

TRAINING PRACTICES IN PUBLIC & PRIVATE FINANCIAL INSTITUTIONS: AN INSIGHT INTO EMPLOYEE'S PERSPECTIVE

*Bhawna Malik, # Prof. Ashok Purohit

*11/268 1st floor Geeta Colony, Delhi-110031

#Principal, M. J. Kumeria (PG) College, RawaMandi, Sri Ganganagar

ABSTRACT

Ensuring safety in work environments is essential –not only for personnel, but also for the organization as well as the environment. Safety is perceived as the functioning of an organization without serious failures or harm for the organization and the environment. Safety is continuously developed from a coaction of intra- and extra-organizational factors such as personnel, technology, or rules (Fahlbruch, Schöbel & Domeinski, 2008). One measure taken to ensure safety is training. A skilled workforce can yield higher productivity, higher motivation and commitment, and increased safety (Salas, Wilson, Priest & Guthrie, 2006b). Training refers to the acquisition of skills that result in improved performance (Patrick, 1992) and is defined as —the systematic approach to affecting individuals' knowledge, skills, and attitudes in order to improve individual, team, and organizational effectiveness (Aguinis & Kraiger, 2009, p. 452). Today's banking and capital markets industries are highly competitive, with the majority of firms providing similar products and services. When a successful new financial product or service is first introduced, profit margins are often substantial—but increased global competition quickly whittles these margins down to levels where under-capitalized or less-productive institutions can no longer compete. Often, the only distinguishing feature is which firm can deliver the product or service at the least expense. The present research paper tried to focus of Training Practices in Public & Private Financial Institutions: An Insight into Employee's Perspective.

INTRODUCTION

A variety of terms have been used by academics and practitioners to describe the topic covered in this book: training, training and development, employee development, learning and development, and human resource development (HRD). Do these different terms mean different things? Or, can they be used inter-changeably? Who is responsible for HRD in organizations: HRD practitioners or line managers or both? What are the responsibilities of the learner? What is the relationship between HRD and human resource management (HRM)? Why do academics rather than practitioners prefer the term Human Resource Development (HRD)? The aim of this book is to provide answers to these questions. This is not an easy task as there are multiple perspectives on the meaning and purpose of HRD which can confuse anyone who is unfamiliar with the topic. Much of the academic literature published over the last decade has been characterized by an ongoing and robust debate on these different perspectives. This has been important for three reasons: it has strengthened the breadth and depth of HRD theory; it has generated empirical studies on different aspects of HRD practice; and, it has helped to establish the academic credibility of the subject. But there is still a sense that the academic and practitioner communities are not as closely inter-twined as they should or could be;

although tensions between theory and practice are not confined to the field of HRD but appears to be endemic in the management and organizational sciences generally (Kuchinke, 2004). It is not the purpose of this chapter to critique the relationship between the academic and practitioner communities and the implications that this has for the theory and practice of HRD. This is covered in the next chapter where you will gain an insight into the often ambiguous and contested nature of the concept. Chapter 2 will focus in particular on an analysis of the two principal perspectives on HRD: the performance and humanist perspectives. These perspectives have fuelled some of the most controversial debates about the meaning and purpose of HRD. To date these debates have been dominated by Anglo-American perspectives but this is now changing as more indigenous perspectives on HRD emerge across Europe, the Middle East, and Asia. This reflects the way in which the theory and practice of HRD are evolving within the context of a dramatically changing world.

