



IBM Global Services

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e-learning and the transformation of IBM

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Session Abstract

- IBM's transition as a company from its early 1990s image of a tired old dinosaur, to today's forward thinking, technology leading, services driven company, has been one of the most remarkable corporate transformation success stories of recent times.
- There are many elements behind this transition, but one was the role by IBM's re-focussed approach to human capital management and the accompanying internal skills and training programs. This included the adoption of e-business technologies and a major shift to e-learning as a strategic delivery vehicle for skills development. Today, over 40% of IBM's internal training program is delivered by e-learning, saving the company over \$350M (US) each year.
- Learning has become mission critical for IBM. In the words of our recently departed CIO, Lou Gerstner, "I believe that in this networked world the single greatest factor separating winners and losers in all industries and in fact, in all societies, will be the ability to use information and build a culture based on knowledge and the ability to learn."
- In this session, the speaker will outline the transition of IBM's skills development and e-learning processes, cover IBM's strategy to learning and discuss the adoption of e-learning techniques as a core component. To demonstrate IBM's approach, the speaker will focus on the transformation of IBM's management training programme and the role played by e-learning.



In the 1990s, IBM transformed itself from a primarily hardware manufacturer to a services driven organisation. This change required a rebuild and re-skilling of our employee base.

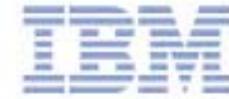
■ Drivers for change

- Executive led drive to services organisation
 - ▶ Rapid change in skills requirements
- Increase in staff turnover
 - ▶ In 2001, IBM hired 27,116 people worldwide and 23,584 left.
 - ▶ IBM *still* needs to continually re-balance our workforce to meet changing marketplace demands.
- Geographically disperse population
- Cost to Revenue problems of early 90s
- Technology advances provide an opportunity

■ 325.000 employees worldwide, with projected revenue > \$80B in 2002

- 150.000 employees in Global Services
- business operations in 164 countries
- IBM Global Services revenue totaled \$ 33.2 B in 2000
- IBM is the largest business and technology consultancy
- IBM Global Services has grown in 10 years from \$4B to \$33B

■ By 2002, IBM had moved 43% of its employee training to e-learning



IBM is not alone having to deal with an employee skills issue. Businesses today face serious challenges on skills and training if they are to survive.

■ Find the right employee

- 70% of CEOs cite finding and retaining skilled employees a serious problem

■ Retaining top employees

- 44% of workers with **poor** training opportunities look for a new job within a year vs. 12% with **excellent** opportunities

■ Finding new employees costs companies dearly

- On average it takes at least \$125,000 to replace an IT worker (USA)

■ Keep skills current

- Skills - 50% of IT employee's skills become outdated in less than 3 years
- 70% of employees knowledge comes from informal means

■ Training is a key factor for a new employee

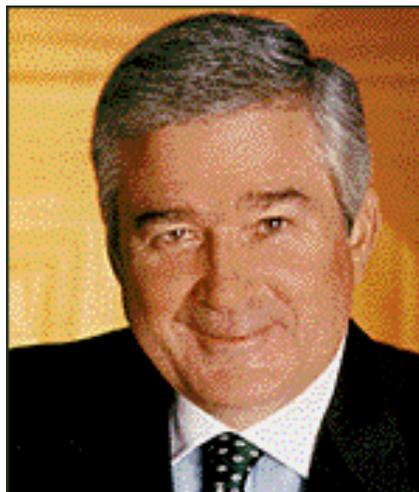
- learning and educational opportunities are a factor for new associates in selecting their next company
- 5 out of 7 recent college graduates rank educational opportunities over starting salary when selecting a first employer

* Source: IDC, Forester



The focus on learning within IBM is a priority that comes from a deeply held belief of our CEO.

I believe that in this networked world the single greatest factor separating winners and losers in all industries and in fact, in all societies, will be the ability to use information and build a culture based on knowledge and the ability to learn.



Lou Gerstner
Chairman of the Board and Chief Executive Officer
IBM Corporation
San Francisco, Thursday, Oct 12 2000



Employees need to be shown a career path within the company, together with the skills and competencies required to progress through all levels in their career.

Where we were

■ Process

- Country based administration
- Manager heavily involved with administration process
- Education records held on paper in employee file

■ Culture

- Employee Skills Development responsibility of the Manager
- Education was hard to come by
 - ▶ Budgets, Demand, Time out of office
- ... leading to employee dissatisfaction
 - ▶ 'What do I want to do' rather than 'What do I need to do'

■ Delivery

- Self Study via books / self-study texts (10-20%)
- Classroom (80-90%)
- Minimal use of CBT

■ Organisation

- Education activities delegated to major countries

Where we are

■ Process

- Administration and Management on a Global basis, achieved via an Intranet Solution

■ Culture

- Businesses responsible for Investment and ROI
- Responsibility for Skills/Education planning and execution transferred to employee

■ Delivery

- New 4-Tier Learning Model incorporating e-Learning as a delivery method
- 43% now delivered by e-learning

■ Organisation

- Global Education Organisation covering all aspects of Education with no more than one development/delivery organisation in each country, with centralized administration

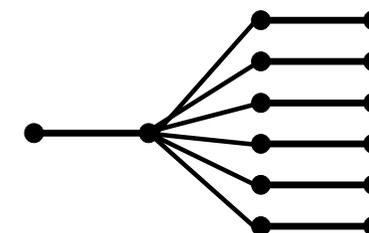


Employees need to be shown a career path within the company, together with the skills and competencies required to progress through all levels in their career.

