

Contextual Reasoning Framework Delivers Improved Collaboration

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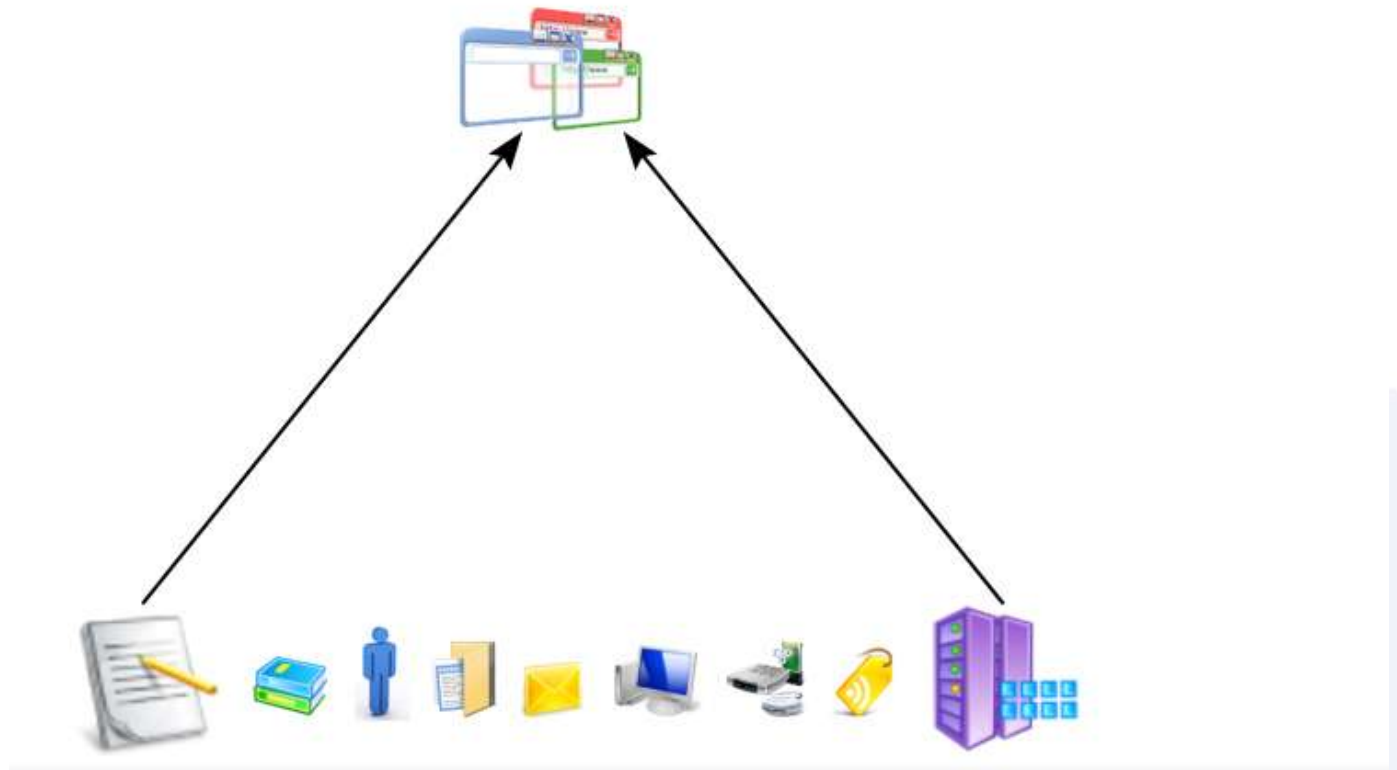
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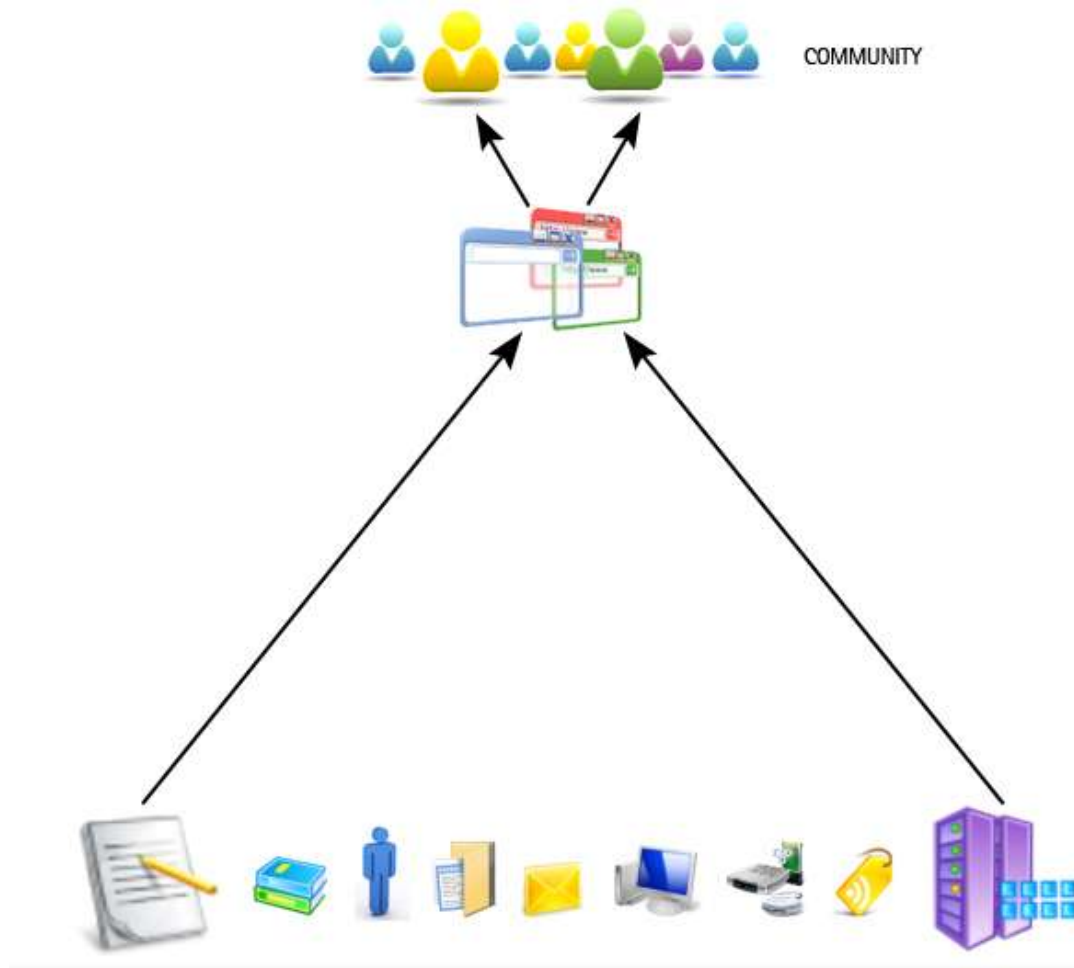
Every large organization has a complex community of people... employees, suppliers, customers, influencers....



