

Enabling COIs with Open Technology Development (OTD)

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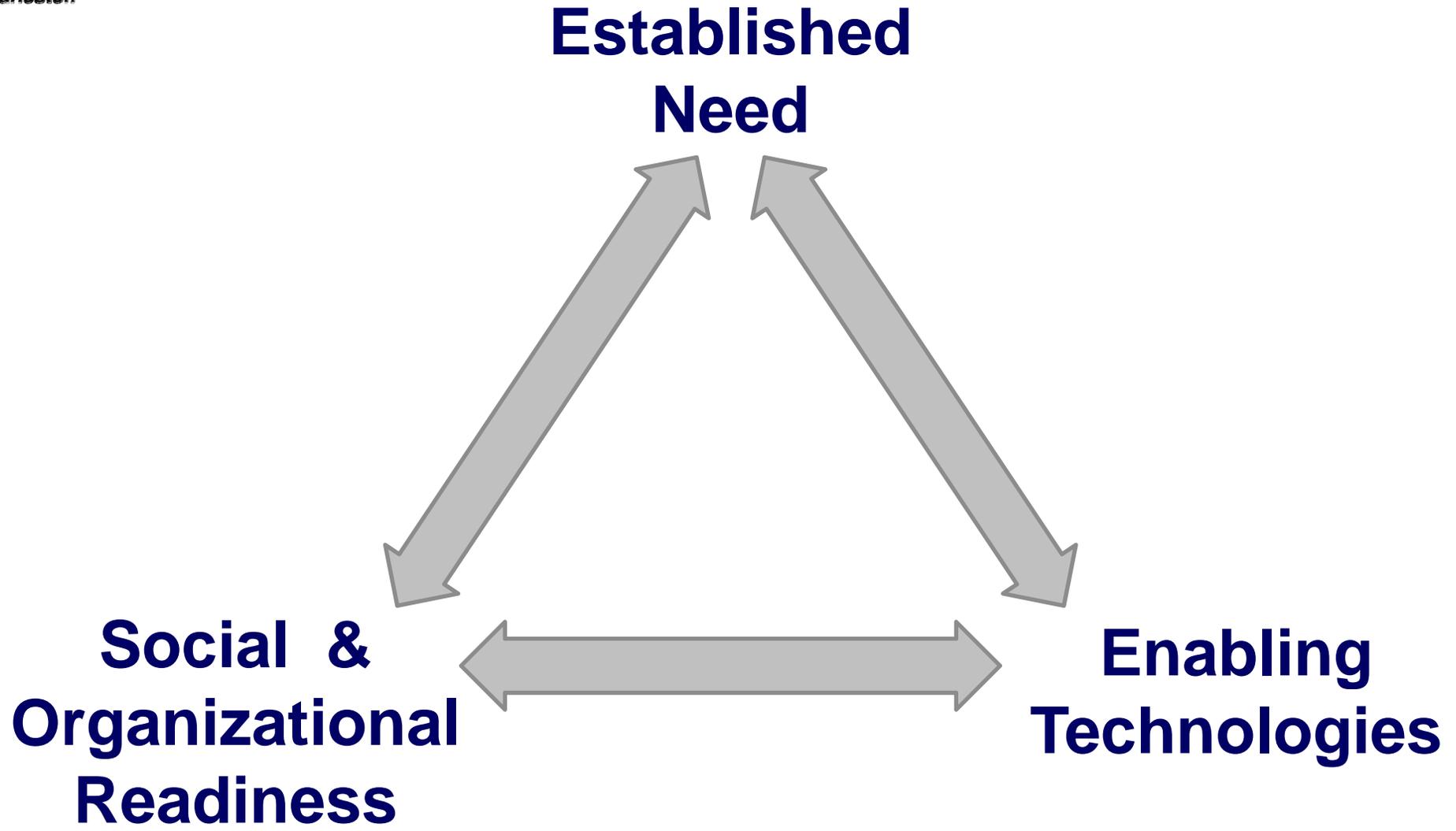
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Successful COI Implementation





- Transnational Information Sharing Cooperation (TISC) is an initiative to restructure approaches to knowledge management within humanitarian assistance, disaster relief, and stability operations contexts, and provide means to bridge information sharing gaps among institutions by embracing the “**need to share**” information
- TISC will engage a broad spectrum of partners during its development lifecycle to ensure that innovations in policy, process, and technology are **mutually beneficial and supportive of existing capabilities** among extended partners
- Cooperative exchanges outside of traditional government channels are essential for the development of effective **collaborative information sharing environments**



Concepts of Operations

Connect and Collaborate – Alignment of efforts and interests among independent organizations

Situational Awareness – Shared awareness of resources and infrastructure among partners

Web-centric – Interoperability and connectivity among actors over the common platform of the Web

Social Networking – Shared knowledge communities and group-forming behavior among individuals

