



Building the Knowledge Enterprise

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The World is Changing . . .

DON IM/IT Environment

HISTORICAL

Stable
Learned
Obtrusive technology
Presence
Activity
People support technology
Stovepipe mentality
Crisis-driven
Computation
Hardware focus
Localized
Information chaos
Control
Standardization
Isolated Solutions



FUTURE

Flexible
Learning
Invisible technology
Virtual
Performance
Technology supporting people
Integrative competency
Strategy-driven
Communication
Client utility focus
Ubiquitous
Knowledge Centric
Point of Action empowerment
Open Standards
Interoperability

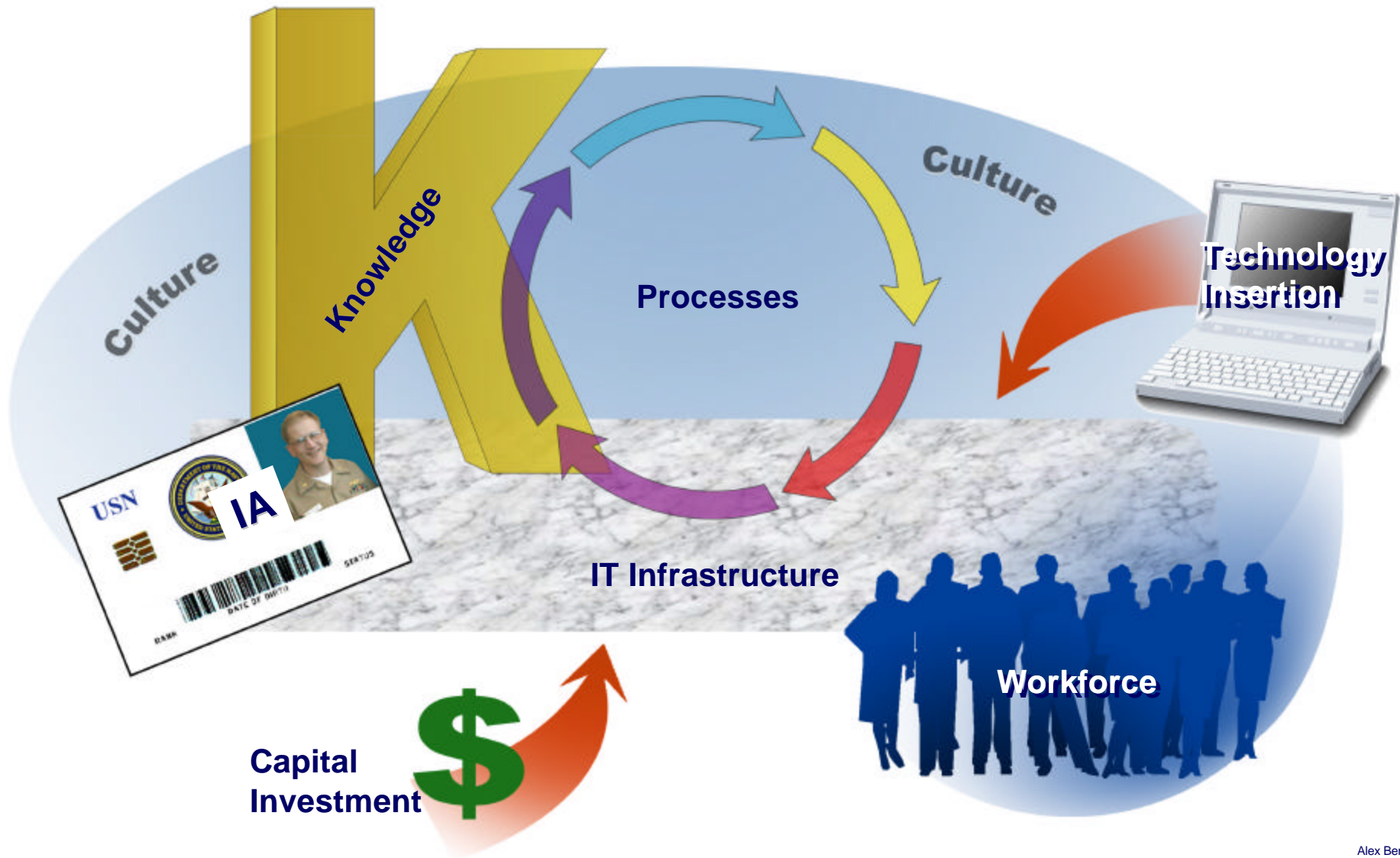


The DON IM/IT Vision for the Future

- An integrated, results-oriented Navy and Marine Corps team characterized by strategic leadership, ubiquitous communication, and invisible technology.
- An effective, flexible and sustainable DON enterprise-wide information and technology environment that enables our people to make and implement efficient and agile business decisions.
- A knowledge-centric culture where trust and respect facilitate information sharing and organizational learning.

Knowledge management is critical to achieving our IM/IT vision

Putting information to work for our people

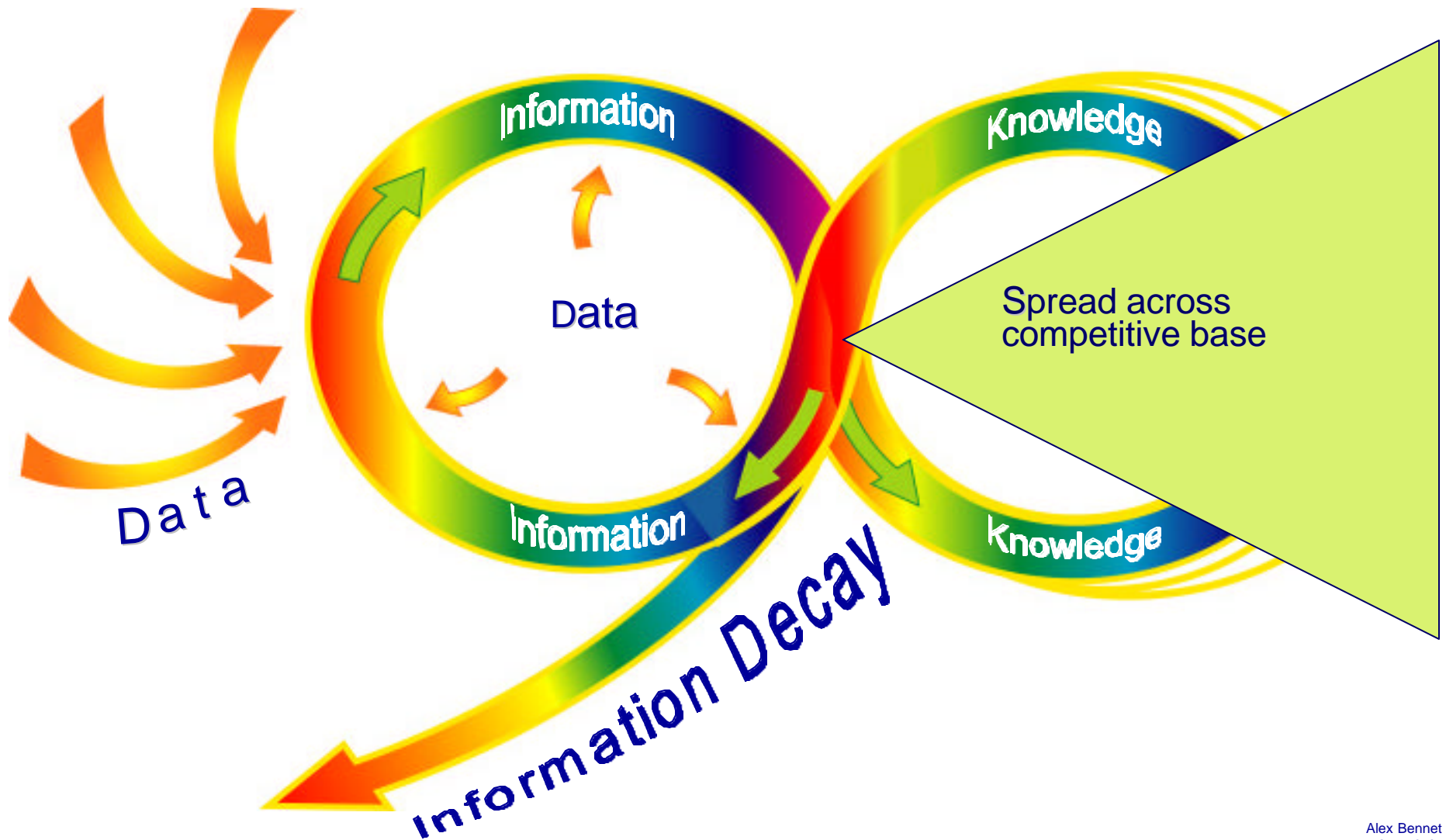




Visioning the Future



The Knowledge Life Cycle





IT Supporting Transformation of Information into Knowledge



- Data Mining
- Navigation and search
- Synthesis of information through automated analyses of relationship between information
- Inference engines that reason about interactions between data
- Intelligent applications that introspect about uncertainties and ambiguities and missing data
- Representation of complex knowledge to users

Knowledge



KM Definitions

- “Knowledge management is an emerging discipline that stresses a formalized, integrated approach to managing an enterprise’s intangible information assets...
Knowledge management is a coordinated attempt to tap the unrealized potential for sharing and reuse that lies in an enterprise’s collective consciousness.”

