



Information Democracy: A Critical Analysis

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Bolder Technology, Inc.



DCI Business Intelligence Conference
April 5, 2005

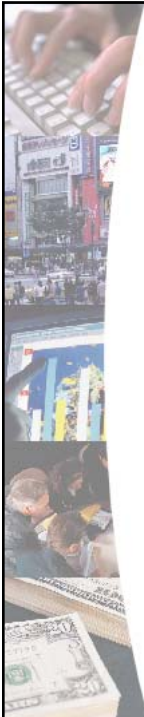
Biography



- **Richard Hackathorn**
Bolder Technology, Inc.
- President and founder with thirty years of IT experience. Regular columnist for DM Review. Conducted seminars in eighteen countries. Founder of three companies. Author of three books: *Web Farming for the Data Warehouse*, *Using the Data Warehouse* (with W. Inmon), *Enterprise Database Connectivity*. Professor at the Wharton School, Univ. of Pennsylvania, and at the Univ. of Colorado. BS from Caltech; MS and Ph.D. from Univ. of California, Irvine.
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Information Democracy: A Critical Analysis

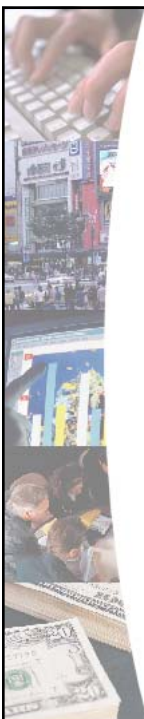



Abstract

Since the Gartner Group coined the phrase in 1997, Information Democracy has been a popular content-free term that vendors and consultants love to leverage to their advantage. The original intent was to ensure all users had access to the information required to promote the common good of the enterprise. This sounds like an inspiring goal. However, any real progress toward Information Democracy has been lacking because there are many practical and policy issues lurking within.

Through specific examples, this presentation surfaces the tough issues involved with technology infrastructure, business integration, and access policy. Five steps are suggested to formulate the access policy appropriate for your company and to execute successfully that policy


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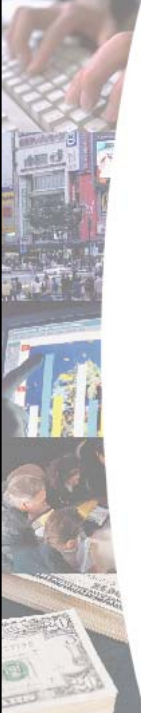


Overview


- **Defining Information Democracy**
- **Models & Levels of Information Sharing**
- **Need to Know vs. Mandate to Know**
- **Right to Know vs. Right to Privacy**
- **Technology Infrastructure Required**
- **Executing Info Sharing Successfully**

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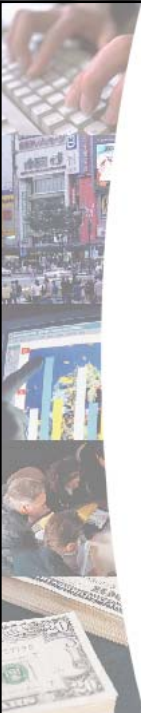

What is Democracy?




- **Means “rule by the people”**
 - From ancient Greek city-states circa 500 BC
 - “Government of the people, by the people, for the people”
- Abraham Lincoln
- **The rule of law**
 - No dictators allowed!



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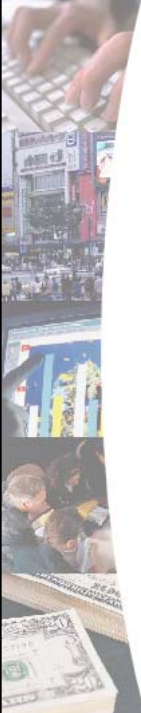
What is Democracy?



- **Equality and dignity for all persons**
 - Regardless of race, religion, sex...
 - “All men are created equal” - Declaration of Independence
- **Majority rules and minority rights**
 - Democracy is measured by “the freedom of its humblest citizens” - John Galsworthy
- **Freedom of expression and of the press**
 - ...is essential for democracy

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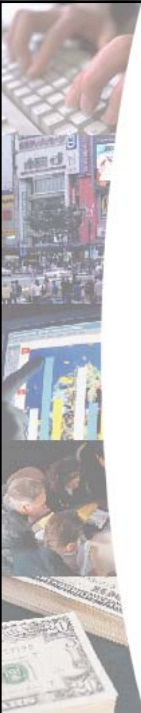





Why Free Information Flow?


