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Human Performance Technology Workshop

Williamsburg, VA | September 8 - 10

8:30 – 10:30 PM ◦ Friday, Sept. 10th

Award Winning Tools and Techniques for Performance Centered Solutions

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- q **EPSScentral LLC formed in 2001 by consolidating three primary Performance Centered Design (PCD) portals**
- q **Outgrowth of conducting annual PCD Awards since 1997**
- q **Works closely with ISPI editing special issues of Performance Improvement Journal**
- q **“EPSS Revisited” recently published**
- q **40+ enterprise system projects since 1975**
- q **Designer of commercial EPSS tools /solutions**
- q **Teach specialty graduate courses at George Mason University and Boise State University**

Performance Centered Design

- q ***Performance*** in Performance Support and Performance Centered Design (PCD) means ***business performance through human performance***
- q Models of PCD have therefore evolved along with business models that address current economic conditions
- q For the current era, PCD means ***getting the right process right, quickly and continuously.***

Grudin's Law

“When those who benefit [from technology] are not those who do the work, then the technology is likely to fail or, at least, be subverted.”

- Jonathan Grudin

Edward R. Murrow (1962)

“The newest computer can merely compound, at speed, the oldest problem in the relations between human beings, and in the end the communicator will be confronted with the old problem of what to say and how to say it.”

- q **Chicken Little, Marshal McLuhan and the Global Village**
 - o a few short lessons on the collapse of time and space



Can you see the resemblance?

The New Normal, Interpreted

- q **SARS**
- q **Enron**
- q **Mad Cow**
- q **9/11**
- q **HIPAA** (health insurance portability and accountability act of 1996)
- q **USS Cole**
- q **Iraq War**
- q **Pneumonia outbreak among troops**
- q **DC Sniper**
- q **Customer Relationship Management**
- q **Ongoing terrorist threats**

Performance Support Means

- q **Business performance through human performance**
- q **Solving the business problem without losing sight of the human dimension**
- q **We need to**
 1. **Get the right processes right**
 2. **Gather the right data and information that supports the process**
 3. **Transform information to action (knowledge)**
 4. **Real-time and continuously**

Three Fundamental PCD Solutions

#1

q **External / extrinsic capture-format-integrate-deploy solutions**

- **Design: Rapidly capture processes and job-specific operational knowledge in a meaningful form**
- **Integrate: Leverage existing electronic assets**
- **Deploy: Share operational knowledge via Intranet/Internet**

Three Fundamental PCD Solutions

#2

q **External / extrinsic portal-centric solutions that facilitate rapid assembly and deployment of existing knowledge and learning, including collaboration assets for teams**

- Based on the simple premise that smart, connected people perform at higher levels.
- Focuses on enhancing group performance via the WWW.
- Integrates learning, sharing, and collaboration to drive performance.
- Empowers group leaders and members to contribute.
- Emphasizes simplicity, speed and ease of use.

Three Fundamental PCD Solutions

#3

q Intrinsic and extrinsic model-driven solutions based on adaptive workflows

- Automatically capture existing business processes and model new business processes
- Analyze, improve, and integrate business processes
- Automatically generate knowledge assets from capture and process resources
- Integrate knowledge assets into existing workflows and systems; integrate processes across disparate systems
- Rapidly deploy and maintain knowledge assets
- Measure and refine performance and solutions

Examples

Type 1 External / extrinsic capture- format-integrate-deploy solutions	Type 2 External / extrinsic portal-centric solutions	Type 3 Intrinsic and extrinsic model- driven solutions based on adaptive workflows
ProCarta www.procarta.com	Zope www.zope.com	Epiplex www.epiance.com
Talsico www.talsico.com	Plone www.plone.org	OnDemand Personal Navigator kp.globalknowledge.com
	Knowledge Gateway www.ptechinc.com	ActiveGuide www.rocketools.com
	Plumtree Corporate Portal www.plumtree.com	2Work! EPSS www.thinksmartps.com
	Hummingbird EIP www.hummingbird.com	

Showcase

q **PCD Solution***
[Business Plan Developer By SII](#)

q **Plone**
www.plone.org

q **Procarta***
www.procarta.com

q **ActiveGuide***
www.rocketools.com

q **epi^{plex}***
www.epiance.com

q **2Work! EPSS***
www.thinksmartps.com

* Recipient of 2003 and/or 2004 PCD Awards

Business Plan Developer

Demonstration

- q [Business Plan Developer By SII](#)
- q The Business Plan Developer is an EPSS that SI International, Inc., developed for the National Park Service to enable park personnel to build business plans for their parks. No experience with business plans, financial analysis, or document construction was assumed. The tool guides inexperienced personnel through the entire process, from data gathering, through extensive analysis, to the writing of an actual plan.