IBM recognizes Professions in Sales, Services and Marketing



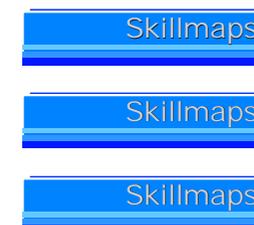
Career paths are mapped out for all professions



Core skills are defined for all stages in a career path



Specialised skills are defined and driven by business needs

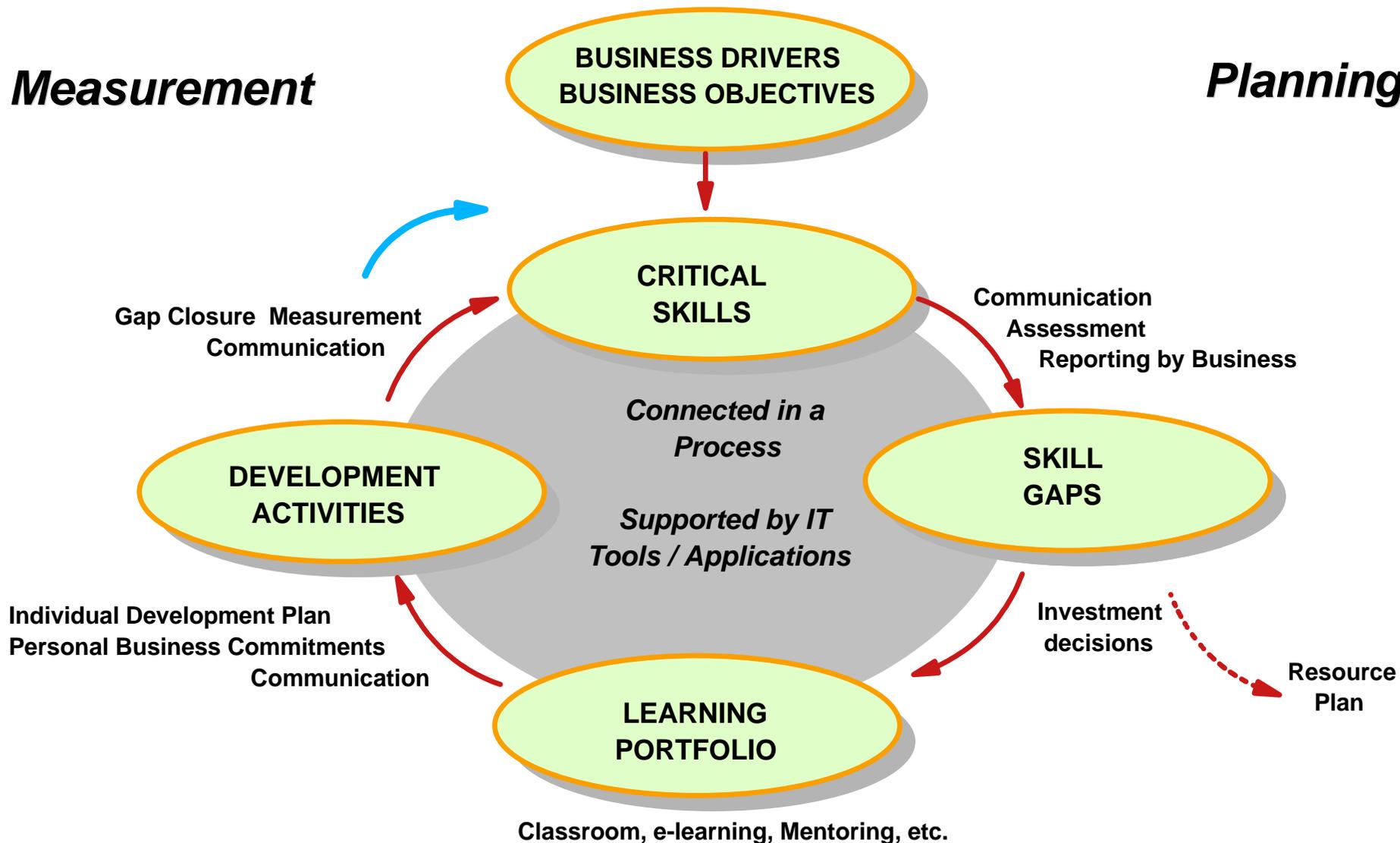




Roadmaps, Professions and Skills are all defined and integrated in IBM's implementation of a Skills Management Cycle.

Measurement

Planning





Personal skills and career guidance are all linked through the HR website.

■ Global Repository of career information

- Eliminates redundancy and inconsistency
- Transforms learning culture
- 500k hits in quarter

■ Include skills profiles and recommended training programs

- Multiple roadmaps
- Career paths
- Industry specific
- IBM Offerings
- Core Skills

The screenshot shows the IBM Human Resources CareerPlanner website. The top navigation bar includes 'Home', 'Site Map', 'Help', and a search box. A main banner features a woman climbing a ladder with the text 'Help your career grow.' Below this, there are several sections: 'What's Inside' with sub-sections for 'Information' (Favorites, General, Careers, Organizations, Geographies) and 'Actions' (Skills, Dev Plan (IDP), Mentoring, Roadmaps); 'Roadmap Index' with sub-sections for 'Careers' (Consultant, HR, IASBC, Marketing, Project Management, Sales, Security, Supply Chain), 'IBM Offerings/Solutions' (eServer Manager, iSeries & AS/400, pSeries & RS/6000, zSeries & z/OS, Storage, xSeries & Netfinity, Personal Systems, Printing Systems, Unix, e-Business), 'Skills' (Client for e-business, High Performance Selling (HPS), Signature Selling Method (SSM), MFM), 'Industries' (Aerospace and Defense, Automotive, Banking, Chemicals and Petroleum, Computer Services Industry (CSI), Consumer Packaged Goods, Education, Electronics, Financial Markets, Government, Healthcare, Insurance, Media and Entertainment, Net Generation, Retail, Telecommunications, Travel, Transportation, Utilities, Wholesale & Service), and 'Organizations' (S&D Critical Skills, PSS, Sales Competencies, S&D Manager, S&D Technical Sales Support). A 'What's New?' section highlights 'Personal Skills Update' and 'Mentor'.



