



HMC Enablement Evaluation

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Agenda

- Purpose of the Evaluation
- Evaluation Methodology
- Organizational Context
- Enablement Providers
- Target Audiences
- Instructional Materials
- Gaps Identified
- Recommendations
- Conclusion

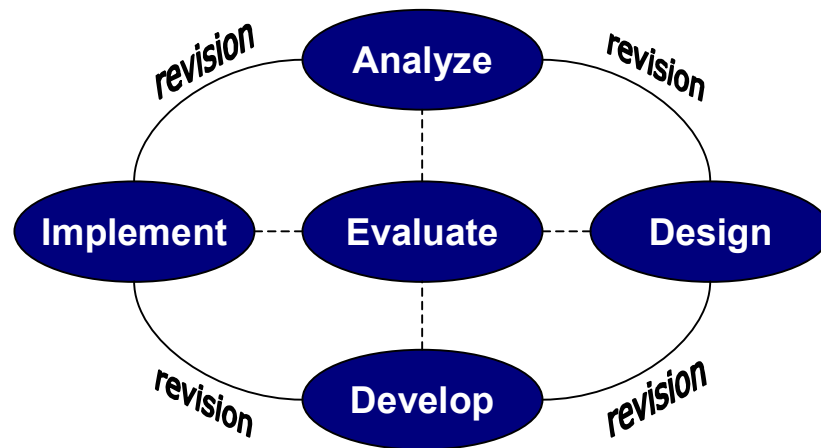


Purpose of the Evaluation

- Responsive evaluation of Hardware Management Console (HMC) enablement
- Identify gaps between what currently exists for HMC enablement and the needs of the target audience

Evaluation Methodology

- Combination of summative evaluation and analysis phase of traditional instructional design process
 - Analysis, Design, Development, Implementation, Evaluation





Evaluation Methodology

- Data collection

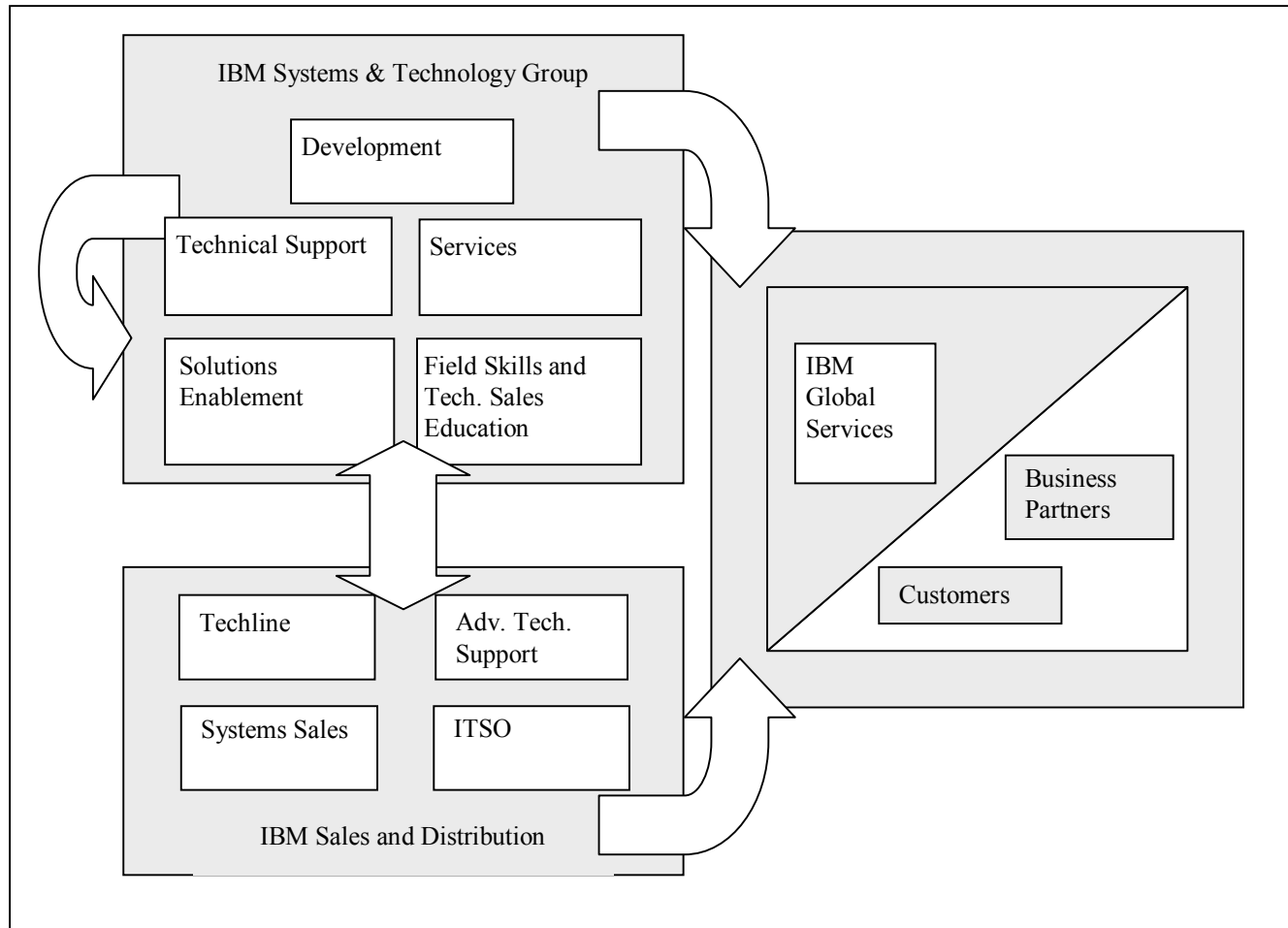
- Interviews with enablement providers and target audience members
- High-level assessment of instructional materials