Globalization has witnessed the deregulation of markets, the relocation and outsourcing of production and service facilities, particularly to China and India respectively, and the inter-connectedness of markets, principally as a result of increasingly sophisticated information and communications technologies, symbolized by the Internet. This has resulted in changes to how many organizations are structured, how they are managed, how they conduct their operations, and how they plan for the future. Globalization is not a new phenomenon but what differentiates this current phase from previous ones is the sheer scale. The number of countries affected, the volume of trade, and the rate of growth are far greater than in any previous phase (Stark, 2005). Inevitably globalization is having a huge impact on the role, nature, and purpose of HRD in organizations of all sizes and sectors across the world. However, much of the literature on HRD has been written from the perspective of large private sector organizations (i.e. national and multinational corporations). Examples taken from the public and non-profit sectors tend to be used less frequently by authors. This is also the case with small and medium sized enterprises (SMEs). Yet, public sector organizations are significant employers in most developed countries and non-profit organizations play a crucial role in addressing a wide range of humanitarian issues around the globe and make a significant contribution through a wide range of training initiatives. While smaller businesses are now able to compete globally and, in many countries such as Australia and Finland, are critical to the national economy. Consequently, throughout the book I shall endeavour to highlight the challenges that different sectors and types of organization pose for the theory and practice of HRD. Similarly, when referring to the practice of HRD it is important to understand that this involves several stakeholders, in particular the HRD practitioner, the line manager, and the learner at an operational level, and the HRD practitioner and senior manager at a strategic level. The contribution made by each of these stakeholders varies considerably depending on the context. This will be illustrated throughout the book using case examples drawn from a wide range of contexts.

Today's banking and capital markets industries are highly competitive, with the majority of firms providing similar products and services. When a successful new financial product or service is first introduced, profit margins are often substantial—but increased global competition quickly whittles these margins down to levels where under-capitalized or less-productive institutions can no longer compete. Often, the only distinguishing feature is which firm can deliver the product or service at the least expense. As a result, the financial services industry operates on thin margins compared to manufacturing and other sectors, and even small changes in pricing or operational expenses can have

a significant impact on profitability. At the same time as downward pressure on margins continues, engaging new customers and retaining existing ones can be increasingly costly and complex. Customers have more choices from more global providers, with services ranging from 401(k) and pension plans to debt and equity securities and futures. In this context enhanced education, training, and support—both for sales and services staff and for customers evaluating their options and reaching out for help—are now competitive imperatives.

REVIEW OF RESEARCH

Both the history of work and organizational psychology and that of human factors can be traced back to experimental psychology (for example the work of Wilhelm Wundt). Later on, a more applied psychology began to emerge, as there was a need for a more usable psychology (Lane, 2007, p. 244). During World War I, airplanes and tanks became increasingly complex and operator errors started to increase. This led to the military's interest in meeting the demands posed on operators through new systems and determining whether humans were capable of meeting these demands. This work resulted, for instance, in the development of new displays and controls. World War II was the starting point for the divergence of work and organizational psychology and human factors. While work and organizational psychologists were involved with the testing, screening, and classification of recruits, human factors experts were concerned with adapting knowledge of human abilities and limitations to the design of military equipment (Lane, 2007; Muchinsky, 1987). After the two World Wars, members of industry also began to hire human factors experts to design jobs and equipment which led to a further expanding of human factors (Lane, 2007).

Today, human factors investigates how humans accomplish work-related tasks in the context of human-machine interaction while work and organizational psychology has a broader view, in that the concern is with behavior in work situations in general (Chmiel, 2000; Muchinsky, 1987). The two disciplines of work and organizational psychology and human factors do have research fields in common, such as training, effects of stress or team performance. However, they are considered to be distinct entities, because human factors have become a multidisciplinary endeavor that has been influenced not only by psychology, but also by engineering, design, physiology, and computer science (Lane, 2007).

The history of the two disciplines has influenced the topics that are investigated. By inspecting text books from work and organizational psychology (Chmiel, 2000; Fincham, 1999; Nerdinger, Blickle & Schaper, 1999; Weinert, 2004), research topics of the discipline are summarized. Traditional research topics in work and organizational psychology include leadership, motivation and job satisfaction, social interaction including group and intergroup behavior, stress, organizational culture and processes, as well as training and individual differences. These topics were traditionally investigated with regard to work environments such as manufacturing, military, office work or sales (Muchinsky, 1987). Traditional research topics in human factors are, due to its history, more related to cognitive and experimental psychology. They include decision making, attention, perception and information processing, workload and stress, display design, automation, safety, accidents and human error. These topics were traditionally investigated regarding work environments such as aviation, transportation, military or nuclear power (Badke-Schaub, Hofinger & Lauche, 2008; Wickens, Gordon & Liu, 1998; Wickens & Hollands, 2000; Salvendy, 2006).