IBM's Learning Strategy needed to support the company's new business imperatives and integrate with the HR performance management model.

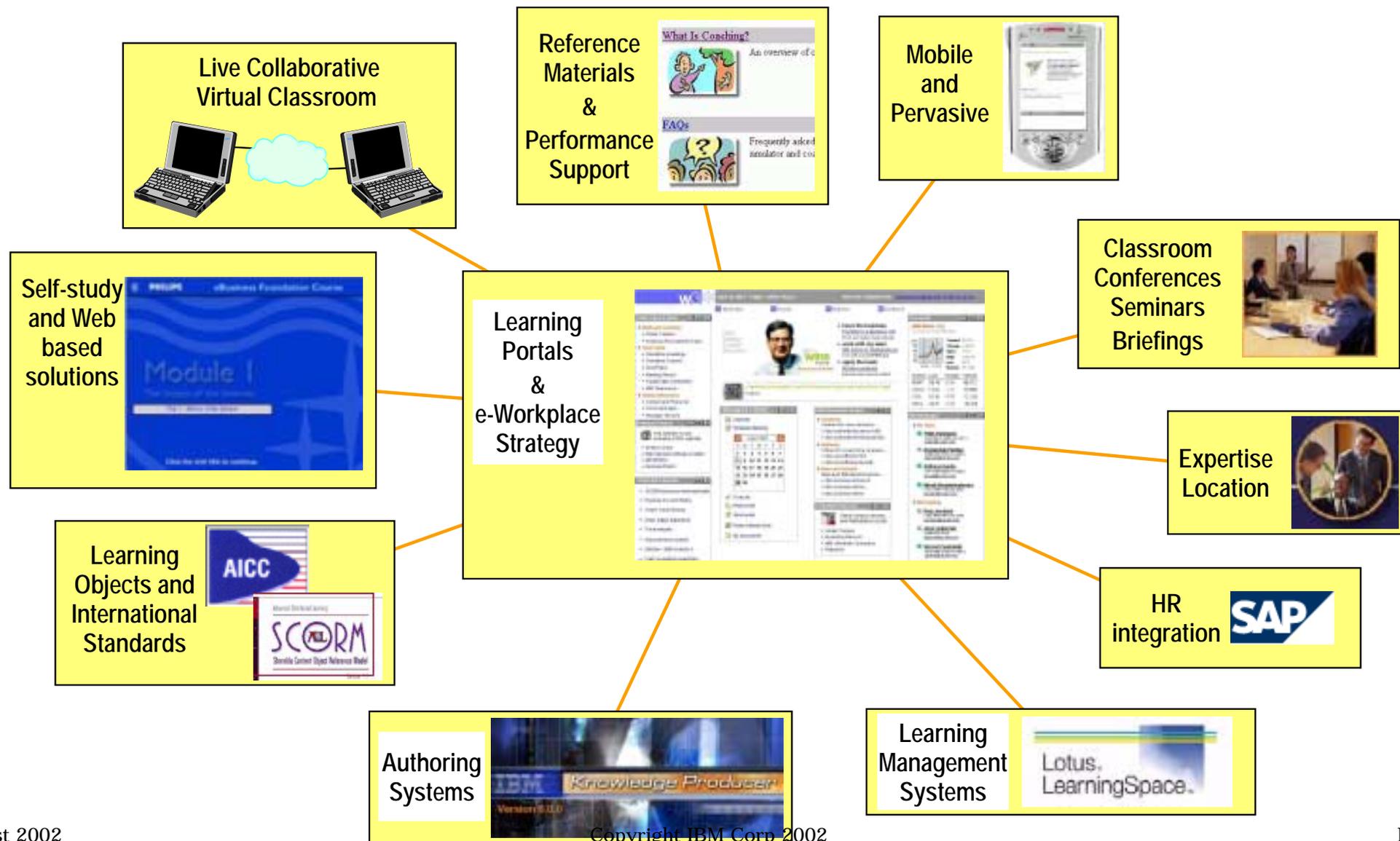
Our vision for IBM is to be an environment where it is easy for employees to learn what they need, when they need it and apply their knowledge, understanding, and experience for their own benefits as well as IBM's

Goals for learning

- ★ Leverage our intellectual capital in order to grow our knowledge base
Enable collaboration among employees
- ★ Speed the transfer of knowledge so we can solve business problems faster
Increase the speed of availability of knowledge to employees, business partners and customers
- ★ Ensure that learning solutions reach the target audience and meet their needs in order to get the desired results
Employ the right technologies
- ★ Link learning with business results
Measure by business results and personal outcomes



Our Vision of learning has to go beyond the traditional classroom and embrace new technology and new forms of learning