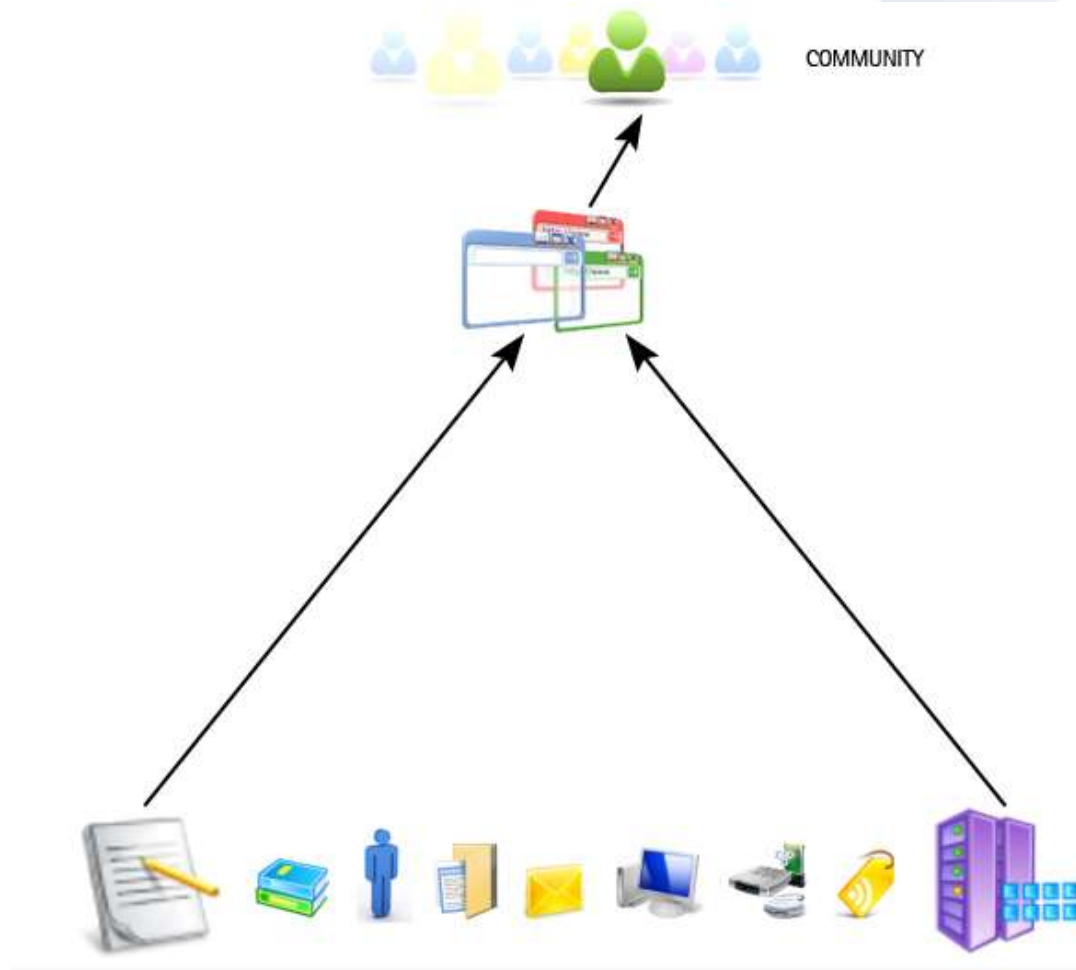
It also has many sources of data – accounting systems, asset registers, documents, RSS feeds, email... scattered everywhere



