

***The Latest Web-based Tools for Efficient
Management of EH&S Regulatory Compliance***

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Kami Blake, Solutions Engineer

3E Company

Who is 3E Company?



- Leading provider of EH&S compliance and risk information management solutions
 - Most comprehensive global EH&S domain knowledgebase
 - MSDS images and product data
 - Global regulatory content
 - Hazardous substance databases
 - Provider of Choice
 - Broadest range of services
 - Delivered in multiple formats and platforms
 - Across a multitude of industries
 - Global capabilities and presence
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Agenda

- Scope of Discussion
- Compliance Considerations
- Solution Options
- Web Hosted Integration
- Enterprise Integration
- MSDS Authoring Tools
- Regulatory & Chemical Content
- Chemical Inventory Management
- Evaluation



Scope of Discussion



- Hazardous Material Information Management & Regulatory Compliance
 - Tools, Services and Support designed to manage this information throughout the chemical life cycle, across the supply chain
 - Identifying options and opportunities to
 - Reduce costs
 - Increase compliance
 - Mitigate risk
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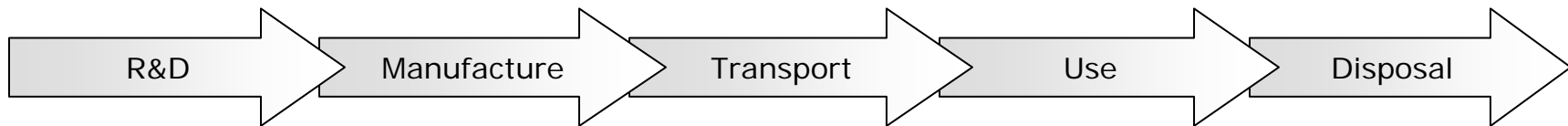
Compliance Considerations



- The RIGHT Stuff
 - Tools
 - Information
 - Services
 - Scalability
 - Internal needs (current and future)
 - Expanding regulatory landscape
 - Portability - easily implemented & transferable
 - From location to location
 - Organic growth / M & A's
 - Leveragability
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Regulatory Landscape

Hazardous chemical regulations cover the entire product life cycle.



Workplace Hazardous Materials Information System (WHMIS)



Transport Canada



Life Cycle Approach

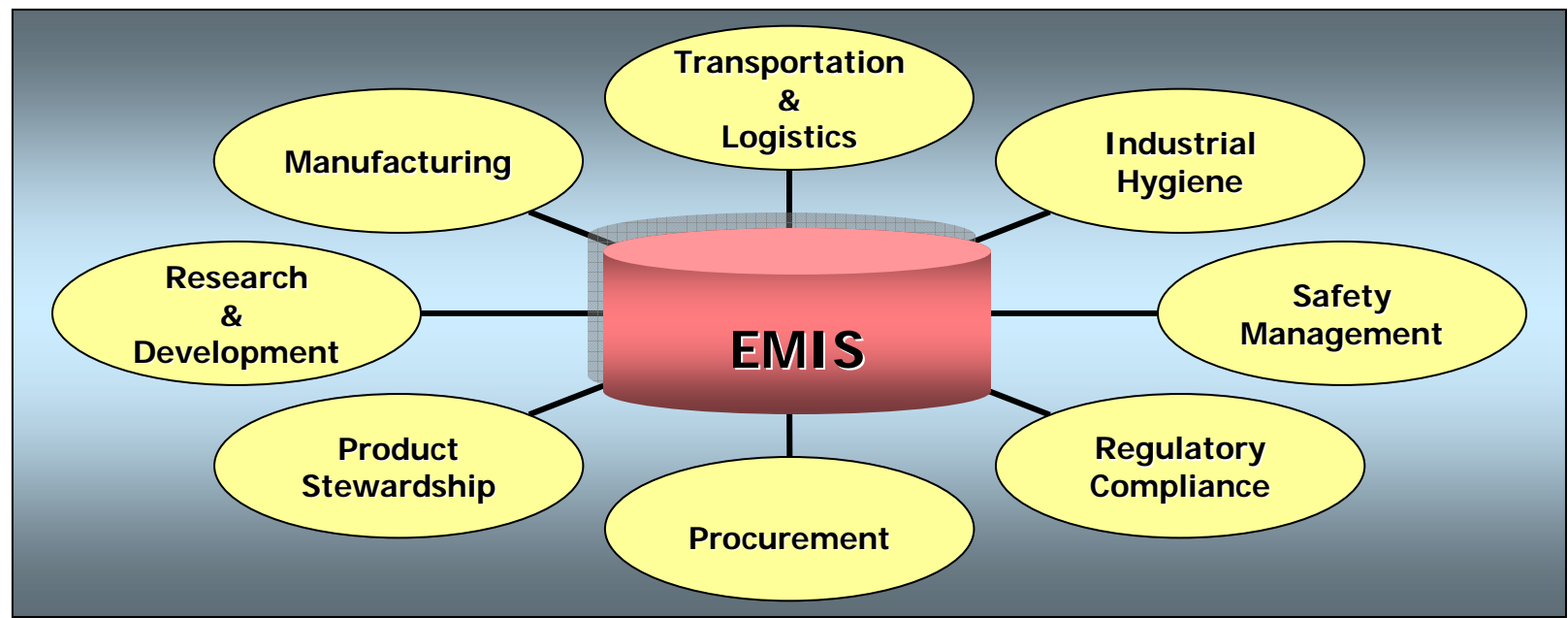
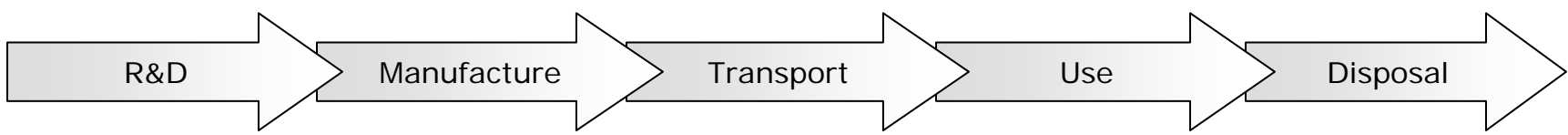