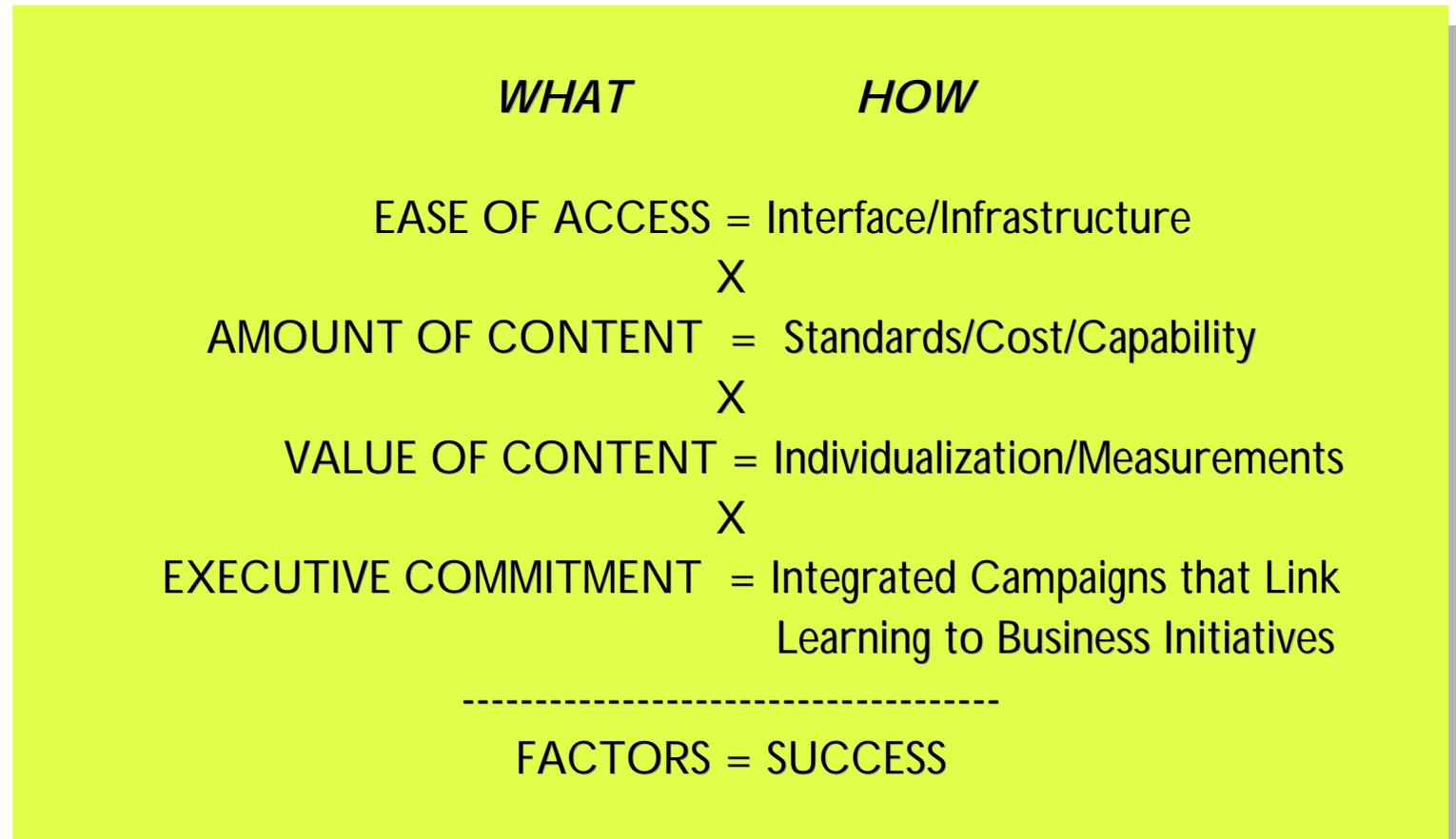
Four "propositions for e-learning" were used to shape our vision

- **Position e-Learning as a board room discussion and corporate mission enabler of the highest order**
 - Position e-learning as a mission enabler that attracts and retains world class talent
 - Build communities of expertise that continue to learn from each other to support company brands
 - Build e-learning campaigns that align with objectives of corporate business initiatives