As mentioned above, training and individual differences are focused on in this thesis. Training and individual differences belong to traditional research topics in work and organizational psychology. They have been investigated in a range of different work environments –as summarized above–, but have rarely been examined in high hazard work environments. Furthermore, most of the research performed on the relationship between personality, ability and performance explored only student performance from grade school through college (Goldstein, 1993). In the field of human factors, individual differences present a novel topic. In the Handbook of Human Factors (Salvendy, 2006), for instance, contributions to individual differences are included. However, these contributions are all related to design but not to training (e.g. –design for people with functional limitations, –design for aging or –design for children). Moreover, the study of individual differences is limited to demographic variables.

A review on personnel selection –which is related to research on individual differences– is included in the handbook (Hedge & Borman, 2006), although it is kept on a general level and is not specifically related to high hazard work environments and human-machine interaction. This might be due to the fact that research on personality and ability variables and high hazard work environments are hard to come by, except from the field of aviation (e.g. Wickens et al., 1998).

Training research is approached differently by work and organizational psychology and human factors. For work and organizational psychologists, training is –inherently an applied enterprise in which organizations attempt to change individuals in a way that is consistent with the job requirements (Quiñones & Ehrenstein, 1997, p. xi), and technological, social, and individual factors are primarily considered. For human factors psychologists or cognitive psychologists, training involves applying principles of learning and skill acquisition and a focus on individual ability, information processing and task characteristics (Quiñones & Ehrenstein, 1997). This doctoral thesis aims at integrating both approaches by drawing on training theories from work and organizational psychology and theories of skill acquisition from human factors research.

Safety is perceived as the functioning of an organization without serious failures or harm for the organization and the environment. Safety is continuously developed from a co-action of intra- and extra- organizational factors such as personnel, technology, or rules (Fahlbruch, Schöbel & Domeinski, 2008).

One measure taken to ensure safety is training. A skilled workforce can yield higher productivity, higher motivation and commitment, and increased safety (Salas, Wilson, Priest & Guthrie, 2006b). Training refers to the acquisition of skills that result in improved performance (Patrick, 1992) and is defined as –the systematic approach to affecting individuals’ knowledge, skills, and attitudes in order to improve individual, team, and organizational effectiveness (Aguinis & Kraiger, 2009, p. 452). As Patrick (1992) states, the important point is that –training is more than just learning (p. 2), because training is aimed at improving performance on a specified task, while learning refers to the change in a person’s behavior in response to a particular situation due to repeated experiences in that situation. Training of personnel has become an important factor in organizations as can be shown by the resources spent on training. The American Society for Training and Development estimated that U.S. organizations spent \$134.1 billion on employee training and development in 2008 (ASTD, 2009). A wide range of different training approaches are employed, but on-the-job training and the lecture method remain the most frequently used. More recent training approaches involve computer- and technology-assisted instruction (Goldstein, 1993; Salas et al., 2006b). Furthermore, individual

differences of trainees are of concern in terms of the training design. Training programs need to be designed appropriately to the abilities and the personality of trainees (e.g. Salas et al., 2006b). Despite these endeavors for personnel training in organizations, –the reality is, all too often, that the training an individual experiences is ineffective and fails to transfer back to the workplace (Fincham, 1999, p. 36). In this context, Goldstein (1993) refers to the –training struggle. Most organizations do not evaluate their training programs in order to determine their utility. If training is evaluated, then it is done so by means of collecting trainee reactions at the end of the course. However, to assess whether skills were acquired and whether they transfer to job performance, follow-up measurements on the job are needed. Besides the lack of thorough training evaluations, there is also a lack of training needs assessments through task, person and organization analyses (Dipboye, 1997; Goldstein, 1993).

RESEARCH METHODOLOGY

A desk study was performed of published and grey material. Literature was searched by means of the databases of Publish Media, Human resource line, Management reviews and Business journals, over the period 1996–2006. Relevant web sites were also consulted, such as those of international organizations and institutes involved in research or interventions in performance. Approximately 500 persons with HR experience were contacted.

OBJECT OF STUDY

Measures are deduced from the model of training antecedents, training methods and training outcomes underlying this thesis. Dependent variables were basically the training outcomes, i.e. cognitive, skill-based and affective training outcomes were measured as dependent variables. In Study, however, knowledge measures were assessed as independent variables, in contrast to the other studies. Since the objective of Study is

1. To assess a novel method for structural knowledge assessment, the relationship between knowledge measures and skill-based training outcomes was analyzed.
2. To improve customer service through high-touch yet low-cost exchanges, reduce operational expenses, or improve compliance and security.

