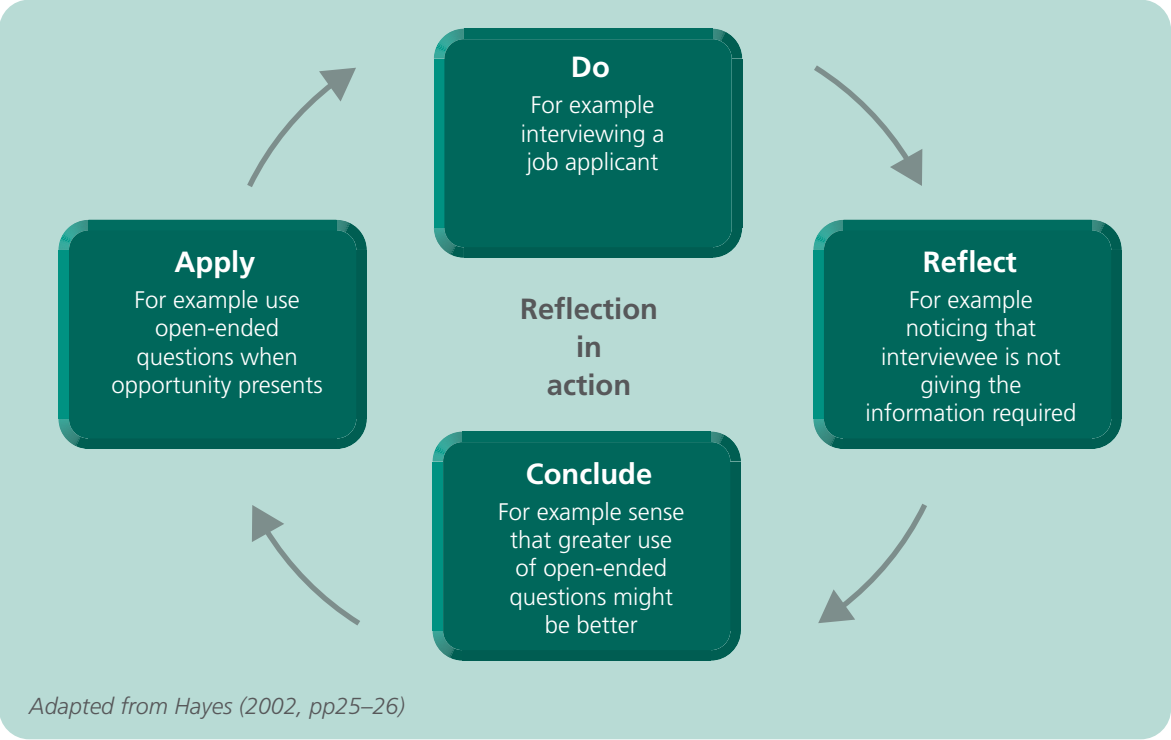
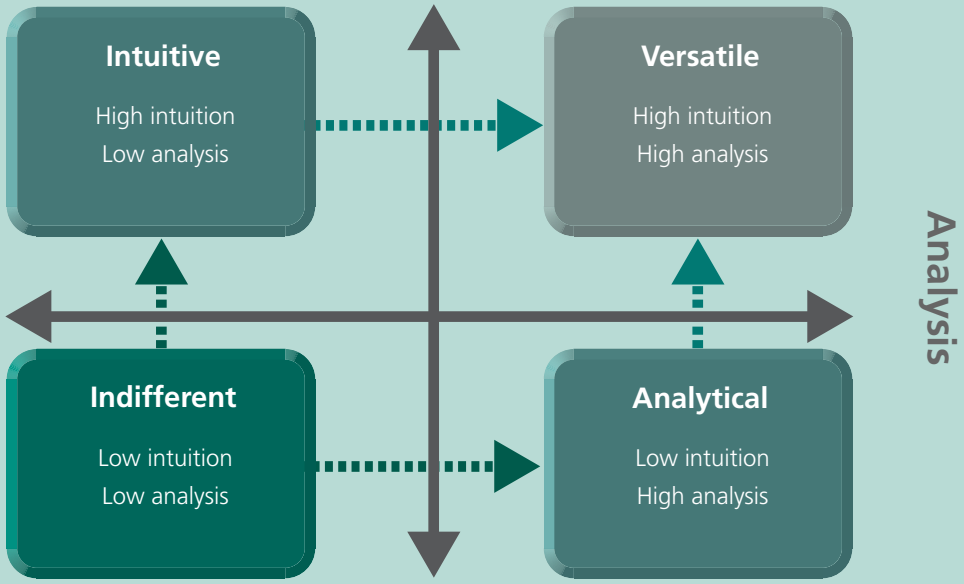


Figure 12: Intuitive and analytical styles of thinking (the dashed arrows represent learning trajectories)



Based on Hodgkinson and Clarke (2007); Sadler-Smith (2002); Sadler-Smith (2011)

Intuition is a style of thinking, but there are also different types of intuition, some of which are more 'hard-wired' than others. The most learnable type of intuition is expert intuition (that is, intuitive expertise).

The substrate of intuitive expertise is tacit knowledge and skill acquired through formal and informal learning. Expert intuitions are slow to form (the rule of thumb is that in the more high-skill areas, it takes around ten years to become an intuitive expert), but fast to act (that is, they are rapid, involuntary responses based on pattern recognition). The development of good intuitive judgement depends on the environment in which the intuitions have been learned:

- Good intuitive judgement develops in 'kind' learning environments, that is, where there is accurate feedback from another person (for example a coach) and where the consequences of one's behaviours are apparent (so that it is possible to figure out what went right or wrong, and why) (Hogarth 2001).
- Bad intuitive judgement, on the other hand, develops in 'wicked' learning environments, that is, where there is little opportunity to practise, gut feeling is exercised in a vacuum and there is only little or poor feedback on the consequences of following one's intuitions (Hogarth 2001).

