



**T**echnology is changing faster than ever. The pace of change is making it hard to keep up and determine which technologies will drive value for your organization. Businesses today are dealing with extreme market volatility, tight margins, and a mandate to reduce operating expenses. At the same time, they must be able to respond quickly to changing market conditions and new opportunities to remain competitive. It is not surprising that so many organizations are stuck fighting fires and are not able to leverage new technologies for competitive advantage and cost optimization.

There are many technologies and trends in the market that are, and will have, a major impact in the commodities market space and the Commodity Trading & Risk Management (CTRM) systems used to manage commodity trading businesses. Organizations need to take a proactive approach to evaluate, manage, and implement new technologies to deliver the right types of value. *But what are the right technologies to focus on?*

There are technology trends that are in almost every industry and they are no different for CTRM systems. Why all the fuss? Because technology is enabling massive disruption in all industries. Those that have a plan to leverage new technologies will be the ones doing the disrupting instead of being disrupted. In this article I will highlight technology trends dominating CTRM and in future articles will provide practical advice on steps to take to harness the power of these technologies.

## 10 Technology Trends

### 1 - Cloud



**Definition:** A buzzword that means different things to different people. In simple terms, cloud means storing and accessing data and programs over the Internet instead of your computer's hard drive.

**CTRM Opportunity:** Potential for providing cost savings and enables scalability and agility of systems and processes.

### 2 - BI, Analytics, and Big Data

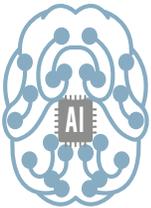


**Definition:** Business Intelligence (BI), a technology-driven process for analyzing data and presenting actionable information used to make informed business decisions; Analytics, practices for continuous data exploration and investigation to gain insights; Big Data, an all-encompassing term for extremely large sets of data. Together they make up the components of the discipline of Information Management.

**CTRM Opportunity:** A core capability of any organization to remain competitive. This functionality is not traditionally a strength of the CTRM systems in the market.

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## Technology Trends Dominating CTRM



### 3 – Artificial Intelligence (AI)

**Definition:** The theory and development of computer systems able to perform tasks that normally require human intelligence. Includes concepts such as Machine Learning, Deep Learning, Cognitive Automation, and Robotic Process Automation (RPA).

**CTRM Opportunity:** Ability to leverage AI techniques for decision making and automation purposes.



### 4 – Internet of Things (IoT)

**Definition:** The interconnection via the Internet of computing devices embedded in everyday objects, enabling them to send and receive data.

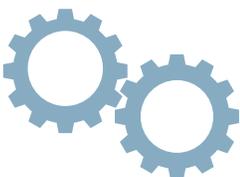
**CTRM Opportunity:** Ability to leverage IoT data for logistics, inventory, and asset management.



### 5 – Blockchain

**Definition:** A digital ledger in which a continuously growing list of records, called blocks, which are linked and secured using cryptography.

**CTRM Opportunity:** Ability to reduce administrative operational risks and costs of physical energy trading, and improve the reliability and efficiency of back-end trading operations.



### 6 – DevOps & DataOps

**Definition:** DevOps, a software culture and practice that aims at unifying software development (Dev) and software operations (Ops); DataOps, the alignment of people, process and technology to enable the rapid, automated and secure management of data.

**CTRM Opportunity:** Deliver higher quality application releases faster, and manage the production and non-production data in a more streamlined and cost-effective manner.



### 7 – Any Device Anywhere

**Definition:** The ability for users (technological programs and services) to access information anytime, anywhere, and on any device.

**CTRM Opportunity:** Technology and the way people work is evolving, so must the CTRM systems.

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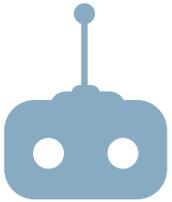
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### 8 - Everything-as-a-Service

**Definition:** A concept of being able to call up re-usable, fine-grained software components across a network. It is a subset of cloud computing.

**CTRM Opportunity:** Easier access to needed functionality and allows for quicker responses to market changes.



### 9 - Conversational Platforms/Chatbots

**Definition:** A computer program which conducts a conversation via auditory or textual methods.

**CTRM Opportunity:** New ways to interact with CTRM systems, customers, and suppliers.



### 10 - Cybersecurity

**Definition:** The body of technologies, processes, and practices designed to protect networks, computers, programs, and data from attack, damage, and unauthorized access.

**CTRM Opportunity:** Increased security capabilities for access control, permission sets, and data protection.

Simply chasing the latest technology trend never delivers the business outcomes desired. The reality is that technology does not provide value to a business. Technology's value comes from doing business differently because technology made it possible.

What are your thoughts on these technology trends and their impact to CTRM? Is there another item you think should be on the list? Email me directly [kpiddington@mre-consulting.com](mailto:kpiddington@mre-consulting.com), I'd love to hear your thoughts.



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Ken is an award-winning global business and technology leader with more than 20 years of transformation leadership experience. He is recognized as an industry thought leader, is a regular speaker at business and association conferences, and has been featured in numerous media publications.

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