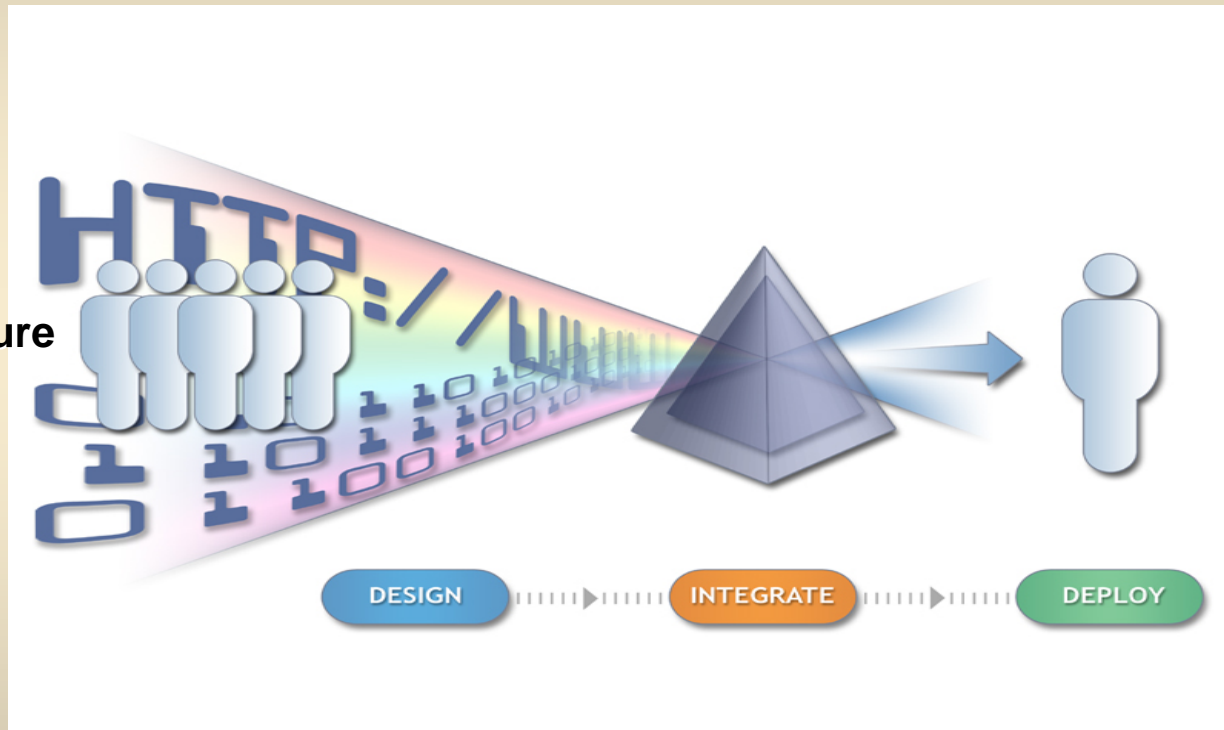
Capturing Performance



- q **Design:** Capture job specific operational knowledge in a meaningful form
- q **Integrate:** Leverage existing electronic assets
- q **Deploy:** Share operational knowledge via Intranet/Internet

Performance Made Visible

Content
Context
Infrastructure
Meaning



Visibility
Clarity
Alignment
Accountability

- q Start where the loss of operational expertise is most critical

What's in it for Your Team?

- q Improved managerial effectiveness
- q Faster ramp up of staff
- q Reduced job turnover and improved morale
- q Basis for continuous learning



Live Demonstration

Plone

www.plone.org

- Plone is an out-of-the-box ready content management system that is built on the powerful and free Zope Application server.
- It requires minimal effort to set up, is deeply flexible, and provides you with a system for managing web content that is ideal for project groups, communities and intranets.