Evaluating soft skills

The attributes of soft skills often do not lend themselves to objective measurement and financial evaluation. However, to provide a business case for soft skills requires that a credible value-added contribution can be demonstrated.

There is a body of evidence for positive relationships between the softer intelligences and various aspects of individual and organisational performance (see 'Soft skills and "intelligences"' on page 8). In Kirkpatrick-type terminology, the evaluations of PI, EI and so forth have been concerned mainly with evaluations at the learning and behaviour levels, with a small number of studies at the results level (for example the impact of intuitive decision style on firm

performance). There are few if any studies that have taken the evaluation of the softer intelligences to the next stage, that is, the assessment of return on investment (ROI), and, as is the case more generally, doing so presents technical challenges to HR professionals and evaluators.

In terms of the evaluation of the return on investment accruing more generally from softer skills, a palpable problem is that the outcomes may not be in the 'tangible category' since the effects of soft skills are likely to be assessable more through soft than hard data (for example a subjective assessment of an employee's 'assertiveness' that may not be easily 'traceable' through to eventual monetary benefit). Phillips (2003), in his ROI methodology, does not dismiss such measures and offers the following guiding principle:

Intangible measures are *defined* as measures that are not converted to monetary values (2003, p238, emphasis added).

On this basis it may be argued that certain outcomes associated with soft skills are, from the outset, destined to be a 'non-monetary benefit', but they may nonetheless be legitimately reported alongside the monetary benefits that accrue from L&D more generally in an evaluation project (since there is always likely to be a mix of hard and soft outcomes).

Phillips is keen to stress that a prime concern in evaluation is establishing and maintaining credibility with stakeholders. The corollary of this is that if by attempting to convert an intangible soft skill outcome (for example integrity) to a tangible monetary benefit in order to garner approval and appear 'objective' and even 'scientific', there is a risk that hard-won credibility could be lost in the process (since converting integrity to a monetary value would not be an easy thing to do), therefore such efforts may prove counterproductive (Phillips 2003). Phillips is also keen to point out that:

1 Any outcome, even those that are intangible, can be measured, sometimes more precisely, and sometimes less.
2 It is vital, in order to gain senior manager buy-in to L&D projects, to be able to specify outcomes (tangible or intangible, but more likely the latter) of soft skills training.

For this reason, in compiling the various lists of soft skills in this report (for example Table 3 and Appendices 6a to 6c), the guiding principle has been, wherever possible, to couch the description in observable terms (since if it is observable it is to some degree at least assessable, for example to what extent did a call centre employee 'ask the right questions' and 'reflect the message back' to the customer – see Appendix 6c). If such outcomes can be converted to monetary values, all well and good; if they cannot, there may be other ways in which they can feed forward to results level outcomes, for example reduced call times, fewer escalations, improved customer satisfaction and loyalty.

Platt (2008) described a case study of an assertiveness training programme unpacked into a range of observable skills (for example active listening, reframing problems, objective-setting, praising and reprimanding). These skills, when practised in the workplace, were considered to be 'traceable' through to a number of areas such as invoicing (for example getting paid the right amount and as quickly as possible), disciplinary procedures (for example tackling issues head on and not prevaricating) and a number of other outcomes (for example productivity rates; absence rates; error rates; labour turnover reduction, and so on). The financial impact of the assertiveness training was quantified by an assessment of reductions in areas such as errors in invoicing (directly quantifiable in financial terms) and manager time spent on disciplinary procedures (indirectly quantifiable through an assessment of the costs of managers' time). The results were also compared with those of a different unit that did not undergo assertiveness training (a pseudo-control group). There were significant differences between the trained and untrained groups in error rates, absence and labour turnover.

Other evaluators take a different approach, especially when trying to assess the impact of soft skills on employability (rather than the assessment of impact on job performance for those in work). A number of guidelines have been suggested (Dewson et al 2000):

1 It is often more feasible to assess 'indicators' rather than 'outcomes': for example increased levels of attendance and improved time-keeping (indicators) could suggest that an individual's motivation (outcome) has improved.

2 Less tangible outcomes, for example confidence, motivation, self-esteem, are important because they can move people towards harder outcomes (for example securing a job).
3 Establishing a 'baseline' and measuring the distance travelled from the baseline is a useful way to monitor an individual's soft skill development trajectory.
4 Information on changes in individual levels of soft skills can be assessed using a variety of methods, for example one-to-one reviews, diaries or logs, personal reflections, observations, creation of portfolios, psychometric tests and attitude measures, and so on.

Summary

The most important of the soft skills are best learned with a small amount of highly focused and relevant formal input, a large amount of real-world experience, practice inside and outside of one's comfort zone, and timely, relevant and constructive feedback from other people in a community of practice, and where the consequences of what we do can be easily observed and understood (Hogarth 2001; Kolb 1984; Revans 1983).

In evaluating most L&D programmes, there is likely to be a mix of tangible and intangible outcomes relevant to the assessment of value added. Soft skill outcomes should be anticipated, identified and quantified, and if outcomes can be converted to more precise, perhaps monetary, measures, this is a good thing. It's important, however, for stakeholders to acknowledge that in the soft skills arena it's important to not shy away from soft data, since such outcomes may be 'of equal or greater value to an organization, even though [they are] more subjective in nature' (Phillips and Stone 2002, p53).