Four "propositions for e-learning" were used to shape our vision

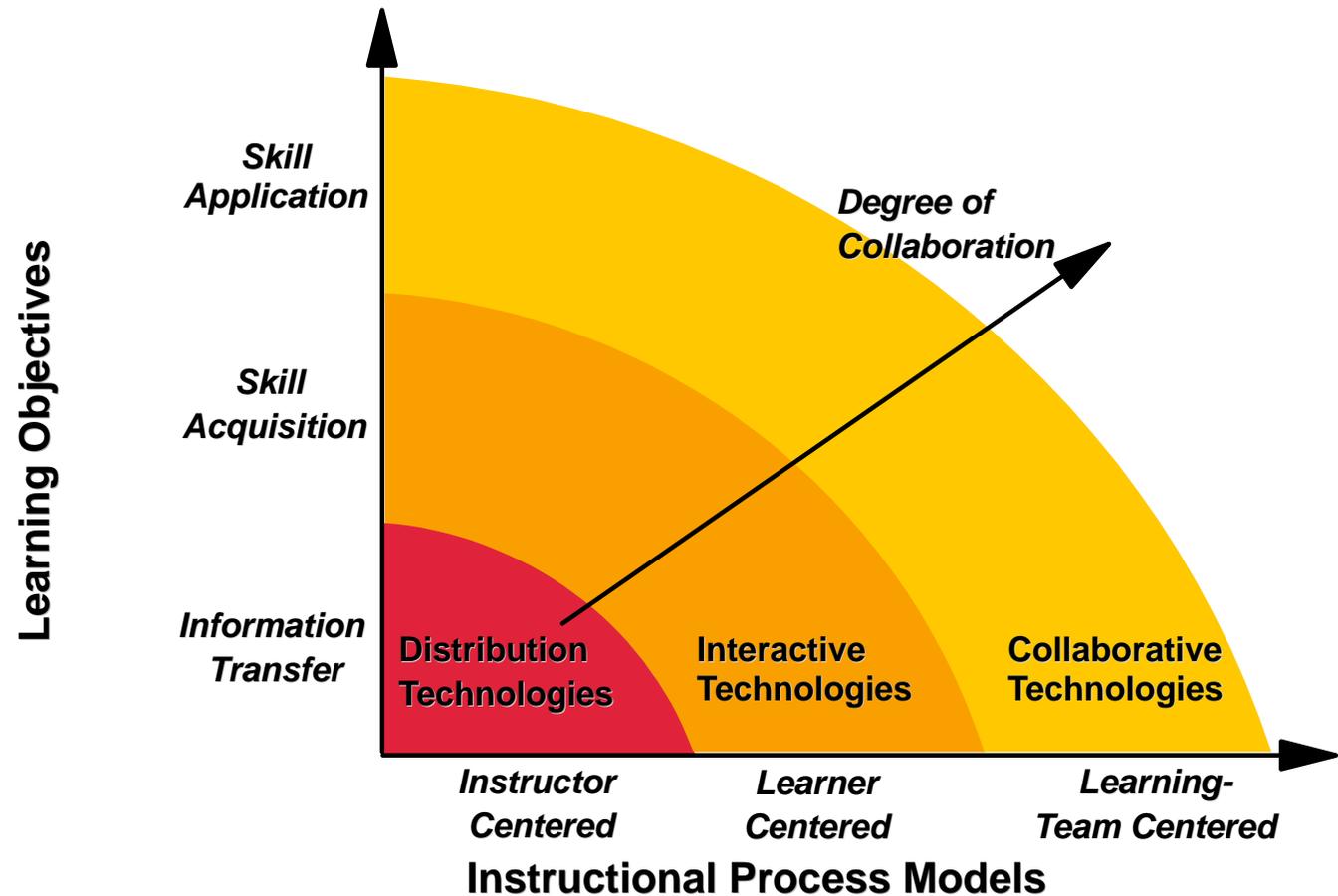
- The solutions we build must entice an elusive audience through a compelling experience that makes them want to come back





Four "propositions for e-learning" were used to shape our vision

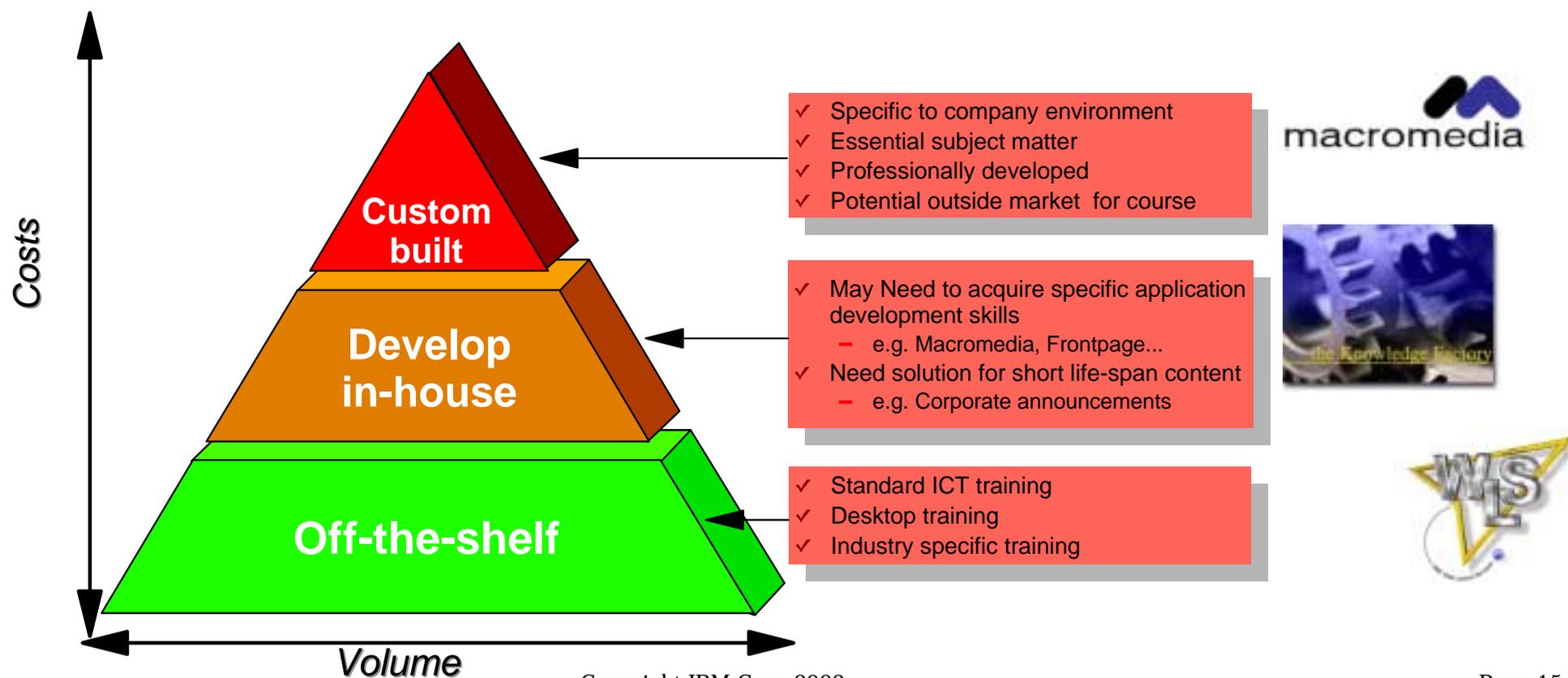
- In order to drive progress, e-Learning needs to increase the number and density of inter human connections, regardless of how those take place





