## **LIFE SCIENCES 4.0**

Integrating Information Technology (IT) + Operations Technology (OT) +
The Internet of Things (IoT) to deliver business results

#### **REALISE THE DATA/DIGITAL PROMISE TODAY**



## DATA IS AT THE HEART OF THE LIFE SCIENCES INDUSTRY

Life Sciences companies pride themselves on being data driven. They are continuously looking for ways to streamline and improve their systems. Life Sciences 4.0 provides them with the dramatic improvements they seek and is poised to change the face of the industry

#### **PROVIDING ANSWERS**

The volume of data in a Life Sciences company is endless. Life Sciences 4.0 delivers end-to-end visibility, transparency, operational excellence, predictive insights and transforms business processes by designing and integrating all the data and control systems on site to create real time insights





#### **ALL-IN-ONE-SERVICE**

We deliver all IT, OT and IoT applications, infrastructure and services, from basis of design, detailed design, implementation, qualification, GMP production startup and support. In essence, we provide full project Lifecycle delivery

#### **GET ANSWERS FROM YOUR DATA**

Today it is not about big data – it is about using your data to answer your questions. We provide the full solution that enables companies to realise the promise of Life Sciences 4.0 today





# COLLECTION, ABSTRACTION & APPLICATION

OF DATA TO CREATE INSIGHT

### REALISE THE DATA/DIGITAL PROMISE TODAY

	70, 70,	FULL IT, OT AND IOT STACK
09	Visualisation and Analytics	Operational Intelligence by functional area, Quality and GMP Trending and Advanced Analytics e.g., MVDA
08	Data Storage	Cloud infrastructure for GMP and Non GMP data storage including edge, on premises and off premises digital architecture
07	Installation and Provisioning	Software, Hardware, Networks, Servers, Panels, PCs, HMIs and Printers
06	System Integration	System Integrating all applications such as ERP, Supply Chain, QC, QA, LMS, EHS, Facilities, CMMS, DCS, Historian, PLC SCADA
05	Data map and Data flow	Common data hierarchies, reference data terminology, data context and data flows arising from process and analytics requirements
04	Interfaces and Messaging	Connecting, collecting, abstracting and applying data using a Manufacturing Service Bus Platform (e.g., PTC Thingworx)
03	Network Design	Data Centres, Fibre, Copper, Switches, CLAN, Wireless CLAN, Control Panels, IO Subsystem
05	Cyber Security	Technologies, standards, processes and practices protecting networks, systems and data from attack, corruption, disruption and unauthorized access
01	Philosophy and Standards	Corporate and Site Philosophy, Specifications, Software Standards, Data Centres, UPS, Racks, Servers including CSV approach