The Business Problem

The Business Pain

- × Complex Processes, Difficult to Improve
 - × Do not know processes in use
 - × Disparate processes and applications - tedious and expensive to integrate
- × Enterprise Application Customization -> Changes
 - × Expensive
 - × Time consuming
- × Low levels of Productivity
 - × Expensive & inefficient training & support
 - × Real time process intelligence and knowledge

**Complex and Expensive
Business Processes**

Solution

Capture and Integrate Processes

- ✓ Extensive and efficient knowledge capture of processes in use
- ✓ Rapidly integrate process, people, content and applications

Simplify Customization and Change Management

- ✓ Slashes costs - Eliminate efforts
- ✓ Accelerates time- Automate and Reuse

Enhance productivity

- ✓ Slash costs and increase efficiency of T & S
- ✓ Provide just-in-time knowledge, intelligence and automation

**Extracts unrealized Value from IT
Investments**



Business Process Platform

epi^{plex}® - Process Development Environment

epi^{plex}® Remote Process Capture System (ERPCS)

epi^{plex}® Business Process Analyzer (EPBA)

epi^{plex}® Knowledge Provisioning System (EKPS)

epi^{plex}® Process Benchmarking System (EPBS)

Enterprise Process Repository (EPR) - Developer

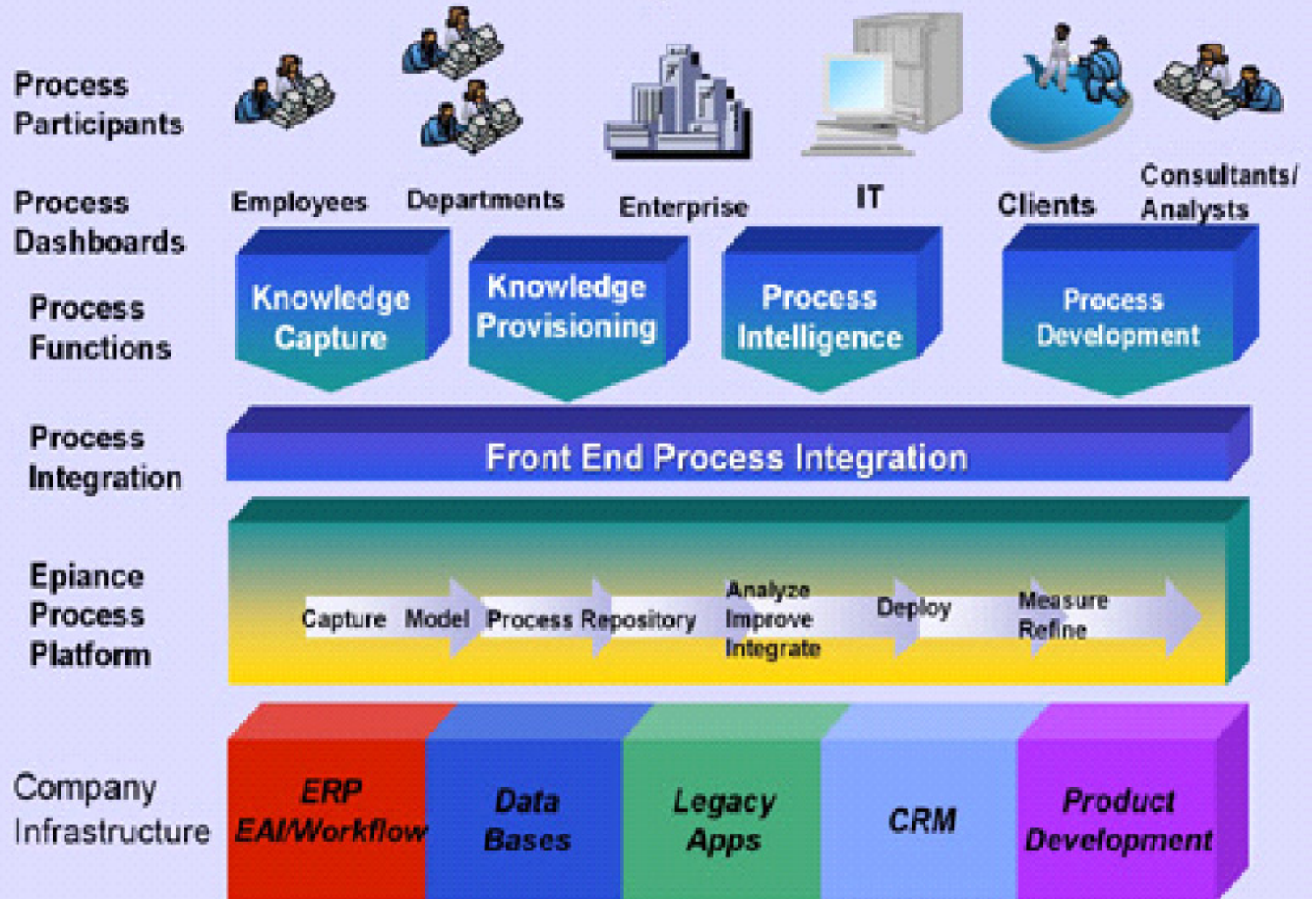
epi^{plex}® Desktop Knowledge Capture (EDKC)

