

NMCI Center for Innovation

19 June 2003

Presented by

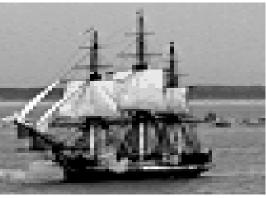
CAPT Chris Christopher

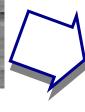
Deputy Director for Future Operations, Communications, and Business Initiatives
Navy Marine Corps Intranet Office

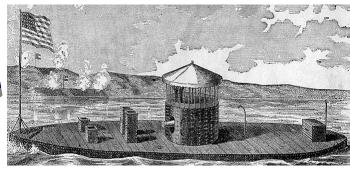


A transformational enabler...

- Culture
- Technology
- Management







Steam

Sail

- ...through enterprise level improvements in:
 - Security
 - Knowledge sharing
 - Reliability

- Interoperability
- Productivity
- Cost

NMCI requires work to effect change



Transformation happens ...

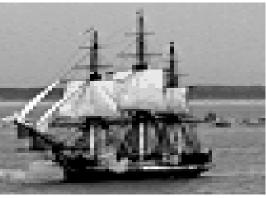


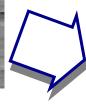
International Naval Review, 1893 New York Harbor



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•Security (firewalls, intrusion detection, encryption)

All network infrastructure

Pier Services(connectivity, NOC / JFTOC interface)

 Enterprise support / functions (Help Desk, Tech Support, etc.)

Joint and industry interoperability

Wide Area Network
 Access (DISN, Commercial WAN, internet)

 Common desktop software suite with built-in refresh

Desktop hardware

with built-in refresh

Domain NameService

User training

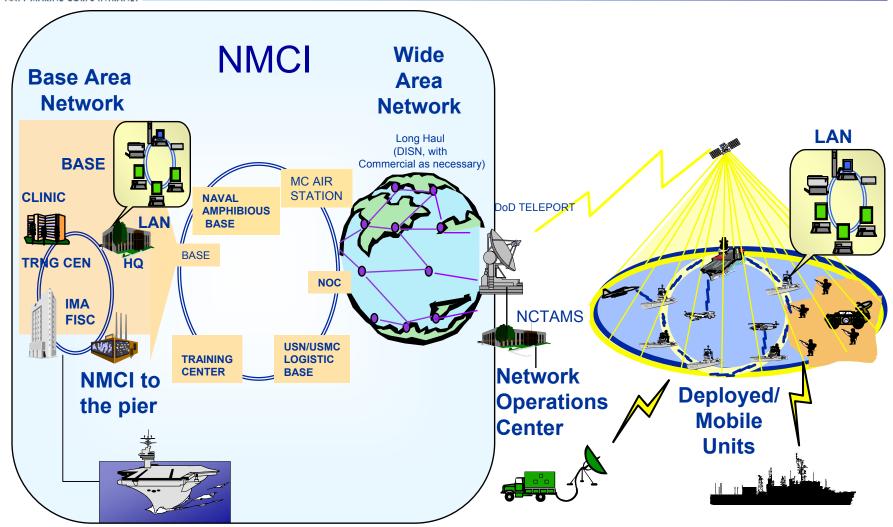
Messaging

Directory services

End-to-end network management

Standard seat services - interoperable and secure





The Network Part of Net Centric







NMCI Center for Innovation

- NMCI Product Evaluation Center
- NMCI Industry Symposium
- NMCI Innovation Council
- NMCI Strategic Partners Forum
- NMCI User Group

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"Innovation has been the key to U.S. naval supremacy in the 20th century. A key to past, successful innovations was the iteration of thought between operators, technologists and analysts. The operator brought "unarticulated requirements" to the table. The technologist brought emerging and existing technologies. Analysis blended the two."

- Chief of Naval Operations Strategic Studies Group



... but what is innovation?

- Innovation concerns the search for and the discovery, experimentation, development, imitation and adoption of new products, new processes and new organizational set ups.
 - Frater, P., Stuart, G., Rose D. and Andrews, G.
- Innovation (is) the act of introducing and using new ideas, processes, products, and technologies in practice.
 - CERF/IIEC
- Innovation is the effort to create purposeful, focused change in an enterprise's economic or social potential.
 - USAF Electronic Security Command Strategy paper No. 3
- The process of innovation is of immense social interest and impact, has been studied extensively, and yet remains poorly understood. A critical factor in many instances of innovation is the transfer of information and understanding developed in one or more disciplines to other, perhaps very disparate, disciplines.
 - Dr. Ronald N. Kostoff, Office of Naval Research



"I know it when I see it."