ENDNOTES

[1] Early psychologists also saw intelligence as having different facets, for example almost a century ago a pioneer of the study of intelligence, Edward L. Thorndike (1874–1949), distinguished three types of intelligence: abstract/scholastic; mechanical/visuospatial; and 'social', described as the 'ability to understand and manage men and women, boys and girls' and 'to act wisely in human relations' (Thorndike 1920, p228).

[2] The competencies identified by Goleman (1998) under the banner of EI (that is, *Working with Emotional Intelligence*) extend beyond the EI domain and overlap with traits and behaviours generically termed 'soft skills'. Soft skills are a broader field than emotional intelligence (EI) alone. Indeed, in Goleman's *Working with Emotional Intelligence* (1998), the skills included under the banner of EI go beyond his earlier account (Goleman 1995) of EI. The skills Goleman (1998) enumerates (that is, emotional competencies based on underlying emotional intelligence capacities) encompass a broad domain of inter- and intrapersonal skill, and overlap significantly with soft skills as conceptualised by various authors (for example Kantrowitz 2005; Klaus et al 2007): (a) 'self-mastery' (that is, intrapersonal) cluster comprises self-awareness (including emotional awareness, accurate self-assessment and self-confidence), self-regulation (self-control, trustworthiness, conscientiousness, adaptability and innovation) and motivation (achievement drive, commitment and initiative and optimism); (b) 'people skills' (that is, interpersonal) cluster comprises empathy (understanding others, service orientation, developing others, leveraging diversity and political awareness), social skills (influence, communication, conflict management, leadership and change catalysis) and social co-ordination (building bonds, collaboration and co-operation, and team capabilities) (Goleman 1998).

[3] L-directed, characteristic of the left hemisphere of the brain, that is, sequential, literal, functional, textual and analytic; R-directed, characteristic of the right hemisphere, that is, simultaneous, metaphorical, aesthetic, contextual and synthetic (Pink 2005, pp26–27). L and R are metaphors for different modes of thinking rather than representing strict 'neural geographies' (see Hodgkinson et al (2009) for a review and commentary).

[4] For example Leonard and Swap (2005) identified 'deep smarts' as 'experience-based wisdom' comprising 'intuition, judgement, and knowledge, both explicit and tacit' stored in the heads and hands of people (p1). Wagner and Sternberg (1985) also suggested a distinction between 'street' smarts and 'book' smarts.

[5] Lucas (2007) and his colleagues referred to these capabilities as 'New Kinds of Smart' (NKOS): 'by "smart" we mean being able to successfully navigate whatever system or context you are in. This involves making the best of all available resources – your own and those of people around you – to maximise the opportunities and overcome the constraints of the environment in which you find yourself' (Lucas 2007, p7).

[6] Lord Sandy Leitch is the son of a Scottish coal miner, former CEO of Zurich Financial Services, and was one of Tony Blair's most trusted advisers. See: http://www.dailymail.co.uk/news/article-510966/The-man-Blairs-new-job-From-miners-son-peer-power.html (accessed 7 September 2010).

[7] AMBA in partnership with Durham Business School, one of the longest established business schools in the UK and 'ranked in the top ten business schools in the country' (AMBA 2010).

[8] The Mind Gym themed its best-selling offering around 'Get what you want', 'Be liked', 'Be respected', and 'Ride the storm' (see Armstrong and Sadler-Smith 2008).

[9] Perhaps in a threat to, or negation of, the validity of the 'offshoring' and 'Asia' arguments put forward by Pink (2005) and others (see above) as a justification for soft skills as a potential USP, and sole province, of Western economies, soft skills have not gone un-noticed in the BRIC economies, for example: 'soft skills are about projecting oneself and one's professional skills in the best possible way, and taking a holistic view of things. They are about how you interact with and react to others when you come into contact with them; they enable you to zero in on the most important point you want to make, but in an attractive and charming manner' (Raj 2008, p8). The only journal that is dedicated exclusively to soft skills, *The IUP Journal of Soft Skills*, is published in Andhra Pradesh, India.

[10] For example: Cavallo and Brienza (2002) found a strong relationship between EI and superior performing leaders; Collins (2001) on the other hand found EI to decline for managers higher up the corporate ladder in career tracks where EI many not be essential (see Carmeli and Josman 2006).

[11] For recent reviews of intuition research see: Hodgkinson, Langan-Fox and Sadler-Smith 2008; Hodgkinson, Sadler-Smith, Burke, Claxton and Sparrow 2009.

[12] This is the famous dictum of the so-called father of social psychology, Kurt Lewin.

[13] In the psychology and education literature, various types of skill ('categories of human performance' and their relevant 'learned capabilities') have been distinguished, for example intellectual skills and psychomotor skills (Gagné 1985, pp47–48). This ISD (that is, instructional systems design) perspective, as well as being well documented elsewhere (for example Reigeluth 1983), resonates less well in the current climate than it did in the 1980s era of 'instructional design' principles and the aspiration to 'technologize' learning and instruction.

[14] This distinction is sometimes used, perhaps unhelpfully, to define soft skills by default, that is, as skills that are 'not hard' (for example Mitchell and Wilson 2007).

[15] Based on US Department of Labor's Dictionary of Occupational Titles, DOT.

[16] http://www.bps.org.uk/careers/what-do-psychologists-do/areas/counselling.cfm (Accessed 6 September 2010).

