Proving The Value of the HRD Investment

Rosemary Harrison  
*Former Director of Durham University HRD Research Unit*

Wendy Brooks  
*Director, Learning and Consultancy, Hemsley Fraser Group Ltd.*

The paper explores challenges facing HRD professionals as they seek to measure and communicate outcomes of their training activity in ways that will convince stakeholders of its value-adding organisational impact. Core issues here are not new, but despite the rhetoric, action still lags behind. The authors suggest reasons for this, focusing on three interrelated themes: linking training to the business, working in partnership, and evaluating training. A literature review establishes theoretical grounding and highlights key issues. These are explored further in relation to a large-scale management development programme at Airbus UK, part of the global Airbus company. The authors’ narrative indicates a vital role played by an integrated planning and evaluation system in linking training to organisational outcomes. They reflect that such a system can demonstrate the strategic value of corporate training initiatives that, like this one, represent a substantial business investment, and conclude with implications for research and practice.

Keywords: linking training to the business; organisational effectiveness; HR business partnerships; adding value; training planning and evaluation; training metrics and measurement frameworks.

Purpose and Methodology

In this paper we make no attempt to prove, by any methodological formula, a set of hypotheses about training and its evaluation or about wider issues of HRD strategy. These are already well covered in the literature. Our purpose is to present a narrative concerning a major training programme, widely perceived in its organisation to be successful, whose approach was one of the most complete we had seen in the development of a corporate HRD initiative from inception to evaluation. Our reflections on it led to a literature search around three related themes: linking training to the business, working in partnership, and evaluating training. Our findings form the theoretical grounding contained in the first sections of the paper. The case narrative follows, incorporating an evaluation framework for linking organisational outcomes to a training intervention. In conclusion, we suggest some key implications for theory and practice.
Linking Training to the Business

Organisations’ training investment has risen steadily over the years (Bober and Bartlett 2004, CIPD 2005, Holton III and Naquin 2005). Hirsch and Tamkin (2005) identify the UK’s current human resource development (HRD) landscape as one that is making it more essential than ever to demonstrate a strong link between training activity and organisational effectiveness defined as the organisation’s ability to gain and sustain competitive advantage (Lawler et al. 2004:29). Key features in the landscape are the restructuring of HR and training functions, with an increasing devolution to line managers of core training and development responsibilities; a broadening of development activity’s scope, requiring an alignment of formal training with a range of other learning processes focused on organisational goals; and a more knowledge-based economy, where training can help to build the essential social capital to create and apply organisationally-valuable knowledge.

Research indicates the same landscape across the Western world, yet training professionals seem slow to realise its implications (Harrison and Kessels 2003, 104-118). The Chartered Institute of Personnel and Development’s 2005 annual Training and Development survey of hundreds of UK-based training managers across sectors found that although most thought it crucial to demonstrate the link between training and the bottom line if managers’ buy-in to training was to increase, few seemed to be doing much to ensure this (CIPD 2005). Reliable evidence of training’s organisational value was very limited, hindered especially by poor planning and evaluation.

What causes such weaknesses? Apart from lack of competence, one reason lies in many organisations’ failure to provide line managers with adequate support and incentives to perform their training tasks effectively. In the UK this seems to be a widespread problem (CIPD 2005). Another is pressure on training managers to focus on hard budgetary and performance targets, coupled with a drive for cost containment that can lead to fluctuating training budgets, complicating training planning and evaluation (Aragon-Sanchez et al. 2003).

Yet none of this is enough to explain the widespread disconnect between the business imperative and training practice.