Operational Capabilities

Benefits of Web-centricity:

Actors in complex real-world scenarios can choose to communicate and share interoperable data while preserving ownership over information and platform infrastructure

Employment options:

Facilitates communication among actors at all levels

Strategic partnership-building among organizations

Operational coordination and alignment among responding groups

Tactical information sharing among individual responders

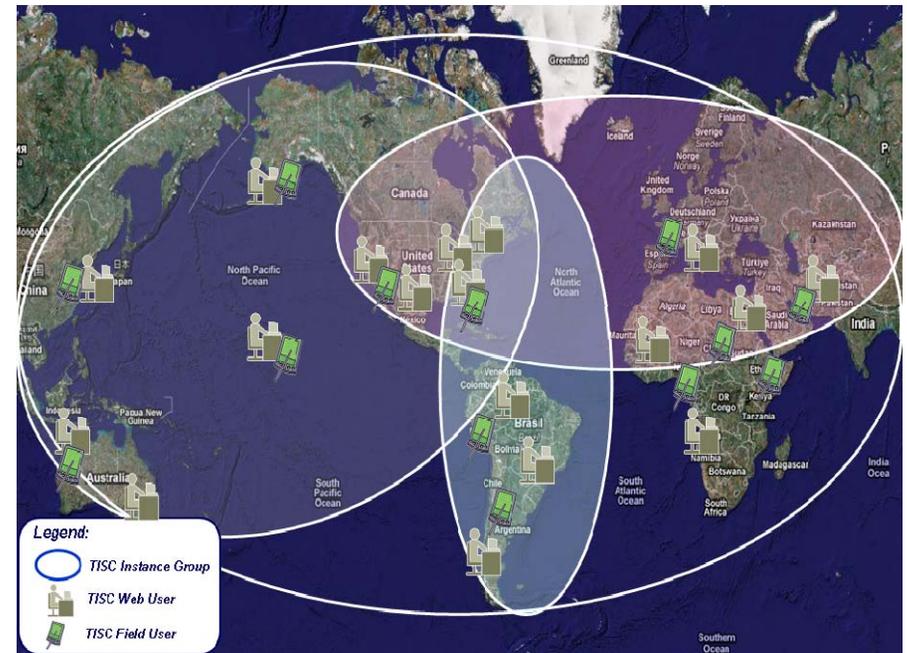
Ownership of capabilities and information:

Concepts and technology applicable across multiple configurations

DoD hosted sites – TISC capabilities transitioned to programs of record

Partner hosted sites – Infrastructure owned by partner organizations

Commercially hosted sites – Partner site on third-party infrastructure



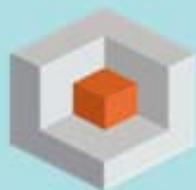
TISC Operational View - 1 (OV-1)

Independent and geographically dispersed instances can connect and exchange information as needs demand



Interaction with Customers & Their Audiences

- Needs Analysis
- Support Services
- Strategic Alignment, Leveraging



SCHOLAR
Open Technology
Development (OTD)

Capability Technology Platform

Architecture & Design
Coordination of Support Services



Interaction with Open Source Community

- Alignment
- Configuration
- Product Maturity



DOD CIO Net-Centric Data Strategy

Ensuring data is visible, available, and usable when needed and where needed to accelerate decision-making.



DODD 8320.02 Data Sharing in a Net-centric Department of Defense

4.6 Data interoperability shall be supported by making data assets understandable and by enabling business and mission processes to be reused where possible.



DOD CIO Implementing the Net-Centric Data Strategy: Progress and Compliance Report

C4.4.3.1.1. Enterprise Considerations.

C4.4.3.1.2. Improve the understandability of the data.

C4.4.3.3. Ensure that data structure meets the consumers' needs, including those of unanticipated users.



DOD 3000.5 Military Support for Stability, Security, Transition, and Reconstruction (SSTR) Operations

5.7.1. Ensure effective information exchange and communications among the DoD Components, U.S. Departments and Agencies, foreign governments and security forces, International Organizations, NGOs, and members of the Private Sector involved in stability operations, in coordination with the USD(P) and the USD(AT&L).



DOD CIO Open Source Software in the Department of Defense

DoD Components acquiring, using or developing OSS must ensure that OSS complies with the same DoD policies that govern Commercial Off The Shelf (COTS) and Government Off The Shelf (GOTS) software.