Gartner Group

- “..providing the right information to the right decision-maker at the right time, thus creating the right conditions for new knowledge to be created.”

Dow Chemical

- Knowledge management is a business strategy, best practice transfer, personal learning, customer intelligence, intellectual asset management, and innovation.

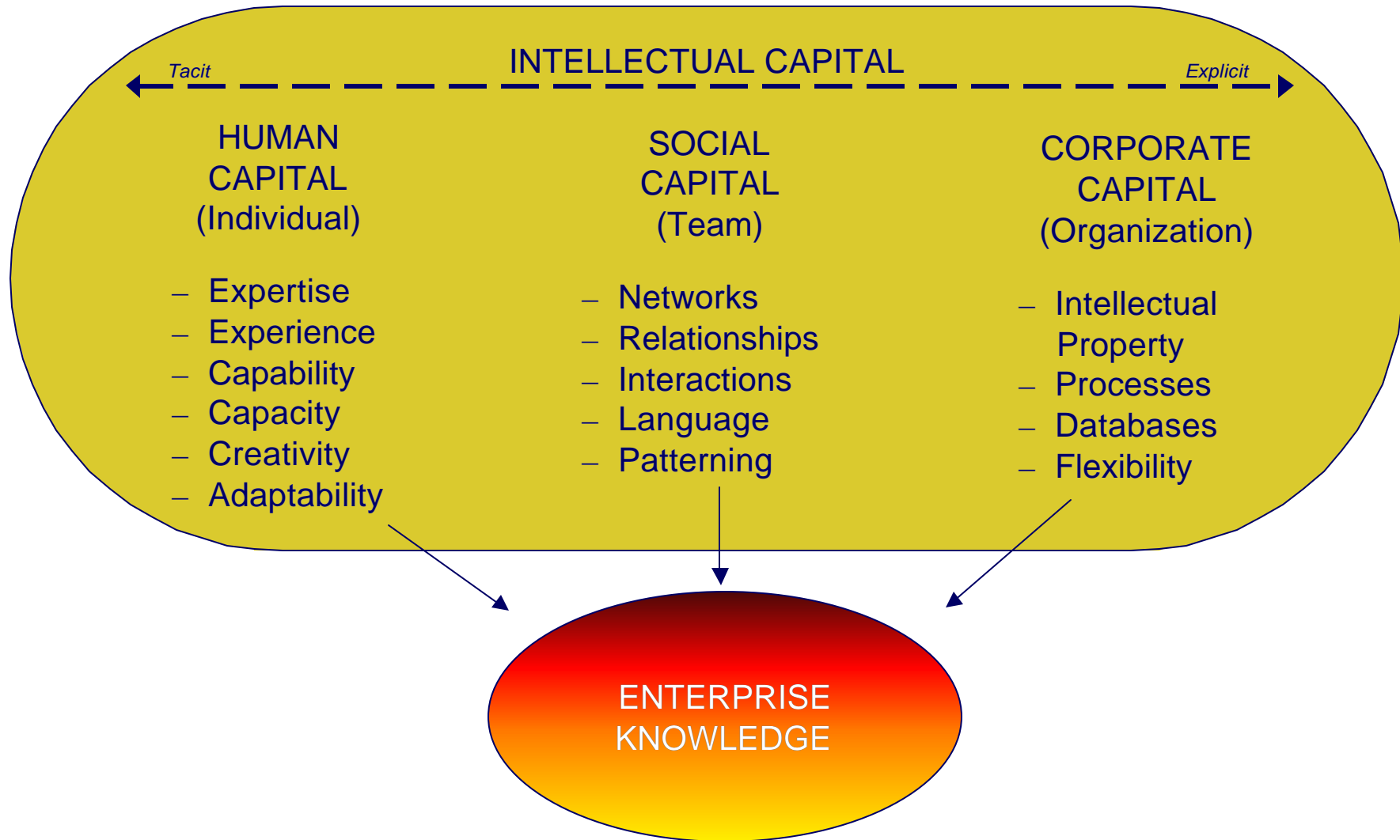
American Productivity & Quality Center



KM Truisms

- Perfect information does not equal perfect decisions
- Behaviors are not changed by technology alone
- Connecting is not sufficient to create value

The Essence of Knowledge Management

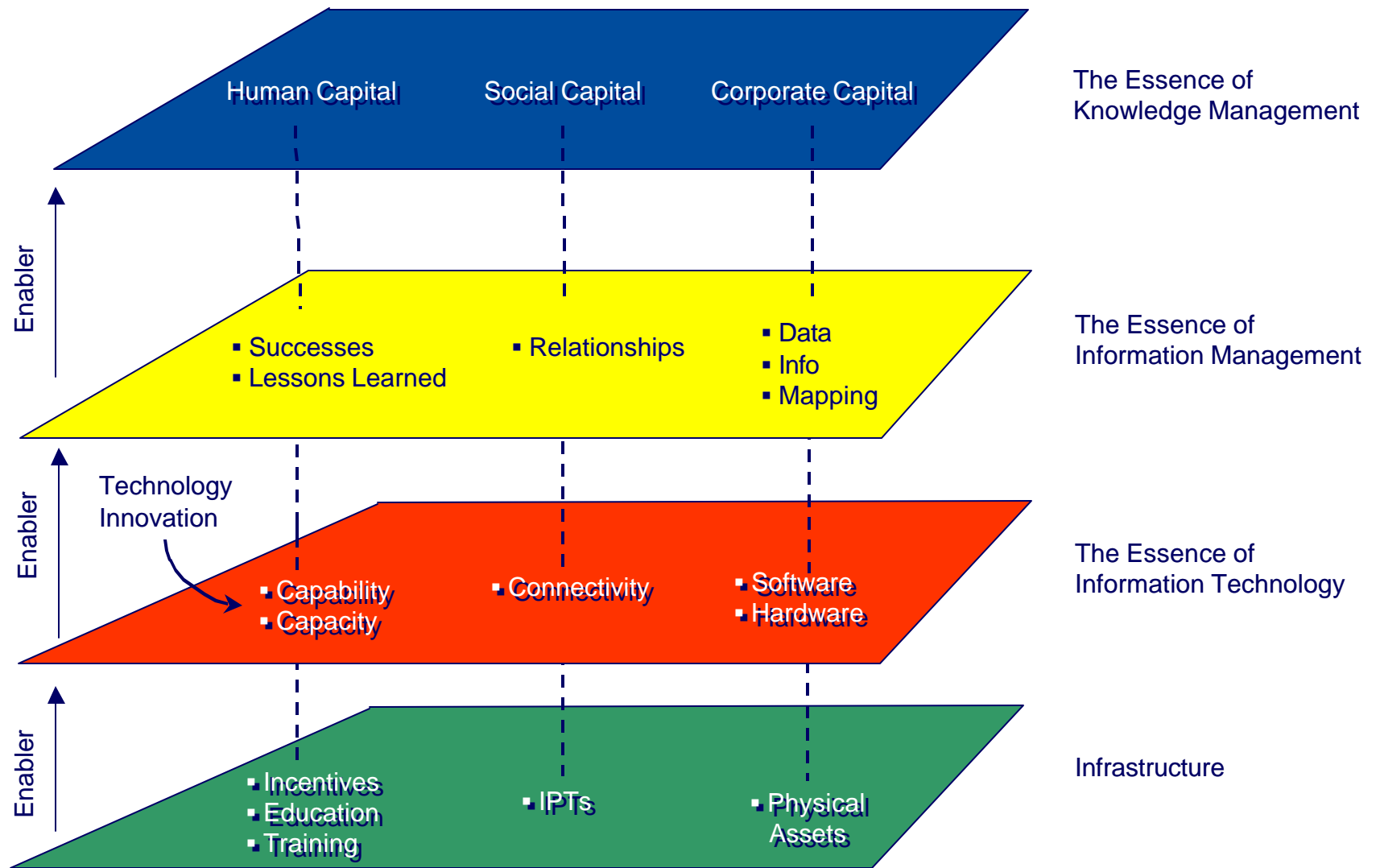


What is the true value to DON?

