AI's Bottom-Line Impact on Pharma Manufacturing

Input Avg.	Baseline	Optimized
COGS	$84/g	$67/g (-20%)
Price	$200/g	
Titer	$3.53 g/L	4.24 g/L (+20%)
Capacity	9,400 L /year	
Annual Batches	47	
Batch Failures	1.12/year	0.9/year (-20%)
Annual Profit	$176M	$244 M (+68M)

An average manufacturer producing mAbs is benchmarked to the left. As shown, the manufacturer can realize an annual increase in profits of up to $68M due to improvements in COGS, yield, and batch wastage reduction.

20-25%
Reduction in COGS

15-30%
Reduction in Cycle Time

10-20%
Reduction in Batch Failures

28%
Increase in Annual Profit

Basetwo

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BASETWO'S AI USE CASES IN PHARMACEUTICALS

Basetwo's AI copilot enables pharmaceutical manufacturers to pull from a library of customizable modeling, encompassing AI and physics-drive logic, to streamline their production processes. To explore use cases, click from the options below:

- Golden Batch Analysis
- Bioreactor Yield Optimization
- Chromatography Process Optimization
- Small Molecule Process Optimization
- Process Development
- Optimizing Process Scale-up

BASETWO BENEFITS: AI'S IMPACT IN PHARMA MANUFACTURING

1. **Greater process understanding & experimentation**
   Integrated digital twins can mimic processes in a virtual setting, enabling "what-if" scenarios that can test new operating conditions without consuming precious resources or experimentation time.

2. **Reduction in Energy Consumption & More Sustainable Processes**
   AI can rapidly analyze complex multivariate data to optimize process parameters and critical quality attributes across different scales, ensuring right-first time scale-up.

3. **Tighter process control & reduced product variability**
   The predictive power of AI enables pharmaceutical manufacturers to detect and be alerted of batch failures in advance, forecasting process performance and predicting final batch quality.

Want to explore how Basetwo can increase profitability for your team?

Reach out today!