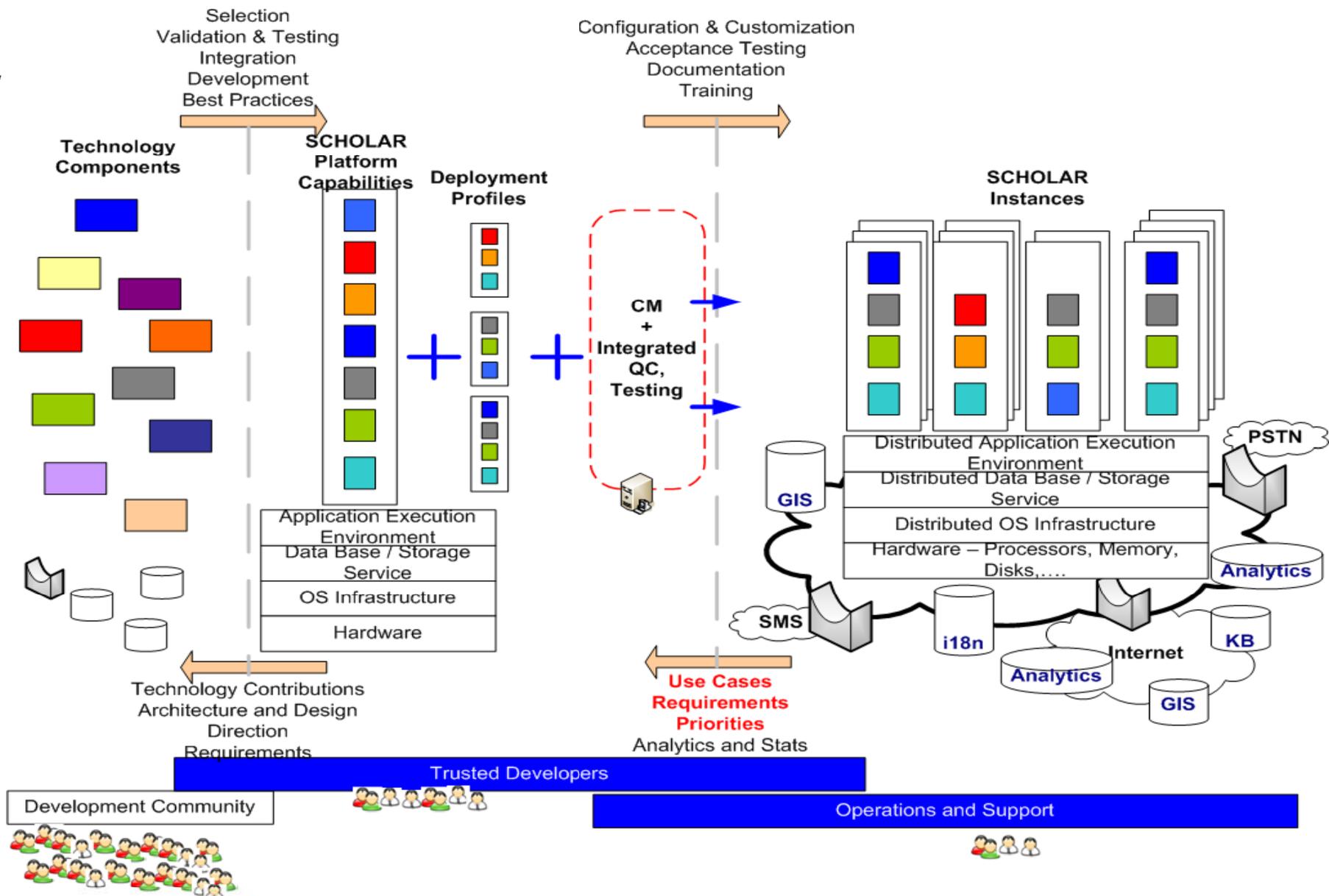


OSD AS&C Open Technology Development Roadmap Plan

DoD needs to leverage the corporate mindset that goes along with the shift to OTD...technology is now a commodity and the business model is providing professional services for solutions versus closed products.



Technology Delivery Model



“IBM provides a good example of engineering a corporate culture change away from proprietary implementations to leveraging and heavily investing in open solutions.” – OTD Roadmap, April 2006



- **Platform**

- Open architecture utilizing a combination of loosely coupled components with a common application provisioning framework allowing for rapid integration and solution delivery.

- **Data centrality**

- Consolidate and broker data between various channels utilizing open protocols and formats, such as XMPP and RSS.

- **Service orientation**

- Consuming and providing features and functionalities as application services.

- **Federation**

- Decentralized deployment and administration model utilizing open standards and allowing for interoperability in homogeneous and heterogeneous environments.