[17] Kantrowitz (2005) identified six 'counter-productive' soft skills: gains power to exercise influence over others; makes inappropriate/'off-colour' comments; micromanages projects; talks before he/she thinks; under/overestimates own skills and abilities; undermines others (p86).

[18] Search terms: 'SOFT SKILL*' and 'DEFIN*'; the search returned 59 results, these items were then electronically searched for the terms 'soft' and 'defin*'; the usability of the authors' definitions were determined by reading the relevant portions of the text. This structured search was also supplemented by an unsystematic and unrestricted Google Scholar search (search term: 'definition of soft skill'), items yielded by this search are marked thus (*).

[19] The leadership and management literature is vast and provides more than adequate coverage of soft skills as they apply to leader and manager behaviours, hence only essential coverage of these issues will be offered here.

[20] A preliminary review was used to exclude skills identified in the various reports but considered to be hard. The list of 103 skills were then: (1) categorised subjectively by the author; (2) categorised subjectively by an independent rater; (3) a new categorisation comprising nine sub-categories was developed on the basis of a comparison of the categorisations in Steps 2 and 3; (4) two independent raters jointly categorised the skills into the nine sub-categories; (5) the per cent agreement between the rating in Step 3 and that in Step 4 was calculated (the per cent agreement was 67%); (6) further minor adjustments were made on the basis of a discussion between the author and the two Step 4 independent raters.

[21] There are areas of overlap in the map. Emotional intelligence emerged explicitly in the policy view and was initially categorised in 'self-management', but in order to avoid pointless duplication it was removed from this component of soft skills since it was more than adequately represented in the intelligences area of the map. Creative intuition and practical intelligence overlapped with 'solving problems' (creating and innovating novel and practical solutions, see Table 4); however, since the intelligences view is concerned mainly with a psychological explanation of the soft skill behaviours (for example insight) it was decided to retain creativity in both areas of the map.

[22] See Schön 1983, p50.

[23] Donald L. Kirkpatrick, the doyen of training evaluators, developed his now famous framework in the 1950s. It is still used widely to this day and comprises four levels: reaction; learning; behaviour; results.

[24] http://www.occupationalinfo.org/appendxb_1.html (Accessed 8 September 2010).

[25] That is, 95% of adults to have functional literacy and numeracy; more than 90% of adults qualified to at least Level 2; shifting the balance of skills from Level 2 to Level 3; 40% of adults qualified to Level 4 and above.

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APPENDIX 1

NATIONAL EMPLOYER SKILLS SURVEY (NESS) FOR ENGLAND 2009

The National Employer Skills Survey for England (NESS) 2009 is the most recent in a series of surveys established under the auspices of the Learning and Skills Council (LSC) in 2003. The aim of NESS2009 was to provide information from employers on skills deficiencies and workforce development activities, which could serve as a basis for the development of policy and the assessment of impact of skills development initiatives.

The main survey was large (around 79,000 responses were received) and a follow-up survey also collected cost-of-training data from a sub-sample (N = 7,317).

The NESS findings are comprehensive, and from the perspective of scoping the domain of soft skills, several issues of potential relevance emerged with respect to skills shortages and skills gaps

Skills shortages

These are areas in which employers have difficulty in employing staff they need because job candidates with these skills are not available in the labour market:

1 Occupational groups in which skill shortages were highest were 'skilled trades' (31% of vacancies were skill shortage vacancies), 'professional' and 'associate professional' occupations (23% and 20% respectively).
2 Occupational groups in which skill shortages were lowest were 'administrative and secretarial' (10%), 'elementary occupations' (11%), and 'sales and customer service positions' (12%).
3 Main skills types that were lacking were: (i) 'technical and practical skills' (62%); (ii) 'customer handling skills' (41%); (iii) 'problem-solving skills' (38%); (iv) 'team working skills', (37%); (v) 'oral communication skills' (35%); (vi) 'written communication skills' (34%); (vii) 'management skills' (32%).

Skills gaps

These arise when employees are not fully proficient in their job and are unable to undertake the full range of duties expected of them as a result of their lack of skill:

1 Sixty-four per cent of the staff described by their employers as lacking skills (that is, not 'fully proficient') were related to lack of 'technical or job-specific skills' (p31).
2 Employers also reported gaps in 'customer-handling' and 'team working' (amongst half of staff who were not fully proficient).
3 The next most commonly mentioned were 'oral communication' and 'problem-solving' skills.
4 Least common were 'written communication skills', insufficient 'management skills', and 'general IT user skills' (37%, 34% and 28% respectively).

In so far as 'soft' skills are concerned, the picture that emerged from NESS2009 was one in which employers saw the greatest needs for upskilling in the areas of: management skills; customer-handling skills; problem-solving skills; and teamworking skills.

The occupational group perceived as being in greatest need of upskilling was managers.

In terms of addressing this need, 2.1 million managers received training (in absolute terms more than any other occupational group), but proportionately managers were one of the least likely occupational groups to receive training (49%).

NESS2009 attached some significance to management skills as a soft skill of priority; regrettably, the report lacks precision with regard to the definition of 'management skills', that is, all that can be gleaned from the report is that employers feel that they need 'management skills' in their organisations.