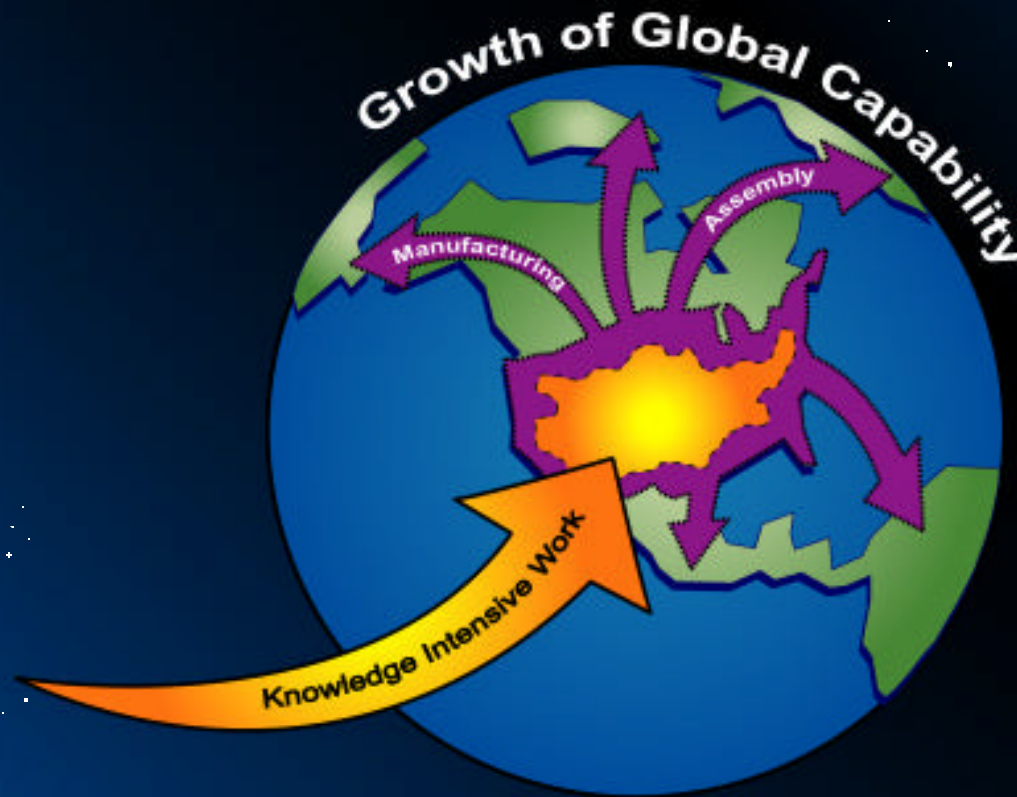


Knowledge management can be viewed as a process for optimizing the effective application of intellectual capital to achieve organizational objectives.

Relationship of IT, IM and KM



Relationship of Globalization to KM



- Labor in developing nations more cost effective
- Knowledge intensive work increasing in US.
- Technology amplifies the diffusion of knowledge

Changing economy changing the value of knowledge



With the rapid expansion of the global economy – and especially the information revolution – we could become “data junkyards”...when what we really need is, not data, but knowledge. This makes our investment in decision-making systems, intellectual capital, and knowledge management one of the keys to our warfighting and business operations.

-Jerry MacArthur Hultin



Knowledge Management Trends

- Survey of 200 Large Firms found:
 - 82% have KM underway in their organization
 - 50% have KM staff & budget
 - 27% have a Chief Knowledge Officer

(Conference Board)
- Survey of nations leading CEOs:
 - Second top priority “Improving KM” (88%)

(Foundation for Malcolm Baldrige Award)
- By 2001, enterprises that lack ongoing KM infrastructure will lag KM-enabled competitors by 30-40% in speed of deployment for new competitive programs and products

(Gartner Group)



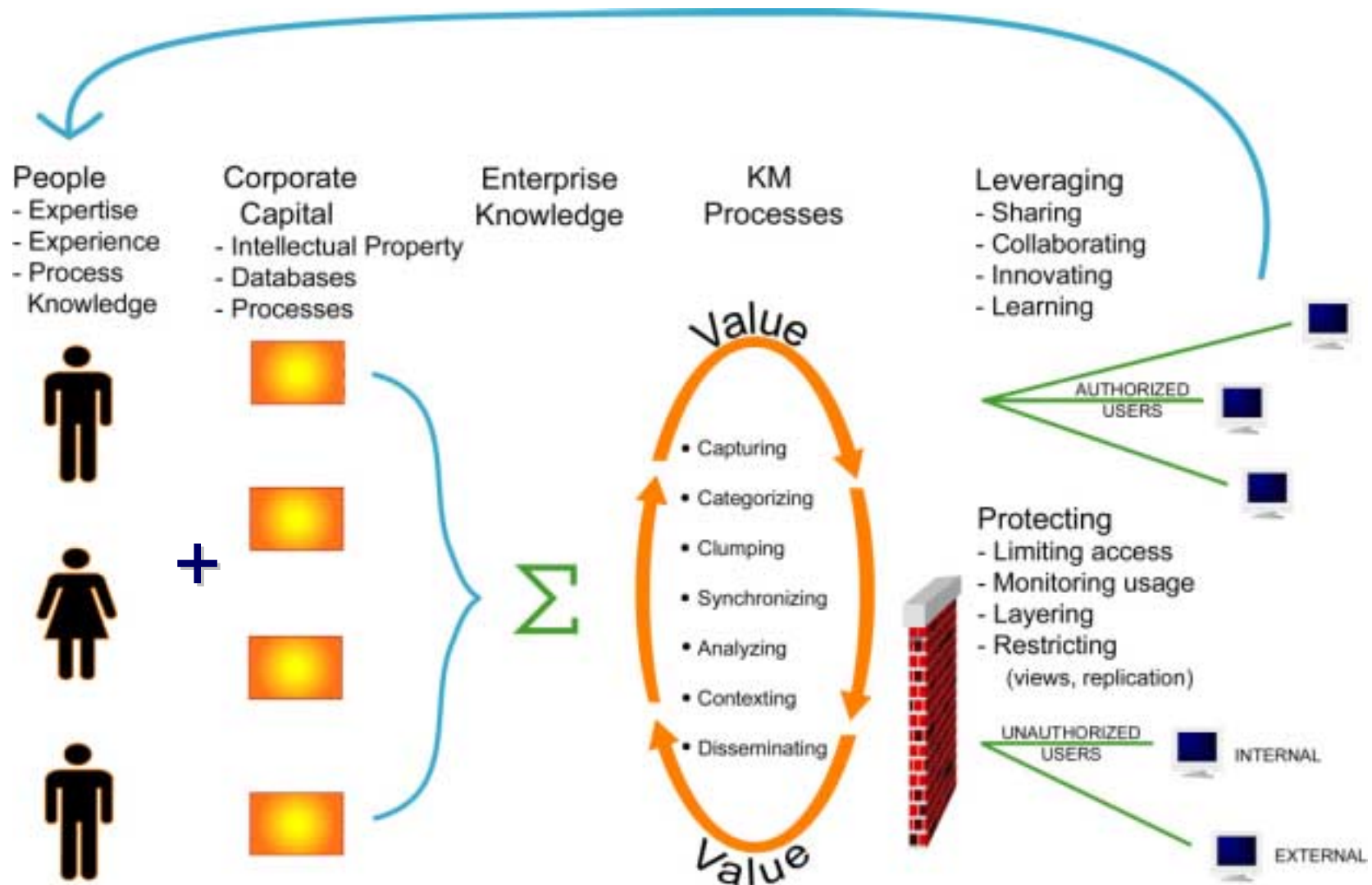
Food for Thought

- Began collecting customer buying profiles in early 1980's.
- Have identified 80,000 long term customers and provided them with the following service options:
 - Specially loaded palm files which enable ordering via telephone or internet for home delivery.
 - Having staple items pre-bagged prior to visiting the store and then shopping for specialty items.
 - Shopping with a bar code device so there is no need to go through a check-out line.