Many studies now cast light on the relationship between HR strategies and practices and organisational performance (Huselid 1995, Hendry 1995, Patterson et al. 1997, Guest and King 2001). On-going case-based research by Purcell et al. (2003) strongly indicates that the key to activating the ‘People–Performance’ link lies not only in well-crafted ‘bundles’ of HR practices, but in their conjunction with a powerful and cohering organisational vision (or ‘Big Idea’) and corporate leadership, together with front-line leadership’s action and use of its discretionary power. When this conjunction raises employees’ organisational commitment, it can release their ability, motivation and opportunity to ‘go the extra mile’ needed in high-performance work organisations (HPWO). However despite such research, many writers remain preoccupied with a search for hard proof of a direct link between training and the organisation’s financial performance, often at the risk of drowning in a sea of measurements. But anyone can play the numbers game, and HR personnel tend to be poor players (Pfeffer 1997). Furthermore ‘the emphasis on proving rather than understanding and improving has led to the use of methods that often distort reality and can prove almost anything’ (Spitzer 2005:57).
Research by Wright et al. (2004) highlights a related issue concerning the ‘inside-out mindset that continues to plague many HR organizations’. Their survey of HR professionals responsible for corporate HR strategies in nine multinational companies showed that all were attempting to integrate their HR activities to support the business. However in formulating strategy the majority started with HR and worked outwards to link to the business and had no deep, formal knowledge of the competitive issues facing their organisations. A ‘paradigmatic shift’ was vital in order to build them ‘outside-in’ from the starting point of the business. Such a shift will be difficult for those training practitioners who have a naïve understanding of their organisations’ strategy and decision-making processes. The dominant decision-making model for the training profession has long been the systematic training cycle (Boydell 1971), grounded in a rational-economic view of the business universe. But economic logic repeatedly breaks down in the confusion caused by conflicting mindsets, interests and perceptions as to ‘what matters here’ and how to tackle it, giving way to a ‘bounded rationality’ (Simon, 1955) whose influence over strategic decision-making training professionals need to understand (Harrison 1996; Harrison 2000; Holton III and Naquin 2005; Pfeffer 2005).

In a 2001 survey of training research over previous years Salas and Cannon-Bowers (2001:472) found that ‘things have progressed dramatically in terms of both the science and practice of training’. Our own review confirms this but also raises the question, why is the research on linking training to the business so under-used by HR professionals? Perhaps because it has little synergy. We found a rich but diffuse body of work, in need of regular integrative commentaries to increase its visibility and perceived practical relevance.

Business Partnership

Key Issues
Business partnerships are central to the work of training practitioners, and have become more complex with the prevalence of organising through co-operative alliances, cellular structures and other such flexible arrangements. Ulrich’s model (1987) of HR business partner roles is the most widely known. His latest revision synthesises five types to transform HR professionals from partners into strategic players, adding value to their organisations through directly improving the performance of the business (Ulrich and Brockbank 2005). Like many others (see, for example, a 2005 special issue of Human Resource Management, 44, 2) he appears to regard lack of current HR current competence and business grasp as the most significant barriers to HR’s transformation. Undoubtedly the HR business partner role suffers from many HR practitioners’ low level of awareness, ability and self-confidence related to the business and how they can contribute to it (CIPD 2003; Wright et al. 2004). Some writers, however, challenge Ulrich’s normative stance, identifying inherent tensions in HR business partnerships (Pfeffer 1997, Toulson and Dewe 2004, Wright and Snell 2005). The exhortation to ‘prove HR’s value’ begs the question ‘value related to what – and to whom?’ Measurement is never value-free and ‘proof’ can be unreliable. A further complication is the number of external stakeholders now involved in training partnerships. Innumerable official agencies offer funding and accreditation support for training, but the conditions that they set often run counter to internal stakeholders’ immediate needs. Yet their support may open up substantial developmental opportunities for employees, and where this increases organisational commitment it can activate the people-performance link (Purcell et al. 2003).
Building effective business partnerships is therefore a challenging task, calling for a considerable investment in time and expertise in order to achieve the required balance between developing shared mindsets and organisational purpose on the one hand and on the other retaining sufficient cognitive dissonance to stimulate creativity and innovation. Yet failure to make that investment can ultimately undermine the ultimate impact of even the most systematically designed training programme (Kessels 1993; Stead 2004).

The task is particularly challenging when organisations provide too little meaningful incentive or support to line managers in partnering with training personnel. Hirsh and Tamkin’s (2005) case-based research identifies a similar problem concerning the relationship between training specialists and other HR colleagues in organisations where HR strategies deal largely with HR processes rather than with workforce capability. It requires shared cognitions to link workforce planning and capability issues and then align both with business needs. Their research casts doubt on the extent to which HR business partners can be relied on even to understand the learning needs of the business. Stewart and Harris (2003) expressed similar concerns in their study of a training function that was part of a wider personnel function in a large UK public sector organisation. There, training was the low-status ‘Cinderella’ and operated virtually independently, mainly because of a disinterest by personnel generalists in getting involved.