- Analysis

- Needs, Learner, Task, and Gap analysis

- Recommendations based on analysis

Organizational Context



Enablement Providers

Name	Organization	Job/ Position
Tim Alpers	IBM STG	iSeries PDT Leader
Bob Bittner	IBM STG Solutions Enablement	iSeries Porting Team
Ray Champlin	IBM Systems Sales	Manager, FTSS
Nick Harris	IBM ITSO	Consulting IT Specialist
Clifford Hodde	IBM STG Field Skills and Tech Sales Education	iSeries Technical Sales Education Lead
Todd Kelsey	IBM ITSO	Manager (Rochester Center)
Lois Krinke	IBM STG Technical Support	Manager (WW iSeries Support Education)
Susan Lee	IBM STG Field Skills and Tech Sales Education	Manager (iSeries Technical Center)
Edith Lueke	IBM STG Development	User Centered Design
Dan O'Hare	IBM STG Technical Support	Technical Support Marketing
Leif Rush	IBM STG Technical Support	Technical Support Marketing

IBM Audience Matrix

	IBM										
	FTSS	Sales Rep	IGS	Sys Arch	L1	L2	ATS	CE	HW Supp Center	Tech Line	Consult Line
SELL	X	X	X	X						X	
BUY											
PLAN	X		X	X				X			
IMPLEMENT	X		X		X			X	X	X	
USE	X		X		X	X	X	X	X		X
SUPPORT	X		X		X	X	X		X	X	X

BP/ Customer Audience Matrix

	Business Partners				Customers				
	Tech Mktg	Sales Rep	Config Team	Svcs Team	CIO/ CTO	IT Mgr	Ops	Tech Support	Dev
SELL	X	X		X					
BUY					X	X		X	
PLAN			X			X			
IMPLEMENT	X		X	X			X	X	X
USE				X			X	X	X
SUPPORT	X			X				X	

Target Audience Members

Name	Affiliation	Job/ Position
Rosie Aleman	AvNet	Pre-Sales Technical Support
Scott Arntsen	Martin-Bower	iSeries administrator
Juan Bretton	IBM ATS	SW IT Specialist
Ray Champlin	IBM Systems Sales	Manager, FTSS
Darryl Conner	AvNet	Technical Support Team Manager
Chris Ernest	IBM STG Services	Custom Technology Center Consultant
Ed Gerwill	IBM Technical Support	Support Center
Don Gibson	IBM Technical Support	Squadrons Rollout
Scott Goodson	IBM Technical Support	Remote Support
Scott Hutchison	IBM Techline	BP Technical Advocate
Lee Kagy	IBM Systems Sales	FTSS
Gordon Kelly	IBM Global Services	IGS/ ITS Consultant
Leslie Parham	IBM Techline	BP Technical Advocate