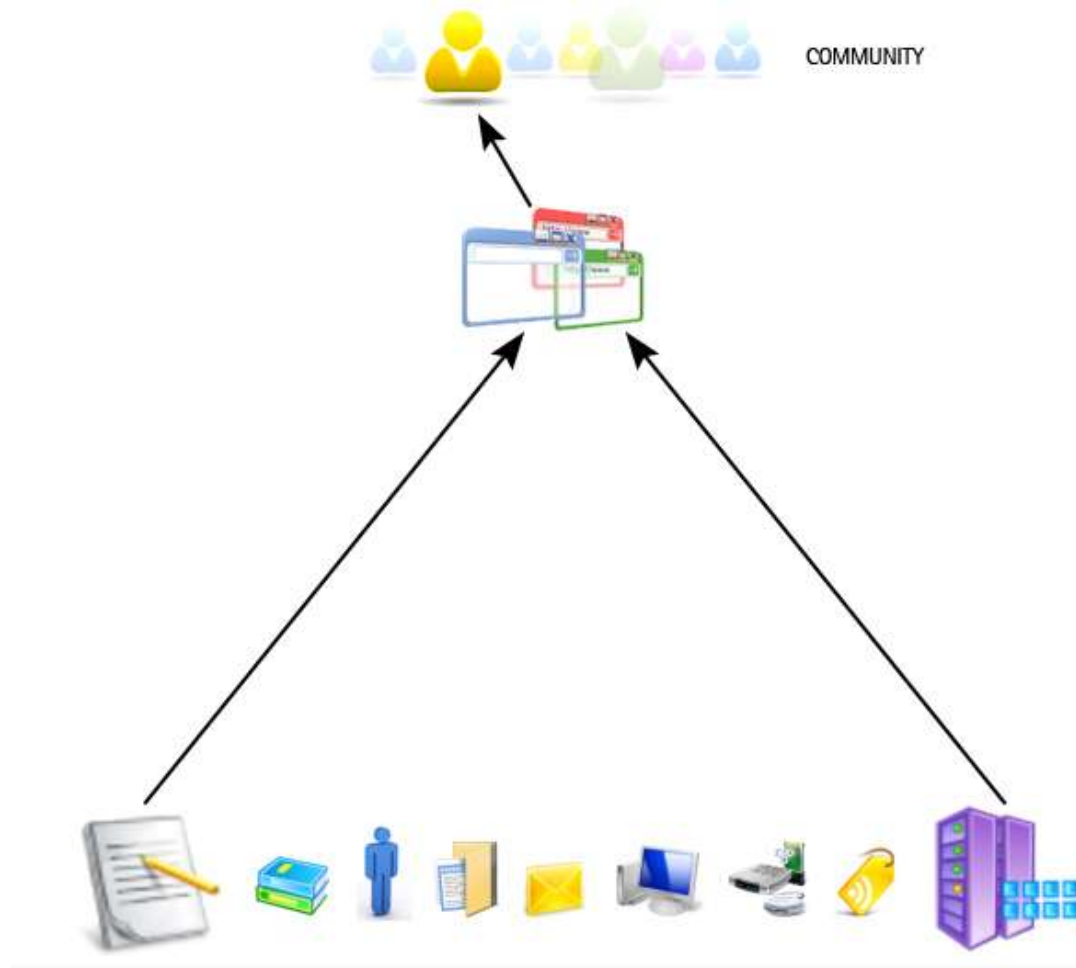
In an attempt to pull things together, these organizations typically implement data warehouses...
spending many millions on data integration...