APPENDIX 2

NATIONAL STRATEGIC SKILLS AUDIT (NSSA) 2010, SKILLS FOR JOBS: TODAY AND TOMORROW

The National Strategic Skills Audit 2010 (NSSA2010) made use of NESS2009 data in assessing the extent and nature of the mismatch between the skills needed and the skills available, and the implications of this for meeting the needs of the economy and labour market based on analyses of 'drivers of change' and labour market projections, as well as sector-specific analyses. NSSA2010 offered several important messages:

1 Economically valuable skills are those that meet the changing needs and requirements of the labour market.
2 There is a significant demand for highly skilled workers (for example managers, professionals and associate professionals, and in technical roles).
3 Important skill areas to support future economic growth are:

- management and leadership skills
- professional skills (for example computing and software sectors, health and social care, pharmaceutical and medical technology, manufacturing, and in teaching and research)
- technician and equivalent skills
- intermediate vocational skills (for example in sectors such as manufacturing, engineering, processing and construction, and in skilled trades)
- care services and care assistant roles, especially given the increase in the number of older people in the population
- customer care and employability skills in the service sector, and in after-sales service and maintenance roles in manufacturing and digital technologies.

4 In spite of the fact that the bulk of growth in jobs has been in those occupations that are associated with a Level 4 qualification (a level to which a third of the workforce are now qualified) and the fastest declining occupations have Level 2 qualifications or below, it is inevitable that low-skilled jobs will persist.
5 The UK has more high-skill jobs than high-skill people; however, the supply of high skills in the UK has been increasing faster than demand.

NSSA2010 also identified seven key drivers of change: regulation and governance; demographic change; environmental change; economics and globalisation; technological change; values and identities; and consumer demand. In so far as soft skills were concerned, the report drew attention to a number of specific issues:

1 **Technology as a driver of change:** there will be 'increasing demand for creativity and entrepreneurship, and the need for a range of generic skills linked to these' (p17).
2 **Effects of globalisation on culture, values, identities and beliefs:** individuals will have affiliations that extend beyond their immediate and physical localities, becoming more distributed and virtual in nature. The multiple allegiances that are a likely consequence of this will bring about greater plurality, complexity and liberality in beliefs, values and attitudes.
3 **Environment and sustainability:** increased awareness of environmental and sustainability issues will shape attitudes and behaviours that are more environmentally conscious and caring in the population generally (that is, increased salience of environmental values), and there is likely to be an upward trend in consumers' preferences for 'environmentally benign' goods and services.
4 **Increasing sophistication amongst consumers:** increased demand for higher value-added goods and services, greater differentiation in patterns of consumption (for example lower-income consumers relegated to standard, low value-added goods and services), and the development of niche products and services with greater relational (that is, high standards of customer care and personal attention, and the

associated skills of being able to relate to customers and clients in a positive way) content and attributes. Business services (for example accountancy, law, consulting, advertising and PR, facilities management and call centres), health and social work, retailing, hospitality and catering are likely to show the greatest increases in numbers of jobs.

In terms of growth sectors and relevant soft skills:

1 As low carbon jobs and advanced manufacturing sectors develop, there is likely to be a rise in demand for individuals who have management and leadership, project management and new product development and commercialisation (that is, innovation) skills.
2 Leadership and management along with customer-handling skills are likely to be important in the financial and professional services sector.
3 The digital economy will require business, creative and interpersonal skills.
4 Life sciences and pharmaceuticals will require generic skills such as management and leadership, negotiation and customer-handling.
5 The creative sector has an oversupply of potential entrants with a mismatch between their current skills and those needed in the sector; the latter includes soft skills such as commercial acumen, entrepreneurship and management and leadership.
6 In the retail sector employment growth is most likely to be in customer-facing roles, that is, customer-handling and teamworking skills; the sector is also likely to require management skills and knowledge of consumer trends in areas such as ethical sourcing.
7 The projected growth in tourism, hospitality and leisure is anticipated to be around 1 million workers (in addition to the 2.6 million currently employed) by 2017. To deliver the increasingly higher levels of service demanded by consumers, there are likely to be soft skill needs in areas such as people management and customer service (for example communication skills, teamworking and customer engagement).

The authors of NSSA2010 also argued that there is a necessity to supply not only the skills that the economy needs at the present time (for example skills that employers feel they currently need) but also to 'supply the skills which effectively meet the changing needs and requirements of the labour market' and a commitment to 'economically valuable skills' (both 'hard' and 'soft'). The question arises of which soft skills are 'economically valuable'.

Even in those areas traditionally seen as lower skilled, such as retail, hospitality and care of the young and elderly, there is a need to upskill workers in order to improve standards of customer service and provide better-quality products and services, and increasingly customised offerings. Such a move could help shift these sectors out of the 'low skill equilibrium', which the authors of NSSA2010 depict as dogging them.

APPENDIX 3

SKILLS AT WORK (SAW), 1986–2006 (FELSTEAD, GALLIE, GREEN AND ZHOU, 2007)

Skills at Work, 1986–2006 (based on the British Skills Survey 2006 [BSS2006], the latest in a series of surveys of British jobs supported by a consortium formed of the Economic and Social Research Council and a number of government agencies) reports on the main features of a wide range of jobs based on job incumbents' perceptions.

There has been a degree of continuity in the design of the survey instrument over the two decades of its use. The application of the techniques of job analysis to social surveying enabled ten 'generic' skills with the addition of computing skills to be measured.

Based on theories of skill and the 'practices of commercial psychology [sic]' (pp10–11) a set of 35 multiple survey items relating to the activities and requirements of respondents' jobs were reduced through statistical data reduction techniques (that is, factor analysis) to 'several [that is, 10] generic skill indicators' (p11), namely: literacy; numeracy; technical know-how; high-level communication skills; planning skills; client communication skills; horizontal communication skills; problem-solving; checking skills; physical skills (see below).