Audience Characteristics

Information Category	Target Learner Characteristics		
	IBM	Business Partners	Customers
<p>Entry Skills:</p> <ul style="list-style-type: none"> ▪General iSeries or i5 knowledge ▪Adaptability to new technology and interfaces ▪Some familiarity with Linux, AIX, or the LPAR environment 	<p><i>IBMers have strong iSeries knowledge and some i5 knowledge.</i></p> <p><i>IBMers generally adapt well to technology changes.</i></p> <p><i>IBMers who have a lot of experience on iSeries have some familiarity with other platforms, but it usually is not extensive. There are pockets of LPAR knowledge as well.</i></p>	<p><i>Most BPs have strong iSeries knowledge and limited i5 knowledge.</i></p> <p><i>BPs generally do not adapt well to technology changes that cause them a lot of retraining because it cuts into the bottom line of their business.</i></p> <p><i>Some BPs are familiar with Linux and other platforms. BPs are becoming more familiar with LPAR and what it can do for them.</i></p>	<p><i>Most customers have strong iSeries knowledge and limited i5 knowledge.</i></p> <p><i>Customers do not generally adapt well to technology changes because they are focused on running their business, not learning new technology.</i></p> <p><i>Some of the larger customers are familiar with Linux or a variant of Unix, but that is not typical. LPAR is familiar to some of the larger customers.</i></p>
Prior Knowledge of Topic Area	<i>Many IBMers understand LPAR, but were not very knowledgeable regarding HMC prior to training.</i>	<i>Some BPs are familiar with LPAR, but were not very aware of HMC or the implications of the i5 release.</i>	<i>A limited number of customers are familiar with LPAR, but were not aware of the need for or advantages of HMC.</i>
Attitudes Toward Content	<i>Most IBMers are interested in learning about new technologies as they become available.</i>	<i>Most BPs are interested in learning what they need to know to serve their customers. If it is just a new technology, but their customers haven't expressed an interest, they are usually not very interested either.</i>	<i>Most customers are interested in very practical content – what is it, why do I need it, and how do I use it to better run my business.</i>

Audience Characteristics (cont'd)

Information Category	Target Learner Characteristics		
	IBM	Business Partners	Customers
Attitudes Toward Delivery System	<i>IBMers are usually unable to attend face-to-face classes, and web-based instruction is more convenient for them. But they are looking for something more effective than slides with an audio track.</i>	<i>Many BPs like to attend classes either face-to-face or remotely with IBMers. Tech Talks and conferences are good. But they can't always get to face-to-face classes.</i>	<i>Most customers do not attend face-to-face classes.</i>
Motivation	<i>IBMers are a highly-motivated group usually responsible for their own skills development. They believe that their jobs are dependent upon keeping up with leading-edge technologies. Almost all of their skills development is the result of self-directed learning.</i>	<i>BPs are usually motivated to learn once they understand how the new skills can improve their business.</i>	<i>Customers are motivated to learn new things when their business needs dictate that a new technology is needed.</i>

Audience Characteristics (cont'd)

Information Category	Target Learner Characteristics		
	IBM	Business Partners	Customers
General Learning Preferences	<p><i>IBMers have experience with all different learning formats. Most of their learning takes place independently, although they enjoy working in team and classroom settings as well. They like to be able to apply what they learn to real-world situations and have the opportunity to do "hands-on" practice exercises whenever possible. They need to be able to fit their education and skill development into their busy schedules.</i></p>	<p><i>BPs have experience with many different learning formats. Their learning needs are often graduated. They need to know a little at first, and then more and more as their customers become more involved in the technology. They want education to be available so that they stay one step ahead of their customers.</i></p>	<p><i>Most customers learn new things only as needed. They are often figure things out for themselves by experimenting on a system and calling support when they run into problems. With the exception of some larger customers, they often do not plan for education and training.</i></p>