SCOPE AND ROLE OF TRAINING PRACTICES IN PUBLIC & PRIVATE FINANCIAL INSTITUTIONS

More services, changing interactions

The explosion in device, service, and data access options presents an opportunity for financial services institutions to engage with current customers more effectively, as well as reach a new generation of customers. At the same time, the proliferation of channels and devices puts more pressure on firms to maintain control of customer information and ensure security. Adding to the challenge, the industry is highly regulated, which can make it not only more difficult for institutions to differentiate their products but also imposes additional reporting and oversight requirements.

While many industries consider IT a support function, it is typically considered the –factory floor in financial services. Consequently, IT constitutes the lion’s share of any firm’s investment and is a vital

leverage point for revenue growth and expense reduction. Considering rising marketing costs, the proliferation of customer options, and the ongoing investment in IT, several strategies have emerged that can help financial services firms compete and grow. Today, institutions must use technological innovations to keep prices competitive and protect margins, drive increased volumes, and promote client retention by providing personalized service through lower-cost channels. And of course, all of this must be accomplished with a focus on regulatory compliance and securing customer and corporate information.

Best practices

Web conferencing tools have become a strategic asset for financial services firms in capital markets and banking—whether their goals are to improve customer service through high-touch yet low-cost exchanges, reduce operational expenses, or improve compliance and security. The following examples illustrate how online collaboration and eLearning solutions from Adobe are enabling institutions to compete successfully in the highly commoditized and regulated financial services market.

Secure, Regulatory-Compliant Internet Banking

Many firms are realizing that there is a strategic opportunity to use Adobe® web conferencing solutions to revamp the way they engage customers and improve margins. Increasingly, digital channels, such as online and mobile, are becoming the preferred method for customers to interact with a provider's products and services. Several institutions are adopting Adobe Connect™ web conferencing to interact with customers in a high-touch, secure environment where control over information is a priority. Institutions are deploying Adobe Connect using on-premise servers to maintain control over customer information, ensure authentication of participants, and eliminate concerns about sharing customer data and computer screens. With Adobe web conferencing solutions, institutions can maintain audit logs and manage and limit the data uploaded to servers, thereby streamlining compliance reporting and promoting enhanced security.

Boost account enrollment, improve customer service, and reduce costs with the proliferation of financial services offerings, customers often find it difficult to understand their options and determine the best fit for their needs. They may not be fully aware of which services will benefit them most, and they may find it challenging to sign up for new products or complete transactions without assistance. At the same time, in today's busy world customers rarely have the time to sit down with financial services advisors in person. In addition to often being inconvenient for customers, in-person consultations are typically labor-intensive propositions for financial institutions. Yet, financial institutions know they cannot simply replace costly call center and in-person interactions with self-service applications; the demand for personal service is still high. Their challenge is to help ensure that each customer gets the level of service he or she needs and that it is adapted to every customer's personal preferences and unique situation.

Several institutions have chosen rich web conferencing solutions with collaborative features such as instant messaging and screen sharing to interact and engage with customers in meaningful ways. These dynamic solutions provide live, personalized, and intuitive customer experiences that boost customer loyalty and increase enrollment in new services while reducing operational expenses. Web

conferencing tools can help firms build sustainable customer relationships by delivering exceptional customer interactions that increase satisfaction, reduce costs, and create market differentiation.

BNP Paribas, a leading European financial services firm, is providing a videoconferencing and screen-sharing solution based on Adobe Connect that enriches its business and its client services. Called Net Savings, the service provides recommendations for savings and other financial products and enables clients to perform transactions on the bank's website, helping clients register or complete transactions online.

–With Adobe Connect, our advisors can remotely control a client's screen to help them do what they want to do. For example, if a client wants to buy a stock, the advisor can conduct an interactive demonstration on the client's screen so he can see exactly what needs to be done, explains Laure de Tilly, head of online development operations at BNP Paribas, Retail Banking. For BNP Paribas, their initial success in the retail banking group with Net Savings has been so successful that the program is being expanded throughout the organization. –Our conversion rate for Net Savings is 100%. When clients are assisted, they always buy the product or finish the transaction, says de Tilly.