- Meet the hazardous material information management objectives of the entire Supply Chain
 - Account for all applicable data sources
 - Deploy tools and decision making processes to
 - Create or establish access to central repositories for required information
 - Streamline the collection and flow of EH&S information
 - Improve workflows (operational, technical and administrative)
 - Integrate regulatory and chemical content with chemical inventories (RM, intermediates, finished goods)
 - Identify actionable regulatory data, proactively when possible
 - Establish control points to maintain compliance
 - Internal Operations
 - Procurement Practices
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Supply Chain



Stakeholders



Compliance Systems Analysis



- Evaluation of Existing Tools
 - Data repositories
 - Internal Processes
 - Does Your Current Program...
 - Enable access to all required information?
 - Ensure that information is updated regularly?
 - Leverage data across the supply chain?
 - Integrate organizational data and internal business rules with regulatory and chemical content?
 - Are Compliance program requirements on your Infrastructure Team's radar?
 - Can outsource options provide the most optimal solutions?
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Essential Information



EH&S Foundation: Timely access to accurate information, applicable to business objectives and corporate mandates

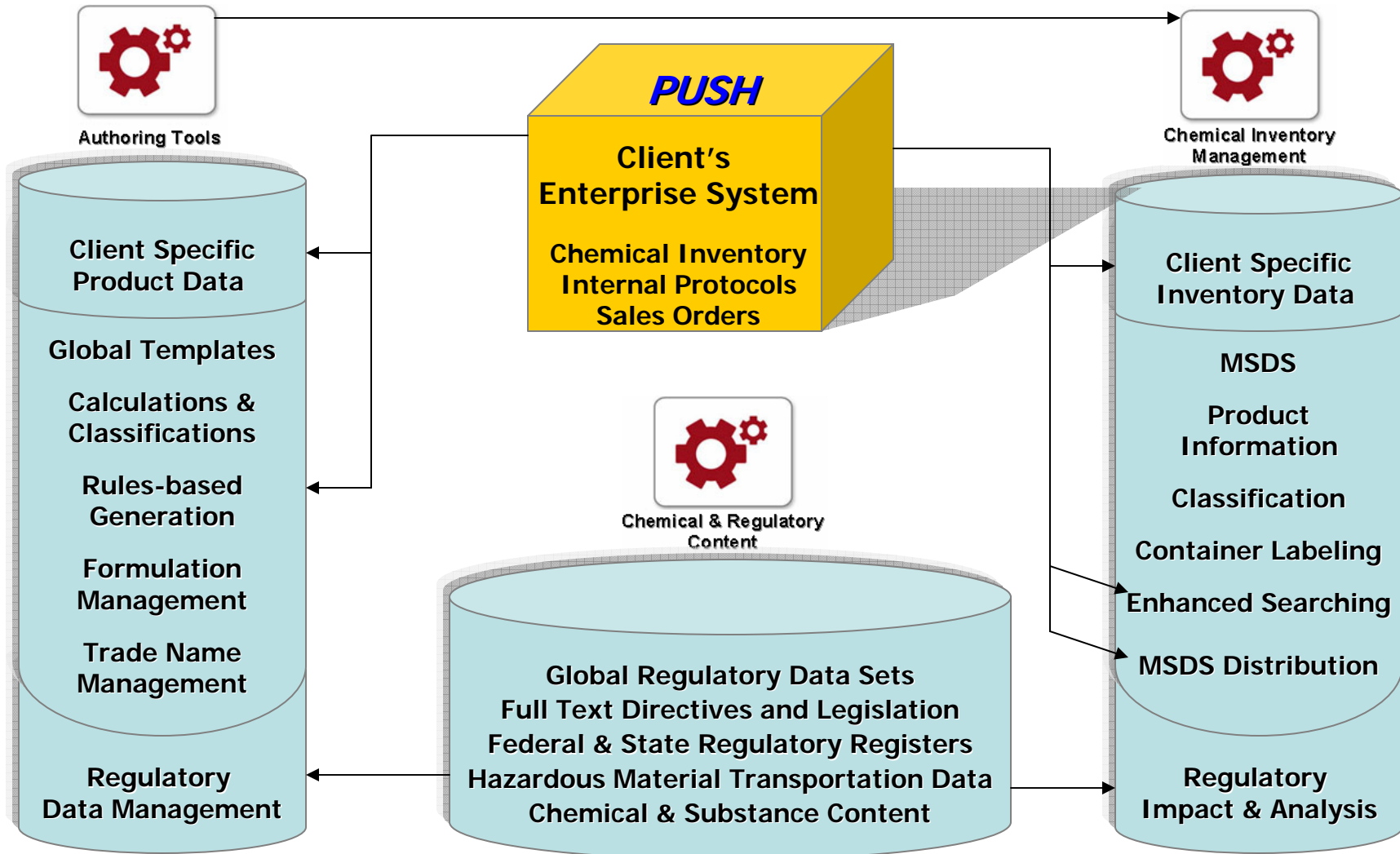
- Regulatory Information
 - Workplace & Community Safety
 - Environmental Impact
 - Transportation
 - Global Inventories
 - Substance, Raw Material and Product Data
 - Chemical and Physical Properties
 - Chemical hazard classifications
 - Exposure standards and regulations
 - Tox, Ecotox, and Biomedical effects
 - Safety and handling information
 - Organizational Data
 - Inventory of hazardous materials
 - Quantity and usage data
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EH&S Solution Options