Instructional Materials

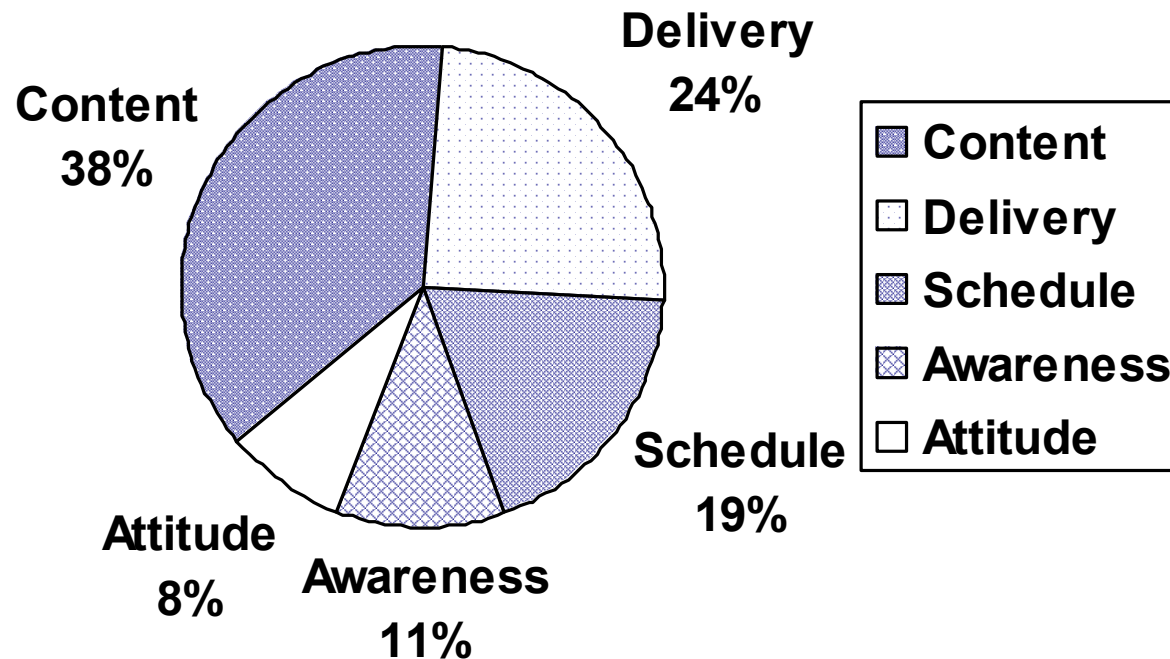
Instructional Materials	Intended Audience	Delivery/ Media	Availability
ResourceLink: How to use the Hardware Management Console for POWER5 Systems	IBMers, Business Partners, Customers	Self-paced web-based instruction In order to access the instructional materials, one must register with the site.	Currently available No charge
ResourceLink: Additional Service Courses	IBMers	Self-paced web-based instruction In order to access the instructional materials, one must register with the site.	Currently available No charge
iSeries Tech Talk: Hardware Management Console (iTechTalk4)	IBMers	Teleconference and Presentation	Originally held in May Replay was available Materials and MP3 still available on the System Sales Portal
iSeries Tech Talk: Logical Partitioning and Virtualization (iTechTalk7)	IBMers	Teleconference and Presentation	Originally held in June Materials and MP3 still available on the System Sales Portal
ITSO Technical Forum: LPAR and the Hardware Management Console (GL01)	IBMers, Business Partners	Face-to-face Presentation Lab using HMC VMWare and Emulator	6 sessions in EMEA, 7 sessions in the Americas, and 3 sessions in AP All sessions were full and additional sessions scheduled
ITSO Redbook: Logical Partitions on IBM PowerPC	IBMers, Business Partners, Customers	PDF	Draft made available August 2004

Instructional Materials (cont'd)