Four "propositions for e-learning" were used to shape our vision

- We must have aggressive content strategies that find the right balance of production values, learning effectiveness, and impact on available resources
 - Delivery method selection is as important as instructional design, and requires integrated content solutions





Web Lecture Services is IBM's solution for simple, self-service e-learning content development

■ Quick start on e-Learning Content

- Self-service e-Learning development
 - ▶ Auto-Transformation of presentations to web format
 - ▶ Self-record audio
 - ▶ Multiple language support
- Hosted or in-house solutions

■ Three customised services

- Corporate University
 - ▶ Full AICC tracking, administration and personalised workspace
- Corporate Seminars
 - ▶ Organised suites of web lectures
- Library



Our approach to custom content development has been develop a low-cost factory based model: The Knowledge Factory.

■ Customised e-Learning content development

- World-wide content development network
- Focussed on solving customer specific training issues

■ Role based development model

- Closely links methodology with toolset
 - *Project Managers, Instructional Designers, Scriptwriters, Graphic Artists, Multimedia Specialists, Courseware Engineers*

■ Common processes and methodologies

- ADDIE design and development model
- Structured and phased documentation and storyboarding

■ Common tools

- Industry standard
 - e.g. Macromedia
- Developed in-house
 - ***Knowledge Producer***

curso
BSCH

Base de datos
de personas

Menú

Seleccione el módulo que quiere ver.

Instrucciones

Alta de Persona Física

Consulta de Persona Física

1 de 1

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For learning to be driven by employees, an e-learning portal, focussing on ease of use, is a key element of any deployment strategy

- **Over 2,000 e-learning courses offered worldwide in a variety of languages (60+ countries)**
 - IT products/technologies, professional development, services methods
- **250,000 registered students**
- **Classroom and e-learning courses on a wide variety of technical/professional topics**
- **Complete course catalog including roadmaps, with browse & search**
- **Provides single classroom schedule and enrollment request vehicle**
- **Multiple delivery methods including WBT, CBT, classroom, Notes, LearningSpace and satellite**



- ★ **Corporate University Xchange Award**
 - ★ **Best use of technology for learning**
 - ★ **Best linkage to skill development**



Success factors and Lessons Learned from our transformation to an e-learning organisation guide our strategy and future development.

■ Success Factors

- Aligned to business initiatives
- Established based on a common skilling process
- Leverage common global infrastructure
- Executive sponsor for each program
- Cost savings goal and flexibility for the employee was just the first step - we are now focussed on *learning effectiveness* and *applied business results*

■ Lessons Learned

- Individual Responsibility for Skills/Education Plan leads to greater thought on career direction, and thus education requirements
- Line Management was instrumental in driving through the required Culture Change
- e-Learning is not an end in itself but part of a total solution
- It is essential that the right delivery method is chosen for an education module
 - ▶ ***The IBM 4-Tier Learning Model***
- Although Centralization can lead to greater productivity, greater uniformity and savings, it also introduces new problems.



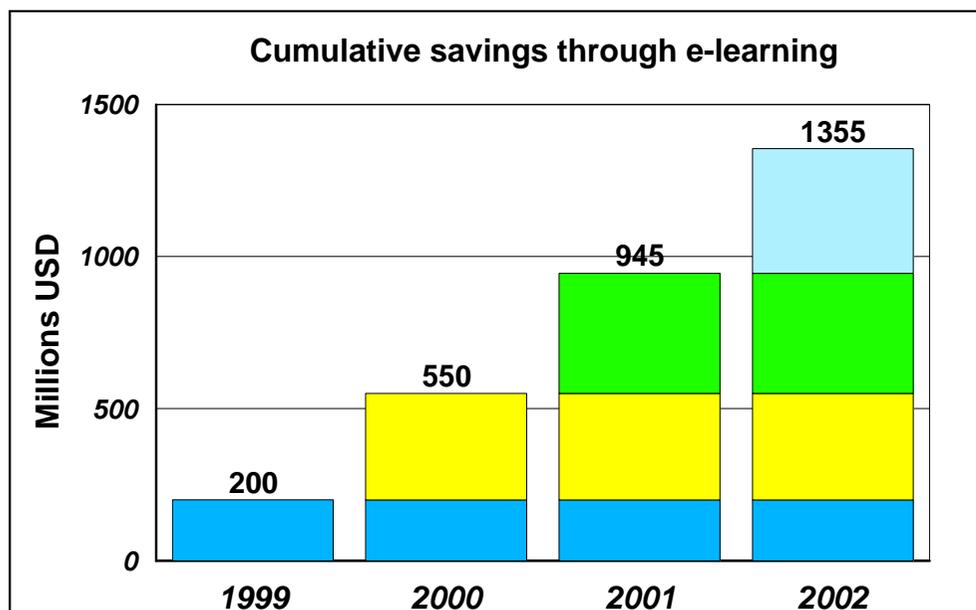
IBM's savings in cost avoidance through e-learning represent a significant benefit to the company. Intangible benefits are equally important.