epi^{plex}® Desktop Knowledge Provision (EKDP)

epi^{plex}® Process Intelligence Dashboard (EPID)

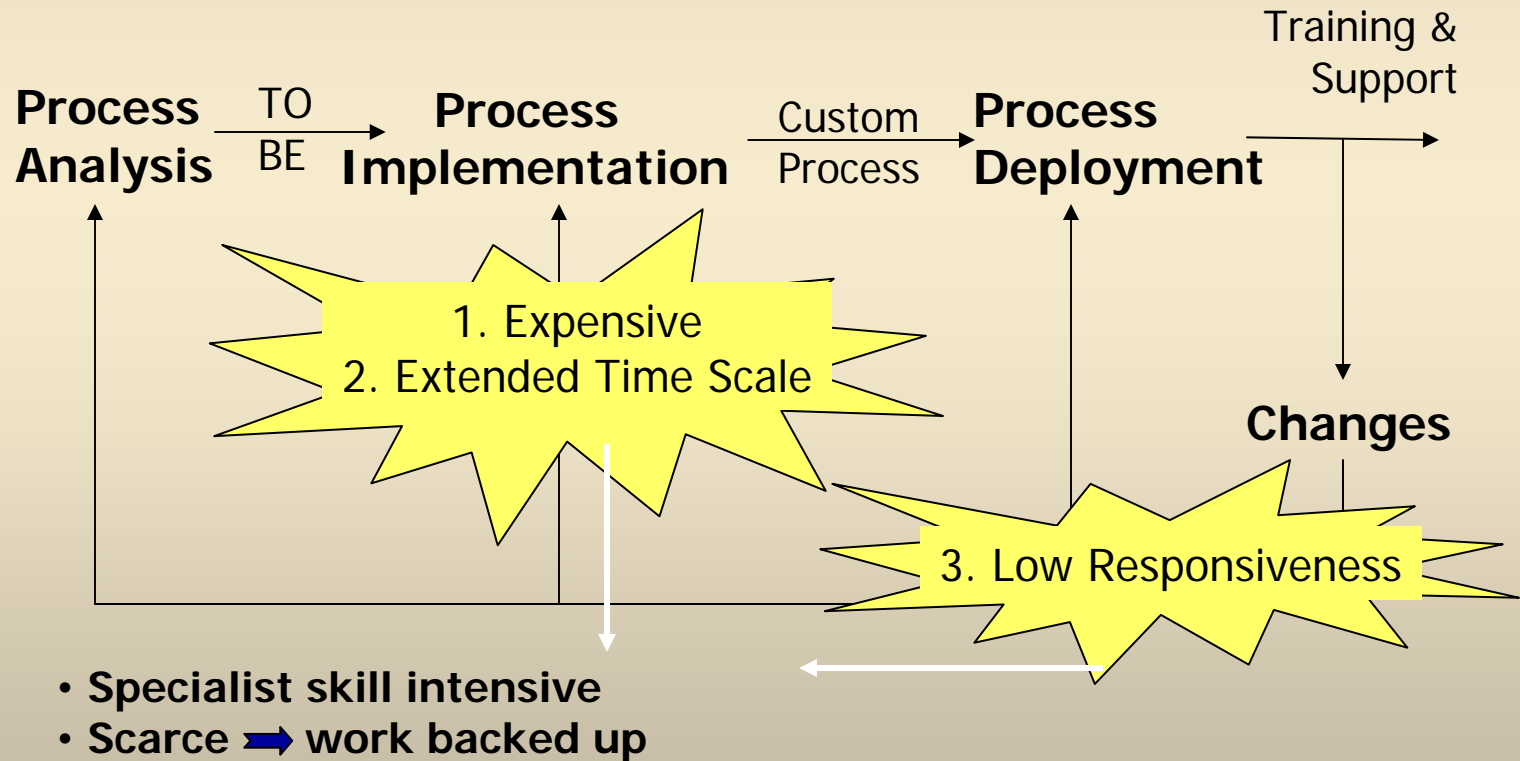
epi^{plex} - Process User Environment

Business Process Management Solution Capabilities



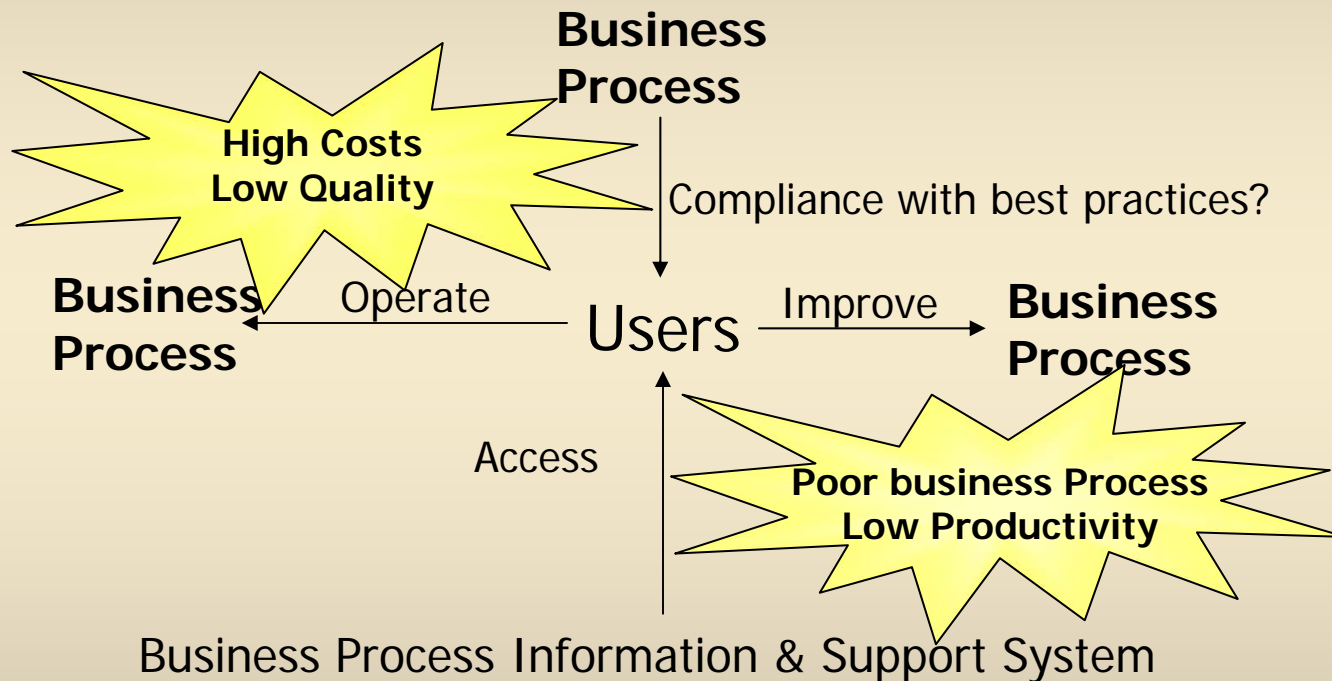
Customization & Change Management

Getting enterprise applications to support custom business processes



The Missing Human Dimension

Getting personnel to use custom business processes



- | | | |
|----------------------------------|---------------------------------------|---------------------------|
| Retention from Training Programs | References | Consultation with Experts |
| Enterprise Knowledge Portals | Best Practices, Policies & Procedures | |



Live Demonstration

q ActiveGuide

www.rocketools.com

Performance Support for Applications and Business Processes.