- **Unalienable rights to life, liberty and pursuit of happiness - US Constitution**
 - Everyone has rights to access/share information
 - Movies, music, etc. are part of happiness
- **Achieve the human potential**
 - Employ the full use of a person's abilities
 - "Release the energies of every human being"
- Woodrow Wilson
- **Make informed decisions**
 - Better representation through open elections
 - Better laws/policies through representatives

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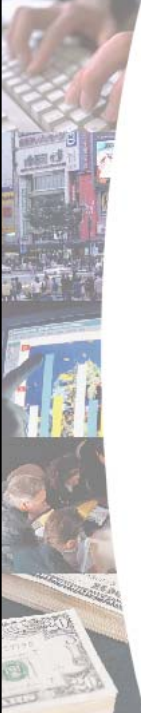
What is Information Democracy?

- **Term coined by Gartner Group in 1997**
 - Promote the common good
 - Sharing insights broadly
 - Increased transparency
 - Timely access by all constituents/stakeholders
 - As much information as possible to as many people as possible
 - ...or simply, it is information sharing
- **My definition:**
 - Information sharing that enhances decision-making for smart organizations




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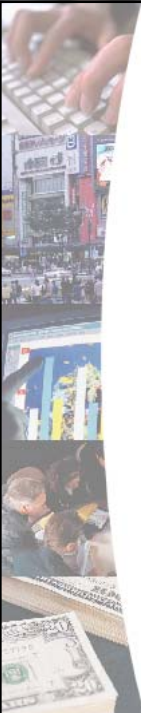



Union Pacific Railroad




- **Largest railroad in western America**
 - \$12 billion in revenues with 48,000 employees
 - 33,000 miles of track serving 23 states
- **Enterprise-wide data integration**
 - Consolidation into a single information source
 - Closed the loop with business automation
- **Open info. policy for all employees**
 - “The one thing that works for us is that we have a very open philosophy with our data. We still must have security to sensitive data. However, our philosophy is that any user can ask any question of any data at any time. They do not have to ask IT or wait for a certain time of day. Just ask away! Again, they must have the proper security.” -- *Paul Evans, Senior Mgr of EDW*
 - Increased and unpredictable workload on DW

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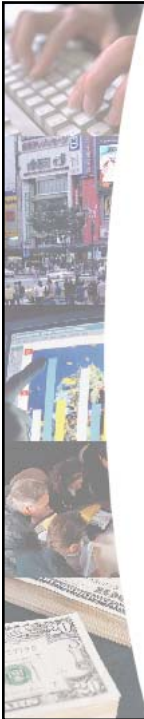
Stakeholders in Information Sharing

- **Internal to the enterprise**
 - Executives
 - Other employees
 - Out-sourcing parties
- **Partners within the value chain**
 - Customers
 - Suppliers
 - Distributors
- **External to the enterprise**
 - Government regulators
 - News and press
 - General public




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Why BI Information is Different

- **Hack's Law:** Detailed data becomes less valuable as the amount of it increases
- **Implications for a multi-TB warehouse?**
 - Corollary: Analytics are essential for large DW
- **Aggregation and comparisons**
 - Chunking more data into fewer objects
- **Dimensional analysis**
 - Pivots on the key business dimensions
 - ...especially the time dimension
- **Predictive analytics**
 - Embeds the business model

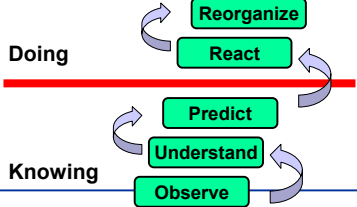


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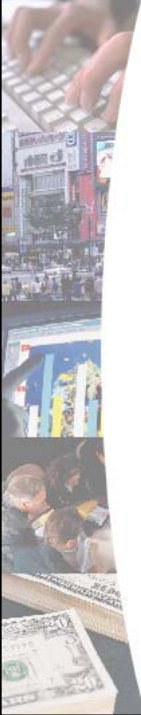
Is More Information Always Better?