A relationship of trust with the customer is essential

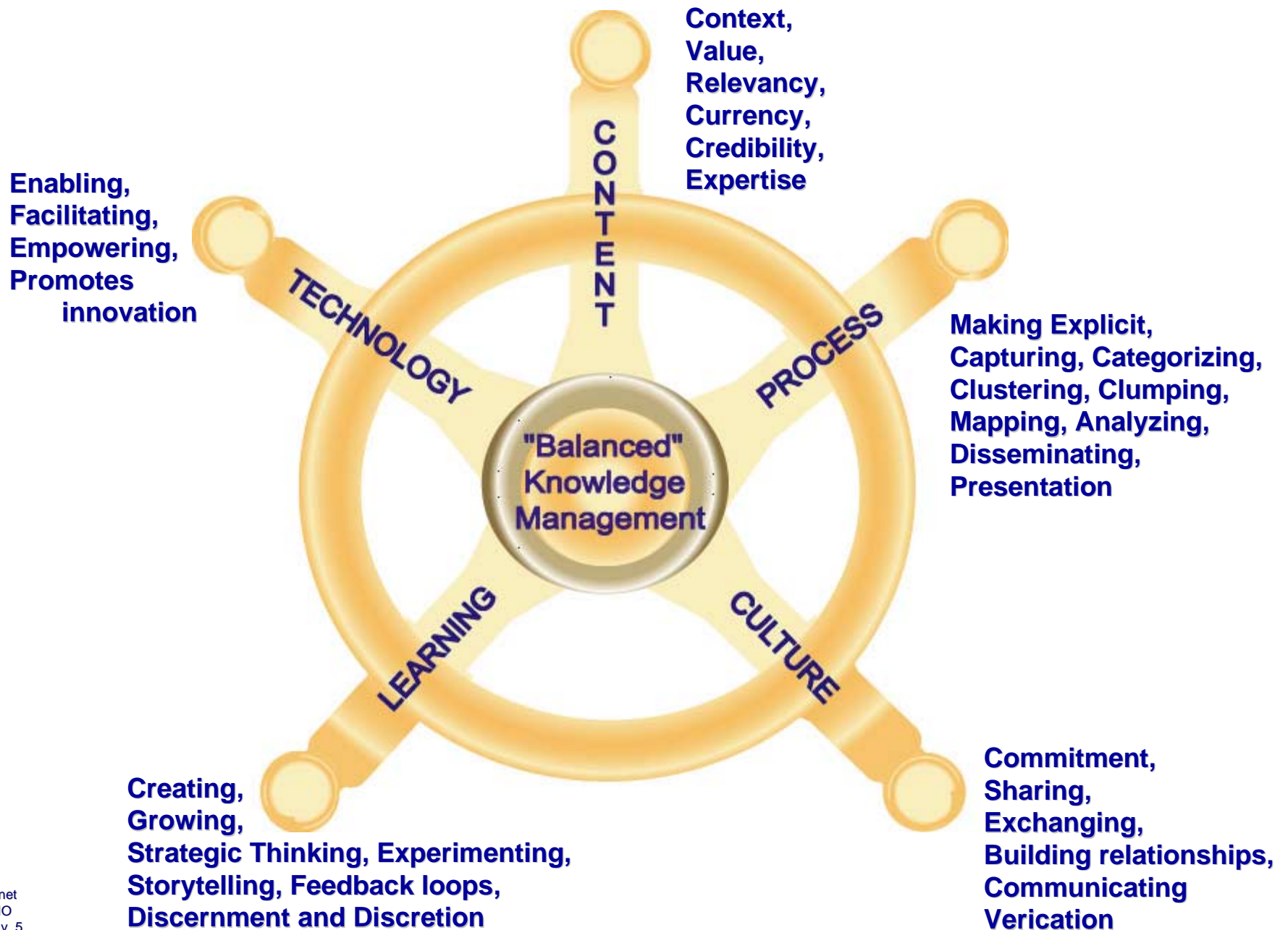
Knowledge Management Challenge



Alex Bennet
DON DCIO
12/01/99

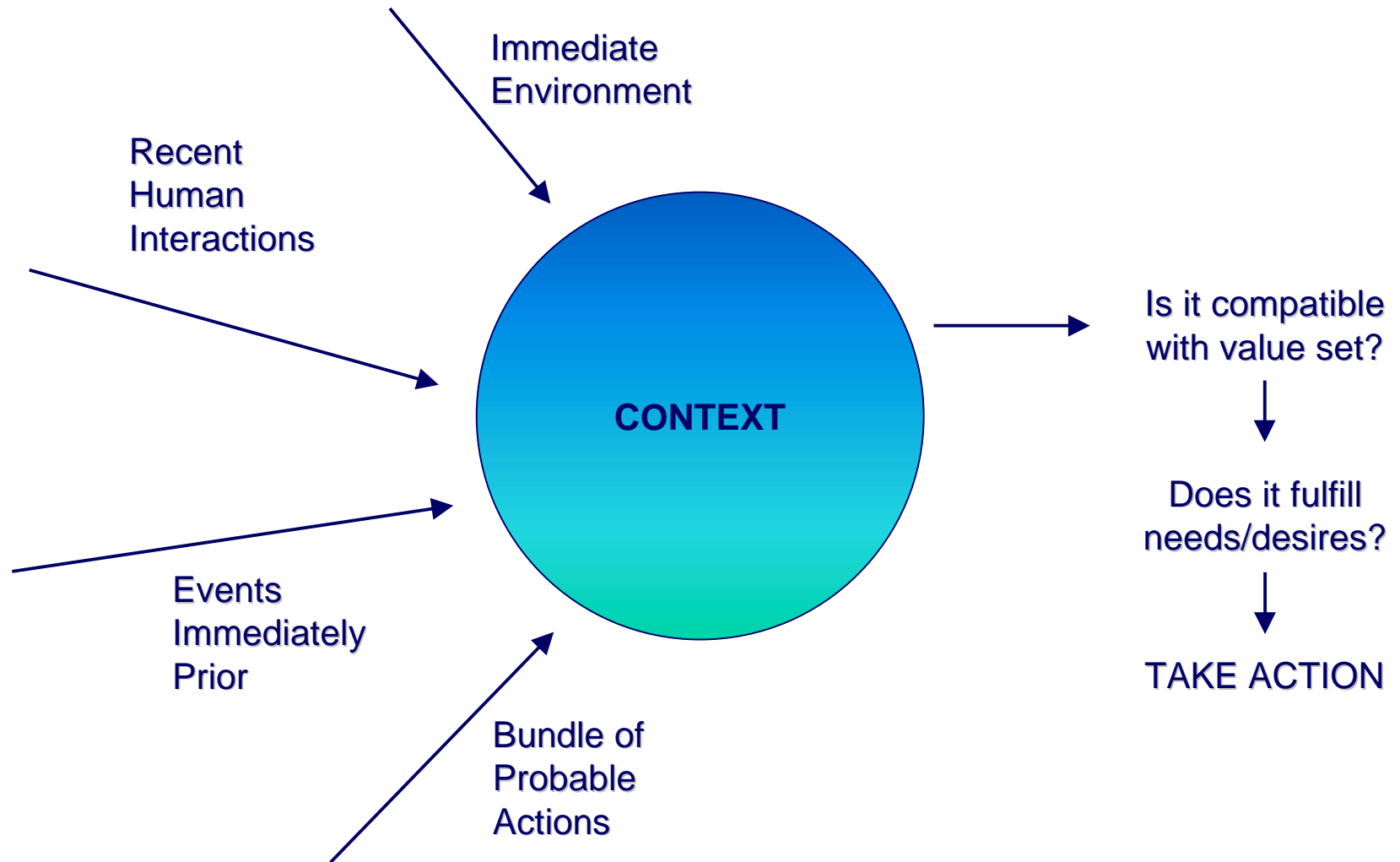
How do we maximize collaboration and sharing while minimizing loss of intellectual capital?

The DON KM Framework



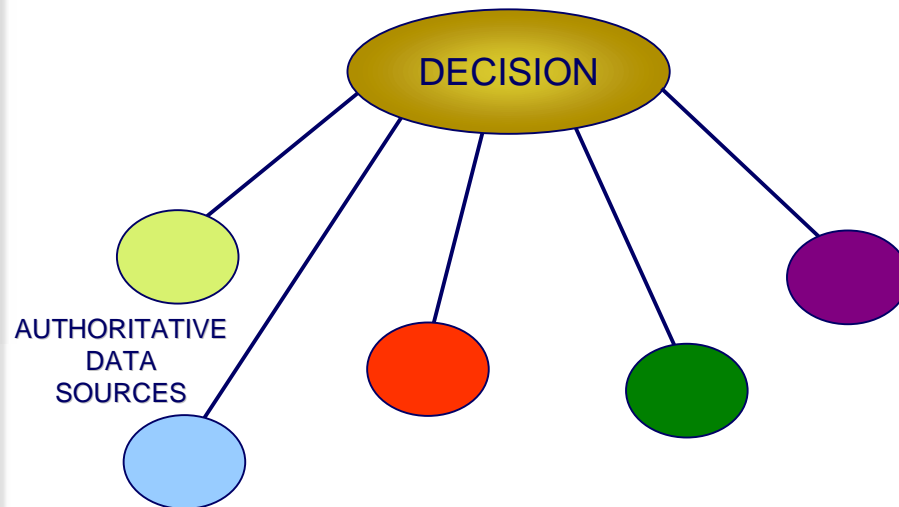


Context is Unique at any Given Point in Time





Value of Clumping and Clustering

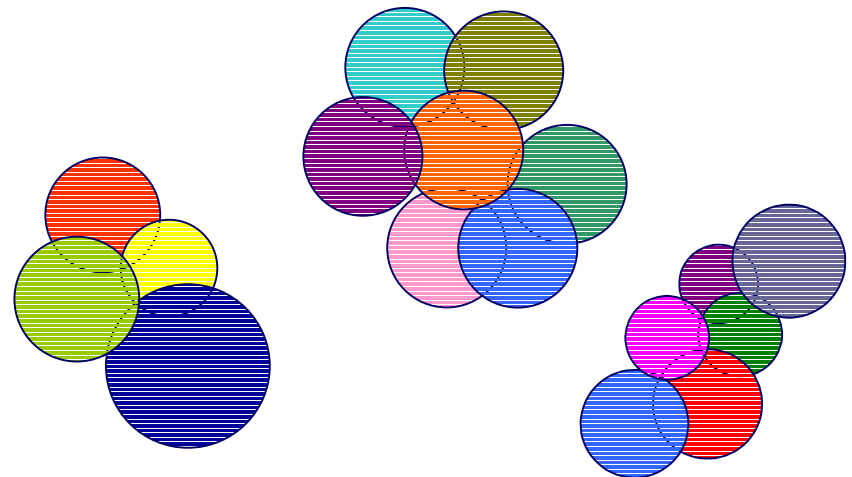


CLUMPING

- Organizing information and data around decision points.
- Real-time data and information.
- Promotes efficient and effective decision making.

CLUSTERING

- Information and data organized around similarities.
- Promotes building of new knowledge and innovative practices.