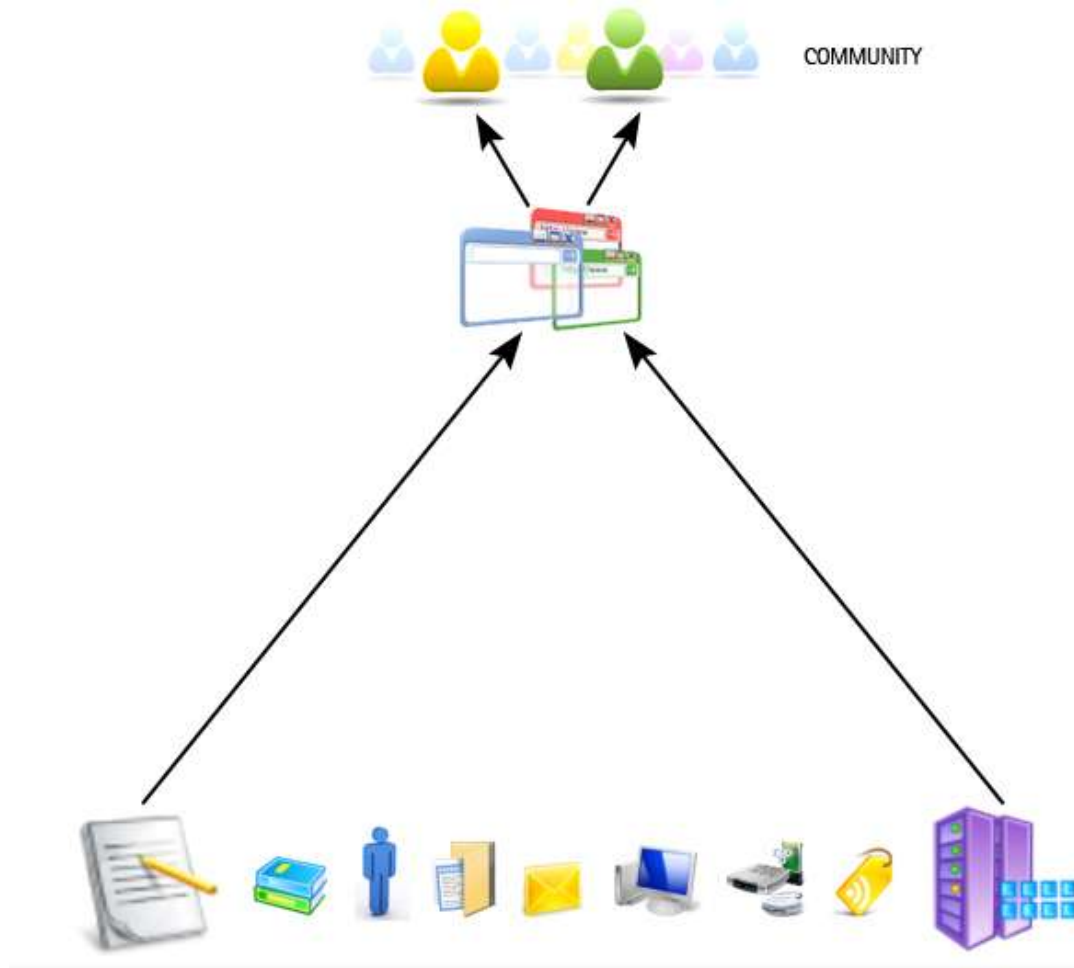
and building portals... so everyone can see the same information in one place...