- **In general, NO !**
 - Info overload leads to subjective (*knee-jerk*) decisions
 - "Ad hoc BI is killing us!" by Wayne Eckerson
- **Focus on task within context**
 - Must be actionable information
 - Alert - Inform - Suggest
 - ...leads to smart decisions & then proper actions





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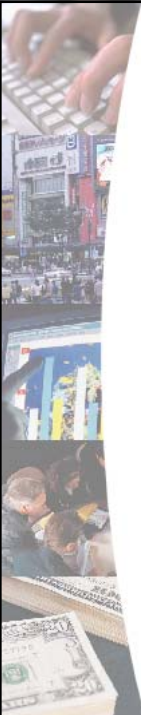



Models of Information Sharing

- **Information Dictatorship (or Tyranny)**
 - Access for only a few senior executives
 - Strict need-to-know
- **Information Anarchy**
 - Grassroots uprising against dictatorship
 - Managers develop their own reporting system




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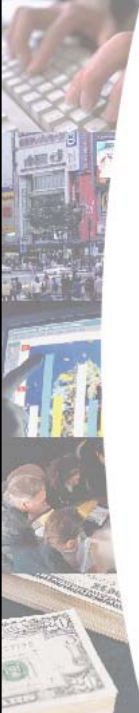
Models of Information Sharing

- **Information Democracy**
 - Sharing widely across people and departments
 - Democracy = (BI-enabled users) / (desktops)
 - Empowerment = (ad-hoc-enabled) / (BI users)
- **Information Embassies**
 - Extending BI to users outside the enterprise
 - Using extranets to link to suppliers, customers...




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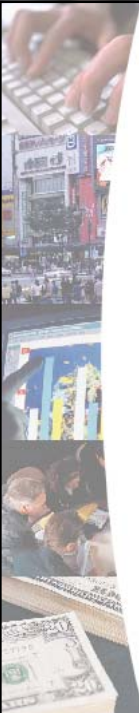




Amazon.com, Inc.


- **Their BI is targeted to their customers!**
- **Affinity links** Customers interested in this title may also be interested in
Customers who bought this book also bought
 - Bought this book, liked this author, part of group
- **Posting opinions**
 - Review of specific book
 - Lists of suggested books on topic
- **My wish list**
- **Sharing BI info with customers so that...**
 - They can make smarter decisions

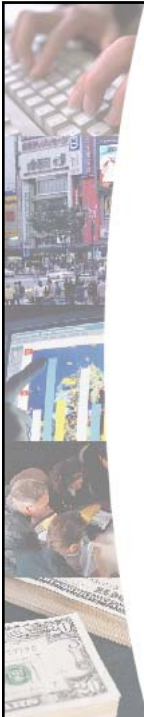
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Cultural Barriers to Info Sharing

- **Information is power!**
 - Sharing info implies that you are sharing power
- **Protecting proprietary data**
 - We need to play it safe (cover my rear)
 - What if our competitors had access to that...
- **Concern about losing control**
 - Simplify access policy and avoid 'glitches'
 - Sarbanes-Oxley Act has personal liability
 - So, why share any more info than necessary?
- **It is NOT the way that we have done it!**
 - Sharing info has not been part of the culture

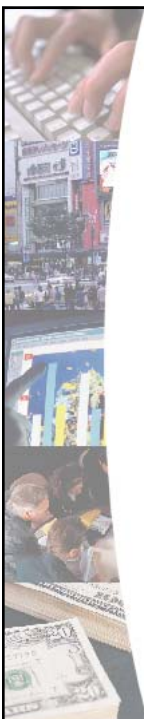

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Need to Know vs. Mandate to Know

- **Managers usually restrict info. access**
 - ...on a 'need to know' basis: If the data relates to your job, then you are granted access privileges.
- **However, the problems are...**
 - Managing privileges for thousands of employees
 - Information is constantly changing
 - Difficult to predict what info. will be needed
- **Employees have the responsibility to...**
 - Discover the 'right' info & apply it to their jobs
 - Cultivate the skills and resources to do so
- **Customers have the desire to know...**


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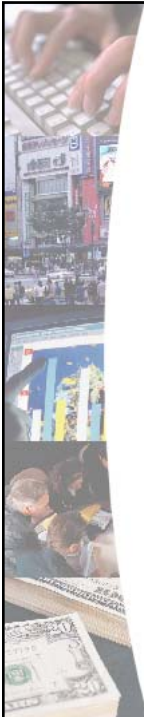