Decision Grounding

Verification (to verify)

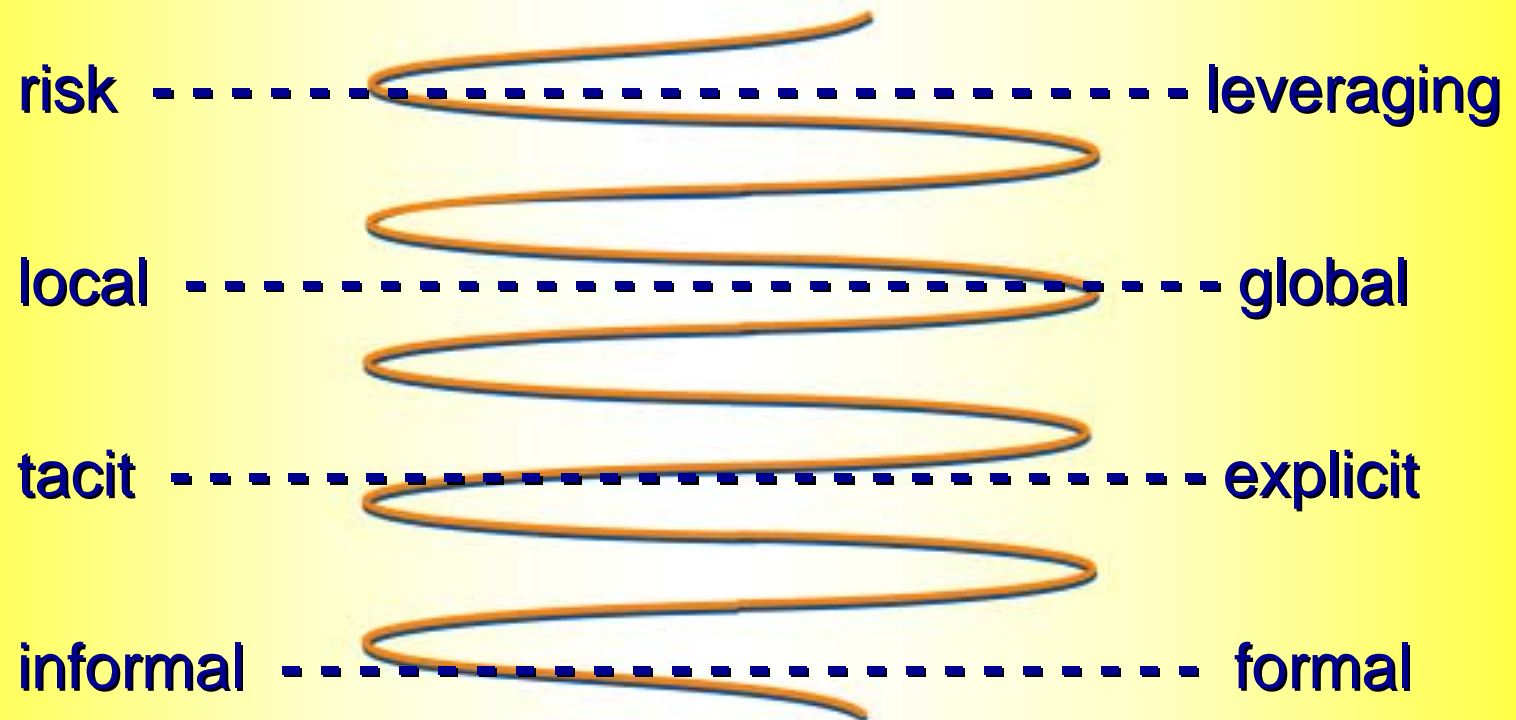
- To prove the truth of by presenting evidence; to determine the truth of accuracy.
- Grounded by the explicit.



Verication (to vericate)

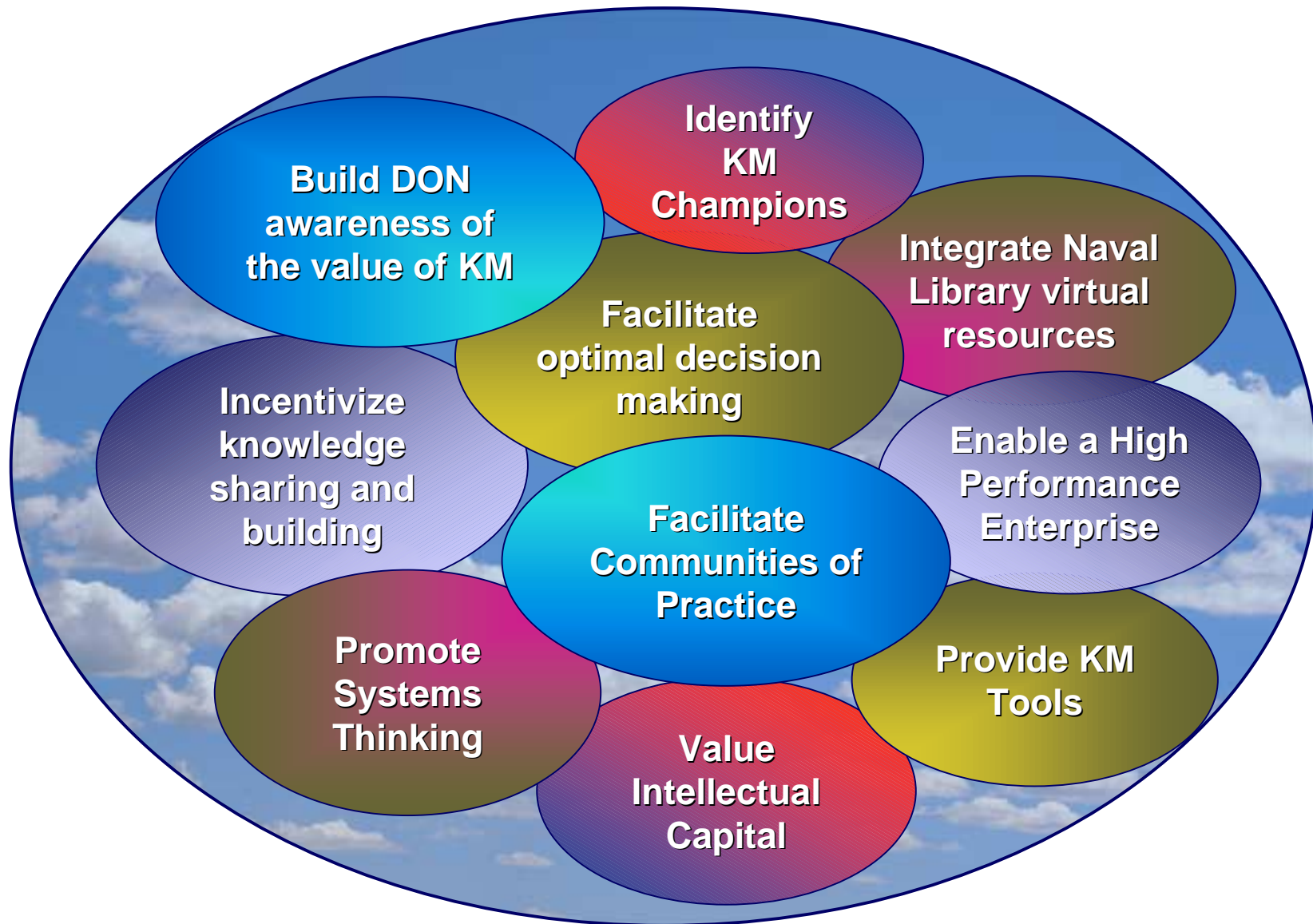
- To test the reasonableness by consulting a trusted ally; to determine the reasonableness or soundness.
- Grounded by the implicit.