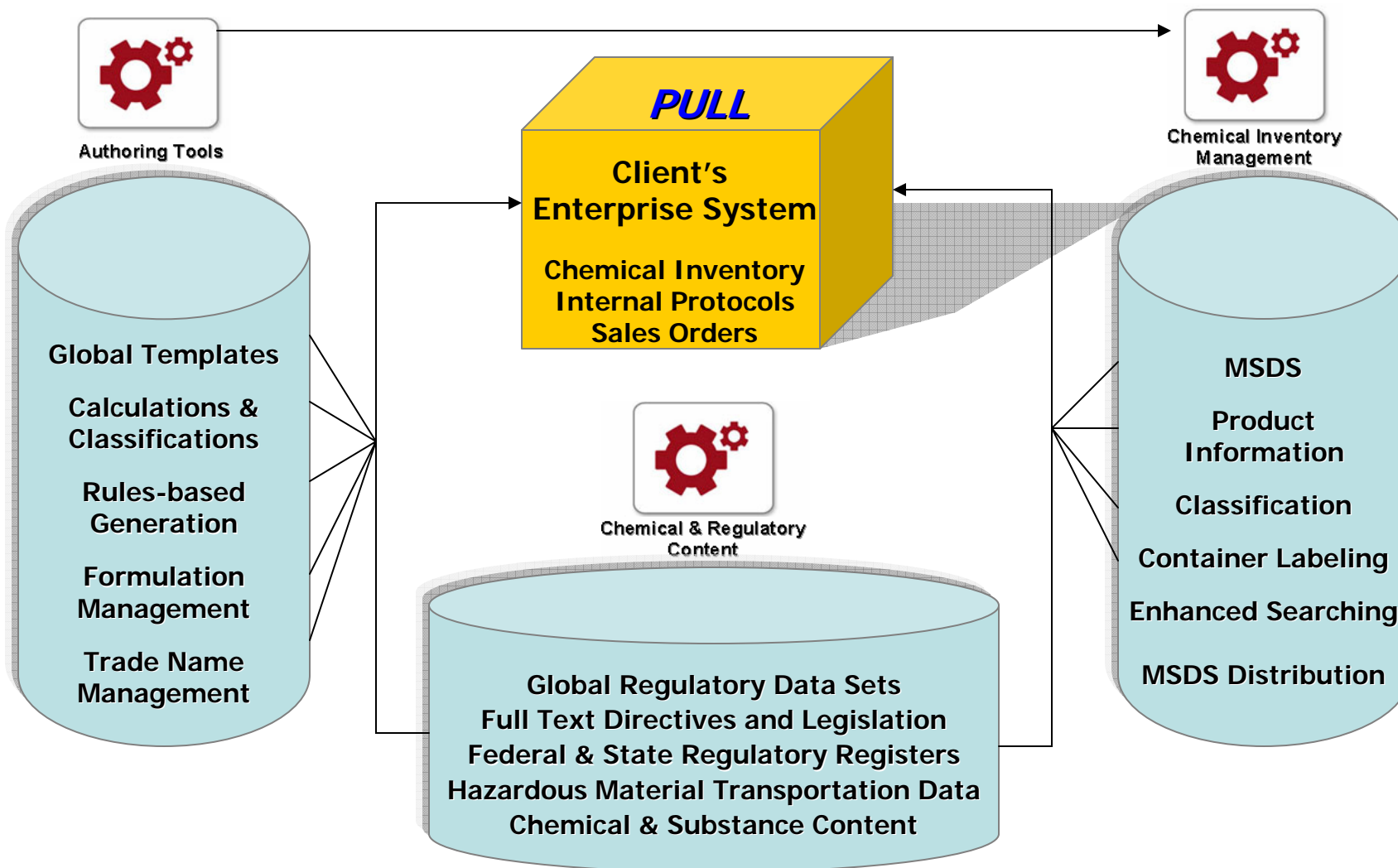


- Application Software
 - Installed as stand alone program (inside)
 - Enterprise integration
 - Web-accessible solution (outside)
 - Information Databases
 - Web-hosted, with enabled integration (PUSH)
 - Enterprise data feed (PULL)
 - Service & Support
 - Implementation & training
 - Updates and information renewal
 - Alerts and notifications
 - Back office support
 - 24-7-365 hotline support
 - Technical, regulatory consultation
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Web Hosted Integration



Enterprise Integration



Authoring Tools



Specific Requirements

- Global Templates
 - (M)SDS
 - PDS/TDS
 - Labels
 - Other HazCom Docs
 - Authoritative Phrase & Glossary Library
 - Repository of distinct statements that support (M)SDS and label content
 - Customizable by document authors to support internal practices & preferences
 - GHS Classification and Labeling
 - Imbedded algorithms and auto-calculations
 - Substance and mixture-level assessments
 - GHS regulatory list access
 - Test data / Purple book
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Authoring Tools



Specific Features & Requirements

- **Transportation Classification**
 - Assignment of hazard class, packing group, proper shipping name
 - Broad agency support
 - **Other Assessments and Regulatory Analysis**
 - OSHA & WHMIS hazards, HMIS, NFPA & SARA ratings, Global Inventories, RoHs, Australian Hazchem Codes, German WGK
 - **Country-specific Rules-sets / Rules Creation Capabilities**
 - **Formulation Management**
 - Nested ingredient algorithm
 - Auto-formula acquisition (Enterprise integration)
 - Trade secret and disclosure management
 - BRC & ARC Compositions
 - Formulation histories
 - **Trade Name Management**
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Authoring Tools



Data Management & Admin Requirements

- Multi-Lingual Capabilities / Global Compliance
 - User Interface
 - Phrase Library and Glossary
 - Document templates
 - Integrated Regulatory Data
 - Version Control & Archiving
 - User-defined Queries
 - Reporting Capabilities
 - System Security
 - Workflow to facilitate Assessment Review
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Authoring Tools



External System and ERP Integration

- Is it advantageous for your MSDS authoring platform to interface or be integrated with existing organizational information and business process?
 - Is broad integration supported?
 - Oracle-based
 - SAP
 - JD Edwards / PeopleSoft
 - Other internal legacy systems
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Regulatory & Chemical Content