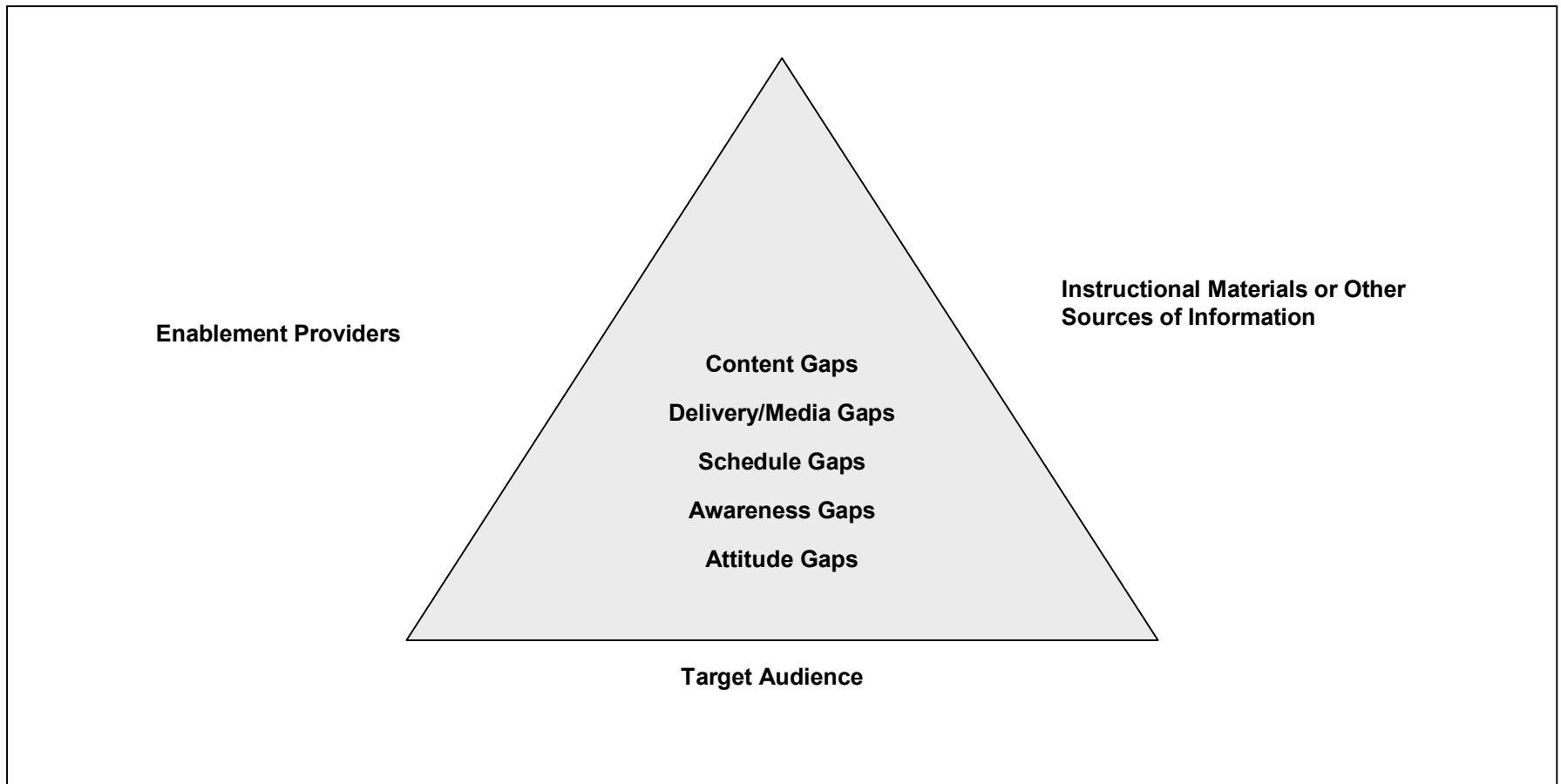
Instructional Materials	Intended Audience	Delivery/ Media	Availability
Webucation: eServer Power5	IBMers (Support)	Face-to-face sessions with lab Distance learning sessions	Feb/ March 2005 May/ June 2005
Webucation: HMC Workshops	IBMers (Support)	Face-to-face sessions Distance learning sessions	Available earlier in 2004 but not currently scheduled
COMMON: An Introduction to the Power5 Hardware Management Console	IBMers, Business Partners, Customers	Face-to-face session Lab	Fall 2004
ITSO Redbook: Logical Partitions on IBM PowerPC	IBMers, Business Partners, Customers	PDF	Draft made available August 2004
Logical Partitioning (LPAR) on IBM eServer i5 (AS530)	IBMers, Business Partners, Customers	Face-to-face class Hands-on lab	Available at various locations at different times Also can be taught on-site
iSeries Information Center/ eServer Hardware Information Center	IBMers, Business Partners, Customers	Web pages PDFs	Available on the Internet at no charge

Gaps Identified in Interviews

Enablement Gaps



Data Triangulation



Content Gaps

- Information was inaccurate
 - Product changes were not reflected in the documentation
 - Erroneous and incomplete information went out initially
- Additional content needed
 - Hands-on instructional opportunities
 - Experience with actual system is best
 - Simulations are ok in some instances
 - Screen shots help when can't do hands-on

Content Gaps (cont'd)

- Additional content needed (cont'd)
 - Practical information
 - What to look out for
 - How to (step-by-step)
 - Why (broader view)
 - Deeper information
 - Troubleshooting
 - What information needs to be collected
 - How to debug
 - Where to look
 - How to recover from mistakes
 - Field certification/ Business Partner qualification



Content Gaps (cont'd)