Dynamic Tensions

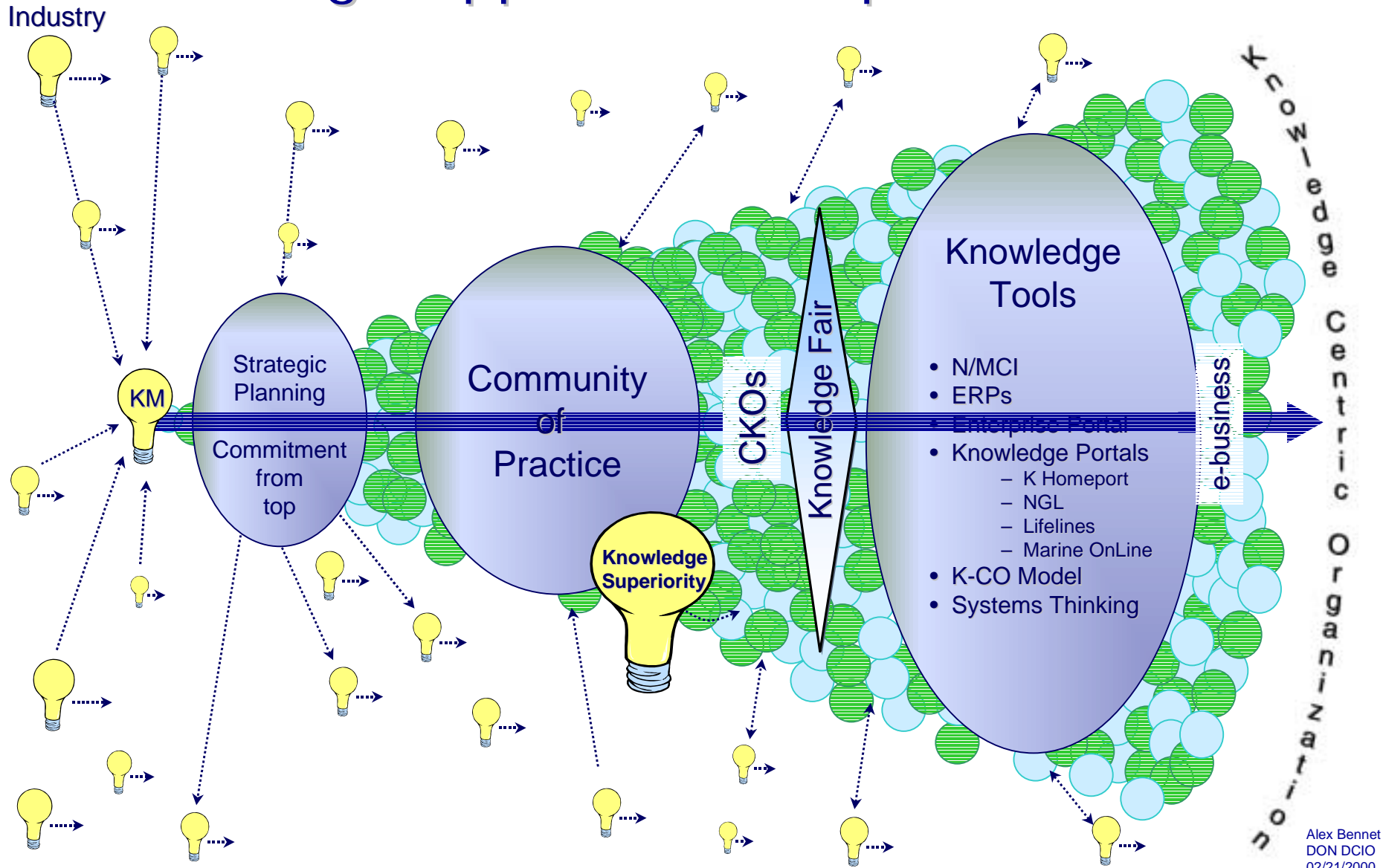


For every KM effort there is a point of equilibrium

Holistic KM Strategy



Strategic Approach to Implementation



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02/21/2000

Invokes the law of requisite variety



Goals of DON KM

- Achieving Knowledge Superiority
- Leveraging intellectual capital
- Improving decision-making
- Promoting innovation
- Transferring best practices
- Facilitating individual and organizational learning

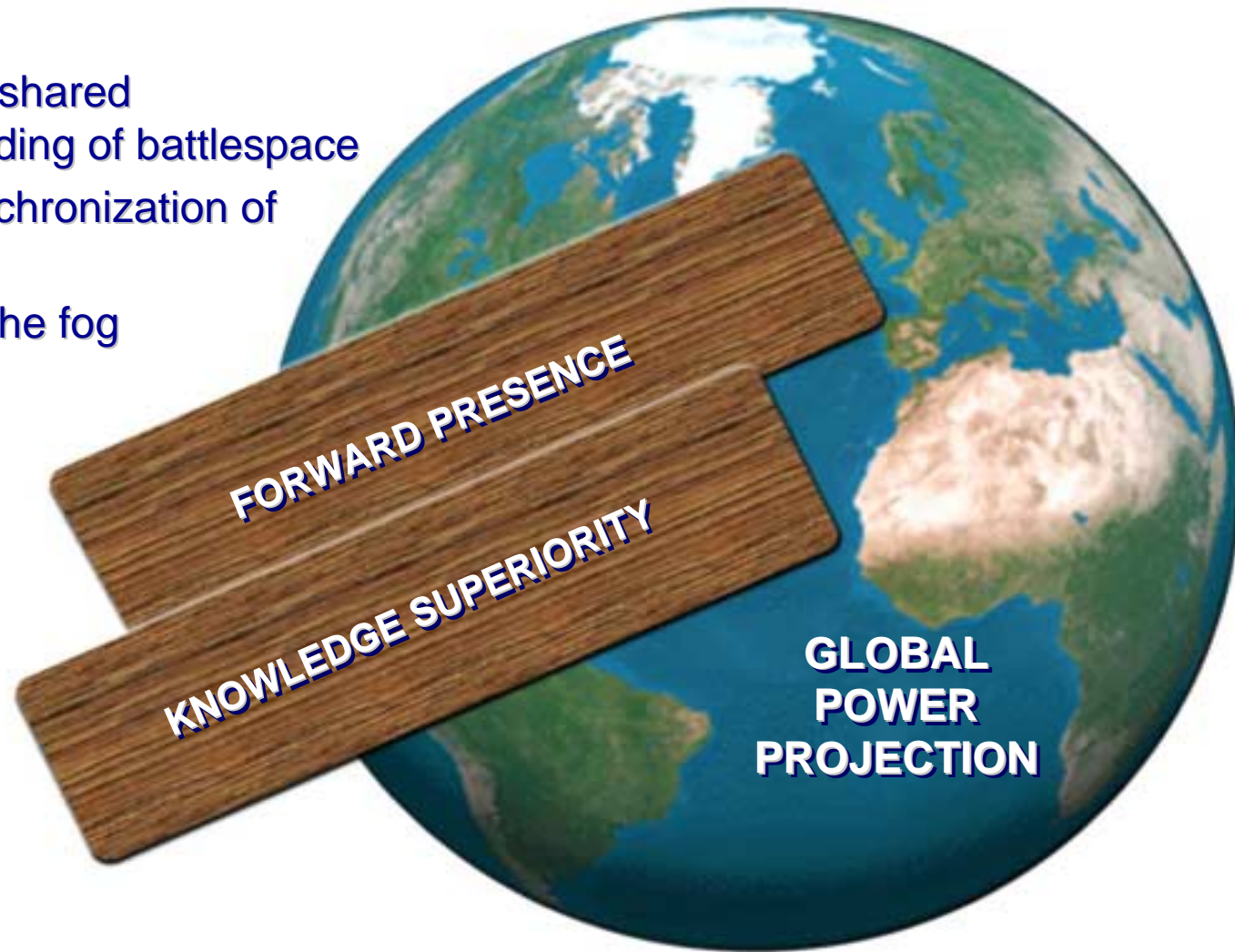


Knowledge Superiority

- KS is for achieving sustainable competitive advantage over our adversaries.
- Characterized by tactical and technical competence and consistent building of cohesive teams.
- Builds on integration and interoperability of warfighters and systems.
- Includes capabilities for KM, effective IO and network management, and organizational relationships that encourage sharing and creation of knowledge.
- Translates into superior knowledge of the battlespace and the ability to rapidly bring overwhelming force against our adversary.

The New DON Maritime Concept

- Real-time shared understanding of battlespace
- Rapid synchronization of actions
- Mitigates the fog of war



*“Our Navy will be alive with the fire
of shared understanding.”* - KS Project Vision