- "This 'telephone' has too many shortcomings to be seriously considered as a means of communication. The device is inherently of no value too us."
 - Western Union internal memo 1876
- "I think there is a world market for maybe five computers."
 - Thomas Watson, chairman of IBM, 1943
- "But what... is it good for?"
 - Engineer at the Advanced Computing Systems Division of IBM, 1968, commenting on the microchip.
- "There is no reason anyone would want a computer in their home."
 - Ken Olson, president, chairman and founder of Digital Equipment Corp., 1977
- 640K ought to be enough for anybody."
 - Bill Gates circa 1981
- "Anybody who thinks a little 9,000-line program that's distributed free and can be cloned by anyone is going to affect anything we do at Microsoft has his head screwed on wrong."
 - Bill Gates to George Gilder, responding to Java
- "I don't have time to talk to some salesman. I have a battle to fight!"
 - Caption to a cartoon showing a king, in full armor, riding his horse off to battle after refusing to see a salesman selling a Gatling gun.



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NMCI Industry Symposium

- Purpose: to facilitate an ongoing dialogue among the DON, EDS, and the IT industry that will help shape the future IT marketplace in the DON
- Annual meeting in New Orleans
- Continuing dialogue
 - NMCI web site
 - Smaller, focused meetings



- First stop for vendors
- Entry point for product consideration
- Single Navy point of contact for evaluating NMCI compatibility
 - Provide vendors opportunity to verify that products work in the NMCI environment & not DOA because security issues
- Authoritative source for FAMS and claimants



DON activity

- Access to NMCI architecture and performance parameters for development
- Publish standards and procedures for submitting software for compatibility evaluation

Fee for service

- If found compatible, results posted on web site; report delivered to vendor
- If not found compatible, deliver report to vendor





- Focus on leveraging NMCI infrastructure
- Explore underlying NMCI technologies as they relate to application or operational issues for the Navy & Marine Corps
 - Investigate opportunities for improvements and innovation within the context of the NMCI infrastructure and environment
 - Leverage existing technologies in unplanned ways
 - Combine constituent parts of NMCI to yield an unanticipated outcome
- Two-year horizon for results



NMCI Strategic Partners Forum

- Share IT vision of next 3 to 5 years
 - DON briefs initiatives/challenges/desires
 - Industry briefs capabilities/plans/products
- Consider "over the horizon" issues
 - Emerging science
 - New technologies or technology trends
 - Marketplace directions and trends
 - Implications for equipment/software that run on NMCI



- Modeled on industry User Groups (e.g., CA, Xplor)
- Provides NMCI program status to operators
- Provides forum for individual users to identify needs/requirements for existing operations
- Provides opportunity to apprise users of availability of new/emerging/planned changes to NMCI
- Annual meetings
- Ongoing dialogue



- "We believe in, and will do everything we can do, to encourage innovation in our Navy. Experimentation is vital to change, and we will embrace innovation and experimentation. We cannot have too many pilot projects underway."
 - Admiral Vern Clark, Chief of Naval Operations
- "The challenges are new, and new tools must be brought to bear: the tools of innovation, experimentation, rigorous examination of concepts. . . the tools of a high-speed, networked, Information Age."
 - Admiral Jay Johnson, former Chief of Naval Operations



Innovation: it's what we do

"Building a 21st century military will require more than new weapons...will also require a renewed spirit of innovation...It is this spirit of innovation that in the late '20s allowed a visionary like Admiral Marc Mitscher to truly understand the potential power of putting an airplane on a ship. He and other great pioneers perfected in less than 20 years the doctrine, technology and tactics of naval aviation that would win the war in the Pacific. That same decade, the spirit of innovation allowed a smart Marine Major named Pete Ellis to understand that such a war would require the ability to land men and heavy equipment from a ship. So he spent the better part of his career developing the doctrine of amphibious warfare. The Marines at Iwo Jima and Inchon were thankful he did. The same spirit led Admiral Hyman Rickover in the '50s to the insight that the nuclear genie could be bottled to allow our submarines to stay underwater for months at a time. It led Admiral "Red" Raborn to understand how to put a nuclear missile on a submarine. And it led Arleigh Burke, the father of the modern Navy, to have the foresight to put these two men and their ideas together to create the third and most invulnerable leg of our Cold War nuclear triad. Creativity and imaginative thinking are the great competitive advantages of America and America's military."

Remarks by President George W. Bush at the U.S. Naval Academy Commencement











Official NMCI web site: http://www.nmci.navy.mil



NMCI Information on the Web

Navy web sites:

- Official NMCI Web Site: http://www.nmci.navy.mil/
- DONCIO http://www.don-imit.navy.mil/
- Secretary Gordon England on NMCI: http://www.chinfo.navy.mil/navpalib/news/navnews/nns01/nns01061.txt
- Secretary Richard Danzig on NMCI Contract Award: http://www.chinfo.navy.mil/navpalib/people/secnav/danzig/speeches/nmci001006.txt
- Navy's Report to Congress on NMCI http://164.224.120.150/congress/nmcireport.html

EDS NMCI web site:

http://www.nmci-isf.com/