

# Using Flash to Maximize Profitability

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- Generating more profits is different than saving money
- Flash storage no longer a bottleneck
- Customer example of using Flash to generate more profits
- Cost Savings is a bonus!



# mory View flash as new technology...

- Flash is not just "the next generation of disk"
  - it enables new profitability and applications
- Saving money should not be the only goal of a flash project
- Flash can help enterprises generate more profit and serve customers better – think email vs faster snail mail delivery



### Flash Storage...... Timing is Perfect!

#### In the last 10 years...

**CPU Speed**: Performance increase roughly **8-10x** 

**DRAM Speed**: Performance increase roughly **7-9x** 

**Network Speed**: Performance increase of **100x** 

**Bus Speed**: Performance increased roughly **20x** 

Yet...

Disk (storage) speed: Performance increased only 1.5x





# Datacenter's Response to Bridge Disk Performance Gap

Most Costly & Volatile

Add More Memory

Typical
Performance
Mitigation
Tactics

Wasteful, Expensive & Ineffective with Storage Latency Issues

Expensive & Ineffective for Storage Performance Issues

Add CPUs

Tune & Modify Application

Enhanceme

Time Consuming, Very Expensive & Risky







# Coca-Cola Bottling Co. Consolidated Delivering deeper insight into customer demand four times faster

# 97 percent

reduction in processing time without replacing a single server

#### 20x more

data crunched within the existing window and SLAs

#### 150 million

cases of product per week

#### **Solution Components**

- SAP ERP
- JDA Manugistics
- IBM FlashSystem 820
- IBM SAN Volume Controller



**Business challenge:** CCBCC needed to process more data to accurately anticipate customer demand without increasing time-to-insight or exceeding SLAs.

**The solution:** CCBCC now processes 20 times more forecasting data, down to the store level, which enables them to match manufacturing output with demand, enables earlier logistics planning and increases profitability.

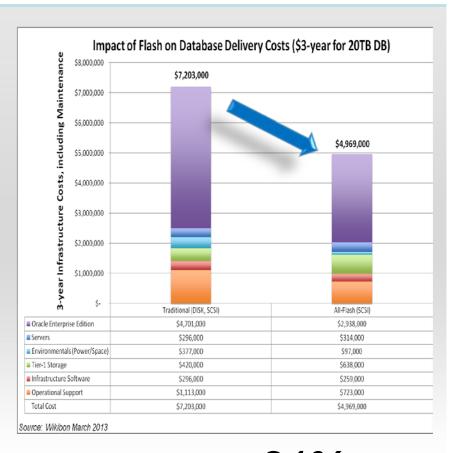
"By using IBM FlashSystem to accelerate our insights into customer demand, we're better placed than ever before to offer unbeatable levels of service to our customers across the United States."

- Tom DeJuneas, Infrastructure Manager, CCBCC



# Cost savings is **BONUS!**

- 38% Lower software license costs
  - Due to fewer cores
  - Lower software maintenance
- More Efficient Infrastructure
  - 13% lower infrastructure software costs
  - 35% lower operational support costs
  - Server / Storage Admin
- Much better storage utilization
  - As much as 50%
  - Lower maintenance
  - Ease management by 50%
- 17% Fewer Servers
  - Fewer cores
  - Lower Memory
  - Fewer network connections
  - Lower maintenance
- Environmentals 74% Lower Cost
  - Lower power / cooling
  - Less floor space



All Flash is 31%
Less Expensive Overall



# Questions and Thank You!