"Performance support" focuses on helping people to perform their work better and more efficiently. ActiveGuide creates optimal real-time self-service performance support for applications and business processes reliant on those applications, including:

- CRM
- ERP
- Financial Management
- Supply Chain Management
- Compliance Management

To this end ActiveGuide is designed to take performance support beyond text files, simulations and other offline information about processes. ActiveGuide provides automated interactive support with processes and applications. It "understands" the user's actions and the application state and delivers performance support that:

- q Is easily and immediately accessible to all application users.
- q Does not take the user away from their transaction.
- q Is capable of providing individualized interactive guidance.
- q Can mediate between the user and the live application.
- q Captures and corrects user errors.
- q Integrates user performance support with the appropriate business rules.
- q Supports optimal job performance with minimal intervention by others.
- q Works inline to assist in the completion of real tasks in real time in real applications.
- q Requires no player, plug-in or download

q Demonstration

[ActiveGuide](#)

q 2Work! EPSS

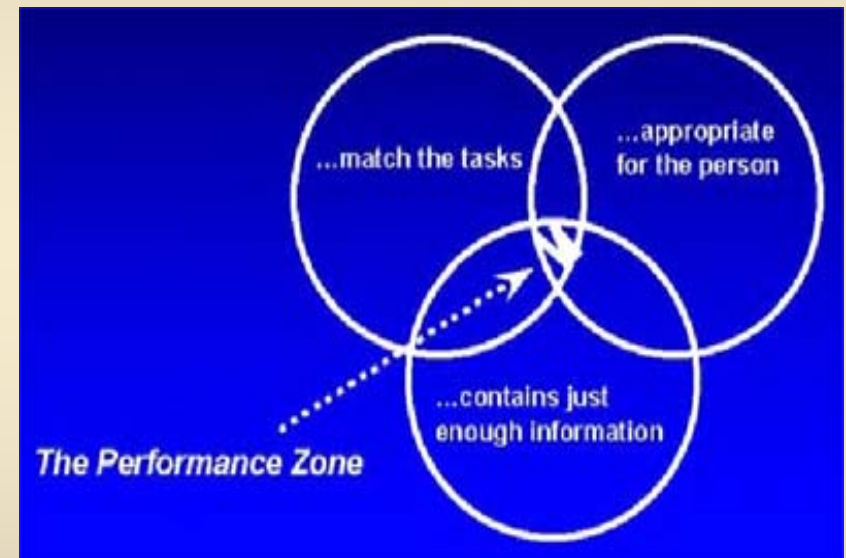
www.thinksmartps.com

The patented *2Work!*[™] EPSS is software that works concurrently with browser-based applications to deliver relevant information, so that end-users of the applications can perform tasks correctly, the first time. The *2Work!* EPSS sends contextual information right to the users' desktop—where and when the users need it.