Build trust and loyalty

Providing high-touch customer service and establishing trust is imperative for financial services firms. Unfortunately, the reality is that conducting one-on-one, in-person meetings across large volumes of customers are rarely feasible in an industry with razor-thin margins. Today, there are new ways to provide differentiated, personalized customer service and make clients feel confident conducting large transactions, all while controlling costs. One major investment firm with 1,300 branch offices is using Adobe Connect web conferencing software to conduct one-on-one meetings over the Internet to help build ongoing trust and provide differentiated services. Prior to adopting Adobe Connect, each of the branch offices had used proprietary videoconferencing solutions that were expensive to operate and maintain. By switching to high-quality web conferencing tools that support video without the expense, the firm is cultivating stronger client relationships. The institution discovered that high-quality web conferencing solutions are a successful alternative to in-person meetings for building client trust.

Meet compliance training requirements

Meeting today's increasingly complex regulatory environment calls for comprehensive, mandatory training. Regulations are constantly in flux, making it imperative to keep staff up to date. With mandatory compliance training across dispersed and diverse workforces, organizations can struggle with the costs and complexity of required trainings. One large investment firm uses Adobe Connect to create a complete eLearning environment for on-demand and live training, as well as a tracking dashboard that is integrated with a human resources learning management system. The dashboard enables employees and managers to track which sessions individuals have completed to ensure that training requirements have been met and support compliance auditing. The solution enables easier compliance with regulatory training requirements as well as tracking training schedules, attendance, and test results across a global training portal. Another firm, Allianz SE, is using Adobe eLearning tools across the organization for employee training. To simplify training delivery, Allianz uses Adobe Connect as a complete eLearning environment for on-demand or live training that scales easily to support the company's global workforce. –Training can be costly and time consuming, says Katja

Ruisinger, manager of eLearning services at Allianz SE, the holding company of Allianz Group. –Stricter organizational processes are making it more difficult for employees to find time for training. E-Learning with Adobe Connect makes it possible to bring training and education to the workplace and deliver it worldwide at any time.¶

Deliver value-added services

Thomson Reuters is one of the world's leading providers of subscription-based information services for financial services institutions and professionals. As part of its services, the company provides free, value-added training to 500,000 financial clients worldwide. The company is one of the world's largest commercial training organizations with 300 trainers around the globe. In 2009, the company supported 560,000 training interactions. Thomson Reuters had been using a web conferencing and eLearning tool that was expensive and required clients to download specialized software. The company decided to move to Adobe solutions so that it could make its training more interactive and media-rich and enable clients to participate in training without cumbersome software downloads. Using web conferencing enabled Thomson Reuters to expand client access to the firm's top financial experts by eliminating unnecessary travel, but still maintaining an engaging, personal experience.

Workplace Learning

The training and development function in banks is transforming in several fundamental ways. First, as training and development budgets come under increased scrutiny, much of the responsibility for improving job performance and enhancing career potential rests with the employee and not the training organization. The one-time practice of the bank accepting full responsibility for the long-term development of employees is rapidly disappearing. That trend is expected to continue until employers fully understand the important linkage between the training and development investment and business performance.

Business unit managers who view workplace learning as key to employee performance will support programs that promise measurable results. Therefore, more and more learning programs are linked to measurable performance outcomes—for a position, a business unit, or the overall organization.

At the same time, training departments are being assigned greater responsibility for helping business units achieve performance objectives and business results through various learning strategies. To support the learning needs of employees and their sponsoring business units, training professionals are assuming the roles of learning and performance consultants and are spending relatively less time as classroom training presenters. In these new roles, training professionals are becoming much more concerned about the accessibility of the appropriate mix of learning resources for employees who are assuming greater personal responsibility for their own professional development. Increasingly, superior performing employees are also active learners and, in many cases, self-directed learners. To a large degree, the emergence of the self-directed learner in banking has been driven by the widespread adoption of online learning technologies, which accommodate employees' personal and professional schedules as well as their learning needs and preferences.