In addition the following skills were also measured in BSS2006, on the basis that they 'have become especially important in service industries' (p13): (a) small number of generic management skills, that is, using participants identified in the survey as managers; (b) 'emotional skills', that is, 'how important it is for workers to manage their own feelings and handling the feelings of others' (p27); (c) aesthetic skills, that is, 'how important it is for them to "look the part" and "sound the part" in their jobs' (ibid).

'Generic skill' as referred to in BSS2006 encompasses skills needed across a range of occupations and organisations (for example communication) rather than occupation- and organisation-specific skills. The ten generic skills, their short descriptors and the proportion of jobs in which they were at least 'very important' (in parentheses) were as follows:

1 **Literacy skills:** both reading and writing forms, notices, memos, signs, letters, short and long documents (40%).
2 **Physical skills:** the use of physical strength or stamina; skill in using one's hands (26%).
3 **Number skills:** adding, subtracting, divisions, decimal point or fraction calculations, and so on, and/or more advanced maths or statistical procedures (28%).
4 **Technical 'know how':** knowing how to use tools or equipment or machinery, knowing about products and services, specialist knowledge and/or skill in using one's hands (41%).
5 **Influence (previously 'high communication skill'):** persuading or influencing others, instructing, training or teaching people, making speeches or presentations, writing long reports, analysing complex problems in depth and planning the activities of others (23%).
6 **Planning:** planning activities, organising one's own time and thinking ahead (68%).
7 **Client communication:** selling a product or service, counselling or caring for customers or clients, dealing with people, knowing about products or services (46%).
8 **Horizontal communication:** working with a team of people, listening carefully to colleagues (74%).
9 **Problem-solving:** detecting, diagnosing, analysing and resolving problems (67%).
10 **Checking:** noticing and checking for errors (79%).
11 **Aesthetic skills:** looking and sounding the part (52%).
12 **Emotional skills:** managing own and handling others' feelings (65%).

The importance of the generic skills also varied by occupational group, for example: 'influence' and 'horizontal communication' were most important in professional occupations; 'client communication' and 'aesthetic skills' in sales; 'emotional skills' in personal service (see p49 of Felstead et al (2007) for a full description).

BSS2006 also drilled down into 'generic management skills' by focusing on respondents who were in managerial or supervisory roles and eliciting their perceptions of the importance of: 'three activities thought to be central to the human resource function, namely coaching staff, developing their careers, and motivating staff' (p32); controlling of resources; and strategic thinking (acknowledged by the authors as a non-exhaustive list of what managers actually do).

The percentage of respondents for whom each generic management skill activity was very important or essential were as follows: (a) coaching staff (75.3%); (b) developing staff careers (57.6%); (c) motivating staff (86.2%); (d) controlling resources (74.4%); (e) strategic thinking (41.5%).

In so far as the softer components of generic skills were concerned, the authors reported that:

1 **Checking skills:** used in four out of every five jobs.
2 **Influence skills:** used in roughly one in four jobs and concentrated in managers, professionals and associate professionals.
3 **Emotional and aesthetic skills:** most prominent in service industries.
4 **Strategic thinking:** twice as important for self-employed managers compared with managers who are employees.

Between 1997 and 2006 there were significant increases in skills usage in all domains (except physical skills); 'influence skills' (a correlated set of activities associated with communicating, analysing and persuading), literacy and planning showed the greatest rises.

Overall there was a degree of stagnation between 2001 and 2006 in the general upward movement of skills. In terms of pay premia and economic value of generic skills:

1 **Higher-value generic skills:** jobs requiring the use of influence skills pay a premium (for example jobs where such skills are 'essential' rather than 'very important' pay between 7% and 8% more per hour), that is, employers will pay more to hire persons with the necessary generic skills over and above what is necessary to hire persons with the necessary 'road skills' (p135), and that these premia do not diminish over time (that is, over the period of the various surveys), that is, influence skills carry a longer-term premium acquired at some cost or be a 'scarce inherent competence' (p137).
2 **Lower-value generic skills:** aside from influence skills and computing skills, no other generic skills yielded a substantial and statistically significant pay premium among all workers, but among managers there was a small premium reflecting greater use of 'managerial skills'. Neither aesthetic nor emotional skills were associated with statically significant pay premiums, and rewards associated with generic skills overall have been stable over the period 1997–2006.

Felstead et al (2007) noted a number of similarities between the approach and methods of BSS2006 and those used in compiling the US O*NET database. The O*NET program, sponsored by the US Department of Labor/Employment and Training, is the United States' primary source of occupational information; the database contains information on hundreds of standardised and occupation-specific descriptors, that is, a standardised, measurable set of variables based on the different mix of knowledge, skills and abilities required of an occupation. O*NET identifies six groups of skills as follows:

1 **Basic skills:** active learning; active listening; critical thinking; learning strategies; mathematics; monitoring; reading comprehension; science; speaking; writing.
2 **Complex problem-solving skills:** identifying complex problems; reviewing related information to develop and evaluate options and implement solutions.
3 **Resource management skills:** management of financial resources; management of material resources; management of personnel resources; time management.
4 **Social skills:** co-ordination; instructing; negotiation; persuasion; service orientation; social perceptiveness.

5 **Systems skills (that is, 'socio-technical systems'):** judgement and decision-making; systems analysis; systems evaluation.
6 **Technical skills:** equipment maintenance; equipment selection; installation; operation and control; operation monitoring; operations analysis; programming; quality control analysis; repairing; technology design; troubleshooting.

