## The Evolution of Information Technology and Data in Drug Development

### Past
- Too many systems. Systems assembled one application at a time.
- Systems are inflexible and processes are hard-coded.
- User interfaces outmoded, collaboration an afterthought.
- Point-to-point integration of systems and data.

### Present
- Longer cycle times and market access difficulties created from complex protocols, greater regulation and the need to prove product value to gain reimbursement.
- Data explosion. Sponsors are drowning in terabytes of data, from imaging, operational and wearables data, to real-world evidence.
- Processes span multiple systems and are compounded by an assortment of existing legacy systems and data sources.

### Future
- Decoding data into operational value, from data collection to risk prevention and mitigation through more adaptive trials that detect anomalies and address them proactively.
- Decoding silos of activity into a true digital ecosystem: from a site-centric model to a patient-centric model that will evolve beyond site-based studies to virtual trials.
- Decoding system and software infrastructure into higher productivity: from a data-centric, reaction-based model to a proactive, insight-driven model that increases quality and delivers more personalized therapies to market faster.

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**At PAREXEL, the future is being built today. Innovation is allowing us to structure and integrate data, use analytics and artificial intelligence (AI) to decode data, yielding better insights for action.**

Learn how you can become a part of the future:

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4. 48% Healthcare data is growing annually resulting in 2.3 billion terabytes by 2020.
5. 80% of the world’s healthcare data is unstructured.
6. 25% rise in drug development time over the past decade.