Reduce Development Costs and Speed Time to Market with Innovative Product Offerings

IoT Use Cases for Product Development

- **Usage-Based Requirements** – Analyze real-world product usage and condition data across products and customers with PLM, ALM, and quality systems to inform design requirements, support product portfolio optimization, and enable data-driven closed-loop lifecycle management.
- **Immersive Product Review** – Integrate CAD, PLM, and product data into augmented or virtual reality experiences to enable enhanced design reviews for real-time cross-discipline collaboration, shortened design cycles, and reduced physical prototyping.
- **Connected Product Quality Analysis** – Analyze real-world product usage and condition data with FMEA models and predictive analytics for automated root cause analysis, reduced warranty claims, and higher quality design.
- **Product Configuration Management** – Remotely identify and manage the as-maintained configuration of fielded products and securely distribute software updates to optimize performance, ensure compliance, and remotely deliver new product variants.

Common IoT Metrics for Product Development:

- R&D Expense; total development cost
- Time to market
- Percent profit from new products/services
- Customer Lifetime Value
- Product quality; returns
- Service cost; warranty cost; first time fix rate
- Customer satisfaction; net promoter score
- Non-compliance events per year
- Recalls; warning letters; audits
- Complaints; response time; resolution time

Flowserve manufactures and services fluid motion control solutions for the world's toughest, most critical applications.

Using the ThingWorx Platform Flowserve gathers and analyzes sensor data which informs them on the use of their industrial pumps and equipment. With this real-world data, Flowserve can analyze performance of specific portions of their products to improve overall design and effectiveness.