The Business Case

Because the value of the workplace learning investment to business performance is not completely understood, training budgets are often at risk, especially when the underlying business case for the

learning activity is not a clear and compelling one. That is, without a sound business rationale, there is no way to determine how a specific program supports business strategy and goals, its priority relative to other such initiatives, or its intended business impact. As a result, the learning activity is often seen as an isolated, unjustified expense. To connect with the ultimate economic decision-maker, the business rationale must reflect the strategy and goals (as well as language) of the business unit or overall organization.

The key to building a business case begins with empirical evidence that identifies gaps in the current state of performance (relative to the desired state) with respect to a specific job, a group of employees, certain critical processes, or some other business situation. Moreover, a business case without the appropriate quantitative analysis is not credible. A cost/benefit analysis is essential, and a formal evaluation should be planned that attempts to assess learning gains, performance outcomes, and ultimately, business impact.

Managing Resources

A growing body of evidence (McBassi et al.) suggests that if firms invest optimally in people, then the return on that investment would rival the returns on other forms of investments. But such investments must be made wisely—in line with business objectives and in ways that increase the amount of relevant training employees receive for the dollars invested.

Investing sensibly also means accessing learning resources that generate the greatest possible return for the bank. Often, this is accomplished by leveraging learning technologies. For example, the scalability of online courses presents significant cost advantages in providing learning opportunities to large numbers of employees in comparison to sending relatively fewer individuals to higher-priced programs. Virtually all banks –outsource^{ll} part of their training and development effort as a complement to what can be (or should be) done internally. The decision to outsource is not always a simple one. It is based on a number of considerations, such as business priorities, corporate culture considerations, costs and budgetary considerations, internal training capabilities, the timing or urgency of the training, and the magnitude of the training initiative itself.

Outsourcing aspects of the training and development function typically enables the organization to manage costs more effectively, allows for faster turnaround of training, and stabilizes staff resources. Often, based on the reputation of the vendor, outsourcing a program may also add significant credibility to a training offering. However, outsourcing costs need to be managed carefully. When outsourcing the financial stability of the vendor must be considered. This is especially true for relationships with e-learning providers, because online technology is evolving, particularly with respect to learning management systems.

Leadership

As the transition continues from organization-directed training to employee-centric learning, business practices and cultures are evolving to keep pace. This requires a leadership commitment at the highest levels of the organization. Leadership plays an essential role in transforming learning into performance motivating, inspiring, and enabling others to learn and perform as expected. Because of their formal leadership responsibility, the CEO and other bank executives must clearly demonstrate their ongoing support for the learning activities of self-directed learners and the organization in general. For more formal training programs, bank executives need to reinforce key elements of the

business case: the purpose of the learning initiative, what is expected to be accomplished, the business rationale, and the overall benefits to the individual, business unit, and organization. In turn, business-line managers and supervisors should reinforce those messages with employees. This is especially important during implementation of major learning initiatives, such as the launch of e-learning within the bank. Just as the training function is evolving, so has the composition of the team responsible for employee learning and development. No longer is workplace learning the sole responsibility of the training department. Instead, a broader support team, including training and development personnel, executive staff, managers, and even the outside learning partners, shares responsibility for effective workplace learning. Managers need to work closely with training professionals (learning consultants) to ensure that business objectives are aligned with specific learning activities. Furthermore, managers and learning professionals should share responsibility and accountability for the performance results expected through the learning intervention. Managers may have their greatest impact on the learning process as coaches. Coaching is critical in helping employees apply newly acquired knowledge and skills to the job and in reinforcing desired behavior (i.e., performance). With the significant increase in outsourcing and other business arrangements occurring today in workplace learning, vendors are playing an even more significant role. Training personnel should work closely with vendors not only to ensure that learning objectives are adequately addressed, but also, for business and culture reasons, to integrate bank brands, practices, and approaches into vendors' programs. In addition to collaborating with CEOs, other executives, managers, and outside learning partners, chief learning officers need to influence others in the organization to support the values of a learning organization. For example, CLOs must help HR personnel understand that learning effectiveness begins with having the right person in the right position, supported by a capable manager-coach, and provided with the right mix of incentives that will drive learning and ultimately personal and organizational performance.