- **Scalability**

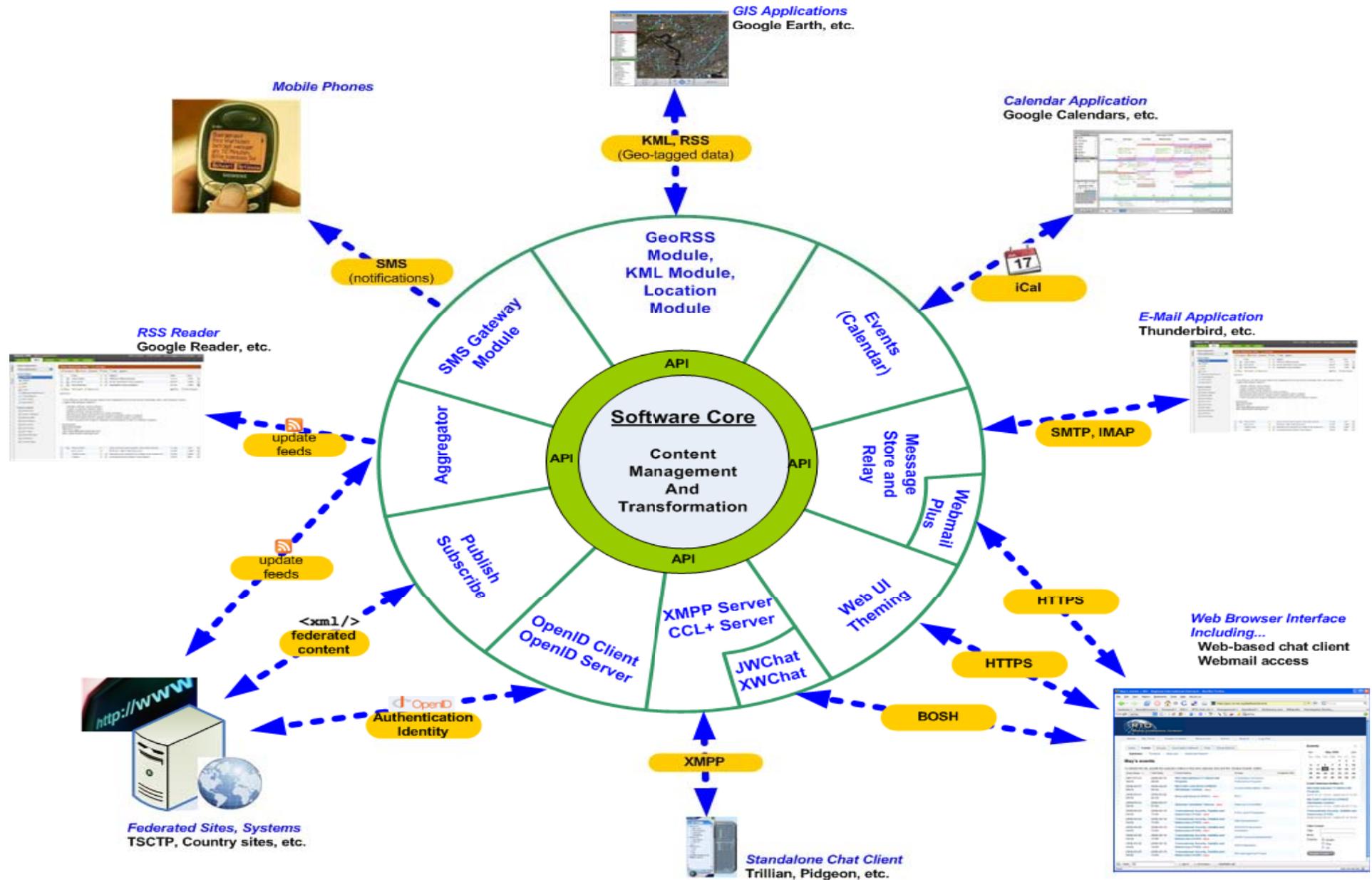
- From portable to large-scale deployments based on virtualization and horizontally scalable system architecture.



- **Community workspace**
 - Groups
 - File sharing
- **Community discovery**
 - Search
 - Social Network members Activity
 - Content and Notifications
- **Community forming**
 - Expertise
 - Geo
 - Content
- **Integrated communications**
 - Group email
 - Group chat
 - Group voice communications
- **Crossing stovepipes and organizational boundaries**
 - Federated identity
 - Distributed search



Technology Solution





Social and Organizational Enablers

- **Cohesion**

- Maturity of prior communities and social networks

- **Engagement**

- Leadership advocacy for transformational capabilities

- **Interaction**

- Dialogue among all system participants (user-centric), to include, but not limited to, management (customer) and development groups

- **Development**

- Technological maturity/accessibility, robust requirements

- **Liaising**

- Consultancy and ambassadorship to bring cohesion to a community supported by technology platform

- **Adaptation**

- Responsiveness of operational model to evolving capabilities

- **Transformation**

- Incorporation of Web behavior into business processes



- **Programs/Institutions that have taken an operational focus to application of technology are performing 3x -10x programs that have a technology service focus**
- **Programs/Institutions with high levels of effective interaction and liaisonship are most effective at integrating technology into operations.**
- **High technology focused interaction for programs and institutions leads to general platform reuse and growth, but does not translate into program and institution adoption without operational model changes.**



Demonstration