q 2Work! EPSS

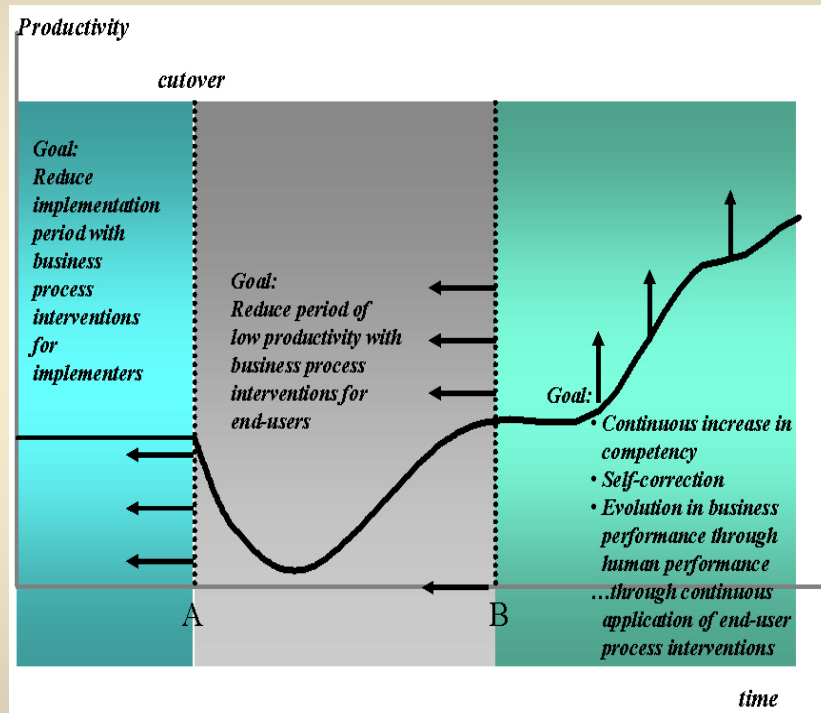
Performance Centered Methodology

- q Based on iterative Software Development Life Cycle (SDLC), Human Factors Engineering/User/Usage Centered Design, Business Process Management and Reengineering
- q Focuses on performance through multi-dimensional representations of task/process, human diversity/preferences, and information/knowledge engineering



Performance Centered Methodology

- q Addresses the Productivity / Competence Curve
- q Meets all goals
 - o Reduce implementation period
 - o Reduce disruptive transient time typical of cutover
 - o Assure close-to-immediate competency
 - o Continuously increase competency through blended and adaptive performance support interventions

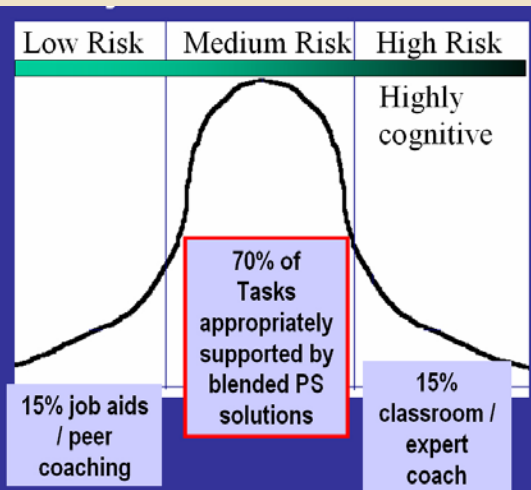


Performance Centered Methodology

- q Employs risk-mitigating task segmentation schema
- q Quickly identifies ~70% most appropriate tasks for blended Performance Support Solutions
- q Embraces fabric of best practice products

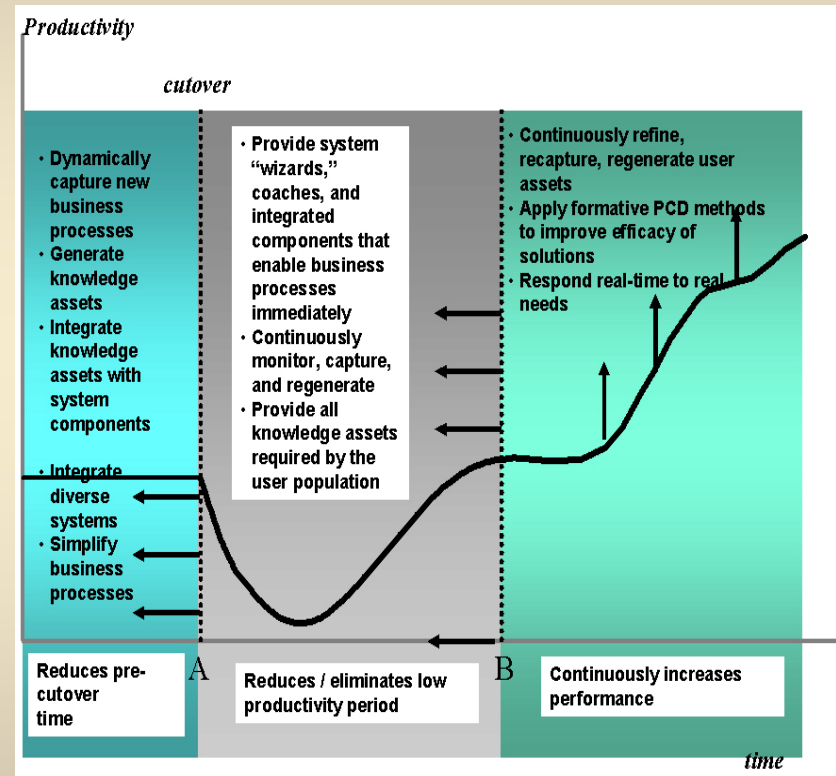
Task Segmentation

- Difficulty of learning
- Frequency of execution
- Consequences of failure
- Probability of failure



