### 4 Key Challenges Facing Life Sciences Manufacturers

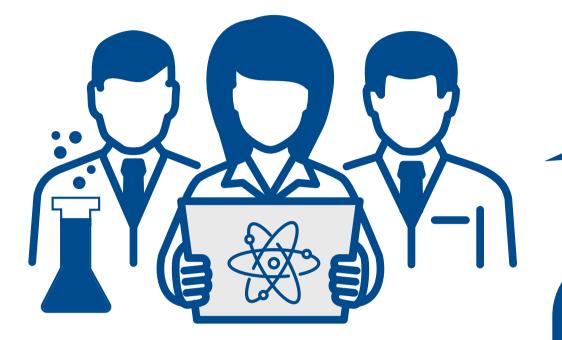


### Pipeline Acceleration

- Faster new product introductions / tech transfer
- Flexible processes and recipes
- Modular building blocks
- Consolidated lifecycle data



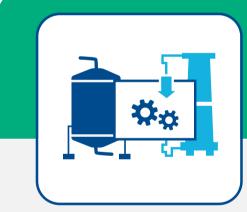
Get new products to market faster



Release products faster

Make different products quickly

Supply products in full on time



## Flexible Manufacturing

- Fast change over
- Seamless orchestration of equipment, people, materials
- Integrated control strategy definition and execution



# **Operational Integrity**

- Shorter production set-up
- Reliable equipment monitoring
- Predictive asset management
- Adaptive operator training
- Optimized facility scheduling



#### Real-Time Release

- Consolidated "control tower" views
- Integrated in-line testing
- Live exception resolution
- Improved quality attribute control
- Easy process analysis