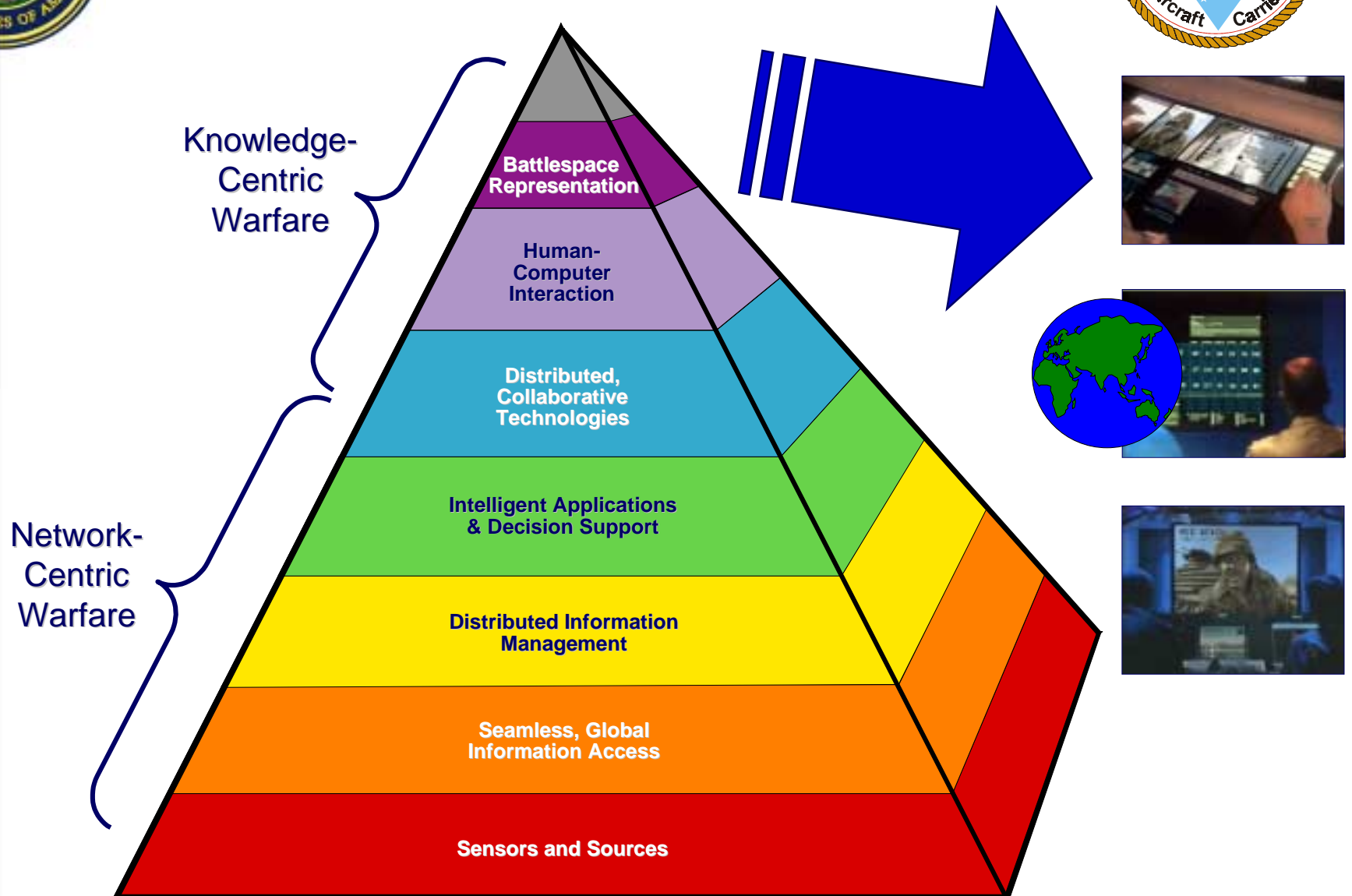


Knowledge Superiority Goals

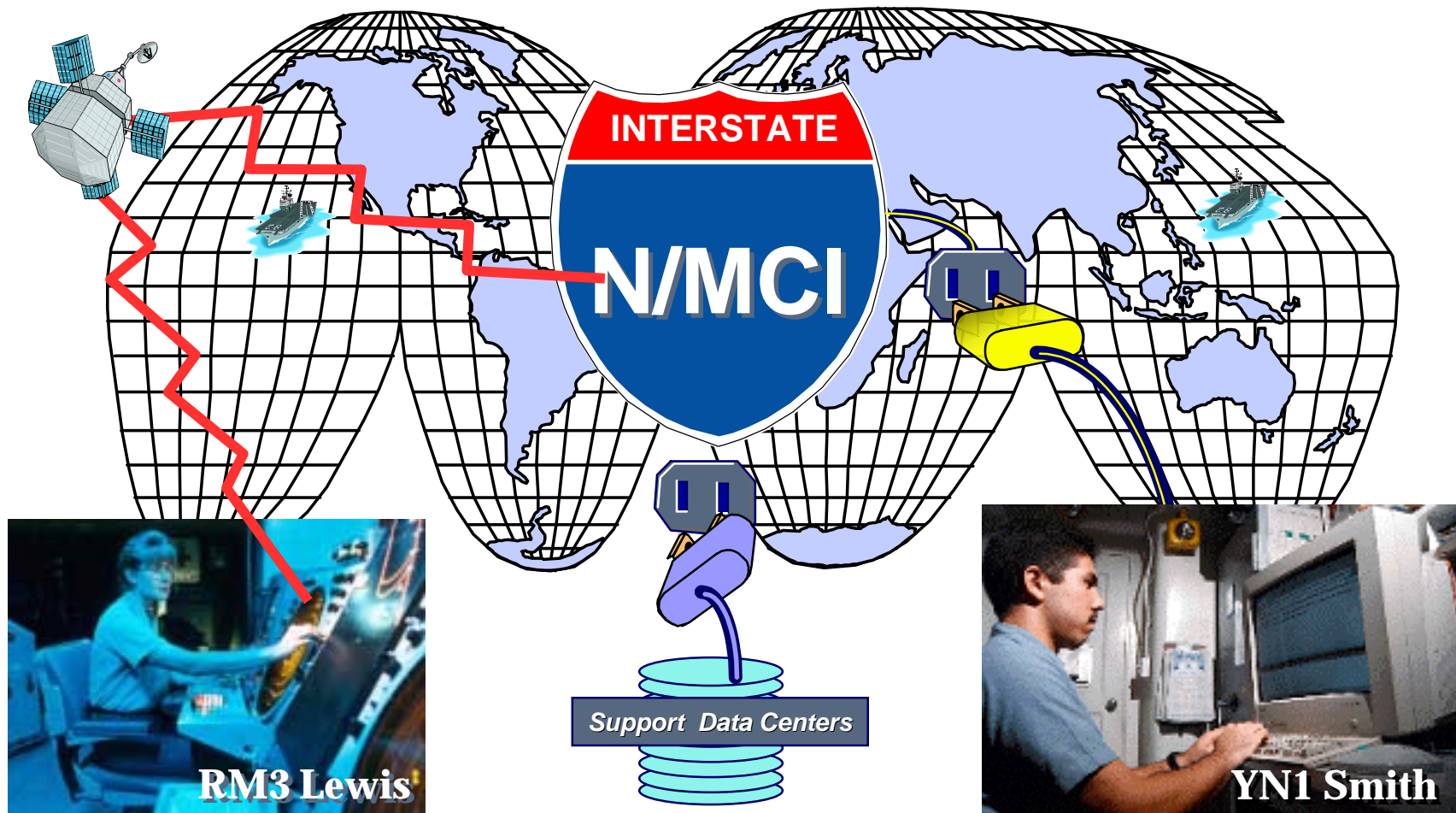
- Goal 1 – Develop and resource an integrated, end-to-end investment strategy to ensure an effective, efficient, interoperable Naval Knowledge Superiority capability
- Goal 2 – Develop a process for the coherent development of Knowledge Superiority capability
- Goal 3 – Develop a Navy “all hands” training and education continuum for core Knowledge Superiority competencies
- Goal 4 – Change the organizational structure and culture of the Navy to achieve Knowledge Superiority
- Goal 5 – Develop levels of Knowledge Superiority expertise in the Navy
- Goal 6 – Develop an architecture process which supports/enhances the full range of naval missions. It allows improved business practices and increases individual productivity
- Goal 7 – Develop the projection capability of Knowledge Superiority, to affect adversary information and information systems while protecting our own



Keeping the End in Mind



Looking toward the future:
Creating the Navy/Marine Corps Intranet



Enabling global, secure naval information exchange



IKMWG Background

- RBA Excom signed charter Dec 99
- Participants include: CLF N6, CPF N6/8, MARCORSYSCOM, N1, N4, N6, N7, N8, ASN (RDA), ASN (I&E), ASN (M&R), AC/S C4I, ONR, NAVAIR, NAVSEA and PEO (IT)
- IKMWG Subgroups
 - Blueprint: Process Pilots (Led by Debbie Filippi, Deputy AC/S C4I)
 - Enterprise Portal Prototype (Led by CAPT Larry Stack, N6)
 - Collaboration and sharing barriers (Led by Steve DeWeese, N4)



IKMWG Mission

- Explore potential application opportunities for the N/MCI.
- Recommend uses of the Intranet considering major knowledge management initiatives under way and security issues.
- Facilitate integration of major knowledge management initiatives underway throughout the enterprise.
- Recommend policies and procedures that will enable best use of the Intranet.



IKMWG Blueprint Subgroup

- Recommended initiating an Enterprise Portal Pilot.
- Recommended the Working group look at cross-organizational and cross-functional processes as potential pilots to demonstrate Enterprise value of the use of N/MCI.
- Tasked to develop criteria for selection of process pilots.
- Tasked to recommend potential process pilots.
- Tasked to explore the need for additional Enterprise-wide actions for the RBA IKMWG.



IKMWG Enterprise Portal Demonstration Prototype

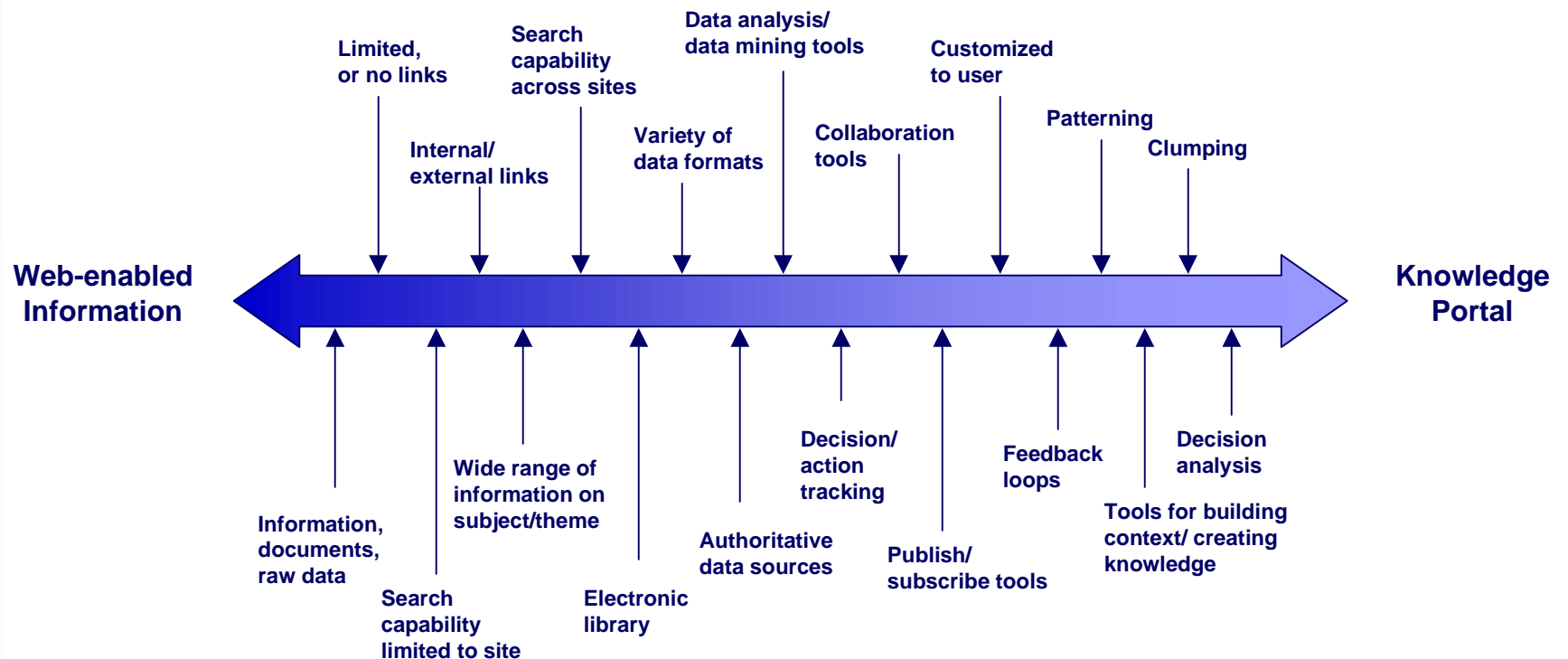
- N6 sponsoring development of a super portal prototype.
- Combines collaborative portal, information portal and expertise portal into single portal application.
- Not just customizable (where you select from a menu of preferences) but tailorable (where you can change the look, feel and shape of it).
- Technology behind portal derived from robust intelligence system portal designed by SAIC and Sybase.
- Beta testing begins in early summer, with prototype delivered 30 September.