Specific Features & Requirements

- Global Regulatory Lists and Inventories
 - Full Text Access and Searchability
 - State/Provincial, Federal, Global
 - Enforceable legislation, regional directives, federal registers, state environmental and safety regs, overviews, inspection procedures, etc.
 - Transportation Classification and Labeling Data
 - All modes: ground, air, rail, vessel
 - Globally applicable regs: DOT, TDG, ADR, IATA, IMDG, GHS
 - Substance-level hazard data
 - GHS Tools
 - Risk & Safety Phrases
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Regulatory & Chemical Content



Data Management & Admin Requirements

- Updated monthly
 - Extensive Language Capabilities
 - Regulatory Change Management
 - Modular Datasets and Features
 - Robust Searchability
 - Personalization
 - Custom products
 - Regulatory Sets
 - Create and save commonly run reports
 - Alerts and notifications
 - Access to regulatory research specialists
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Regulatory & Chemical Content



External System and ERP Integration

- Data fed directly into EH&S modules of ERP platforms
 - Oracle-based
 - SAP
 - JD Edwards / PeopleSoft
 - Other internal legacy systems
 - Data integrated into stand alone MSDS-based applications
 - MSDS Authoring
 - Chemical inventory and vendor MSDS management
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Chemical Inventory & MSDS Mgmt



Specific Features & Requirements

- Site-specific Inventory Management and Maintenance
 - Access to Manufacturer-original MSDS (current & archived)
 - Product Information Access
 - MSDS indexation (Mfr Info, CAS #s, PP, etc.)
 - Custom values and other product identifiers
 - Site-specific data (quantities and usage)
 - Organizational product attachments
 - Chemical classification (NFPA, HMIS & SARA ratings)
 - Transportation Classification (DOT, IATA, IMDG, TDG)
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Chemical Inventory & MSDS Mgmt



Specific Features & Requirements

- Container Labeling
 - Regulatory Reporting
 - Agency Research (local, state, federal)
 - Integrated Regulatory Content
 - Custom List Generation
 - Chemical Approval Workflow
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Chemical Inventory & MSDS Mgmt



Data Management & Admin Requirements

- Back Office Support
 - Timely implementation
 - MSDS obtainment, verification and renewal
 - Data indexing
 - Cross-referencing (implementation & updates)
 - Training / Re-training
 - Dedicated project management
 - 24-7-365 live assistance
 - System Backup Options
 - Advanced Security & User Management
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Chemical Inventory & MSDS Mgmt



Data Management & Admin Requirements

- Activity Journal and Reporting
 - Robust Search Capabilities
 - Multi-search criteria
 - Chemical isolation
 - Multilingual Capabilities
 - Interface translation
 - MSDS obtainment
 - Ingredients & Properties Modification
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Chemical Inventory & MSDS Mgmt



ERP and Regulatory Content Integration

- Import and Export of Inventory Data
 - Cross-reference with Product Identifiers
 - SKUs
 - UPCs
 - SAP Material Codes
 - Integrated Regulated CAS# Lists
 - Links to Applicable Regulatory Text
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Getting Started



- Define and document your EH&S information management requirements
 - Identify Stakeholder roles in the information management chain
 - Evaluate your EH&S data and solution options
 - Internally developed and managed
 - Targeted outsourcing opportunities
 - Build a high-level transition map from as-is to the Life Cycle/Supply Chain management model
 - Stakeholder Summit
 - Gain acceptance and support
 - Prioritize objectives
 - Develop CBA/ROI & and draft implementation plan
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Common Misconceptions



- One Size Fits All
 - Cheaper is Better
 - If you've seen one outsource solution, you've seen 'em all
 - The only difference in outsource providers is their price
 - Solution components must be purchased and activated simultaneously
 - Outsource solutions eliminate the need for
 - IT Support (critical to the vendor approval process and during many implementation phases)
 - Back Office & Administrative Support
 - Included in outsource solution
 - Billed transactionally
 - Decision Making (not no, but Heck NO)
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Conclusion



The regulatory landscape domestically and globally is becoming increasingly complex and data-driven. With the phased acceptance of GHS document, classification and labeling standards, we could see significant and sweeping changes in just a few a years.

Well-managed tools and processes enabling access to critical information that spans the ENTIRE chemical life cycle and accounts for the needs of each stake holder across the supply chain are key to keeping pace with the ever-changing face of product stewardship and EH&S information management.

Questions?

kblake@3ecompany.com

Thank You