The Evaluation Process

Key Issues

Nearly 40 years ago Kirkpatrick observed that training evaluation was ‘still in its infancy’ with most organisations doing little except measuring trainees’ immediate reactions to the training experience (Catalanello and Kirkpatrick 1967). For him, the answer was simple: trainers must learn ‘how to do it’. Since 1975 the four-level Kirkpatrick framework has dominated thinking and practice, but its simplistic and prescriptive appeal hides significant weaknesses (Santos and Stuart 2003).

A flurry of articles throughout 2004 and 2005, notably in US refereed HRD journals, revealed that evaluation has become ‘stuck in a quagmire’ (Russ-Eft and Preskill 2005:71). Findings from around the world revealed little formal evaluation of training, less that had rigour, and less still that focused on the organisational level. Many blamed incompetent training practitioners and the continued domination of Kirkpatrick’s framework. Some looked more widely at organisational context, identifying constraints such as workplace culture, disinterested or critical senior and line managers and organisational politics. Puzzlingly, though, as noted at the start of this paper, organisations’ training spend continues to rise. Holton III and Naquin (2005:258) conclude that: ‘either there are many organizations that have been incredibly naïve in spending huge amounts of money, or they are using different decision-making processes’. As already discussed, they opt for the latter explanation. Skinner’s (2004) findings are consistent with this. Her case-based and desk research into change management initiatives found that they ‘have continued to follow one after the other with little evaluation of their impact being made before organisations progress to the next …’. Reasons included a perceived difficulty of measurement with the literature seen to offer limited help to managers, reluctance to break new ground, failure to plan for evaluation at the start of the whole change management process, and a tendency for management to base decisions on gut feel and personal informal assessment. Most of these reasons are located in internal social structure of the firm, highlighted in HR literature as having a mediating role in
relation to high-performance work systems and organisational performance (Evans and Davis 2005). They show the extent to which, despite the virtual or complete absence of a formal evaluation process, below the surface much assessment still goes on. Sometimes it is 'more acceptable and productive' than formal evaluation, making a significant impact on strategic decision-making (Skinner 2004:1).

This issue of use of evaluation data is a crucial one, given the rising training spend and increased pressures on training budgets, and it is now beginning to receive more attention in research. Cousins and Leithwood’s (1986) evaluation framework enabled Bober and Bartlett (2004) to examine stated and actual usage in four corporate university training programmes. Nicholas Clarke’s (2004) survey of the assessment of formal and informal learning in UK hospices suggested that the extent to which assessment of formal learning is carried out seems to be influenced by the presence of training strategy and also of a significant investment in paid study leave for employees. This may be because both necessitate formal training planning, budgeting and prior assessment of intended outcomes against strategic objectives as well as post-training evaluation. The HR balanced scorecard (Kaplan and Norton 1996) can have a similar effect and was widely used in organisations in Purcell et al.’s ‘People-Performance’ studies (2003). Because its methodology constitutes an ongoing strategic process it stimulates the linking of HR practices – including training – with business metrics and measurement frameworks and thence with organisational performance.

By probing beneath the surface of stated and recorded intent to discover evaluation’s underlying reality, such case-based research illuminates evaluation practice, taking forward theory and suggesting at last a way out of the evaluation quagmire.

Conclusions from the Literature Review

We conclude from our literature review that two factors are of unique importance in determining the strength and persuasiveness with which major training interventions can be linked to the business:

**Effective Business Partnerships**

Training partnerships for such interventions are rarely non-problematic. The training must ‘add value’ but that can be a contested term, requiring expert leadership of a complex nexus of stakeholders to reconcile conflicting interests and build shared perceptions of ‘value’. A considerable front-end investment in time and expertise is needed, too, in order to agree on relevant measurements of training and to generate a sufficiency of shared mental maps while retaining the dissonance that can generate innovative training solutions. Building such partnerships is not only about effective project management. It is also about undergoing a powerful collective learning experience.

**An Outside-in Evaluation Process**

The literature demonstrates the need to integrate evaluation with training planning from the start, ensuring that a ‘causal chain’ links organisational level outcomes, through specific business metrics and KPIs, to core elements of training design and delivery (Spitzer 2005). The first stage of evaluation is to collect a comprehensive baseline of organisational as well as individual data. The former should clarify key mediating influences between individuals’ skills and the extent to which, post-training, they are likely to use them to the benefit of the organisation. Informal as well as formal evaluation should be used to continually develop a
major training intervention, heighten its perceived credibility, and influence decision-making beyond the training sphere, thereby ensuring its strategic thrust.