Right to Know vs. Right to Privacy

- **When information relates to people...**
- **“The good of the many outweighs the good of the few”**
 - Spock's dying remarks in the StarTrek 2 Movie
- **Examples of Person's Right to Privacy**
 - Financial and health records
- **Examples of Public's Right to Know**
 - Registration/publication of sex offenders
- **Customer Data - When is it too much?**


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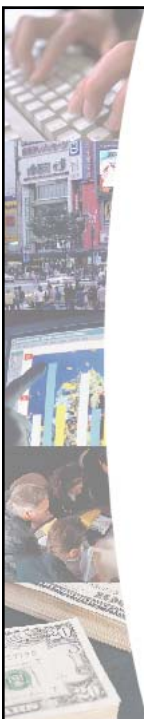



Technology Infrastructure Required


- **Consistent view of business reality**
 - That is the objective!
 - The inflow to DW better be right and timely
- **Integrated across subject**
- **High data quality/accuracy**
- **Easy-of-use dissemination**
 - Standardizing BI tools and portals
- **Security**
 - Authentication & Encryption
 - Privileges Mgt: individual, role,
 - IP Rights Mgt: permitting access/usage
 - Privacy Mgt:



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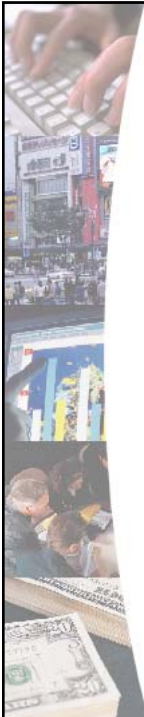
ChoicePoint



- **Information sharing that went too far!**
- **Mission:** “We strive to create a safer and more secure society through the responsible use of information.”
 - “...to assure that we strike the proper balance between society's right to know and the individual's right to privacy”
 - “...making smarter decisions in a world challenged by increased risks”
- **Size:** over \$900M with 5,500 employees in 60 locations
- **Clients:** law enforcement, Homeland Sec.
- **WSJ reports...** Up to 400K personal records were stolen by scam artists as identity thief.


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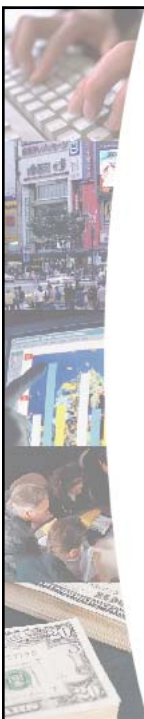



Levels of Information Sharing

- 1. Unmanaged extracts**
 - Upload/download, email, discussion forums...
 - Question: who extracted what when?
- 2. Query & Reporting**
 - Ad-hoc and canned
- 3. Publishing & Subscribing**
 - Restrictions based on role
 - Matching producers with consumers
- 4. Coordination**
 - Workflow related; delegating tasks
- 5. Collaboration**
 - Sharing a common info object




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Executing Info Sharing Successfully

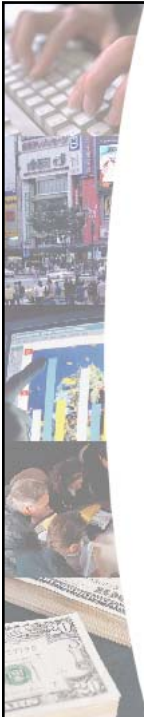
Five steps to Info Sharing...

- 1. Policy formulation**
 - Based on the corporate goals
 - Corporate transparency, smart decisions...
 - Understand the contributions from info sharing
 - Understand the risks from info sharing
 - Struggle with the deeper issues
 - Get agreement and document as policy
- 2. Technology certification**
 - Secure adequate technology
 - Build a reliable infrastructure incrementally




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Executing Info Sharing Successfully

3. **Business integration**
 - Need for 'Consistent View of Biz Reality'
 - Entire context with focus on specific task
4. **Technology deployment**
 - Insure adequate skills and resources
 - Implement in stages; learn step by step
5. **Policy implementation**
 - Continuing executive support
 - Monitor and tune
 - Validate the expected benefits



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Final Comments

- **Do not use “information democracy”**
 - Term has too many dysfunctional connotations!
 - Use “information sharing” instead
- **Educate the executives**
 - Emphasize the benefits of widely sharing analytical information
 - Then outline the possible implications
- **Deal with the cultural issues**
- **Proceed only when there is an adequate infrastructure to support Info Sharing**
 - Especially, adequate security

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