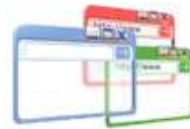
This person has to use his or her brain to make sense of the information in context – when this person gets sick or leaves, the knowledge of how this is done is lost to the organization...



Another person may have different ways of thinking about the same thing, or they might not know about each other – which may cause confusion, people doing the same task many times...



This problem is hard to solve because there is a huge gap in this organization – can you see it?



The gap is right here – there is no intelligence in the way information is aggregated, interpreted *in context* and presented to each person in the community.

Current Dilemmas

- Overwhelming amounts of data and information to sort quickly
 - Quickly changing environment
 - Difficult to share information
 - No common operating picture across the Area of Responsibility
- =
- Ineffective decisions

What is missing?

- Context
 - The answer to “So What?”
 - Following an historical line or knowledge base
- Effectively finding the right answer
 - Too much time getting off track watching the mailbox icon on your computer
 - Wading through various data sets to paint a complete picture

Contextual Reasoning

- Software that provides
 - Systematic processing of new data as it becomes available
 - Prioritization based on strategies, goals and objectives
 - Synchronization of actions to strategies across the enterprise
 - Collaboration in near real-time
 - Automatic information distribution based on profiles of individual users

Patented SIPRA Engine

- Weighting of
 - Success
 - Importance
 - Performance
 - Risk
 - Awareness



Intelligent Push

- Software that
 - Uses business rules to search for relevant data for its user
 - Learns from its user and the system
 - Alerts the user when new information becomes evident or a significant change in relevant data is discovered
 - Is able to conduct searches in many domains, freeing the user from long hours surfing the web

Intelligent Agent

- Searches contextual framework for relevant data and information
- Alerts the user when significant changes or new information is discovered
- Makes connections between data within the framework and alerts the user of new connections
- Learns from its user



Sample Uses

Allows

- Combatant Commands to see its' resources and commitments -- globally, regionally, locally
- Coalition partners to collaborate on developing and implementing unified plans of action
- Interagency partners to share information and have a truly “common operating picture” to make decisions
- Synchronization of objectives and resources to avoid pulling resources out of circulation during high risk periods
- Disparate data sources to be viewed simultaneously and in context
- Action officers to concentrate on analysis rather than presentation of data set, resulting in high quality recommendations

Current T&E Projects

- US Special Operations Command
 - Global situational awareness
 - Operations control
 - Elimination of out-dated presentations because briefings can be done on the near real-time system
- US Army Corps of Engineers
 - Readiness/Preparedness across organizations
 - Supporting stabilization

References

- Current Users
 - US Special Operations Command
 - US Army Corps of Engineers
 - Australian Joint Operations Command
 - Australian Defense Services (Air Force, Army, Navy)
- In Negotiation
 - US Business Technology Agency
 - US Department of Homeland Security – Science & Technology
 - US Defense Intelligence Agency
 - US Defense Information Services Agency



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