In the next section we relate these issues to a large-scale programme for front-line managers (FLMs) at Airbus UK’s airwing production site at Broughton, North Wales. We focus especially on the integrated evaluation and planning process that linked organisational outcomes to the programme and on the business partnership to whose development that process made a unique contribution. The programme is ongoing, but our narrative concerns its first tranche, from May to September 2005, rolled out sequentially to eight cohorts of up to 18 FLM participants each.

The Airbus UK Narrative

Airbus UK has around 6,000 employees and is part of the global Airbus company. Confronted with the environmental hostility now facing the entire aerospace industry, the global company has embarked upon an intensive programme, ‘Route 06’. Its goal is to differentiate Airbus from competitors by driving down costs through standardisation while maintaining its world-class standards of customer experience, continuous improvement and quality. In support, Airbus UK’s Broughton site has developed its own ‘Our Route to Excellence’ (ORTE) to build a lean, high-performance work system. Since Airbus is a cross-global, cross-cultural consortium of widely varying businesses, it has no overall formal, integrated HRD strategy. Instead there is a lean central HR function that operates its HRD activity mainly through projects and internal and external partnerships. The ORTE programme incorporates various HRD initiatives. Some, like a recent culture change programme for all managers, are run by external providers, and some, like its Lean Learning Academy - a learning resource centre to stimulate personal development – are managed by specially trained in-house personnel.

In 2004 Broughton’s managing director (MD) identified a need for a management development programme specifically for FLMs, to be aligned with the other ORTE change initiatives. The site employs 800 FLMs, and at that time an in-house survey had revealed them to be stressed, lacking confidence in their management roles, reluctant to make decisions, and possessing little managerial competence. Their teams were often fractured and conflictual. But the FLM workforce was also loyal, long-serving and hard-working, appreciative of their employment at Airbus UK which offered them stability and work-life balance opportunities, and proud of the times when they could see the product going out in time and at cost. The MD’s goal was to provide FLMs with a transformational learning experience that would support a major shift to a strong organisational climate where they would understand clearly their vital role in the organisation and manage their area to target conditions. By ‘strong’ was meant a climate in which they would have ‘a shared perception of what the organisation is like in terms of practices, policies, procedures, routines, and rewards – and what is important and what behaviors are expected and rewarded’ (Bowen and Ostroff 2004:205).

The Business Partnership

Responsibility for this major training investment was given to a project team incorporating in-house and external expertise. Airbus UK ‘Value Champions’ and ‘Value Specialists’, including senior HR personnel, brought to the project team deep functional and commercial knowledge of Airbus UK’s business, its core values and culture, and the organisational context for training. The consultants, from the Hemsley Fraser international training and
consultancy company and chosen through a rigorous competitive selection procedure, contributed specialised learning design expertise, backed up by a quality-assured design process. Their business partnership approach and project management skill was critical to ensure that the programme had the support of key stakeholders, was designed to the requisite world-class standard, and was translated into reliable delivery by the Airbus UK team.

The number of interdependent work streams related to the FLM programme was high, necessitating careful alignment in order to link all ORTE-related activity consistently to the business. With 26 stakeholders involved in the wider business partnership (including the project team), regular meetings had to be held between the consultancy and other ORTE personnel. The timescale for the project team was aggressive, with only five months between start-up and delivery. The MD agreed a ratio of around 60 per cent front-end time to around 40 per cent design time. That was unusually high but he was persuaded that it was essential in view of the number and complexity of up-front factors. For project team members this provided a vital learning opportunity. Through their intensive collaboration throughout the front-end period they rapidly formed a close-knit and efficient community of practice. Their first task was to concentrate on the upfront factors which would lay the programme’s foundation. These included:

- considerable work to engage with key stakeholders in the business to gain their full support. This proved invaluable as the programme was rolled out, with highly visible sponsorship and practical support provided by the leaders.
- detailed analysis of the workplace environment. This laid a sound basis for transferring the learning into the workplace, with a clear target of ‘creating the right environment’. It provided the baseline from which to measure that environment.
- detailed analysis of training and development needs, crucially involving the FLM population to gain its input to programme design. Training needs analysis (TNA) is an often-neglected area, with consequent failure of many training initiatives and for others, lack of clear baseline data against which to measure ultimate organisational outcomes (Audit Scotland 2004, Spitzer 2005). Here, TNA ensured that the programme was tightly linked to workplace outcomes, with measurement strategy integrated with planning from the outset.
- benchmark analysis of learning practices and principles to provide a guiding vision of how the programme should look and feel.