CONCLUSIONS OF SUMMIT PROCEEDINGS

More than others, chief learning officers understand that investments in employee learning and development lead to improved financial performance of banks through gains in quality, productivity, and customer satisfaction among other underlying business drivers. But to ensure that happens, CLOs have a significant leadership responsibility (and opportunity) to see that workplace learning and development dollars are spent in ways that support business goals and yield the greatest return to the organization, while allowing the employee to take advantage of an array of learning resources to improve individual performance and grow professionally. CLOs understand how to unleash employee capabilities and achieve business objectives through learning. Through their deliberations at the Financing Chief Learning Officer Summit, they have shared their unique perspectives with the rest of the industry, which should help banks leverage the workforce of today in securing a profitable and successful tomorrow.

FUTURE SCOPE

The independence of skills in system control and fault finding was replicated in all experiments. This is crucial information for training. One needs to consider the independence of the two tasks and the

findings of the studies in different phases of training design and delivery. Following the training phases by Salas et al. (2006b), the following suggestions are made:

- In the training analysis phase, training objectives and cognitive requirements should be elaborated separately for fault finding and system control.
- In the training design phase, the focus should be on operator characteristics that influence learning outcomes in process control tasks differently. However, the trainability of operator characteristics is limited. Nevertheless, insights into essential operator characteristics can guide decisions in selection
- For example, in order to answer the question: Who will be most likely to succeed in a training program?
- In training development and delivery, training should contain parts especially designed for enhancing fault finding skills and system control performance. For fault finding of practiced fault states D&P and for fault finding of novel fault states, EST combined with situation awareness training is suggested. System control during practiced faults can be supported with EST, while EST combined with situation awareness training supports system control during novel faults.
- In training evaluation, it will be important to cover different facets of learning and knowledge as training outcomes, as they are related differently to the main tasks of process control.

REFERENCES

Bassi, L. and McMurrer, D. –How’s Your Return on People?|| Harvard Business Review. Boston,MA: March 2004, Volume 82, Number 3., p. 4.

American Society for Training & Development, Inc (Sugrue, B., ed.). 2003 State of the Industry. Alexandria, VA: 2003, p. 23.

American Society for Training & Development, Inc. Press Release: Investing in Workforce Training Improves Financial Success. Alexandria, VA: September 2000.

Bassi, L., McGraw, K. and McMurrer, D. White Paper: Beyond Quarterly Earnings: Using Measurement to Create Sustainable Growth. Atlanta, GA: McBassi & Company, September 2003.

American Society for Training & Development, Inc. White Paper: Measuring What Matters: Core Measures of Intellectual Capital. Alexandria, VA: 2000.

National Association of Colleges and Employers. Press Release: New College Grads Seeking Employers with Integrity. Bethlehem, PA: March 2004.

Ackerman, P., Kanfer, R. & Goff, M. (1995). Cognitive and noncognitive determinants and consequences of complex skill acquisition. *Journal of Experimental Psychology: Applied*, 1, 270– 304.

Aguinis, H. & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organizations, and society. *Annual Review of Psychology*, 60, 451–474.

Altstötter-Gleich, C. & Bergemann, N. (2006). Testgüte einer deutschsprachigen Version der Mehrdimensionalen Perfektionismus Skala von Frost, Marten, Lahart und Rosenblate (MPS-F). [Psychometric properties of a German version of the multi-dimensional perfectionism scale by Frost, Marten, Lahart and Rosenblate (MPS-F)]. *Diagnostica*, 52, 105–118.

ASTD. (2009). 2009 State of the industry report. Alexandria: American Society for Training and Development. Badke-Schaub, P., Hofinger, G. & Lauche, K. (2008). Human Factors. Psychologie sicheren Handelns in Risikobranchen [Human factors. The psychology of safe behavior in risk organizations]. Heidelberg: Springer.

Bainbridge, L. (1983). Ironies of automation. *Automatica*, 19, 775–779.

Brand, M., Fujiwara, E., Borsutzky, S., Kalbe, E., Kessler, J. & Markowitsch, H. (2005). Decision-making deficits of Korsakoff patients in 128 a new gambling task with explicit rules: associations with executive functions. *Neuropsychology*, 19, 267–277.