

PRESS RELEASE  
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## Big Data – What does it mean for your Process Automation Plant?

**With an ever-changing business environment, manufacturers are turning to innovations in technology to increase productivity, reduce costs and improve quality. Big Data is the next step – advancing production and business operations through the collection, analysis, and monitoring of vital data.**

Big Data refers to large volumes of data that now inundate businesses at unprecedented speeds and velocity. Data streams arrive in a variety of different formats or protocols. Data streams are received as unstructured (such as only when a switch is operated, once each week or month), or structured (such as current and volt readings every second) and are delivered in real-time from various sources. In an automated process this may vary from internal sources, such as machines and devices, to external sources such as transactional and social data. These various connected sources enable the Industrial Internet Of Things (IIOT) to supply data from almost anywhere. Finding the variability factors, such as trends, seasonal changes, and peaks, along with data veracity and quality, adds to the complexity of Big Data.

The importance with big data lies in how you use it, it has the potential to unlock enhanced insights, inform decision making and improve process automation. By combining big data with high-performing analytics your plant may be delivered value in:

- Finding faults and issues, and their causes in real time.
- Optimise operational efficiencies through equipment efficiency alerts, predictive maintenance schedules, and preparing for downtime.
- Enabling irregularities to be found faster and more accurately than traditional methods, to enable better process quality.
- Reassessing risks and hazards within minutes.
- Adjust deep learning models to correctly show and respond to fluctuating variables.
- Reveal trends and identify patterns which allow for actionable insights into processes.
- Drive new revenue and growth opportunities with more perceptive market intelligence.

Big Data is expected to drive change and provide new opportunities for businesses within the Automation and Process Control Industry. Expected future industry trends due to the increased use of Big Data include:

- Bigger reliance on cloud technology and growth of Data-as-a-Service (DaaS) industry.
- The increase demand for data focused roles, to enable companies to extract value from their data e.g., data scientists, data engineers, and officers.
- Changing Roles of Artificial Intelligence (AI), Machine Learning (ML) & Humans in the working environment with a focus for personnel to be more process & quality focussed and less focussed on mundane tasks.
- Emerging technologies will continue to grow, with cost-effective and innovative forms of information processing and improved decision-making being enable in areas such as Augmented Reality (AR) and analytics.
- Faster Project delivery and updates with new methods for project development. An example of this is where systems can be trialled, assessed, and validated in the digital realm before physical commissioning reducing risks and costs.

Big Data is expected to aid digital transformation across multiple industries, with Automation and Process Control being a strong contender for the rapid uptake and establishment of new operational standards with the ability to engage and revolutionise processes, data, and people. It will support the reduction of waste and costs and has the potential to rapidly increase accuracy and yield, improve quality assurance and optimise processes.

To discuss Big Data and how Triple i can help, contact us today! Email us at [sales@triplei.com.au](mailto:sales@triplei.com.au), or call 1300 422 444.

### **About Triple i**

Triple i is a one-stop-shop for all your control, data, electrical, instrument, and mechanical needs with over thirty-five (35) years of experience. We supply a range of technology-based projects, consultancy, maintenance, and support services in the industrial sector. With over seventy-five (75) skilled employees, Triple i provides the best product and services, with integrated solutions designed for client's needs.