The dominant contextual feature was top management’s leadership and values. ORTE was the ‘Big Idea’ that provided the programme’s guiding vision, while the MD’s determination to ensure a transformational learning experience for FLMs who were crucial to the realisation of that vision drove the programme forward. The unions, too, were supportive but the stance of middle managers was less certain. Many seemed out of touch with FLMs’ feelings and concerns, and although TNA revealed a cluster of HR practices at Broughton that, in the literature, typify ‘lean’ HPWOs (Evans and Davis 2005), their implementation by the middle management team (MMT) was inconsistent and sometimes inequitable. This was particularly true of practices related to recognition and reward – a major complaint of FLMs – and to personal development, where despite a company emphasis on its importance, there was no system to embed it and the process was in the hands of the MMT. All of this cast doubt on how far middle managers would support the training programme.

Informed by these baseline data the project team designed a tightly customised FLM programme. It was aligned with other ORTE initiatives and accredited for the Institute of
Leadership and Management’s (ILM) diploma in order to give participants recognition and reward and link the training to their personal development. Pre-work for the programme included the piloting of key modules, coaching training for the MMT, a familiarisation workshop for all managers, and the setting up of ILM work-based assignments for participants. The programme was housed in its own FLM training centre, purpose-designed to role model the standards and practices of the broader working environment. This ensured for participants a vivid reminder throughout training of the relevance of their learning to the work system in which they would subsequently be key players.

The evaluation system
Programme planning and evaluation were integrated into a system shown in Figure 1.

This approach involves the articulation of core learning principles (in the Airbus UK case, the project team used a Hemsley Fraser matrix of six workplace learning principles) and their complete integration with design at the crucial stage of defining value for the organisation and individuals. These principles, linked to the intended outcomes, were translated into a highly customised measurement strategy, with metrics at every stage. This is a unique feature of the outside-in system, putting learning, as distinct from instructional, design at the heart of evaluation, planning and design in a way that ensures that from the start,
the training professionals focus equally on what drives value for the organisation and for individuals.

The goal of the Broughton FLM programme is to enhance organisational effectiveness, therefore the project team’s evaluation framework had its starting point at the corporate level. Although there was no preoccupation with ROI evaluation, critical ROI measures to do with reduction of waste, reduced absenteeism and so on were inevitably included against the workplace outcomes that were the foundation of the measurement linkages. The balanced scorecard principle of linked metrics with leading and lagging measures was used to link organisational outcomes to the programme, drawing for this purpose on the company’s comprehensive and accessible knowledge bank including commercial and employee data and organisational and functional key performance indicators (KPIs). The system outlined in Figure 1 required the exploration of opportunities to use existing organisational measures and KPIs in order to create efficiencies and credibility with key stakeholders. The methodology involved a wide range of formal and informal assessments, with evaluation flowing causally from corporate to individual levels and data being collected from key stakeholders before, during and after training.

Post-programme evaluation focused on workplace validation, where data showed the development of consistency of practices (for example in shift briefings and return to work interviews) and evidence of where the workplace was now being managed to target conditions. All leading indicators proved to be on target. Participants’ reactions were tracked and were highly positive. Informal assessments were particularly revealing in showing the start of a shift to a strong workplace climate as FLMs developed more accurate and shared perceptions of their managerial roles, tasks and competence. Anecdotal feedback was encouraged during the programme and captured especially on whiteboards around the training centre’s walls in the form of stories, metaphors, symbols and cartoons about the training experience. Another powerful data source was ‘Go and See’, an informal Airbus process to observe in situ tangible differences in behavioural changes and attitudes and their impact on workplace practice. The project team made deliberate use of positive informal assessments to create momentum and demand for the programme across the Broughton site, and to encourage the development of a more positive workplace culture. Evaluation data were also used to recognise and reward participants’ success and to share best practice, notably at the major celebratory event held after every programme, where senior managers presented participants with their ILM diploma awards.