Tangible benefits

Year	1999	2000	2001	2002
Savings (M USD)	200	350	395	410
Percentage e-learning	26%	36%	43%	43%

Intangible benefits

- Reduced learning time - avoid day-long classes, learn just the material you need, when you need it
- Extended out of office period eliminated, employees available on the job
- Busy employees won't be putting off learning/skill building because they can't afford the extended time away from the job.
- Knowledge/skill building is available immediately when needed - don't have to wait for a class to be scheduled
- An employee is likely to turn to e-learning on their own time
- Learning at one's own pace means everyone learns more efficiently
- Changing the culture - Learning at the desktop in real-time





Our experiences in selecting the right delivery method for the learning content resulted in our blueprint for learning delivery : The IBM 4-Tier Learning Model.

The IBM 4-Tier Learning Model

<i>Learn through Collocation</i>	Experience Based Learning	Face-to-Face
	Learning Labs, Classroom, Mentoring, Role Playing, Coaching, Case Studies	Get together, Build Communities & Relationships, Live it, Do it
<i>Learn from Collaboration</i>	Collaborative Learning	Collaborative
	Live Virtual Classroom, e-Labs, Collaborative Sessions, Real-time Awareness, Live Conferences, Teaming	Discuss it, Practice it with Others
<i>Learn through Interaction</i>	Interactive Learning, Simulation & Games	Multimedia
	CBT/WBT Modules, Self-Directed Learning Objects, Interactive Games, Coaching & Simulations	Examine it, Try it, Play it
<i>Learn from Information</i>	Performance Support & Reference Materials	Internet
	Web Lectures, Web Books, Web Conferences, Web Pages, Videos	Read it, See it, Hear it

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The Management Development Program is an excellent example of the use of the 4 tier learning model and IBM's philosophy in its PD Program

■ Integrate learning into the managers role

- Implement corporate learning as a system and process
- Use teaming and collaboration to enhance understanding of concepts and help apply concepts on the job

■ Provide an offering for all New Managers

- Provide a wide range of content
- Add a diversity/multicultural facet for managing many different types of people

■ Leverage technology

- Technology can reduce costs
- Technology can enable access worldwide
- Technology can make content available when learners need it

■ Provide flexibility in the design of the offering

- Make the offering modular to meet the needs of each customer



IBM has selected content in these themes for a comprehensive MD solution

Management Fundamentals

- The First 30 Days as a Manager
- Role of the Manager*
- Setting Goals*
- Meeting Management
- Delegation

Coaching

- Motivation*
- Influence and Leadership*
- Coaching
- Coaching Simulator
- Mentoring

Leadership

- Role of the Manager
- Setting Goals*
- Motivation*
- Influence and Leadership
- Decision Making 1
- Decision Making 2
- Managing Breakthrough Thinking Simulator

Staffing

- Keeping Good Employees
- Retention
- Retention Simulator
- Retention Action Plan

Teamwork

- Stages of Team Development
- Group Dynamics
- Team Communications
- Code of Conduct
- Setting Goals*
- Teams and Team Leadership Simulator



Content is presented in three phases

Phase 1 : Concepts and Practice

- Quickviews
- Simulations
- Mastery Tests
- Simple Collaborative Activities

Phase 2 : Integration

- Learning Lab

Phase 3 : Applied Learning

- Quickviews
- Simulations
- Mastery Tests
- Action Plans
- Team-based Collaborative Activities

Collaboration with 2nd Line Manager

Facilitation by MD Tutor



Quickviews provide a wide range of topics covering the basic concepts of management