IKMWG Enterprise Portal Architecture





Spectrum of Capabilities



* Taken from the May 2000 Center for Naval Analysis DON portal study.



Barriers to Collaboration and Information Sharing Subgroup

- Identified three conditions for success: willingness, ability and opportunity
- Surfaced Issues
 - Information Integrity
 - Fear of Compromise
 - Knowledge is Power
 - Sharing is a social, unformatted activity
 - Organizational Culture
- Recommendations
 - Develop N/MCI Roll-out strategy (web sites, CDs that “tell the story”, NMCI Road show)
 - Reward sharing and collaboration in the promotion and recognition processes
 - Build communities



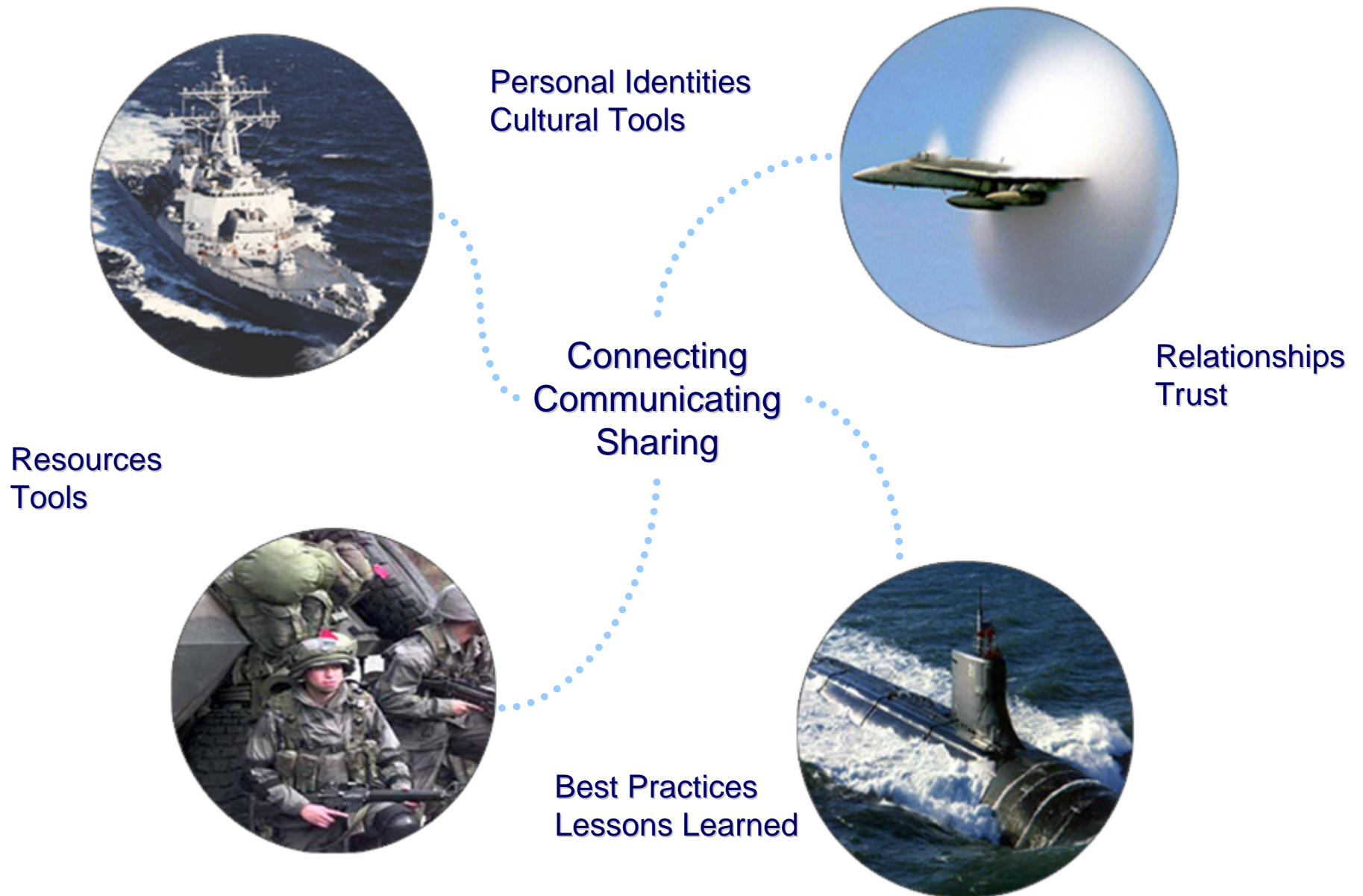
Barriers Subgroup Recommendation: Build Communities

COP = Community of Practice

COI = Community of Interest

- Develop guidance for effective operational level COPs/COIs.
- Faster and support at least two COP/COI pilots.
- Create a COP/COI template.

DON Community Elements



Community of Practice Attributes

- Shared Domain of Practice
- Alignment with strategic direction
- Crosses operational, functional and organizational boundaries
- Defined by knowledge, not tasks
- Managed by making connections
- Focus on value added mutual exchange and continuous learning
- Evolving agenda



*"...you cannot force a plant to grow by pulling its leaves...
what you can do is create the infrastructure in which it can prosper."*

- Etienne Wenger, 1999

Community of Interest

IT Investment Portfolio Management

- Sharing of knowledge and ideas between DON participants from different organizational positions and across organizational boundaries
- Information exchange facilitated by interactive forums:
 - Web site
 - Information events
 - Workshops
- First event will be a track session at Connecting Technology in May 2000

Community of Practice

Defense Acquisition Community

- Principal Deputy Under Secretary of Defense sponsored a Rapid Improvement Team (RIT) to explore options for an Acquisition Knowledge Management System
- DON Acquisition Reform Executive represented the Department
- RIT developed a KM vision that emphasizes the creation and support of Knowledge Communities of Practice
- RIT recommended four high priority Community of Practice candidates
 - Simulation Base Acquisition
 - Performance Based Service Contracting
 - Competitive Sourcing
 - Total Ownership Cost Reduction



*Building
Communities*



The KM Community of Practice

- Builds on the Fall 1998 and early 1999 KM Senior Leaders' Forums sponsored by N6.
- Offers the opportunity to benchmark against best practices and participate in development of Enterprise-wide tools.
- Facilitates exchange of successes and lessons learned.
- Wide representation from across Enterprise.
- Continuing virtual connectivity and quarterly forum meetings.
- Sponsoring the DON Knowledge Fair.

Facilitates information sharing and organizational learning.



DON Knowledge Fair

- Showcase for facilitating Enterprise sharing.
- Event hosted by the Under, CNO and CMC
- Video-taped for wide dissemination
 - Over 40 displays demonstrating successful KM applications
 - PACFLT Knowledge Home Port
 - Research.Link (Next Generation Library)
 - ACOM
 - PEO (Carrier)
 - Knowledge Superiority Project
 - LifeLines
 - Marine On Line
- Scheduled for 1 August in Crystal City

Creating the Knowledge-Centric Enterprise



Institute for Knowledge Management

- Consortium of government and industry leaders in knowledge management.
- Other government participants include GSA, DOT, and NSA.
- Supporting cutting edge research.
- DON has enterprise-wide rights to all studies and tools generated by Consortia.
- Working groups underway include: Intermediation, Community of Practice, and Knowledge Strategy.
- PEO (Carrier) serving as test bed for Innovation Diffusion project (Harvard team).
- Leading-edge information available through KM Community of Practice.

Building Critical Thinking Skills