The potential applications of the database are far reaching, for example Bacolod et al (2009) used O*NET's Dictionary of Occupational Titles (DOTs) as a means to classify jobs as high or low on soft skills (see above).

The 'people' variable within DOT/O*NET includes 'the complexity at which worker performs in relation to human beings' from highest to lowest: mentoring; negotiating; instructing; supervising; diverting (that is, 'amusing others'); persuading; speaking-signalling; serving; taking instructions-helping.[24]

APPENDIX 4

THE EMPLOYABILITY CHALLENGE (EC2009) AND EMPLOYABILITY SKILLS EXPLORED (ESE2008)

The Employability Challenge report (EC2009) asserts that employability skills are necessary if the UK is to achieve its productivity goals, and if individuals are to find and progress in rewarding work. Such skills are in short supply and a critical question facing the UK labour market is 'how do people acquire employability skills?' (ESE2008, pxi).

The report compares over 20 different definitions and concludes that there is no consensus as to exactly what employability skills are but that definitions are, in practice, quite similar.

Employability skills are not equated with soft skills, instead they are conceptualised in terms of functional skills (three in number) exercised in the context of personal skills (four in number), and founded on a 'positive approach' (that is, being ready to participate, make suggestions, accept new ideas and constructive criticism, take responsibility for outcomes):

1 **Functional skills:**
   - using numbers effectively
   - using language effectively
   - using IT effectively.

2 **Personal skills:**
   - **self-management:** punctuality and time management; fitting dress and behaviour to context; overcoming challenges and asking for help when necessary
   - **thinking and solving problems:** creativity; reflecting on and learning from own actions; prioritising; analysing situations; developing solutions
   - **working together and communicating:** co-operating; being assertive; persuading; being responsible to others; speaking clearly to individuals and groups; listening for a response
   - **understanding the business:** understanding how the individual job fits into the whole; recognising the needs of stakeholders (for example customers and service users); judging risks; innovating; contributing to the whole organisation.

Martin et al's (2008) research report *Employability Skills Explored* (ESE2008), produced on behalf of the Learning and Skills Network (LSN), used a questionnaire survey (N = 1,137) to explore employers' attitudes to 14 employability 'skills, qualities, and behaviours' (p18). The researchers asked respondents to indicate the extent to which they would expect a job candidate to have each of the following skills in order to be 'employable':

- communication skills
- teamworking skills
- problem-solving skills
- literacy skills
- numeracy skills
- general IT skills
- timekeeping
- business awareness
- customer-care skills
- personal presentation
- enthusiasm/commitment
- enterprising
- vocational job-specific skills
- advanced vocational job-specific skills.

The summary findings were that although employers did not expect a school or college-leaver to be the 'finished article', they did expect them to 'at least be enthusiastic, literate, numerate, and able to turn up on time'. The most important employability skills were literacy, communication skills, numeracy and enthusiasm.

In terms of employability, employer bodies, for example the CBI, consistently report dissatisfaction amongst their members with the 'key skills' both of school-leavers and graduates.

The CBI offered its own list of employability skills: self-management; teamworking; problem-solving; communication (application of literacy); business awareness; customer care; application of numeracy; application of IT.

ESE2008 sees such skills as being acquired in the context of work (hence it is unsurprising that school-leavers and graduates are not in possession of them) via 'experiential action learning' [sic], 'work experience' and 'reflection and integration' (p18). The report offers various recommendations and case study examples of good practice in developing employability skills.

APPENDIX 5

AMBITION 2020: WORLD CLASS SKILLS AND JOBS FOR THE UK

Following the Leitch Review (2006), *Ambition 2020* (published in 2009) assessed the UK's progress towards becoming a world leader in skills, employment and productivity by 2020.[25] The report identified the challenge facing the UK as the 'need to build a system to match the high-skill, people-driven economy of the future – a system that responds well to business needs while opening opportunity for all people' (p6).

The target is for the UK to be in the top quartile of OECD countries in jobs, productivity and skills (that is, eighth). However, the 2009 position was little changed from that in the Leitch Review (2006), namely that the UK is: seventeenth on low-level skills, eighteenth on intermediate-level skills, and twelfth on high-level skills, and as a result of other countries also improving, some of them faster than the UK, our relative position has not changed.

The fundamental precept of *Ambition 2020* is that it is necessary but insufficient to raise skill levels and align the skills available with skills required; it is also necessary to drive a demand for higher-level skills. The view expressed in *Ambition 2020* is that the demand for skills is a derived demand, that is, the more companies move up the value chain producing innovative, differentiated, high-value goods and services, the greater will be the demand for higher-level skills:

1 Leaders and managers are seen as key to shaping the nature of this demand through their 'vision, capability, and effectiveness' (p10), which 'raises their game' and that of their businesses relative to competitors both at home and abroad.
2 Without this 'virtuous spiral', the UK will struggle to improve its economic performance.

Ambition 2020 goes beyond a number of previous reports, as intimated above, by urging that skills shortages and gaps should be seen in the wider context and in particular in relation to 'latent' skill gaps, that is, the relationship between what is actually being practised in the skills arena and best practice.

This approach not only addresses skills gaps and shortages identifiable by asking managers (see NESS2009 above), but may also suggest skills areas that are currently overlooked by the majority of organisations but where development effort needs to be placed. There is a need for 'bottom–up' (that is, what employees think is needed based on their current knowledge, understanding and practices) and 'top–down' (that is, what policy, best practice and theory suggest is needed) perspectives.

