Abstract: As the amount of data generated by Industrial Automation and the Internet of Things grows, so does the opportunity to use that data to improve efficiency, reduce costs, and predict or even eliminate maintenance challenges before they occur. With the current trend to move this data directly to Big Data storage without capitalizing on the benefits of analytics during flow, many of these these opportunities may be lost.

Rockwell Automation, the world’s largest company dedicated to industrial automation and information, has been at the forefront driving connected-enterprise strategies for more than a decade. From factory production, oil rigs, and heavy machinery assets; Rockwell Automation intelligent devices and programmable logic controllers are major participants in the Industrial Internet of Things. Not only does Rockwell have the ability to help generate new data, it also has the capability to extract value from this data at the time of origination and during movement.

In this talk, Rockwell Automation Senior Systems Engineer Nicholas Marangoni and Platform Leader Jonathan Wise explore opportunities to capitalize on Big Data as it moves from its source, through the layers industrial automation infrastructure, out to Big Data storage. This presentation will include examples of current Big Data uses from Rockwell customers and an exploration of how to analyze data at inception and during movement.
Nicholas Marangoni is a Senior Systems Engineer in Rockwell Automation’s Advanced Technology, Research and Development Department. He is currently working in developing solutions for industrial data collection, processing, and analytics. He has over 10 years’ experience in industrial automation and data processing, specifically focused on algorithm development for nuclear power applications. Nicholas holds a Master’s Degree in Electrical and Computer Engineering from the University of Pittsburgh.

Jonathan Wise is a Platform Leader for Information Products in Rockwell Automation’s Architecture and Software business. He is currently working on developing new innovations for the Industrial Internet of Things, simplifying the flow of data from control systems to analytics and information systems. Jonathan has spent more than 15 years in software strategy and development, including experience at General Electric, Microsoft and Amazon.