- Amount of information is overwhelming
 - Cannot absorb everything at once
 - Need to pass key information on to others (pyramid scheme of enablement)

Delivery/ Media Gaps

- More hands-on training is needed
- The majority of training is face-to-face classes or workshops
 - Time, travel, or cost considerations
- Information needs to be available when and where it is needed
 - Information is available, but not in the correct format
 - Can't find information when needed
 - Body of knowledge doesn't exist yet
- Learners need to redistribute the information to others
 - One or two people are trained on a new technology
 - Responsible for skills transfer to others
 - Create their own abridged version of the instructional materials

Schedule Gaps

- Cannot schedule a block of time to attend classes or workshops.
- Instruction was delivered:
 - Too early (before the learner realized it was needed)
 - Too late (support personnel and CEs did not received training before their customers were expecting support)
- Face-to-face classes were full
- Product changes require supplemental information
- Training needs vary throughout the cycle
 - High-level information needed early on
 - More detailed information needed once system arrives/ is installed
 - Screen shots or simulations needed only until the learner can get “hands-on” experience
 - Troubleshooting information is needed later in the cycle



Awareness Gaps

- FUD (compounded by product issues)
- Unaware that there is such a steep learning curve for HMC and LPAR in new release
- Unaware of the all the training opportunities and resources available
- Product changes and information updates need to be communicated

Attitude Gaps

- HMC is another shift for BPs and customers
- Many have not yet accepted change from twinax and green screen to Operations Navigator
- Don't understand:
 - Why things are being changed
 - How it will affect their jobs
 - What the benefits are to them
- Natural resistance to change
- Product issues and bad experiences of early customers contribute to negative attitude toward HMC

Recommendations

■ End-to-End Enablement Strategy

- Comprehensive, end-to-end plan for HMC is needed
- Based on:
 - Needs assessment to identify what enablement is needed
 - Learner analysis to identify the general characteristics and preferences of the target audience(s)
 - Task analysis to identify what the target audience members need to learn in order to perform the various activities associated with the product (sell, buy, plan, implement, use, support)
- Should include:
 - Audiences for enablement
 - Tasks/ functions to be enabled
 - Available and planned enablement
 - Schedules
 - Delivery mechanism and format

Recommendations (cont'd)

■ End-to-end Enablement Strategy (cont'd)

□ Benefits of Holistic View

- Gaps more easily identified
- Needs of all target populations identified
- Overlapping needs of the various audiences more apparent
- Duplication of effort and materials identified and possibly eliminated
- Synergy between the enablement providers results in savings to allow additional development
- Roadmaps could be developed for the different target audiences
- Enablement plans could be shared with all stakeholders, as appropriate
- Coordination with development, support, sales, and marketing
- “Living document” that could be modified as the product evolved



Recommendations (cont'd)

■ Remote Enablement

- Already implemented or being considered by most enablement providers
- Remote delivery should be considered for all future enablement offerings

Recommendations (cont'd)

■ Single Source for Enablement

- Need a “one-stop shopping” place where HMC users can go to find what they need
- Single web site with links to enablement resources
- Provide a way to get answers if the answer cannot be easily found
- Discussion board for HMC community
- Similar to WebSphere Commerce Information Center at <http://publib.boulder.ibm.com/infocenter/wc56help/index.jsp>

Recommendations (cont'd)

- Additional Instructional Materials to be considered:
 - Printable checklists for various HMC tasks
 - Abridged materials for skills transfer in the “pyramid scheme” of enablement
 - Screen shots or simulations (see the following recommendation for Hands-On Enablement)
 - Tips and techniques
 - Troubleshooting and debugging information
 - Certification or qualification materials
 - Information to promote awareness and acceptance of product

Recommendations (cont'd)

■ Hand-On Enablement

- Need for “hands on” enablement identified by the majority of interviewees
- Screen shots and simulations can provide stop-gap measures
- Remote “hands on” labs are needed in addition to face-to-face
- Consider making “sandbox” systems available remotely

Conclusions

- Findings not unique to HMC
- Many products and learners dealing with:
 - Lack of time
 - Growing complexity
 - New skill gaps
 - Difficulty finding what's needed
 - Increased speed-to-market requirements
- Help prevent future customer satisfaction issues by:
 - Analyzing learner needs across the different groups
 - Leveraging the different enablement providers and resources
 - Looking for new and innovative ways to deliver enablement
 - Keeping the “big picture” in mind

Premium server <=> Premium enablement