The downside of relying solely on a bottom–up perspective is that it may only serve to maintain a status quo and 'make do'; the upside of relying on top–down and bottom–up approaches is that the former may serve to alert managers and leaders of the skills that they and their employees and organisations need if they are to 'raise their game' (p113).

A fundamental problem that the UK economy may face is rooted in potential weaknesses in the demand from employers for high-level skills: 'this implies a need to raise employer ambition, to stimulate demand, as much as enhance skill supply. In doing so, we can create a "virtuous circle" of skills development' (*Ambition 2020*, p122). From a soft skills perspective a question is raised: 'which high-level soft skills have the potential to fuel this virtuous circle?'

Ambition 2020 saw one answer to this question in the concept of high-performance organisations (HPO) or high-performance work (HPW) practices, arguing that organisations that 'adopt an integrated range of HPW practices are likely to perform better' (p125). Further afield in the USA, the American Management

Association conducted a cross-sectional study (N = 1,400) of HPOs, and argued that 'role model' HPOs that consistently outperform competitors over an extended period of time have the following attributes:

1 **Strategic approach:** establish clear vision, have clear set standards and leadership behaviours that are consistent.
2 **Customer approach:** clear approaches to attracting, treating well and retaining customers.
3 **Process and structure:** processes and workflows enable employees to meet internal/external customer needs and use metrics.
4 **Values and beliefs:** well-established values, aligned with mission, 'deep drivers' of behaviour.
5 **Leadership:** leaders are clear about behaviours needed to support mission and leaders set goals and guide performance.

The various HPO/HPW frameworks (see Tamkin et al 2007) are consistent with HRM models that assert that no individual practice *per se* is vital of itself; rather, bundles of practices and the way they are implemented locally gives HRM the power to create synergistic effects.

The take-up of HPW practices in the UK does not appear to be widespread, and a number of researchers have suggested that this is as a result of lack of knowledge and skill on the part of managers in understanding and implementing such practices, even being attributed to 'management incompetence' (*Ambition 2020*, p129). There is a general point that emerges across all the various reports and that *Ambition 2020* amplifies:

- The importance of effective management for economic development is compelling and undeniable.
- Companies that apply management best practices outperform those that do not.
- Managers in the UK are relatively underqualified by international comparison.
- A long-term proactive approach to developing managers' skills is associated with higher organisational performance (*Ambition 2020*).

The report concluded with the assertion that 'enhancing the skill levels of UK managers could have a significant effect on fostering organizational ambition, future business practices, the take-up of HPW, improve skills utilisation, and ultimately bring substantial benefits to business and economic performance' (p137).

Creating greater demand for higher-level soft skills and their development and execution through more effective people management and L&D practices are likely to play an important role in initiating, supporting and sustaining this virtuous circle.

APPENDIX 6

ASPECTS OF SOFT SKILLS

Appendix 6a: Self-related aspects of soft skills (unrefined list)

Component	Sub-component	Element
SELF	Self-management	Accepting legitimate criticism Accepting constructive feedback Admitting your mistakes Learning from your experiences Inquiring
	Learning	Acknowledging emotions in yourself Being patient when required Acting with self-confidence Being punctual Looking the part Bouncing back Taking the initiative when necessary Maintaining your self-esteem Managing your time and balancing competing demands Overcoming professional and personal challenges Tolerating the stresses and strains
	Integrity	Being honest with yourself and others Acting with integrity Appreciating and valuing things that have an intrinsic value Committing to professional and moral principles and values Following through (for example not giving up) Following up (for example being reliable) Holding yourself accountable when necessary Persisting in the face of challenges Speaking out when required

Appendix 6b: Task-related aspects of soft skills (unrefined list)

Component	Sub-component	Element
TASK	Organising activity	Checking Marshalling necessary resources Co-ordinating your own and others' actions Monitoring progress Planning Prioritising goals, actions and resources Setting SMART goals
	Solving problems	Analysing situations Being prepared to compromise to achieve an acceptable solution Creating and innovating novel solutions Thinking critically about problems and issues Taking decisive action when necessary Defusing potentially problematic situations Developing practical solutions to problems Judging the risks involved Being pragmatic Resolving competing demands Seeing the parts of a problem Seeing the whole of a problem
	Knowing your business	Being entrepreneurial Fitting your behaviour to the business context Knowing about your business and its wider context Knowing the tacit rules of your business Noticing what goes on in your business Being culturally sensitive Being politically sensitive

Appendix 6c: People-related aspects of soft skills (unrefined list)

Component	Sub-component	Element
PEOPLE	Communicating	Adjusting your message to suit the hearer
		Answering questions
		Articulating your knowledge
		Asking the right questions
		Asking for help when necessary
		Communicating competently
		Presenting a convincing case
		Developing rapport
		Listening objectively
		Negotiating
		Persuading
		Presenting information
		Reflecting message back
		Responding
		Speaking clearly
		Communicating clearly with the written word
	Relating	Acknowledging and respecting diversity
		Acting courteously towards others
		Asserting yourself when necessary
		Being approachable and accessible
		Building relationships
		Earning the respect of others
		Complimenting others when appropriate
		Co-operating
		Eliciting others' needs
		Empathising
		Enthusing
		Influencing
		Maintaining others' self-esteem
		Managing positively the impression you project
		Networking
		Recognising emotions in others
		Recognising the contribution of others
		Reconciling differing viewpoints
		Team-playing
	Leading	Acting with authority
		Coaching others
		Delegating to others
		Developing others
		Holding others accountable when appropriate
		Inspiring others
		Instructing others
		Leading others
		Managing others
		Motivating others

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