Performance Centered Methodology

- q Dynamic, immediate capture of blended solution assets
- q Integrate with target apps and other infrastructure assets without commingling code
- q Adaptively and organically monitor, recapture, and regenerate interventions
- q Continuously refine and regenerate assets

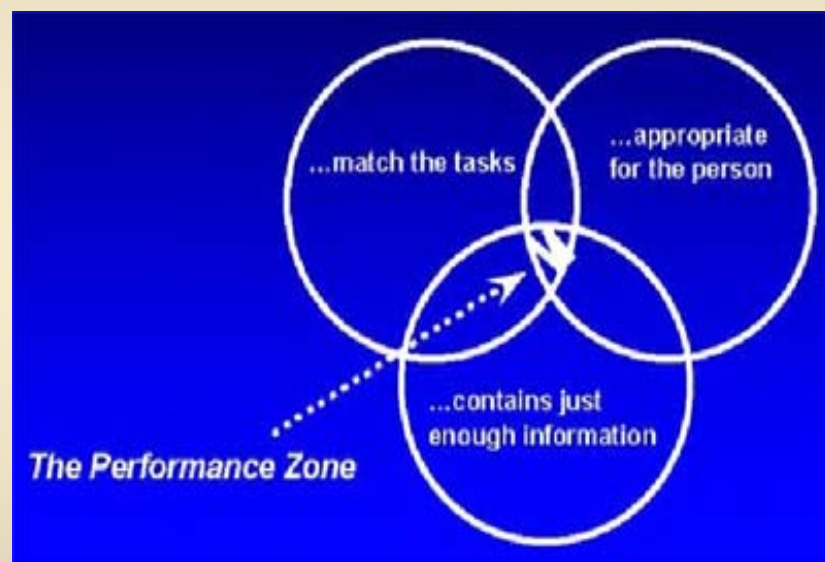


Metrics / ROI Goals and Realities

- q Reduces time for initial development of blended solutions to as low 5% - 15% of conventional methods
- q Reduces time-to-competency by up to 90% and eliminates substantial training/learning overhead
- q Reduces time/cost of maintenance events substantially
 - o Conventional maintenance event: 40 - 100% of initial intervention development
 - o PCD maintenance event: 5 - 15% of initial intervention development
- q Example: Reduced annual support expenditure of \$5M for enterprise system support to \$0.7M (total cost of ownership)

Performance Centered Methodology

- q Diversity analysis & design embodied in e-learning schema (Docs, Animation, Simulation, Tests/Certification, Collaboration) and ability to rapidly blend Performance Support solutions
- q Accelerate Business Process Management, Business Process Engineering activities
- q Knowledge Provisioning through intelligent development technology



Conclusions

- q The word *performance* in *performance support* and *performance-centered design* means **business performance through human performance.**
- q **Success of performance-centered solutions influenced as much by business climate as by human factors and the means to deliver knowledge.**
- q **The best solutions, tools and techniques today are those that provide organizations with the means to quickly and efficiently meet organizational goals and the needs of the real people who have to get the work done.**

□ Three essential categories:

- (1) Those that create external or extrinsic knowledge solutions by rapidly capturing, formatting, integrating, and deploying usage-centered representations of workflow and their respective resources;
- (2) Those that produce external or extrinsic portal-centric solutions that facilitate rapid assembly and deployment of existing knowledge and learning, including collaboration assets for teams; and
- (3) Those that are model-driven, based on capturing workflow within software applications, continuously refining it, and producing knowledge assets swiftly and automatically that are contextual, conditional (with respect to workflow logic), and intrinsic.

Questions and Answers