■ More than 100 Quickviews

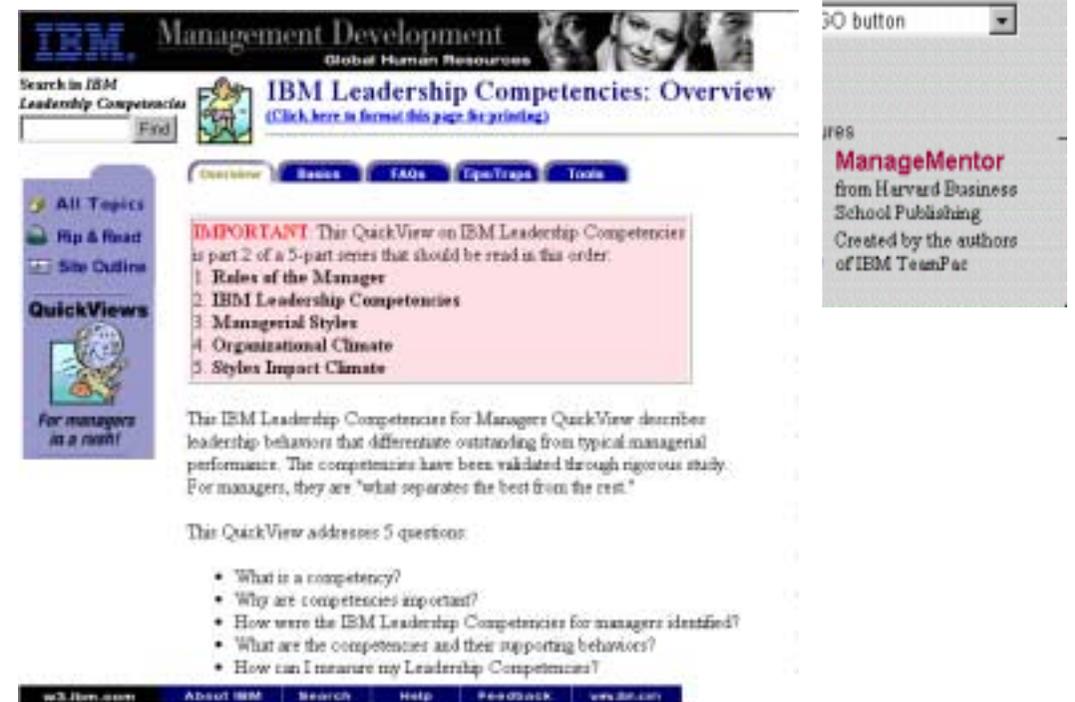
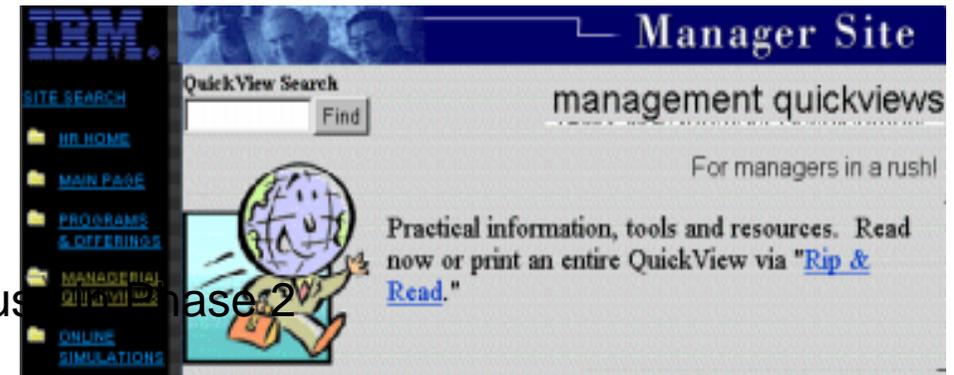
- Researched by 26 global MD teams

■ Designed for anytime, anyplace learning

- Elective topics for managers to tailor their learning
- Provides foundation information for Learning Lab use phase 2

■ Features

- Use on screen or "Rip & Read"
- Hot links to related customer-hosted content
- Basics Sections give a summary of the topic
- FAQs Section offer the benefit of others exp
- Tips & Traps Section provide shorts and wa





Tier 2 Role-play Simulators build skills in key areas of management

■ Simulators:

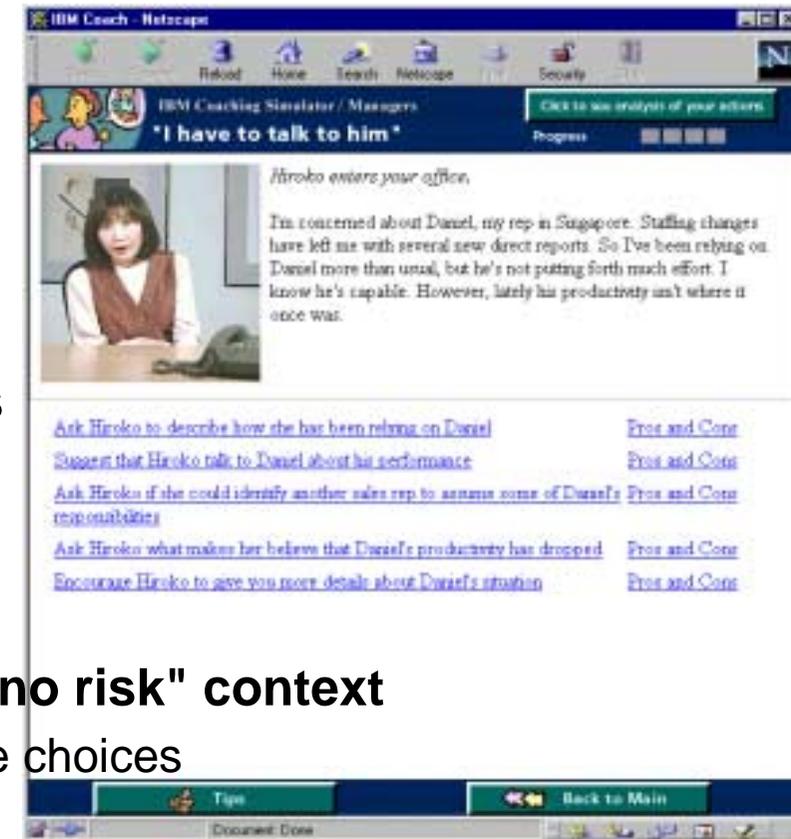
- Coaching
- Retention
- Managing Breakthrough Thinking
- Teams and Team Leadership
- Multicultural Simulator (planned)

■ Simulation engine stimulates thinking about choices

- Multiple scenarios
- Web-based
- e.g. Coaching simulator: 5000 branches

■ Features a focus on "real-life" decision-making in a "no risk" context

- Pros and Cons provide learners with a balanced view of the choices
- Tips help guide learners to decisions
- Progress indicator shows learners when they have selected actions that are good coaching techniques





It is all about people and learning together ...



Questions?
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