The FLM programme’s second tranche is now underway. The in-house project team leader regularly discusses evaluation data with senior management and decisions are in train to carry out a longer-term evaluation of programme outcomes in order to measure retention of learning, workplace climate change and continuing behaviours and performance of FLMs and their teams against KPIs. The performance management process is the obvious vehicle to generate such information, and to provide recognition and reward for those FLMs who are managing to target conditions. The perceived effectiveness of the Broughton programme has also been a factor in the company’s decision to roll out the programme, adapted to new needs and context, across the engineering design side of global Airbus in mainland Europe. This will involve training several hundred more FLMs by the end of 2007.
Reflections and Conclusion

The Broughton FLM programme represents in microcosm the Airbus approach to linking HRD to the business. Although there is no discernible overarching HRD strategy or corporate learning architecture across the many businesses that make up the global Airbus consortium, the company takes a strategic outside-in approach to HRD, driven by top management’s real clarity about business goals and very clear understanding of the impact of people on organisational performance and effectiveness, and by flexible partnering processes. A key potential weakness is inconsistent links between the many HRD initiatives. This emphasises the need for effective partnerships and a sustained focus on a ‘Big Idea’ to act as a guiding vision for clusters of interrelated projects.

The Airbus UK narrative confirms the key part played by organisational vision and leadership in activating the ‘People-Performance’ link identified in Purcell et al’s (2003) research. The whole Broughton FLM programme is driven by the ORTE vision, and by the MD’s belief that this training is a more important investment than any he could make in capital equipment or materials. That decision made and the partnership with an external provider established, his concern was not with detailed financial accounting but with ongoing demonstration that vital organisational outcomes drove the programme – and that evaluation data showed them being achieved. The main attention thereafter focused on how to continue maximising the programme’s asset value.

The overall business partnership for the programme was so large and complex that it was essential from the start to ensure that the programme not only had internal consistency (a systematic approach to achieve excellence in design and delivery) but also that it achieved the external consistency that primary research (Kessels 1993) suggests is a major differentiator of ‘successful’ from ‘unsuccessful’ programmes. The extensive up-front work for the programme acted as the main vehicle for that process. The whole learning experience was intense. The consultants commented:

We learnt a great deal around project complexity. So from a partner point of view we did a project debrief, where we identified the reasons why the project was painful for us at times. Numerous lessons here which are being incorporated into future client work. The client conducted a project debrief with the same facilitator. What we can say is that both the client and we conducted a thorough debrief against best practice in project management and learning interventions. We are currently sharing these lessons mutually as well as Hemsley Fraser incorporating them into future client work.

The part played by HR practices and line management in relation to the programme and its outcomes remains less clear. Baseline data had revealed inconsistent implementation by the MMT of the company’s HR practices, and participant feedback for the first tranche of programmes identified lack of pre-programme support for some FLMs by their managers, both related to their pre-programme ILM assignment work and to pre-programme briefings. The HR function continues to work on these issues, and a customised MMT development programme is being planned to follow the FLM programme. The urgency is clear: unless HRD and other HR practices are integrated to support ORTE and are implemented consistently and fairly across the site, and unless FLM participants receive the support needed from their managers to ensure effective transfer of learning, programme outcomes could be fatally prejudiced.
To conclude: our hope through this paper is to contribute to theory-building and practice by stimulating debate, suggesting a unique approach to training evaluation, and encouraging more case-based research into the reality – as distinct from espoused intent - of partnership and evaluation for corporate HRD initiatives that represent major business investments. Our literature review has pulled together three crucial strands of research related to the linking of training to the business and has identified two key issues on which we have reflected further in the Airbus UK narrative. Our review revealed a rich but diffuse body of research that would benefit from more integrative input to pull together key strands and make them more accessible for HRD professionals.

Our final point returns us to issues of mindsets and cognitions that have recurred throughout this paper. Pfeffer (2005) claims that one of HR professionals’ key roles is to influence the mindsets of key business stakeholders. We suggest that working effectively in business partnerships to link organisational outcomes through evaluation and learning principles to corporate training can make a powerful impact on strategic thinking. By influencing the mindsets of organisational leaders it can therefore offer a primary route out of HRD’s functional bunker and onto the strategic stage.

References


